

REGION C WATER PLANNING GROUP

TO: REGION C WATER PLANNING GROUP
FROM: J. KEVIN WARD, CHAIR
SUBJECT: JUNE 12th, 2023 PUBLIC MEETING
DATE: JUNE 5, 2023

This memorandum will serve as a notice that the Region C Water Planning Group (RCWPG) is holding a public meeting at **2:00 P.M. on Monday JUNE 12th, 2023**, at the **North Central Texas Council of Governments, 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas, 76011**. An agenda (including information on how to participate in the public meeting) has been prepared for the meeting and is attached to this memorandum. The following is a brief overview of the agenda items to be discussed with relevant materials and handouts.

OPEN MEETING

- I. ROLL CALL
- II. APPROVAL OF MINUTES – NOVEMBER 7, 2022
- III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)
- IV. PRIMARY ACTION ITEMS FOR CONSIDERATION
 - A. Announcement of Region C RWPG voting member vacancies: Gary Spicer Representing Electric Generating Utilities; Call for nominations to fill vacancy, and vote to fill vacancy.

This action item will consider recommendations for replacement of RCWPG members who have resigned. Gary Spicer resigned from the Region C Water Planning Group effective November 14, 2022. Gary nominated Ryan Bayle to fill the electric generating utilities interest vacancy.

- B. Presentation on manufacturing projections.

TWDB provided draft manufacturing demands in January 2022. The consultant team has reviewed TWDB's initial non-municipal projections using TWDB guidelines and additional information. Consultants will present this information, along with recommended revisions. The

planning group will consider the recommended changes and approval of the projections. The RCWPG may choose to authorize the Consultants to make minor revisions prior to submittal to TWDB as necessary.

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

- A. Presentation on municipal projection methodology from TWDB.
- B. Presentation on municipal projections coordination and review from FNI.
- C. Schedule Overview.
- D. Statuses of contracts with TWDB, TRA and consultants.

VI. OTHER DISCUSSION

- A. Updates from the Chair.
- B. Report from Regional Liaisons.
- C. Report from the Interregional Planning Council.
- D. Report from Texas Water Development Board.
- E. Report from Texas Department of Agriculture.
- F. Report from Texas Parks and Wildlife Department.
- G. Report from Texas State Soil & Water Conservation Board.
- H. Other Reports.
- I. Confirm Date and Location of Next Meeting: July 17, 2022.

VII. ADJOURNMENT

The following items are enclosed with this memorandum:

- I. RCWPG Agenda – June 12, 2023
- II. Meeting Handouts
 - A. Agenda Item II – RCWPG Minutes from November 7, 2022
 - B. Agenda Item IV.A. – Recommendation for Ryan Bayle as the replacement for Gary Spicer
 - C. Agenda Item IV.B. – Manufacturing Projections Technical Memorandum

REGION C WATER PLANNING GROUP

OPEN PUBLIC MEETING

MONDAY, JUNE 12, 2023 AT 2:00 P.M.

THE MEETING WILL BE HELD AT
**NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
616 SIX FLAGS DRIVE, CENTERPOINT TWO BUILDING
FIRST FLOOR TRANSPORTATION COUNCIL ROOM
ARLINGTON, TX 76011¹**


AGENDA

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 - D. Status of contracts with TWDB, TRA and Consultants.
- VI. OTHER DISCUSSION
 - A. Updates from the Chair.
 - B. Report from Regional Liaisons.

¹ *If you plan to attend this public meeting and you have a disability that requires special arrangements at the meeting, please contact Elena Berg by phone at (817) 608-2363 or by email at eberg@nctcog.org, 72 hours in advance of the meeting. Reasonable accommodations will be made to assist your needs.*

- C. Report from the Interregional Planning Council.
- D. Report from Texas Water Development Board.
- E. Report from Texas Department of Agriculture.
- F. Report from Texas Parks and Wildlife Department.
- G. Report from Texas State Soil & Water Conservation Board.
- H. Other Reports.
- I. Confirm Date and Location of Next Meeting: July 17th.

VII. ADJOURNMENT

SUBMITTED BY:  _____
J. KEVIN WARD, Administrative Officer

DATE: June 5, 2023

POSTED BY: _____
DATE: _____
TIME: _____
LOCATION: _____

Agenda Item II – Attachment

RCWPG Minutes from November 7, 2022

REGION C WATER PLANNING GROUP
MINUTES OF AN OPEN PUBLIC MEETING
November 7, 2022

The Region C Water Planning Group (RCWPG) met in an open public meeting on Monday, November 7, 2022, at 1:30 P.M. The meeting was held at the North Central Texas Council of Governments located at 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas. Notice of the meeting was legally posted.

Chairman Kevin Ward called the Region C Regional Water Planning Group meeting to order at approximately 1:30 P.M. and welcomed guests.

I. ROLL CALL

Chairman Ward conducted a roll call. The following members were in attendance:

David Bailey	Harold Latham
Jay Barksdale	Steve Mundt
Dan Buhman	Bob Riley
Wendy Chi (Alternate for C.Harder)	Rick Shaffer
Jenna Covington	Doug Shaw
Grace Darling	Gary Spicer
John Paul Dineen III	Connie Standridge
Stephen Gay	Kevin Ward

Kevin Smith, TWDB, and Adam Whisenant, TPWD were present. The registration lists signed by guests in attendance are attached.

II. APPROVAL OF MINUTES – May 23, 2022

The minutes of the May 23, 2021, RCWPG meeting were approved by consensus upon a motion by Dan Buhman and a second by Grace Darling.

III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)

There were no public comments.

IV. PRIMARY ACTION ITEMS FOR CONSIDERATION

A. Request for consistency waiver from Files Valley WSC.

Abbie Gardner, FNI, led the discussion of this action item to consider approving a request for a Consistency Waiver from Files Valley Water Supply Corporation (WSC). Lea Sanders, representing Files Valley WSC, also participated in this presentation and answered questions. Some of the key points presented are as follows:

- Files Valley WSC supplies water to customers in Regions G and C. Its primary source of water is surface water from Lake Aquilla through Aquilla WSD.

RCWPG MINUTES

November 7, 2022

PAGE 2

- Recently, Aquilla WSD decided to reduce its contract with Files Valley WSC by 0.5 MGD, effective in 2031. This reduction in supply was not considered in the 2021 Regional Water Plans.
- The Files Valley WSC needs additional water due to rapid growth in connections and reduction of contracted supply from Aquilla WSD.
- Files Valley WSC is currently constructing a well in the Trinity Aquifer in Ellis County. This well is permitted for 50 MG per year, which will help meet the immediate needs but is insufficient to meet projected growth and the loss of 0.5 MGD of supply from Aquilla WSD in 2031.
- Files Valley WSC will be pursuing additional groundwater. The exact quantities and locations are not finalized, but the wells will likely fall within the Prairielands Groundwater Conservation District (GCD).
- Files Valley WSC is privately funding the current well construction and plans to seek state funding for the additional groundwater wells.
- Files Valley WSC is requesting a consistency waiver from the Region C WPG because groundwater is not a current or future source for the WSC in the Region C Water Plan.
- The 2021 Region C Water Plan shows one recommended strategy to purchase water from Tarrant Regional Water District through Waxahachie. This strategy cannot be implemented within the timeframe the water is needed.

Kevin Smith, TWDB, advised that an amendment to the 2021 Region C Water Plan will be necessary for the Files Valley WSC to obtain SWIFT funding to use groundwater. Abbie Gardner added that a consistency waiver will make the Regional Water Plan consistent with the events that are occurring.

There were no public comments on this action item.

Upon a motion by Doug Shaw, and a second by Connie Standridge, the RCWPG voted unanimously to approve a consistency waiver to include groundwater as a supply source for Files Valley WSC, subject to all required approvals by agencies of jurisdiction including the Prairielands Groundwater Conservation District.

- B. Announcement of Region C RWPG voting member vacancies: Drew Satterwhite representing Water Districts; Call for nominations to fill vacancies; and vote to fill vacancies.

Chairman Ward led the discussion on this action item for recommendations to fill the vacancy left by Drew Satterwhite's resignation from the Region C RWPG water district position. Harold Latham recommended Paul Sigle, Greater Texoma

Utility Authority, to replace Drew Satterwhite on the water planning board. There were no recommendations from the floor.

There were no public comments on this action item.

Upon a motion by Doug Shaw, and a second by Rick Shaffer, the RCWPG voted unanimously to elect Paul Sigle to fill the Water District vacancy left by Drew Satterwhite on the Region C WPG board.

- C. Announcement of Region C Interregional Planning Council alternate vacancy: Call for nominations to fill vacancy, and vote to fill vacancy.

Chairman Ward led this discussion to fill the Interregional Planning Council alternate vacancy created by Drew Satterwhite's resignation from the RCWPG board. Dan Buhman volunteered to fill this alternate position. Kevin Smith asked Chairman Ward to provide the pertinent background information on Mr. Buhman.

There were no public comments on this item.

Dan Buhman was approved unanimously by acclamation to fill the alternate position to the Interregional Planning Council.

- D. Accept nominations for slate of officers for 2023; Consider election of 2023 Region C Water Planning Group Officers.

Chairman Ward asked the floor for nominations for the Region C slate of officers for 2023. Hearing none, Chairman asked for a motion to approve the current officers for 2023.

There were no public comments on this item.

Upon a motion by Dan Buhman, and a second by Gary Spicer, the planning group voted unanimously to approve Kevin Ward as Chairman, Russell Laughlin as Vice-President, and Jenna Covington as Secretary for the RCWPG 2023 Officers.

- E. Presentation on non-municipal projections.

Simone Kiel, FNI, gave this presentation on the draft livestock, manufacturing, and steam electric power demands the TWDB provided in January 2022. Draft irrigation and mining demands were released in August 2022. The consultant team has reviewed TWDB's initial non-municipal projections using TWDB guidelines and additional information. Draft projections are to be reviewed by planning groups with recommended revisions submitted to the TWDB by July 2023. Final projections will be adopted by TWDB Board in October 2023.

Irrigation Projections

- Defined as irrigation of agricultural crops and golf courses

- TWDB draft projections utilize an average of the 2015-2019 irrigation water use estimates for each county, held constant
- Irrigation varies with climatic conditions as shown by higher irrigation water use from 2010-2014 (dry period) than 2015-2019
- Comparison of the draft 2026 RWP projections and final 2021 RWP projections show a 27% decrease
- This decrease is due to using the average historical water use during a wet period as the basis for future demands, however regional water plans are to consider water use during drought of record conditions
- Recommend to request projections be based on the max amount between the TWDB draft projections and the average historic water use during the dry period from 2010-2014
- This accounts for water used during a dry period and any additional acreage added since the last plan

Livestock Projections

- Defined as water used in the production of livestock, both for drinking, cleaning, or environmental purposes. This does not include processing of livestock for food. Water use is generally associated with ranching for Region C.
- TWDB draft projections based on average of the 2015-2019 livestock water use estimates for each county
- Rate of change for projections from 2021 RWP applied to base
- Recommend no request for changes to the draft projections

Manufacturing Projections

- Defined as water used in the production process of manufactured goods including drinking and sanitation purposes
- TWDB draft projections baseline (2020) based on max annual historical use from 2015-2019 plus non-surveyed water use for each county
 - 2030 projections: Apply statewide annual historic water use rate of change from 2010-2019 (0.96%)
 - After 2030 projections: Apply statewide manufacturing growth proxy of 0.37%
- The assumption of statewide growth applied uniformly does not accurately capture manufacturing growth corridors or projected water use. There are at least 10 new facilities announced not included in TWDB draft projections. Expected new facilities water use based on data from water provider or based on similar facilities
- Recommend to request to increase baseline with known new facilities expected to be operating in 2 - 5 years and apply same TWDB methodology to increased baseline
 - Grayson County adjusted separately to incorporate large demands from 2 new facilities

Mining Projections

- Defined as water used for oil and gas development, coal and lignite, sand aggregate, and other resource extraction
- Draft projections developed from the 2022 Mining Use Study by BEG and USGS that looked at 3 mining categories and used data collected from trade organizations, government agencies, and other industry representatives
- Region C mining use to gradually increase through 2080 due to increased demands for aggregate industry products.
- Oil & Gas mining use projected to decrease in 2040 as major O&G development matures
- Currently no active coal mines in Region C. 2 lignite coal mines in Fannin County closed in 2011 and 2017.
- 2026 RWP projections declined compared to 2021 RWP due to historic decline in mining use from 2012-2019
- Recommend no request for changes to the draft projections

Steam Electric Power (SEP)

- Defined as consumed water used in the production process of SEP, including drinking and sanitation purposes
- Does not include cooling water returned to a lake or stream
- TWDB draft projections based on maximum annual SEP water use from 2015-2019 for each county, held constant
- New and retired facilities considered in draft projections

New Facilities

- WM Renewable Energy - Skyline Gas Recovery (Dallas)
- Denton Energy Center (Denton)
- Ennis Power Company LLC (Ellis)
- Wise County Power Company LLC (Wise)

Retired Facilities

- Luminant - North Lake Plant (Dallas)
 - NG Power - Valley Steam Electric Station (Fannin)
 - Luminant - Big Brown Steam Electric Station (Freestone)
 - Brazos Electric Power - North Texas Plant (Parker)
 - Luminant - Eagle Mountain Steam Electric Station (Tarrant)
- Water rights for facilities that have closed can be used for new facilities in future. Power demand remains strong.
 - New facilities demand based on SEP memo developed for the 2021 Region C Water Plan:

- Navasota Energy Generation Holdings, Van Alstyne Energy Ctr.
Online Date by 2030, Consumptive Amt. 2,439 ac-ft/yr.
- Halyard Energy Henderson, LC Halyard, Henderson Energy Ctr.
Online Date by 2040, Consumptive Amt. 2,060 ac-ft/yr.
- Recommend for existing facilities: Use the highest use over the past 10 years for each facility to include dry period
- Recommend for retired facilities: If retained water right for power generation, include demand 2/3 of consumptive water right. Do not include future power demand if water right no longer retained.
- Add potential new facilities not included in draft TWDB projections based on the 2021 RWP and current status

There were discussions and questions concerning these projections, particularly as they relate to manufacturing and SEP. Wendy Chi stated that Fort Worth has several large industrial parks in development. Steve Mundt added that a lot of industries are considering this area and asking questions about water and electricity. Mundt asked how Region C determines the methodology to include potential growth. Simone Kiel, FNI, said the TWDB requires certain criteria to avoid being overly speculative, e.g., the types of growth, contractual demands, etc. Ms. Kiel also added that the TWDB response to concerns such as these growth projections are why the State Water plan is updated every 5 years. Steve Mundt stated that Region C may be in a position where they need to inform the TWDB of potential growth. Kevin Smith, TWDB, advised that grant money from the Water Board will not cover consultants' extra work necessary to change baseline numbers and projections.

There were no public comments on this item.

Upon a motion by Jenna Covington, and a second by Connie Standridge, the RCWPG voted unanimously to approve recommended changes to projections with the exception of manufacturing projections and with modifications to steam electric projections to remove the retired Valley Steam Electric Station power plant in Fannin County.

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

A. Schedule Overview - Simone Kiel, FNI, presented the following information:

Working Timeline - 2026 RWP Cycle

- | | |
|--------------------|---|
| • August 2021 | Contract Execution Deadline |
| • January 2022 | Non-Municipal Demand Projections |
| • September 2022 | Irrigation/Mining Projections |
| • February 2023 | Population/Municipal Demand Projections |
| • 2022 - 2023 | Complete Various Scope of Work Tasks |
| • March 4, 2024 | Technical Memo Due |
| • March 3, 2025 | Initially Prepared Plan Due |
| • October 20, 2025 | Regional Water Plan Due |

Upcoming Key Dates

- **February 2023:** TWDB Releases Population Projections, Plumbing Code Savings, Municipal Demand
 - **July 2023:** Submit request of revisions for Non-Municipal Demand Projections
 - **August 2023:** Submit request of revisions for Population and Municipal Demand Projections
- B. Update on Region C Website - Abbie Gardner, FNI, advised the Planning Group that the new website is active and encouraged members to visit it at: <https://regioncwater.org/>
- C. Status on contracts with TWDB, TRA, and Consultants - Chairman Ward advised that all contracts have been updated.

VI. OTHER DISCUSSION

- A. Updates from the Chair – None
- B. Report from Regional Liaisons
- Region B - None
 - Region D - None
 - Region G - None
 - Region H - Meeting held on Nov. 2, 2022
 - Region I - None
 - IPC - Meeting on Nov. 9, 2022
- C. Report from Texas Water Development Board – Kevin Smith, TWDB, addressed the following topics:
- 1. RWP Contract Amendments**
 - Amendment to include anticipated total project cost, full scope of work, and updated contract guidance documents
 - Sent to RWPG political subdivisions for execution
 - 2. Interregional Planning Council**
 - Meeting on November 9 in Austin with a virtual component
 - More information available online at: <http://www.twdb.texas.gov/waterplanning/rwp/ipc/2027IPC.asp>
 - 3. New Educational Materials**
 - Water supply and flood mitigation strategies one-pager
 - RWPG Member Guide
 - Administrative Guidance for RWPG Sponsors
 - Drought of Record
- Important Considerations**
- All data released thus far is available online
 - Interactive dashboards

- Underneath each dashboard is Excel file format + methodology summaries
- <https://www.twdb.texas.gov/waterplanning/data/projections/2027/projections.asp>
- Timeframe for reviewing draft population and municipal demand projections is ~ 6 months
 - Regions should meet soon after release and develop strategy for meeting the deadline
 - Regions are strongly encouraged to submit non-municipal revision requests before municipal data release
 - Declines in population will be reflected in the draft population projections
- Planning groups must take action to approve submitting revisions requests
- Planning groups encouraged to coordinate with TWDB as early as possible on potential revisions
- Guidance regarding projections revisions provided in RWP contract Exhibit C, Section 2.2
- TWDB staff available for assistance and to provide projections presentations
- RWP grant funds may not be used for revisions to TWDB **Board-adopted** projections

D. Report from Texas Department of Agriculture - None

E. Report from Texas Parks and Wildlife Department - None

F. Other Reports - None

G. Confirm Date and Location of Next Meeting – TBD; NCTCOG, 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas 76011

H. Public Comments - None

VII. ADJOURNMENT

There being no further business, the meeting of the Region C WPG adjourned at approximately 3:50 PM.

KEVIN WARD, Chairman

Agenda Item IV.A – Attachment

Recommendation for Ryan Bayle as the replacement for Gary Spicer

From: Spicer, Gary <Gary.Spicer@luminant.com>
Sent: Monday, November 14, 2022 9:38 AM
To: Kevin Ward <wardk@trinityra.org>
Cc: Bayle, Ryan <Ryan.Bayle@luminant.com>; Collins, Renee <Renee.Collins@luminant.com>
Subject: Region C Water Planning Group

Warning: This email was received from an external source. Do not click any links or open any attachments unless you trust the sender and know the content is safe. If you suspect that this email is malicious please report it with the Phish Alert button.

Kevin,

As discussed in our last Region C meeting, I will be retiring soon and well before our next scheduled event. By this note I am officially rendering my resignation.

Also, attached is a short bio on the individual that I recommend as my replacement as the Electric Generation representative, Mr. Ryan Bayle. Mr. Bayle has been my alternate for several years and is very knowledgeable on the industry related water issue for Region C. If you need additional information on Mr. Bayle, please contact him at the e-mail address above.

Please let everyone at Region C know how much I appreciated the opportunity to serve on the Group, and how much I appreciate all their efforts.

Thank you,

Ryan Bayle, P.G.
Environmental Manager
Luminant Generation Company LLC

Ryan earned his BS in Geology in 1997. He received his licensure as a Professional Geoscientist in the State of Texas in 2003. He began his career in 1996 as an Environmental Consultant where he performed due diligence and site investigations for evaluation under various TCEQ regulatory programs. Since 1999 Ryan has worked in the corporate Environmental Services Department for Luminant Generation Company. His main responsibilities include providing corporate support for day-to-day operations of the Luminant ERCOT fleet in order to maintain compliance with wastewater, storm water, potable water and solid waste regulations. He is also the corporate SME for the fleet water rights and manages in excess of \$10M in water supply contracts.

Agenda Item IV.B – Attachment

Manufacturing Projections Technical Memorandum

DRAFT

TO: Region C Regional Water Planning Group

CC: File

FROM: Freese and Nichols, Inc.

SUBJECT: Memorandum on Draft Manufacturing Water Use Projections

DATE: 6/8/2023

PROJECT: TRA21862

1.0 BACKGROUND

The Texas Water Development Board (TWDB) provided the planning groups with draft manufacturing demand projections in January of 2022. The draft projections will be reviewed by the individual planning groups and recommendations will be provided to the TWDB to be considered. The final projections will ultimately be adopted by the planning groups and the TWDB and incorporated into the 2027 State Water Plan (SWP). The purpose of this technical memorandum is to document information related to historical manufacturing usage and provide information supporting recommended modifications to the draft manufacturing demands.

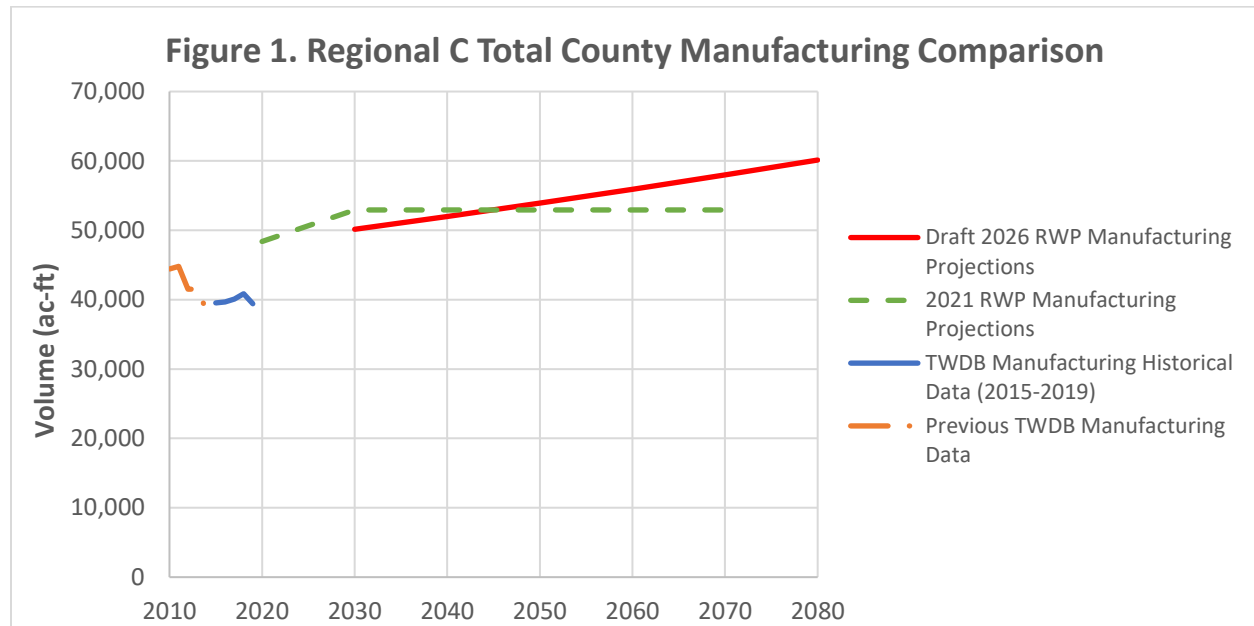
Manufacturing water use is defined by the TWDB as water used in the production process of manufactured products, including water used by employees for drinking and sanitation purposes. The manufacturing water use category does not include water use by all manufacturers, as described in the following section. Manufacturing demands in Region C include larger manufacturing facilities, food processing operations, defense industry operations, and others. Historically, manufacturing has accounted for approximately 30 percent of all non-municipal water use in Region C¹.

1.1 Historical Manufacturing Water Use Estimates

The TWDB's manufacturing water use estimates are obtained from manufacturing facilities that complete TWDB Water Use Surveys and from manufacturing use volumes reported by surveyed municipal water sellers. The TWDB historical manufacturing water use estimates focus on facilities that use large amounts of water and/or are self-supplied by groundwater or surface water. Facilities with smaller uses that are supplied by public utilities and cannot easily be tracked separately are included in municipal water demands.

As of January 2022, historical data estimates are available through the year 2019. Since 2015, the region-wide manufacturing water use estimates have ranged from 39,519 to 40,850 acre-feet per year (Figure 1). This represents approximately 3.6% of the total state manufacturing water use.

¹ Based on historical water use estimates from the TWDB.



1.2 TWDB Draft Manufacturing Water Demand Projections

TWDB’s draft 2026 manufacturing demand projections are based on the maximum annual manufacturing water use that occurred in each county during 2015-2019 plus an estimate of the non-surveyed water use. Non-surveyed water use was determined using the U.S. Census Bureau’s Business Patterns (CBP)² and an inventory of the industries from the Water Use Survey.

To obtain the 2030 demand projections, the 2020 demand projections were multiplied by the statewide annual historic water use rate of change from 2010-2019, which was determined to be 0.96%. This was to account for potential changes in production and water use that may occur between the baseline water use values and the first projected decade. For each planning decade after 2030, a statewide manufacturing growth proxy of 0.37% was applied annually to project increases in manufacturing water demands. This growth proxy was based on the CBP historical number of establishments in the manufacturing sector from 2010-2019. Both of these growth factors (0.96% and 0.37%) were applied equally by county across the state.

The draft projected manufacturing water demands for the 2026 Region C Plan by county and the decadal increases are shown in Table 1.

² U.S. Census Bureau, *CBP Datasets*. URL: <https://www.census.gov/programs-surveys/cbp/data/datasets.html>, accessed January 2022.

Table 1. TWDB Draft Manufacturing Water Demands

County Name	Draft Manufacturing Demands (ac-ft/yr)							Increase from Baseline (ac-ft/yr)				
	Baseline	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070
Collin	4,518	4,952	5,135	5,325	5,522	5,726	5,938	434	617	807	1,004	1,208
Cooke	127	139	144	149	155	161	167	12	17	22	28	34
Dallas	18,436	20,206	20,954	21,729	22,533	23,367	24,232	1,770	2,518	3,293	4,097	4,931
Denton	552	605	627	650	674	699	725	53	75	98	122	147
Ellis	5,164	5,660	5,869	6,086	6,311	6,545	6,787	496	705	922	1,147	1,381
Fannin	5	5	5	5	5	5	5	0	0	0	0	0
Freestone	50	55	57	59	61	63	65	5	7	9	11	13
Grayson	2,501	2,741	2,842	2,947	3,056	3,169	3,286	240	341	446	555	668
Henderson	1,158	1,269	1,316	1,365	1,416	1,468	1,522	111	158	207	258	310
Jack	0	0	0	0	0	0	0	0	0	0	0	0
Kaufman	1,074	1,177	1,221	1,266	1,313	1,362	1,412	103	147	192	239	288
Navarro	991	1,086	1,126	1,168	1,211	1,256	1,302	95	135	177	220	265
Parker	78	85	88	91	94	97	101	7	10	13	16	19
Rockwall	6	7	7	7	7	7	7	1	1	1	1	1
Tarrant	10,858	11,900	12,340	12,797	13,270	13,761	14,270	1,042	1,482	1,939	2,412	2,903
Wise	232	254	263	273	283	293	304	22	31	41	51	61
TOTAL	45,750	50,141	51,994	53,917	55,911	57,979	60,123	4,391	6,244	8,167	10,161	12,229

1.3 Criteria for Revising the Draft Manufacturing Water Demand Projections

One or more of the following criteria must be verified by the Planning Group and the Executive Administrator for consideration of revising the manufacturing water demand projections:

- A new or existing facility that has not been included in the TWDB water use survey.
- An industrial facility has recently closed its operation in a county.
- Plans for new construction or expansion of an existing industrial facility in a county at some future date.
- Evidence of a long-term projected water demand of a facility or industry within a county that is substantially different than the draft projections.
- Evidence of errors identified in historical water use, including volumes of reuse (treated effluent) or brackish groundwater that were not included in the draft projections.

The Planning Group must provide the following data associated with the identified criteria to the Executive Administrator for justifying any adjustments to the manufacturing water demand projections:

- Historical water use data and the 6-digit North American Industrial Classification System (NAICS) code of a manufacturing facility. The NAICS code classifies establishments by type of activity in which they are engaged as defined by the U.S. Office of Management and Budget and is a successor of the Standard Industrial Classification (SIC).
- Documentation and analysis that justify that the new manufacturing facility not included in the Water Use Survey database will increase the future manufacturing water demand for the county above the draft projections.
- The 6-digit NAICS code of the industrial facility that has recently located in a county and annual water use volume.

- Documentation of plans for a manufacturing facility to locate in a county at some future date will include the following data:
 - The quantity of water required by the planned facility on an annual basis.
 - The proposed construction schedule for the facility including the date the facility will become operational.
 - The 6-digit NAICS code for the planned facility.
- Other data that the RWPG considers adequate to justify an adjustment to the manufacturing water demand projections.

2.0 RCWPG RECOMMENDED REVISIONS TO DRAFT MANUFACTURING WATER DEMAND PROJECTIONS

Manufacturing water use is a small fraction of Region C’s total water use, but it is an important component especially in the more rural counties. The North Texas area is a prime area to attract new businesses, including manufacturing in the electronic and high-tech sectors. There have been at least 12 new manufacturing facilities announced within the last one to two years within the region. Many are in the computer and electronics field. A facility currently under design is the Texas Instruments Semiconductor facility in Sherman (Grayson County). This is just one of several water manufacturing facilities locating to Grayson County. Another facility, Global Wafer, is expected to be online by 2026. Its production is planned to double by 2031 with the potential to double again during the planning period. This increase in water use is not reflected in the draft projections provided by the TWDB.

A list of new facilities in Region C announced by the Office of the Texas Governor³ and those included in local publications is included in Table 2. This list does not necessarily represent all the expected new facilities in Region C in the next few years.

Table 2. List of Newly Announced Manufacturing Facilities in Region C

Facility	County	Process Type	NAICS	Expected Water Use ¹ (ac-ft/yr)
TI Semiconductor Plant (new)	Grayson	Electronics	334	8,962
TI Semiconductor Plant (expansion)	Collin	Electronics	334	3,000
Global Wafer	Grayson	Electronics	334	6,722
Finisar	Grayson	Electronics	334	560
GAF Roofing Materials	Navarro	Recycling	327	500
Delta Electronics	Collin	Electronics	334	200
Mouser Electronics	Tarrant	Electronics	334	200
Chewters Chocolates	Rockwall	Food	311	400
Clevon (automotives)	Tarrant	Automotives	336	200
Niagara Bottling Plant	Dallas	Beverage	312	400
Raytheon	Collin	Electronics	334	150
Pratt Industries	Dallas	Packaging	322	50

1. Expected water use is based on data provided by the water provider or estimated based on similar facilities.

³ [Recent Project Announcements | Texas Economic Development | Office of the Texas Governor | Greg Abbott](#)

The assumption of a state-wide average growth applied uniformly across the state does not accurately capture the manufacturing growth in North Texas. It also does not accurately capture the projected water use. This is demonstrated through the projected manufacturing water use in Grayson County. Water use by facility can vary significantly and projecting which industries may locate in specific counties is difficult at best. Without more specific data, an estimated growth approach seems reasonable. However, this growth should reflect current trends within the region.

To better capture current and future manufacturing growth Region C requests to increase the water demands for counties with known new facilities expected to be operating within the next two to five years. This includes known projected expansions of these facilities. The state-wide growth rate (0.96%) for 2030 would be applied to the new baseline. For subsequent decades, the state-wide manufacturing growth proxy (0.37%) would be applied. For Grayson County, the growth factors are applied to the TWDB baseline and the demands are adjusted to incorporate the projected demand for the new facilities in Sherman, Texas, because the state-wide growth rates do not accurately reflect the planned expansions for these facilities.

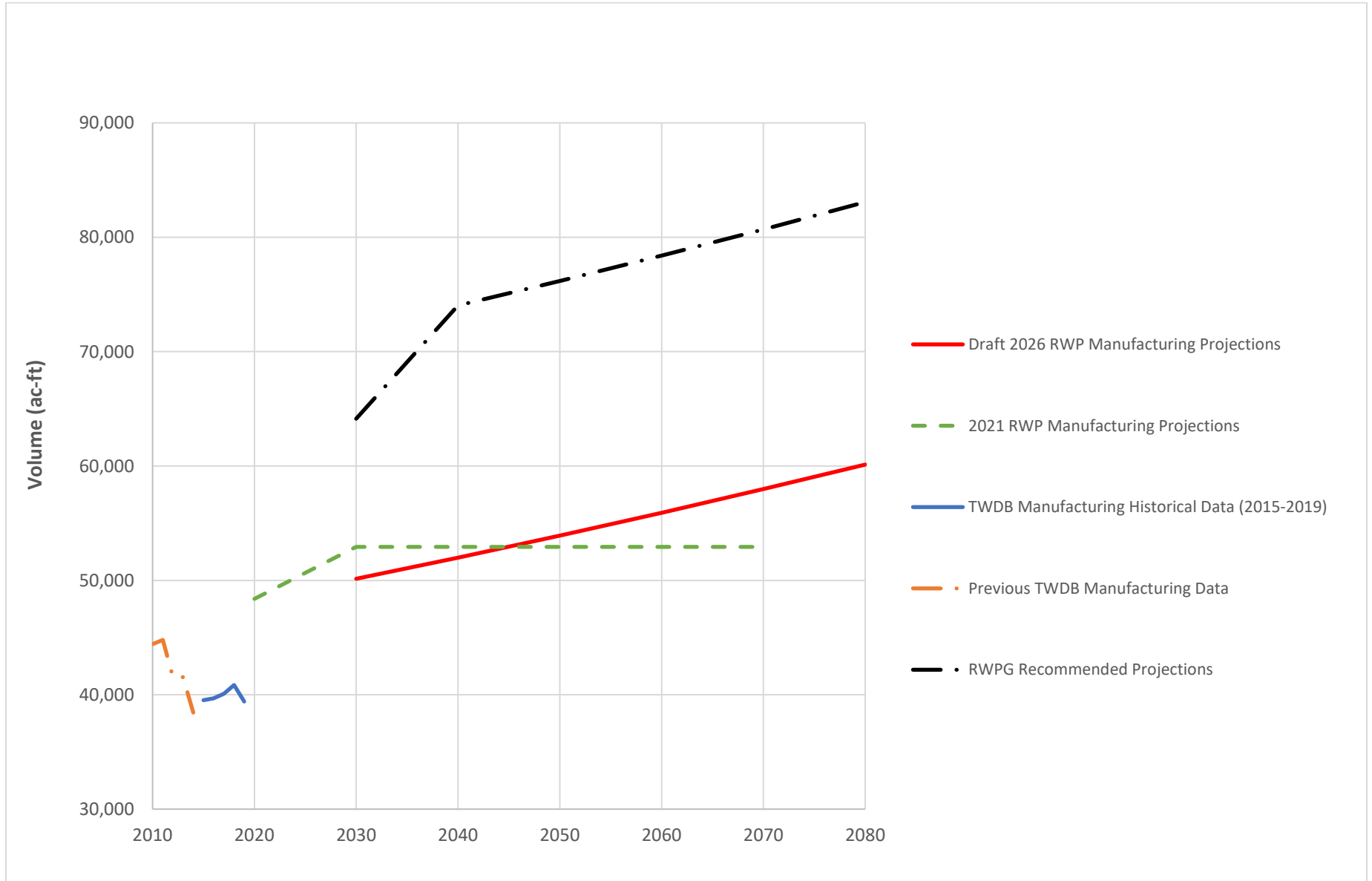
A comparison of the draft projections for the 2026 RWP (provided by TWDB), the final 2021 RWP projections, and the proposed RCWPG revisions to the 2026 RWP projections is presented in Table 3 and Figure 2.

Table 3. Comparison of Region C Manufacturing Demand Projections

County Name	2021 RWP Projections (ac-ft/yr)						Draft Projections for 2026 RWP (ac-ft/yr)						Recommended RWPG Revisions (ac-ft/yr)					
	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080	2030	2040	2050	2060	2070	2080
Collin	2,246	2,602	2,602	2,602	2,602	2,602	4,952	5,135	5,325	5,522	5,726	5,938	8,623	8,942	9,273	9,616	9,972	10,341
Cooke	116	128	128	128	128	128	139	144	149	155	161	167	139	144	149	155	161	167
Dallas	21,834	23,073	23,073	23,073	23,073	23,073	20,206	20,954	21,729	22,533	23,367	24,232	20,699	21,465	22,259	23,083	23,937	24,823
Denton	374	440	440	440	440	440	605	627	650	674	699	725	605	627	650	674	699	725
Ellis	5,414	6,549	6,549	6,549	6,549	6,549	5,660	5,869	6,086	6,311	6,545	6,787	5,660	5,869	6,086	6,311	6,545	6,787
Fannin	12	12	12	12	12	12	5	5	5	5	5	5	5	5	5	5	5	5
Freestone	19	19	19	19	19	19	55	57	59	61	63	65	55	57	59	61	63	65
Grayson	2,951	3,009	3,009	3,009	3,009	3,009	2,741	2,842	2,947	3,056	3,169	3,286	11,148	19,092	19,197	19,306	19,419	19,536
Henderson	806	985	985	985	985	985	1,269	1,316	1,365	1,416	1,468	1,522	1,269	1,316	1,365	1,416	1,468	1,522
Jack	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Kaufman	946	1,109	1,109	1,109	1,109	1,109	1,177	1,221	1,266	1,313	1,362	1,412	1,177	1,221	1,266	1,313	1,362	1,412
Navarro	894	1,062	1,062	1,062	1,062	1,062	1,086	1,126	1,168	1,211	1,256	1,302	1,634	1,694	1,757	1,822	1,889	1,959
Parker	87	103	103	103	103	103	85	88	91	94	97	101	85	88	91	94	97	101
Rockwall	31	36	36	36	36	36	7	7	7	7	7	7	445	461	478	496	514	533
Tarrant	12,197	13,301	13,301	13,301	13,301	13,301	11,900	12,340	12,797	13,270	13,761	14,270	12,339	12,796	13,269	13,760	14,269	14,797
Wise	454	501	501	501	501	501	254	263	273	283	293	304	254	263	273	283	293	304
Total	48,382	52,930	52,930	52,930	52,930	52,930	50,141	51,994	53,917	55,911	57,979	60,123	67,015	71,643	78,251	80,338	82,500	84,743

Grey text indicates that there was no change from the TWDB Draft projections.

Figure 2. Region C Manufacturing – Comparison of Water Use Estimates, 2021 Region C Water Plan Projection, Proposed Projections, and Revised Projections



Attachment A
Manufacturing Demand by County
Historical Usage and Projections

Figure 1A. Collin County Manufacturing Comparison

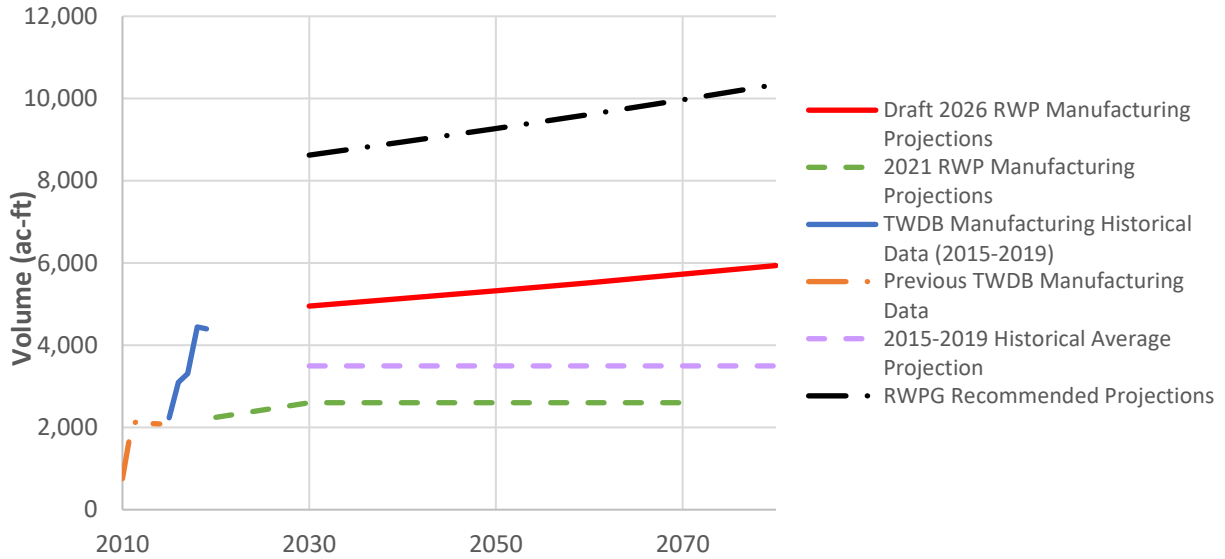


Figure 2A. Cooke County Manufacturing Comparison

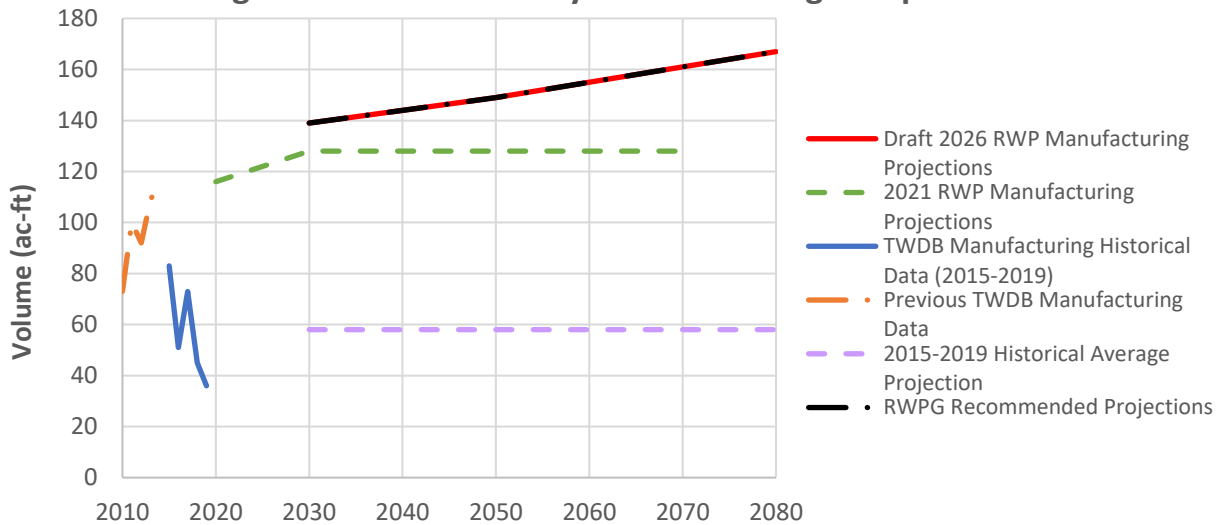


Figure 3A. Dallas County Manufacturing Comparison

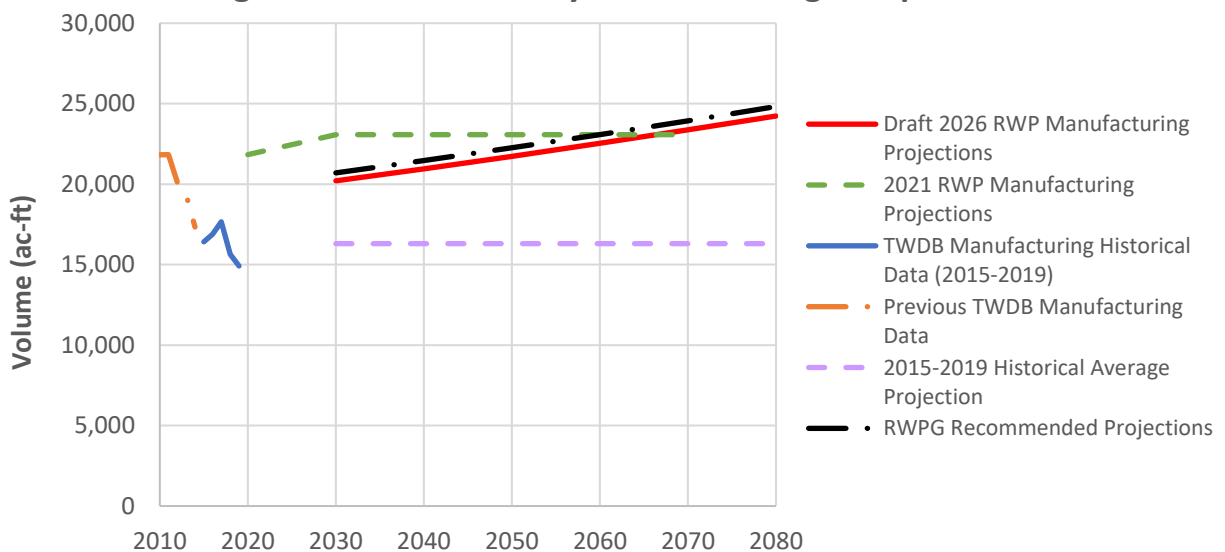


Figure 4A. Denton County Manufacturing Comparison

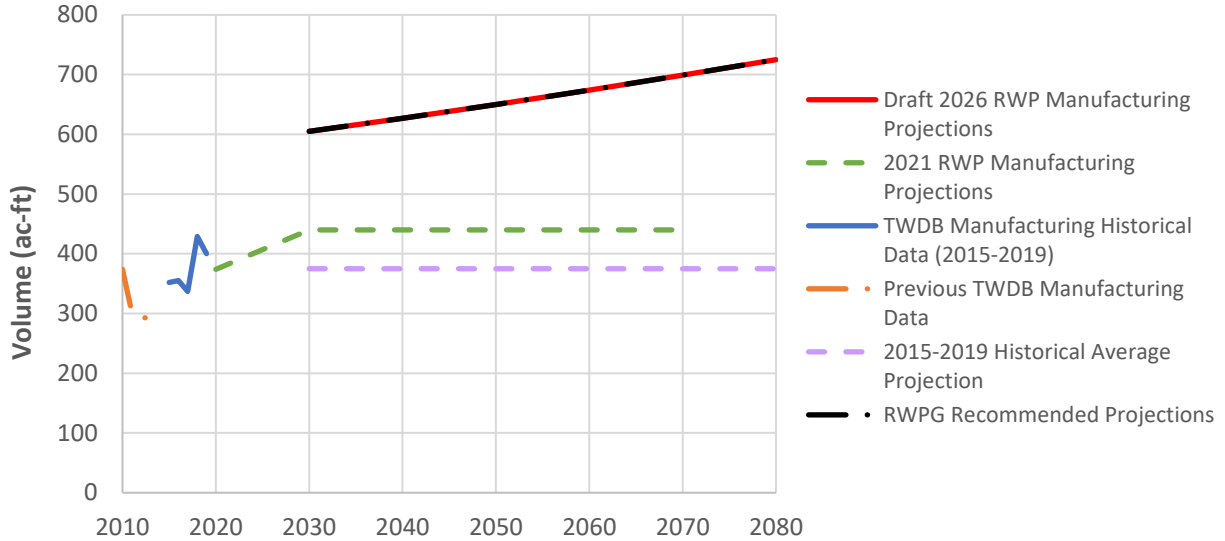


Figure 5A. Ellis County Manufacturing Comparison

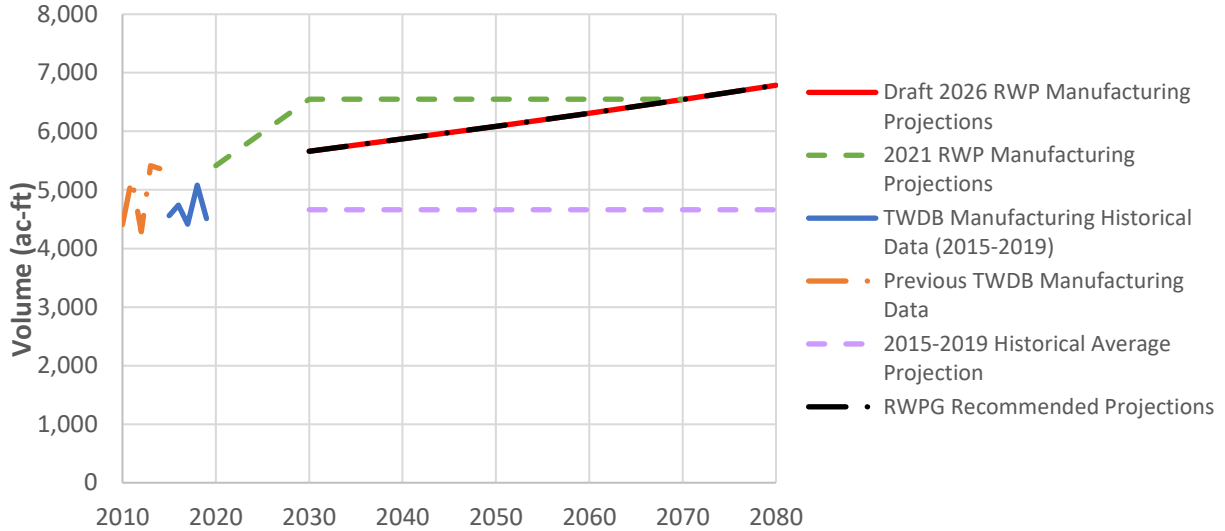


Figure 6A. Fannin County Manufacturing Comparison

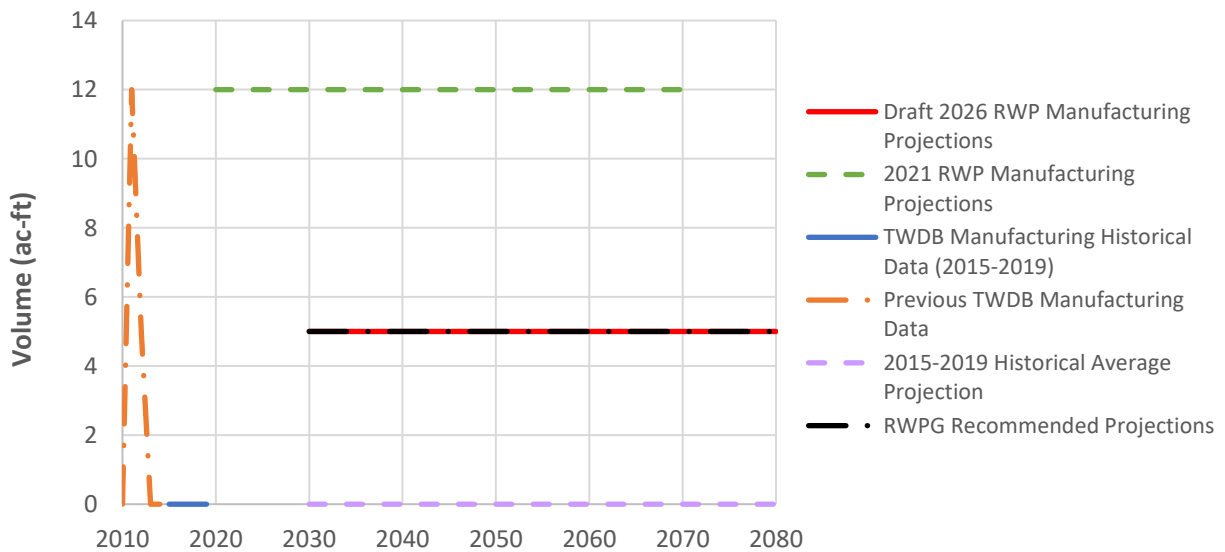


Figure 7A. Freestone County Manufacturing Comparison

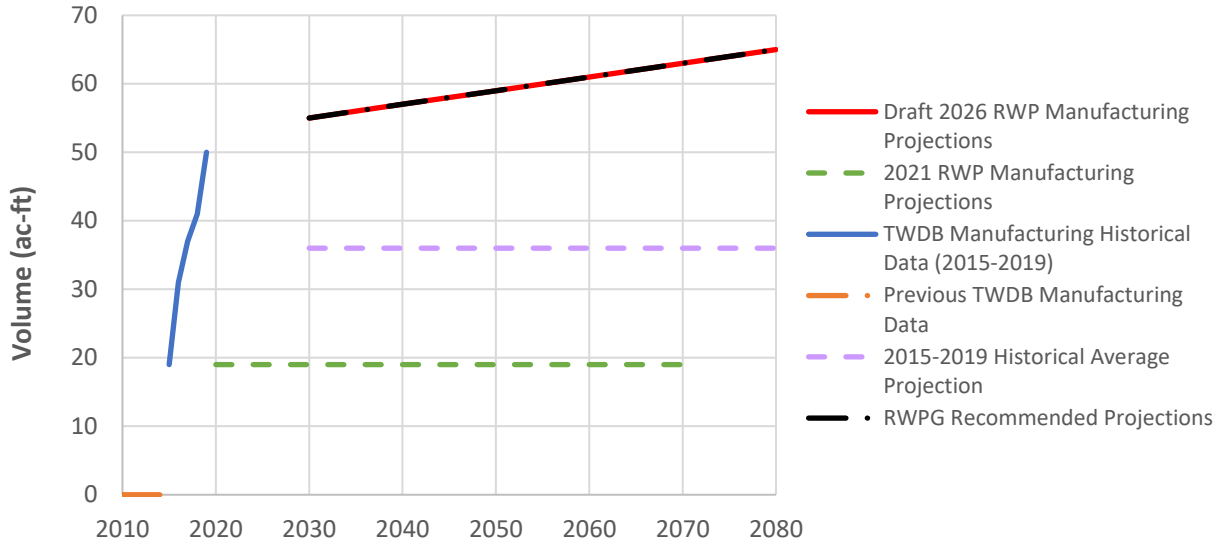


Figure 8A. Grayson County Manufacturing Comparison

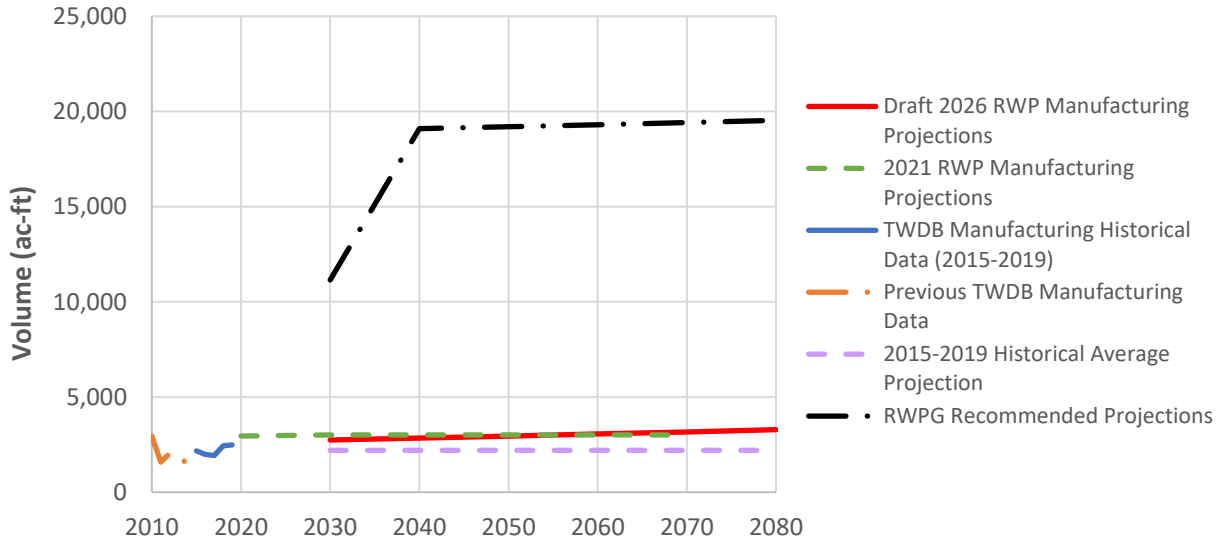


Figure 9A. Henderson County Manufacturing Comparison

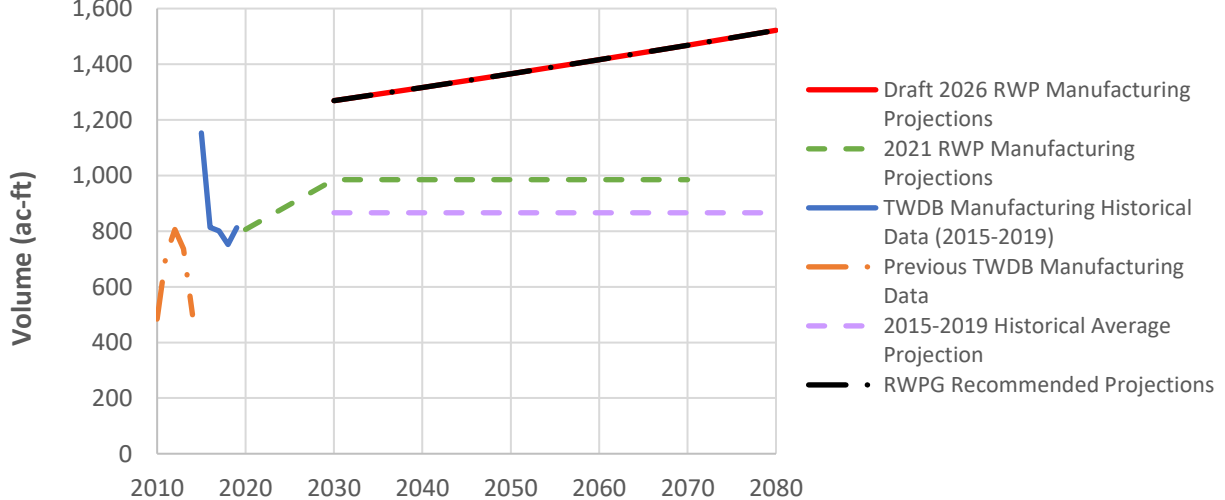


Figure 10A. Jack County Manufacturing Comparison

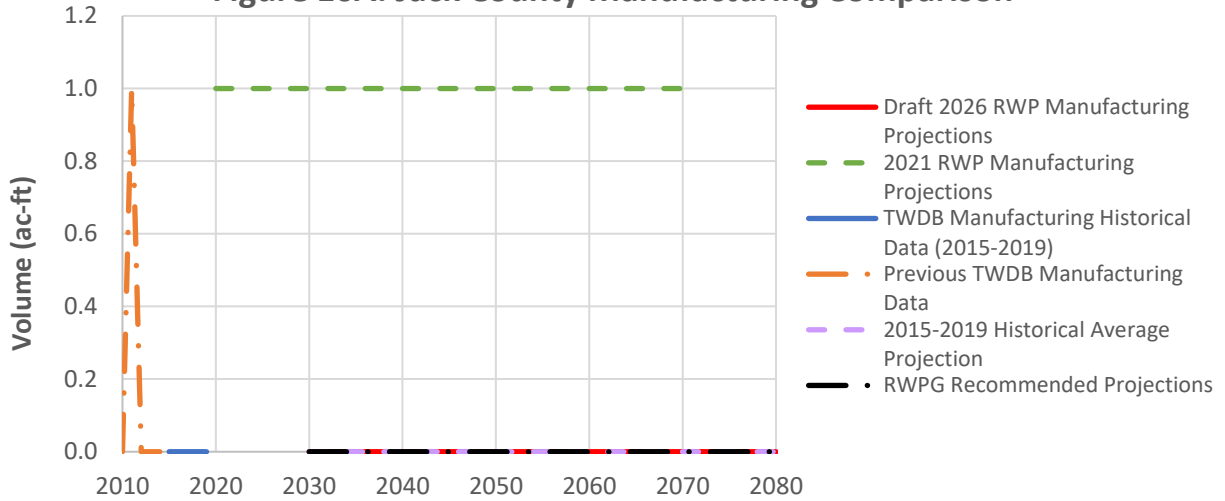


Figure 11A. Kaufman County Manufacturing Comparison

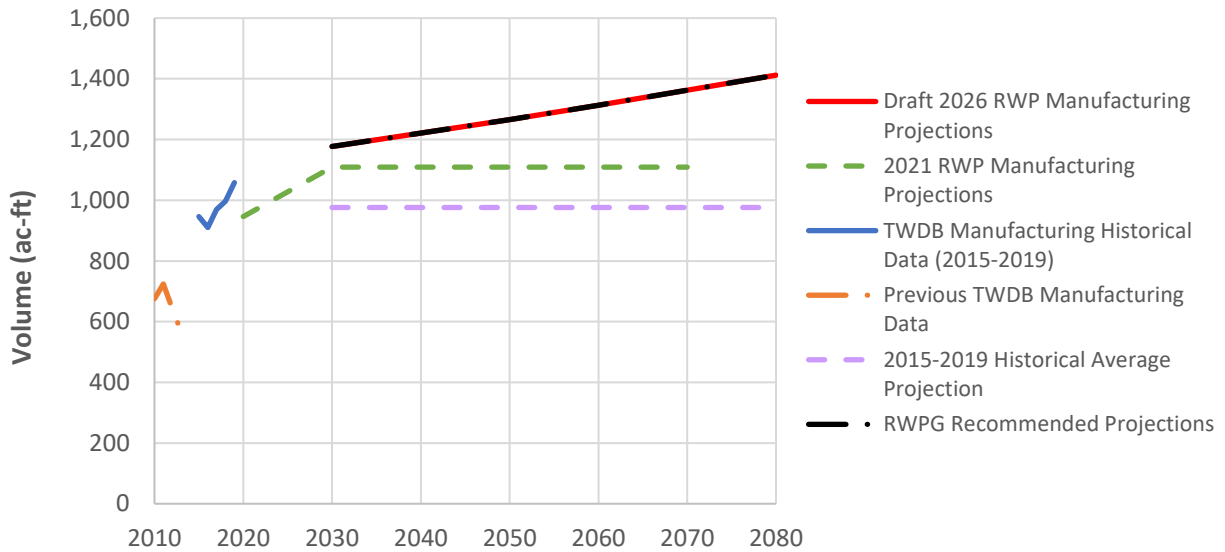


Figure 12A. Navarro County Manufacturing Comparison

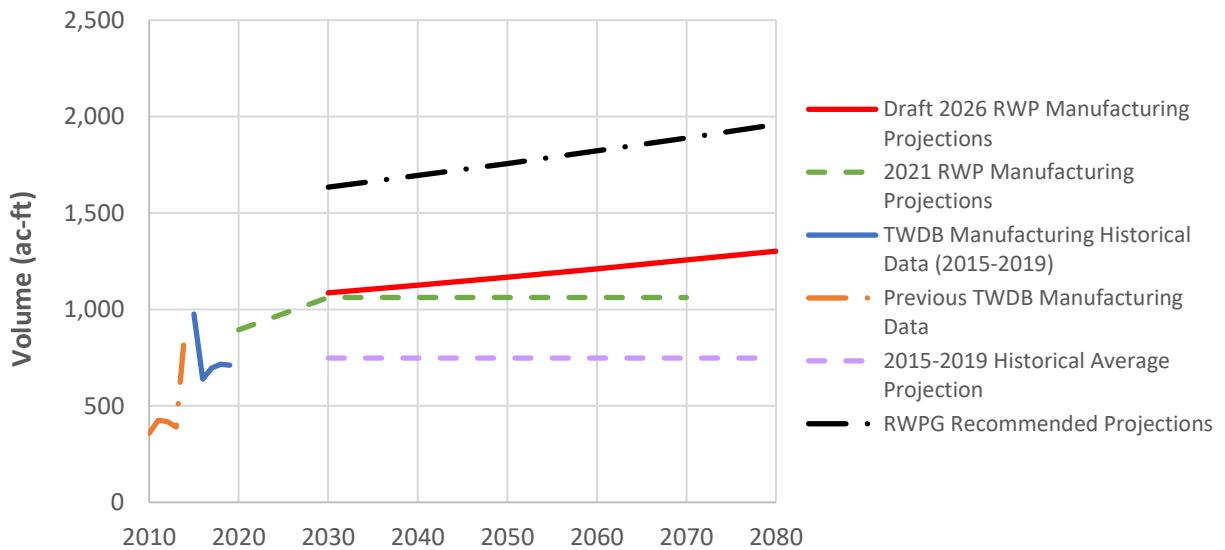


Figure 13A. Parker County Manufacturing Comparison

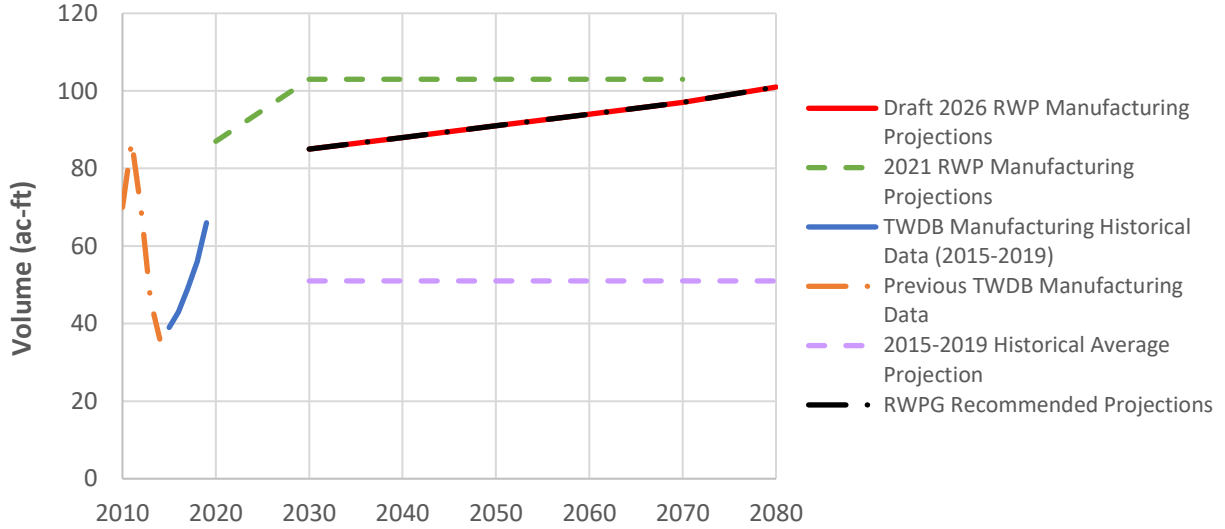


Figure 14A. Rockwall County Manufacturing Comparison

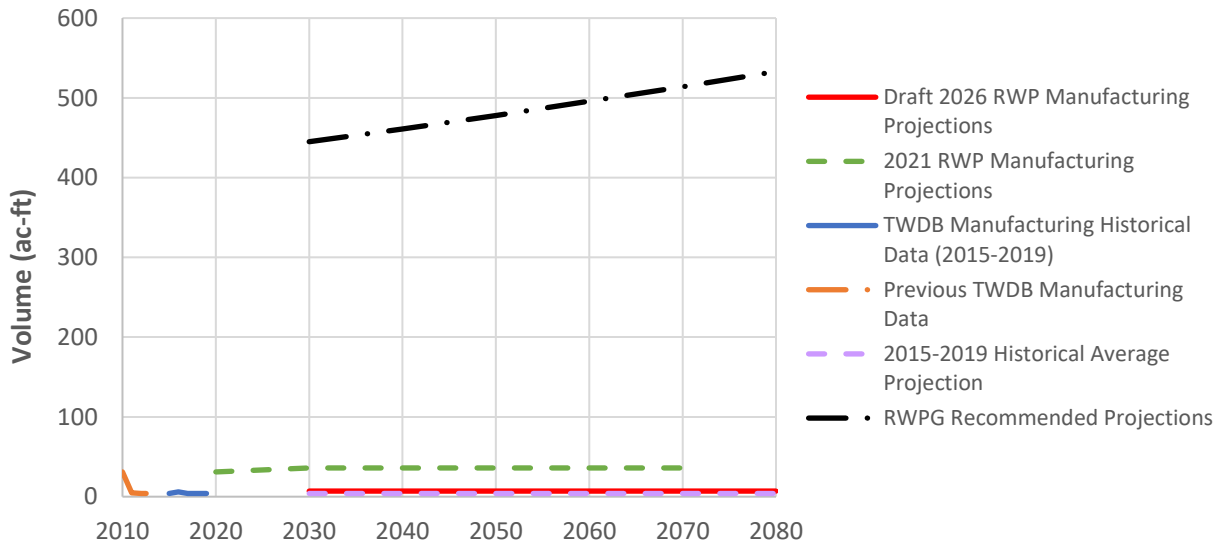


Figure 15A. Tarrant County Manufacturing Comparison

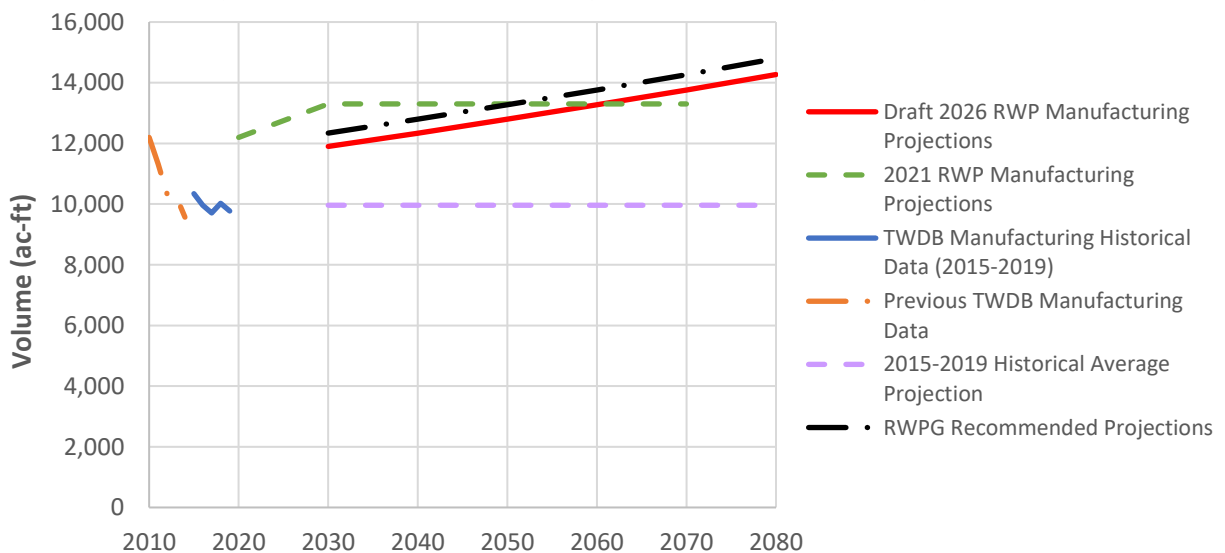


Figure 16A. Wise County Manufacturing Comparison

