

Rio Grande RWPG Meeting

2026 Region M Regional Water Plan

Jaime Burke, Black & Veatch
Lauren Gonzalez, Black & Veatch
April 6, 2022



AGENDA

7.A Status on Current TWDB Contract Activities

1. Schedule and Progress Update
2. Draft Projections from TWDB for Livestock, Manufacturing, and Steam Electric
3. Draft Municipal Water User Group List and Historical Data from TWDB
4. Discussion of Potential Subcommittees for the Planning Cycle

7.A.1

Schedule and Progress Update

CONCEPTUAL/INITIAL SCHEDULE FOR REGION M PLAN DEVELOPMENT

	2021				2022				2023				2024				2025								
	QTR	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Regional Water Planning Rules Updates		■									■											■			
Texas Legislative Sessions		■		■						■												■			
TWDB Releases Data / Information						🚩		🚩		🚩			🚩		🚩								🚩		
TASK 1 Planning Area Description										■															
TASK 2 Population & Water Demands Projections					■																				
TASK 3 Water Availability & Supply Analysis						■	■																		
TASK 4 Identification of Water Needs										■				■											
Technical Memorandum Due (March 4, 2024)																						🚩			
TASK 5 Water Management Strategy (WMS) Evaluations										■															
TASK 6 Impacts of Plan & Cumulative Effects															■										
TASK 7 Drought Response Information & Recommendations													■												
TASK 8 Unique Segments & Policy Recommendations													■												
Initially Prepared Plan Due (March 3, 2025)																						🚩			
TASK 10 Public Participation and Plan Adoption		■																							
TASK 11 Implementation & Comparison to Previous Plan																									
Final Plan Due (October 20, 2025)																						🚩			

LEGEND

■ TWDB Conceptual Schedule ■ B&V Planned Schedule 🚩 TWDB Data Release 🚩 TWDB Deadline

2022 ANTICIPATED REGION M SCHEDULE (Based on Currently Funded Tasks)	QTR 1			QTR 2			QTR 3			QTR 4		
	J	F	M	A	M	J	J	A	S	O	N	D
Regional Water Planning Rules Updates	■											
TASK 1 Planning Area Description												
TASK 2A Non-municipal Water Demand Projections												
• Livestock, Manufacturing, Steam-Electric	■			■						→ July 2023		
• Mining and Irrigation								■			→ July 2023	
TASK 2B Population and Municipal Demand Projections												
• WUG list, GPCD, historical population and water use				■								
• Population and Municipal Water Demand Projections												
TASK 8 Unique Segments & Policy Recommendations												
TASK 10 Public Participation and Plan Adoption	■			■			■			■		

LEGEND

■ Region M RWPG Activities 🚩 TWDB Data Release ◆ Region M RWPG Meeting

2022 ANTICIPATED REGION M SCHEDULE (Based on Currently Funded Tasks)	QTR 1			QTR 2			QTR 3			QTR 4		
	J	F	M	A	M	J	J	A	S	O	N	D
Regional Water Planning Rules Updates	■											
TASK 1 Planning Area Description												
TASK 2A Non-municipal Water Demand Projections												
• Livestock, Manufacturing, Steam-Electric	■			■						→ July 2023		
• Mining and Irrigation								■			→ July 2023	
TASK 2B Population and Municipal Demand Projections												
• WUG list, GPCD, historical population and water use					■							
• Population and Municipal Water Demand Projections												
TASK 8 Unique Segments & Policy Recommendations												
TASK 10 Public Participation and Plan Adoption	■											

LEGEND

■ Region M RV

APRIL RWPG MEETING – Review:

- Livestock, Manufacturing, & Steam-electric demands
- WUG list, GPCD, historical population, and water use data

Upcoming Meetings This Year

2022 ANTICIPATED REGION M SCHEDULE (Based on Currently Funded Tasks)	QTR 1			QTR 2			QTR 3			QTR 4		
	J	F	M	A	M	J	J	A	S	O	N	D
Regional Water Planning Rules Updates	■											
TASK 1 Planning Area Description												
TASK 2A Non-municipal Water Demand Projections												
• Livestock, Manufacturing, Steam-Electric	■											→ July 2023
• Mining and Irrigation									■			→ July 2023
TASK 2B Population and Municipal Demand Projections												
• WUG list, GPCD, historical population and water use					■							
• Population and Municipal Water Demand Projections												
TASK 8 Unique Segments & Policy Recommendations												
TASK 10 Public Participation and Plan Adoption	■											

LEGEND

■ Region M RWPG Activities

JULY RWPG MEETING – Review/provide feedback on:

- Livestock, Manufacturing, & Steam-electric demands
- WUG list, GPCD, historical population, and water use data – revisions due to TWDB July 29, 2022

2022 ANTICIPATED REGION M SCHEDULE (Based on Currently Funded Tasks)	QTR 1			QTR 2			QTR 3			QTR 4		
	J	F	M	A	M	J	J	A	S	O	N	D
Regional Water Planning Rules Updates	■											
TASK 1 Planning Area Description												
TASK 2A Non-municipal Water Demand Projections												
• Livestock, Manufacturing, Steam-Electric	■			■						→ July 2023		
• Mining and Irrigation								■			→ July 2023	
TASK 2B Population and Municipal Demand Projections												
• WUG list, GPCD, historical population and water use					■							
• Population and Municipal Water Demand Projections												
TASK 8 Unique Segments & Policy Recommendations												
TASK 10 Public Participation and Plan Adoption	■											

LEGEND

■ Region M RWPG Act

OCTOBER RWPG MEETING – Review/provide feedback on:

- Mining and Irrigation Demands (released in August/September)
- Livestock, Manufacturing, & Steam-electric demands/revision requests

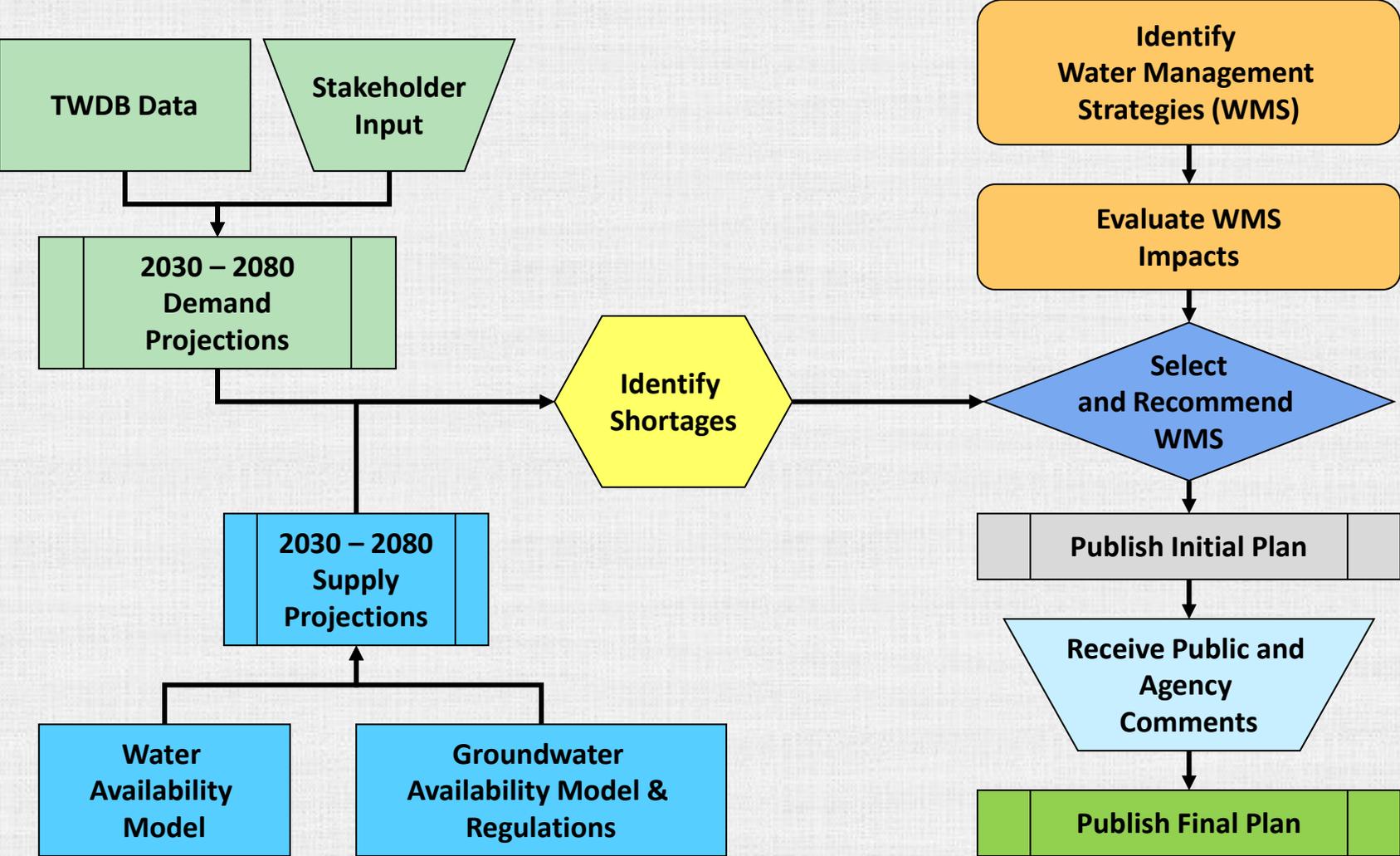
Progress Update

- Reviewed draft projections from TWDB for livestock, manufacturing, and steam-electric, and compared them to last cycle's numbers.
- Received draft municipal water user group list and historical data from TWDB. Began review and started updating contact list for this cycle.
- Met with Hidalgo County Drainage District #1 to discuss possible amendment to the 2021 Region M Water Plan.
- Reviewed subcommittees list and proposed potential subcommittees for this cycle.

7.A.2

Draft Projections from TWDB for Livestock, Manufacturing, and Steam Electric

Regional Water Planning in Texas



Draft Non-Municipal Water Demand Projections Currently Available for Review

- TWDB released in January
 - Manufacturing
 - Steam-Electric
 - Livestock
- Data files provided to RWPG by TWDB
- Any revision requests need to be coordinated with TWDB by July 2023, but we can submit any time before then.

Draft Livestock Water Demand Projections

Region	County	Historical Water Use Estimates					2021 Regional Water Plan Projections						2026 DRAFT Regional Water Plan Projections					
		2015	2016	2017	2018	2019	2020	2030	2040	2050	2060	2070	2030	2040	2050	2060	2070	2080
M	CAMERON	309	314	264	274	274	436	436	436	436	436	436	287	287	287	287	287	287
M	HIDALGO	722	735	582	603	603	777	777	777	777	777	777	649	649	649	649	649	649
M	JIM HOGG	445	449	392	407	407	376	376	376	376	376	376	420	420	420	420	420	420
M	MAVERICK	453	471	467	487	487	371	371	371	371	371	371	473	473	473	473	473	473
M	STARR	1,131	1,142	800	825	825	1,192	1,192	1,192	1,192	1,192	1,192	945	945	945	945	945	945
M	WEBB	956	980	812	842	842	963	963	963	963	963	963	886	886	886	886	886	886
M	WILLACY	201	204	190	196	196	235	235	235	235	235	235	197	197	197	197	197	197
M	ZAPATA	433	439	299	312	313	398	398	398	398	398	398	359	359	359	359	359	359
Region Total		4,650	4,734	3,806	3,946	3,947	4,748	4,748	4,748	4,748	4,748	4,748	4,216	4,216	4,216	4,216	4,216	4,216

- Comparison to last cycle
 - Demand projections are fairly similar to the 2021 Plan
 - Some gal/head/day water use rates have changed
 - No revisions requested by Region M last cycle

Table 1. Water use parameter comparison, 2021 and 2026 RWPs.

TWDB category	Subcategory	2021 RWP water use (gal/head/day)	2026 RWP water use (gal/head/day)
Cattle	Milk	75	55
	Fed & other cattle	15	15
Chickens	Non-broilers	0.086	0.09
	Broilers	0.077	0.09
Turkeys	Turkeys	0.2	0.2
Equine	Horses, ponies, mules, burros, & donkeys	12	12
Hogs	Hogs	11	5
Sheep	Sheep	2	2
Goats	Milk	0.5	2
	Meat		
	Angora		

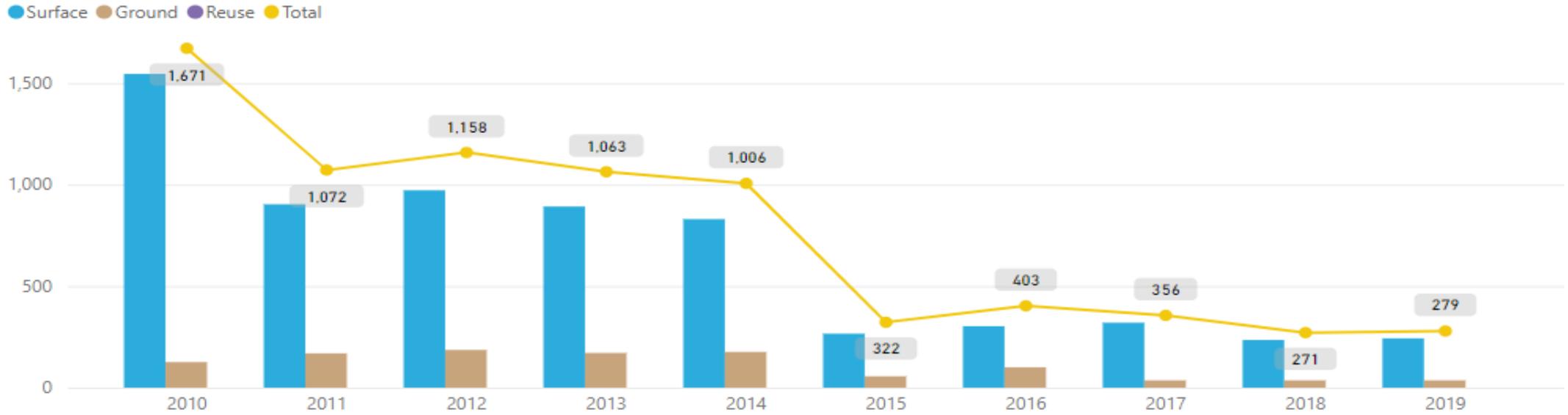
Draft Manufacturing Water Demand Projections

Region	County	Historical Water Use Estimates					2021 Regional Water Plan Projections						2026 DRAFT Regional Water Plan Projections					
		2015	2016	2017	2018	2019	2020	2030	2040	2050	2060	2070	2030	2040	2050	2060	2070	2080
M	CAMERON	322	403	356	271	279	1,647	1,846	1,846	1,846	1,846	1,846	460	477	495	513	532	552
M	HIDALGO	2,787	3,564	2,705	2,379	2,118	2,236	2,721	2,721	2,721	2,721	2,721	3,926	4,071	4,222	4,378	4,540	4,708
M	JIM HOGG	0	36	36	37	38	2	2	2	2	2	2	42	44	46	48	50	52
M	MAVERICK	63	58	64	63	89	65	65	65	65	65	65	98	102	106	110	114	118
M	STARR	74	74	74	74	74	95	116	116	116	116	116	81	84	87	90	93	96
M	WEBB	71	39	41	45	59	251	296	296	296	296	296	78	81	84	87	90	93
M	WILLACY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	ZAPATA	0	0	0	0	0	9	9	9	9	9	9	0	0	0	0	0	0
Region Total		3,317	4,174	3,276	2,869	2,657	4,305	5,055	5,055	5,055	5,055	5,055	4,685	4,859	5,040	5,226	5,419	5,619

- Comparison to last cycle
 - Cameron County – significant decrease compared to 2021 Plan
 - Hidalgo County – significant increase compared to 2021 Plan
 - No revisions requested by Region M last cycle
- TWDB draft projections this cycle incorporate calculated unaccounted water use (potential non-surveyed water use)

Manufacturing Data for Region M, CAMERON County

Net Use for Groundwater, Surface Water, and Reuse 2010-2019 (ACFT)

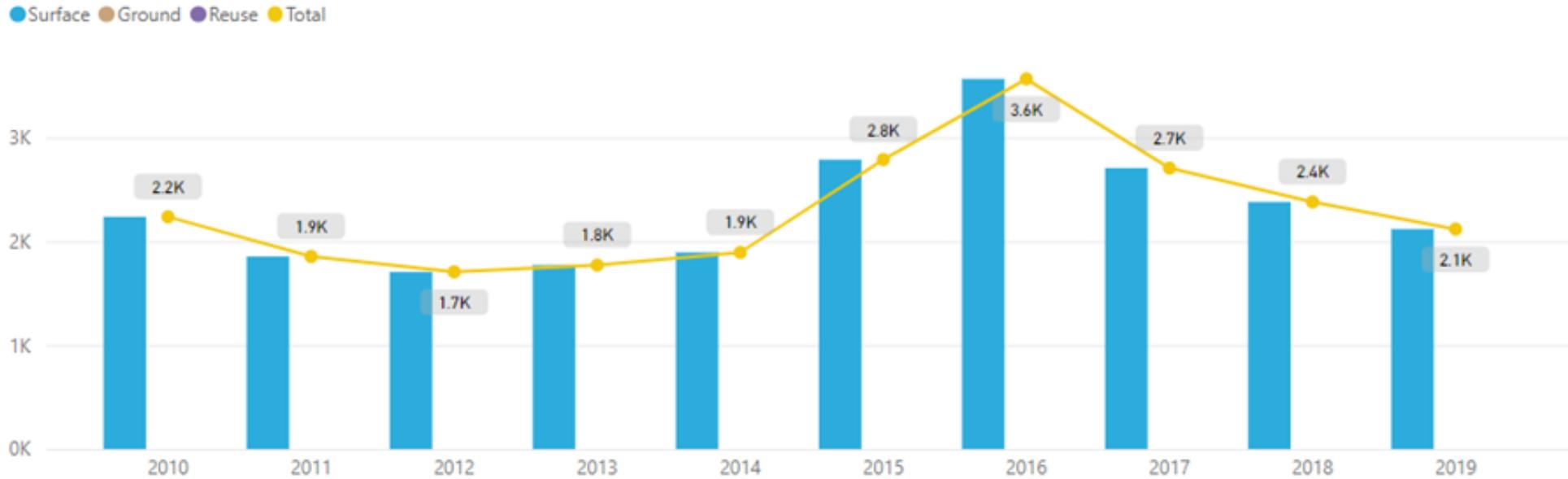


Number of Manufacturing Facilities (Water Use Survey)

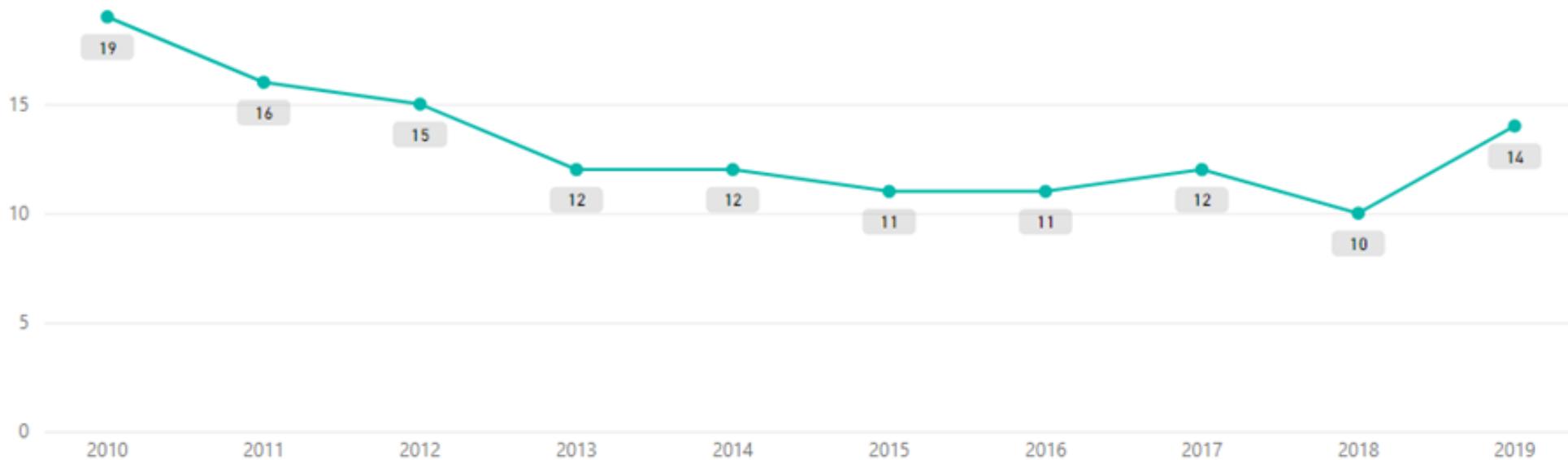


Manufacturing Data for Region M, HIDALGO County

Net Use for Groundwater, Surface Water, and Reuse 2010-2019 (ACFT)



Number of Manufacturing Facilities (Water Use Survey)



Draft Steam-Electric Water Demand Projections

Region	County	Historical Water Use Estimates					2021 Regional Water Plan Projections						2026 DRAFT Regional Water Plan Projections					
		2015	2016	2017	2018	2019	2020	2030	2040	2050	2060	2070	2030	2040	2050	2060	2070	2080
M	CAMERON	165	106	70	64	61	3,550	3,550	3,550	3,550	3,550	3,550	165	165	165	165	165	165
M	HIDALGO	7,847	8,653	8,220	10,325	9,404	11,538	11,538	11,538	11,538	11,538	11,538	10,325	10,325	10,325	10,325	10,325	10,325
M	JIM HOGG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	MAVERICK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	STARR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	WEBB	81	94	113	131	103	152	152	152	152	152	152	131	131	131	131	131	131
M	WILLACY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	ZAPATA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Region Total		8,093	8,853	8,403	10,520	9,568	15,240	15,240	15,240	15,240	15,240	15,240	10,621	10,621	10,621	10,621	10,621	10,621

- Comparison to last cycle
 - Cameron County
 - 2021 Plan included 3,400 AFY of demand for two planned facilities associated with Coronado Power Ventures (La Paloma Energy Center).
 - 2026 Plan data show those facilities have been canceled, thus reducing the demand .
 - Other counties are fairly similar to last cycle
 - No revisions were requested by Region M last cycle.
- No new proposed facilities identified for the region this cycle.

7.A.3

Draft Municipal Water User Group List and Historical Data from TWDB

Draft Municipal Water User Group List (WUG) and Historical Data

- TWDB released in March (from regionalwaterplanning.twdb.texas.gov)
 - Draft Municipal Water User Group (WUG) List
 - Historical Data, including
 - Historical WUG-level population estimates
 - Net water use by public water system collected through TWDB water user surveys
 - Historical calculated Gallons per Capita Daily (GPCD)
 - New Draft Baseline GPCDs

Draft Municipal Water User Group List (WUG) and Historical Data

- RWPG Responsibilities
 - Review list of WUGs and submit revisions (merges, additions, etc.) to TWDB
 - Review historical data and let TWDB know of any revisions
 - Due to TWDB by **July 29, 2022**
 - Revisions to Baseline GPCD numbers can be requested in 2023 as well as part of the population and municipal demand review

Draft Municipal Water User Group List (WUG) and Historical Data

- Definition of Water User Group [Texas Administrative Code 31 TAC § 357.10\(43\)](#)

Water User Group (WUG)--Identified user or group of users for which Water Demands and Existing Water Supplies have been identified and analyzed and plans developed to meet Water Needs.

For the municipal use category, these include:

- (A) Privately-owned utilities that provide an average of more than 100 acre-feet per year for municipal use for all owned water systems;
- (B) Water systems serving institutions or facilities owned by the state or federal government that provide more than 100 acre-feet per year for municipal use;
- (C) All other Retail Public Utilities not covered in subparagraphs (A) and (B) of this paragraph that provide more than 100 acre-feet per year for municipal use;
- (D) Collective Reporting Units, or groups of Retail Public Utilities that have a common association and are requested for inclusion by the RWPG;
- (E) Municipal and domestic water use, referred to as County-Other, not included in subparagraphs (A) - (D) of this paragraph

Draft Municipal Water User Group List (WUG) and Historical Data

- 64 municipal WUGs for Region M – same list as last cycle

Cameron County

BROWNSVILLE
 COMBES
 COUNTY-OTHER, CAMERON
 EAST RIO HONDO WSC*
 EL JARDIN WSC
 HARLINGEN
 LA FERIA
 LAGUNA MADRE WATER DISTRICT
 LOS FRESNOS
 MILITARY HIGHWAY WSC*
 NORTH ALAMO WSC*
 OLMITO WSC
 PALM VALLEY
 PRIMERA
 RIO HONDO
 SAN BENITO
 SANTA ROSA
 VALLEY MUD 2

Hidalgo County

AGUA SUD*
 ALAMO
 COUNTY-OTHER, HIDALGO
 DONNA
 EDCOUCH
 EDINBURG
 ELSA
 HIDALGO
 HIDALGO COUNTY MUD 1
 LA JOYA
 LA VILLA
 MCALLEN
 MERCEDES
 MILITARY HIGHWAY WSC*
 MISSION
 NORTH ALAMO WSC*
 PHARR
 SAN JUAN
 SHARYLAND WSC
 WESLACO

Jim Hogg County

COUNTY-OTHER, JIM HOGG
 JIM HOGG COUNTY WCID 2

Maverick County

COUNTY-OTHER, MAVERICK
 EAGLE PASS
 MAVERICK COUNTY

Starr County

AGUA SUD*
 COUNTY-OTHER, STARR
 EL SAUZ WSC
 EL TANQUE WSC
 LA GRULLA
 RIO GRANDE CITY
 RIO WSC
 ROMA
 UNION WSC

Webb County

COUNTY-OTHER, WEBB
 LAREDO
 MIRANDO CITY WSC
 WEBB COUNTY

Willacy County

COUNTY-OTHER, WILLACY
 EAST RIO HONDO WSC*
 LYFORD
 NORTH ALAMO WSC*
 PORT MANSFIELD PUD
 RAYMONDVILLE
 SEBASTIAN MUD

Zapata County

COUNTY-OTHER, ZAPATA
 FALCON RURAL WSC
 SAN YGNACIO MUD
 SIESTA SHORES WCID
 ZAPATA COUNTY
 ZAPATA COUNTY WCID-HWY 16 EAST

* WUG is in multiple counties

Draft Municipal Water User Group List (WUG) and Historical Data

- WUG Historical Population and Gallons per Capita Daily (GPCD) Estimates
 - Population estimates (2010-2020) developed by TWDB using 2010 and 2020 Census Block data.
 - Net use (2010-2020) reported by public water system and aggregated by utility-based WUG.
 - GPCD estimates 2010-2020
- New Draft Baseline Gallons per Capita Daily (GPCD)
 - Since the first projected decade (2030) is more than ten years from the baseline data, accumulated passive savings from plumbing code savings is removed from the base 2022 State Water Plan GPCD to calculate a new base GPCD for each WUG. GPCDs are draft and subject to revision by RWPGs.
 - All new WUG GPCDs use 2018. If 2018 = 0, then 2019 GPCD is used.
 - Any GPCD below 60 is increased to 60, since 60 is considered a 'floor'.
 - Statewide, draft baseline GPCDs are generally lower than the 2021 RWPs baseline GPCD

Draft Municipal Water User Group List (WUG) and Historical Data

- RWPG Responsibilities
 - Review list of WUGs and submit revisions (merges, additions, etc.) to TWDB
 - Review historical data and let TWDB know of any revisions
 - Due to TWDB by **July 29, 2022**
 - Revisions to Baseline GPCD numbers can be requested in 2023 as well as part of the population and municipal demand review

7.A.4

Discussion of Potential Subcommittees for the Planning Cycle

Discussion of Potential Subcommittees for the Planning Cycle

- Subcommittees for Discussion
 - Population and Water Demand Committee (Start April 2022)
 - Review population and water demand projections data released from TWDB in more detail and develop feedback. Reach out to stakeholders to solicit feedback on draft projections.
 - Groundwater/Surface Water Modeling Committee (Start ~ Oct 2022)
 - Review both groundwater and surface water availability data
 - Water Management Strategy Committee (Start ~ Feb 2023)
 - Review water management strategy requests and draft evaluations
 - Environmental Review Committee (Start ~ Feb 2023)
 - Review and update environmental assessment methodologies for WMSs (Task 5) and impacts of plan (Task 6)
 - Policy Committee (Start ~ July 2024)
 - Develop Chapter 8 Policy Recommendations language

Discussion of Potential Subcommittees for the Planning Cycle

- Additional Subcommittees for Discussion
 - Bylaws Committee
 - Review and update RWPG bylaws, as needed
 - Stakeholder Involvement Committee
 - Assist with outreach efforts to stakeholders
 - Rio Grande Groundwater Exportation Committee
 - Regional Water Entities Steering Committee