



Region I

East Texas Regional
Water Planning Group



Regional Water Planning Group Meeting

etexwaterplan.org

October 4, 2023

East Texas Regional Water Planning Group Meeting

1. Call to Order
2. Invocation & Pledge of Allegiance
3. Notice of Meeting
4. Roll Call/Determination of Quorum
5. Public Comments

Item 6

Consideration and Approval of the minutes of the June 21, 2023 meeting

Item 7

Reports from the City of Nacogdoches

Item 8 Reports of Adjoining Regions' Activity

Region C – David Montagne

Region D – John McFarland

Region H – Scott Hall

Interregional Liaison – Kelley Holcomb

Item 9

Reports from Standing Committees

Executive Committee – John Martin

Finance Committee – Kelley Holcomb

Bylaws Committee – David Alders

Technical Committee – Scott Hall

Nominations Committee – Monty Shank

Item 10

Actions for Authorization of Contract Amendments

- a) Amendment #2 (City/Consultant)
- b) Amendment #2 (Texas Water Development Board [TWDB]/City)
- c) Amendment #3 (City/Consultant)
- d) City Personnel Eligible Listing

a. Region I/Plummer Amendment #2

- Amendment #1 TWDB → City
- Signed October 2022
- Awarded **\$890,317**

EXPENSE BUDGET CATEGORY	ORIGINAL BUDGET	REVISED BUDGET	AMOUNT CHANGED
Contractor (Political Subdivision) Other Expenses ¹	\$5,000.00	\$5,000.00	\$0.00
Contractor (Political Subdivision) Salaries and Wages ²	<i>category did not previously exist</i>	\$0.00	\$0.00
Subcontract Services	\$219,814.00	\$1,110,131.00	\$890,317.00
Voting Planning Member Travel ³	\$4,000.00	\$4,000.00	\$0.00
Contractor (Political Subdivision) Travel ⁴	\$0.00	\$0.00	\$0.00
Total Project Cost	\$228,814.00	\$1,119,131.00	\$890,317.00

TASK BUDGET

CAS Item No.	SOW Task No.	Task Description	ORIGINAL BUDGET	REVISED BUDGET	AMOUNT CHANGED
1	1	Planning Area Description	\$18,805.00	\$18,805.00	\$0.00
2	2A	Non-Municipal Water Demand Projections	\$32,928.00	\$32,928.00	\$0.00
3	2B	Population and Municipal Water Demand Projections	\$53,316.00	\$53,316.00	\$0.00
4	8	Recommendations Regarding Unique Stream Segments and/or Reservoir Sites and Legislative & Regional Policy Issues	\$11,097.00	\$11,097.00	\$0.00
5	10	Public Participation and Plan Adoption	\$112,668.00	\$254,062.00	\$141,394.00
6	3	Water Supply Analysis	\$0.00	\$130,118.00	\$130,118.00
7	4A	Water Needs Analysis	\$0.00	\$21,201.00	\$21,201.00
8	4B	Identification of Infeasible Water Management Strategies in the previously adopted 2021 Regional Water Plan	\$0.00	\$23,863.00	\$23,863.00
9	4C	Technical Memorandum	\$0.00	\$32,759.00	\$32,759.00
10	5A	Identification of Potentially Feasible Water Management Strategies and Projects	\$0.00	\$14,924.00	\$14,924.00
11	5B	Evaluation and Recommendation of Water Management Strategies and Projects	\$0.00	\$378,351.00	\$378,351.00
12	5C	Conservation Recommendations	\$0.00	\$25,534.00	\$25,534.00
13	6	Impacts of the Regional Water Plan and Consistency with Protection of Resources	\$0.00	\$34,445.00	\$34,445.00
14	7	Drought Response Information, Activities, and Recommendations	\$0.00	\$75,386.00	\$75,386.00
15	9	Implementation and Comparison to the Previous Regional Water Plan	\$0.00	\$12,342.00	\$12,342.00
		Total	\$228,814.00	\$1,119,131.00	\$890,317.00

a. Region I/Plummer Amendment #2

- Amendment #1 City → Plummer
- Signed February 2023
- Awarded **\$406,956** of \$890,317
- Balance to be awarded: **\$483,361**

EXPENSE BUDGET CATEGORY	ORIGINAL BUDGET	REVISED BUDGET	AMOUNT CHANGED
Contractor (Political Subdivision) Other Expenses ¹	\$5,000.00	\$5,000.00	\$0.00
Contractor (Political Subdivision) Salaries and Wages ²	<i>category did not previously exist</i>	\$0.00	\$0.00
Subcontract Services	\$219,814.00	\$1,110,131.00	\$890,317.00
Voting Planning Member Travel ³	\$4,000.00	\$4,000.00	\$0.00
Contractor (Political Subdivision) Travel ⁴	\$0.00	\$0.00	\$0.00
Total Project Cost	\$228,814.00	\$1,119,131.00	\$890,317.00

TASK	DESCRIPTION	Total Amount
Task 3	Water Supply Analysis	\$130,118.00
Task 4A	Water Needs Analysis	\$21,201.00
Task 4B	Identification of Infeasible Water Management Strategies	\$23,863.00
Task 4C	Technical Memorandum	\$32,759.00
Task 5A	Identification of Potentially Feasible Water Management Strategies and Projects	\$14,924.00
Task 5B	Evaluation and Recommendation of Water Management Strategies and Projects	\$154,091.00
Task 5C	Conservation Recommendations	\$5,000.00
Task 6	Impacts of the Regional Water Plan and Consistency with Protection of Resources	\$5,000.00
Task 7	Drought Response Information, Activities, and Recommendations	\$5,000.00
Task 8	Policy Recommendations & Unique Sites	\$5,000.00
Task 9	Implementation and Comparison to the Previous Regional Water Plan	\$5,000.00
Task 10	Public Participation and Plan Adoption	\$5,000.00
	TOTAL ENGINEER BUDGET	\$406,956.00

a. Region I/Plummer Amendment #2

- Amendment #2 City → Plummer
- Balance to be awarded: **\$483,361**

CONTRACTOR EXPENSE BUDGET

EXPENSE BUDGET CATEGORY	ORIGINAL BUDGET	REVISED BUDGET	AMOUNT CHANGED
Contractor (Political Subdivision) Other Expenses ¹	\$5,000.00	\$5,000.00	\$0.00
Contractor (Political Subdivision) Salaries and Wages ²	<i>category did not previously exist</i>	\$0.00	\$0.00
Subcontract Services	\$219,814.00	\$1,110,131.00	\$890,317.00
Voting Planning Member Travel ³	\$4,000.00	\$4,000.00	\$0.00
Contractor (Political Subdivision) Travel ⁴	\$0.00	\$0.00	\$0.00
Total Project Cost	\$228,814.00	\$1,119,131.00	\$890,317.00

TASK	DESCRIPTION	Total Amount
Task 5B	Evaluation and Recommendation of Water Management Strategies and Projects	\$219,260.00
Task 5C	Conservation Recommendations	\$20,534.00
Task 6	Impacts of the Regional Water Plan and Consistency with Protection of Resources	\$29,445.00
Task 7	Drought Response Information, Activities, and Recommendations	\$70,386.00
Task 9	Implementation and Comparison to the Previous Regional Water Plan	\$7,342.00
Task 10	Public Participation and Plan Adoption*	\$136,394.00
TOTAL ENGINEER BUDGET		\$483,361.00

a. Region I/Plummer Amendment #2

- Regional Water Planning Group (RWPG) to Authorize the City of Nacogdoches to Negotiate and Execute Amendment #2 to Technical Consultant Team (Plummer) for \$483,361.00 to Match Current Total Project Costs and Committed Funds for the 2026 Region I Regional Water Plan (RWP)

b. TWDB/Region I Amendment #2

EXPENSE BUDGET CATEGORY	BUDGET	REVISED BUDGET	AMOUNT CHANGED
Contractor (Political Subdivision) Other Expenses ¹	\$5,000.00	\$5,000.00	\$0.00
Contractor (Political Subdivision) Salaries and Wages ²	\$0.00	\$60,000.00	\$60,000.00
Subcontract Services	\$1,110,131.00	\$1,277,611.00	\$167,480.00
Voting Planning Member Travel ³	\$4,000.00	\$4,000.00	\$0.00
Contractor (Political Subdivision) Travel ⁴	\$0.00	\$0.00	\$0.00
Total Project Cost	\$1,119,131.00	\$1,346,611.00	\$227,480.00

b. TWDB/Region I Amendment #2

- RWPG to Authorize the City of Nacogdoches to Negotiate and Execute an Amendment #2 to the TWDB Contract for \$227,480.00 to Increase the Total Project Cost and Committed Funds for the 2026 Region I Regional Water Plan

c. Region I/Plummer Amendment #3

EXPENSE BUDGET CATEGORY	BUDGET	REVISED BUDGET	AMOUNT CHANGED
Contractor (Political Subdivision) Other Expenses ¹	\$5,000.00	\$5,000.00	\$0.00
Contractor (Political Subdivision) Salaries and Wages ²	\$0.00	\$60,000.00	\$60,000.00
Subcontract Services	\$1,110,131.00	\$1,277,611.00	\$167,480.00
Voting Planning Member Travel ³	\$4,000.00	\$4,000.00	\$0.00
Contractor (Political Subdivision) Travel ⁴	\$0.00	\$0.00	\$0.00
Total Project Cost	\$1,119,131.00	\$1,346,611.00	\$227,480.00

c. Region I/Plummer Amendment #3

- RWPG to Authorize the City of Nacogdoches to Negotiate and Execute Amendment #3 to Technical Consultant Team (Plummer) for \$167,480.00 to Increase the Total Project Cost

d. Personnel Eligible Listing

- RWPG to Approve the City of Nacogdoches Personnel Eligible Listing (PEL) for Political Subdivision Salaries and Wages

Item 11

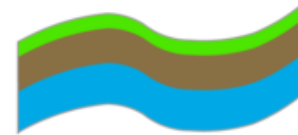
Action for consideration and adoption of updates to the Bylaws

Agenda Item No. 12

Report from Consultant Team



PLUMMER



AGS

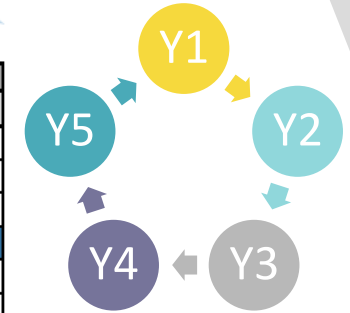
Advanced Groundwater Solutions, LLC



**FREESE
AND
NICHOLS**

Today's Discussion

- a) Overview of Project Schedule
- b) Major Water Providers (ACTION)
- c) Infeasible Water Strategy Methodologies, Results, and Recommendations (ACTION)
- d) Hydrological Variance Request for Surface Water Supplies to the TWDB (ACTION)
- e) Water Management Strategy Evaluation Methodology (ACTION)
- f) Notice to Proceed on Task 5B (ACTION)
- g) Technical Memorandum Outline
- h) Next Meeting Agenda

[illegible]

Notes: ^A Estimated timeline based on currently available agency resources and subject to change

^b DB27 is the updated, online water planning database for the 2027 State Water Plan.

^c Anticipated database availability dates are estimates based on currently available agency resources

¹² Subject to available funding

2026 Plan Short-Term Schedule

Date	Schedules Events/Tasks
Oct 2023	TWDB Board adopts projections
Oct – Dec 2023	Obtain the Notice to Proceed on Task 5B Continue to evaluate water availability/existing water supplies and identify any water needs Identify Water Management Strategies, including reuse, conservation, and other water projects Draft and Review Draft Infeasible WMSs and WMSPs Submit the Hydrological Variance Request to TWDB
Oct – March 2024	Prepare the technical memorandum outline and draft the memorandum
Dec 2023 – Feb 2024	RWPG Meeting(s)
Jan – June 2024	TWDB Board adopts identified WMSs and WMSPs as infeasible

Abbreviations:

RWPG = Regional Water Planning Group
TWDB = Texas Water Development Board

WMSs = Water Management Strategies
WMSPs = Water Management Strategy Projects

Major Water Providers

Definition of Major Water Provider

- Definition from last round of planning:
 - Recommend for Major Water Providers to provide more than 5,000 acre-feet per year
 - Non-Aggregated Group
 - Owns their own groundwater wells or has direct surface water rights

Per the Texas Administrative Code (31 TAC §357.10(19) Major Water Providers are defined as: "A WUG or WWP of particular significance to the region's water supply as determined by the regional water planning group. This may include public or private entities that provide water for any water use category."

List of Major Water Providers

- Angelina & Neches River Authority
- Angelina Nacogdoches WCID #1
- City of Center
- Houston County WCID #1
- City of Jacksonville
- City of Lufkin
- City of Nacogdoches
- City of Tyler
- Athens MWA
- City of Beaumont
- City of Carthage
- Lower Neches Valley Authority
- Panola County FWSD #1
- City of Port Arthur
- Sabine River Authority
- Upper Neches River Municipal Water Authority

Abbreviations:

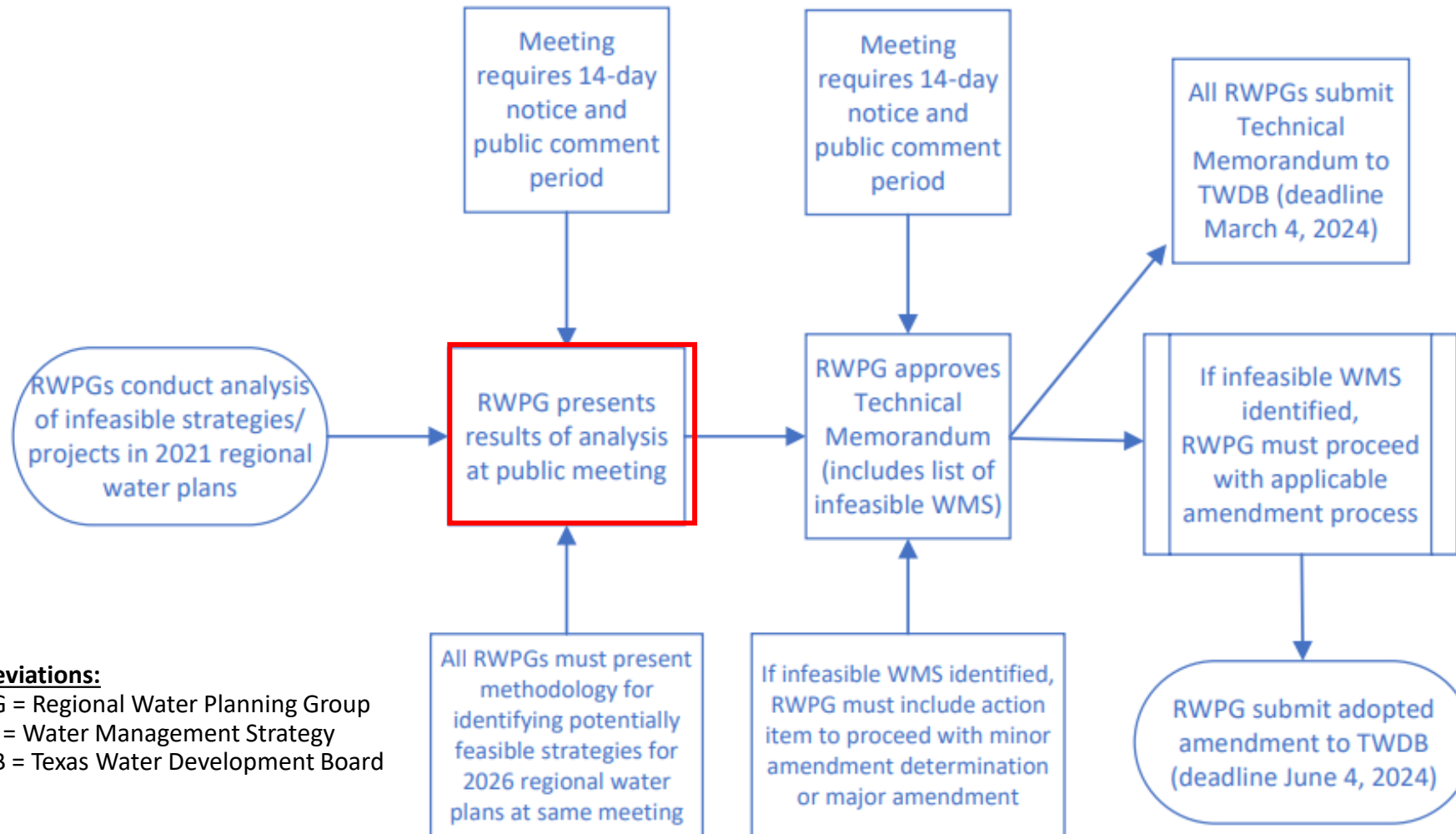
FWSD = Fresh Water Supply District WCID = Water Control & Improvement District MWA = Municipal Water Authority

Item 12b

- Discussion and Approval of the Definition and List of Major Water Providers

Infeasible Water Strategy Methodologies, Results, and Recommendation

Process to Identify Infeasible Water Management Strategies



Abbreviations:

RWPG = Regional Water Planning Group

WMS = Water Management Strategy

TWDB = Texas Water Development Board

New Requirements on Infeasible WMSs

- Task 4B: Identification of infeasible WMSs in the 2021 RWP
 - Required by Senate Bill (SB) 1511, 86th Texas Legislature
 - Methodology and Results presented at public meeting
 - Analysis and list to be included in the Technical Memorandum (Due March 4, 2024), the IPP, and Final RWP

Step 1: Review of 2021 RWP WMSs and Projects

- Focus on reviewing 2021 Plan's strategies and projects that require a permit and/or involve construction and that:
 - are shown to be online by the 2020 (no later than January 5, 2023),
 - are near-term and have lengthy permitting/construction:
 - ✓ new major reservoirs,
 - ✓ seawater desalination,
 - ✓ direct potable reuse,
 - ✓ brackish groundwater,
 - ✓ aquifer storage and recovery, and
 - ✓ out of state water transfers;
 - Generally required for implementation either:
 - ✓ significant resources;
 - ✓ significant time.

Step 2: Screening Process

1. Does the strategy require construction or permitting?

Is it recommended to be online in 2020?

Is there an identifiable sponsor (e.g., needs identified for livestock has no sponsor)

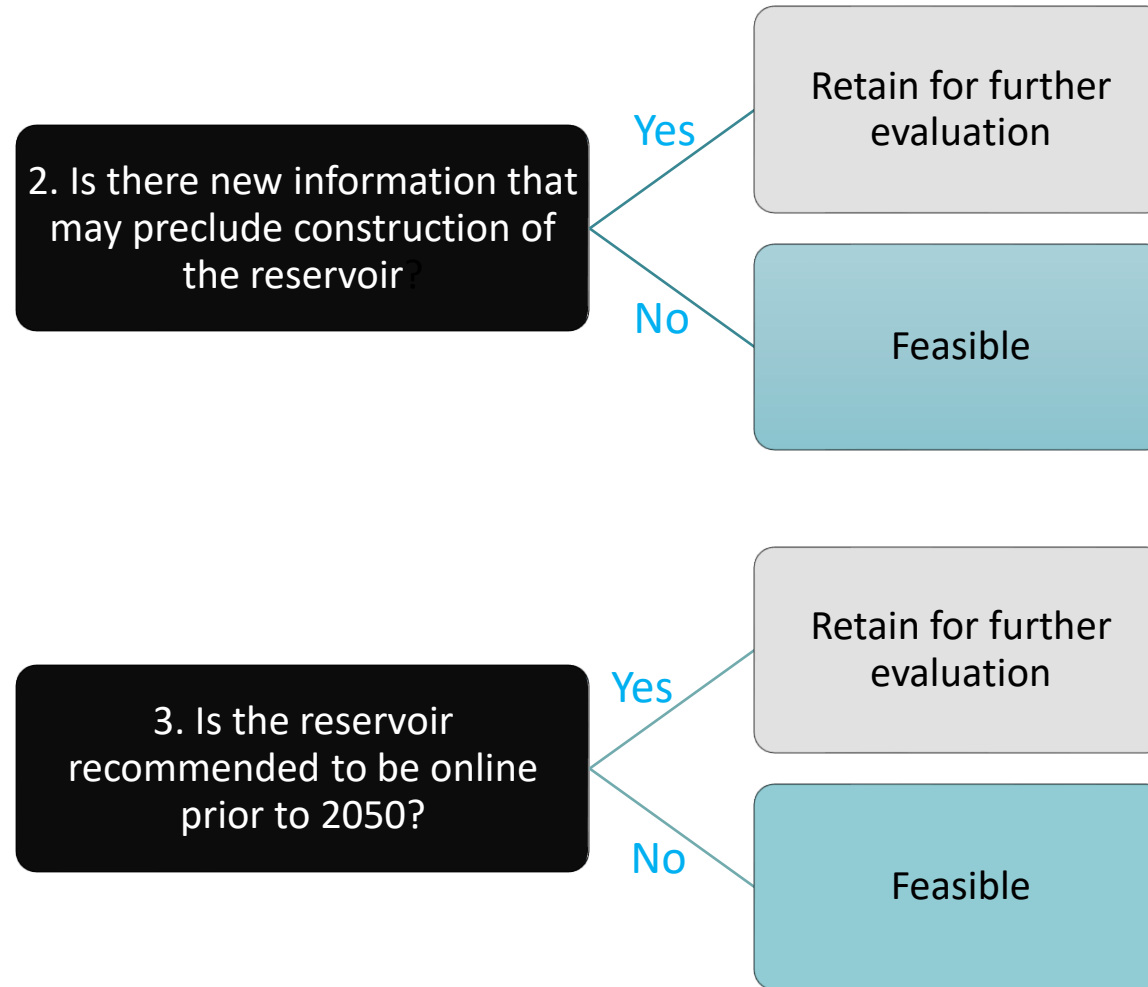
Is the WMS a major project type (e.g., reservoir)?

YES

Retain for further evaluation

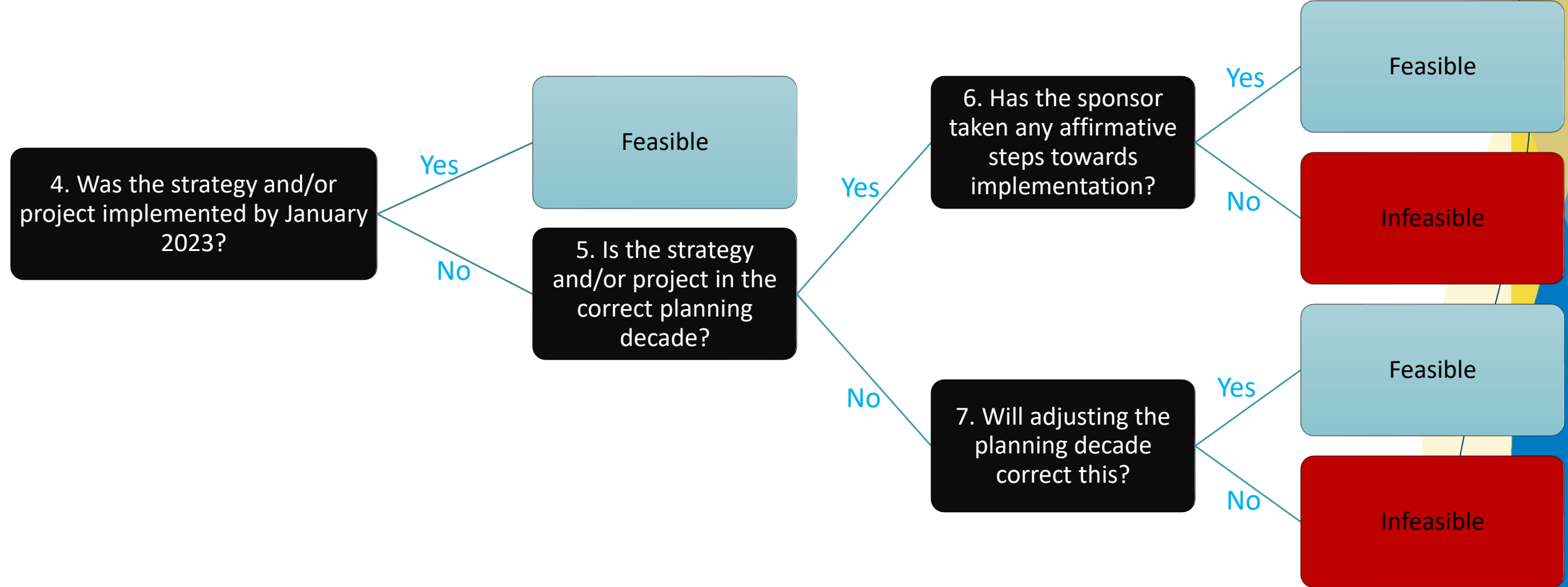
KEY POINT: Initial screening eliminates all conservation strategies, strategies for self-supplied aggregated WUGs, and infrastructure projects that are recommended to be online in 2040 or later.

Screening Process Cont.



KEY POINT: Permitting for new reservoirs are expected to take between 10 and 20 years, and construction between 4 and 8 years. Therefore, no activity is required for projects recommended after 2040.

Screening Process Cont.



KEY POINT:

- Question 4 only applies to strategies retained after initial screening and recommended to be online in 2020.
- Affirmative steps by the sponsor may include but are not limited to:
 - Spending money on the strategy or project
 - Voting to spend money on the strategy or project
 - Applying for a federal or a state permit for the strategy of project

Step 3: Screening Results

1	TWDB Identified 2021 WMS Projects	11 Conservation projects (screened out) 1 Non-municipal project (screened out) 5 projects with online decade after 2020 (screened out) 3 projects need to be reviewed for infeasibility
2	Select Projects Online After 2020 (Major Reservoir)	1 project needs to be evaluated
3	Source: Related WMS Supply	5 Non-municipal projects (screened out) 4 projects need to be reviewed for infeasibility

Abbreviations:

TWDB = Texas Water Development Board

WMS = Water Management Strategy

Note: The three lists above were obtained in a spreadsheet format from TWDB which were to be assessed for infeasibility.

Step 4: Contact Sponsors of the Identified Infeasible WMSs and WMSPs

S.N.	Project/Strategy	Sponsor
1	AMWA Athens Fish Hatchery Reuse	Athens Municipal Water Authority
2	Neches Run-of-River with Lake Palestine	Upper Neches River Municipal Water Authority
3	Beaumont West Regional Reservoir	Lower Neches Valley Authority
4	Purchase from Center	Sand Hills WSC
5	Lake Columbia	Angelina and Neches River Authority
6	ANRA-Run-of-River (Submitted Application)	Angelina & Neches River Authority
7	HCWC Permit Amendment	Houston County WCID 1

Abbreviations:

AMWA = Athens Municipal Water Authority

ANRA = Angelina & Neches River Authority

HCWC = Houston County Water Control

WSC = Water Supply Corporation

WCID = Water Control & Improvement District

Item 12c

- Discussion and Possible Action on Infeasible Water Strategy Methodologies, Results, and Recommendations and Receive Public Comment

Requirements on Infeasible WMSs if Identified

- If infeasible WMSs identified, amend 2021 plans to:
 - Remove infeasible WMS or WMSP,
 - Revise infeasible WMS or WMSP to make feasible, and/or
 - Incorporate new WMS or WMSP
- RWPG-adopted amendments due June 4, 2024

Amendment Type

- Three Types of Amendments:
 - Alternative Strategy
 - Minor Amendment
 - Major Amendment
- Intend to utilize the first two types if possible.

Hydrological Variance Request

Surface Water in Regional Water Planning

- TWDB requires the use of the Texas Commission on Environmental Quality (TCEQ) Water Availability Model (WAM) Run 3 (Full Appropriation)
 - Assumes first in right is first in time
 - All water rights are fully used
- To make adjustments, need to request a hydrologic variance from the TWDB

Consulting Team Recommended Hydrologic Variances

- Neches-Trinity Coastal Basin
 - Adopt the current WAM run by TCEQ
- Trinity Basin
 - Adopt the updated Trinity WAM run by Region C

Consulting Team Recommended Hydrologic Variances

- Sabine Basin
 - Adopt updated Sabine WAM run by Region I
- Neches Basin
 - Adopt updated Sabine WAM run by Region I

Item 12d

- Discussion and Approval of the Hydrological Variance Request for Surface Water Supplies to the TWDB

Process to Identify and Evaluate Water Management Strategies

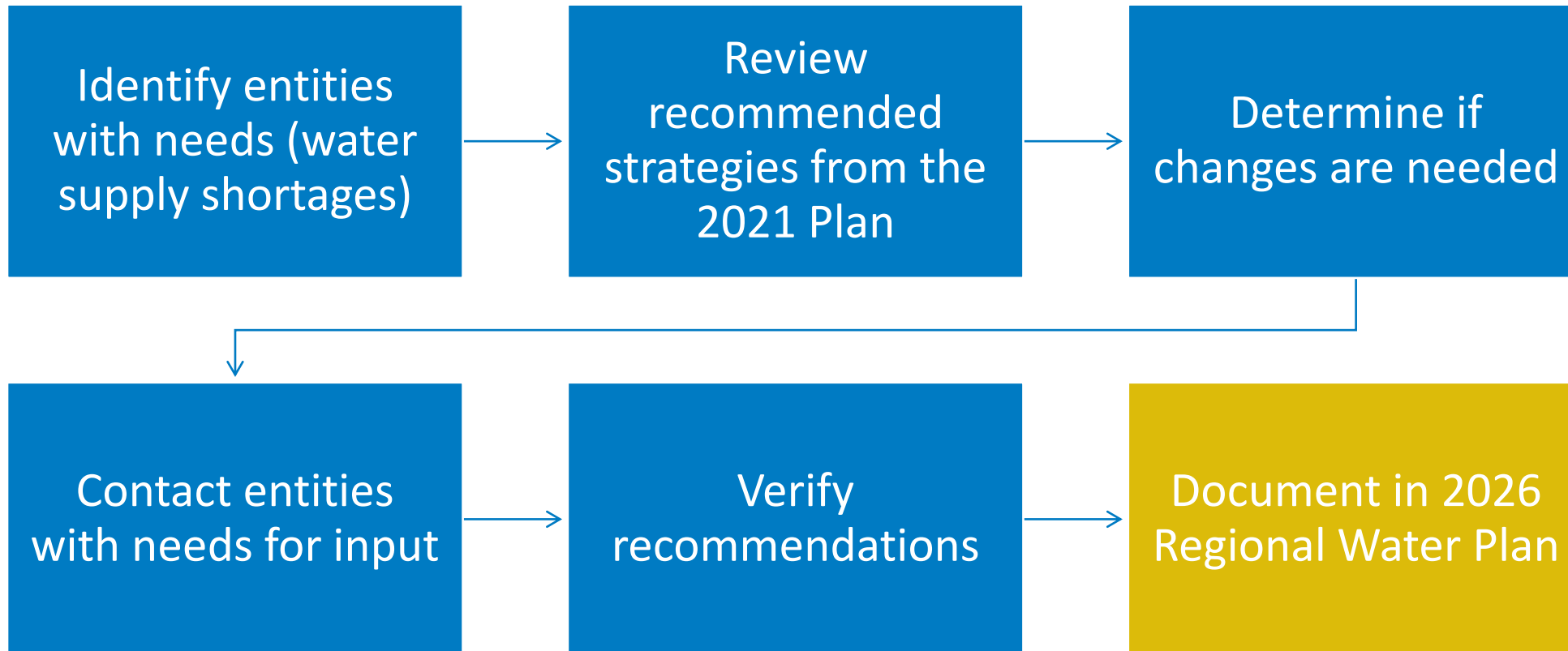
Process to Identify and Evaluate Water Management Strategies

31 TAC 357.12(b) states that the RWPG must:

- Hold a public meeting to receive input on its process; and
- Document the process

2026 Plan process will be very similar to the process used in the 2021 Plan

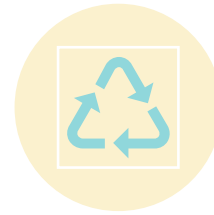
Process to Identify and Evaluate Water Management Strategies



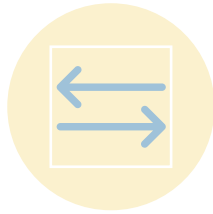
Process to Identify and Evaluate Water Management Strategies



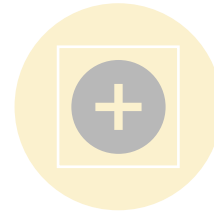
Conservation,
Drought
Management



Reuse



Transfer of existing
supply



Expanded use of
existing supply



New supply
development



Other types
identified in
guidance

Process to Identify and Evaluate Water Management Strategies

Other potential types of strategies listed in guidance:

- Brush control
- Precipitation enhancement
- Cancellation of water rights
- Rainwater harvesting

Not likely considered in the East Texas Regional Water Planning Area (ETRWPA) 2026 Plan

Process to Identify and Evaluate Water Management Strategies

Strategies must:

- Have an identifiable sponsor or authority
- Consider end use
- Have a firm supply during the drought-of-record to provide a reasonable percentage of projected need
- Meet existing regulations
- Use proven technology
- Be implementable
- Be appropriate for regional planning

Process to Identify and Evaluate Water Management Strategies

ETRWPG evaluation process will:

- Utilize current TCEQ-approved WAM for new surface water appropriations
 - ✓ Consideration of environmental flows
- Utilize approved modeled available groundwater (MAG) and desired future condition (DFC) for specific aquifers
- Provide equitable & consistent comparison between strategies
- Prepare quantitative reporting for each WMS
 - ✓ Quantity, cost, and reliability

Process to Identify and Evaluate Water Management Strategies

ETRWPG evaluation process will consider:

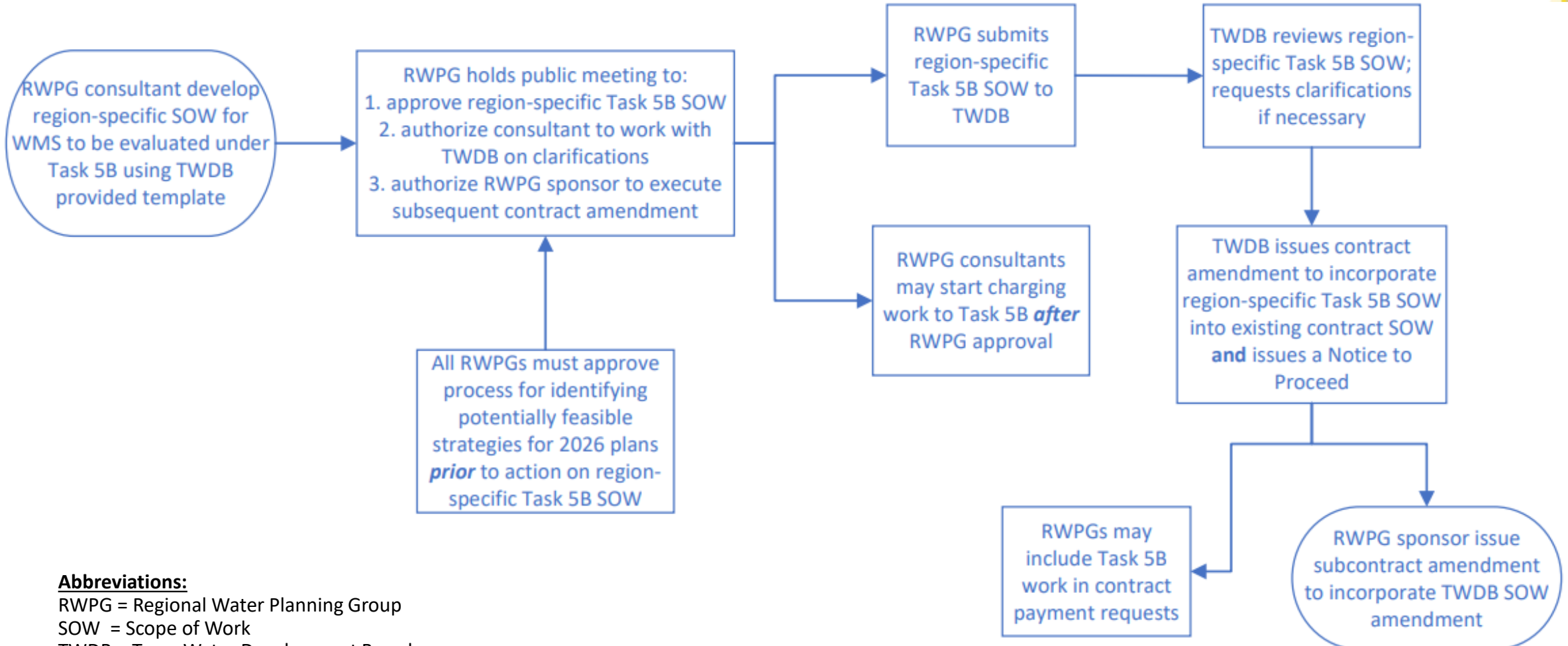
- Impacts on water resources
- Impacts/threats to agricultural or natural resources
- Interbasin transfers
- Third-party social and economic impacts from voluntary redistributions of water
- Impacts on key water quality parameters
- Existing pipelines and other conveyance infrastructure
- Other relevant issues, as necessary

Item 12e

- Discussion and Approval Process to Identify and Evaluate Water Management Strategies and Receive Public Comment

Notice to Proceed on Task 5B

Task 5B Notice-to-proceed Request



Abbreviations:

RWPG = Regional Water Planning Group

SOW = Scope of Work

TWDB = Texas Water Development Board

List of WMS Categories

- Water Conservation Strategies
- Indirect, Non-Potable Reuse Strategies
- New Major Reservoir (Lake Columbia)
- Surface Water Diversion
- Surface Water Yield Enhancement
- Other WMS (Documentation and Database Entry – DB27)

Item 12f

- Discussion and Approval for Consulting Team to Submit a Notice-to-Proceed Request on Task 5B

Look Ahead

Technical Memorandum (3/4/24)

- TWDB DB27 data reports
 - Population, Demand, Source Availability, Existing Water Supply, Needs/Surplus, Data Comparison to 2021 RWP, Source Data Comparison to 2021 RWP
- Process used identify potentially feasible WMSs
- List of potentially feasible WMSs to date
- Any hydrologic variance requests to date
 - For approved TCEQ WAM modifications or alternative surface water models, reallocated annual MAG volumes, or use of MAG Peak Factors, a table must be included showing the original unmodified firm yield or MAG value along with the alternative availability utilized as the basis for planning
- Methodology for calculating the anticipated sedimentation rate and revising the area-capacity rating curve
- Table of details of hydrologic models used
 - model name, version date, model input/output files used, date model used, and any relevant comments
- Documentation of methodologies for groundwater availabilities to date
 - table providing the aquifer, county, and methodology description
- Region's interregional coordination efforts to date
- List of infeasible WMSs and WMSPs from the region's 2021 RWP
- Electronic model files used in determining water availability

Next Meeting(s)

- Discussion of 2 meetings
- Approval of Technical Memorandum (due March 4, 2024)

Item 13

Reports from other state agencies

- a) Texas Water Development Board – Lann Bookout
- b) Texas Department of Parks & Wildlife – Stephen Lange
- c) Texas Department of Agriculture – Manual Martinez
- d) Texas Soil and Water Conservation Board – Trey Watson
- e) Groundwater Management Areas – John Martin/John McFarland

Item 14

General Discussion

Item 15

Next Meeting Date(s)

Questions?



PLUMMER

Brigit Buff, PE

bbuff@plummer.com

972.533.2499