



SCOPE OF WORK COMMITTEE MEETING

10:00 A.M. – October 10, 2023

BRAZOS RIVER AUTHORITY

4600 COBBS DR., WACO, TX 76710



- 1. CALL MEETING TO ORDER**
- 2. INVOCATION**
- 3. NOTICE OF MEETING**
- 4. ATTENDANCE AND ANNOUNCEMENTS**
- 5. PUBLIC INPUT** (limited to 5 minutes each)



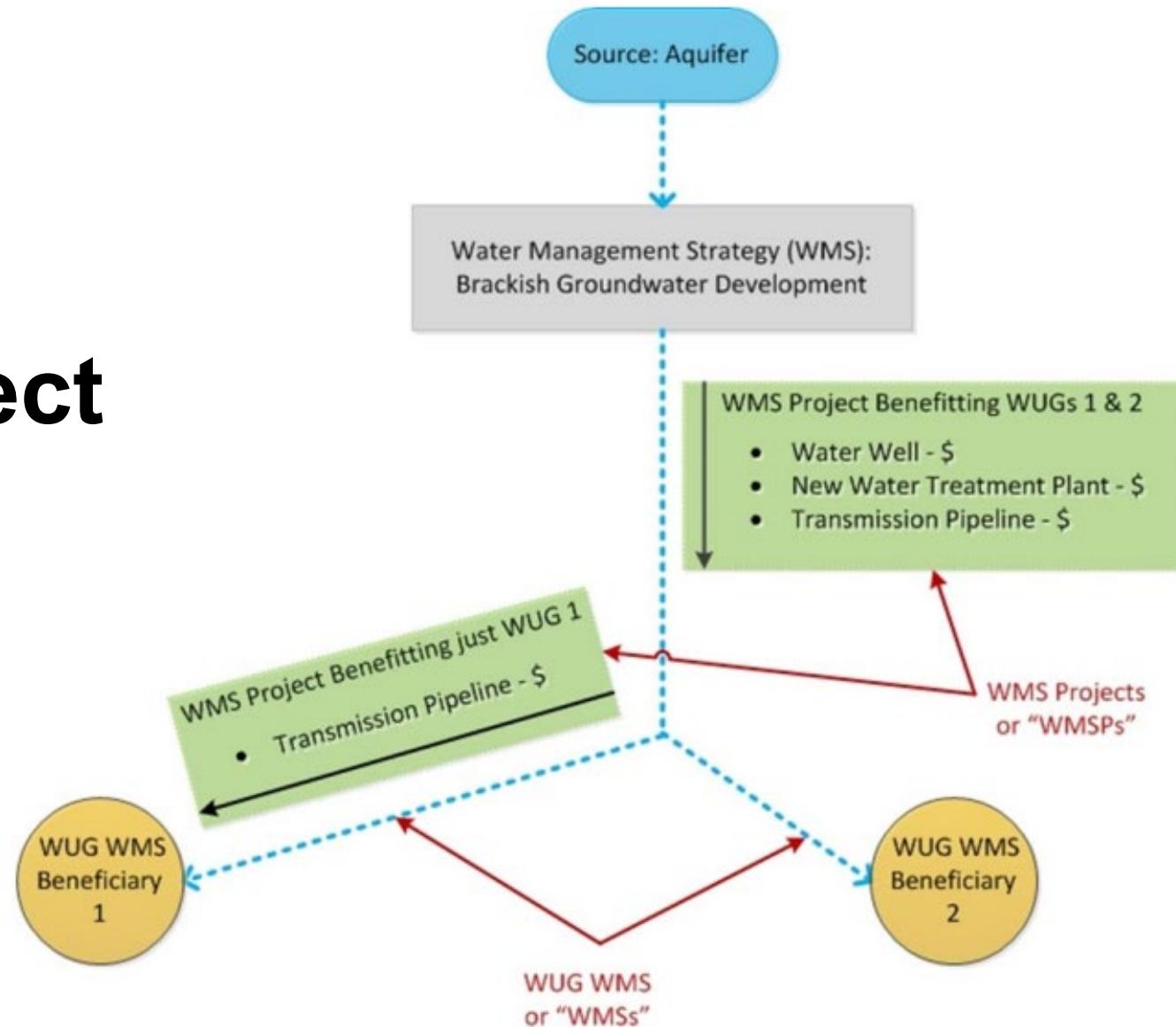
**6. Discussion and possible action on the process for
identification of Infeasible Water Management
Strategies from the 2021 Brazos G Plan**

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Process for Identification of Infeasible Water Management Strategies from the 2021 Brazos G Plan

Water Management Strategy Structure

WMS & WMS Project



Feasible and Infeasible Water Management Strategies

- Statutory and Rule Requirements
 - TWC §16.053(h)(10) and 31 TAC §357.12 (b)
- RWPG shall:
 - Hold a public meeting to determine the process for identifying potentially feasible WMSs;
 - Process shall be documented, and
 - Shall include input received at the public meeting;
 - After reviewing the potentially feasible strategies using the documented process, then the RWPG shall list all possible WMSs that are potentially feasible for meeting a Water Need in the region.
 - The public meeting shall also include a presentation of the results of the analysis of infeasible WMSs or WMSPs, as defined by Texas Water Code §16.053(h)(10), included in the most recently adopted RWP.
 - Include list of Infeasible WMS and WMSPs in Technical Memorandum
 - Infeasible WMSs or WMSPs shall be identified based on:
 - Project sponsor provided information
 - Local knowledge, as acquired through plan development activities such as surveys, and as determined based on implementation schedules consistent with implementation by the project sponsors.
 - The group shall provide notice to all associated project sponsors and amend its adopted RWP as appropriate based upon the analysis.

Infeasible Strategies (cont'd)

- Amend the previous RWP to modify and/or remove any infeasible WMS or WMSPs in accordance with existing amendment procedures.
- If applicable or required, identify and evaluate new WMS or WMSP that would be needed to meet need that had been met by infeasible WMS/WMSP
- Previous RWP may be amended to:
 - Remove infeasible WMS/WMSP
 - Revise infeasible WMS/WMSP to make it feasible; and/or
 - Incorporate a new WMS/WMSP to address the identified need.
- RWPG must submit the adopted amendments associated with this task to TWDB no later than three (3) months following March 4, 2024 (i.e., June 4, 2024).



“[A] water management strategy or project is considered infeasible if the proposed sponsor of the water management strategy or project has not taken an affirmative vote or other action to make expenditures necessary to construct or file applications for permits required in connection with the implementation of the water management strategy or project under federal or state law on a schedule that is consistent with the completion of the implementation of the water management strategy or project by the time the water management strategy or project is projected by the regional water plan or the state water plan to be needed.

- TWC §16.053(h)(10)

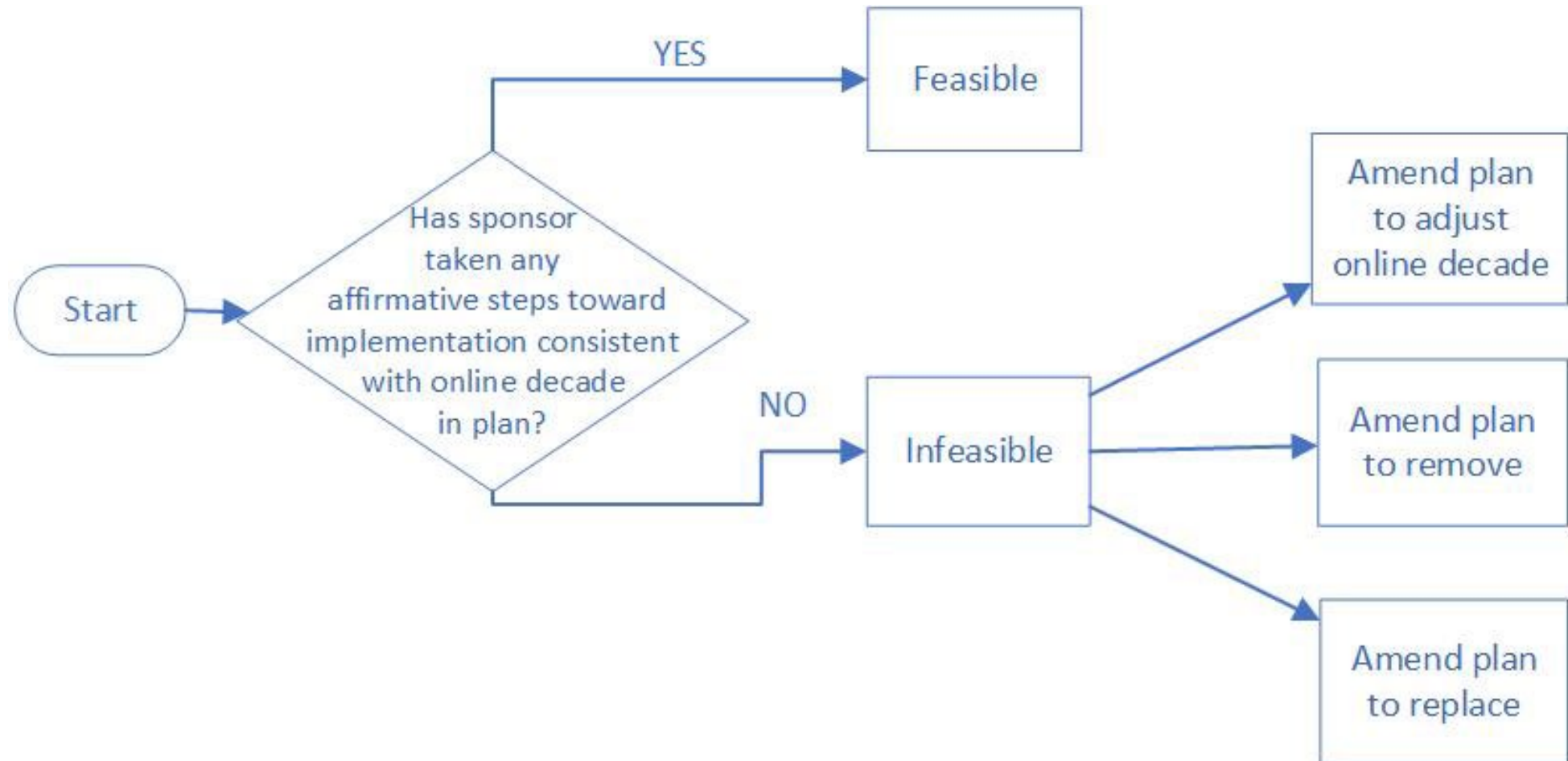
Infeasibility Process

Identify previous plan's strategies and projects that:

- Require a permit and/or involve construction;
- Are shown in the plan to be online by the 2020 or 2030 decade;
- Related to:
 - new major reservoirs,
 - seawater desalination,
 - direct potable reuse,
 - brackish groundwater,
 - aquifer storage and recovery, and
 - out of state water transfers; or
- Generally require for implementation either:
 - significant resources;
 - significant time.

Infeasibility Process (cont'd)

Apply the following steps to the identified potentially infeasible WMS and/or WMSPs:



Infeasibility Process (cont'd)

TWDB recognizes information may be difficult to obtain or may not be available for some WUG categories

- e.g., county-wide water user groups that are to be implemented by private parties

RWPG may therefore not be able to determine infeasibility for some strategies or projects.

- 85 in Region G

Status on Identification of Infeasible Water Management Strategies from 2021 Region G Plan

Strategies for county aggregates excluded

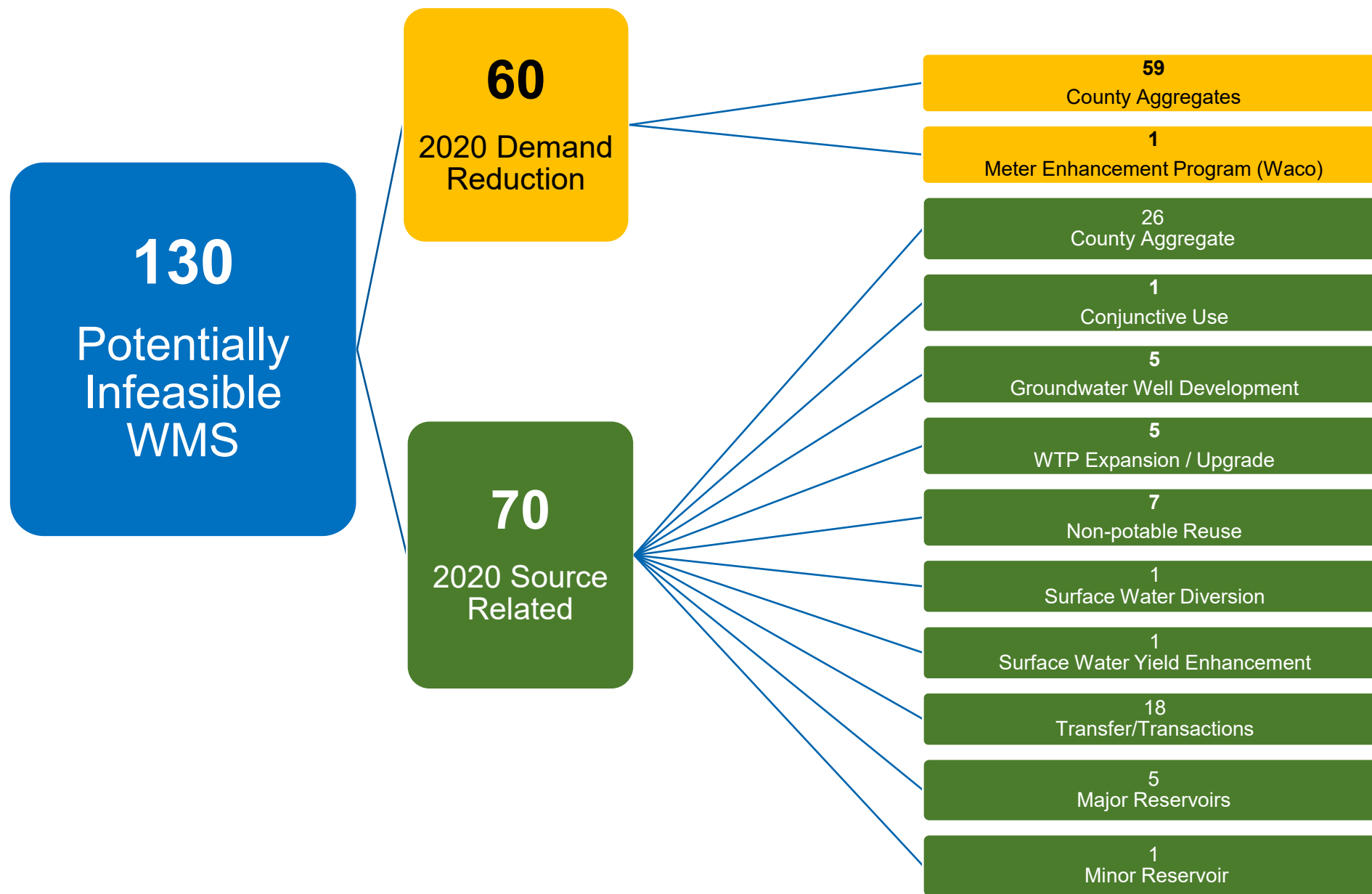
For those requiring construction/permit, affirmative steps include:

- Spending money on the strategy or project
- Voting to spend money on the strategy or project
- Applying for a federal or state permit for the strategy or project

Engagement / Survey

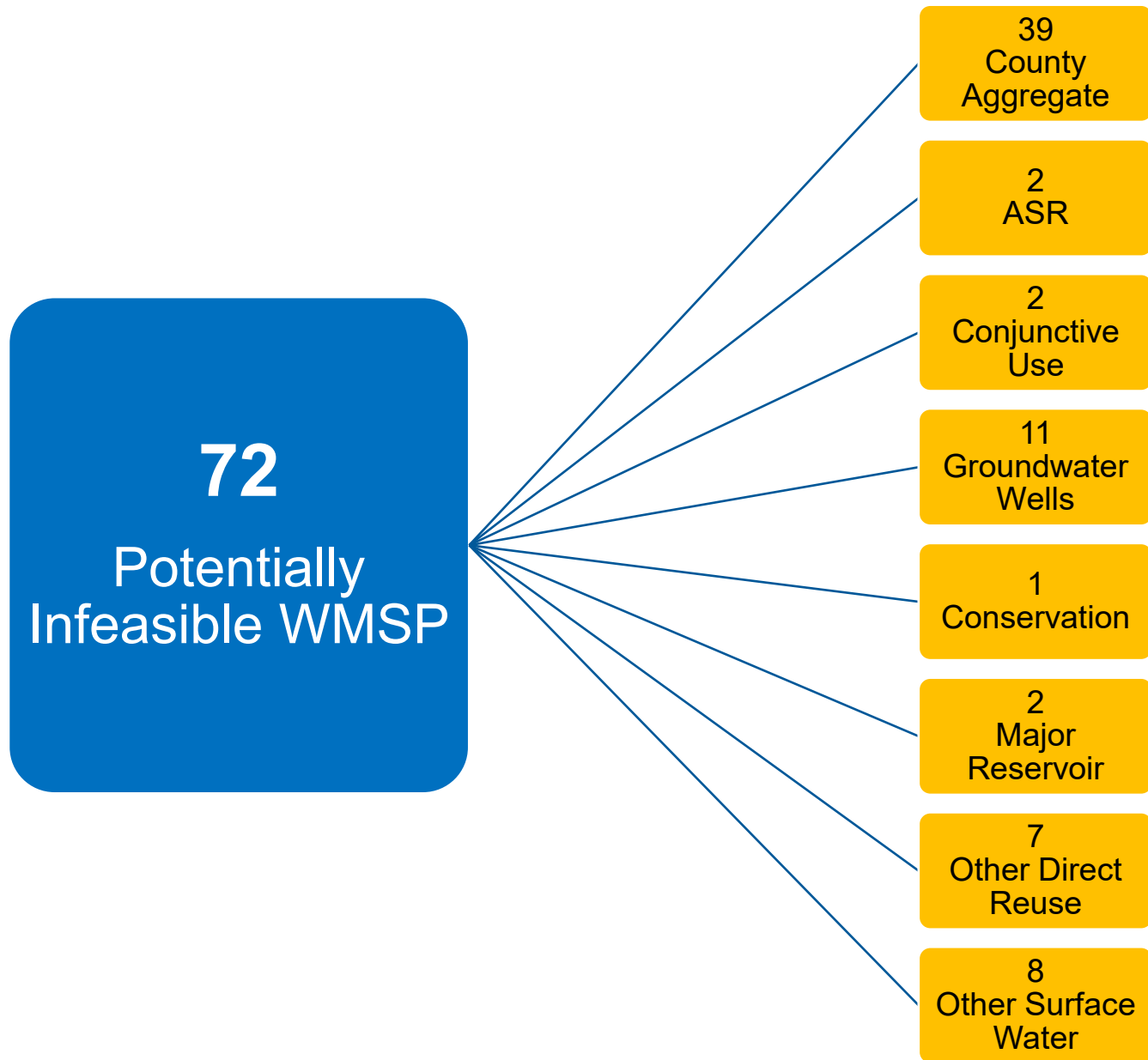
- Project Name
- Project Sponsor
- Online Decade
- Date of Affirmative Action
- State Water Right Status
 - » Application filed?
 - » Admin complete?
 - » Draft released by TCEQ?
 - » Issued?
- Federal 404 Permit Status
 - » Applied for?
 - » Issued?
- Planning/Design/Construction Status
 - Type/Amount of study/testing/design performed to date (%)
 - Land Acquisition?
 - Started Construction?
 - Completed construction?
- Est. Funds Expended to Date
- Pertinent Details

Summary of Potential Infeasible 2020 WMS



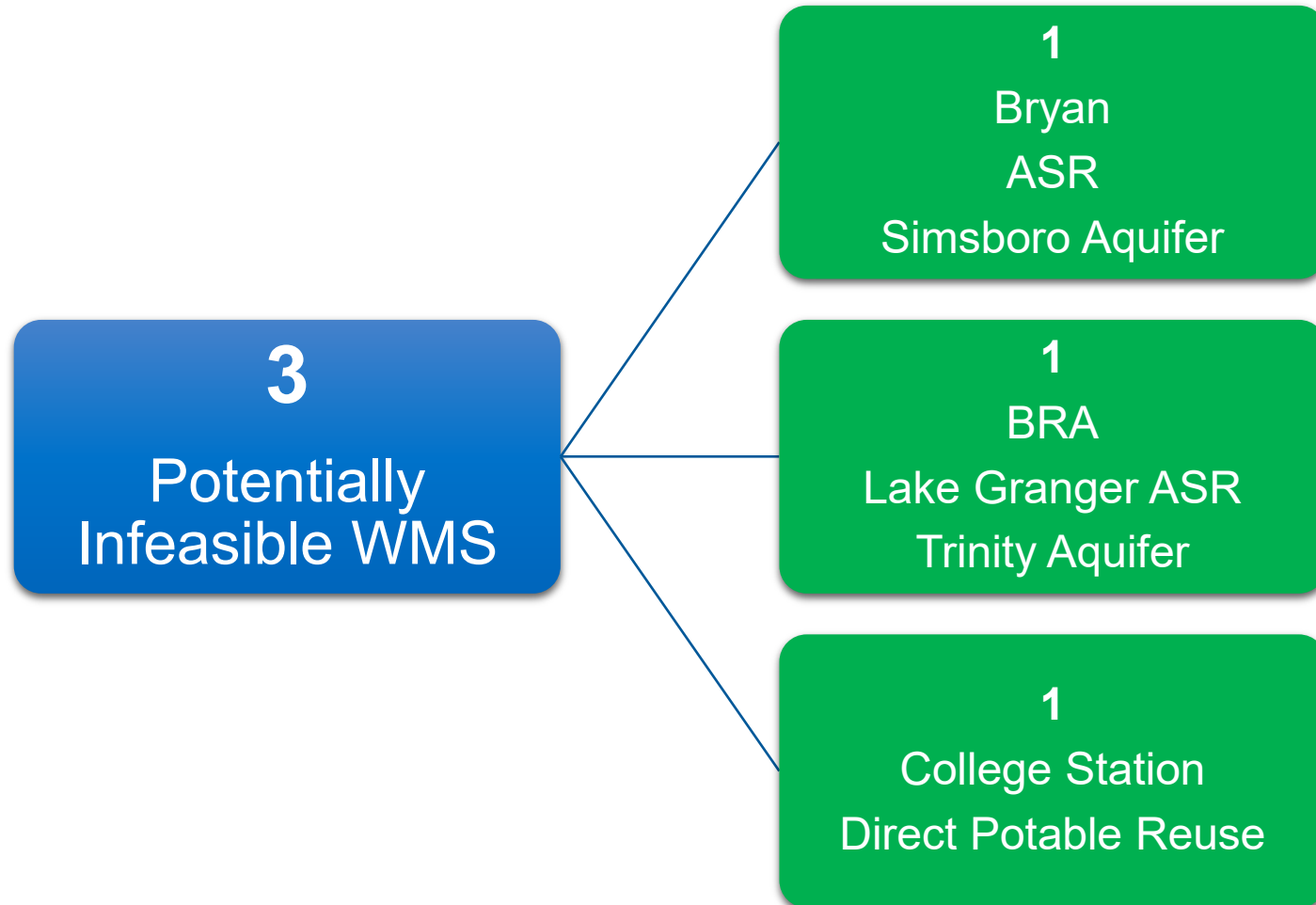
Number Identified as Infeasible	Remaining
0	-
0	-
0	-
?	1
1	2
0	3
0	-
0	-
?	1
0	3
1	-
1	-

Summary of Potential Infeasible 2020 WMSPs



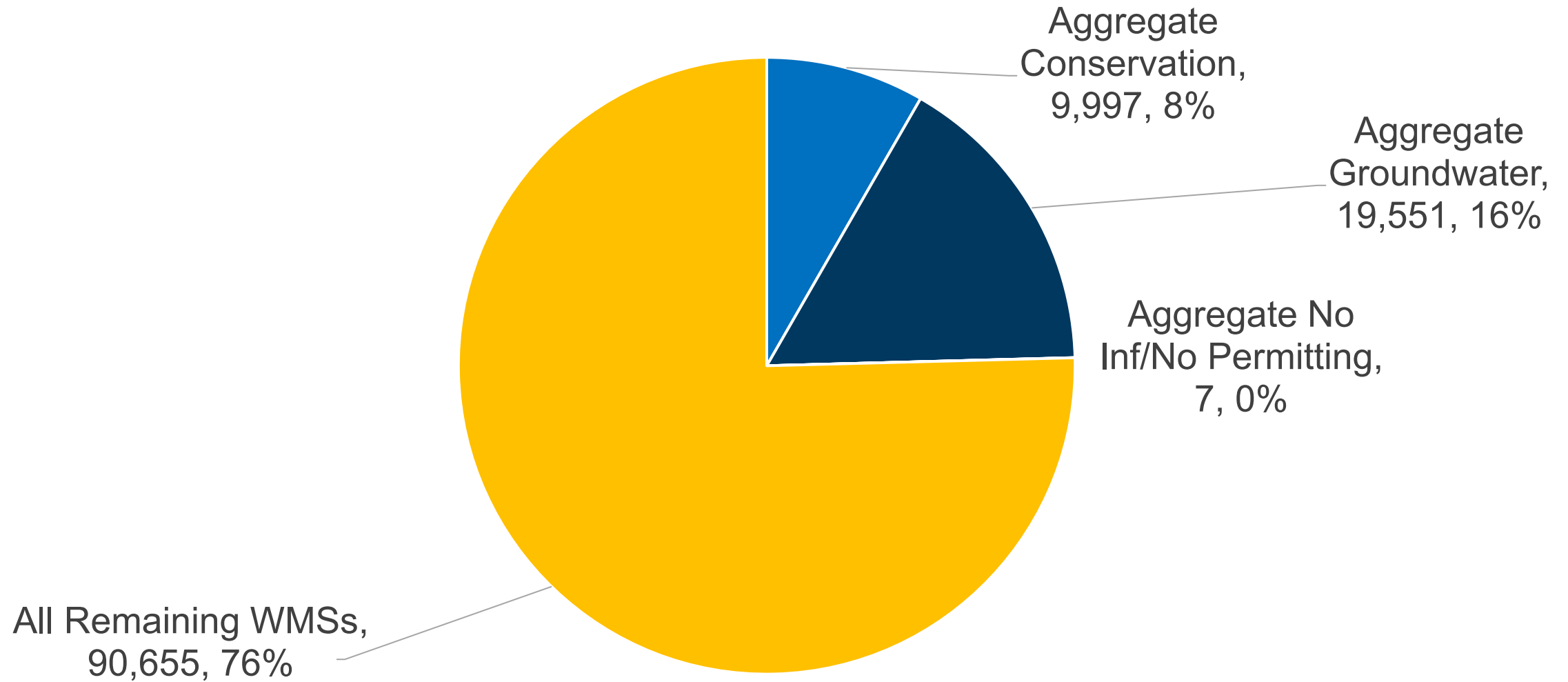
Number Identified as Infeasible	Remaining
0	-
0	1
0	1
2	7
0	-
0	1
0	1
0	4

Summary of Potential Infeasible 2030-40 WMS



Number Identified as Infeasible	Status
0	Sponsor has taken affirmative steps
0	Sponsor has taken affirmative steps
?	Remaining

Proportions of Aggregate WMSs by Amount of Water (2020)



Identified Infeasible WMS and WMSPs

Groundwater Well Development (Trinity Aquifer, Johnson County)

- City of Godley
 - Still plans to build a well in the next 5 years,
 - Has taken no formal actions to do so.
- Johnson County SUD
 - Indicated WMS/WMSP is no longer feasible.
 - Has increased surface water agreement with the City of Mansfield and negotiating a revised contract with the Brazos Regional Public Utility Agency, per provided 2022 Water System Master Plan.

Strategy Supply 2020	Strategy Supply 2030	Strategy Supply 2040	Strategy Supply 2050	Strategy Supply 2060	Strategy Supply 2070
211	12	22	35	786	1,556

Identified Infeasible WMS and WMSPs

New Throckmorton Reservoir (New Major Reservoir)

- Cities of Graham and Throckmorton
- No affirmative steps taken by sponsors.
- City of Throckmorton plans to use existing water from lakes and/or increase contracted amount with the City of Graham.
- City of Graham has no new reservoir project planned or on their radar.

Sponsor	Strategy Supply 2020	Strategy Supply 2030	Strategy Supply 2040	Strategy Supply 2050	Strategy Supply 2060	Strategy Supply 2070
Graham	0	1,500	1,500	1,500	1,500	1,500
Throckmorton	0	2,000	2,000	2,000	2,000	2,000

WUG Impact Analysis

WUG		2020	2030	2040	2050	2060	2070	Comments:
THROCKMORTON	Demand (AF/YR)	185	181	177	177	177	177	
	Supply (AF/YR)	50	40	30	20	10	0	Supply From: THROCKMORTON LAKE/RESERVOIR LAKE/RESERVOIR SYSTEM
	Surplus or Need (Negative)	-135	-141	-147	-157	-167	-177	
	WUG WMS & Supply:							
	NEW THROCKMORTON RESERVOIR	0	2,000	2,000	2,000	2,000	2,000	
	MUNICIPAL WATER CONSERVATION - THROCKMORTON	0	14	26	40	44	44	
	Water Surplus or Need (Negative) Not Including the Off-Channel Reservoir	-135	-127	-121	-117	-123	-133	Unmet needs if reservoir is no longer planned; Need of 135 AF/YR in 2020 identified in 2021 Plan as "Needs for WUGs Left Unmet in the 2021 Brazos G Regional Water Plan" (Table ES-5)
GRAHAM	Demand (AF/YR)	2,788	2,891	2,959	3,052	3,157	3,262	No Unmet Needs if reservoir online decade is moved
	Supply (AF/YR)	1,426	1,309	1,190	1,070	949	828	Supply From: BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM; GRAHAM/EDDLEMAN LAKE/RESERVOIR
	Surplus or Need (Negative)	-1,362	-1,582	-1,769	-1,982	-2,208	-2,434	
	WUG WMS & Supply:							
	NEW THROCKMORTON RESERVOIR	0	1,500	1,500	1,500	1,500	1,500	
	MUNICIPAL WATER CONSERVATION - GRAHAM	0	234	463	708	962	1,210	
	Water Surplus or Need (Negative) Not Including the Off-Channel Reservoir	-1,362	-1,351	-1,306	-1,274	-1,246	-1,224	Unmet needs if reservoir is no longer planned; Need of 1,457 (1,362 + 95 from Contract with Fort Belknap WSC) AF/YR in 2020 identified in 2021 Plan as "Needs for WUGs Left Unmet in the 2021 Brazos G Regional Water Plan" (Table ES-5)

Identified Infeasible WMS and WMSPs

Coryell County OCR (New Minor Reservoir)

- No affirmative steps taken by sponsor
- Multi County WSC's agreement to be the representative of the project if it comes to fruition in the future.
- WSC believes online decade would be 2050 or later.
- From 2021 Region G Plan: "For the project to be economically feasible, an agreement with the Brazos River Authority (BRA) would be required to subordinate Lake Belton water rights to diversions from Cowhouse Creek for impoundment in the OCR. Without subordination, the unappropriated flows in Cowhouse Creek are not sufficient to maintain adequate water levels in the OCR. Currently, BRA indicates that no subordination agreement is likely to be possible."

Benefiting WUG Name	WMS Sponsor/Seller Name	Strategy Supply 2020	Strategy Supply 2030	Strategy Supply 2040	Strategy Supply 2050	Strategy Supply 2060	Strategy Supply 2070
COUNTY-OTHER, CORYELL	MULTI COUNTY WSC	0	1,308	1,308	1,308	1,308	1,308
FLAT WSC	MULTI COUNTY WSC	0	1	3	3	12	22
GATESVILLE	MULTI COUNTY WSC	0	550	823	981	1,152	1,528
MULTI COUNTY WSC	MULTI COUNTY WSC	0	1,051	843	721	574	243
MULTI COUNTY WSC	MULTI COUNTY WSC	0	225	158	122	89	34
		0	3,135	3,135	3,135	3,135	3,135

WUG Impact Analyses

WUG		2020	2030	2040	2050	2060	2070	Comments:
MULTI COUNTY WSC	Demand (AF/YR)	291	312	336	360	389	419	
	Supply (AF/YR)	245	245	245	245	245	245	Supply From: BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM
	Surplus or Need (Negative)	-46	-67	-91	-115	-144	-174	
	WUG WMS & Supply:							
	CORYELL COUNTY OFF CHANNEL RESERVOIR	0	1,276	1,004	843	663	277	
	HAMILTON REDUCTION TO MULTI WSC	100	100	0	0	0	0	
	PURCHASE SURPLUS WATER FROM THE CITY OF HAMILTON	46	67	91	115	144	174	
Water Surplus or Need (Negative) Not Including the Off-Channel Reservoir	100	100	0	0	0	0	No Unmet Needs if reservoir online decade is moved	
COUNTY-OTHER, CORYELL	Demand (AF/YR)	290	562	873	1,139	1,429	1,721	
	Supply (AF/YR)	614	614	614	614	614	614	Supply From: TRINITY AQUIFER CORYELL COUNTY
	Surplus or Need (Negative)	324	52	-259	-525	-815	-1,107	
	WUG WMS & Supply:							
	CORYELL COUNTY OFF CHANNEL RESERVOIR	0	1,308	1,308	1,308	1,308	1,308	
	TRINITY AQUIFER DEVELOPMENT	0	0	259	525	815	1,107	
Water Surplus or Need (Negative) Not Including the Off-Channel Reservoir	324	52	0	0	0	0	No Unmet Needs if reservoir online decade is moved	
FLAT WSC	Demand (AF/YR)	100	112	125	137	150	164	
	Supply (AF/YR)	102	102	102	102	102	102	Supply From: BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM
	Surplus or Need (Negative)	2	-10	-23	-35	-48	-62	
	WUG WMS & Supply:							
	CORYELL COUNTY OFF CHANNEL RESERVOIR	0	4	3	3	12	22	
	MUNICIPAL WATER CONSERVATION - FLAT WSC	0	9	20	32	36	40	
Water Surplus or Need (Negative) Not Including the Off-Channel Reservoir	2	-1	-3	-3	-12	-22	Unmet Needs if reservoir online decade is moved	
GATESVILLE	Demand (AF/YR)	4,301	4,801	5,377	5,897	6,472	7,050	
	Supply (AF/YR)	3,260	3,109	2,922	2,743	2,555	2,362	Supply From: BRAZOS RIVER AUTHORITY LITTLE RIVER LAKE/RESERVOIR SYSTEM
	Surplus or Need (Negative)	-1,041	-1,692	-2,455	-3,154	-3,917	-4,688	
	WUG WMS & Supply:							
	CORYELL COUNTY OFF CHANNEL RESERVOIR	0	550	823	984	1,152	1,528	
	LAKE GRANGER AUGMENTATION-PH 2	0	1,028	1,060	1,093	1,125	1,158	
	MUNICIPAL WATER CONSERVATION - GATESVILLE	0	384	852	1,386	1,988	2,392	
Water Surplus or Need (Negative) Not Including the Off-Channel Reservoir	-1,041	-280	-543	-675	-804	-1,138	Unmet Needs if reservoir online decade is moved; Need of 1,041 AF/YR in 2020 identified in 2021 Plan as "Needs for WUGs Left Unmet in the 2021 Brazos G Regional Water Plan" (Table ES-5)	



**7. Discussion and possible action on the process for
identifying Potentially Feasible Water Management
Strategies**

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Process for Identification of Potentially Feasible Water Management Strategies for the 2026 Brazos G Plan

Requirements and Guidance on Establishing the Process for Identifying Potentially Feasible Strategies

Potentially Feasible Strategies

31 TAC 357.12(b) – RWPG must...



Conduct a public meeting to determine the process for identifying potentially feasible Water Management Strategies (WMSs)



Document process and incorporate input received



List all possible potentially feasible WMSs

Identifying and Evaluating WMSs

TWDB allows flexibility in selecting method



Criteria determined by Planning Group



Should receive public comment on proposed process



Should be an equitable and consistent evaluation and application of all potentially feasible WMSs for each water supply need.

TWDB Guidelines for Identifying Water Management Strategies



Evaluate the net quantity, reliability, and cost of water delivered to users during drought conditions (does not include distribution of water after treatment).



Evaluate Environmental Factors

Environmental water needs
Wildlife habitat
Cultural resources
Adopted environmental flow standards



Impacts on other water resources of the State



Discussion of threats to agricultural or natural resources

TWDB Guidelines for Identifying Water Management Strategies

Consideration of interbasin transfer

Consideration of third party social and economic impacts resulting from voluntary redistribution of water

Impacts on key water quality parameters

Consideration of existing infrastructure (pipelines, other facilities)

Any other factors as deemed relevant by the regional water planning group

31 TAC 357.34(c)

Potentially feasible water management strategies may include, but are not limited to:

- Expanded use of existing supplies including:
 - system optimization and conjunctive use of water resources,
 - reallocation of reservoir storage to new uses,
 - voluntary redistribution of water resources including contracts, water marketing, regional water banks, sales, leases, options, subordination agreements, and financing agreements, subordination of existing water rights through voluntary agreements,
 - enhancements of yields of existing sources, and
 - improvement of water quality including control of naturally occurring chlorides.

31 TAC 357.34(c) – cont'd

Potentially feasible water management strategies may include, but are not limited to:

- Conservation and drought management measures including demand management.
- Reuse of wastewater.
- Interbasin transfers of surface water.
- Emergency transfers* of surface water including a determination of the part of each water right for non-municipal use in the RWPA that may be transferred without causing unreasonable damage to the property of the non-municipal water rights holder in accordance with Texas Water Code §11.139 (relating to Emergency Authorizations).

** Considered but RWPG determined for 2021 Plan that reducing water demands during a drought as a defined WMS does not ensure that sufficient supplies will be available to meet projected demands, and should not be identified as a “new source” of supply.*

31 TAC 357.34(c) – cont'd

Potentially feasible water management strategies may include, but are not limited to:

- New supply development including:
 - construction and improvement of surface water and groundwater resources,
 - brush control,
 - precipitation enhancement,
 - desalination,
 - water supply that could be made available by cancellation of water rights based on data provided by the Commission,
 - rainwater harvesting, and
 - aquifer storage and recovery.

Proposed Process for Identifying Potentially Feasible Strategies

(Modified from 2021 Process)

(Modified from 2021 Process)

Proposed 2026 Plan's Process for Identifying Potentially Feasible Strategies

Include strategies identified in previous plans

- Include recommended and alternative strategies from **2021 Plan**
- Include strategies evaluated, but not recommended in **2021 Plan**
- Include strategies evaluated in previous Plans that were not moved forward
- **Include statutory categories**

Identify draft needs and develop additional ideas to meet those needs

Maintain ongoing communication from local interests through the process

Proposed 2026 Plan's Process for Identifying Potentially Feasible Strategies

Results in an initial list of potentially feasible strategies

Additional WMSs are included if:

- local interests request them and
- the planning schedule and budget allow for the addition.

Investigate for Potential Infeasibility

- If strategy contemplates permitting and/or construction
- If strategy is near-term or necessitates significant time for implementation
- If the potential sponsor(s) have taken, or have indicated they will take, affirmative steps towards the strategy's implementation. Affirmative steps may include, but not be limited to:
 - Spending money on the strategy or project
 - Voting to spend money on the strategy or project
 - Applying for a federal or state permit for the strategy or project

Identify if strategy could potentially provide flood mitigation benefits

Identify if strategy contemplates use of the Brazos Alluvium

Proposed 2026 Plan's Process for Identifying Potentially Feasible Strategies

Identify dates the Scope of Work Committee can meet to identify potentially feasible WMSs

Document which potentially feasible water management strategies are recommended for further evaluation for the 2026 Brazos G Plan

Future Considerations and Path Forward

Path Forward

Considerations from 2021 Brazos G Plan

Seawater desalination was not considered potentially feasible.

Brackish groundwater was not considered as it was part of the MAG and would have only been considered if it was cheaper than going to a freshwater portion of an aquifer.¹

- 1. TWDB has identified Brackish Groundwater Production Zones (BGPZs), the supplies from which might be considered as separate from the MAG. The consultant team will determine if these BGPZs might constitute additional sources of supply for water management strategies.*

Considerations from 2021 Brazos G Plan

Aquifer Storage and Recovery

- ASR potential was assessed based on a “threshold of significant water needs” of $\geq 10,000$ ac-ft/yr and ASR potential for each WUG.
- ASR was recommended for other WUGs with needs less than the threshold; rationale was not documented.
- ASR was not considered as a potential strategy for county-aggregated WUGs unless a specific project sponsor requested; there were no requests.

Considerations from 2021 Brazos G Plan

Emergency Transfers

- Continue stance from 2021 Plan?

Water Conservation

- Municipal goals
- Non-municipal goals
- Specific goals

Plan Development Criteria

- Water Supply
- Environmental Issues
- Impacts on Other State Water Resources
- Threats to Agriculture and Natural Resources
- Equitable Comparison of Feasible Strategies
- Interbasin Transfers
- Impacts from Voluntary Redistribution
- Other Criteria



**8. Consider Agenda Items and Date for the next Scope
of Work Committee Meeting**

9. ADJOURN