



# **BRAZOS G REGIONAL WATER PLANNING GROUP**

**February 26, 2020**

**10:00 A.M.**

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



- 1. CALL THE MEETING TO ORDER**
- 2. INVOCATION**
- 3. NOTICE OF MEETING**
- 4. ATTENDANCE AND ANNOUNCEMENTS**
- 5. PUBLIC INPUT**



**6.1. Report and possible discussion from Texas Water Development Board staff.**



**6.2. Presentation, discussion and possible action on the Brazos G 2021 Initially Prepared Plan.**



# Review of the Initially Prepared Plan

## Agenda Item 6.2

February 26, 2020



# Contents of the Plan

## Volume I:

Executive Summary

Chapter 1. Description of Region

Chapter 2. Population and Water Demands

Chapter 3. Water Supplies

Chapter 4. Needs

Chapter 5. Plans for WUGs and WWP, organized by counties

Chapter 6. Impacts of the Plan on Natural and Agricultural Resources

Chapter 7. Drought Response Information and Recommendations

Chapter 8. Water Policy Recommendations

Chapter 9. Results of Infrastructure Financing Survey

Chapter 10. Public Participation and Adoption of Plan

Chapter 11. Implementation and Comparison to the 2011 Plan

Appendices



# Contents of the Plan

## Volume II: Technical Evaluation of Water Management Strategies

Water Conservation

Wastewater Reuse (14 strategies)

New Reservoirs (12 strategies)

Groundwater (4 strategies)

BRA System Operations **These are strategies that were evaluated.**

Conjunctive Use (2 strategies) **Not all are recommended.**

Aquifer Storage and Recovery (ASR) (6 strategies)

Regional Water Supply Projects (9 strategies)

Augmentation of Existing Supplies (5 strategies)

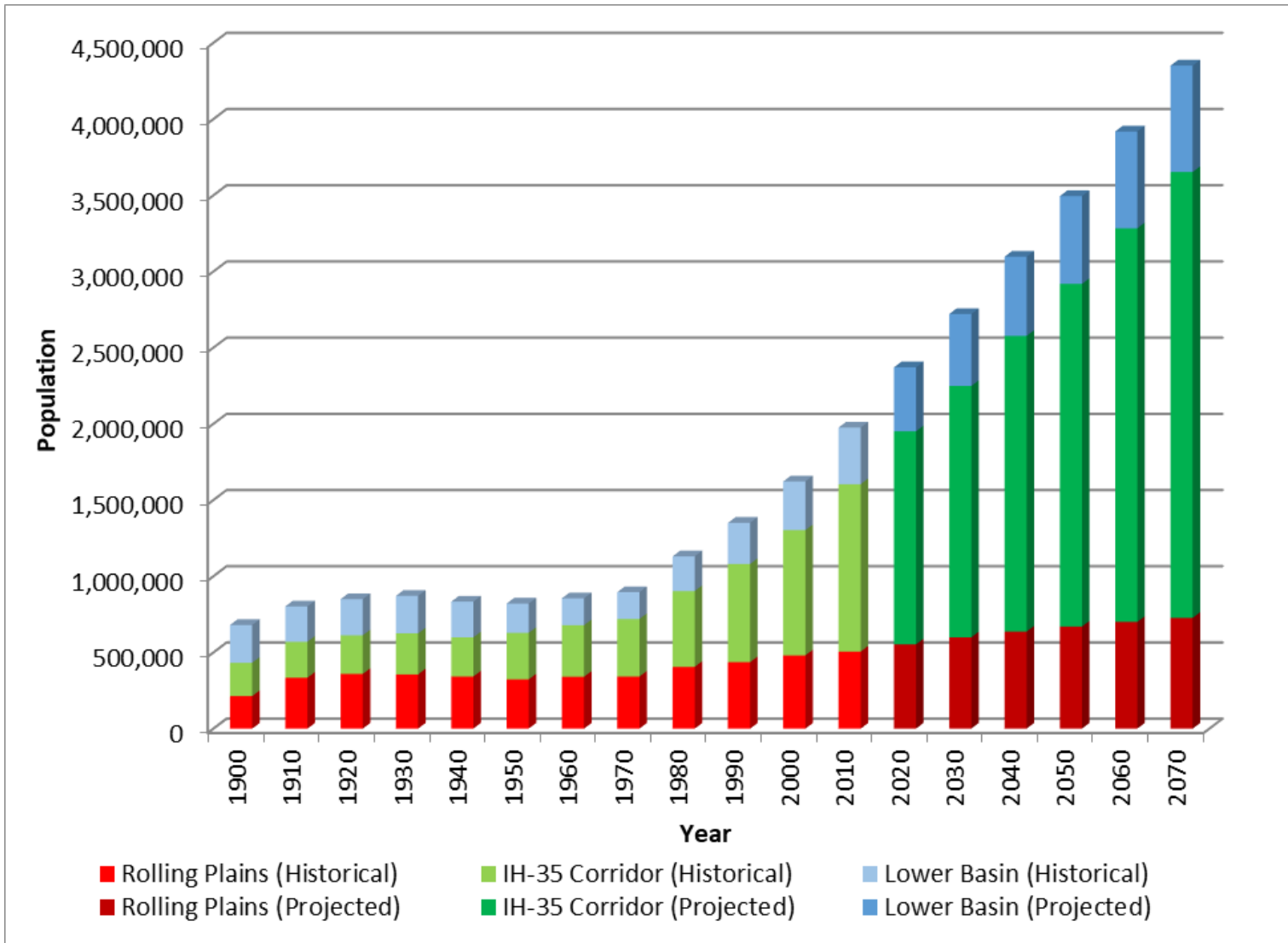
Chloride Control Project

Brush Control

Miscellaneous Strategies (pipelines, pump stations, wells, treatment plants)

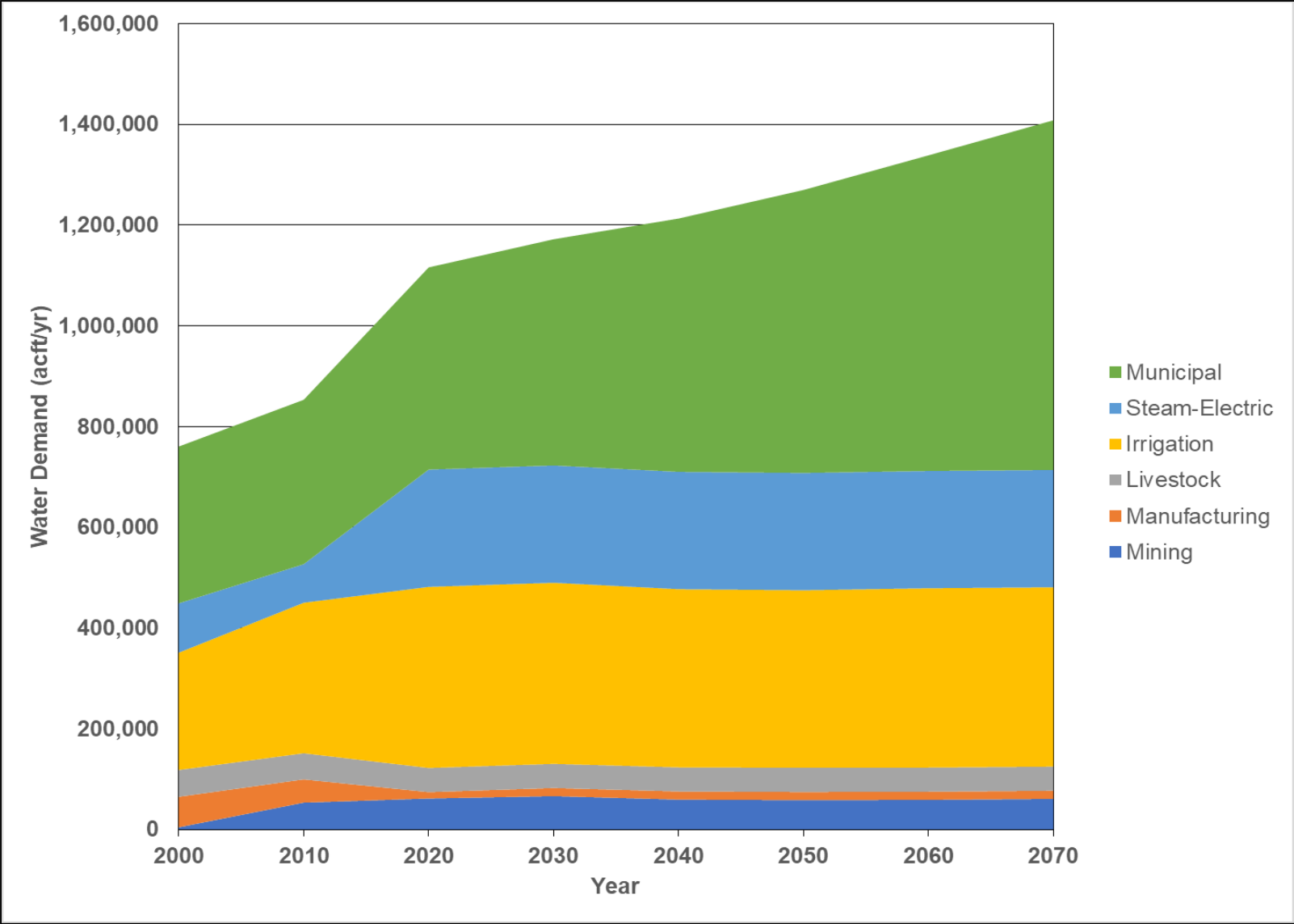


# Population Projected for the Brazos G Area





# Water Demands Projected for the Brazos G Area



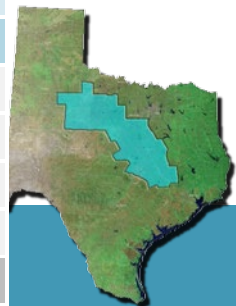
# Projected Water Supply Needs

- Municipal: 147 WUGs (327,658 acft/yr in 2070)
- Manufacturing: 10 counties (1,920 acft/yr in 2070)
- Steam-Electric: 7 counties (74,477 acft/yr in 2070)
- Mining: 31 counties (33,008 acft/yr in 2070)
- Irrigation: 21 counties (77,574 acft/yr in 2070)



# Unmet Needs

County	Water User Group	Needs Left Unmet (acft/yr)					
		2020	2030	2040	2050	2060	2070
Bosque	Mining	747	801	594	575	539	528
Brazos	Steam-Electric	1	—	—	—	—	—
Comanche	Irrigation	12,991	12,382	11,707	11,739	11,707	11,738
Haskell	Mining	90	87	77	69	61	55
Haskell	Irrigation	14,932	13,881	10,540	10,809	11,711	11,825
Hill	Steam-Electric	4,120	4,120	4,120	4,120	4,120	4,120
Hill	Mining	187	—	—	—	—	—
Knox	Irrigation	13,160	14,678	10,394	8,418	7,954	10,117
Limestone	Mining	6,849	6,271	6,016	6,457	6,891	7,467
Milam	Steam-Electric	32,254	32,254	32,254	32,254	32,254	32,254
Nolan	Irrigation	6,572	6,341	6,110	6,110	6,110	6,110
Robertson	Irrigation	10,476	12,222	11,521	12,106	12,217	12,309
Shackelford	Mining	336	501	309	201	95	16
Somervell	Steam-Electric	34,687	34,773	34,879	34,975	35,071	35,167
Somervell	Mining	—	98	—	—	—	—
Stephens	Mining	3,323	3,295	2,557	1,968	1,440	990
Stephens	Irrigation	80	80	80	80	80	80
Williamson	Mining	4,722	5,492	6,405	7,513	8,654	9,960
Williamson	Irrigation	—	—	—	149	149	149
Young	Livestock	111	—	—	—	—	—
<b>Total Livestock</b>		<b>111</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Irrigation</b>		<b>58,211</b>	<b>59,584</b>	<b>50,352</b>	<b>49,411</b>	<b>49,928</b>	<b>52,328</b>
<b>Total Mining</b>		<b>16,254</b>	<b>16,545</b>	<b>15,958</b>	<b>16,783</b>	<b>17,680</b>	<b>19,016</b>
<b>Total Steam-Electric</b>		<b>71,062</b>	<b>71,147</b>	<b>71,253</b>	<b>71,349</b>	<b>71,445</b>	<b>71,541</b>
<b>Total Brazos G</b>		<b>145,638</b>	<b>147,276</b>	<b>137,563</b>	<b>137,543</b>	<b>139,053</b>	<b>142,885</b>



# Notable Water Management Strategy Recommendations

- Additional Conservation: 104 municipal WUGs
- Reuse: 18 WUGs
- New Reservoirs:
  - Lake Creek Reservoir
  - Throckmorton Reservoir
  - Turkey Peak Reservoir
  - Brushy Creek Reservoir
  - Cedar Ridge Reservoir
  - Coryell County Off-Channel Reservoir
  - Groesbeck Off-Channel Reservoir
- Additional groundwater development (multiple aquifers)
- ASR (McLennan County, College Station, Lake Granger, Lake Georgetown)
- BRA System Operations Permit Supplies
- Williamson County supplies – Alcoa SW, Milam GW, Granger Augmentation, Granger and Georgetown ASR, Lake Whitney Hydropower Reallocation



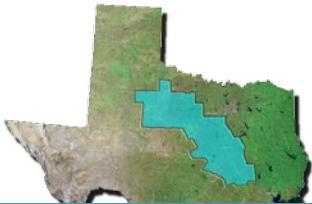
# Overview of Document Status

## Volume I:

- Chapter 1 – Description of Region – February 21
- Chapter 2 – Demands – updated February 21
- Chapter 3 – Supplies – January 6, updated February 21
- Chapter 4 – Needs – January 13, updated February 21
- Chapter 5 – County & WWP Plans – January 16, updated February 21
- Chapter 6 – Impacts – presented Feb 12, text uploaded February 21
- Chapter 7 – Drought Response – uploaded February 21
- Chapter 8 – Policy Recommendations – December
- Chapter 9 – Infrastructure Financing – submitted with Final Plan
- Chapter 10 – Public Participation/Adoption of Plan – submitted with Final Plan
- Chapter 11 – Implementation and Comparison – February 21

## Volume II:

- All strategy evaluations presented
- Text in draft form still being edited



# What has changed in the draft documents?

- Internal review by HDR and response to actions taken last meeting:
  - Modified Cleburne's plan in response to ongoing discussions
  - Changes to Williamson County Plan
    - Finalized utilization of Milam County GW and Alcoa Property Supplies
    - Supply from Lake Whitney Reallocation replaces Brazos River Alluvium
  - Updated county plans for changes to steam-electric needs
    - Eliminated needs in Robertson, Hood
    - Reduced needs in Somervell
    - Needs left unmet in Milam
  - Chp 4 – added “Unmet Needs” section and table
  - Minor editorial revisions to supplies and needs tables
  - Typographical corrections
  - Clarifications in text
  - Adjusted some strategies to agree with WWP plans
  - Misc. minor strategies – costs for WTPs, wells, pipelines



# What could change between now and IPP submittal?

- Minor typographical corrections, clarifications and formatting changes
- Compile Volume II Strategy Evaluations
- Compile appendices
  - A. Supplemental Data used for Chapter 1
  - B. Aquifer Descriptions and Groundwater Availability
  - C. Water Use Compilation
  - D and E. Detailed Descriptions of Vegetative Regions, Biotic Provinces and Ag. Resources
  - F. Surface Water Supplies – detailed water availability output
  - G. TWDB Economic Impacts Analysis
  - H. Written Comments Received (placeholder for final plan)
  - I. Memo of Population and Water Demand Revisions Requested
  - J. Strategies from Other Regions (placeholder for final plan)
  - K. DB22 reports required in plan
  - L. Water Availability Model input files (separate electronic submittal)
  - M. 2016 Implementation Spreadsheet (separate electronic submittal)
  - Requested Revisions to Population Projections and Water Demands
  - TWDB database tabular output as required by rules



# Questions/Discussion







## **6.3. Presentation of the timeline to develop the 2021 Brazos G Regional Water Plan.**



# Schedule to Develop the 2021 Brazos G Plan

## Agenda Item 6.3

February 26, 2020

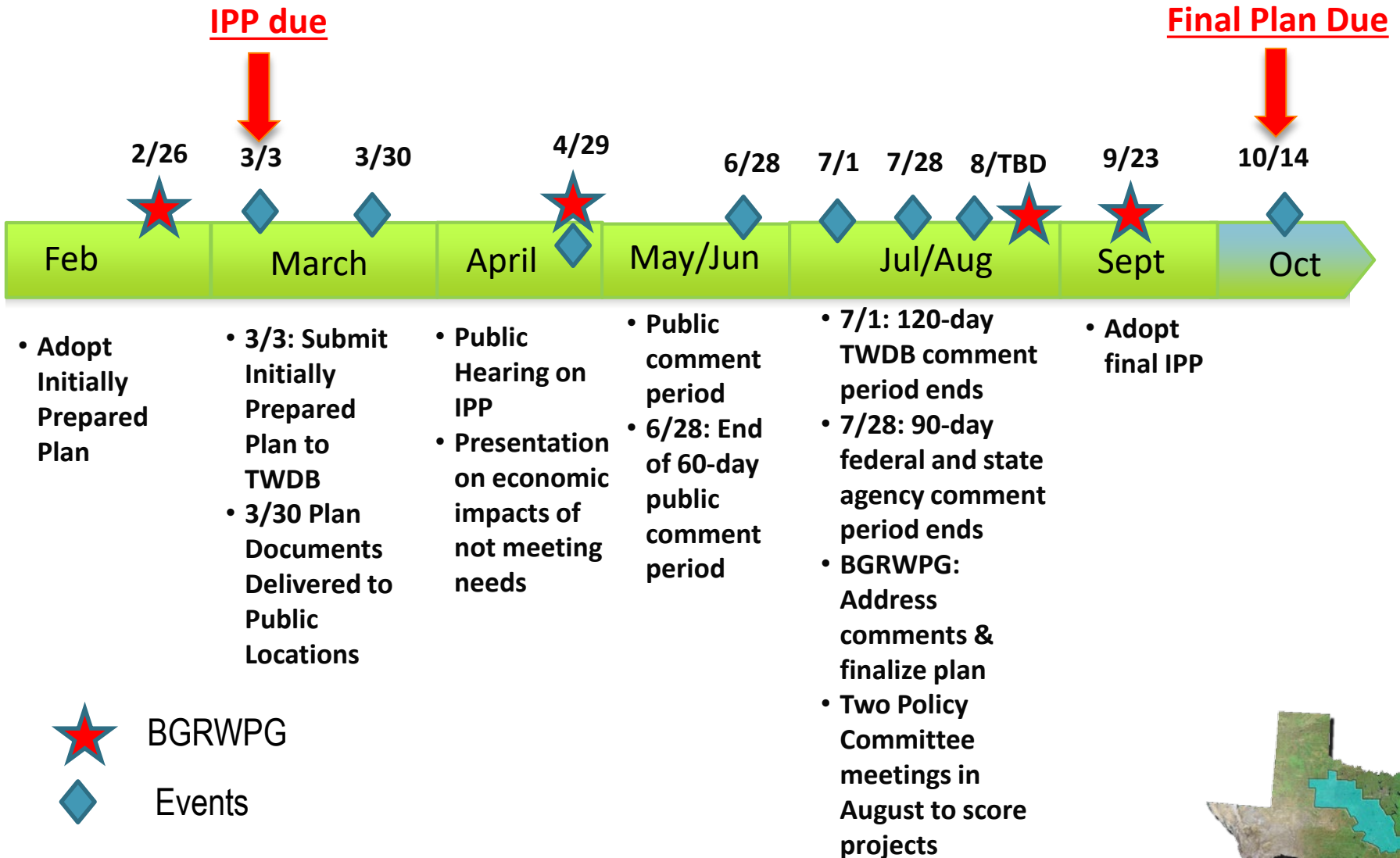


# Working Schedule for the 2021 Planning Cycle

- February 26 Brazos G RWPG Meeting
  - Adopt Initially Prepared Plan
- March 3, 2020 – Submit Initially Prepared Plan to TWDB
  - March – Distribute IPP
  - Spring – Public/agency comment period
  - April 29 – Public Hearing on IPP; presentation on economic impacts of not meeting needs
  - May/June – Public comment period following public hearing
  - July/Aug – Address comments & finalize plan
  - September – Brazos G RWPG Meeting – adopt Final Plan
- October 14, 2020 – Submit Final Plan



# Proposed Brazos G Schedule (Feb– Oct 2020)





## **6.4. Discussion and possible action to adopt the Brazos G Initially Prepared Plan.**

## **Suggested Action:**

“The Brazos G Regional Water Planning Group directs HDR and the Brazos River Authority (BRA) to submit the 2021 Brazos G Initially Prepared Plan (IPP) to the Texas Water Development Board on or before March 3rd, 2020. HDR is allowed to make non-substantive changes to the IPP, as necessary, to correct grammatical and formatting errors prior to submittal.

Furthermore, the Brazos G Regional Water Planning Group directs the BRA to hold a public IPP hearing on April 29th, 2020 in accordance with the Texas Administrative Code. ”





- 6.5. Report and possible discussion on updates from other regional planning groups (Regions B,C,F,H,K,L &O).**
- 6.6. Report and possible discussion on Groundwater Management Area activities.**
- 6.7. Report and possible discussion on agency communication and information.**
- 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**