

REGION C WATER PLANNING GROUP

TO: REGION C WATER PLANNING GROUP
FROM: J. KEVIN WARD, CHAIR
SUBJECT: MAY 23, 2022 PUBLIC MEETING
DATE: MAY 17, 2022

This memorandum will serve as a notice that the Region C Water Planning Group (RCWPG) is holding a public meeting at **1:00 P.M. on Monday MAY 23, 2022**, at the **North Central Texas Council of Governments, 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas, 76011¹**. 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 1, 2021
- III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)
- IV. PRIMARY ACTION ITEMS FOR CONSIDERATION
 - A. Announcement of Region C RWPG voting member vacancies: Richard Wagner Representing Municipalities; Pritam Deshmukh Representing Municipalities; Call for nominations to fill vacancies, and vote to fill vacancies.

This action item will consider recommendations for replacement of RCRWPG members who have resigned. Richard Wagner resigned from the Region C Water Planning Group effective December 10, 2021. Richard nominated Denis Qualls to fill the municipal interest vacancy. Pritam Deshmukh resigned from the Region C Water Planning Group effective September 30, 2021. Pritam nominated Stephen Gay to fill the municipal interest vacancy.
 - B. Announcement of Region C RWPG Liaison vacancies: Region C to Regions B and D; Call for nominations to fill vacancies, and vote to fill vacancies.

This action item will consider recommendations for currently vacant Region C RWPG Liaison positions. Larry Patterson recommended Ronna Hart as the Region C to Region D liaison.

- C. Certify and authorize TRA to submit administrative expenses to the TWDB for reimbursement for the remainder of the sixth planning cycle.

The RCWPG will consider authorizing TRA to submit administrative expenses to TWDB for reimbursement for the remainder of the sixth planning cycle.

- D. Authorize TRA to negotiate and execute an amendment to the TWDB contract to incorporate the full scope of work and total project cost for the 2026 Regional Water Plans, and to amend and execute the associated Consultant's subcontract to include this additional scope of work and funding.

The RCWPG will consider authorizing TRA to negotiate and execute an amendment to the TWDB contract to incorporate the full scope of work and total project cost for the 2026 Regional Water Plans, and to amend and execute the associated Consultant's subcontract to include this additional scope of work and funding.

- E. Review historical data and consider ratifying changes to WUG list that must be submitted to TWDB by the July 29, 2022 deadline.

The RCWPG will consider ratifying changes to the water user group (WUG) list as presented by the technical consultants. Final changes must be submitted to the TWDB by July deadline.

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

- A. Schedule Overview
- B. Review of Members and Alternates
- C. Presentation on Projections Methodology and Region C Non-Municipal Projections
- D. Update on Region C Website

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: October 2022.

VII. ADJOURNMENT

The following items are enclosed with this memorandum:

- I. RCWPG Agenda – May 23, 2022
- II. Meeting Handouts
 - A. Agenda Item II – RCWPG Minutes from November 1, 2021
 - B. Agenda Item IV.A. – Attachments:
 - 1. Recommendation for Denis Qualls as the replacement for Richard Wagner
 - 2. Recommendation for Stephen Gay as the replacement for Pritam Deshmukh
 - C. Agenda Item IV.B – Recommendation for Ronna Hart as the Region C Liaison to the Region D Water Planning Group.
 - D. Agenda Item IV.E – Technical Memorandum for Changes to WUG List
 - E. Agenda Item VI.A. – Letter from Region D Water Planning Group

REGION C WATER PLANNING GROUP

OPEN PUBLIC MEETING

MONDAY, MAY 23, 2022 AT 1:00 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

- I. ROLL CALL
- II. APPROVAL OF MINUTES – NOVEMBER 1, 2021
- III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)
- IV. PRIMARY ACTION ITEMS FOR CONSIDERATION
 - A. Announcement of Region C RWPG voting member vacancies: Richard Wagner Representing Municipalities; Pritam Deshmukh Representing Municipalities; Call for nominations to fill vacancies, and vote to fill vacancies.
 - B. Announcement of Region C RWPG Liaison vacancies: Region C to Regions B and D; Call for nominations to fill vacancies, and vote to fill vacancies.
 - C. Certify and authorize TRA to submit administrative expenses to the TWDB for reimbursement for the remainder of the sixth planning cycle.
 - D. Authorize TRA to negotiate and execute an amendment to the TWDB contract to incorporate the full scope of work and total project cost for the 2026 Regional Water Plans, and to amend and execute the associated Consultant's subcontract to include this additional scope of work and funding.
 - E. Review historical data and consider ratifying changes to WUG list that must be submitted to TWDB by the July 29, 2022 deadline.

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.

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

- A. Schedule Overview
- B. Review of Members and Alternates
- C. Presentation on Projections Methodology and Region C Non-Municipal Projections
- D. Update on Region C Website

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: October 2022.

VII. ADJOURNMENT

SUBMITTED

BY: _____



J. Kevin Ward, Administrative Officer

DATE: May 16, 2022

POSTED BY: _____

DATE: _____

TIME: _____

LOCATION: _____

Agenda Item II – Attachment

RCWPG Minutes from November 1, 2021

REGION C WATER PLANNING GROUP
MINUTES OF AN OPEN PUBLIC MEETING
November 1, 2021

The Region C Water Planning Group (RCWPG) met in an open public meeting on Monday, November 1, 2021, at 1:00 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.

Chair Kevin Ward called the Region C Regional Water Planning Group meeting to order at approximately 1:08 P.M. and welcomed guests.

I. ROLL CALL

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

| | |
|--------------------|---|
| David Bailey | Steve Mundt |
| Dan Buhman | Denis Qualls (Alternate for Richard Wagner) |
| Jenna Covington | Drew Satterwhite |
| Grace Darling | Rick Shaffer |
| Christopher Harder | Doug Shaw |
| Harold Latham | Connie Standridge |
| John Lingenfelder | Kevin Ward |

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

II. APPROVAL OF MINUTES – August 2, 2021

The minutes of the August 2, 2021, RCWPG meeting were approved by consensus upon a motion by Jenna Covington and a second by Grace Darling.

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

There were no public comments.

IV. PRE-PLANNING MEETING FOR 2026 REGION C WATER PLAN

A. Overview of the regional water planning process (presented by technical consultants)

The pre-planning meeting is a requirement to provide the public an opportunity to give input and comments to the RCWPG on issues that should be addressed in the upcoming regional water plan. This meeting is required prior to the initiation of technical work.

Abigail Gardner, FNI, gave a brief presentation on the regional water planning process. Highlights of Ms. Gardner's overview are as follows:

Water Planning in Texas

- \$6 Billion in economic losses in 1996 due to severe drought conditions
- S.B. 1 & 2 in 1997 and 2001 established regional water planning
- 16 regional water planning areas created by TWDB
- Goal of each RWPG is to develop a plan that serves the region and state

Region C Overview

- 26% of State's Population
- 2016 population: 7.2 million
- 53 Cities with population over 20,000
- 31% of State's economy
- 9% of State's water use
- 90% of Demand met by Surface Water
- Population predicted to double by 2070

Region C Water Planning Group

- 16 North Central Texas counties
- 22 voting members
- Major aquifer: Trinity River
- Municipal water use was 90% of total use in 2016
- Overlaps much of the Trinity River Basin

Fundamentals of Water Planning

- Goal is to meet drought of record water needs
- 50-year planning horizon, 5-year planning cycle
- Water User Groups: municipal, manufacturing, mining, irrigation, livestock, and steam-electric power
- Water Management Strategy = a water project that has a capital cost and would develop, deliver, or treat additional water supplies or conserve water for WUGs or WWP's

Working Timeline - 2026 RWP Cycle

- | | |
|--------------------|---|
| • August 31, 2021 | Contract Execution Deadline |
| • November 1, 2021 | RCWPG/Preplanning Meeting |
| • January 2022 | Non-Municipal Demand 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 |

- B. Receive public input and comments on issues that should be addressed or provisions that should be included in the 2026 Region C Water Plan.

No public comments were received or requested.

- C. Consider the identification of water management strategies that may create collaboration and cooperation with other regions.

Simone Kiel, FNI, led this discussion on major interregional water management strategies that were considered and recommended in the 2021 Region C Water Plan and acknowledged opportunities for identifying additional strategies that could promote and encourage collaboration between regions. She mentioned the recommended and alternate strategies included as shown below:

Recommended Strategies

- Marvin Nichols Reservoir
- Wright Patman Reallocation
- Neches Run-of-River
- Lake Columbia
- Oklahoma
- Groundwater - East Texas

Alternate Strategies

- George Parkhouse North
- George Parkhouse South
- Red River Off-Channel Reservoir
- Toledo Bend
- Groundwater - East Texas

Other Strategies

- Cypress River Basin
- Brazos River Basin
 - BRA System Operations
- Red River Basin
 - Oklahoma/Region B
- Sabine River Basin

Ms. Kiel added that the Region C WPG does a good job working across the state. Currently, Region C has six strategies included in the 2021 Water Plan that are also located in other regions.

- D. Discuss the potential process for conducting interregional coordination regarding water management strategies during the development of the 2026 Region C Water Plan.

Simone Kiel, FNI, gave a review of the process for interregional coordination used for the 2021 Water Plan and presented an approach for the 2026 Water Plan for discussion. The Interregional Planning Council made the following recommendations to the TWDB for RWPGs:

- RWPGs discuss process for interregional coordination
- Begin interregional coordination early in process
- Document interregional coordination

The TWDB made the following requirement for RWPGs:

- RWPGs include discussion on interregional coordination in pre-planning meeting
- RWPGs document their efforts in technical memo, Initially Prepared Plan (IPP) and final plan

Ms. Kiel added that Region C shares the following with Regions B, D, G, H and I:

- 43 shared Water User Groups (WUGs)
- 15 shared existing sources
- 6 recommended Water Management Strategies (WMS)
- 7 alternative WMS

Kiel stated that the RCWPG proposed 2026 interregional coordination involves consultant coordination, regional liaisons and interregional meetings, as needed in the event of a conflict. Ms. Kiel outlined the following consultant guidelines:

2026 Water Plan Consultant Coordination

- **Goals**
 - Share communications
 - Consistency across regional plans
- **Multiple Areas for Coordination**
 - Shared water user groups
 - Shared existing sources
 - Proposed water management strategies located in other regions

Below is a list of the Region C Regional Liaisons:

Region C to other Regions

- Region B, Vacant
- Region D, Vacant
- Region G, Gary Spicer
- Region H, Kevin Ward
- Region I, Connie Standridge

Other Regions to Region C

- Region B, Tracy Mesler
- Region D, David Nabors
- Region G, Gary Spicer
- Region H, Kevin Ward
- Region I, Vacant

Ms. Kiel commented that the liaison vacancies need to be addressed at a future date.

V. ACTION ITEMS FOR CONSIDERATION

- A. Consider re-appointment or replacement of RCWPG members with terms expiring in November 2021. Call for nominations to fill vacancies and vote to fill vacancies.

There are several members on the RCWPG board whose terms are expiring on November 1, 2021. Chairman Ward asked if there were any nominations from the floor to fill these positions. Hearing none, Chairman Ward asked for a vote to reappoint the following RCWPG board members: Jay Barksdale, Dan Buhman, Grace Darling, Russel Laughlin, G. K. Maenius, Gary Spicer, Connie Standridge, and Kevin Ward.

There were no public comments on this action item.

Upon a motion by Denis Qualls, and a second by Rick Shaffer, the RCWPG voted unanimously to reappoint board members listed above for another term.

- B. Consider appointments to a By-Laws Subcommittee to review the Region C By-Laws and report suggested modifications to the RCWPG.

There were no public comments on this action item.

Upon a motion by Dan Buhman, and a second by Steve Mundt, the RCWPG voted unanimously to appoint Grace Darling, Denis Qualls, Russel Laughlin, Connie Standridge and Kevin Ward to a By-Laws Subcommittee to review the Region C By-Laws and report suggested modifications to the RCWPG.

- C. Consider Approval of Nomination(s) of a Region C member and alternate to serve on the Interregional Planning Council, in accordance with H.B. 807. Authorize the Trinity River Authority to submit nominees' information to the Texas Water Development Board for appointment.

There were no public comments on this item.

Chairman Ward nominated Jenna Covington to serve on the Interregional Planning Council, and Drew Satterwhite to serve as the alternate.

Upon a motion by Kevin Ward, and a second by Grace Darling, the RCWPG voted unanimously to appoint Jenna Covington to serve on the Interregional Planning Council, and Drew Satterwhite to serve as the alternate.

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 - Chairman Ward stated that Region H meets in a week, and he plans to attend.
- Region I - None

C. Report from Texas Water Development Board – Kevin Smith, TWDB, addressed the following topics:

1. Subcontract Guidance for 2026 Regional Water Planning Contracts (8/11)

- Subcontracts must include provisions and clauses listed in the following guidelines:
http://twdb.texas.gov/about/contract_admin/doc/Subcontracting_Guidelines.pdf
- Official TWDB review and acceptance of sub-subcontracts (between the primary technical consultant and their subcontractors) will no longer be conducted. Copies of any sub-subcontracts and sub-subcontract amendments should be submitted directly to the planning group's TWDB regional water planner for their files.
- There is not a Certificate of Procurement form associated with the 2026 Regional Water Plan contracts.

2. Interregional Planning Council Nominations (9/13)

- At least one member to serve on the Council, and one alternate, for each member nominated
- Nominations should be submitted no later than February 28, 2022. The TWDB anticipates Council appointments will occur in April 2022.

3. Regional Water Planning Stakeholder Technical Meeting (10/12)

- Discuss technical-related lessons learned from the 2021 Regional Water Plan cycle and consider potential improvements to TWDB's regional water planning technical guidance for the 2026 Regional Water Plans.
- Optional meeting and consultants for regions that have not yet held their pre-planning meeting by the date of this meeting would not be eligible to invoice to the regional water planning contract.

D. Report from Texas Department of Agriculture - None

E. Report from Texas Parks and Wildlife Department - Adam Whisenant commented that they are looking into updates on stream segments.

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 RCWPG adjourned at approximately 2:50 P.M.

KEVIN WARD, Chairman

Agenda Item IV.A. – Attachments:

**Recommendation letter for Denis Qualls as the replacement for
Richard Wagner**

**Recommendation letter for Stephen Gay as the replacement for
Pritam Deshmukh**



November 3, 2021

Kevin Ward, Chair
Region C Water Planning Group
c/o Trinity River Authority
P.O. Box 60
Arlington, Texas 76004

Re: Resignation from Region C Water Planning Group and
Nomination for Municipal Interest Voting Member Vacancy

Please accept this letter as my official resignation from the Region C Water Planning Group effective December 10, 2021. I will be retiring from the City of Dallas with 27 years of service. I would like to thank the current and previous members of the Regional C Water Planning Group that I have had the pleasure to serve with in the 16-county area of Region C. It has been a privilege for me to be able to participate in water planning for Region C over the past three years.

Please accept my nomination of Denis Qualls, P.E., Dallas Water Utilities' Program Manager of Planning to fill the municipal interest vacancy my resignation creates. Mr. Qualls has over 17 years of service with Dallas Water Utilities and manages DWU's Water Planning and Wholesale Services programs. He is responsible for the development and implementation of the City's long-range water supply plan, drought contingency plan and administers the City's water rights, water storage and supply contracts. Additionally, his program is responsible for review of State and Federal rules and legislation that may impact Dallas Water Utilities operations. Mr. Qualls has also served as my alternate in the past to the Region C Water Planning Group and would make an excellent addition moving forward.

Thank you again for the opportunity to work with each of you in the long range water supply planning for Region C as this area continues to grow.

Sincerely

Richard V. Wagner, P.E.
Assistant Director of Business Operations
City of Dallas – Water Utilities Department

cc: Region C Water Planning Group Members
Kevin Smith, Texas Water Development Board
Terry Lowery, Dallas Water Utilities
Simone Kiel, Freese and Nichols

Our Vision: To be an efficient provider of superior water and wastewater service and a leader in the water industry.

Dallas Water Utilities · City Hall, 1500 Marilla, 4AN · Dallas, TX 75201
Telephone: (214) 670-3146



WATER UTILITIES

901-A Texas Street, Denton, TX 76209

September 30, 2021

Kevin Ward
Executive Director
Trinity River Authority
Chair, Region C Water Supply Planning Group
P.O. Box 60
Arlington, Texas 76004

Subject: Position on the Region C Water Supply Planning Group (WSPG)

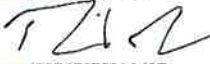
Dear Mr. Ward,

On October 14, 2020, Kenneth Banks sent you a letter recommending Pritam Deshmukh be his replacement on the Region C Water Supply Planning Group because he had resigned his position here at the City of Denton.

Since that time we have hired a new Director of Water Utilities, Stephen Gay. We would like for Mr. Gay to be the replacement for Mr. Deshmukh as a representative of municipalities in Region C. Mr. Gay's resume is attached for your review.

I wish to thank you and all of the members of Region C for this consideration.

Sincerely,

DocuSigned by:

480B1E0708AA49F...

David Gaines

Assistant City Manager/CFO

Cc: Mike Rickman, Secretary

STEPHEN D. GAY

1851 Brinker Rd, Denton, TX 76208
Phone: 303.895.9945 e-mail: yags65@me.com

**MISSION AND PERFORMANCE DRIVEN, 28-YEAR VETERAN OF
PUBLIC UTILITY OPERATIONS MANAGEMENT**

**SERVANT LEADER FOCUSED ON TEAM DEVELOPMENT AND THE BUILDING OF STRONG,
COLLABORATIVE PARTNERSHIPS AND WORKING GROUPS**

**NATIONALLY RECOGNIZED EXECUTIVE LEADER IN CRISIS AND EMERGENCY
MANAGEMENT PRACTICES FOR THE WATER SECTOR**

EXECUTIVE LEADERSHIP COMPETENCIES

- Proven ability to develop successful collaborative working partnerships between diverse government divisions/departments, creating positive changes in the working culture.
- Proven ability to successfully manage human, financial and material resources.
- Proven ability to develop and implement complex safety, security and preventative maintenance programs.
- Proven ability to develop strategic plans designed to prepare and guide utility organizations through the response to and recovery from emergency situations.
- Proven ability to identify and manage cross functional teams to develop and refine industry standards such as AWWA (American Water Works Association) M-19 (Management Series), G440 and G430 (Guidance Series).
- Proven ability to proactively develop effective succession planning opportunities unique to the utility industry.
- Invited speaker/presenter on a myriad of water industry techniques and best management practices.

CAREER BACKGROUND

CITY OF DENTON, TEXAS – WATER UTILITIES DEPARTMENT

Director – 2021 to Present

- Provide leadership and management for all aspects of plant and field operations for water, wastewater and reclaimed water.
- Provides leadership that fosters a healthy and respectful culture within the Department.
- Develop short – and long-range capital plan and programs. Initiate and/or direct engineering, operations and maintenance studies for the continuous improvement of the Department.
- Develop and prepare Department budgets, annual reports and quarterly activity reports.
- Approves performance standards, ensures that subordinate managers motivate employees to high levels of performance.
- Develops agenda items for Public Utilities Board, Planning and Zoning Commission and City Council; attend all Public Board and City Council meetings and present information related to the Department.
- Assist with the development review process as needed, provide decisions, guidance and direction, resolve disputes, and work with the city's development review engineers in the development review process.

CITY OF WESTMINSTER, COLORADO – PUBLIC WORKS AND UTILITIES DEPARTMENT

Utilities Operations Manager – 2013 to 2021

- Plan, organize and direct the Water Operations Division, including Water Treatment and Distribution, Wastewater Collection and Treatment, and Reclaimed Water Treatment and Distribution.
- Develop and review, analyze and evaluate Water Utilities Operations procedures and make recommendations for improvement, refining or expanding operations to meet current and long-range needs.
- Develop and prepare Utilities Operations Division budgets, annual reports and quarterly activity reports.
- Conduct feasibility studies and prepare special reports or cost benefit studies with a special emphasis towards innovative techniques and methods.
- Work as a member of the Department of Public Works and Utilities Management team to assure citywide and departmental goals, concerns, policies and priorities are met.

STEPHEN D. GAY – Page Two

CITY OF LONG BEACH, CALIFORNIA - WATER DEPARTMENT Manager, Security and Emergency Preparedness - 2010 to 2013

Selected Achievements:

- Performed comprehensive evaluation of operations using industry standards resulting in the development of effective and defendable long-range security, emergency and business continuity plans.
- Established a culture of understanding within the Water Department as to the value of comprehensive security and emergency preparedness, demonstrated by the active support and collaborative participation of all sectors, including City Management, which has resulted in bringing Long Beach Water to the forefront in terms of the development of industry standards
- Managed several security related system integration and upgrade projects, including a Mobile Resource Management System, resulting in enhanced operational efficiencies.

CITY OF NORTH LAS VEGAS, UTILITIES DEPARTMENT – Water Operations - 1993 – 2010

During my 17-year tenure with the City of North Las Vegas Utilities Department, I realized steady growth in terms of water operations responsibilities, progressing from Utility Systems Operator I (Meter Reader), to Water Systems Supervisor, responsible for the maintenance/operation of all production, storage and treatment facilities.

Selected Achievements:

- Developed and administered a \$20M annual operations budget and reduced budgetary needs by enhancing operational efficiencies through more effective pumping strategies and maintenance programs.
- Managed a dynamic team of water system operators, heavy equipment mechanics, welders, store clerks, SCADA/telecommunications technicians, IT professionals and administrative support staff.
- Developed and administered a successful, self-funded backflow prevention and cross-connection control program requiring ordinance development. Additionally, under my direction, my team developed several successful public outreach programs designed to inform the community about the need for backflow prevention. The program was recognized and adopted by the Nevada State Health Division.

AMERICAN WATER WORKS ASSOCIATION (AWWA)

Selected Voluntary Activities (past and present):

- Chair, Rocky Mountain Section - American Water Works Association (AWWA).
- Chair, AWWA National Security and Emergency Preparedness Standards Committee.
- Member, AWWA National Security Practices for Operations and Management Committee.

CERTIFICATIONS

- State of Colorado Class 4 Distribution Operator
- Nevada State Health Division Distribution Operator III
- AWWA Risk Assessment Methodology for Water Systems (RAM-W)
- Homeland Security Exercise and Evaluation Program (HSEEP) Trainer
- NIMS ICS 100, 139, 200, 300, 400, 700, 800

ACADEMIC PREPARATION

- ECEM - Executive Master of Science in Crisis and Emergency Management
University of Nevada Las Vegas – School of Public Administration
- BSBA - Bachelor of Science in Business Administration - University of Phoenix

MILITARY SERVICE

- United States Navy - Petty Officer Third Class - Honorable Discharge

Agenda Item IV.B – Attachment

Recommendation for Ronna Hart as the Region C Liaison to the Region D Water Planning Group.

Kevin:

As you know the Upper Trinity Regional Water District has made it a priority to participate in the Region C Water Planning Group planning process since the very beginning. From time to time representatives from UTRWD have assisted the work group to secure planning information and always provided both oral and written comments on the committee reports as well as the final plans. It now does appear that there is an opportunity for UTRWD to become a little more directly involved and allowed to better participate in future water supply planning activities. This will become increasingly important as UTRWD works with other partners to develop future water supplies in the Sulphur River Basin as identified in the current Region C / State Water Plan. These potential water supply sources are a Primary Water Management Strategy for UTRWD. Again, it our desire to be allowed to have a more direct role to assist the Region C Planning Group as we all move forward and begin the next regional water planning process.

Well with all this being said, my request is that the Region C Water Planning Group - - give serious consideration to the appointment of Ronna Hartt (UTRWD - Water Resources Manager) to the vacant Region D Liaison position. Ronna has been actively involved in the Region C planning process since 2008 and served as UTRWD Project Manager for the Lake Ralph Hall state and federal permitting effort. She currently serves as a NON-VOTING member of the Region D Water Planning Group. Ronna routinely attends Region D meetings along with those of the Sulphur River Basin Authority. I have discussed the possible appointment to this position with Ronna and she has agreed to serve if the Region C Planning Group does authorize her appointment.

Therefore, I formally request that the Region C Planning Group board members take appropriate action to appoint Ronna Hartt, P.E.- UTRWD Manager of Water Resources as the Region C Liaison to the Region D Water Planning Group.

Should you need additional information or require a more detailed resume from Ronna, please call me at (office) 972-219-1228 or (cell) 214-673-7497.

Warmest Regards

Larry N. Patterson, P.E.
Executive Director
Upper Trinity Regional Water District
P.O. Box 305
Lewisville, Texas 75067

Agenda Item IV.E – Attachment

Technical Memorandum for Changes to WUG List

REGION C MEMORANDUM

www.regioncwater.org

TO: Region C Regional Water Planning Group
CC: File
FROM: Freese and Nichols, Inc.
SUBJECT: Recommended Changes to TWDB WUG List for Sixth Cycle Region C Regional Water Plan
DATE: 5/17/2022

1 Introduction

The TWDB released a draft list of municipal water user groups (WUGs) to be included in the 2027 State Water Plan. A complete list of the draft WUGs for the 2026 Region C Water Plan is included in Attachment A. Those that are new or proposed for removal are highlighted in yellow.

2 Removed WUGs

All WUGs in the 2022 State Water Plan are included for planning purposes in the 2027 State Water Plan if they had an active, community public water system (PWS). If a WUG merged with another WUG, the acquired WUG was removed. Based on available data at the time the WUG list was developed, the TWDB did not remove any municipal WUGs from the 2021 Region C Regional Water Plan. However, Marilee SUD has been recently acquired by Mustang SUD, and the following change is requested:

- Request to combine Marilee SUD with Mustang SUD.

3 New WUGs

New WUGs in the 2027 State Water Plan were determined by whether the utility used more than 100 ac-ft per year between 2015 – 2019 per 31 TAC 357.10(43). The TWDB added 11 new municipal WUGs as listed below. Of these new WUGs, we have identified that the Federal Correctional Institution at Seagoville is no longer a public water supplier as of April 27, 2021. This is based on the status reported in the TCEQ Texas Drinking Water Watch Database. Since this entity no longer meets the criterion for listing as a WUG, we request:

- the Federal Correctional Institution at Seagoville be removed from the draft list.

| Entity Name | PWS Code | WUS Survey | Previously Part of... | Keep? |
|--|------------------------|------------------|-------------------------|--|
| AMC Creekside | TX0610191 | 192100 | County-Other, Denton | Yes |
| City of Blue Mound | TX2200005 | 389590 | County-Other, Tarrant | Yes |
| City of Log Cabin | TX1070121 | 507050 | County-Other, Henderson | Yes |
| City of Savoy | TX0740006 | 777000 | County-Other, Fannin | Yes |
| Denton County FWSD 11-C | TX0610272 | 1104079 | County-Other, Denton | Yes |
| Kaufman County MUD 14 | TX1290053 | 1104129 | County-Other, Kaufman | Yes |
| Lancaster MUD 1 | TX0570176 | 1103485 | County-Other, Dallas | Yes |
| Nash Forrester WSC | TX0700025 | 593000 | County-Other, Ellis | Yes |
| Southern Oaks Water Supply | TX0810034 | 807060 | County-Other, Freestone | Yes |
| Terra Southwest | TX0610112 TX0610161 | 390600 249615 | County-Other, Denton | Yes |
| Federal Correctional Institution – Seagoville | TX0570128 | 1104541 | County-Other, Dallas | No; Listed as inactive as of 4/27/2021 on the TCEQ Texas Drinking Water Watch Database |

4 Renamed WUGs

There were four WUGs that had name updates as listed below.

- Copeville SUD to Copeville WSC
- Westminster WSC to Westminster SUD
- Ables Springs WSC to Ables Springs SUD
- College Mound WSC to College Mound SUD

ATTACHMENT A

DRAFT LIST OF WATER USER GROUPS FOR THE 2026 REGION C WATER PLAN

Recommended Changes to TWDB WUG List for Sixth Cycle Region C Regional Water Plan
May 17, 2022
Page 4 of 10

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|---|------------------|---------------|
| 164 | ABLES SPRINGS SUD | UTILITY | |
| 166 | ADDISON | UTILITY | |
| 171 | ALEDO | UTILITY | |
| 173 | ALLEN | UTILITY | |
| 180 | ALVORD | UTILITY | |
| 10082 | AMC CREEKSIDE | UTILITY | New WUG; Keep |
| 187 | ANNA | UTILITY | |
| 188 | ANNETTA | UTILITY | |
| 199 | ARGYLE WSC | UTILITY | |
| 6201 | ARLEDGE RIDGE WSC | UTILITY | |
| 200 | ARLINGTON | UTILITY | |
| 205 | ATHENS | UTILITY | |
| 207 | AUBREY | UTILITY | |
| 6203 | AVALON WATER SUPPLY & SEWER SERVICE | UTILITY | |
| 209 | AZLE | UTILITY | |
| 6205 | B AND B WSC | UTILITY | |
| 213 | BALCH SPRINGS | UTILITY | |
| 2976 | BEAR CREEK SUD | UTILITY | |
| 6218 | BECKER JIBA WSC | UTILITY | |
| 232 | BEDFORD | UTILITY | |
| 238 | BELLS | UTILITY | |
| 242 | BENBROOK WATER AUTHORITY | UTILITY | |
| 6223 | BLACK ROCK WSC | UTILITY | |
| 260 | BLACKLAND WSC | UTILITY | |
| 263 | BLOOMING GROVE | UTILITY | |
| 267 | BLUE RIDGE | UTILITY | |
| 6227 | BOIS D ARC MUD | UTILITY | |
| 271 | BOLIVAR WSC | UTILITY | |
| 272 | BONHAM | UTILITY | |
| 276 | BOYD | UTILITY | |
| 291 | BRIDGEPORT | UTILITY | |
| 308 | BUENA VISTA-BETHEL SUD | UTILITY | |
| 3133 | BUTLER WSC | UTILITY | |
| 6236 | CALLISBURG WSC | UTILITY | |
| 332 | CARROLLTON | UTILITY | |
| 24 | CEDAR HILL | UTILITY | |
| 338 | CELINA | UTILITY | |
| 345 | CHATFIELD WSC | UTILITY | |
| 346 | CHICO | UTILITY | |
| 10094 | CITY OF BLUE MOUND | UTILITY | New WUG; Keep |
| 10095 | CITY OF LOG CABIN | UTILITY | New WUG; Keep |
| 10096 | CITY OF SAVOY | UTILITY | New WUG; Keep |
| 376 | COCKRELL HILL | UTILITY | |

Recommended Changes to TWDB WUG List for Sixth Cycle Region C Regional Water Plan

May 17, 2022

Page 5 of 10

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|----------------------------|------------------|---------|
| 380 | COLLEGE MOUND SUD | UTILITY | |
| 382 | COLLEYVILLE | UTILITY | |
| 383 | COLLINSVILLE | UTILITY | |
| 389 | COMBINE WSC | UTILITY | |
| 394 | COMMUNITY WSC | UTILITY | |
| 3002 | COPEVILLE WSC | UTILITY | |
| 403 | COPPELL | UTILITY | |
| 3003 | CORBET WSC | UTILITY | |
| 406 | CORINTH | UTILITY | |
| 35 | CORSICANA | UTILITY | |
| 454 | COUNTY-OTHER, COLLIN | COUNTY-OTHER | |
| 460 | COUNTY-OTHER, COOKE | COUNTY-OTHER | |
| 468 | COUNTY-OTHER, DALLAS | COUNTY-OTHER | |
| 472 | COUNTY-OTHER, DENTON | COUNTY-OTHER | |
| 481 | COUNTY-OTHER, ELLIS | COUNTY-OTHER | |
| 485 | COUNTY-OTHER, FANNIN | COUNTY-OTHER | |
| 492 | COUNTY-OTHER, FREESTONE | COUNTY-OTHER | |
| 502 | COUNTY-OTHER, GRAYSON | COUNTY-OTHER | |
| 530 | COUNTY-OTHER, JACK | COUNTY-OTHER | |
| 540 | COUNTY-OTHER, KAUFMAN | COUNTY-OTHER | |
| 586 | COUNTY-OTHER, NAVARRO | COUNTY-OTHER | |
| 595 | COUNTY-OTHER, PARKER | COUNTY-OTHER | |
| 610 | COUNTY-OTHER, ROCKWALL | COUNTY-OTHER | |
| 631 | COUNTY-OTHER, TARRANT | COUNTY-OTHER | |
| 660 | COUNTY-OTHER, WISE | COUNTY-OTHER | |
| 667 | CRANDALL | UTILITY | |
| 6259 | CRESCENT HEIGHTS WSC | UTILITY | |
| 223 | CROSS TIMBERS WSC | UTILITY | |
| 679 | CROWLEY | UTILITY | |
| 685 | CULLEOKA WSC | UTILITY | |
| 36 | DALLAS | UTILITY | |
| 694 | DALWORTHINGTON GARDENS | UTILITY | |
| 697 | DAWSON | UTILITY | |
| 704 | DECATUR | UTILITY | |
| 706 | DENISON | UTILITY | |
| 40 | DENTON | UTILITY | |

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|--|----------------------|--|
| 3057 | DENTON COUNTY FWSD 10 | UTILITY | |
| 10097 | DENTON COUNTY FWSD 11-C | UTILITY | New WUG; Keep |
| 707 | DENTON COUNTY FWSD 1-A | UTILITY | |
| 3055 | DENTON COUNTY FWSD 7 | UTILITY | |
| 6268 | DESERT WSC | UTILITY | |
| 2774 | DESOTO | UTILITY | |
| 6271 | DOGWOOD ESTATES WATER | UTILITY | |
| 6273 | DORCHESTER | UTILITY | |
| 724 | DUNCANVILLE | UTILITY | |
| 45 | EAST CEDAR CREEK FWSD | UTILITY | |
| 730 | EAST FORK SUD | UTILITY | |
| 3124 | EAST GARRETT WSC | UTILITY | |
| 2775 | EDGECLIFF | UTILITY | |
| 6283 | ELMO WSC | UTILITY | |
| 51 | ENNIS | UTILITY | |
| 763 | EULESS | UTILITY | |
| 764 | EUSTACE | UTILITY | |
| 765 | EVERMAN | UTILITY | |
| 767 | FAIRFIELD | UTILITY | |
| 769 | FAIRVIEW | UTILITY | |
| 773 | FARMERS BRANCH | UTILITY | |
| 774 | FARMERSVILLE | UTILITY | |
| 2679 | FATE | UTILITY | |
| 1104541 | FEDERAL CORRECTIONAL INSTITUTION, SEAGOVILLE | UTILITY | Remove; Listed as inactive as of 4/27/2021 on the TCEQ Texas Drinking Water Watch Database |
| 778 | FERRIS | UTILITY | |
| 785 | FLOWER MOUND | UTILITY | |
| 787 | FOREST HILL | UTILITY | |
| 52 | FORNEY | UTILITY | |
| 788 | FORNEY LAKE WSC | UTILITY | |
| 55 | FORT WORTH | COLLECTIVE REPORTING | |
| 819 | FRISCO | UTILITY | |
| 6320 | FROGNOT WSC | UTILITY | |
| 57 | GAINESVILLE | UTILITY | |
| 60 | GARLAND | UTILITY | |
| 831 | GASTONIA SCURRY SUD | UTILITY | |
| 841 | GLENN HEIGHTS | UTILITY | |
| 853 | GRAND PRAIRIE | UTILITY | |

Recommended Changes to TWDB WUG List for Sixth Cycle Region C Regional Water Plan

May 17, 2022

Page 7 of 10

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|---|------------------|---------------|
| 859 | GRAPEVINE | UTILITY | |
| 870 | GUNTER | UTILITY | |
| 873 | HACKBERRY | UTILITY | |
| 878 | HALTOM CITY | UTILITY | |
| 920 | HASLET | UTILITY | |
| 925 | HEATH | UTILITY | |
| 942 | HIGH POINT WSC | UTILITY | |
| 943 | HIGHLAND PARK | UTILITY | |
| 944 | HIGHLAND VILLAGE | UTILITY | |
| 957 | HONEY GROVE | UTILITY | |
| 6370 | HORSESHOE BEND WATER SYSTEM | UTILITY | |
| 960 | HOWE | UTILITY | |
| 963 | HUDSON OAKS | UTILITY | |
| 969 | HURST | UTILITY | |
| 970 | HUTCHINS | UTILITY | |
| 1219 | IRVING | UTILITY | |
| 1220 | ITALY | UTILITY | |
| 1223 | JACKSBORO | UTILITY | |
| 1242 | JOSEPHINE | UTILITY | |
| 1246 | JUSTIN | UTILITY | |
| 1249 | KAUFMAN | UTILITY | |
| 6376 | KAUFMAN COUNTY DEVELOPMENT DISTRICT 1 | UTILITY | |
| 6377 | KAUFMAN COUNTY MUD 11 | UTILITY | |
| 10098 | KAUFMAN COUNTY MUD 14 | UTILITY | New WUG; Keep |
| 1251 | KELLER | UTILITY | |
| 1253 | KEMP | UTILITY | |
| 1258 | KENNEDALE | UTILITY | |
| 3018 | KENTUCKYTOWN WSC | UTILITY | |
| 1259 | KERENS | UTILITY | |
| 1275 | KRUM | UTILITY | |
| 1288 | LADONIA | UTILITY | |
| 83 | LAKE CITIES MUNICIPAL UTILITY AUTHORITY | UTILITY | |
| 2975 | LAKE KIOWA SUD | UTILITY | |
| 1298 | LAKE WORTH | UTILITY | |
| 1300 | LAKESIDE | UTILITY | |
| 1305 | LANCASTER | UTILITY | |
| 10099 | LANCASTER MUD 1 | UTILITY | New WUG; Keep |
| 1315 | LEONARD | UTILITY | |
| 1317 | LEWISVILLE | UTILITY | |
| 1327 | LINDSAY | UTILITY | |
| 1328 | LITTLE ELM | UTILITY | |
| 1605 | LUCAS | UTILITY | |

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|---------------------------------|----------------------|--|
| 2977 | LUELLA SUD | UTILITY | |
| 2978 | M E N WSC | UTILITY | |
| 1613 | MABANK | UTILITY | |
| 1619 | MALAKOFF | UTILITY | |
| 94 | MANSFIELD | UTILITY | |
| 871 | MARILEE SUD | UTILITY | Marilee SUD has been acquired by Mustang SUD. Recommend combining these two WUGs and removing Marilee SUD from the WUG list. |
| 6410 | MARKOUT WSC | UTILITY | |
| 1817 | MCKINNEY | UTILITY | |
| 1824 | MELISSA | UTILITY | |
| 1832 | MESQUITE | UTILITY | |
| 98 | MIDLOTHIAN | UTILITY | |
| 6423 | MILLIGAN WSC | UTILITY | |
| 2979 | MOUNT ZION WSC | UTILITY | |
| 2090 | MOUNTAIN PEAK SUD | UTILITY | |
| 3027 | MOUNTAIN SPRINGS WSC | UTILITY | |
| 2092 | MUENSTER | UTILITY | |
| 2096 | MURPHY | UTILITY | |
| 101 | MUSTANG SUD | UTILITY | |
| 10100 | NASH FORRESTON WSC | UTILITY | New WUG; Keep |
| 2103 | NAVARRO MILLS WSC | UTILITY | |
| 2107 | NEVADA SUD | UTILITY | |
| 2118 | NEWARK | UTILITY | |
| 2133 | NORTH COLLIN SUD | UTILITY | |
| 6452 | NORTH FARMERSVILLE WSC | UTILITY | |
| 6455 | NORTH KAUFMAN WSC | UTILITY | |
| 107 | NORTH RICHLAND HILLS | UTILITY | |
| 2140 | NORTHLAKE | UTILITY | |
| 6461 | NORTHWEST GRAYSON COUNTY WCID 1 | UTILITY | |
| 6465 | OAK RIDGE SOUTH GALE WSC | UTILITY | |
| 2165 | OVILLA | UTILITY | |
| 2172 | PALMER | UTILITY | |
| 3079 | PALOMA CREEK NORTH | COLLECTIVE REPORTING | |
| 6618 | PALOMA CREEK SOUTH | COLLECTIVE REPORTING | |
| 2178 | PANTEGO | UTILITY | |
| 2179 | PARKER | UTILITY | |

Recommended Changes to TWDB WUG List for Sixth Cycle Region C Regional Water Plan

May 17, 2022

Page 9 of 10

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|--|------------------|---------------|
| 3032 | PARKER COUNTY SUD | UTILITY | |
| 2190 | PELICAN BAY | UTILITY | |
| 2198 | PILOT POINT | UTILITY | |
| 6486 | PINK HILL WSC | UTILITY | |
| 2208 | PLANO | UTILITY | |
| 6487 | PLEASANT GROVE WSC | UTILITY | |
| 6490 | POINT ENTERPRISE WSC | UTILITY | |
| 2219 | PONDER | UTILITY | |
| 2231 | POTTSBORO | UTILITY | |
| 2236 | PRINCETON | UTILITY | |
| 2239 | PROSPER | UTILITY | |
| 3056 | PROVIDENCE VILLAGE WCID | UTILITY | |
| 6502 | R C H WSC | UTILITY | |
| 2255 | RED OAK | UTILITY | |
| 2657 | RENO (Parker) | UTILITY | |
| 2260 | RHOME | UTILITY | |
| 2263 | RICE WATER SUPPLY AND SEWER SERVICE | UTILITY | |
| 2264 | RICHARDSON | UTILITY | |
| 2265 | RICHLAND HILLS | UTILITY | |
| 2277 | RIVER OAKS | UTILITY | |
| 2281 | ROANOKE | UTILITY | |
| 121 | ROCKETT SUD | UTILITY | |
| 122 | ROCKWALL | UTILITY | |
| 3035 | ROSE HILL SUD | UTILITY | |
| 2302 | ROWLETT | UTILITY | |
| 2304 | ROYSE CITY | UTILITY | |
| 2306 | RUNAWAY BAY | UTILITY | |
| 2311 | SACHSE | UTILITY | |
| 2312 | SAGINAW | UTILITY | |
| 2328 | SANGER | UTILITY | |
| 2779 | SANSOM PARK | UTILITY | |
| 2334 | SARDIS LONE ELM WSC | UTILITY | |
| 130 | SEAGOVILLE | UTILITY | |
| 3060 | SEIS LAGOS UD | UTILITY | |
| 2355 | SHERMAN | UTILITY | |
| 6533 | SOUTH ELLIS COUNTY WSC | UTILITY | |
| 6534 | SOUTH FREESTONE COUNTY WSC | UTILITY | |
| 2376 | SOUTH GRAYSON SUD | UTILITY | |
| 10101 | SOUTHERN OAKS WATER SUPPLY | UTILITY | New WUG; Keep |
| 2383 | SOUTHLAKE | UTILITY | |
| 2384 | SOUTHMAYD | UTILITY | |
| 2386 | SOUTHWEST FANNIN COUNTY SUD | UTILITY | |

Recommended Changes to TWDB WUG List for Sixth Cycle Region C Regional Water Plan

May 17, 2022

Page 10 of 10

| 2027 Entity ID | 2027 Entity Name | 2027 WUG Subtype | Comment |
|----------------|----------------------|------------------|---------------|
| 2393 | SPRINGTOWN | UTILITY | |
| 6547 | STARR WSC | UTILITY | |
| 2498 | SUNNYVALE | UTILITY | |
| 3041 | TALTY SUD | UTILITY | |
| 2512 | TEAGUE | UTILITY | |
| 10102 | TERRA SOUTHWEST | UTILITY | New WUG; Keep |
| 139 | TERRELL | UTILITY | |
| 2518 | THE COLONY | UTILITY | |
| 2528 | TIOGA | UTILITY | |
| 2530 | TOM BEAN | UTILITY | |
| 2539 | TRENTON | UTILITY | |
| 2542 | TRINIDAD | UTILITY | |
| 2546 | TROPHY CLUB MUD 1 | UTILITY | |
| 2552 | TWO WAY SUD | UTILITY | |
| 2557 | UNIVERSITY PARK | UTILITY | |
| 2562 | VAN ALSTYNE | UTILITY | |
| 6581 | VERONA SUD | UTILITY | |
| 2571 | VIRGINIA HILL WSC | UTILITY | |
| 153 | WALNUT CREEK SUD | UTILITY | |
| 2580 | WATAUGA | UTILITY | |
| 154 | WAXAHACHIE | UTILITY | |
| 155 | WEATHERFORD | UTILITY | |
| 156 | WEST CEDAR CREEK MUD | UTILITY | |
| 6591 | WEST LEONARD WSC | UTILITY | |
| 2993 | WEST WISE SUD | UTILITY | |
| 3142 | WESTLAKE | UTILITY | |
| 6594 | WESTMINSTER SUD | UTILITY | |
| 2607 | WESTOVER HILLS | UTILITY | |
| 2608 | WESTWORTH VILLAGE | UTILITY | |
| 2615 | WHITE SETTLEMENT | UTILITY | |
| 6600 | WHITE SHED WSC | UTILITY | |
| 2617 | WHITESBORO | UTILITY | |
| 2618 | WHITEWRIGHT | UTILITY | |
| 2624 | WILLOW PARK | UTILITY | |
| 2627 | WILMER | UTILITY | |
| 2640 | WOODBINE WSC | UTILITY | |
| 2649 | WORTHAM | UTILITY | |
| 2650 | WYLIE | UTILITY | |
| 3058 | WYLIE NORTHEAST SUD | UTILITY | |

Agenda Item VI.A. – Attachment

Letter from Region D Water Planning Group

NORTH EAST TEXAS REGIONAL WATER PLANNING GROUP - D

Executive Committee

November 11, 2021

Jim Thompson
Chair

Richard LeTourneau
Vice Chair

Rolin McPhee
Secretary

Joe Bumgarner
At-Large

Voting Members

Russell Acker
Counties

Allen Beeler
Environmental

Brandon Belcher
Environmental

Bruce Bradley
Agriculture

John Brooks
Public

Joe Coats
Environmental

Donnie Duffie
Electric
Generating
Utilities

Andy Easley
Counties

Nicolas Fierro
Water Districts

Richard Garza
Agriculture

Cindy Gwinn
Industries

Conrad King
River Authority

Janet McCoy
Small Business

Fred Milton
Water Districts

Ned Muse
Municipalities

Sharron Nabors
Agriculture

Lloyd Parker
Water Utilities

Billy Henson
Industries

Bob Tardiff
Municipalities

Harlton Taylor
Water Utilities

Mr. J. Kevin Ward
Chair, Region C Water Planning Group
Trinity River Authority of Texas
P.O. Box 60
Arlington, Tx 76004-0600
wardk@trinityra.org

Dear Mr. Ward:

The North East Texas Regional Water Planning Group (Region D) has authorized the submission of this letter to you as Chair of the Region C Water Planning Group to notify the Region C Planning Group of a potential conflict between our two plans and to enhance interregional coordination efforts going forward.

Obviously, we are at the beginning of the planning cycle and very early on in the process. However past experiences between our Regional Water Planning Groups regarding conflicts and potential conflicts have shown that early identification and discussions of any potential conflicts can be helpful. The Interregional Planning Council Report to The Texas Water Development Board dated October 16, 2020 stressed the importance of identifying issues and potential interregional conflict concerns at the beginning and throughout the planning cycle.

We realize that final decisions on potential projects for the upcoming Regional Water Plan have not occurred. However, we are also aware that Region C has consistently included the potential Marvin Nichols Reservoir as a future water supply source in its Plans. We also know that for at least the last twenty (20) years, Region D has included language in its Plans that expressly states that Marvin Nichols Reservoir should not be included in the State Water Plan or any Regional Water Plan because it does not protect the economic, agricultural and natural resources of the region and of Texas and that the development of this project would have a substantial adverse effect on our region as a result of the impacts the reservoir would cause. I have attached with this letter Section 6.9 and Section 6.10 of the most recent approved Region D Water Plan which details the concerns our Region has regarding the proposed Marvin Nichols Reservoir.

It is certainly our hope that our two groups can avoid a conflict on this issue. We are willing to take all reasonable measures to do so. Those efforts could include coordinating and exploring other viable measures to increase water supply sources for Region C in the future as well as decreasing future demand, including but not limited to fully utilizing water supplies in existing reservoirs, potential reallocation of water resources in existing reservoirs, additional reuse beyond what is proposed in the Region C Water Plan, and increased water conservation.

We are sending a copy of this letter to representatives of the Texas Water Development Board. It is our desire that a conflict be avoided if at all possible and hopefully, both regions can work toward that goal.

Thank you for your consideration.

Very truly yours,


Jim F. Thompson
Chair, Region D
Water Planning Group

cc: Mr. Jeff Walker
Executive Administrator
Texas Water Development Board
1700 N. Congress Ave.
Austin, Tx 78701

Temple McKinnon
Temple.McKinnon@twdb.texas.gov

Ron Ellis
Ron.Ellis@twdb.texas.gov

6.7.2 Navigation

As noted in Chapter 1, while the lack of perennial streams limits the viability of navigation projects in northeast Texas, there are several notable navigation projects either in the region or affected by streamflows from the region. None of the recommended water management strategies proffered herein are expected to exhibit impacts on navigation within the region. Conservation, groundwater wells, reuse, and contractual strategies will not impact navigation of surface waters, and the recommended surface water strategies considering development of infrastructure utilize existing surface water supplies and not affect navigation of streams in the region.

6.7.3 Parks and Public Lands

The NETRWPA contains numerous state parks, forests, and wildlife management areas. In addition, there are a number of city parks, recreational facilities, and public lands located throughout the region. None of the water management strategies evaluated for the 2021 NETRWP are expected to adversely impact parks or public land. The development of additional groundwater resources could ultimately reduce the reliance on water from surface water resources. Where possible, reducing the need for diversions from surface water sources may enhance recreational opportunities.

6.7.4 Energy Reserves

Numerous oil and gas wells are located within the NETRWPA, including the Hawkins Oil Field and the majority of the East Texas Oil Field. In addition, significant lignite coal resources can be found in the NETRWPA under portions of 15 counties. These resources represent an important economic base for the region. None of the water management strategies recommended by the NETRWPG are expected to significantly impact oil, natural gas, or coal production in the NETRWPA.

6.8 Consistency with State Water Planning Guidelines

To be considered consistent with long-term protection of the State's water, agricultural, and natural resources, the NETRWP must be determined to be in compliance with Texas Administrative Code (TAC) 31, Chapters 357.40, 357.41, 358.3(4) and (9).

The information, data evaluations, and recommendations included in Chapters 1 through 12 of the NETRWP collectively comply with these regulations.

6.9 Marvin Nichols I Reservoir and Impacts on Water Resources, Agricultural Resources and Natural Resources

Although not a recommended water planning strategy for the NETRWPG for this round of planning, Marvin Nichols I Reservoir was a recommended water management strategy for Region C in 2011 and 2016, and was included in the 2012 and 2017 State Water Plans. A larger Marvin Nichols reservoir has also been included in Region C's drafts as a proposed water management strategy for this round of planning. Since all proposals for Marvin Nichols reservoirs would be located exclusively in the North East Texas Region, and the impacts to agricultural and natural resources would be greatest in this Region, the NETRWPG feels it is important and necessary to review the impacts that any such Marvin Nichols reservoir would have to this area. This is particularly true since the spirit of Texas' regional water planning process includes a ground up, localized approach to the planning process. The discussion below will apply to the Marvin Nichols I/IA Reservoir, since it was included in the 2017 State Water Plan, but the approach applies to any proposed reservoir in the Sulphur River Basin.

Based on the reasons set forth below, it has been and continues to be the position of the NETRWPG that Marvin Nichols I Reservoir should not be included in any regional plans as a water management strategy and not be included in the 2022 State Water Plan as a water management strategy. The NETRWPG continues to oppose any Marvin Nichols type reservoir. The NETRWPG also has not yet seen an adequate evaluation by Region C of the impacts of such a reservoir on water, agricultural and natural resources of the state and on Region D. The NETRWPG supports its positions with both the facts set out in its previous 2011 and 2016 Region D Plans, including information provided again below that have come from evaluations of the needs for instream flows to protect flood plain forests that exist downstream of the proposed reservoir. It is the position of the NETRWPG that all proposals for Marvin Nichols reservoirs developed by Region C are based on the impoundment and use of water that NETRWPG needs to protect these downstream agricultural and natural resources.

Per the terms of agreement set forth from the October 5, 2015 mediation between Regions C and D and ratified by the NETRWPG at its October 21, 2015 meeting, the NETRWPG does not challenge Marvin Nichols Reservoir as a unique reservoir site for the purposes of this Plan. At the time of publication of this Regional Water Plan, no agreement has been made between Regions C and D for the purposes of the 2021 Region D Plan.

6.9.1 Impacts on Agricultural Resources

Agriculture as a whole and timber in particular are vital and important industries throughout the NETRWPA, as illustrated in Chapter 1, Figure 1.11, wherein timber is listed in 12 of the 19 counties as a principal crop.

Estimates developed for the USACE and Sulphur River Basin Authority (SRBA 2013) reflect that Marvin Nichols I Reservoir would flood 66,103 acres, mainly in Red River County and including portions of Titus, Franklin, Delta, and Lamar Counties. Within that study, a high-level desktop analysis using available land coverage data from the TPWD Ecological Systems Classification, and EPA concluded that included in the flooded acreage would be 31,600 acres of forest lands, including an approximation of 10,156 acres of Priority 1 bottomland hardwoods potentially classified as waters of the U.S. (SRBA Environmental Evaluation Interim Report, Sulphur River Basin Comparative Assessment, 2014). Specifically to differentiate bottomland hardwood forest by that area potentially characterized as "waters of the U.S.," dubbed "Forested Wetland," an extra GIS filter was employed using the U.S. Fish and Wildlife Service National Wetlands Inventory data coverage.

While the SRBA study suggests that the amount of bottomland hardwood forest characterized as waters of the U.S., i.e., "Forested Wetland" potentially impacted by the proposed Marvin Nichols reservoir is 10,156 acres, the amount reported in the TWDB 2008 Reservoir Site Protection Study is reported as 26,309 acres (Table 5-37, pg. 100, utilizing a methodology performed by the Texas Parks and Wildlife Department, TPWD, described in Appendix C of that report). A possible reason for this significant difference may be the extra filtering noted above to differentiate between bottomland hardwood forest, and "Forested Wetland," which is used for their calculation of "waters of the U.S." While the difference in the overall acreage between the 2008 TWDB study and the more recent SRBA study is less than 2%, the reported difference in impacts on potentially mitigable bottomland hardwoods has decreased by approximately 16,153 acres, or more than 60%.

More recent analyses performed for the SRBA (as reported in Timberland and Agricultural Land Impact Assessment for Selected Water Resource Options in the Sulphur River Basin, SBG 2015) have indicated the impacted acreage from the Marvin Nichols Reservoir project to be 66,216 acres, assuming a reservoir elevation of 328 ft-NGVD. Additional information developed for the SRBA in early 2015 indicated that, "recent droughts had impacted the estimated firm yield of reservoirs within the Sulphur Basin to a greater

extent than anticipated and that a larger scope of the Marvin Nichols project should be evaluated.” This more recent study thus adopted a “more refined” approach to evaluate timber resources. The results indicated that approximately 42,019 acres of timber, 22,854 acres of agriculture, and 1,343 acres of “other” wildlife area would be impacted by the Marvin Nichols Reservoir project. The estimated value of these impacts totals approximately \$28.3 million (\$24.7 million timber value, \$3.6 million agricultural value).

Ultimately, these studies provide a useful example of the uncertainty underlying the planning-level characterization of the significance of impacts from the Marvin Nichols I Reservoir on the timber industry in the North East Texas Region, and the importance of field verification and further detailed analysis.

In addition to the timber and agricultural land lost as a result of the reservoir, mitigation requirements are anticipated to significantly impact agricultural resources. The recent SRBA study of the Sulphur River Basin (specifically the Cost Rollup Report) concluded that approximately 47,060 acres would be necessary for mitigation. This methodology was based upon the application of a 2:1 ratio applied to the aforementioned calculated acreage of 23,530 acres of “water of the U.S.” within the footprint of the proposed reservoir. This information was then incorporated into the 2016 Region C Water Plan.

The results of the SRBA Study were used as the basis for the 2014 analysis for Region C entitled, “Analysis and Quantification of the Impacts of the Marvin Nichols Reservoir Management Strategy on the Agricultural and Natural Resources of Region D and the State.” This analysis compiled information developed during the SRBA study for use in the TWDB’s conflict resolution process between Region C and Region D performed for the purposes of the 2016 regional water planning process.

Region D prepared a three-part response to Region C’s analysis. In the first part of this response, Trungale (2014) concluded that the impacts on priority bottomland hardwoods due to the reservoir and its impacts on flows would be significant:

“Development of the Marvin Nichols Reservoir project as proposed in the Region C water plan would permanently flood a large proportion of the last remaining intact bottomland hardwoods (BLH) in East Texas. It would also result in a massive reduction in flows remaining in the river downstream of the proposed reservoir project which would result in significant, likely catastrophic, harm to an even larger bottomland hardwood forest area. As the plan acknowledges “Marvin Nichols Reservoir will have significant environmental impacts.” (Region C 2011, p 4D.11)”

These bottomland hardwoods habitats are important natural resources that are dependent on maintenance of instream flows.

“Floodplains with BLH and other ecologically important habitats are one of most altered and imperiled ecosystems on Earth (Opperman et al. 2010). The unique importance of this BLH ecosystem is largely based on its extensive swamp communities sustained by an active regime of high and overbank flows. More than any other factor, the sustainability of ecosystem processes within floodplains depends upon the longitudinal and lateral hydrologic connections that would be severed by the proposed reservoir.”

Trungale (2014) further concluded based on analysis of modeling provided by Region C that operation of Marvin Nichols as proposed by the Region C Plan would not protect these important natural resources.

“As currently modeled, the proposed Marvin Nichols I reservoir will not provide sufficient frequency and duration of high and overbank flows to sustain downstream BLH forest....Analysis of results generated by the water availability modeling (WAM), developed to evaluate this reservoir project, indicate that the flows needed to maintain these forests would

be severely diminished, if not entirely eliminated. The environmental flow requirements used to evaluate the Marvin Nichols Reservoir Water Supply Project are based on an approach developed in the 1990's called the "Consensus Criteria". Unlike the more recent environmental flow criteria developed as part of SB3, there are no requirements, under the consensus criteria, to pass any high flow pulse flows. The maximum pass through for the proposed Marvin Nichols Reservoir Project, as required by consensus criteria, would be 514 cfs in May and then only if the reservoir is greater than 80% full.

The clearest problem with the Region C report is that it contains no analysis or quantification of downstream impacts. Data and methodologies to perform this type of analysis, even at a planning level, are readily available. In 2004, the TWDB and the U.S. Army Corps of Engineers (USACE) conducted a study on the Sulphur River (TWDB 2004). Direct observations and technical evaluations reported in this study indicate that flows in the range of 862 cfs (approximately 50,000 ACFT per month) are transitional between in-channel and overbank flow.

An analysis of the outputs from the water availability model, developed by Region C to evaluate the Marvin Nichols project, show that under existing conditions, there is only one year, out of the 57-year record, in which flows did not exceed this threshold volume in at least one month. When the proposed reservoir is included in the simulation, this number jumps to 29 years (more than half of the time) when no overbank events occur. The longest duration of time in which no over bank event occur under the without project scenario is 16 months; the flow regime resulting from the proposed reservoir indicates that at two separate times in the record, the river would go 80 months (almost 7 years) without overbank flow events. These flow rates, based on the 7Q2 water quality target, are intended to sustain the river during brief, infrequent and severe droughts, but with the Marvin Nichols project as proposed and modeled by Region C, these extremely low flows would occur much more frequently."

The impact of flow alteration due to the Marvin Nichols Reservoir on downstream forests does not appear to have been considered in the recent Region C analyses. These losses as well as the losses within the reservoir footprint represent a significant impact on natural resources in Region D. From Trungale (2014):

"The lack of seasonal flooding identified in the water availability results indicates BLH forests cannot be maintained downstream of the proposed Marvin Nichols reservoir. When the effect on flows and the loss of episodic inundation are added to the impacts resulting within the reservoir footprint, the impacts from the Proposed Marvin Nichols Reservoir Project are huge. In the Sulphur basin 44% of the Forested Wetland area and 17% of the Bottomland Hardwood Forests would be at significant risk. By completely ignoring the largest and most significant impacts to natural resources resulting from the Marvin Nichols Reservoir Water Supply project, the Region C report does not meet the requirements of the TWDB order."

In a separate section of Region D's 2014 response to the 2014 Region C analysis, Sharon Mattox, Ph.D., J.D., concluded that the Region C report "fails to provide reasonable quantification of impacts." This report cites a relatively recent major change in the means of determining mitigation, identifying that the U.S. Army Corps of Engineers and the U.S. EPA published their final rule, "Compensatory Mitigation for Losses of Aquatic Resources," better known as the "2008 Mitigation Rule." As noted in Mattox (2014):

"The policies and procedures laid out in the 2008 Mitigation Rule render it improper and utterly illogical to conduct an analysis of a future project based solely on historical information (even if Region C had gathered accurate and relevant historical data). Under well-developed tools and

practices stemming from the 2008 Mitigation Rule, losses of functions and values are the emphasis and simple ratios are not the touchstone. If a ratio is used, that ratio should be in the range of 3:1 to 10:1."

Mattox (2014) further notes:

"Initially, the Report estimates impacts only for the inundation area of the Reservoir itself – that is, the footprint of reservoir. The Report fails to estimate jurisdictional areas for the 2,751 acres of "ancillary facilities" recognized in the [2011] Region C Plan. The ancillary facilities must be part of the USACE permit, which must assess the complete project. In addition, the Report fails to include any estimates for lands used during the construction process. The estimate also fails to include any estimate of critical secondary impacts to waters of the U.S., which will also require mitigation if losses of waters of the U.S. result. One example of a secondary impact that would likely have a material impact is wetlands adjacent to the Sulphur River downstream of the proposed dam that will no longer be inundated by frequent flood events."

Mattox (2014) summarizes the characterization of potential mitigation thusly:

"The 23,530 acre estimate of jurisdictional areas is not consistent even with the data on land coverage types... Based on my review of the EEIR-SRBCA, I would include the estimated acreages for bottomland hardwoods, forested wetlands, herbaceous wetlands, open water, and shrub wetland. In addition other habitat types identified ... as subtypes under Grassland/Old Field, Shrubland, and Upland Forests that are not broken out but likely qualify as waters of the U.S., include Pineywoods: Bottomland Wet Prairie, Pineywoods: Small Stream and Riparian Wet Prairie, Pineywoods: Small Stream and Riparian Evergreen Successional Shrubland, and Pineywoods: Small Stream and Riparian Temporarily Flooded Mixed Forest.

The total of only the habitat types listed Table 2 of the Report is 35,411 acres, which I believe to be a more realistic estimate of the number of acres that require mitigation, if one is limited to the numerical data provided in the Report. This number, however, still excludes the additional habitat types given above, which will also contain jurisdictional areas. It further excludes the small, but identifiable wetlands, streams, and other waters that are certainly present in other habitat categories. Although no data on these omitted waters is included, it would certainly increase the realistic minimum number of jurisdictional waters of the U.S. For planning purposes, an estimate of at least 40,000 jurisdictional acres is reasonable."

Noting that historically, all required mitigation has occurred in the watershed of the reservoir, Mattox (2014) indicates that, "given that the watershed approach is a central focus of the 2008 rule, all mitigation required for the [Marvin Nichols I] strategy must certainly occur within Region D," ultimately opining:

"...[T]he mitigation required for the [Marvin Nichols I] strategy will require at least 3 times as much land as the acres of jurisdictional waters, and potentially much more. Any of the reasonable estimates suggest the mitigation land required for the [Marvin Nichols I] strategy will exceed 100,000 acres..."

Another previous study by the Texas Parks and Wildlife Department (TPWD)/United States Fish and Wildlife Service (USFWS) concluded a minimum of 163,620 acres would be required for mitigation and that number could be as high as 648,578 acres. "The Economic Impact of the Proposed Marvin Nichols I Reservoir to the Northeast Texas Forest Industry" prepared by the Texas Forest Service dated August 2002 estimated that

the total acres affected by Marvin Nichols I Reservoir could be as low as 258,000 acres or as high as 820,000 acres. "The Economic, Fiscal and Developmental Impacts of the Proposed Marvin Nichols Reservoir Project" dated March 2003 by Weinstein and Clower prepared for the SRBA stated a lower acreage loss, estimating agricultural land loss of 165,000 to 200,000 acres.

It is understood that the exact amount and location of the mitigation acreage is unknown. However, in analyzing impacts to agricultural and natural resources in the NETRWPG area, it is clear that vast amounts of agricultural acreage will be removed from production due to flooding and mitigation requirements associated with Marvin Nichols I Reservoir. These impacts are corroborated in "Table P.1: Summary of Evaluation of Water Management Strategies" as follows: "Agricultural Resources/Rural Areas" are rated high" and "Possible Third Party" are rated "high". Third Party impacts are considered to be social and economic impacts resulting from redistribution of water.

6.9.2 Impacts on Timber Industry

The Texas Forest Service Study dated August 2002 estimated that the forest industry and local economies would incur significant losses due to a substantial reduction in timber supply from the reservoir project and required mitigation. The study further detailed that manufacturing facilities such as paper mills located near the proposed site which are dependent on hardwood resources would be impacted the most. The NETRWPG has previously received oral and written commentary from Graphics Packaging International, (formerly International Paper Company), which operates a paper mill in Cass County, Texas, and from numerous other timber companies, logging contractors and related industries stating that Marvin Nichols I Reservoir and the mitigation associated with the project would place their industries in peril due to the loss of hardwood timber supplies.

The Texas Forest Service Study estimated forest industry losses based on three (3) separate mitigation options. The low end impacts were estimated to be an annual reduction of \$51.18 million output, \$21.89 million value-added, 417 jobs and \$12.93 million labor income. The high end impacts were estimated to be annual loss of \$163.91 million industry output, \$70.10 million value-added, 1,334 jobs and \$41.4 million labor income.

The Weinstein and Clower Study dated March 2003 estimated as much as 200,000 acres of agricultural land, including 150,000 acres of timberland, could be removed from production. However, the study opined that based on assessment U.S. Forest Service inventories, those inventories along with growth could offset the loss of timberland due to reservoir impoundment and mitigation. The study also indicated that the loss to the timber industry should be limited to additional transportation costs associated with assessing new regional sources of timber.

The Weinstein and Clower Study has been criticized on the following grounds:

1. The Weinstein and Clower Study used total U.S. Forest Service timber inventories throughout the region in arriving at its conclusion that the inventories together with the growth of those inventories would offset any losses due to reservoir impoundment and mitigation. It did not take into account that large amounts of this acreage is unharvestable because it is located in wildlife management areas, streamside management zones, parks, housing areas and other areas which cannot be harvested. In addition, it is well documented that hardwood acreage throughout Northeast Texas as well as the State as a whole is decreasing due to development, conversions of hardwood areas to production of pine plantation acreage, and inundation for water development projects. See "An Analysis of Bottomland Hardwood Areas" report to TWDB dated February, 1997.

2. The Weinstein and Clower Study fails to distinguish between timber inventories as a whole (which includes more pine than hardwood) and hardwood timber inventories. Many of the timber industries in Northeast Texas, such as paper mills and hardwood sawmills, are dependent upon a reliable and affordable supply of hardwood timber. Hardwood timber grows predominantly in bottomlands and thus would be more severely impacted by the reservoir project and required mitigation than other timber species.
3. The Weinstein and Clower Study acknowledges that transportation costs would be greater with Marvin Nichols I in place as timber companies would be required to purchase timber from farther distances. These additional costs would have a huge impact on the timber industry in Northeast Texas. Timber is a heavy product and the transportation cost of timber is a substantial factor, particularly taken in conjunction with the current high cost of fuel. The industries involved compete in a global market. Additional transportation costs and additional costs in obtaining raw materials will jeopardize their ability to compete in this global market. This is particularly important considering the number of manufacturing jobs already lost due to rising costs of manufacturing products in the United States.
4. The Weinstein and Clower Study used a mitigation factor of 1.54 to 1, citing that ratio as the mitigation required by the most recently developed reservoir in Texas. It is widely believed that the estimates by the TPW/USFWS Study and the TFS Study are more accurate estimates based on the detailed analysis of the actual acreage to be mitigated rather than a recent mitigation requirement from a totally different type of habitat. In addition, Cooper Lake in Northeast Texas had 5,900 acres of bottomland hardwood and required total mitigation of 31,980 acres throughout Northeast Texas.
5. Finally, additional skepticism of the Weinstein and Clower Study is based on the knowledge that funding for the Study came from Dallas-Fort Worth entities which would benefit from and utilize the water supplies from Marvin Nichols I Reservoir.

As noted previously, results from SBG (2015) developed for the SRBA indicated that approximately 42,019 acres of timber, 22,854 acres of agriculture, and 1,343 acres of “other” wildlife area would be impacted by the Marvin Nichols Reservoir project. The estimated value of these impacts totals approximately \$28.3 million (\$24.7 million timber value, \$3.6 million agricultural value). The 2016 Region C Water Plan similarly reported potential impacted acreage of timberland to be approximately 42,823 acres. However, it is noted that both of these analyses focused upon the acreage potentially inundated within the reservoir, and did not include an analysis of acreage impacted by potential mitigation.

6.9.3 Impacts on Farming, Ranching and other Related Industries

The studies cited above deal only with the timber industry in Northeast Texas. Marvin Nichols I Reservoir and required mitigation would also impact areas which produce wheat, cotton, rice, milo, hay, soybean, and alfalfa. In addition, acreage currently being utilized for beef cattle, dairy cattle, poultry and hog production would be affected. The NETRWPG has received numerous oral and written comments from individuals involved in the production of these agricultural commodities, along with others in agribusiness industries, reflecting negative impacts from the potential development of Marvin Nichols I Reservoir.

6.9.4 Impacts on Natural Resources

Additional commentary has been previously received from the NETRWPG concerning negative impacts on natural resources such as lignite and oil and gas reserves located in and near the reservoir site. See Chapter 1 Figures 1.7 and 1.9 for maps of oil and gas as well as lignite resources. “Table P.3: Strategy Evaluation Matrix” as presented in the 2016 Region C Plan corroborates the negative impacts of Marvin Nichols I upon “Other Natural Resources” in its rating of “medium high.” Additional concerns have been expressed from

landowners regarding economic losses from hunting leases, grazing leases and timber sales. These impacts are again corroborated in the aforementioned table from the 2016 Region C Water Plan, rating the impacts of Marvin Nichols I upon "Agricultural Resources/Rural Areas" as "high" and "Possible Third Party" as high.

In addition, if Marvin Nichols I Reservoir is built the footprint will sit squarely on top of the outcrop of the Nacatoch Aquifer. Local residents report there are dozens of springs and thousands of sand boils. Man-made alterations include water wells, undocumented seismograph holes and unplugged oil wells. Residents' concern is that heavy metals settling to the bottom of the reservoir will contaminate the aquifer below.

6.9.5 Impacts on Environmental Factors

Region C's 2016 planning process provides a summation of significant negative environmental impacts in "Table P.4: Environmental Quantification Matrix." Marvin Nichols Reservoir would cause "High" habitat impacts, "Medium High" impacts to cultural resources, and "Medium" impacts to environmental water needs. "High" is the highest category for negative impacts given to any strategy. This includes 24,093 acres of wetlands impacted and 23 threatened/endangered species.

Although the NETRWPG opposes any Marvin Nichols type reservoir, the NETRWPG notes that other potentially feasible alternatives, such as reallocation of flood pool storage in Wright Patman Reservoir, do exist in the Sulphur River Basin. Evaluations considering the feasibility of this strategy have been performed as part of the aforementioned SRBA Sulphur River Basin Feasibility Study, an ongoing effort on the part of the USACE and SRBA to evaluate potential water supply alternatives in the Sulphur River Basin.

A modified WAM for the Sulphur River Basin, and conditions representing full demands of existing water rights with no discharges (i.e., Run 3), was used in this study to evaluate three reallocation scenarios with conservation elevations of 232.5 ft., 242.5 ft., and 252.5 ft. The results from these analyses conclude that the available firm supply from reallocation of Wright Patman reservoir ranges from 415,000 ac-ft/yr, to 730,400 ac-ft/yr, and up to 1,004,100 ac-ft/yr, depending upon the amount reallocated from flood storage². It is noted, however, that more recent modeling reflecting updated hydrology may decrease these amounts due to a more recent drought of record in the Sulphur River Basin.

Analyses of potential unit costs of alternative water supplies from the Sulphur River Basin are presented within the *Cost Rollup Report – Final* for the SRBA study. Through a series of planning level analyses, the study identified 12 alternatives having unit costs under \$650 per acre-foot during debt service (after debt service, these 12 most cost effective alternatives remain the least expensive). These seven alternatives are comprised of some combination of the following components:

- Marvin Nichols 328'
- Marvin Nichols 313.5'
- Wright Patman 232.5'
- Wright Patman 242.5'
- Talco 350' – Configuration 1
- Talco 370' Configuration 1
- Parkhouse I
- Parkhouse II

It is then concluded that "[i]n general, the larger Marvin Nichols scales, the smaller Wright Patman scales, and the Talco alternatives appear to merit further consideration, at least on the basis of unit costs."

² Taken from *Technical Memorandum on Hydrologic Yields – Sulphur River Basin Feasibility Study*, 08/26/2014.

As noted in the SRBA's Socioeconomic Study of the Sulphur River Basin, "the analysis of socioeconomic resources identifies those aspects of the social and economic environment that are sensitive to change and that may be affected by actions associated with the development of water resources in the Sulphur Basin." Regional economic development effects were estimated using the MIG, Inc. IMPLAN modeling software for the construction and operation of alternative reservoir scenarios, with all costs and impacts expressed in 2014 dollars. Study areas for each of 12 reservoir scenarios were defined via the adjacent counties to each reservoir alternative. The resultant comparisons between modeled estimates of employment and labor income generated during construction and during project operations demonstrate that the considered Wright Patman Reservoir scenario offers the greatest induced, indirect, and direct effects of all the scenarios analyzed.

The *Environmental Evaluation Interim Report, Sulphur River Basin, Comparative Assessment* produced as part of the SRBA Sulphur River Feasibility Study provides consideration of potential environmental concerns associated with the development of additional water supply within the Sulphur River Basin. Preliminary environmental analyses were performed to, "...help with the identification of potential impacts and constraints..." to the considered potential reservoir sites under evaluation. Readily available information regarding land cover/resources, wetlands, bottomland hardwoods, water quality, archeological resources, instream uses, groundwater, and state and federally listed threatened or endangered species was gathered and reviewed. This information was analyzed within the footprint of each alternative reservoir site to develop a structured assessment. Rankings were then developed based on the identified impacts/constraints. With regard to the Marvin Nichols and Wright Patman reservoir scenarios, the report states:

"The Marvin Nichols project is representative of a more downstream location for new storage within the Sulphur River Basin. At least five locations for this dam have been considered in previous studies. In general, these alternative sites represent an attempt to locate the impoundment so as to avoid conflicts with Priority 1 bottomland hardwood habitats and oilfield activity while maintaining yield. A potential reservoir at the Marvin Nichols 1A site ...was identified as a recommended strategy for [the North Texas Municipal Water District, Upper Trinity River Water District, and the Tarrant Regional Water District] in the 2006 and 2011 [Region C] plan. The Marvin Nichols 1A site is also recommended for protection in the Reservoir Site Protection Study."

and

"Wright Patman Lake is an existing reservoir located on the Sulphur River in Bowie and Cass Counties, Texas. The top of Wright Patman Dam is at elevation 286 ft. msl. In terms of normal operations, elevation 259.5 ft. msl is considered the top of the flood control pool. At this elevation, Wright Patman Lake would have a cumulative storage capacity of 2,659,000 acre-feet. Theoretically, reallocation of almost any portion of that flood storage is possible. In a practical sense, reallocations are typically limited by either the need to maintain a large amount of flood control storage in order to protect downstream lives and properties, or the constraint on the increase in dependable yield that can be obtained as a result of limited water rights availability, or both. For the purposes of this analysis, the assessment of potential impacts to resources was estimated for two scenarios: 1) the portion of the flood pool from the existing top-of-conservation-pool elevation of 227.5 ft msl up to 237.5 ft. msl. (i.e., an increase of 10 ft. msl. in the conservation pool) and 2) the entire flood pool from the existing top-of-conservation-pool elevation of 227.5 ft. msl. up to 259.5 ft. msl."*

** The existing top-of conservation-pool elevation of 227.5 ft. msl. was determined by calculating an average for seven years of daily water surface elevations recorded by the USGS Gage (Wright Patman Lk nr Texarkana, TX) located at Wright Patman Lake from February 2006 to February 2013."*

Based on the SRBA study's review of cultural resource records and environmental data, it is reported that the Lake Jim Chapman reallocation and Lake Wright Patman minimum reallocation (237.5 ft. msl.) have the "Lowest Impacts", while the Parkhouse I, Parkhouse II, and Wright Patman maximum reallocation (259.5 ft. msl.) have "Moderate Impacts." Significantly, the Talco and Marvin Nichols 1A scenarios were determined to have the "Highest Impacts."

The comparative environmental assessment performed for the Sulphur River Basin Feasibility Study provides a structured comparative assessment of the potential impacts associated with the alternative reservoirs considered. Significant questions remain regarding the specifics of the methods employed in deriving the impacts on archeological resources, bottomland hardwoods, wetlands, the overall rankings, and the individual weight of each ranking in contributing to the overall rankings. However, although such questions remain, the results of the analysis are informative. A comparison is summarized and presented in the SRBA study via a matrix of rankings, presented in Table 6.17.

Although the full reallocation of Wright Patman Reservoir is presented as having the greatest overall ranking (7 = most impact), it is noteworthy that the lower reallocation of Wright Patman (237.5 ft. msl.) is considered to have a lesser impact than that of Marvin Nichols 1A.

Table 6.17 Summary/Comparison Matrix of the Potential Impacts of the Alternative Reservoir Sites

| Reservoir Site | T&E Impacts | Archeological Resources Impacts | Bottomland Hardwood Impacts | Wetlands | Water Quality | Overall Ranking |
|-----------------------|-------------|---------------------------------|-----------------------------|----------|---------------|-----------------|
| WRIGHT PATMAN (259.5) | 7 | 3 | 7 | 7 | 7 | 7 |
| MARVIN NICHOLS 1A | 6 | 4 | 6 | 6 | 4 | 6 |
| WRIGHT PATMAN (237.5) | 4 | 2 | 5 | 5 | 6 | 5 |
| TALCO | 5 | 4 | 4 | 4 | 5 | 4 |
| PARKHOUSE I | 3 | 3 | 3 | 3 | 3 | 3 |
| PARKHOUSE II | 2 | 3 | 2 | 2 | 2 | 2 |
| JIM CHAPMAN (446.2) | 1 | 1 | 1 | 1 | 1 | 1 |

Source: Environmental Evaluation Interim Report, Sulphur River Basin, Comparative Assessment, SRBA, June 2013.

6.10 Conclusion

It has been and continues to be the position of the NETRWPG that due to the significant negative impacts upon environmental factors, agricultural resources/rural areas, other natural resources, and third parties, Marvin Nichols I Reservoir should not be included as a water management strategy in any regional water plan or the State Water Plan. In referencing Marvin Nichols I, the NETRWP incorporates Marvin Nichols I, Marvin Nichols IA, and any major dam sites on the main stem of the Sulphur River.

Per the terms of agreement set forth from the October 5, 2015 mediation between Regions C and D and ratified by the NETRWPG at its October 21, 2015 meeting, the NETRWPG does not challenge Marvin Nichols Reservoir as a unique reservoir site for the purposes of this Plan. At the time of publication of this Regional Water Plan, no agreement has been made between Regions C and D for the purposes of the 2021 Region D Plan.

Considering the aforementioned information, it is further the position of the NETRWPG that the reallocation of Wright Patman Reservoir provides a viable potential water management strategy to assist in meeting the needs for Region C. Although the approach may be potentially more expensive to Region C (in terms of the unit costs of water) to meet that region's growing needs, the reallocation of Wright Patman may produce less of a potential impact to the agricultural and natural resources of Region D, while providing greater socioeconomic benefits to North East Texas.