## GMA 8 Joint Groundwater Planning

July 26, 2019

Discussion and possible action on potential model runs for this planning cycle

Meeting scheduled with TWDB staff to discuss GMA 8 issues

- WSP consultant team
- Joe, Dirk, Drew, and Mitchell

Modeling Issues

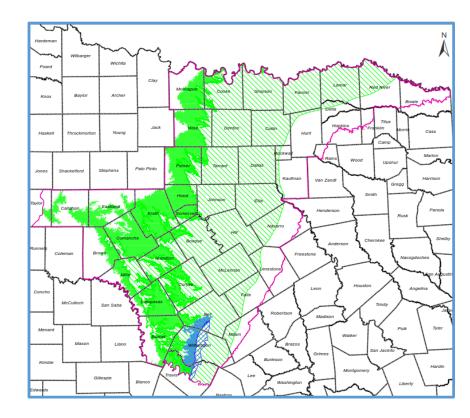
### Major Aquifers

#### Northern Trinity Woodbine GAM

- Trinity
- Woodbine
- Current budget allows one updated simulation

#### Northern Edwards (BFZ) GAM

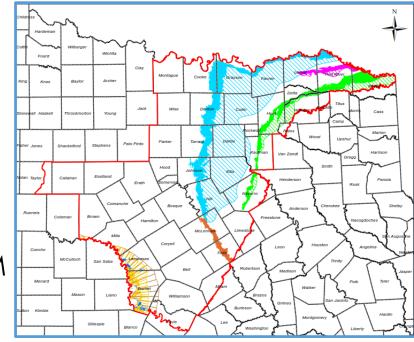
- Edwards BFZ
- Clearwater UWCD funding

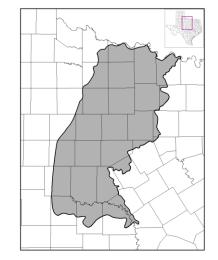


## Minor Aquifers

### Llano Uplift Aquifer System GAM

- Ellenburger-San Saba
- Hickory
- Marble Falls
- No funding in current budget
- Nacatoch Aquifer GAM
  - Non-relevant last round
- Brazos River Alluvium Aquifer GAM
  - Non-relevant last round
- Blossom Aquifer GAM
  - Non-relevant last round
- Cross Timbers Aquifer GAM
  - Cross Timbers
  - GAM likely not ready in this round
  - Relevant or NOT?



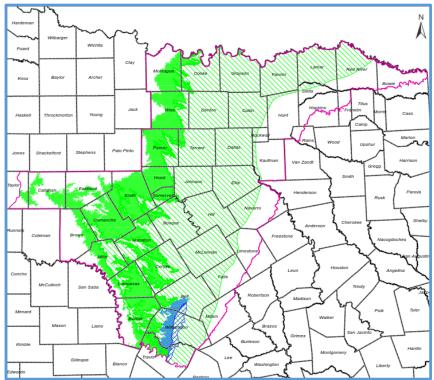


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### Modeling Runs

#### Northern Trinity Woodbine GAM

Run 10



### Run 10 Description

Used TWDB accepted version of the GAM

- Initial conditions set as simulated water levels on January 1, 2010 from transient calibration run
- Adjusted pumping amounts based on GCD input
- No changes to areal distribution of pumping from baseline
- No changes in aquifer assignment of pumping from baseline
- Set pumping so that model code would not automatically reduce pumping amounts

### Run 11 – Update of NTWGAM

- Adjusted pumping amounts based on GCD input
  - Things to consider:
    - Rule changes
    - New permits
    - Anticipated pumping changes
    - Balancing highest practicable and conservation
    - Comments from last round of planning
    - Other
  - We propose that each GCD review the TWDB MAG spreadsheet and adjust pumping estimates

#### Vertical adjustment of pumping

- Run 10 Set pumping so that model code would not automatically reduce pumping amounts
- Tell us if you want to adjust

Discuss plan and schedule for GMA 8 consideration of nine factors required by Texas Water Code Subsections 36.108(d)(1 – 9) in the third round of DFC joint planning WSP Team Approach to Presenting Information on Nine Factors (Texas Water Code Subsections 36.108(d)(1-9))

- Factor presentations Three GMA 8 Meetings (November 2019, February 2020, and May 2020)
- Focused discussion on factors during each meeting
- WSP Team presentations to guide discussions GCDs make presentations available during 90-day public comment period
- Factor presentation content to be reflective of explanatory report content
- Re-visit factor discussions as needed when various GAM runs, or DFC statements considered

### Proposed Schedule for Factors

November 2019												
Environmental Impacts	Subsidence Impacts	Hydrological Conditions										
February 2020												
Aquifer Uses or Conditions	Supply Needs & Management Strategies	Private Property Rights										
	May 2020											
Socioeconomic Impacts	DFC Feasibility	Other Relevant Information										

Discuss plan for updating and preparing the GMA 8 explanatory report for the third round of DFC joint planning

### WSP Team Approach to Preparing the Explanatory Report (Texas Water Code Section 36.108(d-3))

Use GMA 8 second round of DFC joint planning ER as starting point

Update ER discussion and appendices as needed

& WSP Team presents and reviews 1st ER draft – August 2020

GMA 8 considers ER approval – November 2020

Discussion and possible action of joint planning schedule

## Planning Schedule

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ID	Task Name	Duration	Start	Finish	Qtr 1, 2	2019 Qt	r 2, 2019	Qtr 3, 2019	Qtr 4, 2019	Qtr 1, 2020	Qtr 2, 2020	Qtr 3, 2020	Qtr 4, 2020	Qtr 1, 2021	Qtr 2, 2021	Qtr 3, 2021	Qtr 4, 2021 p Oct Nov Dec	Qtr 1, 20
1	GMA 8 Joint Planning Process	635 days	s Thu 8/1/19	Wed 1/5/22	Juni re	a mar Mp		- Jar (Augroe)	, oct nov De	e, Jun (reb) Ma	yn innayi Jul						, our novi Dec	
2	GMA 8 meeting – Review project approach and timeline; present report on requirements of Texas Water Code 36.108; discuss aquifers designated as non-relevant; discuss GAMs to be used for modeling and possible runs; and discuss possible DFCs.		Thu 8/1/19	Mon 9/2/19				T										
3	GMA 8 meeting – Provide project update; present baseline GAM runs; present GAM runs on possible GMA 8 DFCs and discuss additional GAM runs needed; present report regarding Texas Water Code Subsections 36.108(d)(1-3).		Fri 11/1/19	Fri 11/29/19					-									
4	GAM runs on possible GMA 8 DFCs and discuss additional GAM runs needed; present report regarding Texas Water Code Subsections 36.108(d)(4-6).		Mon 2/3/20	Fri 2/28/20														
5	GAM runs on possible GMA 8 DFCs and discuss additional GAM runs needed; present report regarding Texas Water Code Subsetions 36.108 (d)(7-9).		Fri 5/1/20	Thu 5/28/20														
6	GMA 8 meeting – Provide project update; present GAM runs on possible GMA 8 DFCs and discuss additional GAM runs needed; present report regarding proposed non-relevant classifications; and continue discussions of nine factors as needed.		Mon 8/3/20	Fri 8/28/20														
7	GMA 8 meeting – Provide project update; present GAM runs on possible GMA 8 DFCs and discuss additional GAM runs needed; begin to identify DFCs to be proposed by GMA 8; and continue discussions of nine factors as needed.	s	Mon 11/2/20	Fri 11/27/20									<b>*</b>					
8	GMA 8 meeting – Consider action to adopt propose DFCs and non-relevant aquifer classifications for GMA 8. Action to approve proposed DFCs must be approved by 2/3 vote of GMA 8.	d 4 wks	Mon 1/4/21	Fri 1/29/21														
9	90-day public comment period on proposed DFCs/non-relevant aquifers – As applicable, hold public hearings and make available information user to develop the proposed DFCs, including how the nine factors were considered.	66 days	Mon 2/1/21	Mon 5/3/21										*				
	Task		Project Summary		"l Ma	anual Task			Sta	rt-only	E		Deadline	+				
			Inactive Task		Du	iration-only	/		Fin	sh-only	Э		Progress	-		-		
Date	e: Wed 5/1/19 Milestone		Inactive Milestone	$\diamond$		anual Sumn	,			emal Tasks			Manual Progre	ss		_		
	Summary		Inactive Summary	1	1 Ma	anual Sumn	nary		Ext	emal Milestone	۰							
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## Planning Schedule

ID	Task Name	Duratio	n Start	Finish	Qtr 1, 2019 Qtr 2, 2019 Qtr 3, 2019 Qtr 4, 2019 Qtr 4, 2019 Qtr 1, 2020 Qtr 2, 2020 Qtr 3, 2020 Qtr 4, 2020 Qtr 4, 2021 Qtr 2, 2021 Qtr 3, 2021 Qtr 4,
	10 Texas Water Code Section 36.108 (d), deadline adoption of proposed DFCs	e for 0 days	Sat 5/1/21	Sat 5/1/21	♦ 5/1
	11 GCDs compile public comments received durin public comment period; and prepare GCD sun reports and discussion of proposed revisions to DFCs, if applicable.	mary	Tue 5/4/21	Mon 5/31/21	
	12 GMA 8 meeting – Review GCD public commen summaries and proposed revisions to DFCs, if applicable; and consider GCD suggestions to n proposed DFCs based on public comments, if applicable.		Tue 6/1/21	Mon 6/28/21	
	13 GMA 8 Meeting - Review and discuss complet explanatory report	e draft 4.5 wk	s Fri 7/30/21	Tue 8/31/21	
	14 GMA 8 meeting – Consider action to adopt fin DFCs, non-relevant aquifer classification prop and the explanatory report for GMA 8.		Wed 11/3/21	Tue 11/30/21	
	15 Prepare and submit DFCs and explanatory rep TWDB and to each GCD. Submission packet du the TWDB within 60 days of action to adopt th DFCs.	e to	s Wed 12/1/21	Tue 12/28/21	
	16 Texas Water Code Section 36.108(d-3), deadli final adoption of DFCs	ne for 1 day	Wed 1/5/22	Wed 1/5/22	

	Task		Project Summary	I	Manual Task		Start-only	E	Deadline	+	
Project: Schedule_GMA8meetin Date: Wed 5/1/19	Split		Inactive Task		Duration-only		Finish-only	3	Progress		
	Milestone	•	Inactive Milestone	•	Manual Summary Rollup		External Tasks		Manual Progress		
	Summary		Inactive Summary	1	Manual Summary		External Milestone	•			
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