

NOTICE OF OPEN MEETING

BRAZOS G REGIONAL WATER PLANNING GROUP

10:00 a.m. November 20, 2019
Brazos River Authority Central Office 4600
Cobbs Drive, Waco, Texas 76710

AGENDA

1. CALL MEETING TO ORDER
2. INVOCATION
3. NOTICE OF MEETING
4. ATTENDANCE AND ANNOUNCEMENTS
5. PUBLIC INPUT - Public questions and comments on agenda items or water planning issues
(limited to 5 minutes each; public must fill out a 'Request to Speak' form prior to the discussion of the agenda item)
6. PROGRAM
 - 6.1. Report and possible discussion on report from Texas Water Development Board (TWDB) staff.
 - 6.2. Report, discussion and possible action from the Brazos G Water Policy Committee.
 - 6.3. Discussion and possible action on HDR planning tasks.
 - 6.3.1. Presentation on updated water management strategy evaluations.
 - 6.3.2. Discussion and possible action on other HDR planning tasks.
 - 6.3.3. Presentation of the timeline to develop the 2021 Brazos G Regional Water Plan.
 - 6.4. Report and possible discussion on updates from other regional water planning groups (Regions B, C, F, H, K, L & O).
 - 6.5. Report and possible discussion on Groundwater Management Area (GMA) activities.
 - 6.6. Report and possible discussion on agency communication and information.
 - 6.7. Report and possible discussion on the Brazos G Financial Report.
 - 6.8. Discussion and possible action on report by Brazos G Administrator.
 - 6.9. Report and possible discussion from Brazos G Chair.
7. DISCUSSION AND POSSIBLE ACTION ON NEW BUSINESS TO BE CONSIDERED AT NEXT MEETING
8. CONFIRMATION OF NEXT MEETING DATE
9. ADJOURN

Agenda items may be considered, deliberated and/or acted upon in a different order than set forth above.

Meeting agendas and materials are available online at www.brazosgwater.org
For additional information, please contact
STEVE HAMLIN @ 254-761-3172, Brazos River Authority, Administrative Agent



BRAZOS G REGIONAL WATER PLANNING GROUP

November 20, 2019

10:00 A.M.

**Brazos River Authority Central Office
4600 Cobbs Drive, Waco, Texas 76710**



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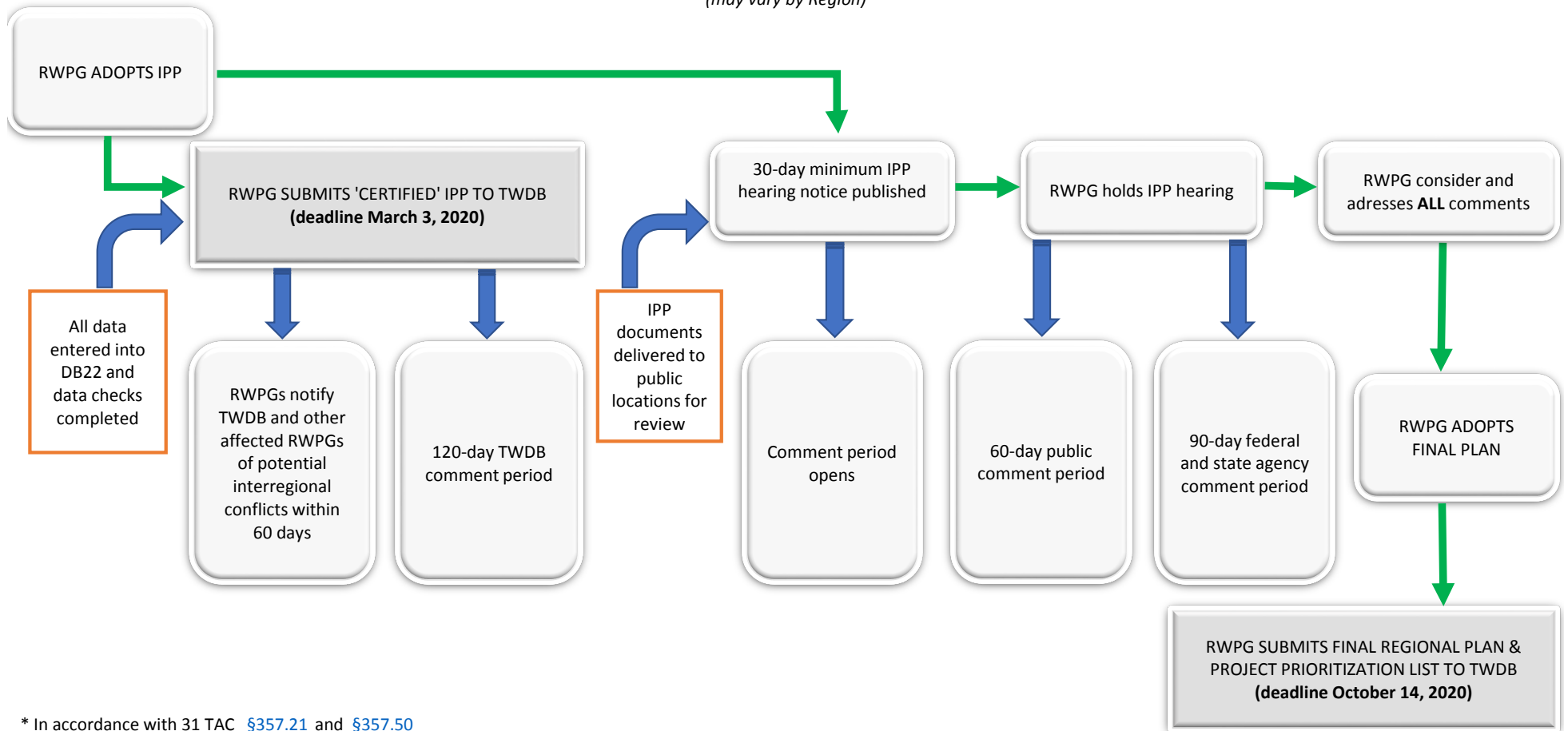


6.1. Report and possible discussion from Texas Water Development Board (TWDB) staff.

2021 Regional Water Plans

Initially Prepared Plan (IPP) and Final Plan Process Schematic*

(may vary by Region)



* In accordance with 31 TAC [§357.21](#) and [§357.50](#)

2021 Regional Water Plans

Summary of Posting Requirements for Public Hearings for Initially Prepared Plans (IPP), Adoption of IPPs, and Adoption of Final Plans

See the document below for detailed posting information:

http://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2021/doc/current_docs/admin_docs/public_notice_quick_ref.pdf

Posting Requirements	Public Hearing for IPP	Adoption of IPP and Adoption of Final Plan
Minimum Notice:		
72 hours prior the meeting		✓
30+ days prior the hearing	✓	
Notice Must Contain:		
Date, time, and location of the public meeting or hearing; summary of the proposed action to be taken; the name, telephone number, and address of a RWPG contact to whom questions or requests for additional information may be submitted	✓	✓
Information that the RWPG will accept written and oral comments at the meeting or hearing; how the public may submit written comments separately; and a specific deadline for submission of written public comments	✓	
Locations of IPPs available for public inspection	✓	
Comment Period:		
30 days prior to the hearing; until 60 days after hearing (public); until 90 days after hearing (federal and state agencies); TWDB issues comments within 120 days after IPP receipt	✓	
Entities Notified:		
All voting and non-voting RWPG members	✓	✓
Any person or entity who has requested notice of RWPG activities	✓	✓
Each RWPG where a recommended or alternative WMS being considered would be located	✓	
Each mayor of a municipality, located in whole or in part in the RWPA, with a population of 1,000 or more or which is a county seat	✓	
Each county judge of a county located in whole or in part in the RWPA	✓	
Each special or general law district or river authority with responsibility to manage or supply water in the RWPA (use list obtained from TCEQ)	✓	
Each Retail Public Utility, defined as a community water system, that serves any part of the RWPA or receives water from the RWPA (use list obtained from TCEQ)	✓	
Each holder of record of a water right for the use of surface water the diversion of which occurs in the RWPA (use list obtained from TCEQ)	✓	
Posting Venues:		
On the website of the RWPG or host Political Subdivision (must post notice and agenda). In lieu of posting the meeting notice and agenda on the website of the RWPG or host Political Subdivision, the notice and agenda may be provided, in writing, to the County Clerk of each county in the RWPA	✓	✓
Texas Secretary of State website	✓	✓
In the Texas Register	✓	
Publish in a newspaper of general circulation in each county located in whole or part in the RWPA	✓	

Posting Requirements	Public Hearing for IPP	Adoption of IPP and Adoption of Final Plan
Document Provision:		
Documents to be made available on the internet or in hard copy for public inspection prior to and following the meeting include: 1) meeting agenda, and 2) copies of all materials, reports, and/or plans presented or discussed at the meeting	✓	✓
Copies of the IPPs must be available for public inspection in: 1) at least one public library in each county, and 2) either the county courthouse's law library, the county clerk's office, or some other accessible place within the county courthouse of each county having land in the RWPA. According to the capabilities of the facility, the RWPG may provide copies electronically, on electronic media, through an internet web link, or in hard copy	✓	
OMA and PIA:		
Each RWPG and any committee or subcommittee of an RWPG are subject to Chapters 551 [Open Meetings Act] and 552 [Public Information Act], Government Code. A copy of all materials presented or discussed at an open meeting shall be made available for public inspection prior to and following the meetings and shall meet the additional notice requirements when specifically referenced as required under subsections	✓	✓



6.2 Report, discussion and possible action from the Brazos G Water Policy Committee.

Stephen Hamlin

From: Stephen Hamlin
Sent: Tuesday, November 5, 2019 9:27 AM
To: 'Charles Beseda'; 'cody.miles@co.mclennan.tx.us'; 'Dale Adams'; 'Dale Spurgin'; David A. Blackburn (David.Blackburn@bellcounty.texas.gov); David Collinsworth; Dirk Aaron ; 'Gail Peek'; 'Gary Newman'; 'Gary Spicer'; 'Gary Westbrook'; gmyers6 (gmyers6@yahoo.com); 'Jim Briggs'; 'Joe Cooper'; 'Kelly Kinnard'; 'Kenny Weldon'; 'Luci Dunn'; 'Mike McGuire'; 'Scott Felton'; 'Terrill Tomecek'; 'Tommy O'Brien'; 'Wayne Wilson'; 'Wiley Stem'; 'Zach Holland'
Cc: Dunn, David; 'Ron Ellis'; Riley Woods
Subject: FW: Draft Chapter 8 - Water Policy Recommendations
Attachments: Chapter_8_Draft_20191029.docx

Good Morning,

I hope you all are doing well. Please find attached a draft of Chapter 8 of the 2021 Regional Water Plan (RWP). This will be an agenda item for the meeting on 20 Nov. If you have comments or recommendations to modify, there will be an opportunity to bring them up at the meeting for the group to consider. At this time, the Water Policy Committee is not planning to meet again. There are a couple of outcomes for Chapter 8 after the 20 Nov meeting.

- 1) If there are no changes requested by the group, the draft will remain unchanged and will be incorporated into the Initially Prepared Plan (IPP), or
- 2) The group has desired changes that will be discussed at the 20 Nov meeting and HDR will incorporate the desired changes into Chapter 8 for the IPP.

The group will have the opportunity to review each chapter of the Regional Water Plan prior to the IPP approval sometime in February 2020. Individual chapters of the Regional Water Plan do not require formal approval by the group. Approval for the IPP as whole, will constitute approval of each chapter.

Please let me know if you have any questions. Thank you.

Steve Hamlin

From: Dunn, David <David.Dunn@hdrinc.com>
Sent: Monday, November 4, 2019 4:27 PM
To: Stephen Hamlin <stephen.hamlin@Brazos.org>
Cc: Mike McGuire <mmcguire@rpgcd.org>; Kelly Kinard (kgkinard@abilene.com) <kgkinard@abilene.com>; Jim Briggs (jim.briggs@georgetown.org) <jim.briggs@georgetown.org>; spicer@luminant.com; Zach Holland <zholland@bluebonnetgroundwater.org>; Jkweldon2@gmail.com; Charles Beseda (waterman.cb@gmail.com) <waterman.cb@gmail.com>; luci.dunn@e-ht.com
Subject: Draft Chapter 8 - Water Policy Recommendations

Stephen,

Attached is the draft of Chapter 8 for review by the planning group. This version includes all of the changes made by the Water Policy Committee at its last meeting, plus the two additional policy recommendations that they directed me to draft on their behalf (#16 and #17), and some editorial cleanup they requested I perform.

Please send this document out to the full planning group for their review.

Thanks.

David

David D. Dunn, PE
Vice President

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8

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



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

8.1 Recommendations Concerning River and Stream Segments Having Unique Ecological Value

Regional water planning groups are given the option of designating stream segments having “unique ecological value” within their planning areas. Five criteria are utilized 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 District),
- Brushy Creek Reservoir (City of Marlin), and
- Coryell County Off-Channel Reservoir (Coryell County).

Brazos G does not designate any additional sites as uniquely suited for reservoir construction in

the 2021 Plan.

[the following alternate text to be utilized if additional reservoir sites are identified]

For the 2021 Plan, Brazos G designates the following sites as uniquely suited for reservoir construction as a result of each being a recommended water management strategy in the 2021 Brazos G Plan that was requested by a local project sponsor.

- Site 1
- Site 2

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 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 in determining surface water supply availability. The period of record for most existing TCEQ Water Availability Models 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.

Issue #1: Streamlining the Permitting 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. Permitting timelines are a critical factor 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.”

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).”

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."

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."

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."

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. Groundwater Conservation Districts (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.”

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.”

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 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 authorized under this chapter or other means of infiltration, including actions designed to reduce declines in the water level of the aquifer, supplement the quantity of groundwater available, improve water quality in an aquifer, improve spring flows and other interactions between groundwater and surface water 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.”

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 Water User Group’s (WUG) 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.”

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.).”

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.”



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 water. State agencies responsible for regulating these rate structures should provide water providers 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.”

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.”

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.”

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.”

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.”

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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DRAFT



Water Policy Recommendations

Agenda Item 6.2

November 20, 2019



Issue #1: Streamlining the Permitting 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. Permitting timelines are a critical factor 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.”



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).”



Issue #3: Coordination between Regional Water Planning Groups and Groundwater Conservation Districts (1)

“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.



Issue #3: Coordination between Regional Water Planning Groups and Groundwater Conservation Districts (2)

“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.

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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.”



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.”



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. Groundwater Conservation Districts (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.”



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.”



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 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 authorized under this chapter or other means of infiltration, including actions designed to reduce declines in the water level of the aquifer, supplement the quantity of groundwater available, improve water quality in an aquifer, improve spring flows and other interactions between groundwater and surface water 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.”



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 Water User Group’s (WUG) 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.”



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.).”



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.”



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 water. State agencies responsible for regulating these rate structures should provide water providers 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.”



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.”



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.”



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.”



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.”*



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.”






6.3 Discussion and possible action on HDR planning tasks.

6.3.1 Presentation on updated water management strategy evaluations.

6.3.2 Discussion and possible action on other HDR planning tasks.



6.3.3. Presentation of the timeline to develop the 2021 Brazos G Regional Water Plan.



Supplies from BRA System Operations

Agenda Item 6.3.1A

November 20, 2019



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System Operations Permit

- Water use Permit No. 5851
 - Obtained in 2016 by BRA
 - Authorizes use of previously unappropriated state water in Brazos Basin
 - Authorizes use of BRA-owned return flows
 - Current max combined diversion amount: 334,345 acft/yr
 - Can be increased to 421,177 acft/yr with construction of Allens Creek Reservoir and expansion of Comanche Peak Nuclear Power Plant
 - Diversion are non-firm and must be backed up with reservoir releases
 - 106,031 acft/yr of diversion can be made firm with reservoir releases



Supplies from BRA System Operations

Customer	Region	Use Type	Volume (acft/yr)
Double Diamond (Retreat)	G	IRR	619
West Central Texas MWD	G	IRR	774
LENMO	G	IRR	774
TPWD Possum Kingdom State Park	G	MUN	12
Sportsman's World MUD	G	MUN	290
City of Abilene	G	MUN	7,737
Parker County SUD	G	MUN	774
Possum Kingdom WSC	G	MUN	1,934
Corky Underwood	G	MIN	54
Neuhaus Trust Partnership	G	IRR	309
FHLM WSC	G	MUN	1,934
Brazos G Total			15,211
Horizon Turfgrass	H	IRR	348
Clark Fielder	H	IRR	774
All Seasons Turfgrass, Inc.	H	IRR	155
City of Brenham	H	MUN	774
City of Sugar Land	H	MUN	10,279
City of Richmond	H	MUN	1,934
City of Manvel	H	MUN	3,731
Vulcan Materials	H	MIN	387
Dow	H	IND	15,473
BASF	H	IND	3,868
Marathon-GBR	H	IND	5,700
GCWA	H	MUN, IND, IRR	36,362
Region H Total			79,785
TPWD Water Trust	Basin wide	---	6,035
GM Reserve	Basin wide	---	5,000
Total System Operations Supply			106,031



Estimated Costs

- FHLM WSC
 - Requires new treatment plant, off-channel storage, transmission pipelines to deliver treated water to customers
- All other entities would not require significant infrastructure investments
 - Estimated costs assumed to be equal to the cost of purchasing water




Estimated Costs

Entity	Supply (acft/yr)	Capital Cost	Total Project Cost	Annual Cost	Unit Cost	
					\$/acft	\$/kgal
City of Abilene	7,737	---	---	\$591,881	\$76.50	\$0.23
Corky Underwood	54	---	---	\$4,131	\$76.50	\$0.23
Double Diamond (Retreat)	619	---	---	\$47,354	\$76.50	\$0.23
FHLM WSC ¹	1,934	\$68,481,000	\$95,792,000	\$8,696,000	\$4,496	\$13.80
LENMO	774	---	---	\$59,211	\$76.50	\$0.23
Neuhaus Trust Partnership	309	---	---	\$23,639	\$76.50	\$0.23
Parker County SUD	774	---	---	\$59,211	\$76.50	\$0.23
Possum Kingdom WSC	1,934	---	---	\$147,951	\$76.50	\$0.23
Sportsman's World MUD	290	---	---	\$22,185	\$76.50	\$0.23
TPWD Possum Kingdom State Park	12	---	---	\$918	\$76.50	\$0.23
West Central Texas MWD	774	---	---	\$59,211	\$76.50	\$0.23

¹Costs obtained from 2015 FHLM Regional Water Facility Planning Study







Oak Creek Reservoir Conjunctive Use

Agenda Item 6.3.1B

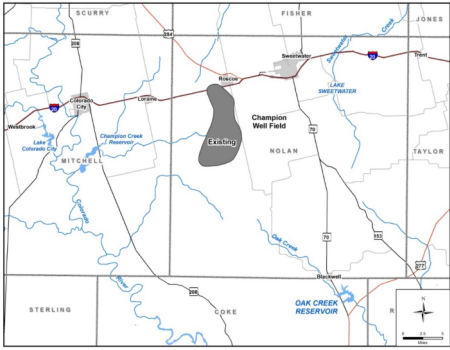
November 20, 2019





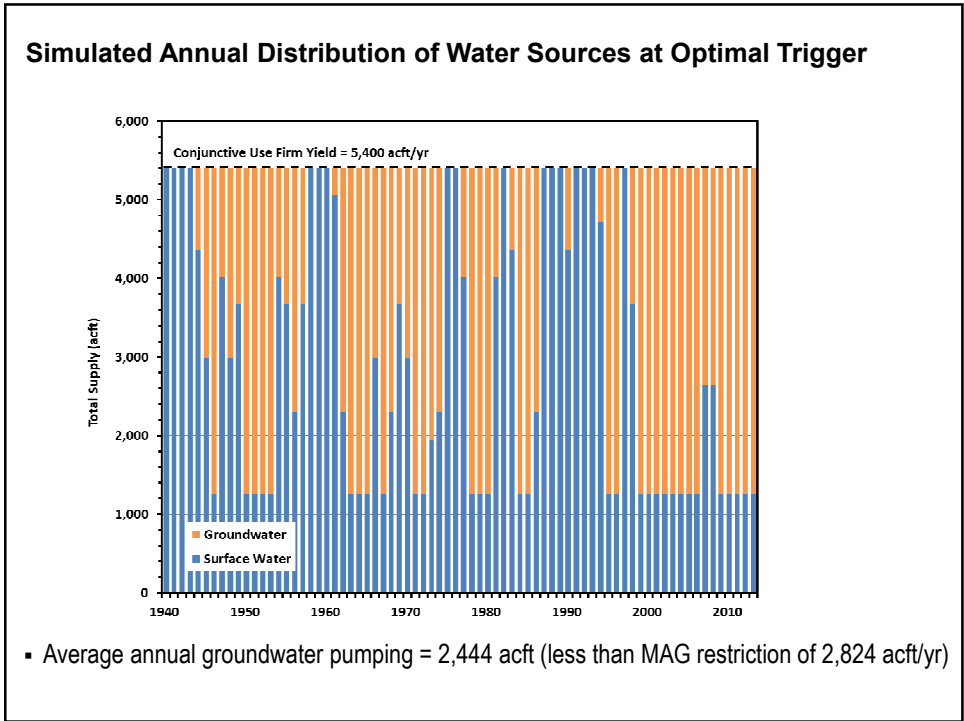
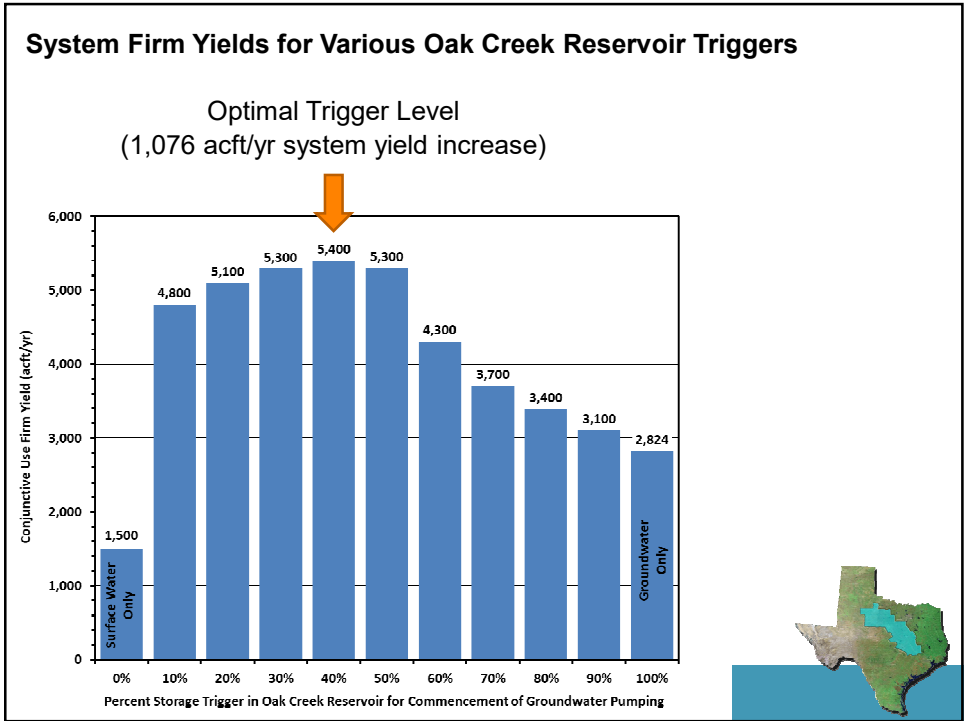
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Oak Creek Reservoir Conjunctive Use

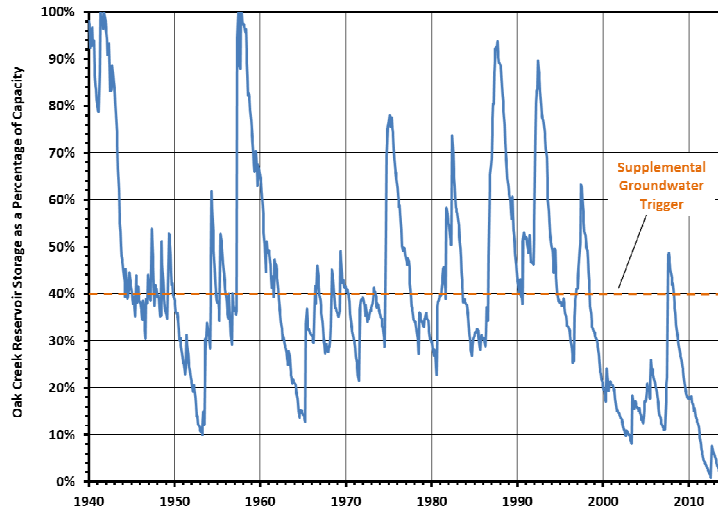
- Sweetwater existing supply sources
 - Champion Well Field – MAG restriction of 2,850 acft/yr
 - Oak Creek Reservoir - firm yield of 1,500 acft/yr (assuming downstream subordinations)
- Opportunity for conjunctive use of supplies to increase firm yield
 - Overdraft reservoir during wet periods
 - Rely on groundwater during drought periods when reservoir levels are low








Simulated Oak Creek Reservoir Storage under Conjunctive Use Operations







Lake Whitney Overdrafting with Off-Channel Storage


Agenda Item 6.3.1C

November 20, 2019




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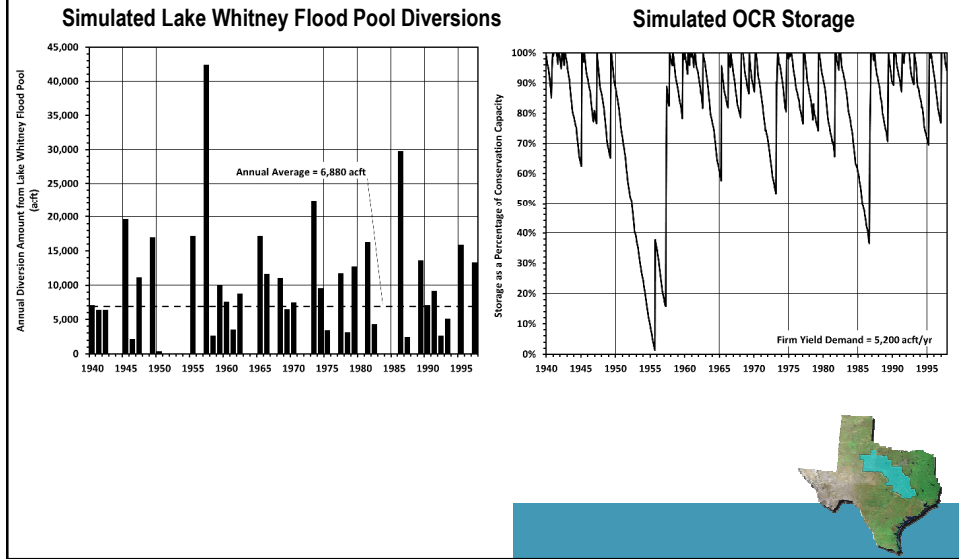
Lake Whitney Overdrafting with Off-Channel Storage



- Proposed Location: Bosque County
- Firm Yield: 5,200 acft/yr
- Diversion of water from flood pool for storage in OCR
- Potential entities to supply water:
 - BRA Customers



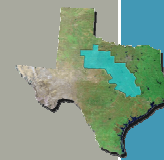
Lake Whitney Overdrafting with Off-Channel Storage



Lake Whitney Overdrafting with Off-Channel Storage

- Required Infrastructure
 - 45,403 acft OCR
 - 184 MGD Intake and Pump Station
 - 102-in, 3-mile pipeline to OCR

Cost Estimate Summary	
Total Capital Costs	\$115,991,000
Total Project Cost	\$171,455,000
Annual Cost	\$12,863,000
Available Project Yield	5,200 acft/yr
Annual Unit Cost of Water	\$2,474 /acft







Lake Palo Pinto Enlargement (Turkey Peak Dam)

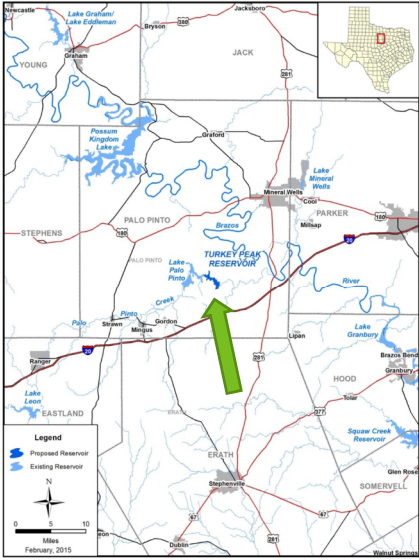
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Lake Palo Pinto Enlargement (Turkey Peak Dam)



- Project Sponsor: PPCMWD No. 1
- Enlarges LPP by 22,577 acft
- Increases 12-month safe yield by 6,000 acft/yr
- District has acquired water right and USACE Section 404 permit
- Currently in final design phase



Lake Palo Pinto Enlargement (Turkey Peak Dam)

Cost Estimate Summary ¹	
Total Capital Costs	\$56,430,000
Total Project Cost	\$102,530,000
Annual Cost	\$5,935,000
Available Project Yield	6,000 acft/yr
Annual Unit Cost of Water	\$989 /acft

¹Costs included in IPP will be updated to reflect final design cost estimate.





Red River Off-Channel Reservoir

Agenda Item 6.3.1E


November 20, 2019



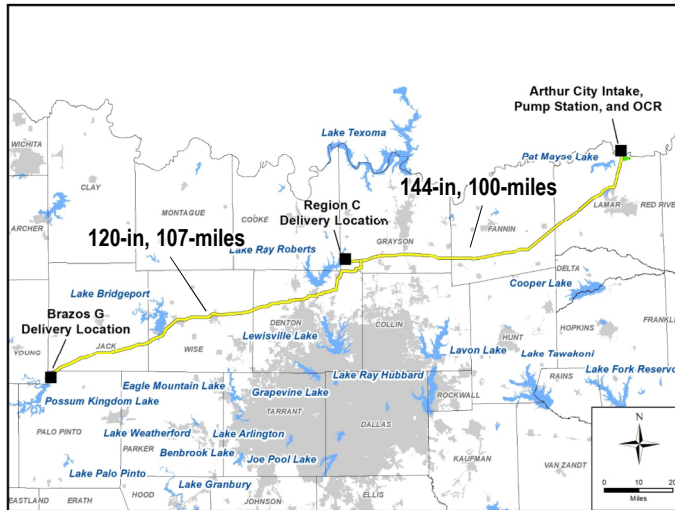
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Red River Off-Channel Reservoir

- Initially evaluated in 2014 Dallas Long Range Water Supply Plan
- Potential for expansion and delivery of supplies to Brazos G
- Firm Yield Supply – 310,000 acft/yr
 - 114,000 acft/yr dedicated to Dallas in Region C
 - 196,000 acft/yr available for Brazos G with expansion of project
- Key Project Challenges
 - Red River bank stability for intake structure
 - Water quality and sediment control
 - Red River Compact compliance
 - Cost

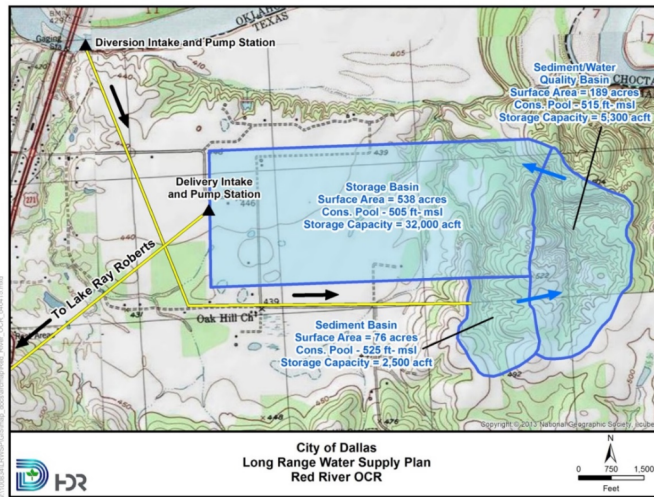


Red River Off-Channel Reservoir



U:\asim\Active\Projects\33071002970510_P\Project_Development\10_2_Work_In_Progress\Task 5A_WMS Eval\03.11 Red River OCR near Arthur City\GIS\Arthur_City_LL_Ray_Roberts.mxd

Red River Off-Channel Reservoir




City of Dallas
Long Range Water Supply Plan
Red River OCR

Estimated Costs for Region G Supply


Cost Estimate Summary (raw water delivered to Possum Kingdom Reservoir)	
Total Capital Costs	\$1,949,099,000
Total Project Cost	\$2,790,964,000
Annual Cost	\$272,701,000
Available Project Yield	196,000 acft/yr
Annual Unit Cost of Water	\$1,391 /acft
Annual Unit Cost of Water	\$4.27 /1,000 gal





City of Bryan ASR
Agenda Item 6.3.1F


November 20, 2019



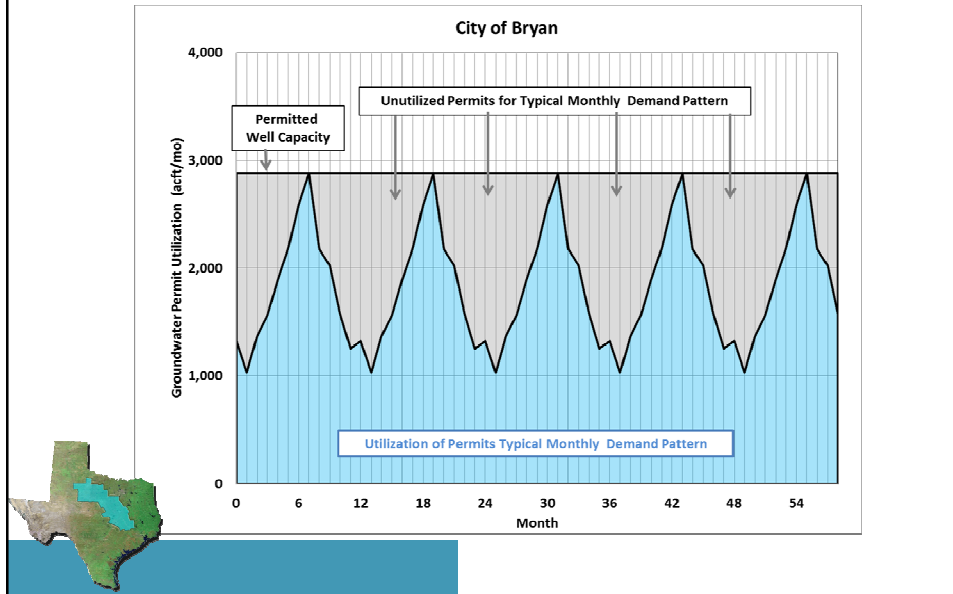
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CONCEPT

- Fully utilize existing groundwater rights from Brazos Valley GCD
- Utilize full system capacity during winter months
- Revise well field operations:
 - Continually pump at design capacity (fully utilize permit)
 - Inject excess water in Simsboro Aquifer with ASR wells
- Recover injected water from storage with ASR wells
- Connect ASR well field to the existing Tabor Road Pump Station
- Treat raw water at existing water treatment plant prior to injection
- Add disinfection facilities to Tabor Road Pump Station for recovered water

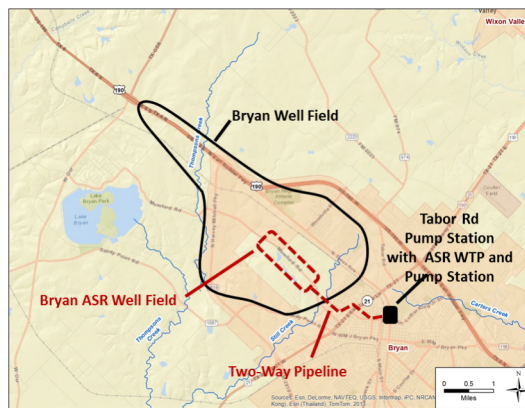


BRYAN WELL FIELD OPERATIONS

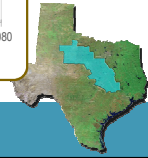
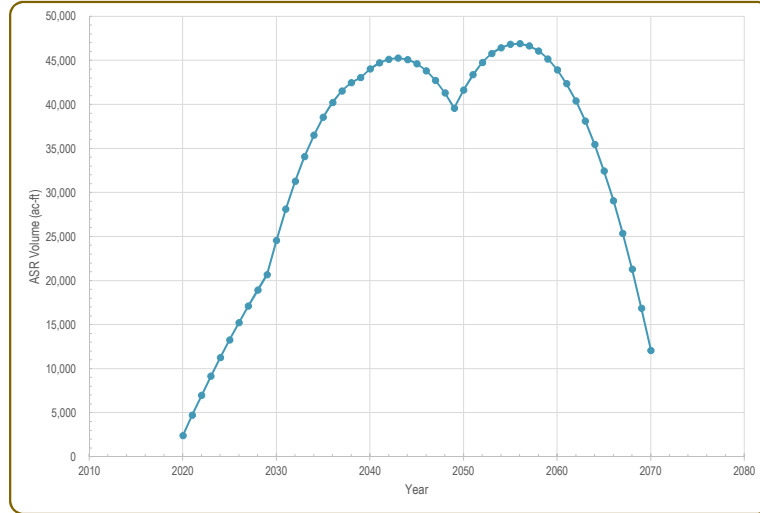


BRYAN ASR PROJECT

- Sourced from existing GW supply
 - Sparta Aquifer
 - Simsboro Aquifer
- Storage water in the Simsboro
- Water treatment
 - Injected: existing WTP
 - Recovered: new disinfection
- Annual Capacities (acft/yr):
 - Permit: 33,540
 - Direct Utilization: 17,300
 - ASR Utilization: 14,600
 - Losses: 1,640 (approx. 10%)




ASR Water Available over Time



COSTS

Cost	City of Bryan ASR
ASR Wells and Collection Pipelines	\$44,824,000
Other	\$4,906,000
TOTAL FACILITIES	\$51,222,000
TOTAL COST OF PROJECT	\$72,404,000
Debt Service	\$5,094,000
O&M	\$990,000
Other (power, wells)	\$431,000
TOTAL ANNUAL	\$6,515,000
Total Project Yield (acft/yr)	14,626
Annual Unit Cost (\$ per acft)	\$445
Annual Unit Cost (\$ per 1000 gal)	\$1.37







Update on Planning Tasks

Agenda Item 6.3.2

November 20, 2019

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Update on Planning Tasks


- **Task 1. Description of Region**
 - Received draft from Freese and Nichols 11/5/19
 - Received additional info from Susan Roth 11/14/19
 - Next steps: review and finalize for IPP
- **Tasks 2, 3 and 4. Demands, Supplies, and Needs**
 - Draft of Chps 2 – 4 in internal HDR review
 - Next steps: finalize for IPP
- **Task 5A/B. Water Management Strategy Evaluations and Conservation Recommendations**
 - Conservation recommendations complete. Finalizing assigning costs to WUGs.
 - Most strategies evaluated, now cleaning up report text/figures
 - Received Freese and Nichols strategies 9/27. Present at Dec Brazos G RWPG mtg.
 - Next steps:
 - » Complete remaining WMS analyses and finalize for IPP (Volume 2 of the IPP)
 - » Make initial WMS and project recommendations for meeting water needs for WUGs and WWPs
- **Task 6. Impacts of Plan and Consistency with Protection of Resources**
 - WAM analysis for surface water impacts to be completed after all strategies recommended
 - Late January, early February
 - GW impacts limited to Desired Future Conditions (no additional modeling necessary)



Update on Planning Tasks

- [Task 7. Drought Response Information, Activities and Recommendations](#)
 - Scope of Work Committee finalized and presented drought of record and other information
 - Received Emergency Interconnects and Drought Contingency Plan reviews from Susan Roth 11/14/19
 - Next steps: review and finalize Chapter 7 for IPP
- [Task 8. Unique Reservoir Sites and Stream Segments and Legislative/Policy Recommendations](#)
 - Draft of Chapter 8 distributed to BGRWPG November 2019
 - Next steps: adopt and finalize chapter text
- [Task 9. Infrastructure Financing Analysis](#)
 - After all WUG and WWP plans are entered into database, TWDB will provide survey document to send to each project sponsor.
 - Next steps: after IPP prepared, send out survey during public/agency comment period
- [Task 10. Public Participation, Administration and Adoption of Plan](#)
 - Ongoing
- [Task 11. Implementation of the 2016 Plan and Comparison of 2016/2021 Plans](#)
 - Implementation data to be entered into TWDB spreadsheet December/January
 - Comparison of 2016 and 2021 Plans to be completed January/February
 - Next steps: compile implementation/impediment information and compare the two plans
- [Task 12. Prioritization of Projects](#)
 - After IPP submitted, compile prioritization scoring of WMSs and projects for inclusion in Final Plan







Schedule to Develop the 2021 Brazos G Plan

Agenda Item 6.3.3


November 20, 2019

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Working Schedule for the 2021 Planning Cycle

- [November Brazos G mtg](#)
 - Review WMS evaluations
 - Review/adopt Chapter 8. Policy Recommendations
- [December Brazos G mtg](#)
 - Review Chapter 1 Description of Region
 - Review Chapters 2-4, 7
 - Review final WMS evaluations
 - Review plans for many WUGs/WWPs
 - Adopt policy recommendations for Chapter 8?
- [January](#)
 - Clean up for remaining tasks
 - Remaining chapters out for review
- [January Sub-regional meetings](#)
 - Review draft plans for WUGs and WWPs
 - Jan. 21 – College Station
 - Jan. 22 – Waco
 - Jan. 23 – Abilene
- [February Brazos G mtg](#)
 - Review/approve Initially Prepared Plan
 - 2 meetings?
 - » Week of Feb. 9 (Wed, 2/12?)
 - » Week of Feb. 23 (Wed, 2/26?)
- **March 3 – Initially Prepared Plan**
 - [March – Distribute IPP](#)
 - [Spring – Public/agency comment period](#)
 - [June/July – Public Hearing on IPP](#)
 - [Aug/Sep – Address Comments & Finalize Plan](#)
 - [September – Brazos G mtg – adopt plan](#)
- **October 14 – Final Plan**





6.4. Report and possible discussion on updates from other regional planning groups (Regions B,C,F,H,K,L &O)



6.5. Report and possible discussion on Groundwater Management Area (GMA) activities.



6.6. Report and possible discussion on agency communication and information.



6.7. Report and possible discussion on the Brazos G Financial Report.



**2021 Regional Water Plan
Expense Budget**

Instrument	Date Executed	Committed Funds
TWDB Contract 1548301835	25 Aug 15	\$187,800
Amendment No. 3	19 Jun 17	\$667,002
Amendment No. 4	13 Aug 18	\$667,002
Amendment No. 6	10 Oct 19	\$333,501
Total Committed	Total Study Cost	\$1,855,305

CATEGORY	AMOUNT	Spent as of Aug 2019 *HDR Invoices thru 8/3/19	Remaining
Other Expenses (Administrative Agent)	\$39,539.14	\$16,906.64	\$22,632.50
Subcontract Services (HDR Inc.)	\$1,780,253.16	\$902,155.37	\$878,097.79
Voting Member Travel (Administrative Agent)	\$35,512.70	\$4,689.60	\$30,823.10
TOTAL STUDY COST	\$1,855,305.00	\$923,751.61	\$931,553.39



2021 Regional Water Plan Expense Budget

Task				
Regional Water Planning Task No.	Description	Total TWDB Study Amount	Spent as of August 2019 *HDR Invoices thru 8/3/19	Remaining
1	Planning Area Description	\$39,657	6,674.51	32,982.49
2A	Non-Population Related Water Demand Projections	\$40,286	25,362.58	14,923.42
2B	Population & Population-Related Water Demand Projections (new projections)	\$59,531	56,901.66	2,629.34
3	Water Supply Analyses	\$183,356	195,092.96	(-11,736.96)
4A	Identification of Water Needs	\$35,823	42,058.23	(-6,235.23)
4B	Identification of Potentially Feasible Water Management	\$34,285	35,055.38	(-770.38)
4C	Technical Memorandum	\$54,484	54,966.69	(-482.69)
5A	Evaluation and Recommendation of Water Management Strategies and Water Management Strategy Projects	\$703,546	208,467.32	213,279.68
5B	Water Conservation Recommendations	\$55,839	15,105.14	40,733.86
6	Impacts of Plan and Consistency with Protection of Resources	\$76,893	0	76,893
7	Drought Response, Activities & Recommendations	\$154,321	28,605.31	125,715.69
8	Unique Sites and Policy Recommendations	\$15,095	3,240.42	11,854.58
9	Infrastructure Financing Analysis	\$10,130	0	10,130
10	Public Participation and Plan Adoption	350,487	252,221.41	98,265.59
11	Implementation and Comparison to the Previous Regional Water Plans	\$29,990	0	29,990
12	Prepare and Submit Prioritization of Projects	\$11,582	0	11,582
Total		\$1,855,305.00	\$923,751.61	\$931,553.39



6.8. Discussion and possible action on report by Brazos G Administrator.



**6.9. Report and possible discussion
from Brazos G Chair.**



- 7. DISCUSSION AND POSSIBLE ACTION ON
NEW BUSINESS TO BE CONSIDERED AT
NEXT MEETING**
- 8. CONFIRMATION OF NEXT MEETING
DATE**
- 9. ADJOURN**