



8

Recommendations for
Unique Stream Segments,
Unique Reservoir Sites, and
Other Legislative Policy
Recommendations



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8.1 Recommendations Concerning River and Stream Segments Having Unique Ecological Value

Regional water planning groups (RWPGs) are given the option of designating stream segments having “unique ecological value” within their planning areas. Five criteria are used to identify such segments:

1. Biological Function:
 - Quantity (acreage or areal extent of habitat), and
 - Quality (biodiversity, age, uniqueness).
2. Hydrologic Function:
 - Water Quality,
 - Flood Attenuation and Flow Stabilization, and
 - Groundwater Recharge and Discharge.
3. Occurrence of Riparian Conservation Areas.
4. Occurrence of High Water Quality, Exceptional Aquatic Life or High Aesthetic Value.
5. Occurrence of Threatened or Endangered Species and/or Unique Communities.

The Brazos G RWPG (Brazos G) has chosen not to designate any stream segments as having unique ecological value.

8.2 Recommendations Concerning Sites Uniquely Suited for Reservoir Construction

Brazos G has previously identified the following sites as uniquely suited for reservoir construction. Each site was associated with a request by a potential local project sponsor to include the project as a recommended or alternative water management strategy in the 2016 Plan.

- Cedar Ridge Reservoir (City of Abilene),
- Turkey Peak Reservoir (Palo Pinto County Municipal Water District No. 1),
- Millers Creek Off-Channel Reservoir (North Central Texas Municipal Water Authority) (now known as Lake Creek Reservoir),
- Brushy Creek Reservoir (City of Marlin), and
- Coryell County Off-Channel Reservoir (Coryell County).

Texas Water Code, 16.051(g-1) states “The designation of a unique reservoir site under this subsection terminates on September 1, 2015, unless there is an affirmative vote by a proposed project sponsor to make expenditures necessary in order to construct or file applications for permits required in connection with the construction of the reservoir under federal or state law.”

Brazos G recommends re-designation of the Millers Creek Off-Channel Reservoir (known as Lake Creek Reservoir) and the Coryell County Off-Channel Reservoir, for which the unique designation appears to have terminated.

Brazos G recommends no change in designation for the previously-designated sites for Cedar Ridge Reservoir, Turkey Peak Reservoir and Brushy Creek Reservoir, as those designations have not terminated because sufficient action has been taken prior to September 1, 2015 regarding their development to meet the requirements of Texas Water Code 16.051(g-1).

Brazos G does not recommend designation of any additional sites as uniquely suited for reservoir construction.

8.3 Legislative and Policy Recommendations

Brazos G established a Water Policy Workgroup to discuss various issues concerning State water policy and to formulate proposed positions for the planning group to consider for recommendation to the Texas Water Development Board (TWDB) and the Texas Legislature. As the population and economic demands grow, water supplies become more stressed. These developments coupled with recent drought conditions make it increasingly important for water planning groups to consider diverse water management strategies.

Regional water planning rules require use of the Texas Commission on Environmental Quality (TCEQ) water availability models (WAMs) in determining surface water supply availability. The period of record for most existing TCEQ WAMs ends with the year 1997. In portions of the Brazos River Basin, drought conditions since 1997 are worse than conditions experienced prior to 1997. Therefore, firm water availability from existing surface water supply sources and from new surface water supply strategies may be overstated. As a result, water shortages may exist that are not apparent in the regional and State water plans. Brazos G considers it prudent to explore alternatives to the historic drought of record for water planning purposes. As more diverse water management planning strategies are developed alternative water planning measurements may include firm yield, safe yield and/or operational yield as appropriate. In addition, the water planning process requires coordination with agencies such as the TCEQ and the TWDB. These agencies need sufficient funding and staffing in order to assist water planning groups in fulfilling their water planning mission. Brazos G applauds the Texas Legislature’s decision to fund an update to the hydrology of the Brazos Basin WAM that will account for the more recent droughts experienced in the Brazos Basin and urges the Texas Legislature to provide additional funding for regular maintenance updates.



Brazos G will promote water development policies that support efforts to protect both groundwater and surface water sources by encouraging sound practices that will not adversely affect water supply or quality. We support other agencies and organizations in their efforts to encourage responsible land management and will oppose any practice or action in our watersheds or recharge zones that could adversely affect our water resources. Maintaining our watershed health, economic sustainability, and community viability are all critical elements in our water planning efforts. Protecting source water and sensible stewardship of the areas adjacent to and around river basins, sensitive sub-basins, aquifers, and recharge zones is essential for maintaining these resources for present and future needs.

During development of the 2021 Plan, the Water Policy Workgroup revisited several legislative and water policy recommendations incorporated into the 2016 Plan and developed additional recommendations. All recommendations identified by the workgroup were presented for consideration by the full Brazos G RWPG. After deliberation, Brazos G offers the following specific recommendations concerning State water policy to the TWDB and the Texas Legislature.

8.3.1 Issue #1: Streamlining the Processes for Project Implementation

“Brazos G recommends that the Texas Legislature direct all State agencies involved in planning, reviewing, and/or permitting water projects to develop defined outcomes and measures of the process for evaluating, approving, permitting, coordinating and funding in order to allow timely project implementation. Processing timelines are critical factors in the development of new resources. The timely development of new sources, consistent with adopted plan strategies, is a major element of meeting the State’s water demands. The amount of time required to gain approval for surface water projects is just one example of the need for more structured and cost-effective processes.”

8.3.2 Issue #2: Plan Implementation

“Brazos G recognizes the need for expeditious implementation of the State Water Plan facilitated by the use of the State Water Implementation Fund for Texas (SWIFT).”

8.3.3 Issue #3: Coordination between Regional Water Planning Groups and Groundwater Conservation Districts

“Brazos G is committed to working cooperatively with Groundwater Conservation Districts (GCDs) and Groundwater Management Areas (GMAs) when developing the Regional Plan. The GCDs are requested to review population and water demand projections for their respective Districts and comment accordingly.

Brazos G recognizes modeled available groundwater (MAG) as the amount of water that the TWDB Executive Administrator determines may be produced on

an average annual basis to maintain or achieve the desired future conditions (DFCs) adopted by the GCDs within a GMA. "Desired future condition" means a quantitative description of the desired condition of the groundwater resources in a management area at one or more specified future times.

GMAs are tasked with the joint planning of groundwater resources as prescribed in Texas Water Code Chapter 36.108. DFCs proposed must provide a balance between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater and control of subsidence in the management area. Regional water plans are required to use the MAGs in place at the time of adoption of TWDB's state water plan in the next regional water planning cycle or, at the option of the regional water planning group, established subsequent to the adoption of the most recent plan. TWDB revised its planning rules to include a MAG Peak Factor that ensures regional water plans have the ability to fully reflect how, under current statute, GCDs anticipate managing groundwater production under drought conditions. However, additional work and efforts to implement regional water plan projects into the groundwater availability model pumping dataset would further assist and benefit uniform, comprehensive joint planning by both groups, further defining the potential impacts and outlook for the future.

Planning of and management to DFCs as a view of the health of aquifers without unreasonably depleting aquifers is consistent with Brazos G's historical policy not to support water management strategies that would substantially deplete aquifers.

Brazos G recognizes and supports the protection of local aquifer systems accomplished through planning and management by groundwater conservation districts and those entities, at present or in the future, invested in groundwater production. Maintaining fluidity and flexibility of the planning processes is in everyone's best interest for setting goals for the future."

8.3.4 Issue #4: System Operation of Water Facilities

"Brazos G recognizes the inherent benefit of system operations of existing water supply sources and recommends that State water planning as well as permitting continue to promote such water management strategies. System operation involves coordinated operation of two or more water supply sources (including surface water reservoirs, run-of-river diversions and aquifers) such that the system yield is greater than the sum of the individual sources.

System operation provides several significant benefits to the State, including more effective utilization of existing infrastructure; efficient use of water supplies to meet water demand; delay or avoidance of expensive new water supply infrastructure; and reduced negative environmental impacts potentially resulting from major new projects."



8.3.5 Issue #5: Interbasin Transfers of Surface Water

“Brazos G recognizes that Interbasin Transfers (IBTs) have been a critical component of water management in the Brazos G Area and are a necessary component of overall State water management strategies. The automatic assignment of junior rights to an interbasin water transfer is a deterrent and suppresses the development of interbasin water supply projects. We recommend the re-evaluation of the junior water rights provision that is automatically assigned to interbasin transfers. We also recommend that statutory rules, policies and administrative code be reviewed, and the permitting and review process be streamlined to eliminate any unnecessary obstacles to IBTs.”

8.3.6 Issue #6: Rule of Capture

“While Brazos G recognizes that the Rule of Capture remains valid law in Texas, we also recognize that advances in science, changes in water marketing, Texas Supreme Court and case law rulings, and increasing pressures on groundwater add complexity to this issue.

The groundwater supply is being tapped to its limits, and in many instances, landowners risk loss due to depletion by over-pumping. Local management through checks and balances can most effectively and fairly regulate usage and protect individual property rights. GCDs are appropriate mechanisms to provide local management of groundwater, to fairly preserve historic use, ensure future sustainability, and protect private property rights – both the rights of those pumping groundwater, and their neighbors. In areas without a GCD and their modification of the Rule of Capture, it is vital to engage individual local entities utilizing the resource in the current and future planning of the resource through the regional water planning group and GMA.

As such, Brazos G supports the continued management of fresh, brackish, and saline groundwater by GCDs. Planning for these groundwater resources should be continued by GCDs and TWDB in defining brackish groundwater zones.”

8.3.7 Issue #7: Conjunctive Use of Groundwater and Surface Water

“Brazos G recognizes conjunctive use as an important management strategy to maximize use of available resources to meet water demands of the State Water Plan. As conjunctive use projects are identified, they should be recommended water management strategies for the regional water plan because Brazos G encourages development of conjunctive use projects. Conjunctive use is the systematic utilization of groundwater and surface water to optimize the combined yield from both sources. Conjunctive use seeks to maximize the advantages and minimize the disadvantages of each source when both are utilized together. Construction of surface water reservoirs, which provide new sources of water, along with judicious use of groundwater resources, which can be of finite quantity, will provide an integrated solution for the water needs of the future. Brazos G also encourages consideration of applicable water quality and environmental issues related to conjunctive use.”

8.3.8 Issue #8: Aquifer storage and recovery (ASR) and Aquifer Recharge Project (ARP)

“ASR projects have the potential to store large amounts of water, eliminate evaporative losses of stored water, reduce impacts to groundwater and surface water resources in times of peak demand, and minimize the impact on surface owners when compared to large reservoir projects. However, it is important to note the significant time component of ASR projects regarding injection and withdrawal. ASR historically is associated with water injection in the winter months, or times of high supply and low demand, and recovered in the following summer months, times of low supply and high demand. The longer the injected water is left in place, the greater potential for the injected water to migrate and disintegrate with the native water source. While ASR projects could be beneficial, there are a number of questions regarding ownership of the injected water, percentage of injected water that is recoverable over time, impact to existing groundwater users, and the quality to which injected water must be treated. An improved legal/public policy framework is needed to address these issues and enhance adoption. Further, we recommend that these water management strategies include sufficient hydrologic study to protect receiving aquifers.

An ARP means a project involving the intentional recharge of an aquifer by means of an injection well or other means of infiltration, including actions designed to reduce declines in the water level of the aquifer, supplement the quality of groundwater available, improve water quality in an aquifer, and improve spring flows and other interactions between groundwater and surface water and/or mitigate subsidence. ARPs have the potential to provide another avenue for water resource stewardship to benefit local and regional water supplies. Quantity and quality reporting for these projects will be vital for use in regional water planning activities to fully account for supplies available during times of drought. Brazos G encourages the use and development of ARPs to enhance and protect water resources available in our region.”

8.3.9 Issue #9: Municipal Per Capita Water Use

“Brazos G recommends the regional water planning process be changed to separate non-residential and residential water use and look at both separately. The current practice of using a WUG’s overall gallons per capita per day (gpcd) does not take into account the variation of land use or density of WUG service areas. Adopting better definitions and metrics for water planning beyond the limitations of gpcd would improve the water supply planning process as well as allow for more useful comparisons between WUGs. An example of this could be allocating expected water use per acre based on customer type, (e.g. Residential, Commercial, Institutional, and Industrial). Also, there needs to be consistency in all water use calculations, and better guidance as to whether regional planning groups are to use raw water delivered or treated water provided in calculating water use for resource planning.”



8.3.10 Issue #10: Reservoir Water Management

“Brazos G recognizes that the primary purpose of conservation storage capacity in Texas reservoirs authorized for water supply is, in fact, water supply. Although recreational and aesthetic benefits of these reservoirs may provide economic impacts locally, these are secondary incidental benefits. Therefore, we recommend that appropriate state agencies and state legislative bodies uphold the critically important primary purpose of Texas water supply reservoirs to ensure long-standing agreements and contracts are honored and deliveries are not jeopardized by secondary interests. Further, consideration of providing educational programs regarding reservoir purpose and management and other appropriate assistance for businesses and others impacted is recommended.

Additionally, Brazos G recommends that appropriate state agencies and state legislative bodies protect water supply reservoirs from future policies or rules that could cause a conversion from water supply purposes to flood control purposes (i.e. mandates of pre-releases, seasonal drawdown protocols, re-allocation of conservation storage, etc.).”

8.3.11 Issue #11: Watershed Planning/Source Water Protection

“Brazos G will promote water development policies that support efforts to protect both groundwater and surface water sources by encouraging sound practices that will not adversely affect water supply or quality. We support other agencies and organizations in their efforts to encourage responsible land management and will oppose any practice or action in our watersheds or recharge zones that could adversely affect our water resources. Maintaining our watershed health, economic sustainability and community viability are all critical elements in our water planning efforts. Sensible stewardship of the areas adjacent to and around river basins, sensitive sub-basins, aquifers and re-charge zones is essential for maintaining these resources. Through source water protection, Texas can promote equitable costs for present and future water sources. Furthermore, Brazos G encourages all governmental agencies, when making regulatory/permitting decisions or influencing decisions regarding land and resource use, to give preference to alternatives to protect or enhance the quality of water so that such water resources may be utilized for beneficial use.”

8.3.12 Issue #12: Water Pricing and Conservation

“Acknowledging that water providers must protect a limited resource, pricing signals for both retail and wholesale water should incentivize conservation. Brazos G encourages water providers to seriously consider implementing appropriate rate structures that would be consistent with best management practices for the water industry. State agencies responsible for regulating these rate structures should provide water providers with the ability to not only cover the cost of service but allow water rate structures to act as a tool in recovering the known future costs of developing or acquiring the next available resource.”

8.3.13 Issue #13: Reuse of Wastewater Effluent

“Brazos G promotes the full development of municipal wastewater effluent as a resilient water resource that can be responsibly used to help meet the water needs of the State of Texas. We further support state agencies and organizations in their efforts to develop technologies and permit the storage and reuse of wastewater effluent as a resilient water source.”

8.3.14 Issue #14: Education

“Brazos G believes strongly that water education is important and supports water conservation and public awareness programs at the state and local level. Research indicates that there is a strong relationship between knowledge of water sources and a willingness to conserve. Conservation can be a cost-effective means of securing future water supply.”

8.3.15 Issue #15: Effects of the Federal Safe Drinking Water Act (SDWA) on Water Supply Systems

“Brazos G recognizes the difficulty in meeting the standards of the Federal Safe Drinking Water Act for some water supply systems. Therefore, we encourage the regionalization of these systems, and/or education and proactive planning.”

8.3.16 Issue #16: Planning Process Improvements

“In order to realize the value of the planning process, Brazos G recommends the Texas Legislature provide funding and direct the TWDB to adopt policies in the following areas:

- Strategic Initiatives. TWDB should provide funds for studies deemed important by the regional water planning groups as strategic initiatives that should be pursued. These would be similar to the Phase 1 studies performed during the third cycle of the regional water planning process prior to development of the 2011 regional water plans.
- Planning Support for Small Systems. Small systems are often at higher risk of losing water supply during drought, and the TWDB should provide support and funding for closer coordination with small systems through subregional planning.
- Mid-cycle Legislative Requirements. The Texas Legislature should not change the requirements of the regional water plans after the current planning cycle has commenced without also providing additional funding for increased requirements.”

8.3.17 Issue #17: Consistency of Water Planning Rules with Texas Administrative Code

“Planning guidelines promulgated by the TWDB often appear to exceed the requirements of the Texas Administrative Code, and planning funds might better be utilized focused on the development of plans to provide the water supplies necessary to meet projected demands during severe droughts and not on ancillary, albeit important, issues.”

8.4 Brazos G – A Valuable Texas Resource

Brazos G is one the most diverse regional water planning areas in Texas, covering 37 counties along the Brazos River Basin. The geographic area extends from Kent, Stonewall and Knox counties in the northwest to Washington and Lee Counties in the southeast.

Since its inception, Brazos G has been an important platform in regional water planning. Its central mission is to develop a regional water plan. The planning process is the true added value. Bringing together perspectives from agriculture, industries, municipalities, counties, small business, water utilities, the public, electric utilities, groundwater management representatives, environmental interests, and river authorities has helped to enhance the overall water planning process.

Brazos G does not operate in a vacuum. We use resources such as our consultant, HDR Engineering, Inc., and its subconsultants, to collect reliable data to include in our regional water plan. We reach out to constituents in the 37 counties as we develop the regional water plan. We engage with other stakeholders in addressing water planning issues. Our planning group meetings are forums for vetting ideas for or against water planning ideas. This process encourages transparency.

Brazos G serves an important role as an entry point for public engagement in the water planning process. This role also makes it a good resource for the Texas Legislature as it grapples with the realities of an ongoing drought, a burgeoning population, and strong economic development.

We welcome such a role and stand ready to assist.

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