Drinking Water Board Packet

November 2, 2021

Agenda

State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF DRINKING WATER
Tim Davis
Director

Drinking Water Board
Vacant, Chair
Kristi Bell, Vice-Chair
Dawn Ramsey
Scott Morrison
Jeff Coombs
David O. Pitcher
Eric Franson, P.E.
Barbara Gardner
Blake Tullis, Ph.D.
Kimberly D. Shelley
Tim Davis
Executive Secretary

DRINKING WATER BOARD MEETING

November 2, 2021 1:00 PM
Via Zoom Webinar & In Person:
Department of Environmental Quality
Multi Agency State Office Building
DEQ Board Room
195 N 1950 W
Salt Lake City, Utah 84116

Tim Davis Cell # 385-226-6511

1. Call to Order

2. Roll Call – Tim Davis

3. Drinking Water Board Elections – Tim Davis
   A. Board Chair & Vice Chair

4. 2022 Drinking Water Board Meeting Schedule (Board Action Needed)

5. Approval of Meeting Minutes
   A. August 31, 2021 Minutes
   B. September 28, 2021 Minutes

6. Disclosure for Conflict of Interest

7. Financial Assistance Committee Report
   A. Status Report – Michael Grange
   B. Project Priority List – Michael Grange
   C. SRF Applications
      i) STATE
         a. Big Plains Water and Sewer Special Service District – Skye Sieber
      ii) FEDERAL
         a. Cornish Town – Heather Pattee
         b. Weber Meadow View Ranches – Heather Pattee

8. Rulemaking Activities
    A. Current Rulemaking Activities
        i. Authorization to Proceed with Rulemaking R309-530 Facility Design and Operation: Alternative Surface Water Treatment Methods – Michael Newberry
        ii. Authorization to Proceed with Rulemaking Subsection R309-200-5(5)(a), Turbidity – Michael Newberry

9. Rural Water Association Report – Dale Pierson

10. Directors Report – Tim Davis
    A. Enforcement Report
    B. New Employees; Rebekah Brown
    C. Other

11. Public Comment Period

12. Open Board Discussion

13. Other

14. Next Board Meeting

Date:	Tuesday January 11, 2022
Time:	1:00 PM
Place:	Multi Agency State Office Building 195 North 1950 West Salt Lake City, Utah 84116

15. Adjourn

Agenda Item 4

Drinking Water Board
2022 Proposed Meeting Schedule

Tuesday January 11, 2022
(Scheduled)

Thursday March 3, 2022
(RWAU Conference)

Tuesday June 7, 2022

Tuesday August 30, 2022
(RWAU Conference)

Tuesday November 1, 2022

Tuesday January 10, 2023

Agenda Item 5(A)

State of Utah

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Tim Davis
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DRINKING WATER BOARD MEETING
August 31, 2021 1:30 PM
Davis Conference Center
Meridian B Room
1651 N 700 W
Layton, Utah 84041

DRAFT MINUTES

1. Call to Order – Kristi Bell

Kristi Bell, Vice-Chair, called the Board meeting to order at 1:30 PM.

2. Roll Call – Tim Davis

Board Members Present: Kristi Bell, Scott Morrison, David Pitcher, Eric Franson, Dawn Ramsey, Blake Tullis, Jeff Coombs. Kimberly Shelley arrived at 1:34 PM.

Division of Drinking Water (DDW, Division) Staff Present: Tim Davis, Allyson Spevak, Skye Sieber, Heather Pattee, Elisa Brawley, Jeremy Andrews, Nathan Lunstad.

3. New Board Member Introduction – Tim Davis
   A. Dawn Ramsey is the mayor of South Jordan City and takes Roger Fridal's place on the board as an elected official of a municipal government.

4. Oath of Office for New Member – Linda Ross, Notary Public

Notary Linda Ross administered the oath of office to new board member Dawn Ramsey.

5. Approval of Meeting Minutes
   A. June 8, 2021 Minutes

- David Pitcher moved to approve the June 8, 2021 Drinking Water Board meeting minutes. Scott Morrison seconded. <u>The motion was carried unanimously by the Board.</u>

6. Disclosure for Intent to Publicly Comment – Kristi Bell

No disclosure for the intent to publicly comment was made.

7. Disclosure for Conflict of Interest – Kristi Bell

No disclosure for a conflict of interest was made.

8. Financial Assistance Committee Report
   A. Status Report – Jeremy Andrews

Jeremy Andrews, DDW/SRF Financial Manager, informed the Board that as of July 31, 2021 there is a balance of approximately $10.4 million in the State SRF fund, while the State hardship fund has a balance of under $1 million, for a total balance of $11.3 million. Over the course of the next year, the Division is expecting another $3.8 million to be added to the fund through sales tax appropriation and repayment streams. By this time next year approximately $15.2 million will be available for State projects.

Jeremy then reported that as of July 31, 2021 the Federal SRF fund balance is just under $4 million, with approximately $329,000 in the Federal hardship fund, for a total balance of $4.3 million. Over the course of the next year, the Division is expecting almost $22 million to be added to the fund from the 2022 EPA capitalization grant, state match, and principal and interest payments. By this time next year, the Division anticipates a balance of $25.3 million in the Federal SRF fund.

Eric Franson pointed out a $1 million discrepancy between the Federal SRF fund balance stated in the packet and the balance Jeremy reported today. Tim said that the Division would confirm the correct balance and send the information out to the Board.

Tim informed the Board that he keeps an eye on the State and Federal hardship fund balances which are both currently low, as they are the most sought-after funding options.

   B. Project Priority List – Heather Pattee

Heather Pattee reported that one new project is recommended to be added to the Project Priority List (PPL): Provo City with 12.9 points with a project consisting of a new water treatment facility, booster station, two discharge locations, and a pipeline for aquifer storage and recovery.
The Financial Assistance Committee recommends the Drinking Water Board approve the updated Project Priority List as presented, with the addition of this project.

- Scott Morrison moved to approve the updated Project Priority List. Eric Franson seconded. <u>The motion was carried unanimously by the Board.</u>

Although it's been added to the PPL, Provo City's project has been deferred for a future meeting.

   C. Applications
      i) STATE

a. Kane County WCD – Heather Pattee

Representing Kane County WCD (Water Conservancy District) were Michael Noel with Kane County and Joe Phillips with Sunrise Engineering.

Heather informed the Board that Kane County WCD is requesting $135,000 in financial assistance for a drainage-wide hydrogeologic study to evaluate water resource availability in the Kanab Creek and Johnson Canyon Creek drainages.

Due to the large study area, staff determined that a weighted average Median Adjusted Gross Income (MAGI) would reasonably reflect the District's financial condition. Staff used MAGI data for the five major cities and towns within or close by the study area boundaries; namely Alton, Glendale, Kanab, Mount Carmel, and Orderville. The weighted average MAGI for this proposed project's service area is $38,633, which is 81.8% of the State MAGI. Kane County WCD has a current average monthly water bill of $60.75 per month which is 1.89% of the weighted average MAGI. Based on the District's financial information, it qualifies as a disadvantaged community and is therefore eligible for additional subsidy.

The Financial Assistance Committee recommends that the Drinking Water Board authorize a planning grant of $135,000 to Kane County Water Conservancy District.

David Pitcher asked about the system's primary objectives for conducting this study.

Joe Phillips responded that the question is, what is the sustainable yield of both the Kanab Creek and Johnson Canyon Creek drainages. There is a difference of opinion among the parties and a number of different studies done over the years have not been conclusive. The parties are the residents, Kanab City, Kane County, ranchers, and the five cities and towns which Heather previously mentioned. Michael Noel's goal is to compile all previous data and through a process of peer review come to a consensus on the sustainable yield. Once completed, all of the parties can move forward together regarding water resources in the area.

Michael added that the main problem is the area's population growth in the last two years, and also the fact that they don't have a good idea of how much water is available in both the Navajo Sandstone and Lamb Point aquifers. They are planning for the future and want to expend their resources in the most efficient way.

- Eric Franson moved that the Drinking Water Board authorize a planning grant of $135,000 to Kane County Water Conservancy District. Dawn Ramsey seconded. <u>The motion was carried unanimously by the Board.</u>

b. La Verkin – Heather Pattee

Representing La Verkin were Treasurer / Recorder Troylinn Benson and Joe Phillips with Sunrise Engineering.

Heather informed the Board that La Verkin City is requesting financial assistance to replace undersized 6" lines with 8" lines and upgrade their service connections. The city will also add a 12" culinary line to increase pressure to the system which would result in taking a booster station

offline to help reduce maintenance costs. The total project cost is $1,210,909 with the city contributing $60,000, so they're requesting $1,150,909 from the Drinking Water Board. Per bonding requirements, entities can only bond in $1,000 increments so the project cost has been rounded to $1,211,000.

The local MAGI for La Verkin City is $37,900, which is 80% of the State MAGI. The current average water bill is $41.65/ERC, which is 1.32% of the local MAGI. The estimated after project water bill at full loan would be $42.34/ERC or 1.34% of the local MAGI.

The Financial Assistance Committee recommends that the Drinking Water Board authorize a loan of $1,151,000 at 1.57% interest or hardship grant assessment fee for 20 years to La Verkin City.

Troylinn explained that 2 years ago they increased the water rate by 50% to help fund this project. The water rate increases incrementally each year. In order to keep their debt service affordable, they would like to have a yearly loan payment of approximately $40,000-$45,000, and so they're seeking better terms such as 1.0%/30 years or 1.50%/35 years. Eric explained that the Board tries to offer consistent interest rates, but he would be comfortable extending the term on this loan to 30 years. La Verkin indicated that a loan at 1.57% for 35 years would put their annual debt service at $43,000.

- Dawn Ramsey moved that the Drinking Water Board authorize a loan of $1,151,000 at 1.57% interest for 35 years to La Verkin City. Eric Franson seconded. The city clarified for David that their rate increase will cover replacements. <u>The motion was carried unanimously by the Board.</u>

ii) Deauthorizations

a. Provo River Water Users Association – Heather Pattee

Heather Pattee reminded the Board that at the June 8, 2021 meeting, the Board authorized a $44 million construction loan to the Provo River Water Users Association for capital improvements at the Association's Deer Creek Reservoir intake structure. On July 13, 2021, the Division received a letter from the Association declining the Board's authorized funding in lieu of more favorable funding from the Division of Water Resources.

The Financial Assistance Committee recommends that the Drinking Water Board deauthorize the $44 million construction loan for 20 years at 1.50% interest to the Provo River Water Users Association to replace the Deer Creek Reservoir intake structure.

- Scott Morrison moved that the Drinking Water Board deauthorize a loan of $44 million for 20 years at 1.50% interest to the Provo River Water Users Association to replace the Deer Creek Reservoir intake structure. Eric Franson seconded. <u>The motion was carried unanimously by the Board.</u>

iii) Planning Advance

a. East Carbon City – Skye Sieber

Representing East Carbon City were Mayor David Avery, Treasurer / Recorder Liz Holt, and Merrial Johansen with Johansen & Tuttle Engineering.

Skye Sieber reminded the Board that at the June 8, 2021 meeting, the Board authorized a loan of $994,000 for 20 years at 1.0% interest/fee and $995,000 in principal forgiveness to East Carbon City for the construction of a new 1.5 million gallon per day water treatment plant. On July 28, 2021 the Division received a letter from the city requesting at $400,000 advance to cover upfront material and design costs that will be incurred prior to bond closing. Specifically, the advance funds would help cover the minimum down payment required by the package plant supplier after submittals and design information are received. Additionally, the funds would be used to secure package plant materials at a firm price and stockpile them until construction begins.

Division staff recommends that the Drinking Water Board authorize a release of $400,000 from principal forgiveness for package water treatment plant design and materials to East Carbon City.

- Eric Franson moved that the Drinking Water Board authorize a release of up to $400,000 from principal forgiveness for package water treatment plant design and materials to East Carbon City. Scott Morrison seconded. The town clarified for David that the full project cost will be $4 million and they have authorized funding from both the DWB and CIB to cover the cost. <u>The motion was carried unanimously by the Board.</u>

iv) Change in Scope

a. Hyde Park City – Skye Sieber

Representing Hyde Park City was Council Member Brandon Buck and Tom Hill with Sunrise Engineering.

Skye Sieber reminded the Board that at the January 14, 2020 meeting the Board authorized a loan of $5,000,000 to Hyde Park City for construction of a 2-million-gallon tank, a transmission line, distribution line, dedicated pumping line, and two booster pump stations. Construction began in April 2021 and is expected to finish by the end of this year. Bids for the authorized project came in lower than originally estimated. Based on the bid tabulations and 10% contingency factored into the project budget, Hyde Park will have approximately $1,620,000 left over after the current construction project is complete.

The city would like to apply their remaining loan proceeds toward other needed water system improvements:

- Lion's Park Pump Upgrade ($200,730): Upsize an existing pump capable of 300 gpm at the Lion's Park Tank to the higher Greystone Tank to two pumps capable of 300 gpm (600 gpm total).
- SV Tank Repair ($40,000): Repair existing cracks in the existing 1 MG SV tank by chipping out the cracks and filling with a high Xypex concentrate grout. This will resolve 50 significant deficiency points pending on the system's IPS report.
- Birch Canyon Spring Pipe Replacement ($1,378,183): Replace 14,000 LF of existing 8" PVC with 12" DIP on a portion of transmission line from Birch Canyon Spring to SV Tank.

The total estimated cost of these additional system improvements is $1,618,913.

Division staff recommends that the Drinking Water Board authorize a change in project scope for Hyde Park City's $5,000,000 construction loan to also include pump upgrades, tank repair, and spring transmission line replacement.

Tom Hill explained that completing two of the added projects, the Lion's Park pump upgrade and the Birch Canyon spring pipe replacement, will help with both future growth and some of the system's deficiencies brought to light by the drought.

- David Pitcher moved that the Drinking Water Board authorize a change in project scope for Hyde Park City's $5,000,000 construction loan to also include pump upgrades, tank repair, and spring transmission line replacement. Dawn Ramsey seconded. Skye confirmed for Eric that terms of the original loan authorization aren't being changed with this change in project scope. The motion was carried unanimously by the Board.

D. Financial Assistance Committee New Member – Tim Davis

David Pitcher volunteered to be the new member of the Financial Assistance Committee, replacing outgoing member, Roger Fridal. David joins current FAC members Scott Morrison, Eric Franson, and Jeff Coombs.

9. Rulemaking Activities
   A. Current Rulemaking Activities (Board Action Needed)
      i. Authorization to Proceed with Rulemaking R309-700 State Drinking Water State Revolving Fund Financial Assistance Program
      ii. Authorization to Proceed with Rulemaking R309-705 Federal Drinking Water State Revolving Fund Financial Assistance Program
      iii. Authorization to Proceed with Rulemaking R309-800 Capacity Development Program

Heather Pattee gave the Board the background for the need for these rule revisions. America's Water Infrastructure Act (AWIA) became law in 2018. AWIA modified many aspects of the federal Safe Drinking Water Act (SDWA), including terms and conditions in the Drinking Water State Revolving Fund Financial Assistance Program and the Capacity Development Program. These changes required that Utah revise existing program rules to meet the new federal definitions and requirements. The following Financial Assistance Program Rules were reviewed and revised: R309-700 Financial Assistance: State Drinking Water Revolving Fund (SRF) Loan Program, R309-705 Financial Assistance: Federal Drinking Water Revolving Fund (SRF) Loan Program, and R309-800 Capacity Development Program.

For each of these rules, staff updated existing rule language, drafted new rule language where necessary, reordered certain rule sections to clarify meaning and intent, and verified and updated references to other rules and statutes. Draft rules were circulated to Division management for comment. Comments from the management team were considered and staff made appropriate changes to the rule language. The revised rules presented to the Board at the June 8, 2021 meeting contained the management team's recommended edits.

After the June 8, 2021 Board Meeting, staff asked 20 external stakeholders, who have worked extensively with the DWSRF and Capacity Development programs over many years, to review the proposed rules and provide comments or questions. Stakeholders included consulting engineers, technical assistance providers, water system operators and managers, and Environmental Protection Agency (EPA) Region 8 staff. Seventeen of these stakeholders agreed to act as subject matter experts, 16 of which responded with their comments, including EPA staff who provided comments specifically for the proposed Capacity Development Rule revision.

Most comments received were positive and constructive. Only one respondent questioned the asset management changes to the Capacity Development Program Rule and offered some insight into asset management from a water system perspective. Staff acknowledged each respondent who submitted comments. Furthermore, staff will individually respond to each stakeholder who submitted detailed comments or questions.

Staff met several times after receiving stakeholder comments and carefully considered each substantive comment to determine its applicability. If staff found the comment applicable, the corresponding rule section language was modified to reflect the comment. If the comment was not applicable, staff noted the reason, and the respondent will be informed why the rule language was not modified.

The next step in the rulemaking process is submitting the proposed rule revisions to the Division of Administrative Rules (DAR) for publication in the August 15, 2021 Utah Bulletin. Once published, the general public will then have 30 days to submit comments or questions on the proposed rules. After the 30-day comment period, staff will consider whether or not comments are substantive, and the rule language will be modified accordingly. Staff proposes to come before the Board at the November 2, 2021 meeting to request authorization to finalize the rules and submit them to DAR with an effective date of January 1, 2022.

Division DWSRF staff proposes that the Drinking Water Board authorize staff to continue the rulemaking process for Financial Assistance Program Rules: R309-700 Financial Assistance: State Drinking Water State Revolving Fund (SRF) Financial Assistance Program, R309-705 Financial Assistance: Federal Drinking Water State Revolving Fund (SRF) Financial Assistance Program, and R309-800 Capacity Development Program.

- Scott Morrison moved that the Drinking Water Board authorize staff to continue the rulemaking process by submitting to the Division of Administrative Rules the proposed revisions for Financial Assistance Program Rules: R309-700 Financial Assistance: State Drinking Water State Revolving Fund (SRF) Financial Assistance Program, R309-705 Financial Assistance: Federal Drinking Water State Revolving Fund (SRF) Financial Assistance Program, and R309-800 Capacity Development Program for publication in the August 15, 2021 Utah Bulletin. David Pitcher seconded. <u>The motion was carried unanimously by the Board.</u>

10. Rural Water Association Report – Dale Pierson

Dale expressed his appreciation for the Board attending the conference.

The reports from the three RWAU staff contracted with the Division are in the packet.

RWAU has been undergoing many changes recently including staff changes and an office relocation. Their focus this summer has been working in conjunction with DDW on emergency response issues, many drought-related.

11. Directors Report – Tim Davis
    A. Fee Proposal

DDW assembled a workgroup of various stakeholders to advise the Division on areas where they need to increase capacity in order to better serve water systems statewide. The four identified areas were compliance assistance, hands-on technical assistance, planning for growth, and additional SRF and plan review staff.

The Division looked at what other states are doing for fees, specifically what types of fees and how they're calculated. The workgroup advised that DDW's fee needs to be affordable, equitable, and water systems need time to work it into their rate structures. DDW is proposing a $1.20 per year per equivalent residential connection (ERC), with a minimum $25 fee for the very small systems. The initial invoices would go out in the fall of 2022, with a payment date by June 30, 2023. The fee is designed to grow as the number of ERCs in the state increases which will help DDW increase capacity over time. The fee will not be applied to wholesale water providers, only public water systems who aren't also wholesale water providers.

Tim has been meeting with water alliances and water systems statewide requesting their feedback on this proposed fee. For the most part Tim has received supportive feedback that the fee seems reasonable and equitable.

DEQ's Fee Hearing is scheduled for September 30, 2021 wherein the Division will hear public comments on this proposed fee. The proposed fee will go before the Legislature during the 2022 General Legislative Session.

Tim reported that 66% of states collect annual fees and the Division's proposed annual fee is one of the lowest, if not the lowest among these states.

    B. Enforcement Report

Tim pointed out that this enforcement report has 21% fewer systems on it than on the report from the last meeting. From an enforcement perspective the Division is now focused on finding practical solutions with the water systems and emphasizing public health. The Division has the ability to use hard enforcement, but doesn't want to go that route unless absolutely necessary to gain compliance from a water system.

Last year the Division adopted cost recovery fees for compliance enforcement issues. The Division projected over $400,000 would be generated from those fees, of which only about 10% was actually generated. The fees also proved to be unproductive in building relationships with

water systems, but are effective in the few enforcement cases where water systems aren't working with DDW.

The Division has since adopted a policy that radically rolls back these cost recovery fees and will only use them sparingly and now projects to raise less than $10,000. The policy gives a water system three chances to work with the Division before they receive a notice of possible cost recovery fees. The Division's new approach to handling enforcement issues is that of actively working with the system to find a solution, rather than notifying of a violation, issuing IPS points, and then a cost recovery fee. The Division is focused on first fixing the violations that are threats to public health, then addressing the other challenges the system may have. The cost recovery fees are an enforcement tool only.

C. Board Training

Historically the Division holds training for new board members which will be held for new member Dawn Ramsey. The rest of the Board will be invited to a Zoom training if they wish to attend.

D. Roger Fridal Years of Service Award

Tim honored and thanked outgoing Chair Roger Fridal for his many years of service to the Drinking Water Board. Unfortunately, Roger had to leave before Tim gave this speech. A clock award will be given to Roger at a later time.

E. Other

Scofield Town Emergency SRF Application

Tim informed the Board that Scofield Town recently drained their water tank, caused by their well going down, overuse, and drought. They are submitting an emergency SRF application to drill a new well. An emergency Drinking Water Board meeting will be scheduled for the Board to hear their request.

Eric expressed his concern over the process of quickly drilling a well. When the town comes before the Board he would ask how much preliminary investigation has been done on the well siting. In Eric's opinion, from a technical perspective, substantial work should have been done or substantial work should be proposed on a new well. Tim said that the Division will review their application and also discuss the matter with the town's engineer.

ARPA Funds

The American Rescue Plan Act (ARPA) of 2021, is also called the COVID-19 Stimulus Package, of which approximately $1.5 billion was appropriated to the State of Utah. The U.S. Department of the Treasury developed criteria for how this funding could be used; it must be necessary, must be high quality, and any project which would be authorized under the DWSRF program (also CWSRF program) would be authorized for APRA funds. In addition, any other drinking water projects not necessarily going to the Board but those authorized by the Legislature would qualify

for ARPA funding. Project costs must be incurred after March 3, 2020, encumbered by the end of 2024, and spent by the end of 2026.

The Legislature also appropriated $50 million to the Governor's Office to create a matching grant program for local governments to apply until September 16, 2021. Local governments with drinking water infrastructure projects, which would otherwise be approved by the Drinking Water Board, can apply via the Governor's Office of Planning and Budget website.

The Utah Legislature met in a special session and appropriated $100 million in APRA funds to the Department of Natural Resources for water conservation projects. There have been many discussions about how that complies with federal regulations and standards, so it's still being determined how those funds can be used.

Bipartisan Infrastructure Funding

At the time of this meeting, the bipartisan infrastructure funding has passed the Senate and the House will vote on it on September 27, 2021. If it passes it will increase DWSRF funds, and also decrease the state match for the first 4 years. After those 4 years the Division will need to look at increasing the state match in order to access the full amount.

The Division is learning about water system infrastructure needs across the state internally and through external groups and is communicating those needs to the Legislature and the Governor's Office. The Division will take both the immediate and longer term needs into the General Legislative Session with a better understanding of the global needs and which funds could help meet those needs.

12. Public Comment Period – Kristi Bell

No public comments were made.

13. Open Board Discussion – Kristi Bell

No open board discussion.

14. Other

Not applicable.

15. Next Board Meeting

Date:	Tuesday November 2, 2021
Time:	1:00 PM
Place:	Multi Agency State Office Building Division of Drinking Water 195 N 1950 W Salt Lake City, Utah 84116

16. Adjourn

- Eric Franson moved to adjourn the meeting. Scott Morrison seconded. The motion was carried unanimously by the Board.

The meeting adjourned at 3:04 PM.

Agenda Item 5(B)

State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

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Blake Tullis, Ph.D.
Kimberly D. Shelley
Tim Davis
Executive Secretary

DRINKING WATER ELECTRONIC BOARD MEETING
Via Zoom

September 28, 2021 3:30 PM

DRAFT MINUTES

1. Call to Order

Kristi Bell, Vice-Chair, called the Board meeting to order at 3:34 PM.

2. Roll Call – Tim Davis

Board Members Present: Kristi Bell, Scott Morrison, David Pitcher, Blake Tullis, Jeff Coombs.

Division of Drinking Water (DDW, Division) Staff Present: Tim Davis, Allyson Spevak, Michael Grange, Skye Sieber, Heather Pattee, Nathan Lunstad, Mimi Ujiie.

3. Disclosure for Intent to Publicly Comment – Kristi Bell

No disclosure for the intent to publicly comment was made.

4. Disclosure for Conflict of Interest – Kristi Bell

No disclosure for the conflict of interest was made.

5. Financial Assistance Committee Report
   A. SRF Applications
      i) STATE
         a. Scofield Town - Skye Sieber

Representing Scofield Town were water system co-managers Mayor Mike Erkkila and Jim Levanger, Treasurer / Recorder Lorraine Behling, and Mark Chandler with CRS Engineers.

Skye Sieber informed the Board that Scofield Town is requesting emergency financial assistance to construct a new well, well house, and transmission line. This past summer their spring went from giving 80-100 gallons per minute to only 6 gallons per minute to supply the entire system. In

addition, the electrical system of their existing well went out. If the new well isn't constructed before next summer the system may have to haul water, hence the urgency of the request.

The total estimated project cost is $2,930,000; the town is contributing $458,000 and is requesting the balance of $2,472,000 from the Drinking Water Board. Scofield Town is a transient non-community water system with approximately 90 residential connections and two commercial connections. Slightly less than 50% of the town's population are considered full-time residents which means they aren't eligible for Board of Water Resources funding. Eventually they would like to install meters to support a tiered rate structure. Canyon Fuel pays more than $100,000 per year for utility connections and dump fees which is factored into their budget.

The Median Adjusted Gross Income (MAGI) for Scofield (ZIP 84526) is $40,600, which is 86% of the State MAGI and the current monthly water bill is $15.00, which is 0.44% of the local MAGI. The after-project water bill at a full loan for 20 years would be $25.74, which is 0.76% of the local MAGI.

Skye pointed out an error in the options table found in the packet; the hardship grant assessment (HGA) fee percentage should not have been included because that fee pertains to federal funding, and this particular project would be funded through the state program which charges interest. Scofield Town is being offered a reduced interest rate of 1.90%, because they're contributing a fair amount to the project cost and also because of their current MAGI level. The town requested a lower interest rate, but the Board concurred that 1.90% is fair.

Staff recommends that the Drinking Water Board authorize a loan of $2,472,000 for 20 years with a 1.90% interest rate to Scofield Town to construct a new well, well house, and transmission line.

Mark Chandler explained that if they're able to save on the design and construction of the well, that savings would be put toward metering the system. Skye confirmed that any savings could be applied towards meter installation.

Scofield Town is also applying for Community Impact Board (CIB) grant funding and ARPA funding to help ensure the entire project is fully funded including meters. If Scofield is successful in securing any of this funding, DDW staff will adjust the amount of the SRF loan, but not the interest rate.

Mark confirmed for Scott that the well siting study is almost complete, the cost of which is not included in the project budget.

- Jeff Coombs moved that the Drinking Water Board authorize a loan of $2,472,000 for 20 years with a 1.90% interest rate to Scofield Town to construct a new well, well house, transmission line, and if there are cost savings those can be applied toward meters for the drinking water system. David Pitcher seconded. <u>The motion was carried unanimously by the Board.</u>

6. Public Comment Period – Kristi Bell

No public comments were made.

7. Open Board Discussion – Kristi Bell

There was no open board discussion.

8. Other

Not applicable.

9. Next Board Meeting

Date:	Tuesday November 2, 2021
Time:	1:00 PM
Place:	Multi Agency State Office Building Division of Drinking Water 195 N 1950 W Salt Lake City, Utah 84116

10. Adjourn

- Scott Morrison moved to adjourn the meeting. Blake Tullis seconded. The motion was carried unanimously by the Board.

The meeting adjourned at 4:00 PM.

Agenda Item 7(A)

DIVISION OF DRINKING WATER

STATE LOAN FUNDS

AS OF September 30, 2021

	SUMMARY		
	Total State Fund:	$17,896,084	
	Total State Hardship Fund:	$2,712,857	
	Subtotal:	$20,608,941	
LESS AUTHORIZED	Less:		
	Authorized Loans & Closed loans in construction:	$9,936,000	*(see Page 2 for details)*
	Authorized Hardship:	$1,494,126	
	Subtotal:	$11,430,126	
	Total available after Authorized deducted	**$9,178,815**	
PROPOSED	**Proposed Loan Project(s):**	**$0**	*(see Page 2 for details)*
	Proposed Hardship Project(s):	**$60,000**	
	Subtotal:	**$60,000**	
AS OF:			
September 30, 2021	**TOTAL REMAINING STATE LOAN FUNDS:**	**$7,960,084**	
	TOTAL REMAINING STATE HARDSHIP FUNDS:	**$1,158,731**	

Total Balance of ALL Funds: **$9,118,815**

Projected Receipts Next Twelve Months:		
and Sales Tax Revenue		
Annual Maximum Sales Tax Projection	**$3,587,500**	
Less State Match for 2022 Federal Grant	($2,202,200)	
Less State Match for 2019 Federal Grant Ar	$0	
Less Appropriation to DDW/Board	($1,018,500)	
SUBTOTAL Sales Tax Revenue including adjustments:		$366,800
Payment:		
Interest on Investments (Both Loan and Hardship Accounts)		$72,000
Principal payments		$2,742,000
Interest payments		$658,732
Total Projections:		$3,839,532

Total Estimated State SRF Funds Available through 10-01-2022	**$12,958,347**

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF September 30, 2021

Community	Loan #	Cost Estimate	Date Authorized	Date Closed/Anticipated	Authorized Funding Loan	Authorized Funding Grant	Authorized Funding Total
Genola City 0% int 30 yrs	3S1732	2,849,400	Aug-19		2,273,000	326,400	2,599,400
Caineville SSD 0% int 30 yrs	3S1766	595,000	Sep-20		295,000	300,000	595,000
Pleasant Grove City 1.6% 20yrs	3S1796	3,745,000	Jun-21		3,745,000		3,745,000
Escalante City (#09004)	3S1793	108,294	Jun-21	Aug-21		103,000	103,000
La Verkin 1.57% 35 yrs	3S1806	1,211,000	Aug-21		1,151,000		1,151,000
Scofield Town (#04008) 1.9% 20yrs	3S1813	2,472,000	Sep-21		2,472,000		2,472,000
							0
							0
Subtotal Loans and Grants Authorized					9,936,000	729,400	10,665,400
PLANNING LOANS / GRANTS IN PROCESS							
Fairview	3S1736P	40,000	Aug-19	Sep-19		40,000	40,000
Thompson SSD	3S1747P	29,500	Jan-20	Feb-20		29,500	29,500
Dutch John Town	3S1776P	40,000	Nov-20	Feb-21		40,000	40,000
Angell Springs SSD	3S1789P	37,600	Mar-21	Apr-21		36,100	36,100
Leamington Town	3S1788P	36,000	Mar-21	Apr-21		10,800	10,800
Glen Canyon SSD of Big Water	3S1801P	39,000	May-21	Jun-21		39,300	39,300
East Carbon City	3S1802P	40,000	May-21			40,000	40,000
North Emery Water Users SSD	3S1775P	40,000	Nov-20	Jan-21		7,900	7,900
Green River City(#08005)	3S1790P	56,626	Jun-21	Jun-21		56,626	56,626
Uintah Town (#29020)	3S1810P	39,500	Aug-21			39,500	39,500
Kane Co WCD-Johnson Canyon #13038	3S1808P	135,000	Aug-21			135,000	135,000
Wayne County (#28000)	3S1814P	40,000	Sep-21			40,000	40,000
Subtotal Planning in Process					0	514,726	514,726
CLOSED LOANS (partially disbursed)							
Genola City Water Tank	3S1732	250,000	Aug-19	Mar-20		250,000	250,000
Subtotal Closed Loans Partially Disbursed					0	250,000	250,000
TOTAL AUTHORIZED/PLANNING/OR CLOSED BUT NOT YET FUNDED					$9,936,000	$1,494,126	$11,430,126
PROPOSED PROJECTS FOR NOVEMBER 2021							
Big Plains SSD	3S1811P	60,000				60,000	60,000
Total Proposed Projects					0	60,000	60,000

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
AS OF September 30, 2021

	5235 Loan Funds	5240 Interest (use for Grants)	Total
Cash:	$17,896,084	$2,712,857	$20,608,941
Less:			
Loans & Grants authorized but not yet closed (schedule attached)	(9,936,000)	(1,244,126)	(11,180,126)
Loans & Grants closed but not fully disbursed (schedule attached)	0	(250,000)	(250,000)
Proposed loans & grants	0	(60,000)	(60,000)
Administrative quarterly charge for entire year	(1,018,500)		(1,018,500)
Appropriation to DDW	0		0
FY 2022 Federal SRF 20% match	(2,202,200)		(2,202,200)
FY 2019 Federal SRF 20% match			0
	4,739,384	**1,158,731**	**5,898,115**
Projected repayments during the next twelve months			
Thru 10-01-2022			
Principal	2,742,000		2,742,000
Interest		658,732	658,732
Projected annual investment earnings on invested cash balance		72,000	72,000
Sales Tax allocation thru Oct-01-2022	3,587,500		3,587,500
Total	**$11,068,884**	**$1,889,463**	**$12,958,347**

* All interest is added to the Hardship Fee account.

DIVISION OF DRINKING WATER

FEDERAL SRF

AS OF September 30, 2021

FIRST ROUND FUND	
1997 thru 2021 SRF Grants	
Net Federal SRF Grants:	$196,032,661
Total State Matches:	$45,673,300
Closed Loans:	-$235,709,861
Total Grant Dollars:	**$5,996,100**

FEDERAL SECOND ROUND FUND	
Principal Repayments	
Principal (P):	$58,983,352
Interest (I):	$21,269,861
Total P & I:	**$80,253,213**

Earnings on Invested Cash Balance	
Total:	**$990,678**

Hardship Fund	
Total:	**$906,666**

SUMMARY		
	Total Federal State Revolving Fund:	$87,239,991
	Total Federal Hardship Fund:	$906,666
	Subtotal:	$88,146,657
LESS AUTHORIZED & PARTIALLY DISBURSED	Less:	
	Authorized & Partially Disbursed Closed Loans:	$52,684,000
	Authorized Federal Hardship:	$387,625
	Subtotal:	$53,071,625
PROPOSED	**Proposed Federal Project(s):**	**$3,604,922**
	Proposed Federal Hardship Project(s):	**$0**
	Subtotal:	**$3,604,922**
AS OF: September 30, 2021	**TOTAL REMAINING LOAN FUNDS:**	**$30,951,069**
	TOTAL REMAINING HARDSHIP FUNDS:	**$519,041**

(see Page 2 for details)

(see Page 2 for details)

Total Balance of ALL Funds after deducting proposed actions: $31,470,110

Projected Receipts thru October 1, 2022	
2022 Fed SRF Grant & State Match	$10,796,100
Interest on Investments	$367,200
Principal Payments	$8,588,203
Interest	$876,137
Hardship & Technical Assistance fees	$768,829
Fund 5215 principal payments	$109,200
Total:	$21,505,669

Receive 60% in January

Total Estimated Federal SRF Funds Available through: 10/01/2022 **$52,975,779**

DIVISION OF DRINKING WATER
FEDERAL STATE REVOVING FUND
PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF September 30, 2021

PUBLIC WATER SYSTEM	Project			Authorized Date	Closing Date Scheduled or Estimated	Authorized From Loan Funds (1st or 2nd Round)			Hardship Fund
	Total Project	Terms	Loan #			Loan	Forgiveness	Total	
Moroni	3,535,000	1% HGF 30 yrs (disadvantaged No LOF)	3F1772	Nov-20		2,485,000	735,000	3,220,000	
Daniel Town	5,692,000	0% int, 30yrs	3F1777	Jan-21		3,992,000	1,700,000	5,692,000	
East Grouse Creek	343,220	$170,000 loan @ 0% 20 yrs, $170,000 PF	3F1783	Mar-21		170,000	170,000	340,000	
Bicknell	2,178,000	50/50 1% 30 yrs	3F1786	Jun-21		1,308,000	870,000	2,178,000	
East Carbon	1,989,000	50/50 1% 20 yrs	3F1792	Jun-21		994,000	995,000	1,989,000	
Irontown	909,000	50/50 0% 40 yrs	3F1794	Jun-21		454,000	455,000	909,000	
Little Meadows Estates HOA	246,000	70/30 0% 25 yrs	3F1795	Jun-21		172,000	74,000	246,000	
Spring Creek Water Users	323,800	50/50 0% 30 yrs	3F1787	Jun-21		162,000	161,000	323,000	
Wellington	1,717,000	60/40 1% 30 yrs	3F1797	Jun-21		1,000,000	717,000	1,717,000	
					TOTAL CONSTRUCTION AUTHORIZED:	**$ 10,737,000**	**$ 5,877,000**	**$ 16,614,000**	**$ -**
COMMITTED ADVANCES / AGREEMENTS or PARTIALLY DISBURSED CLOSED 2ND ROUND AGREEMENTS:									
					Date Closed				
								0	0
Rural Water Assn of Utah	676,000	5 yr contract for Development Specialist	Ongoing	Jan-18	Jun-18			0	112,320
Granger Hunter Improvement District	20,000,000	1.25% HGA 20 yrs (portfolio)	3F1708	Feb-19	Jul-19	12,000,000		12,000,000	
Kearns Improvement District	21,000,000	1.25% hgf, 20 yrs (portfolio)	3F1725	Jun-19	Dec-19	12,000,000		12,000,000	
Central Utah WCD-Duchesne Valley WTP	18,000,000	1.25% HGF, 30 yrs	3F1731	Aug-19	Jun-20	8,020,000		8,020,000	
Hyde Park City	5,994,000	2.91% HGF 20 yrs	3F1744	Jan-20	Apr-21	2,500,000		2,500,000	
Sigurd Town	2,400,000	0%, 30 YRS	3F1745	Jun-20	Jul-21	1,010,000	540,000	1,550,000	
Axtell Community Service Distribution	40,000	5 yr 0% master plan & gw well siting	3F1719P	Mar-19	May-19			0	500
Hildale City	40,000	100% pf master plan	3F1704P	Nov-18	Oct-19			0	40,000
New Paria Subdivision	36,500	100% pf	3F1760P	Apr-20	Oct-20			0	9,005
Clark Bench Water Company	40,000	100% principal forgiveness	3F1778P	Dec-20	Jan-21			0	30,800
Buena Vista Community	40,000	100% principal forgiveness	3F1784P	Jan-21	Mar-21			0	40,000
Paunsaugunt Cliffs SSD	40,000	100% PF	3F1799P	May-21	May-21				40,000
Junction Town	40,000	100% PF	3F1807P	Jul-21					40,000
Hanna Water and Sewer ID	35,000	100% PF	3F1805P	Jul-21					35,000
Blanding City	40,000	100% PF	3F1816P	Sep-21					40,000
					TOTAL PLANNING AUTHORIZED:	**$35,530,000**	**$540,000**	**$36,070,000**	**$387,625**
				TOTAL CONSTRUCTION & PLANNING:				**$52,684,000**	**$387,625**
				AVAILABLE PROJECT FUNDS:					**$34,555,991**
				AVAILABLE HARDSHIP FUNDS:					**$519,041**
PROPOSED PROJECTS FOR NOVEMBER 2021:									
Cornish Town	1,704,922	0%, 30 YRS	3F1812			754,000	750922	1,504,922	
Weber Meadowview	2,158,400	0%, 40 YRS	3F1815			2,100,000		2,100,000	
					TOTAL PROPOSED PROJECTS FOR THIS MEETING:	**$2,854,000**	**$750,922**	**$3,604,922**	**$0**
*RWAU hardship grant is being disbursed monthly						**$3**			
			TOTAL FUNDS AFTER PROPOSED PROJECTS ARE FUNDED:						**$30,951,069**
			TOTAL FUNDS AFTER PROPOSED HS PROJECTS ARE FUNDED:						**$519,041**

DIVISION OF DRINKING WATER
FEDERAL SRF LOAN FUNDS
AS OF September 30, 2021

	Loan Funds 1st Round	Loan Payments			TOTAL
		2nd Round		Hardship Fund	
		Principal	Interest		
Federal Capitalization Grants and State 20% match	$241,705,961				
Earnings on Invested 1st Round Funds			990,678		
Repayments (including interest earnings on 2nd round receipts)		58,983,352	21,269,861	906,666	323,856,518
Less:					
Closed loans and grants	-235,709,861				-235,709,861
SUBTOTAL of Funds Available	**$5,996,100**	**$58,983,352**	**$22,260,539**	**$906,666**	**$88,146,657**
Loans & Grants authorized but not yet closed or fully disbursed	-13,834,000	-38,310,000	-540,000	-387,625	-53,071,625
SUBTOTAL of Funds Available less Authorized	**-$7,837,900**	**$20,673,352**	**$21,720,539**	**$519,041**	**$35,075,032**
Future Estimates:					
Proposed Loans/Grants for current board package	-3,604,922			0	-3,604,922
SUBTOTAL of Funds Available less Proposed Loans & Grants	**-$11,442,822**	**$20,673,352**	**$21,720,539**	**$519,041**	**$31,470,110**
PROJECTIONS THRU October-2022					
2022 FED SRF Grant & State Match	10,796,100				
Projected repayments & revenue during the next twelve months		8,697,403	876,137	768,829	10,342,369
Projected annual investment earnings on invested cash balance		276,000	84,000	7,200	367,200
TOTAL	**-$646,722**	**$29,646,755**	**$22,680,676**	**$1,295,070**	**$52,975,779**

Agenda Item 7(B)

DRINKING WATER BOARD
BOARD PACKET FOR PROJECT PRIORITY LIST

There are two new projects being added to the project priority list:

Cornish Town is being added to the Project Priority List with 36.3 points. Their project consists of a well house, RO and chlorine treatment facilities, booster pump, and 250,000 gallon tank.

Weber Meadow View Ranches is being added to the Project Priority List with 33.7 points Their project consists of a new 150,000 gallon tank, 8" PVC and 4" HDPE water lines, 15 fire hydrants, PRV station, well pump upgrade for additional TDH, and 55 service connections.

FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board approve the updated Project Priority List.

Utah Federal SRF Program

August 11, 2021

Project Priority List

Total Unmet Needs: **$830,042,314** **Total Needs, incl. Recent funding** **$687,645,994** **Authorized** **$378,564,265**

	date	type	%Green	Priority Points	System Name	County	Pop.	ProjectTitle	Project Total	SRF Assistance	Funds Authorized
P				36.3	Cornish Town	Cache		well house, RO/Chlorine Treatment, Booster, 250K tank	$1,704,922.00	$1,504,922	
P				31.7	Weber Meadow View Ranches	Summit		150K tank, waterlines, hydrants, PRV station, well pump upg	$2,158,400.00	$2,100,000	
A				110.6	Wellington	Carbon		replace asbestos pipe, PRV station, meter replacement	$7,580,170.00	$1,717,000	$1,717,000
A				105.6	East Carbon City	Carbon		1.5 MGD conventional treatment plant	$3,650,000.00	$1,989,000	$1,989,000
A				47.1	Irontown	Iron		upgrade/replace distribution, hydrants, & meters	$909,000.00	$909,000	$909,000
A				53.3	Daniel Town / Storm Haven	Wasatch		New tank, pump house, upgrade distribution lines	$5,792,000.00	$5,692,000	$5,692,000
A				36.1	East Grouse Creek	Box Elder	70	Chlorination syst, meters, backflow preventers, air/vac	$343,220.00	$340,000	$340,000
A				23	Bicknell Town	Wayne		300-k gal concrete storage tank, New Well	$2,278,000.00	$2,178,000	$2,178,000
A				24.7	Spring Creek Water Users	Iron		New Well	$323,800.00	$323,800	$323,800
A				12.9	Provo City	Utah		Aquifer Storage and Recovery; 2 pump stations, pipeline	$77,230,000.00	$30,038,000	
A				7.9	Little Meadow Estates	Piute		booster, chlorination, pressure reducing station, storage	$246,000.00	$246,000	$246,000
A				7	Genola	Utah	1,500	Tank and well	$2,849,400.00	$2,849,400	$2,849,400

N = **New Application**
A = **Authorized**
P = **Potential Project- no application**

E= **Energy Efficiency**
W= **Water Efficiency**
G= **Green Infrastructure**
I= **Environmentally Innovative**

EMERGENCY FUNDING

Agenda Item 7(C)(i)(a)

Big Plains Water and Sewer Special Service District
Presented to the Drinking Water Board
November 2, 2021

DRINKING WATER BOARD
BOARD PACKET FOR PLANNING ASSISTANCE

APPLICANT'S REQUEST

Big Plains Water and Sewer Special Service District is requesting financial assistance to complete a water master plan and impact fee facilities plan for the three public water systems it operates.

The total amount of estimated funding needed is **$60,000,** of which they are requesting the full amount from the Drinking Water Board.

STAFF COMMENTS

The local MAGI for Apple Valley is $28,700, which is 61% of the state MAGI, and the current average monthly water bill is $41.85, which is 1.75% of the local MAGI. The after-project monthly water bill at a full loan would be $89.37/ERC or 3.74% of the local MAGI. Based on local MAGI and the after-project monthly water bill, the SSD qualifies to be considered for additional subsidy.

Option	Loan / Grant	Loan	Grant	Term	Interest	Water Bill	% Local MAGI
1	100 / 0	$60,000	$0	10 yrs	1.18%	$89.37	3.74%
2	0 / 100	$ 0	$60,000	-	-	$87.96	3.68%

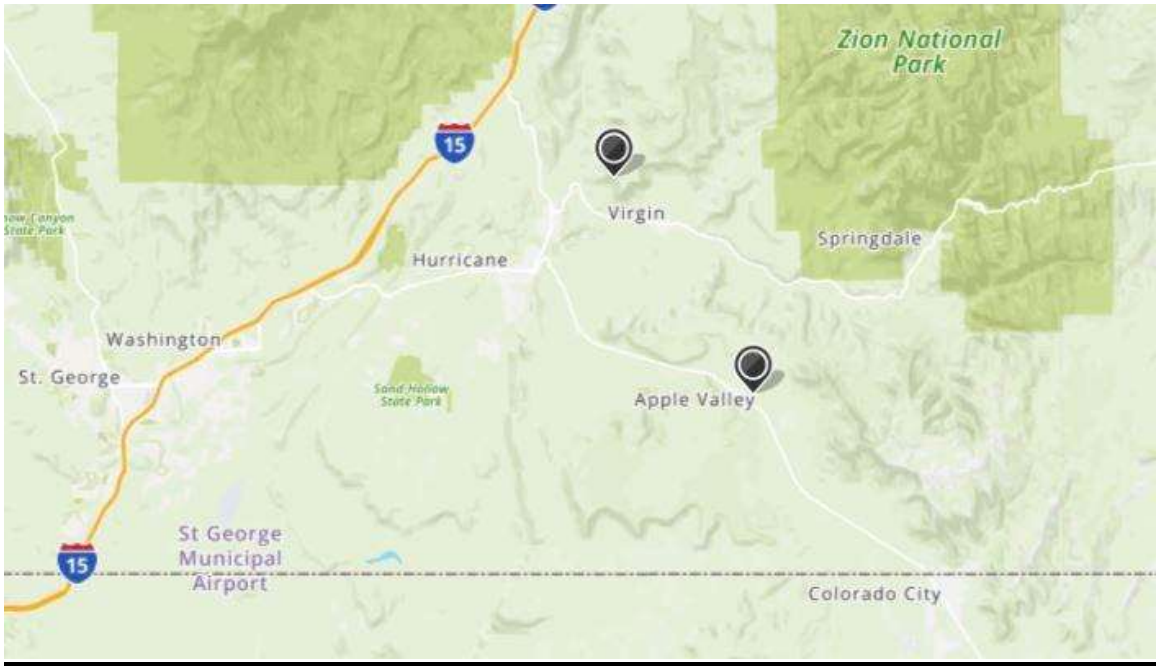
FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION

The Drinking Water Board authorize a $60,000 grant to Big Plains Water and Sewer Special Service District to complete a water master plan and impact fee facilities plan.

Conditions include that they submit a plan to address current IPS deficiencies and show progress towards resolving those deficiencies before further funding from the Drinking Water Board is requested.

APPLICANT'S LOCATION

Big Plains Water and Sewer SSD serves the community of Apple Valley in Washington County, approximately 31 miles east of St. George.



PROJECT DESCRIPTION

Big Plains Water and Sewer SSD operates three unconnected public water systems: Apple Valley, Cedar Point, and Canaan Ranch. The master plan will include all three systems. The SSD is aware of several deficiencies and issues within its water systems and desires to have a master plan that analyzes each one according to State of Utah Guidelines, and then recommends and prioritizes improvements to address deficiencies.

POPULATION GROWTH

Projected population and connections over the next 20 years is based on a 1.40% growth rate estimated by the SSD:

Year	Population	Connections
2021	802	410
2041	1060	460

IMPLEMENTATION SCHEDULE

DWB Authorization	November 2021
Completed Plan	January 2022

COST ALLOCATION

Funding Source	Cost Sharing	Percent of Project
DWB Grant	$ 60,000	100%
Total Amount	$ 60,000	100%

IPS SUMMARY

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiencies
Apple Valley PWS: 27069				
M004	CCC-no annual public education or awareness	15		
M006	CCC-lacks written records of ccc activities	15		
M007	CCC-lacks on-going enforcement implementation	15		
SP04	Apple Valley Well #2 lacks approved updates to Drinking Water Source Protection Plan	5		
SP04	Well #1 Replacement lacks approved updates to Drinking Water Source Protection Plan	5		
V021	Storage tank (ST001) shows signs of mild/moderate deterioration	15		
V029	Storage tank (ST001) access opening lacks a lock			*25 pending*
V009	Storage tank (ST001) lid lacks a functioning gasket between the lid and frame			*25 pending*
V021	Storage tank (ST002) shows signs of mild/moderate deterioration	15		
V029	Storage tank (ST002) access opening lacks a lock			*25 pending*
V009	Storage tank (ST002) lid lacks a functioning gasket between the lid and frame			*25 pending*
V022	Storage tank (ST002) roof or sidewalls show signs of severe deterioration (2-5 gpm leak near bottom)			*50 pending*
V017	Storage tank (ST002) subject to contamination due to unsealed openings on tank roof or sidewalls			*100 pending*
	Total	**85**		

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiencies
Cedar Point PWS: 27089				
M004	CCC-no annual public education or awareness	15		
M006	CCC-lacks written records of ccc activities	15		
M007	CCC-lacks on-going enforcement implementation	15		
S094	System lacks more than 20% of required source capacity			*50 pending*
SP04	Jessup Well lacks approved updates to Drinking Water Source Protection Plan	*5 pending*		
S015	Jessup Well lacks a means to measure water levels periodically	*5 pending*		
71	Consumer Confidence Report (2017) missing		15	
	Total	**45**	**15**	
Canaan Ranch PWS: 27093				
VF34	System lacks required storage capacity due to fire demand but has SOP for following fire incident	15		
M003	CCC-lacks local authority	15		
M007	CCC-lacks on-going enforcement implementation	15		
M004	CCC-no annual public education or awareness	15		
M006	CCC-lacks written records of ccc activities	15		
M020	Cross connection exists in water system (houses above tanks don't have backflow protection)			50
V011	End of 100k steel tank overflow lacks a clearance of between 12 and 24 inches from ground surface			25
SP06	Canaan Springs lacks approved PER			50
SS01	Canaan Springs lacks a permanent device for measuring spring flow	5		
SS02	Canaan Springs collection area not fenced	15		
03	Routine Monitoring (RRAD) missing 10/1-12/31/2020		25	
	Total	**95**	**25**	**125**

CONTACT INFORMATION

APPLICANT:	Big Plains Water and Sewer SSD 1777 N Meadowlark Dr Apple Valley, Utah 84737 435-877-1190 clerk@applevalleyut.gov
PRESIDING OFFICIAL or CONTACT PERSON:	Dale Beddo, Mayor 1777 N Meadowlark Dr Apple Valley, Utah 84737 435-877-1190 accounting@applevalleyut.gov
CONSULTING ENGINEER:	Nathan Wallentine Sunrise Engineering 11 North 300 West Washington, Utah 84780 435-767-0990 nwallentine@sunrise-eng.com
TREASURER/RECORDER:	Jeff Voran 435-877-1190 accounting@applevalleyut.gov

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Big Plains SSD
COUNTY: Washington
PROJECT DESCRIPTION: Master Plan

FUNDING SOURCE: State SRF

0 % Loan & 100 % Grant

ESTIMATED POPULATION:	830	NO. OF CONNECTIONS:	436 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$41.85 *			PROJECT TOTAL:	$60,000
CURRENT % OF AGI:	1.75%	FINANCIAL PTS:	57	LOAN AMOUNT:	$0
ESTIMATED MEDIAN AGI:	$28,700			GRANT AMOUNT:	$60,000
STATE AGI:	$47,200			TOTAL REQUEST:	$60,000
SYSTEM % OF STATE AGI:	61%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	2.50%		1.18%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	10	10		10
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	2.50%		1.18%
REQUIRED DEBT SERVICE:	$0.00	$0.00		$0.00
*PARTIAL COVERAGE (15%):	$0.00	$0.00		$0.00
*ADD. COVERAGE AND RESERVE (10%):	$0.00	$0.00		$0.00
ANNUAL NEW DEBT PER CONNECTION:	$0.00	$0.00		$0.00
O & M + FUNDED DEPRECIATION:	$153,715.00	$153,715.00		$153,715.00
OTHER DEBT + COVERAGE:	$287,337.50	$287,337.50		$287,337.50
REPLACEMENT RESERVE ACCOUNT:	$19,179.25	$19,179.25		$19,179.25
ANNUAL EXPENSES PER CONNECTION:	$1,055.58	$1,055.58		$1,055.58
TOTAL SYSTEM EXPENSES	$460,231.75	$460,231.75		$460,231.75
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$87.96	$87.96		$87.96
% OF ADJUSTED GROSS INCOME:	3.68%	3.68%		3.68%

$0.00

Agenda Item 7(C)(ii)(a)

Cornish Town
Presented to the Drinking Water Board
November 2, 2021

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE

APPLICANT'S REQUEST:

Cornish Town is requesting financial assistance to install a well house with RO treatment and a chlorine treatment facility. Install a booster pump and a new 250,000 gallon tank. This project scored 36.3 points on the Project Priority List.

The total project cost is $1,704,922. Cornish Town is contributing $200,000 and is requesting the balance of $1,504,922 from the Drinking Water Board.

STAFF COMMENTS:

The local MAGI for Cornish Town is $39,500, which is 84% of the State MAGI. The current average water bill is $71.44/ERC, which is 2.17% of the local MAGI. The estimated after project water bill at full loan would be $102.66/ERC or 3.12% of the local MAGI. Based on average monthly water bill data, Cornish Town qualifies to be considered for additional subsidy.

Option	Loan / Grant	(Principal Forgiveness)	Loan	Term	Interest Rate	Water Bill	% Local MAGI
1	Loan		$1,504,922	20 yrs	0%	$102.66	3.12%
2	50/50	$750,922	$754,000	30 yrs	0%	$80.46	2.44%
3	30/70	$1,050,922	$454,000	30 yrs	0%	$71.98	2.19%

FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

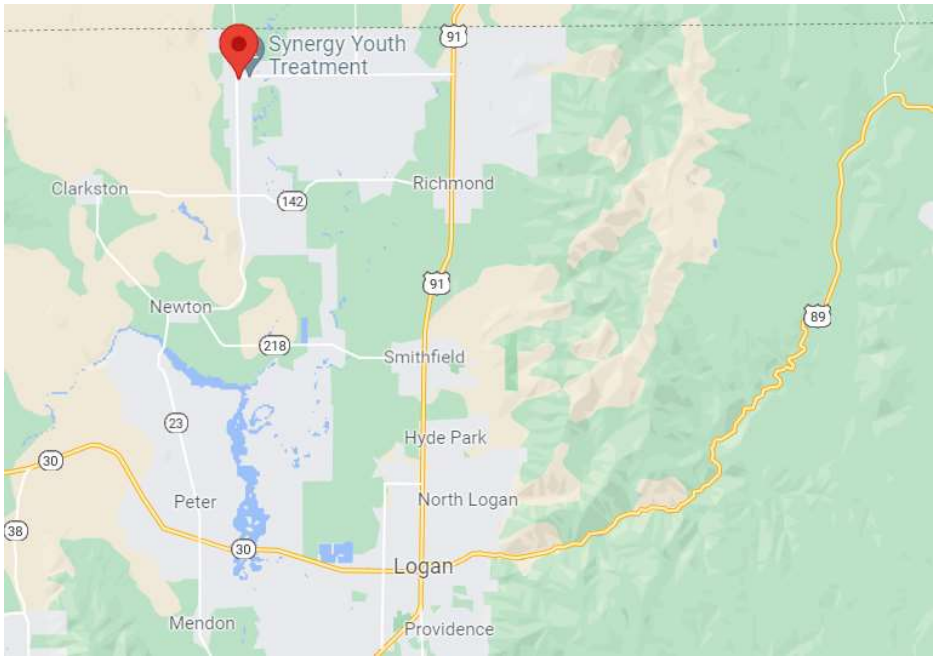
The Drinking Water Board consider a loan of $1,504,922 at 0% interest for 30 years with $750,922 in principal forgiveness for a repayable loan amount of $754,00 to Cornish Town, pending a review of an alternatives analysis.

Conditions include they resolve all points on their IPS report.

APPLICANT'S LOCATION:

Cornish Town is located in Cache County approximately 21 miles Northwest of Logan.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

Cornish Town is requesting financial assistance to install a well house with RO treatment and a chlorine treatment facility. Install a booster pump and a new 250,000 gallon tank.

The Town looked at several alternatives before deciding on this approach. For sources they looked at two separate options including an emergency connection to Lewiston and drilling another well. The town did not want to walk away from the existing proven source they had in the Pitcher Well and the cost of approximately $1.5 million and viability of the Lewiston connection proved it to not be feasible.

The Pitcher Well site treatment was another alternative, the well has two main issues with water quality including high chlorides and high TDS. The intent was to mix the well water with the spring water to manage the TDS and to specifically treat the chlorides from the well. In June it was determined that the springs, which had significantly decreased in yield, were impacted with high nitrates. As they looked at potential ratios for blended water quality, they determined that as long as the spring was producing at least as much as the well, no treatment would be necessary. But if the spring production is low, the reverse osmosis treatment is necessary to address the high TDS. If the spring flows return and stay at historic levels, no treatment may be necessary.

POPULATION GROWTH:

Population growth listed is based on Cornish Town's estimates.

Year	Population	Connections
2020	270	113
2030	320	135
2040	360	160

COST ESTIMATE:

Legal/Bonding/Admin	$32,000
Engineering - Design	$75,000
Engineering - CMS	$10,000
Tank -	$550,000
Sources	$775,000
Contingency (~10%)	$262,922
1% Loan Origination Fee	NA
Total	**$1,704,922**

COST ALLOCATION:

Funding Source	Cost Sharing	Percent of Project
DWB Loan (0%, 30-yr)	$754,000	44%
DWB Grant	$750,922	44%
Local Contribution	$200,000	12%
Total	**$1,704,922**	**100%**

IMPLEMENTATION SCHEDULE:

DWB Funding Authorization:	Nov 2021
Complete Design	Jan 2022
DDW Plan Approval:	Aug 2022
Advertise for Bids:	Feb 2023
Bid Opening:	Feb 2023
Loan Closing:	March 2023
Begin Construction:	March 2023
Complete Construction:	July 2023

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
V021	Tank shows signs of moderate deterioration	15		
	Total =	**15**		

CONTACT INFORMATION:

APPLICANT:	Cornish Town 4788 West 14300 North Cornish, Utah 84308 Telephone: 435-339-5805 cornishmayor@gmail.com
PRESIDING OFFICIAL & CONTACT PERSON:	Matthew Leak, Mayor 4788 West 14300 North Cornish, Utah 84308 Telephone: 435-339-5805 cornishmayor@gmail.com
TREASURER/RECORDER:	Deyette Bradley 435-754-3067 cornishtownhall@gmail.com
CONSULTING ENGINEER:	Mark Chandler CRS Engineers 4246 South Riverboat Road ste 200 SLC, Utah 84123 Telephone: 801-702-4641 Mark.chandler@crsengineers.com
BOND ATTORNEY:	Jefferey Gittens Smith Hartvigsen 257 East 200 South ste 500 SLC, Utah 84111 801-413-+1600 jgittens@hutah.law

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Cornish Town
COUNTY: Cache
PROJECT DESCRIPTION: New tank, well house w/RO and chlorine, booster pump

FUNDING SOURCE: Federal SRF

50 % Loan & 50 % P.F.

ESTIMATED POPULATION:	270	NO. OF CONNECTIONS:	113 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$71.44 *			PROJECT TOTAL:	$1,704,922
CURRENT % OF AGI:	2.17%	FINANCIAL PTS:	52	LOAN AMOUNT:	$754,000
ESTIMATED MEDIAN AGI:	$39,500			PRINC. FORGIVE.:	$750,922
STATE AGI:	$47,200			TOTAL REQUEST:	$1,504,922
SYSTEM % OF STATE AGI:	84%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	2.14%		0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	2.14%		0.00%
REQUIRED DEBT SERVICE:	$25,133.33	$34,317.57		$25,133.33
*PARTIAL COVERAGE (15%):	$0.00	$0.00		$0.00
*ADD. COVERAGE AND RESERVE (10%):	$2,513.33	$3,431.76		$2,513.33
ANNUAL NEW DEBT PER CONNECTION:	$244.66	$334.06		$244.66
O & M + FUNDED DEPRECIATION:	$64,004.00	$64,004.00		$64,004.00
OTHER DEBT + COVERAGE:	$12,500.00	$12,500.00		$12,500.00
REPLACEMENT RESERVE ACCOUNT:	$4,956.87	$5,416.08		$4,956.87
ANNUAL EXPENSES PER CONNECTION:	$720.89	$724.96		$720.89
TOTAL SYSTEM EXPENSES	$109,107.53	$119,669.40		$109,107.53
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$80.46	$88.25		$80.46
% OF ADJUSTED GROSS INCOME:	2.44%	2.68%		2.44%

$0.00

Agenda Item 7(C)(ii)(b)

Weber Meadow View Ranches
Presented to the Drinking Water Board
November 2, 2021

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE

APPLICANT'S REQUEST:

Weber Meadow View Ranches is requesting financial assistance to construct a new 150,000 gallon tank, install 8" PVC and 4" HDPE waterlines, 15 fire hydrants, a PRV station, upgrade the well pump for additional TDH and install 55 service connections. This project scored 33.7 points on the Project Priority List.

The total project cost is $2,158,400 and Weber Meadow View Ranches will be contributing $58,400 towards the project. They are requesting the balance of $2,100,000 from the Drinking Water Board.

STAFF COMMENTS:

The local MAGI for Weber Meadow View Ranches is $68,700, which is 146% of the State MAGI. The current average water bill is $57.73/ERC, which is 1.01% of the local MAGI. This number was calculated based on income from water and the number of connections as they currently charge a flat annual fee that includes water service, road maintenance, fencing, common area electricity and other expenses as needed. The estimated after project water bill at full loan which was calculated the same would be $118.02/ERC or 2.06% of the local MAGI. Based on MAGI and average monthly water bill, Weber Meadow View Ranches qualifies to be considered for additional subsidy in the form of an extended loan term.

Option	Loan / Grant	Grant (Principal Forgiveness)	Loan	Term	Interest Rate (HGA)	Water Bill	% Local MAGI
1	Loan	$0	$2,100,000	40 yrs	0%	$118.02	2.06%

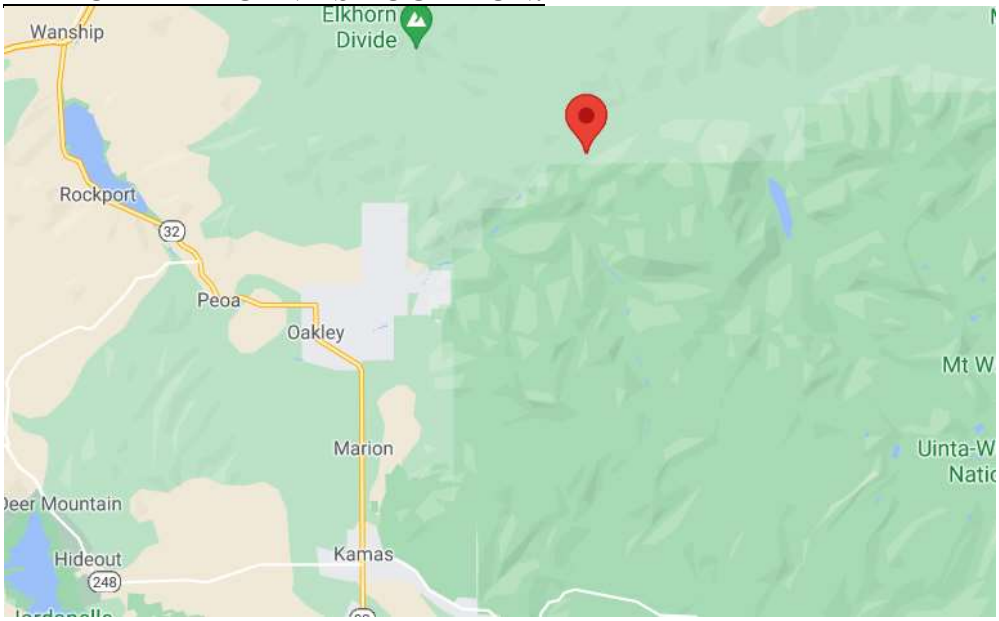
FINANCIAL ASSISTANCE RECOMMENDATION:

The Drinking Water Board authorize $ 2,100,000 LOAN for 40 years at 0% interest to Weber Meadow View Ranches.

APPLICANT'S LOCATION:

Weber Meadow View Ranches is located in Summit County approximately 10 miles North East from Oakley.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

Weber Meadow View Ranches project scope includes building a 150,000 gallon concrete tank to address deficiencies in ability to provide enough storage for indoor/outdoor use as well as fire flow protection and peak day demand. This new tank will replace the existing 5,000 gallon steel tank. Well pump improvements will include replacing the pump with a larger pump and cleaning and videoing the well before the new pump is installed. Distribution pipe improvements will include upsizing to 8" lines to maintain a 20 psi pressure during a fire flow event in all areas that are not a dead end section, in which case a 4" line will be replaced. The dedicated well line will be sized at 4" to provide sufficient chlorination contact time and extending the line to the tank to allow for additional mixing. A PRV station will be installed near the existing upper booster station to decrease the pressures into the lower zone. Additionally, meters will be placed at every service connection to monitor the water usage and help the system encourage conservation as well as assist in finding any leaks in the system.

SYSTEM GROWTH:

Population growth is based on Weber Meadow View Ranches estimates and is based on homes being built on open lots

Year		Connections
2020		38 homes
2030		40 homes
2040		42 homes

COST ESTIMATE:

Legal/Bonding/Admin	$40,000
Engineering - Design	$94,000
Engineering - CMS	$33,000
Tank –	$490,000
Trans and Dist lines	$824,500
Meters and service conn	$137,500
Well rehab	$40,000
Other (PRV, fire hydrants)	$150,000
Contingency (~10%)	$349,400
1% Loan Origination Fee	NA
Total	**$2,158,400**

COST ALLOCATION:

Funding Source	Cost Sharing	Percent of Project
DWB Loan (0 %, 40-yr)	$2,100,000	97%
Local Contribution	$58,400	3%
Total	**$2,158,400**	**100%**

IMPLEMENTATION SCHEDULE:

DWB Funding Authorization:	Nov 2021
Complete Design	June 2022
DDW Plan Approval:	July 2022
Advertise for Bids:	July 2022
Bid Opening:	Aug 2022
Loan Closing:	Sep 2022
Begin Construction:	Oct 2022
Complete Construction:	July 2023

CONTACT INFORMATION:

APPLICANT:	Weber Meadow View Ranches PO Box 1701 Sandy, Utah 84091 Telephone: (801) 651-0887 Webermeadowviewtreasurer@gmail.com
PRESIDING OFFICIAL & CONTACT PERSON:	Paul Brown, President PO Box 741 Oakley, Utah 84055 Telephone: (312) 384-9343 Pfbrown120@gmail.com
TREASURER/RECORDER:	Jordan Nelson (801) 651-0887 webermeadowviewtreasurer@gmail.com
CONSULTING ENGINEER:	Tavis Timothy BT Engineering, PLLC 6136 West Valley View Drive Highland, Utah 84003 Telephone: (801) 319-1288 tavis@b-t-eng.com
BOND ATTORNEY:	Charles Dahlquist Kirton & McConkie 3309 Chaparral Drive St George, Utah 84790 Telephone: (801) 557-6407 cdahlquist@kmclaw.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Weber Meadoview Ranches
FUNDING SOURCE: Federal SRF
COUNTY: Summit
PROJECT DESCRIPTION: Tank, waterlines, PRV, fire hydrants, service connections

100 % Loan & 0 % P.F.

ESTIMATED POPULATION:	65	NO. OF CONNECTIONS:	55 *	SYSTEM RATING:	Approved
CURRENT AVG WATER BILL:	$57.73 *			PROJECT TOTAL:	$2,158,400
CURRENT % OF AGI:	1.01%	FINANCIAL PTS:	29	LOAN AMOUNT:	$2,100,000
ESTIMATED MEDIAN AGI:	$68,700			PRINC. FORGIVE.:	$0
STATE AGI:	$47,200			TOTAL REQUEST:	$2,100,000
SYSTEM % OF STATE AGI:	146%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	2.50%		0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	40	40		40
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	2.50%		0.00%
REQUIRED DEBT SERVICE:	$52,500.00	$83,656.09		$52,500.00
*PARTIAL COVERAGE (15%):	$7,875.00	$12,548.41		$7,875.00
*ADD. COVERAGE AND RESERVE (10%):	$5,250.00	$8,365.61		$5,250.00
ANNUAL NEW DEBT PER CONNECTION:	$1,193.18	$1,901.27		$1,193.18
O & M + FUNDED DEPRECIATION:	$12,270.00	$12,270.00		$12,270.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$223.09	$223.09		$223.09
TOTAL SYSTEM EXPENSES	$77,895.00	$116,840.11		$77,895.00
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$118.02	$177.03		$118.02
% OF ADJUSTED GROSS INCOME:	2.06%	3.09%		2.06%

$0.00

Agenda Item 8(A)(i)

Rule 309-530 Revision
Presented to the Drinking Water Board
November 2, 2021

DRINKING WATER BOARD PACKET
(Request to Begin Rulemaking)

R309-530 Facility Design and Operation: Alternative Surface Water Treatment Methods

PROPOSAL:

The Division of Drinking Water proposes to amend three sections of R309-530, *Alternative Surface Water Treatment Methods*, primarily to update the requirements for design and construction of membrane facilities used for surface water treatment in Section R309-530-8, *Membrane Technology*. The division also proposes to amend sections R309-530-4, *General*, and R309-530-9, *New Treatment Processes or Equipment*.

HISTORY/CONTEXT:

R309-530-8, *Membrane Technology*, was adopted in its current form on August 15, 2001, and has remained unchanged since then. In 2001 when the requirements were first put in place, the use of membrane filtration was relatively limited for the treatment of surface water to meet drinking water standards. Since then, the use of membrane filtration for surface water treatment has become increasingly common and the technology more developed.

The division's current design and construction requirements for membrane filtration facilities treating surface water are rudimentary. R309-530-8 requires a water supplier proposing to use membrane filtration for treatment of surface water to do a pilot study. It offers no guidelines for what to include in the study. It also requires a membrane facility used for surface water treatment to have an on-line particle counter for the treated water and an automatic membrane integrity test system. It has no other design or construction standards.

The minimal detail in R309-530-8 provides little guidance for a water supplier proposing to construct a membrane treatment facility or for the division reviewing membrane facility design. A proposed membrane facility is treated as a unique project for which the design and construction requirements have to be worked out each time.

As the use of membrane filtration for treatment of surface water and groundwater under the direct influence of surface water becomes more common, it has become necessary to adopt basic design standards for the benefit of water suppliers and the division. Therefore, the division is proposing to amend R309-530-8 to provide detailed requirements for the design, construction, and operation of a membrane facility used to treat surface water or groundwater under the direct influence of surface water.

The proposed amendment to Section R309-530-8, *Membrane Technology*, includes a change in the title of the section (to *Membrane Filtration*), 25 new definitions, and a new subsection that explains the circumstances in which the section applies to a membrane treatment facility. Furthermore, the amendment includes new requirements for the collection of source water

quality data, challenge testing of proposed membrane modules, pilot testing of proposed membrane modules, preparation of a preliminary design report, facility design, facility start-up, obtaining an operating permit, membrane integrity testing and monitoring during operation, membrane replacement, and calibration of instrumentation.

The amendment also revises R309-530-4, *General*, to clearly state which design requirements from other rules must be incorporated into the design of a membrane filtration facility and adds new requirements for the collection of source water quality data for all types of alternative filtration. Revisions to R309-530-9, *New Treatment Processes or Equipment*, remove an outdated reference and replace an incorrectly used word.

The proposed amendment to R309-530 has been distributed within the division and to public water systems, consultants, and others for review. The division has considered all comments received. The amendment has also been pre-filed with the Office of Administrative Rules for review as required by Executive Order 2021-12, *Establishing Effective Oversight Over State Agency Rulemaking*, issued by Governor Spencer J. Cox on May 6, 2021.

DIVISION STAFF/DIRECTOR RECOMMENDATION:

The division recommends that the Drinking Water Board approve filing of the amendment to three sections of R309-530 with the Office of Administrative Rules (OAR) to begin the rulemaking process.

IMPLEMENTATION SCHEDULE:

Request Drinking Water Board Approval to File Rule Amendment:	11/02/2021
Deadline to File Rule Amendment with OAR:	11/15/2021
Publication of Rule Amendment in Utah State Bulletin:	12/01/2021
End of 30-Day Comment Period:	01/03/2022
Request Drinking Water Board Approval to Adopt Rule Amendment:	01/11/2022

COST ESTIMATE:

The division anticipates that the proposed rule amendment will have no aggregate costs or savings to the state budget, local governments, small businesses, non-small businesses, or other persons.

The proposed amendment is likely to have no new compliance costs to a water supplier designing and constructing a new membrane treatment facility because the amended rule primarily codifies the current process followed by the division for review and approval of membrane filtration facilities. Any compliance costs associated with the proposed amendment for an existing membrane treatment facility that may need to be retrofitted to meet a new requirement are unquantifiable because of the unique nature of each facility and what, if anything, would need to be retrofitted.

State of Utah
Administrative Rule Analysis
Revised June 2021

NOTICE OF PROPOSED RULE		
TYPE OF RULE: New ___; Amendment _x_; Repeal ___; Repeal and Reenact ___		
	Title No. - Rule No. - Section No.	
Utah Admin. Code Ref (R no.):	**R309-530**	**Filing ID (Office Use Only)**
Changed to Admin. Code Ref. (R no.):	**R**	

Agency Information

1. Department:	Department of Environmental Quality	
Agency:	Division of Drinking Water	
Room no.:	n/a	
Building:	Multi-Agency State Office Building	
Street address:	195 North 1950 West	
City, state and zip:	Salt Lake City UT 84116	
Mailing address:	P.O. Box 144830	
City, state and zip:	Salt Lake City UT 84114-4830	
Contact person(s):		
Name:	**Phone:**	**Email:**
Julie Cobleigh	(385) 214-9770	jjcobleigh@utah.gov
Dani Zebelean	(385) 278-5110	dzebelean@utah.gov
Michael Newberry	(385) 515-1464	mnewberry@utah.gov
Please address questions regarding information on this notice to the agency.		

General Information

2. Rule or section catchline:

R309-530. *Facility Design and Operation: Alternative Surface Water Treatment Methods.*
R309-530-4. *General.*
R309-530-8. *Membrane Technology.*
R309-530-9. *New Treatment Processes or Equipment.*

3. Purpose of the new rule or reason for the change (Why is the agency submitting this filing?)**:**

The division is proposing to amend three sections in Rule R309-530 to provide detailed design and construction standards for membrane filtration facilities treating surface water and groundwater under the direct influence of surface water and to update certain requirements for all types of alternative filtration.

4. Summary of the new rule or change (What does this filing do? If this is a repeal and reenact, explain the substantive differences between the repealed rule and the reenacted rule)**:**

Section R309-530-4, *General*, is being edited for clarity and new requirements for the collection of source water quality data are being added for all types of alternative filtration.

Section R309-530-8, *Membrane Technology,* currently has minimal requirements for the design, construction, and operation of membrane filtration facilities. It requires a water supplier that proposes the use of membrane filtration to do a pilot study. It also requires a membrane treatment facility to have an on-line particle counter for the final effluent and an automatic membrane integrity test system. That is the extent of the current requirements.

The proposed amendment to Section R309-530-8 adds extensive requirements for the design, construction, and operation of membrane facilities that treat surface water or groundwater under the direct influence of surface water. The proposed amendment includes a new section title (*Membrane Filtration*), 25 new definitions, and a new applicability subsection. It also

includes new requirements for challenge testing of proposed membrane modules, pilot testing of proposed membrane modules, preparation of a preliminary design report, facility design, facility start-up, obtaining an operating permit, membrane integrity testing and monitoring, membrane replacement, and calibration of instrumentation.

Additionally, Section R309-530-8 currently requires the director to establish turbidity limits for a membrane facility and requires plant effluent to meet the primary drinking water standards for turbidity. Since these requirements are already included in a subsection of another rule, R309-200-5(5), the amendment removes the repetitive requirements from Section R309-530-8 and replaces them with references to Subsection R309-200-5(5).

Section R309-530-9, *New Treatment Processes or Equipment*, is being amended to remove a reference to a technology verification program that no longer exists and to replace an incorrectly used word (“insure”).

Fiscal Information

5. Provide an estimate and written explanation of the aggregate anticipated cost or savings to:

A) State budget:

The proposed amendment is anticipated to have no aggregate costs or savings to the state budget.

B) Local governments:

The proposed amendment is anticipated to have no aggregate costs or savings to local governments.

C) Small businesses ("small business" means a business employing 1-49 persons)**:**

The proposed amendment is anticipated to have no aggregate costs or savings to small businesses.

D) Non-small businesses ("non-small business" means a business employing 50 or more persons)**:**

The proposed amendment is anticipated to have no aggregate costs or savings to non-small businesses.

E) Persons other than small businesses, non-small businesses, state, or local government entities ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an ***agency***)**:**

The proposed amendment is anticipated to have no aggregate costs or savings to persons other than small businesses, non-small businesses, state government, or local governments.

F) Compliance costs for affected persons (How much will it cost an impacted entity to adhere to this rule or its changes?)**:**

The proposed amendment is likely to have no new compliance costs for water suppliers designing and constructing new membrane treatment facilities to provide drinking water. Although the proposed amendment is substantially longer and more detailed than the current membrane treatment section of the rule, it is primarily codifying the current process followed by the Division of Drinking Water for review and approval of membrane filtration facilities used for drinking water treatment. A water supplier operating an existing membrane filtration facility could incur costs if it had to retrofit the facility to comply with a requirement of the proposed amendment. The compliance costs in such cases are unquantifiable because of the unique nature of what, if anything, would need to be retrofitted.

G) Comments by the department head on the fiscal impact this rule may have on businesses (Include the name and title of the department head):

The proposed amendment will have no fiscal impact on businesses in Utah.

6. A) Regulatory Impact Summary Table (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts will be included in narratives above.)

Regulatory Impact Table

Fiscal Cost	**FY2022**	**FY2023**	**FY2024**
State Government	$0	$0	$0

Local Governments	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Cost	**$0**	**$0**	**$0**
Fiscal Benefits			
State Government	$0	$0	$0
Local Governments	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Benefits	**$0**	**$0**	**$0**
Net Fiscal Benefits	**$0**	**$0**	**$0**

B) Department head approval of regulatory impact analysis:

The Executive Director of the Department of Environmental Quality, Kimberly Shelley, has reviewed and approved this fiscal analysis.

Citation Information

7. Provide citations to the statutory authority for the rule. If there is also a federal requirement for the rule, provide a citation to that requirement:

UC 19-4-104(1)(a)(ii)		

Incorporations by Reference Information

(If this rule incorporates more than two items by reference, please include additional tables.)

8. A) This rule adds, updates, or removes the following title of materials incorporated by references (a copy of materials incorporated by reference must be submitted to the Office of Administrative Rules; *if none, leave blank*)**:**

	First Incorporation
Official Title of Materials Incorporated (from title page)	
Publisher	
Date Issued	
Issue, or version	

B) This rule adds, updates, or removes the following title of materials incorporated by references (a copy of materials incorporated by reference must be submitted to the Office of Administrative Rules; *if none, leave blank*)**:**

	Second Incorporation
Official Title of Materials Incorporated (from title page)	
Publisher	
Date Issued	
Issue, or version	

Public Notice Information

9. The public may submit written or oral comments to the agency identified in box 1. (The public may also request a hearing by submitting a written request to the agency. See Section 63G-3-302 and Rule R15-1 for more information.)		
A) Comments will be accepted until (mm/dd/yyyy)**:**		01/03/2022
B) A public hearing (optional) will be held:		
On (mm/dd/yyyy)**:**	**At** (hh:mm AM/PM)**:**	**At** (place)**:**

10. This rule change MAY become effective on (mm/dd/yyyy)**:**	01/10/2022
NOTE: The date above is the date the agency anticipates making the rule or its changes effective. It is NOT the effective date. To make this rule effective, the agency must submit a Notice of Effective Date to the Office of Administrative Rules on or before the date designated in Box 10.	

Agency Authorization Information

To the agency: Information requested on this form is required by Sections 63G-3-301, 302, 303, and 402. Incomplete forms will be returned to the agency for completion, possibly delaying publication in the *Utah State Bulletin* and delaying the first possible effective date.			
Agency head or designee, and title:	Tim Davis, Director, Division of Drinking Water	**Date** (mm/dd/yyyy)**:**	

R309. Environmental Quality, Drinking Water.

R309-530. Facility Design and Operation: Alternative Surface Water Treatment Methods.

R309-530-4. General.

(1) Alternative Methods.

In addition to conventional surface water treatment,[~~ method~~] [~~(i.e.~~] coagulation, sedimentation, and filtration as outlined in Rule R309-525[~~)~~], several alternative filtration methods may [~~also~~]be suitable for treating surface water. They are[~~:~~] [~~D~~]direct [~~F~~]filtration[~~;~~], [~~S~~]slow [~~S~~]sand [~~F~~]filtration[~~;~~], [~~M~~]membrane [~~F~~]filtration[~~;~~], and [~~D~~]diatomaceous [~~E~~]earth [~~F~~]filtration.

(2) Incorporation of Other Rules.

[~~For each process described in this section pertinent rules are given. The designer shall also incorporate the relevant rules given in other sections into the plans and specifications for any of these specialized treatment methods. Where applicable, the following topics shall be addressed:~~]The following requirements are incorporated into Sections R309-530-5 through R309-530-9 for alternative surface water treatment methods.

(a) Plant Siting, [~~(see~~]R309-525-6[~~)~~].

(b) Pre-design Submittal, [~~(see~~]R309-515-5(2)[~~)~~].

(c) Plant Reliability, [~~(see~~]R309-525-7[~~)~~].

(d) Color Coding and Pipe Marking, [~~(see~~]R309-525-8[~~)~~].

(e) Chemical Addition, [~~(see~~]R309-525-11[~~)~~].

(f) Miscellaneous Plant Facilities, [~~(see~~]R309-525-17, [~~particularly~~]including sub[~~-~~]section R309-525-17(1), Laboratory[~~)~~].

(g) Operation and Maintenance Manuals, [~~(see~~]R309-525-19[~~)~~].

(h) Safety, [~~(see~~]R309-525-21[)].

(i) Disposal of Treatment Plant Waste, [~~(see~~]R309-525-23[~~)~~].

(j) Disinfection, [~~(see~~]R309-520[~~)~~].

(3) Source Water Quality Data.

(a) A water supplier proposing to use alternative filtration to treat surface water or groundwater under the direct influence of surface water shall obtain sufficient source water quality data to:

(i) determine the feasibility of alternative filtration treatment;

(ii) identify substances that may affect the alternative filtration process and finished water quality;

(iii) estimate productivity of the alternative filtration process; and

(iv) determine if seasonal variation is substantial enough to affect design.

(b) Source water quality data required by Subsection R309-530-4(3) shall be collected no more than two years prior to the date that plans and specifications for a treatment facility are submitted to the division.

(c) The source water quality data for alternative filtration shall include at least:

(i) one round of sampling for the contaminants required for initial analysis by Subsection R309-515-4(5); and

(ii) four quarters of sampling collected over a period of 12 months for:

(A) alkalinity;

(B) pH;

(C) temperature;

(D) total organic carbon;

(E) total suspended solids;

(F) turbidity; and

(G) any additional parameter needed to design the treatment facility as determined by consultation with the division.

(d) No later than the date that plans and specifications for an alternative filtration facility are submitted to the division, a water supplier shall also submit:

(i) a summary of source water quality data used to design the facility; and

(ii) a description of how the source water quality data address items (i) through (iv) of Subsection R309-530-4(3)(a).

[~~**R309-530-8. Membrane Technology.**~~

~~(1) Acceptability.~~

~~Surface waters, or groundwater under the direct influence of surface water (UDI), may be treated using membrane technology (microfiltration, ultrafiltration, nanofiltration) coupled with "primary and secondary disinfection."~~

~~(2) Pilot Plant Study.~~

~~Because this is a relatively new technology, appropriate investigation shall be conducted by the public water system to assure that the process will produce the required quality of water at a cost which can be borne by the public water system consumers. A pilot plant study shall be conducted prior to the commencement of design. The study must be conducted in accordance with EPA's Environmental Technology Verification Program (ETV) or the protocol and treated water parameters must be approved prior to conducting any testing by the Director.~~

~~(3) Design Requirements.~~

~~The following items shall be addressed in the design of any membrane technology plant intended to provide microbiological treatment of surface waters or groundwater "UDI:"~~

~~(a) The facility shall be equipped with an on-line particle counter on the final effluent.~~

~~(b) The facility shall be equipped with an automatic membrane integrity test system.~~

~~(4) The Director shall establish the turbidity limit for 95% of turbidity measurements and the maximum turbidity limit which shall not be exceeded. The plant effluent shall meet the requirements of R309-200-5(5)(a)(ii).~~]

R309-530-8. Membrane Filtration.

(1) Definitions.

(a) “Backwash” means the cleaning operation that typically involves periodic reverse flow to remove foulants accumulated at the membrane surface or the intermittent waste stream from a microfiltration or ultrafiltration membrane system.

(b) “Baseline Response” means the amount of airflow or pressure decay due to diffusion of air through water in wetted pores or membrane material in an integral membrane unit.

(c) “Challenge Test” means a study conducted to determine the removal efficiency, known as the log removal value, of a membrane material for a particular organism, particulate, or surrogate.

(d) “Chemically Enhanced Backwash” means a backwash process that includes the addition of chemicals to reduce or remove membrane foulants.

(e) “Clean in Place (CIP)” means the periodic application of a chemical solution, or series of chemical solutions, to a membrane unit for the intended purpose of removing accumulated foulants and thus restoring permeability and resistance to baseline levels; commonly used term for in-situ chemical cleaning.

(f) “Concentrate” means the continuous waste stream, typically consisting of concentrated dissolved solids, from a membrane process, usually in association with nanofiltration and reverse osmosis processes; in some cases, also used to describe a continuous bleed stream of concentrated suspended solids wasted from microfiltration and ultrafiltration systems operated in a crossflow, or feed-and-bleed, hydraulic configuration.

(g) "Control Limit" means a response from an integrity test, which, if exceeded, indicates a potential problem with the membrane filtration system and triggers a response; synonymous with "upper control limit" as used in the United States Environmental Protection Agency's Membrane Filtration Guidance Manual, EPA 815-R-06-009, to distinguish from additional voluntary or State-mandated "lower control limits."

(h) "Differential Pressure" means pressure drop across a membrane module or unit from the feed inlet to concentrate outlet, as distinguished from transmembrane pressure, which represents the pressure drop across the membrane barrier.

(i) "Direct Integrity Test (DIT)" means a physical test applied to a membrane unit to identify and isolate integrity breaches.

(j) "Feed Water" means the influent stream to a water treatment process.

(k) "Filtrate" means the water produced from a membrane filtration unit.

(l) "Foulant" means a substance that causes fouling.

(m) "Fouling" means the gradual accumulation of contaminants on a membrane surface or within a porous membrane structure that inhibits the passage of water, thus decreasing productivity.

(n) "Flux" means the filtration rate of a membrane filtration system expressed as flow per unit of membrane area, such as gallons per square foot per day.

(o) "Indirect Integrity Monitoring" means monitoring some aspect of filtrate water quality that is indicative of the removal of particulate matter.

(p) "Log Removal Value (LRV)" means the filtration removal efficiency for a target organism, particulate, or surrogate expressed as log10; LRV = log10(feed concentration) – log10(filtrate concentration).

(q) "Maintenance Clean" means a routine, short-duration chemical cleaning to minimize the accumulation of foulants.

(r) "Membrane Unit" means a group of membrane modules that share common valving that allows the unit to be isolated from the rest of the system for integrity testing or other maintenance.

(s) "Membrane Module" means the smallest component of a membrane unit in which a specific membrane surface area is housed in a device with a filtrate outlet structure.

(t) "Normalized Flux" means the filtration rate of a membrane filtration system expressed as flow per unit of membrane area, such as gallons per square foot per day, at a given reference temperature for monitoring system productivity independent of changes in water temperature. For microfiltration, ultrafiltration, and membrane cartridge filtration, 20 degrees Celsius is used for normalization. For nanofiltration and reverse osmosis, 25 degrees Celsius is used for normalization.

(u) "Productivity" means the amount of filtered water that can be produced from a membrane module, filtration unit, or system over a period of time, accounting for the use of filtrate in backwash and chemical cleaning operations, as well as otherwise productive time that

a unit or system is offline for routine maintenance processes such as backwashing, chemical cleaning, integrity testing, or repair.

(v) "Recovery" means the volumetric percent of feed water that is converted to filtrate in the treatment process over the course of an operating cycle uninterrupted by chemical cleaning or a solids-removal process such as backwashing and excluding losses that occur due to the use of filtrate in backwashing or cleaning operations.

(w) "Resolution" means the size of the smallest integrity breach that contributes to a response from a direct integrity test; also applicable to some indirect integrity monitoring methods.

(x) "Sensitivity" means the maximum log removal value (LRV) that can be reliably verified by a direct integrity test; also applicable to some continuous indirect integrity monitoring methods.

(y) "Transmembrane Pressure (TMP)" means the difference in pressure from the feed, or feed-concentrate average, if applicable, to the filtrate across a membrane barrier.

(2) Applicability. The requirements of Section R309-530-8 apply to membrane filtration used to treat surface water or groundwater under the direct influence of surface water to:

(a) obtain LRV credit for Giardia, Cryptosporidium, and viruses;

(b) meet the turbidity treatment technique requirements of Rule R309-200; or

(c) meet the filtration treatment technique requirements for enhanced treatment for Cryptosporidium of Section R309-215-15.

(3) Turbidity Treatment Technique and Performance Requirements.

(a) The turbidity treatment technique and turbidity performance requirements for a water system using membrane filtration to treat surface water or groundwater under the direct influence of surface water are specified in Subsection R309-200-5(5)(a)(ii).

(b) To receive log removal credit for Giardia, Cryptosporidium, or viruses under Subsection R309-200-5(5)(a)(ii), a membrane shall:

(i) meet the definition of membrane filtration in Rule R309-110;

(ii) be capable of establishing removal efficiency through product-specific challenge testing and direct integrity testing; and

(iii) undergo direct integrity testing and continuous indirect integrity monitoring during operation.

(4) Challenge Testing of Membrane Modules and LRV Credit.

(a) A membrane module proposed for treatment of surface water or groundwater under the direct influence of surface water shall:

(i) undergo product-specific challenge testing meeting the requirements of Subsection R309-215-15(18)(b)(ii) to evaluate the membrane's removal efficiency; and

(ii) either have NSF/ANSI 419 certification or be accepted by a state with a public drinking water program approved by U.S. EPA.

(b) A water supplier shall submit challenge test results for a proposed membrane module to the division for review prior to pilot testing and facility design.

(c) The division shall award a maximum LRV credit for Giardia, Cryptosporidium, and viruses to a membrane module proposed by a water supplier to be used for design of a membrane filtration facility.

(d) A water supplier shall verify an LRV credit awarded to a membrane module by direct integrity testing meeting the requirements of Subsection R309-215-15(18)(b)(iii) during normal operation of a constructed membrane filtration facility.

(5) Pilot Test or Comparable Full-Scale Membrane Filtration Operational Data. Prior to design of a membrane filtration facility, a water supplier shall:

(a) complete a pilot test of a proposed membrane module; or

(b) request and receive approval from the division to use comparable operational data from a full-scale membrane facility treating water of the same or similar quality for a proposed membrane module.

(6) Pilot Test Protocol.

(a) Prior to initiating a pilot test, a water supplier shall:

(i) submit a test protocol to the division for review; and

(ii) receive written concurrence with the protocol from the division.

(b) The pilot test protocol shall specify the:

(i) source of water for the test;

(ii) membrane module selected for the test;

(iii) number of membrane modules to be tested for the full duration of the pilot test;

(iv) test duration, including number of clean-in-place cycles;

(v) time of year to perform the test;

(vi) objectives of the test, including operating procedures to analyze the optimal balance among:

(A) flux;

(B) productivity;

(C) backwash frequency;

(D) maintenance-clean frequency; and

(E) clean-in-place frequency;

(vii) hydraulic configuration to match the full-scale system;

(viii) continuous operational parameter monitoring for each filter run, including:

(A) elapsed run time;

(B) feed-water, filtrate, and concentrate pressure;

(C) feed-water, filtrate, and concentrate flow; and

(D) feed-water or filtrate temperature;

(ix) water quality monitoring of the feed, filtrate, and concentrate, including:

(A) parameters to be sampled; and

(B) frequency of sample collection;

(x) backwash process, including chemical enhancement, and data collection;

(xi) maintenance-clean process;

(xii) clean-in-place process, including:

(A) data collection; and

(B) direct integrity testing prior to returning the pilot unit to service;

(xiii) direct integrity testing process and data collection;

(xiv) indirect integrity monitoring process and data collection;

(xv) prescreening to protect membrane plugging or damage;

(xvi) pretreatment required for membrane treatment efficiency and removal of substances not removed by membrane treatment;

(xvii) post-treatment required; and

(xviii) waste disposal.

(7) Preliminary Design Report.

(a) Prior to submitting plans and specifications to the division, a water supplier proposing a new or modified membrane filtration facility shall:

(i) submit a preliminary design report to the division that establishes design parameters for a full-scale membrane filtration facility that meets the requirements of Section R309-530-8; and

(ii) receive written concurrence with the report from the division.

(b) The preliminary design report shall include:

(i) a summary of pilot test results or comparable full-scale membrane operational data addressing each of the items listed in Subsection R309-530-8(6), Pilot Test Protocol;

(ii) preliminary design specifications for membrane filtration, including:

(A) flux operating range;

(B) differential pressure operating range;

(C) recovery;

(D) productivity;

(E) membrane fouling potential based on pilot test results;

(F) membrane removal efficiency, LRV, verified during the pilot test;

(G) total membrane area per module; and

(H) number of membrane modules for the full-scale facility.

(iii) treatment objectives based on source water quality, including:

(A) potential of the treated water to produce disinfection byproducts when chlorine is added for disinfection prior to distribution; and

(B) potential of the filtration process to produce corrosive water and the need for chemical conditioning of the filtrate prior to distribution;

(iv) design capacity and its basis;

(v) mode of filtration operation – constant flux or constant pressure;

(vi) expected useful life of selected membranes;

(vii) identification of critical components to be provided in duplicate to assure continued operation of membrane filtration in the case of a component failure;

(viii) details of direct integrity testing representative of an integral membrane filtration unit, including:

(A) description of the testing procedure;

(B) method of direct integrity testing meeting the requirements of Subsection R309-215-15(18)(b)(iii);

(C) frequency of testing meeting the requirements of Subsection R309-215-15(18)(b)(iii)(F);

(D) estimated test resolution meeting the requirements of Subsection R309-215-15(18)(b)(iii)(B);

(E) estimated test sensitivity meeting the requirements of Subsection R309-215-15(18)(b)(iii)(C);

(F) for pressure-based testing, calculations that demonstrate how the measured pressure or flow is converted to an equivalent LRV;

(G) for marker-based testing, identification of:

(I) the particulate or molecular marker; and

(II) how the marker will be discretely quantified or measured;

(H) estimated control limit meeting the requirements of Subsections R309-215-15(18)(b)(iii)(D) and (E); and

(I) for pressure-based testing, a baseline response if applicable, and how it was determined.

(ix) details of continuous indirect integrity monitoring of filtrate quality from each membrane filtration unit, including:

(A) description of the monitoring procedure;

(B) method of continuous indirect integrity monitoring meeting the requirements of Subsection R309-215-15(18)(b)(iv);

(C) frequency of monitoring meeting the requirements of Subsection R309-215-15(18)(b)(iv)(B);

(D) estimated performance-based control limit meeting the requirements of Subsection R309-215-15(18)(b)(iv)(D) or (E); and

(E) triggers for initiating a DIT meeting the requirements of Subsection R309-215-15(18)(b)(iv)(D) or (E);

(x) details of the backwashing process and chemically enhanced backwashing process for membranes requiring backwashing, including:

(A) triggers for initiating the processes;

(B) backwashing and chemically enhanced backwashing frequencies;

(C) duration of processes;

(D) water supply for backwashing;

(E) chemical supply for enhanced backwashing;

(F) list of chemicals used for chemically enhanced backwashing;

(G) treatment and disposal of backwash water and chemicals at completion of the processes;

(H) backwash-water recycling; and

(I) description of cross-connection control for the chemically enhanced backwashing process;

(xi) details of the maintenance-clean process and the clean-in-place process for membranes requiring chemical cleaning, including:

(A) triggers for initiating the process;

(B) process frequency;

(C) chemical supply for the process;

(D) list of chemicals used in the cleaning process;

(E) heating requirements for the cleaning solution;

(F) cleaning-solution recirculation;

(G) soak cycle;

(H) chemical recycling;

(I) post-CIP process for verification that the chemical concentration was adequate for the cleaning cycle;

(J) post-cleaning requirements for returning a membrane unit to filtration, including:

(I) backwashing or flushing;

(II) direct integrity testing; and

(III) disposal of chemical waste stream and rinse water; and

(K) description of cross-connection control for the process.

(8) Design Criteria.

(a) See Subsection R309-530-4(3) for source water quality data collection and submission requirements that a water supplier shall meet no later than the date that plans and specifications are submitted to the division.

(b) Treatment Capacity of a Membrane Filtration Facility.

(i) A membrane filtration facility that provides the sole source of water to a water system shall be capable of meeting peak day demand at the lowest feed-water temperature when the largest membrane unit is out of service by providing either:

(A) one redundant membrane unit; or

(B) multiple membrane units with excess treatment capacity for each unit at maximum design flux.

(ii) A membrane filtration facility that provides the sole source of water to a noncommunity water system that can discontinue water service and shut down does not have to be capable of meeting peak day demand when the largest membrane unit is out of service.

(iii) The treatment capacity of a membrane filtration facility shall account for the:

(A) use of filtrate for backwashing and chemical cleaning;

(B) loss of concentrate; and

(C) loss of filtrate from flushing membranes after chemical cleaning.

(c) Redundancy of Critical Components.

(i) A membrane filtration facility that provides the sole source of water to a water system shall provide critical components needed to maintain continuous operation of the filtration process, as identified in the preliminary design report, in duplicate.

(ii) A membrane filtration facility that provides the sole source of water to a noncommunity water system that can discontinue water service and shut down does not have to provide critical components in duplicate.

(d) Certification of Chemicals and Components.

(i) Chemicals added during water treatment, including chemicals used to clean membrane modules and associated piping, shall be certified to meet NSF/ANSI 60.

(ii) Materials in contact with water during or following the treatment process, including membrane filtration modules and membrane repair materials, shall be certified to meet NSF/ANSI 61.

(e) Membrane Facility Housing. A membrane filtration facility shall be housed in a structure that is:

(i) weatherproof;

(ii) accessible at times that the facility is active;

(iii) protected from flooding;

(iv) drained to prevent the accumulation of water on the floor;

(v) locked and secured to prevent vandalism and unauthorized entry;

(vi) heated, cooled, and vented to protect the equipment;

(vii) dehumidified, if necessary, to protect the equipment;

(viii) lighted to allow routine operation and maintenance; and

(ix) sized and configured to allow operation and maintenance, including the removal and replacement of membrane equipment.

(f) Prefiltration Screening and Pretreatment. Prefiltration screening and pretreatment shall be provided based on source water quality, pilot testing, and preliminary design report recommendations.

(i) Prefiltration screening shall remove particles and debris that may damage or plug a membrane.

(ii) Chemicals used in pretreatment shall be compatible with the membrane material.

(iii) A pretreatment process that uses a polymer upstream of a membrane shall minimize or eliminate polymer carryover to the membrane.

(iv) Equipment shall be provided for routine testing of the effectiveness of the pretreatment process.

(g) Post-treatment. Post-treatment for membrane filtration shall be provided based on pilot testing or preliminary design report recommendations.

(i) Equipment shall be provided for:

(A) routine testing of the effectiveness of the post-treatment process; and

(B) compliance monitoring required by drinking water rules.

(ii) Requirements for disinfection following membrane filtration are specified in Rules R309-200, R309-210, R309-215, and R309-520.

(h) Bypass Water Handling.

(i) Untreated surface water or groundwater under the direct influence of surface water may not bypass the membrane filtration process.

(ii) Water blended with filtrate from membrane filtration treatment prior to distribution shall meet drinking water standards.

(i) Filter to Waste. Each membrane unit shall be equipped to allow filtrate to be sent to waste instead of distribution.

(j) Waste Disposal. Waste generated by membrane filtration, including concentrate, filter-to-waste water, backwash water, and spent membrane-cleaning solution, shall be disposed of according to applicable regulations.

(k) Backwashing Equipment.

(i) For membranes that require backwashing, backwashing equipment shall be provided to remove accumulated foulants from the membrane surface.

(ii) Piping and pumps shall be compatible with chemicals used for chemically enhanced backwashing.

(iii) Air provided during backwashing shall be:

(A) filtered;

(B) dry; and

(C) oil free.

(iv) If water from backwashing is recycled, it shall be:

(A) treated to remove solids; and

(B) returned to the head of the treatment facility.

(v) To prevent damage to a membrane or its housing, for automatic backwashing, a backwash pump shall be equipped with:

(A) a variable frequency drive;

(B) soft start and stop capabilities; or

(C) slow opening and closing automatic valves.

(vi) A means shall be provided to measure the total flow and the rate of flow of the backwash water during the backwashing process.

(vii) Filtrate shall be:

(A) used to backwash membrane modules or membrane units; and

(B) supplied in sufficient volume to maintain rated plant capacity.

(l) Clean-in-Place and Maintenance-Clean Equipment.

(i) For membranes that require chemical cleaning, equipment shall be provided to remove accumulated foulants on the membrane surface not removed by backwashing.

(ii) Piping and pumps shall be compatible with the chemicals used for cleaning.

(iii) Equipment for chemical cleaning shall be provided with cross-connection control to isolate chemicals from the feed water and filtrate during the cleaning process.

(iv) Secondary containment for leaks and spills from a chemical storage tank shall be provided to:

(A) protect the operator and equipment; and

(B) prevent release of chemicals to the environment.

(m) Direct Integrity Testing Equipment.

(i) Equipment shall be provided for automatic direct integrity testing of each membrane unit to:

(A) detect potential breaches; and

(B) record test results.

(ii) Equipment shall be capable of applying direct integrity testing to physical elements of the membrane unit, including:

(A) membranes;

(B) seals;

(C) potting material;

(D) valves;

(E) piping; and

(F) any other component that could result in contamination of the filtrate if the component's integrity were compromised.

(iii) Air provided for pressure-based testing shall be:

(A) filtered;

(B) dry; and

(C) oil free.

(iv) A particle used for marker-based testing shall:

(A) be certified to meet NSF/ANSI 60;

(B) be inert;

(C) be compatible with the membrane material;

(D) have an effective size of 3 µm or less;

(E) have a neutral surface charge;

(F) be capable of being discretely measured; and

(G) be removed less efficiently than the organism targeted for treatment by membrane filtration.

(v) A molecule used for marker-based testing shall:

(A) be capable of being discretely quantified; and

(B) have an effective size equivalent to 3 µm or less.

(n) Indirect Integrity Monitoring Equipment. Equipment shall be provided for the continuous monitoring and recording of turbidity levels of the filtrate at each membrane unit as specified in Subsection R309-530-8(8)(s).

(o) Sample Collection. A means to collect samples shall be provided for the:

(i) raw-water inlet to a membrane filtration facility;

(ii) feed-water inlet to a membrane unit;

(iii) filtrate outlet from a membrane unit;

(iv) concentrate outlet;

(v) combined-filter outlet;

(vi) finished-water outlet from a membrane filtration facility;

(vii) water supply for membrane backwashing; and

(viii) clean-in-place chemical solution.

(p) Flow Measurement. A means to measure and record the total flow and the rate of flow shall be provided for the:

(i) raw-water inlet to a membrane filtration facility;

(ii) feed-water inlet to a membrane unit;

(iii) filtrate outlet from a membrane unit;

(iv) concentrate outlet;

(v) finished-water outlet from a membrane filtration facility;

(vi) water supply for membrane backwashing; and

(vii) recycled water.

(q) pH and Temperature Measurement. A means to measure and record pH and temperature shall be provided for the:

(i) raw-water inlet to a membrane filtration facility; and

(ii) finished-water outlet from a membrane filtration facility.

(r) Pressure Measurement. A means to measure and record pressure for a membrane filtration unit shall be provided for the:

(i) feed-water inlet;

(ii) concentrate outlet; and

(iii) filtrate outlet.

(s) Turbidity Measurement. A means to measure and record turbidity shall be provided for the:

(i) raw-water inlet to a membrane filtration facility;

(ii) outlet from a pretreatment process;

(iii) filtrate outlet from a membrane unit;

(iv) combined-filter outlet;

(v) outlet from any other process downstream of membrane filtration that may increase turbidity; and

(vi) clearwell outlet as required by Subsection R309-215-9(1)(a).

(t) Cross-Connection Control. Cross-connection control shall be provided to prevent contamination of feed water and filtrate from cleaning chemicals and waste disposal.

(u) System Controls.

(i) System controls for a membrane filtration facility shall be:

(A) located above ground;

(B) protected from flooding; and

(C) capable of automatically shutting down the membrane filtration process to prevent damage to the membranes or distribution of inadequately treated drinking water.

(ii) Automated system controls shall be provided with:

(A) spare input/output cards of each type;

(B) a backup power supply; and

(C) surge protection.

(v) Alarms. A membrane filtration facility shall include an alarm system that immediately notifies a water-system operator when:

(i) feed-water turbidity exceeds the maximum design level;

(ii) filtrate turbidity exceeds the level not to be exceeded at any time as specified in Subsection R309-200-5(5)(a)(ii);

(iii) a direct or indirect integrity test exceeds a control limit;

(iv) the maximum flow rate setting corresponding to the maximum design flux level is exceeded;

(v) TMP exceeds the maximum design level; and

(vi) a pump driving the filtration, backwashing, or chemical cleaning process fails.

(w) Control of Remote or Unoccupied Membrane Filtration Facility.

(i) A remote or unoccupied membrane filtration facility shall be provided with alarms, communication systems, and the ability to automatically shut down processes to prevent the distribution of inadequately treated drinking water.

(ii) In addition to the items listed in Subsection R309-530-8(8)(v), a remote or unoccupied membrane filtration facility shall include an alarm system that immediately notifies a water-system operator of:

(A) failure of a critical component identified in the preliminary design report;

(B) failure of a programable logic controller;

(C) membrane unit shutdown;

(D) clearwell water level above the maximum or below the minimum;

(E) chlorine residual level above the maximum or below the minimum;

(F) low level in a chemical storage tank;

(G) loss of electrical power;

(H) unauthorized entry; and

(I) low interior temperature of a treatment building.

(9) Facility Startup.

(a) A membrane filtration facility shall be equipped to allow for disposal of feed water and filtrate during the startup process.

(b) Prior to installing membrane modules:

(i) piping shall be flushed to remove dirt and construction debris;

(ii) chemical-feed equipment shall be tested to assure:

(A) proper operation; and

(B) delivery of chemicals at proper dosages;

(iii) mechanical equipment shall be tested for leaks and proper operation;

(iv) instrumentation shall be calibrated and tested for proper operation;

(v) the control system shall be verified for:

(A) digital and analog control inputs and outputs;

(B) instrumentation alarm limits;

(C) programming logic;

(D) instrumentation loops; and

(E) operational sequences.

(c) After installation, a membrane module shall be:

(i) flushed to waste to remove the storage solution; and

(ii) tested to assure smooth startup and shutdown.

(d) A water supplier shall comply with applicable disposal requirements for waste flushed from newly installed piping, tanks, equipment, and membranes at a membrane filtration facility.

(e) Prior to use of a membrane filtration facility to provide drinking water:

(i) pipes, tanks, and associated equipment shall be disinfected and flushed according to AWWA procedures;

(ii) membrane modules shall be disinfected and flushed according to instructions from the membrane manufacturer taking into consideration the chlorine tolerance of the membranes;

(iii) a facility shall be operated continuously for a trial period to verify design parameters;

(iv) treated water quality shall be sampled and demonstrate compliance with drinking water standards;

(v) final, operational control limits for direct integrity testing shall be established;

(vi) a direct integrity test shall be done per Subsection R309-215-15(18)(b)(iii), and the result may not exceed the established upper control limit; and

(vii) a water supplier shall obtain an operating permit as required by Section R309-500-9.

(f) A water supplier shall assure that adequate operator training and instruction are provided by the supplier of the membrane units on each aspect of startup and operation of a membrane filtration facility.

(10) Operating Permit – Additional Information. In addition to meeting the requirements for an operating permit in Section R309-500-9, a water supplier requesting an operating permit for a membrane filtration facility treating surface water or groundwater under the direct influence of surface water shall provide to the division:

(a) a statement acknowledging that the facility startup requirements of Subsection R309-530-8(9) have been completed;

(b) normalized operating flux range;

(c) normalized operating flux per membrane unit;

(d) maximum operating differential pressure for a membrane unit;

(e) membrane unit backwashing frequency;

(f) membrane unit clean-in-place frequency;

(g) minimum, verified, operational, direct integrity testing resolution;

(h) maximum, verified, operational, direct integrity testing sensitivity;

(i) verified, operational, direct integrity testing control limit; and

(j) verified, indirect integrity monitoring performance-based upper control limit.

(11) Operational Membrane Integrity Testing and Monitoring and Reporting.

(a) Membrane Integrity Testing and Monitoring.

(i) Direct Integrity Testing.

(A) A water system using membrane filtration to treat surface water or groundwater under the direct influence of surface water to meet the requirements of Section R309-530-8 shall comply with the direct integrity testing requirements of Subsection R309-215-15(18)(b)(iii).

(B) A direct integrity test shall be done on a membrane unit following:

(I) clean in place of a membrane unit; and

(II) repair of a membrane unit.

(C) A membrane unit that has been chemically cleaned in place or repaired may not be returned to service unless the result of a direct integrity test of the membrane unit is at or below the established control limit.

(ii) Indirect Integrity Monitoring. A water system using membrane filtration to treat surface water or groundwater under the direct influence of surface water to meet the requirements of Section R309-530-8 shall comply with the indirect integrity monitoring requirements of Subsection R309-215-15(18)(b)(iv).

(b) Reporting Requirements for Membrane Integrity Testing. A water system using membrane filtration to treat surface water or groundwater under the direct influence of surface water to meet the requirements of Section R309-530-8 shall comply with the reporting requirements for direct integrity testing and indirect integrity monitoring of Subsection R309-215-15(20)(d)(x)(B).

(12) Membrane Replacement.

(a) A water supplier shall obtain plan approval and an operating permit for replacement of:

(i) an approved membrane module with a different module; and

(ii) an approved number of modules with a greater number of the same modules.

(b) Replacement of a membrane module with exactly the same product is considered ongoing operation and maintenance and is not a public drinking water project that requires plan approval or an operating permit.

(13) Calibration of Instrumentation. Instrumentation used to verify operation of a treatment process or determine compliance with monitoring and reporting requirements for a drinking water rule, shall be:

(a) calibrated monthly;

(b) tested for accuracy monthly; and

(c) maintained according to manufacturer's recommendations.

R309-530-9. New Treatment Processes or Equipment.

The policy of the Board is to encourage, rather than to obstruct, the development of new methods and equipment for the treatment of water. Nevertheless, any new processes or equipment must have been thoroughly tested in full-scale, comparable installations, before approval of plans can be issued[~~ Refer to EPA's Environmental Technology Verification Program (ETV)~~].

No new treatment process will be approved for use in Utah unless the designer or supplier can present evidence satisfactory to the Director that the process will [~~insure~~]ensure the delivery of water of safe, sanitary quality, without imposing undue problems of supervision, operation, [~~and/~~]or control.

The Director shall establish the turbidity limit for 95% of turbidity measurements and the maximum turbidity limit which shall not be exceeded. The plant effluent shall meet the requirements of Subsection R309-200-5(5)(a)(ii).

KEY: drinking water, direct filtration, slow sand filtration, membrane technology
Date of Enactment or Last Substantive Amendment: [~~August 28, 2013~~]
Notice of Continuation: March 13, 2015
Authorizing, and Implemented or Interpreted Law: 19-4-104

Agenda Item 8(A)(ii)

Rule R309-200-5(5)(a) Revision
Presented to the Drinking Water Board
November 2, 2021

DRINKING WATER BOARD PACKET
(Request to Begin Rulemaking)

R309-200-5(5)(a) Monitoring and Water Quality: Drinking Water Standards
Primary Drinking Water Standards Turbidity

PROPOSAL:

The Division of Drinking Water proposes to amend Subsection R309-200-5(5)(a), *Turbidity*, to add turbidity performance requirements for membrane facilities used to treat surface water or groundwater under the direct influence of surface water. This is being done in conjunction with a proposed amendment to Section R309-530-8, *Membrane Technology*. The amendment also clarifies the combined-filter-effluent-turbidity limit for conventional and direct filtration and corrects three errors in the subsection.

HISTORY/CONTEXT:

The proposed rule amendment includes the following revisions:

- R309-200-5(5)(a)(i)(B) currently requires turbidity samples from combined filter effluent for conventional or direct filtration not to exceed 1 NTU at any time. With the rounding of turbidity results, the actual combined-filter-effluent-turbidity level can be up to 1.49 NTU's and still meet the 1 NTU requirement. Therefore, the proposed amendment revises the turbidity limit from 1 NTU to 1.0 NTU to assure compliance with the 1 NTU requirement.
- R309-200-5(5)(a)(ii) requires the director to set turbidity performance requirements for each approval of an alternative filtration technology, such as membrane filtration. With the proposed amendment of R309-530-8, *Membrane Technology*, which establishes new design, construction, and operational requirements for the use of membrane filtration to treat surface water or groundwater under the direct influence of surface water, the division is able to specify standard turbidity performance requirements for all such membrane filtration facilities. Therefore, the division proposes to amend R309-200-5(5)(a)(ii) to establish turbidity performance requirements for membrane filtration by rule instead of having the director establish them each time a membrane filtration facility is approved.
- The other amendments to Subsection R309-200-5(5)(a)(ii) change the word "section" to subsection," correct a reference to R309-200-7 that should be R309-200-5(7) and add a missing period to the last sentence of the subsection.

The proposed amendment to R309-200-5(5)(a) has been distributed within the division and to public water systems, consultants, and others for review. The amendment has also been pre-filed with the Office of Administrative Rules for review as required by Executive Order 2021-12, *Establishing Effective Oversight Over State Agency Rulemaking*, issued by Governor Spencer J. Cox on May 6, 2021.

DIVISION STAFF/DIRECTOR RECOMMENDATION:

The division recommends that the Drinking Water Board approve filing of the amendment to R309-200-5(5)(a) with the Office of Administrative Rules (OAR) to begin the rulemaking process.

IMPLEMENTATION SCHEDULE:

Request Drinking Water Board Approval to File the Amendment:	11/02/2021
Deadline to File Amendment with OAR:	11/15/2021
Publication of Amendment in Utah State Bulletin:	12/01/2021
End of 30-Day Comment Period:	01/03/2022
Request Drinking Water Board Approval to Adopt the Amendment:	01/11/2022

COST ESTIMATE:

The division anticipates that the proposed rule amendment will have no aggregate costs or savings to the state budget, local governments, small businesses, non-small businesses, or other persons.

The proposed amendment will have no new compliance costs to public water systems. Other than correcting typographical errors and clarifying the combined-filter-effluent-turbidity limit for conventional and direct filtration, the amendment adopts standard turbidity performance requirements that until now have been set by the director with each approval of a membrane filtration facility. Most current membrane filtration facilities are able to meet the new turbidity performance requirements. Three very small facilities may not be able, as currently operated, to meet the new standard.

State of Utah
Administrative Rule Analysis
Revised June 2021

NOTICE OF PROPOSED RULE		
TYPE OF RULE: New ___; Amendment ___; Repeal ___; Repeal and Reenact ___		
	Title No. - Rule No. - Section No.	
Utah Admin. Code Ref (R no.):	**R309-200**	**Filing ID (Office Use Only)**
Changed to Admin. Code Ref. (R no.):	**R**	

Agency Information

1. Department:	Department of Environmental Quality	
Agency:	Division of Drinking Water	
Room no.:	n/a	
Building:	Multi-Agency State Office Building	
Street address:	195 North 1950 West	
City, state and zip:	Salt Lake City UT 84116	
Mailing address:	P.O. Box 144830	
City, state and zip:	Salt Lake City UT 84114-4830	
Contact person(s):		
Name:	**Phone:**	**Email:**
Julie Cobleigh	(385) 214-9770	jjcobleigh@utah.gov
Dani Zebelean	(385) 278-5110	dzebelean@utah.gov
Michael Newberry	(385) 515-1464	mnewberry@utah.gov
Please address questions regarding information on this notice to the agency.		

General Information

2. Rule or section catchline:

R309-200-5(5)(a). *Turbidity.*

3. Purpose of the new rule or reason for the change (Why is the agency submitting this filing?)**:**

The division is proposing to amend Subsection R309-200-5(5)(a) to clarify a turbidity limit, provide water suppliers with a consistent turbidity standard for membrane facilities treating surface water, and to correct errors in the subsection.

4. Summary of the new rule or change (What does this filing do? If this is a repeal and reenact, explain the substantive differences between the repealed rule and the reenacted rule)**:**

R309-200-5(5)(a)(i)(B) currently requires turbidity samples from combined filter effluent for conventional or direct filtration not to exceed 1 NTU at any time. With the rounding of turbidity results, the actual combined-filter-effluent-turbidity level can be up to 1.49 NTU's and still meet the 1 NTU requirement. Therefore, the proposed amendment revises the combined-filter-effluent-turbidity limit from 1 NTU to 1.0 NTU to assure compliance with the 1 NTU requirement.

In Subsection R309-200-5(5)(a)(ii), the reference to Section R309-200-7 is incorrect and is being corrected to Subsection R309-200-5(7); a missing period is being added to the last sentence in Subsection R309-200-5(5)(a)(ii); and new turbidity performance requirements are being added for water suppliers using membrane filtration to treat surface water or groundwater under the direct influence of surface water. The turbidity performance requirements are being added in conjunction with the amendment of Section R309-530-8, *Membrane Technology*.

Fiscal Information

5. Provide an estimate and written explanation of the aggregate anticipated cost or savings to:

A) State budget:

The proposed amendment is anticipated to have no aggregate costs or savings to the state budget.

B) Local governments:

The proposed amendment is anticipated to have no aggregate costs or savings to local governments.

C) Small businesses ("small business" means a business employing 1-49 persons)**:**

The proposed amendment is anticipated to have no aggregate costs or savings to small businesses.

D) Non-small businesses ("non-small business" means a business employing 50 or more persons)**:**

The proposed amendment is anticipated to have no aggregate costs or savings to non-small businesses.

E) Persons other than small businesses, non-small businesses, state, or local government entities ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an ***agency***)**:**

The proposed amendment is anticipated to have no aggregate costs or savings to persons other than small businesses, non-small businesses, state government, or local governments.

F) Compliance costs for affected persons (How much will it cost an impacted entity to adhere to this rule or its changes?)**:**

The proposed amendment is expected to have no new compliance costs for most affected persons, which are public water systems that treat surface water with conventional filtration, direct filtration, or membrane filtration. Other than correcting errors and clarifying the combined-filter-effluent-turbidity limit for conventional or direct filtration, the proposed amendment codifies turbidity performance requirements that until now have been set by the director with each approval of a membrane filtration facility. Most of the current membrane facilities are able to meet the new turbidity performance standards. Three very small membrane facilities may not be able, as currently operated, to consistently meet the new standard.

G) Comments by the department head on the fiscal impact this rule may have on businesses (Include the name and title of the department head):

The proposed amendment will have no fiscal impact on businesses in Utah.

6. A) Regulatory Impact Summary Table (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts will be included in narratives above.)

Regulatory Impact Table

Fiscal Cost	**FY2022**	**FY2023**	**FY2024**
State Government	$0	$0	$0
Local Governments	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Cost	**$0**	**$0**	**$0**
Fiscal Benefits			
State Government	$0	$0	$0
Local Governments	$0	$0	$0
Small Businesses	$0	$0	$0
Non-Small Businesses	$0	$0	$0
Other Persons	$0	$0	$0
Total Fiscal Benefits	**$0**	**$0**	**$0**
Net Fiscal Benefits	**$0**	**$0**	**$0**

B) Department head approval of regulatory impact analysis:

The Executive Director of the Department of Environmental Quality, Kimberly Shelley, has reviewed and approved this fiscal analysis.

Citation Information

7. Provide citations to the statutory authority for the rule. If there is also a federal requirement for the rule, provide a citation to that requirement:		
UC 19-4-104(1)(a)(i)		

Incorporations by Reference Information

(If this rule incorporates more than two items by reference, please include additional tables.)

8. A) This rule adds, updates, or removes the following title of materials incorporated by references (a copy of materials incorporated by reference must be submitted to the Office of Administrative Rules; *if none, leave blank*)**:**

	First Incorporation
Official Title of Materials Incorporated (from title page)	
Publisher	
Date Issued	
Issue, or version	

B) This rule adds, updates, or removes the following title of materials incorporated by references (a copy of materials incorporated by reference must be submitted to the Office of Administrative Rules; *if none, leave blank*)**:**

	Second Incorporation
Official Title of Materials Incorporated (from title page)	
Publisher	
Date Issued	
Issue, or version	

Public Notice Information

9. The public may submit written or oral comments to the agency identified in box 1. (The public may also request a hearing by submitting a written request to the agency. See Section 63G-3-302 and Rule R15-1 for more information.)

A) Comments will be accepted until (mm/dd/yyyy)**:**		01/03/2022
B) A public hearing (optional) will be held:		
On (mm/dd/yyyy)**:**	**At** (hh:mm AM/PM)**:**	**At** (place)**:**

10. This rule change MAY become effective on (mm/dd/yyyy)**:**	01/10/2022
NOTE: The date above is the date the agency anticipates making the rule or its changes effective. It is NOT the effective date. To make this rule effective, the agency must submit a Notice of Effective Date to the Office of Administrative Rules on or before the date designated in Box 10.	

Agency Authorization Information

To the agency: Information requested on this form is required by Sections 63G-3-301, 302, 303, and 402. Incomplete forms will be returned to the agency for completion, possibly delaying publication in the *Utah State Bulletin* and delaying the first possible effective date.

Agency head or designee, and title:	Tim Davis, Director, Division of Drinking Water	**Date** (mm/dd/yyyy)**:**	

R309. Environmental Quality, Drinking Water.
R309-200. Monitoring and Water Quality: Drinking Water Standards.
R309-200-5. Primary Drinking Water Standards.

(5) TURBIDITY

(a) All public water systems using surface water or ground water under the direct influence of surface water shall provide treatment consisting of both disinfection, as specified in R309-200-5(7)(a), and filtration treatment which complies with the requirements of paragraph (i), (ii) or (iii) of this section.

(i) Conventional filtration treatment or direct filtration.

(A) For systems using conventional filtration or direct filtration, the turbidity level of representative samples of a system's combined filtered effluent water shall be less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month, measured as specified in R309-200-4(3) and R309-215-9.

(B) The turbidity level of representative samples of a system's combined filtered effluent water shall at no time exceed 1.0 NTU, measured as specified in R309-200-4(3) and R309-215-9.

(C) A system that uses lime softening may acidify representative samples prior to analysis using a protocol approved by the Director.

(ii) Filtration technologies other than conventional filtration treatment, direct filtration, slow sand filtration, or diatomaceous earth filtration. A public water system may use a filtration technology not listed in paragraph (i) or (iii) of this subsection if it demonstrates to the Director, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of R309-200-5(7), consistently achieves 99.9 percent removal and/or inactivation of Giardia lamblia cysts and 99.99 percent removal and/or inactivation of viruses, and 99 percent removal of Cryptosporidium oocysts, and the Director approves the use of the filtration technology. For each approval, the Director will set turbidity performance requirements that the system shall meet at least 95 percent of the time and that the system may not exceed at any time at a level that consistently achieves 99.9 percent removal and/or inactivation of Giardia lamblia cysts, 99.99 percent removal and/or inactivation of viruses, and 99 percent removal of Cryptosporidium oocysts. For alternative filtration technology using membrane filtration, the turbidity performance requirements shall be a turbidity level of less than or equal to 0.1 NTU in at least 95 percent of the measurements taken each month and that at no time exceeds 0.5 NTU, measured as specified in Subsection R309-200-4(3) and Section R309-215-9. For alternative filtration technology other than membrane filtration, [~~T~~]the turbidity level of representative samples shall at no time exceed 5.0 NTU for any treatment technique, measured as specified in R309-215-9(1)(c) and (d).

KEY: drinking water, quality standards, regulated contaminants
Date of Enactment or Last Substantive Amendment: [~~January 15, 2019~~]
Notice of Continuation: March 13, 2015
Authorizing, and Implemented or Interpreted Law: 19-4-104

Agenda Item 9

DRINKING WATER BOARD PACKET
Rural Water Association Report

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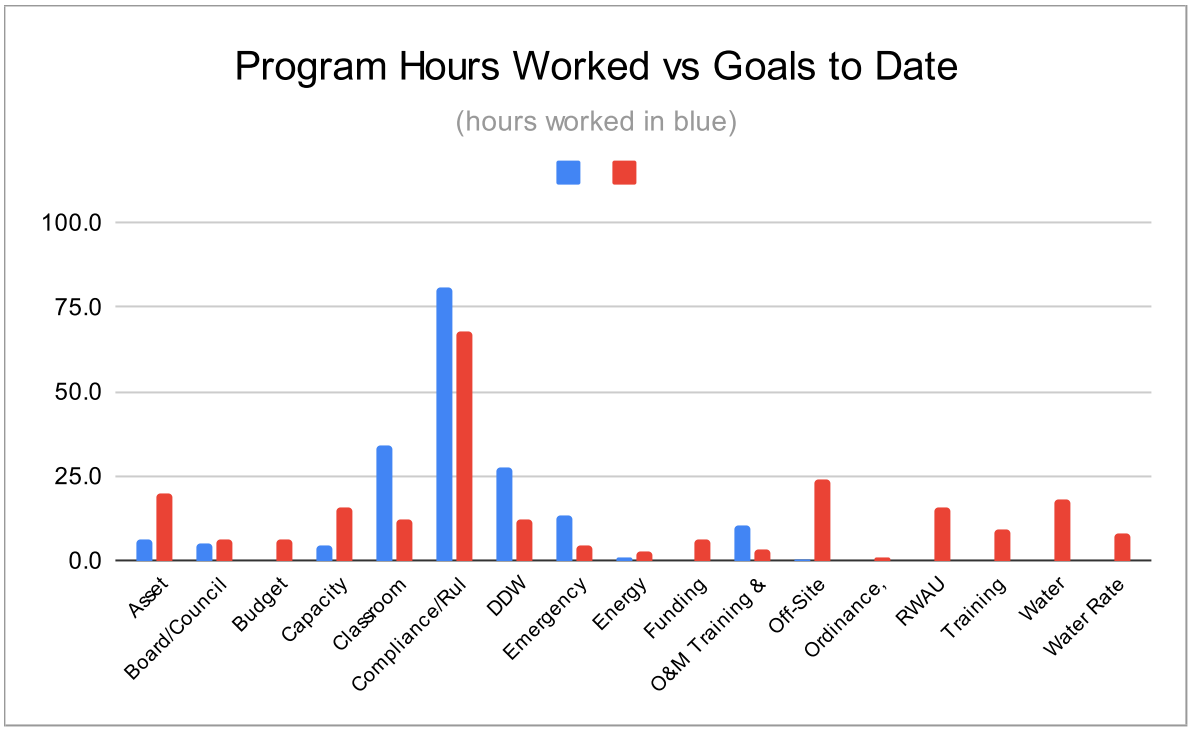
Rural Water Association - DWB Report

Report Period: September, 2021

Terry Smith - Compliance Specialist

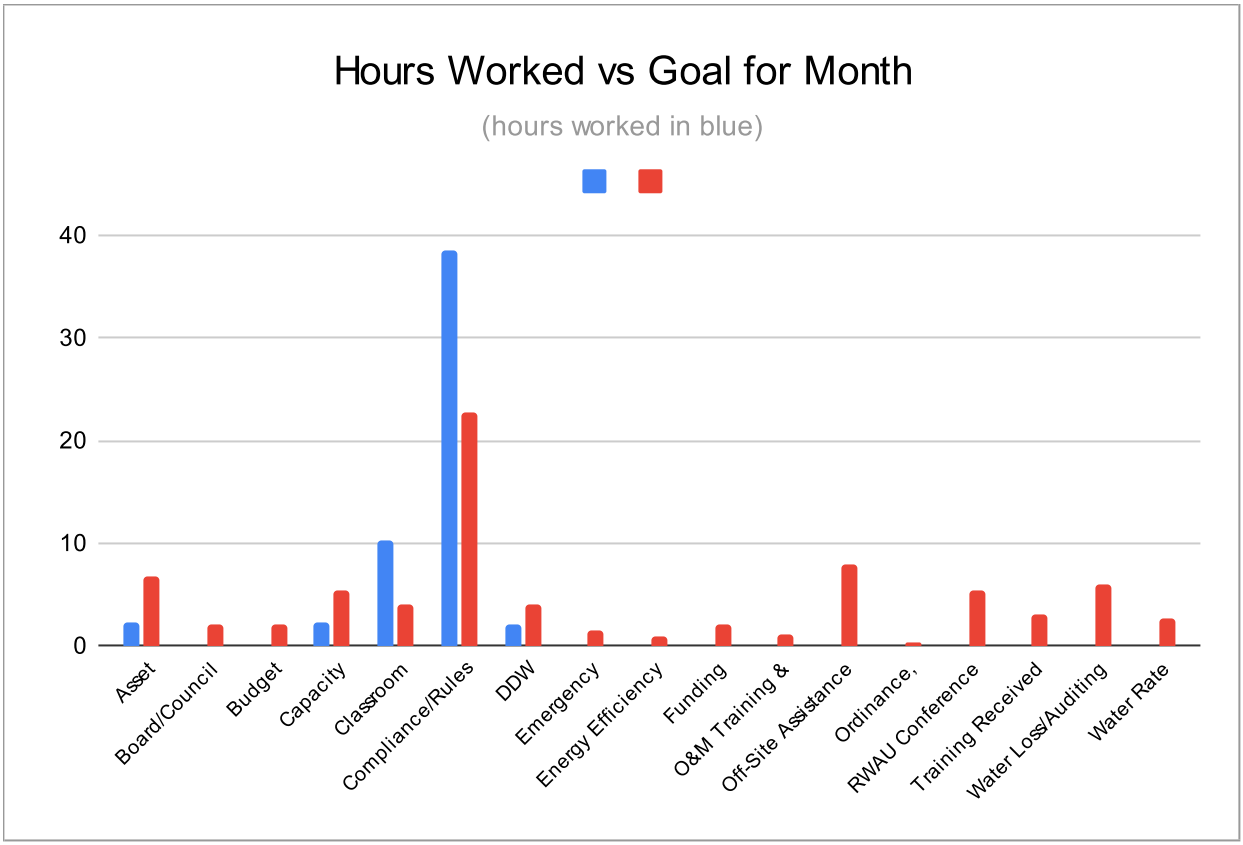
Contract Goal Titles	YTD Goal Hours Achieved	YTD Goal Hours	Annual Program Goals
Asset Management/Evaluation	6.2	20.0	80.0
Board/Council Training	5.0	6.5	26.0
Budget Planning/Evaluation	0.0	6.5	26.0
Capacity Development/Master Planning	4.8	16.0	64.0
Classroom Instruction/Training	34.0	12.0	48.0
Compliance/Rules Assistance	80.7	68.0	272.0
DDW Interaction/Meetings/Reports	27.5	12.0	48.0
Emergency Response	13.3	4.5	18.0
Energy Efficiency Study	1.0	3.0	12.0
Funding Procurement	0.0	6.0	24.0
O&M Training & Assistance	10.5	3.5	14.0
Off-Site Assistance	0.5	24.0	96.0
Ordinance, Resolutions, By-Laws Development	0.0	1.0	4.0
RWAU Conference	0.0	16.0	64.0
Training Received	0.0	9.0	36.0
Water Loss/Auditing	0.0	18.0	72.0
Water Rate Development/Analysis	0.0	8.0	32.0
Totals:	**184**	**234**	**936**



Report Period: September, 2021

Notable Assistance & Work Performed

System	Description:
KANE COUNTY WCD	Proctor exam - Seth Giddings
PINE VALLEY MTN FARMS	Sampling advice and system treatment rules
ZION NP ZION CANYON	Lead/Copper rule and customer notice assistance
PROVO CITY WATER	Teaching CC CEU training
CAMP WAPITI (23035)	Researching deficiency - Seasonal Startup
DESERT SAGE (24051)	Advising Red Jensen TC/e. Coli samples. Flushing & chlorine testing
ELKRIDGE ESTATES	Helping John with rules and establishing him as operator.
CURRANT CREEK JUNCTION (26(	Online meeting going over compliance issues with Duran
PIUTE-SEVIER/DEER CR WTR	Meeting with water board to discuss growth/capacity/master plan
WILSON ARCH (19069)	Online meeting with Eric - capacity assessment method
COBBLES CONDOMINIUM (29126	Assisting Joel with compliance direction and resources
VA MEDICAL CENTER #18173	Contacted/explained to system regarding AWIA/RRA certification
MIDVALE CITY	Working on AWIA/RRA certification. Contacted system.
WINCHESTER HILLS WATER	Working on AWIA past due report - contacting systems, etc.
PROVIDENCE CITY	Working on AWIA past due report - contacting systems, etc.



Rural Water Association of Utah
Water System Assistance Report

Report Month: September
Contract Employee: Terry Smith

Total Working Hours:	176
Hours Assisting Specific Systems:	45.50
System assistance percentage of total working hours:	**25.85%**

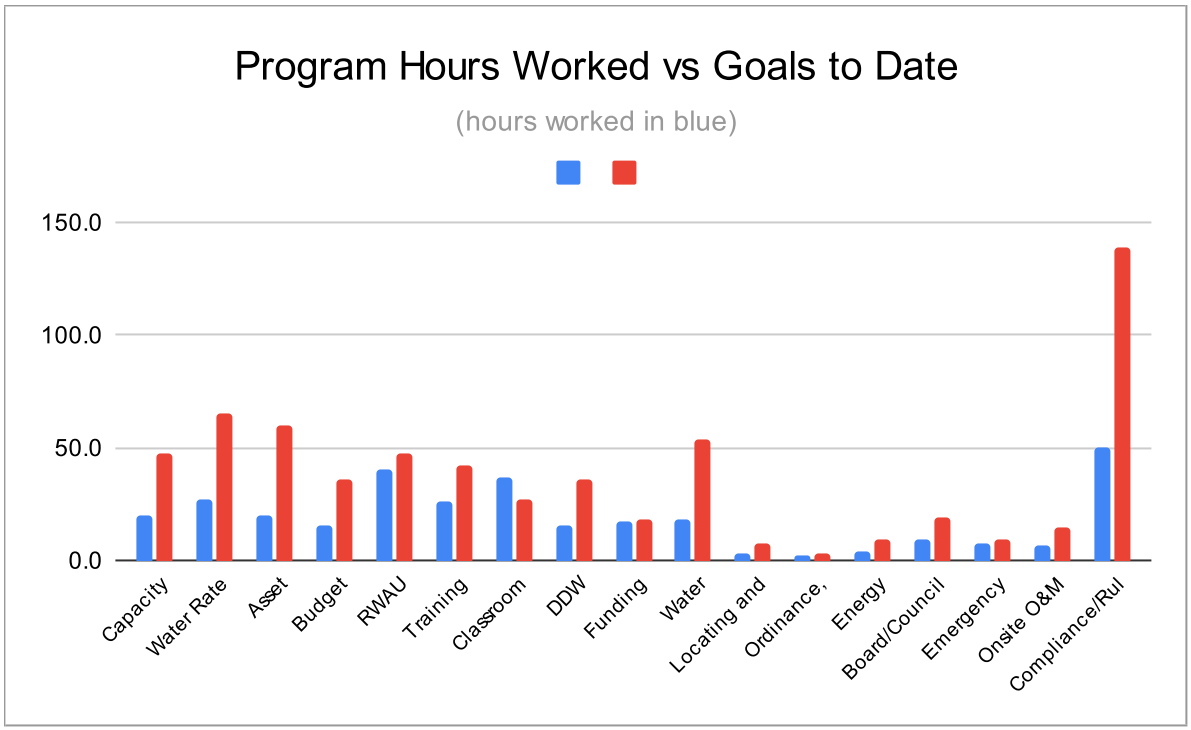
Date:	Description:	Water System:	Task Hours:
9/7/2021	Proctor exam - Seth Giddings	KANE COUNTY WCD	4.00
9/8/2021	Helping Wade with operator certification and search for new op.	WANSHIP MUTUAL WATER CO	1.00
9/8/2021	Conversation with B. Pattee regarding Camp Wapiti deficiences	CAMP WAPITI (23035)	0.50
9/8/2021	Working on email to systems in violation - AWIA certification	VA MEDICAL CENTER #18173	1.25
9/8/2021	Email to Cobbles Condominum - compliance assistance	COBBLES CONDOMINIUM (29126)	0.75
9/8/2021	Sampling advice and system treatment rules	PINE VALLEY MTN FARMS	0.50
9/8/2021	Lead/Copper rule and customer notice assistance	ZION NP ZION CANYON	0.50
9/9/2021	Modifying Phil's preliminary report - Hanksville Town	HANKSVILLE TOWN	1.00
9/9/2021	Teaching CC CEU training	PROVO CITY WATER	1.00
9/9/2021	Metering question - Jody Richenbaugh	GLENDALE TOWN CORP	0.50
9/9/2021	Teaching CC CEU training	PROVO CITY WATER	1.00
9/9/2021	Well drop piping - Paula Milby	MOUNTAIN VIEW SSD	0.50
9/13/2021	Sending emails out to systems in violation - no certified operator	KANOSH TOWN	1.00
9/13/2021	Helping Matt with leads to pump repair companies	FILLMORE CITY	0.75
9/13/2021	Paula called to ask about well piping and how to store, etc.	MOUNTAIN VIEW SSD	0.50
9/13/2021	Discussion with Tim on source capacity calc. Set up onsite meeting.	PIUTE-SEVIER/DEER CR WTR	0.50
9/15/2021	Confirming meeting for tomorrow	LEEDS DOMESTIC WATER	0.25
9/15/2021	Setting up online meeting - emailed to Duran	CURRANT CREEK JUNCTION (26070	0.25
9/15/2021	Researching deficiency - Seasonal Startup	CAMP WAPITI (23035)	1.00
9/16/2021	Advising Red Jensen TC/e. Coli samples. Flushing & chlorine testing	DESERT SAGE (24051)	1.50
9/16/2021	Helping John with rules and establishing him as operator.	ELKRIDGE ESTATES	1.00
9/17/2021	Helping Jim with Tier 2 violation notice/template	CAMP WAPITI (23035)	1.00
9/17/2021	Proctor test - Lynn Heaton	MIDVALLEY EST WTR CO	3.00
9/20/2021	Setting up online meeting	WILSON ARCH (19069)	0.50
9/20/2021	Setting up online meeting	CURRANT CREEK JUNCTION (26070	0.50
9/20/2021	Preparation for meeting at 2:00	CURRANT CREEK JUNCTION (26070	1.00
9/20/2021	Online meeting going over compliance issues with Duran	CURRANT CREEK JUNCTION (26070	1.25
9/22/2021	Meeting with water board to discuss growth/capacity/master plan	PIUTE-SEVIER/DEER CR WTR	1.75
9/23/2021	Discussion with Justin - chlorine reaction in distribution system	NEPHI CITY WATER	0.50
9/23/2021	Discussion with Matt - Cross Connection rules	FILLMORE CITY	0.75
9/24/2021	Meeting preparation - capacity assessment spreadsheet	WILSON ARCH (19069)	1.00
9/24/2021	Online meeting with Eric - capacity assessment method	WILSON ARCH (19069)	0.50
9/27/2021	Determining compliance issues, talked to Linda and Nathan Hall	PINION FORREST (07073)	1.50
9/27/2021	Advised Mike regarding declaration of service area	COTTONWOOD IMP DIST	0.50
9/29/2021	Assisting Joel with compliance direction and resources	COBBLES CONDOMINIUM (29126)	3.00
9/29/2021	Contacted/explained to system regarding AWIA/RRA certification	VA MEDICAL CENTER #18173	1.00
9/29/2021	Working on AWIA/RRA certification. Contacted system.	MIDVALE CITY	0.50
9/29/2021	Assisting Michael with flushing/removing air from lines	ALPINE COVE WTR SSD	0.50
9/30/2021	Working on AWIA past due report - contacting systems, etc.	WINCHESTER HILLS WATER	5.00
9/30/2021	Working on AWIA past due report - contacting systems, etc.	PROVIDENCE CITY	1.00
9/30/2021	Helping Rock with TCR sampling rule	ESCALANTE VLY HOUSING	0.50
9/30/2021	Review list compliance list from Michael O'Shae	INDIAN HEATH SERVICE	1.00

Rural Water Association - DWB Report

Report Period: September, 2021

Janell Braithwaite - Management Technician

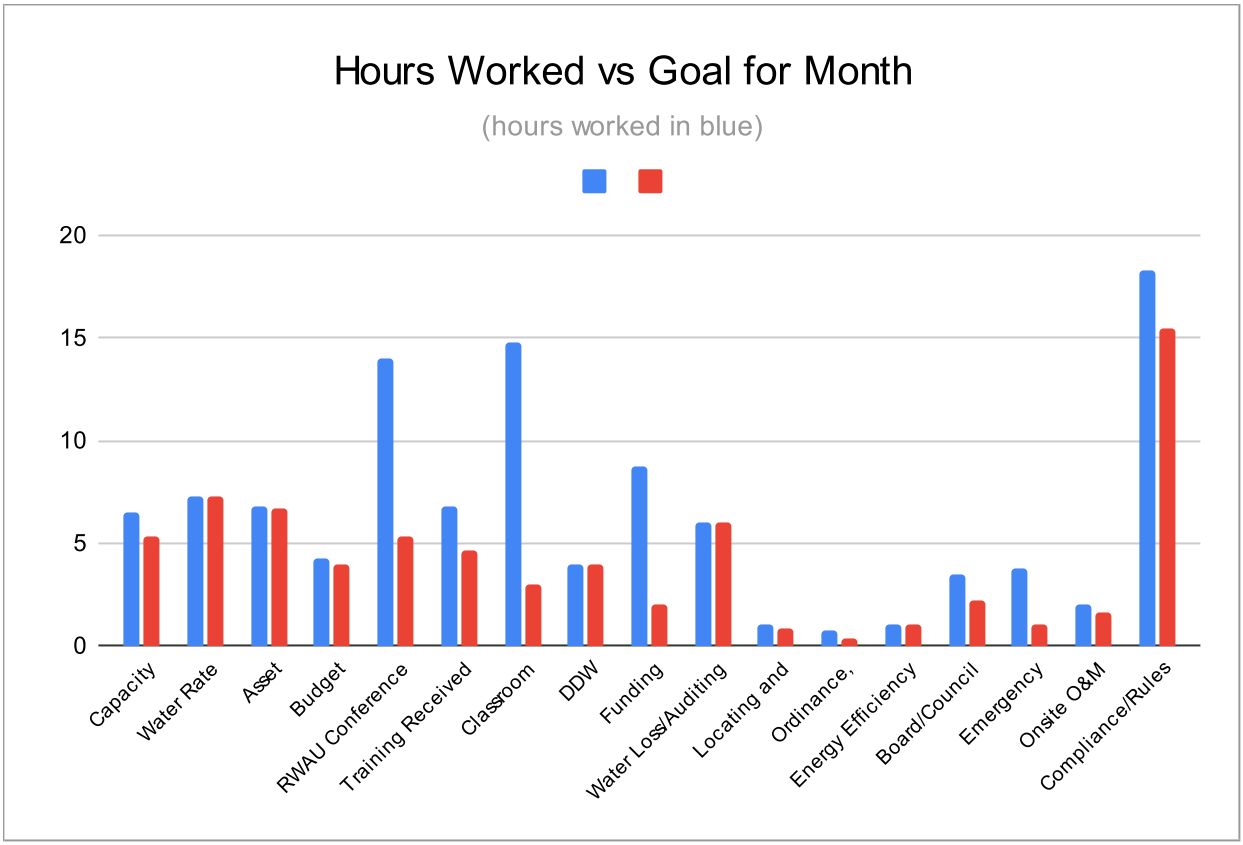
Contract Goal Titles	YTD Goal Hours Achieved	YTD Goal Hours	Annual Program Goals
Capacity Development/Master Planning	19.7	48.0	64.0
Water Rate Development & Fee Analysis	27.2	65.3	87.0
Asset Management/Evaluation	20.2	60.0	80.0
Budget Planning/Evaluation	15.5	36.0	48.0
RWAU Conference	40.5	48.0	64.0
Training Received	26.0	42.0	56.0
Classroom Instruction/Training	37.3	27.0	36.0
DDW Interaction/Meetings/Reports	15.2	36.0	48.0
Funding Procurement	17.0	18.0	24.0
Water Loss/Auditing	18.5	54.0	72.0
Locating and Securing Engineering	3.3	7.5	10.0
Ordinance, Resolution, By-Law Development	2.7	3.0	4.0
Energy Efficiency Study	3.8	9.0	12.0
Board/Council Training	9.5	19.5	26.0
Emergency Response	8.0	9.0	12.0
Onsite O&M Training	7.0	15.0	20.0
Compliance/Rules Assistance, CCC, Water Monitor	50.3	138.8	185.0
Totals:	**322**	**636**	**848**



Report Period: September, 2021

Notable Assistance & Work Performed

System	Description:
	Teach CCC Admin class
EUREKA CITY	Contacted by Lynn at Eureka requesting help w/CCR
KANARRAVILLE TOWN	Sent Utah Code to David and Heidi re: rates and resolutions
BEAR RIVER WCD	Email from Dale, systems haven't done RRA, contact made w/Carl
CEDAR RIDGE	Contact Nathan Hall, he will help Wes get system up and compliant
SOUTH RIM WATER	Contacted Lee re: need help with project and rates
ECHO MUTUAL WATER CO	Phone call from Kory re: update on project, funding and water loss
PINEVIEW WEST WTR CO	Contact by Ben, Water Resources, re:PI meter funding,called Peter
PINEVIEW WEST WTR CO	Contacted by Peter re: funding for secondary water meters
HANNA WTR/SWR DIST	Phone call from Wendi, hiring PW to help Rabbit, CCR not done
COVERED BRIDGE CANYON	Phone call from Nick, would like RWAU to do CCRs for system
WILLARD CITY	Contacted Michelle at Willard re: IPS pending points
CENTERFIELD TOWN	Present water rate study w/drought rate to Centerfield City Council
HIGH VALLEY WATER CO	Meet w/High Valley Water Board re: project, water loss, funding
COTTONWOOD IMP DIST	Met w/Water Board re: secondary water concerns, rates, policies



Rural Water Association of Utah

Water System Assistance Report

Report Month: September

Contract Employee: Janell Braithwaite

Total Working Hours:	176.00
Hours Assisting Specific Systems:	66.75
System assistance percentage of total working hours:	**37.93%**

Date:	Description:	Water System:	Task Hours:
9/2/2021	Discussion w/Mark re: fires, floods and funding for solar project	PACK CREEK RANCH	0.50
9/2/2021	Call from David and Heidi re: resolutions for rate change	KANARRAVILLE TOWN	0.25
9/2/2021	Research Utah Code re: rates and resolutions	KANARRAVILLE TOWN	0.25
9/2/2021	Contacted by Lynn at Eureka requesting help w/CCR	EUREKA CITY	0.25
9/2/2021	Sent Utah Code to David and Heidi re: rates and resolutions	KANARRAVILLE TOWN	0.25
9/2/2021	Researched DDW re: rules and regulations	MANTUA TOWN	1.00
9/2/2021	Received questions from Rachel re: water rate study	GOSHEN TOWN	0.50
9/2/2021	Researched DDW re: rules and regulations	MANTUA TOWN	1.25
9/3/2021	Contact Brittney and Emilie to complete CCR for Eureka	EUREKA CITY	0.25
9/3/2021	Contacted by Karen at High Valley re: water rates/budget, loan info	HIGH VALLEY WATER CO	0.75
9/7/2021	Work on High Valley information, contact Curt re: board mtg. 9/28	HIGH VALLEY WATER CO	1.50
9/7/2021	Contacted by Wes at Cedar Ridge re: bottling company, researched	CEDAR RIDGE DIST CO	1.25
9/7/2021	Email from Dale, systems haven't done RRA, contact made w/Carl	BEAR RIVER WCD	0.25
9/7/2021	Contacted Jason at Sunset, RRA needs to be completed	SUNSET CITY	0.25
9/7/2021	Reviewed DDW rules and regulations for fencing rules	MANTUA TOWN	0.75
9/7/2021	Contacted by Jason re: RRA has been certified today	SUNSET CITY	0.25
9/7/2021	Contact Terry re: Cedar Ridge, want to bottle water --questions	CEDAR RIDGE	0.25
9/7/2021	Contacted by Carl, RRA certification completed	BEAR RIVER WCD	0.25
9/8/2021	Talk w/Wes re:process to get system approved, refer to Nathan Hall	CEDAR RIDGE	0.75
9/8/2021	Contact Nathan Hall, he will help Wes get system up and compliant	CEDAR RIDGE	0.25
9/8/2021	Researched South Rim-per Jake, need help with assets and rates	SOUTH RIM WATER	0.25
9/8/2021	Contacted by Bailey Smith, EPA re: Sunset City RRA	SUNSET CITY	0.25
9/8/2021	Contacted Lee re: need help with project and rates	SOUTH RIM WATER	1.00

9/8/2021	Phone call from Kory re: update on project, funding and water loss	ECHO MUTUAL WATER CO	0.50
9/9/2021	David and Heidi needed help w/asset management, resolution, etc.	KANARRAVILLE TOWN	0.50
9/9/2021	Contact re: drought survey, discuss hiring of new PW, assets, certs	GUNNISON CITY	1.00
9/9/2021	Reviewed DDW email re: Scottsville Water Users need for water	Scottsville Water Users	0.25
9/9/2021	Left message w/Wendle re: drought survey contact	WALES TOWN	0.25
9/10/2021	Work on Centerfield's water rate study to prepare for mtg next wk	CENTERFIELD TOWN	1.25
9/10/2021	Discuss adoption of new rates and council mtg	KANARRAVILLE TOWN	0.50
9/10/2021	Discussed High Valley Water w/Curt, rates, project and mtg.	HIGH VALLEY WATER CO	0.25
9/10/2021	Contacted by Karen re: engineer information	HIGH VALLEY WATER CO	0.75
9/13/2021	Contact Terry & Curt, did Scottsville Water Users get help?	Scottsville Water Users	0.25
9/13/2021	Researched information re: secondary water meter funding	PINEVIEW WEST WTR CO	0.75
9/13/2021	Tried to contact Chip re: drought response survey request	TICABOO TOWN	0.25
9/13/2021	Tried to contact Zach re: drought response survey request	NORTH LOGAN CITY	0.25
9/13/2021	Contact Curt to see if he wanted to contact Angell Springs re:drought	ANGELL SPRINGS SSD	0.25
9/13/2021	Contact Kim, Water Resources, to get secondary funding info	PINEVIEW WEST WTR CO	1.50
9/13/2021	Contact Clint and Dan re: drought response survey request	AURORA CITY	0.50
9/13/2021	Contact by Ben, Water Resources, re:PI meter funding,called Peter	PINEVIEW WEST WTR CO	0.75
9/13/2021	Contacted Scott re: drought response survey request, update project	BICKNELL TOWN	0.50
9/13/2021	Tried to contact Jeffrey re: drought response survey request	DEER SPRINGS RANCH-LOWER	0.25
9/13/2021	Tried to contact Katrina re: drought response survey request	MARBLE HILL WATER CO	0.25
9/13/2021	Tried to contact Jeff re: drought response survey request	EPHRAIM CITY	0.25
9/13/2021	Contacted by Gunnison City for help with records compliance	GUNNISON CITY	0.75
9/14/2021	Tried to contact Ian w/Sunrise for High Valley, left message	HIGH VALLEY WATER CO	0.25
9/14/2021	Contact w/Lacey re: water rate study and mtg. tomorrow night	CENTERFIELD TOWN	0.75
9/14/2021	Contact w/Nick re: CCR and CCC program, Emilie will do CCR	COVERED BRIDGE CANYON	1.00
9/14/2021	Contacted by Peter re: funding for secondary water meters	PINEVIEW WEST WTR CO	0.50
9/14/2021	Phone call w/Michelle, contacted Kent re: ARPA app deadline	MANTI CITY	0.50
9/14/2021	Phone call from Wendi, hiring PW to help Rabbit, CCR not done	HANNA WTR/SWR DIST	1.00
9/14/2021	Phone call from Nick, would like RWAU to do CCRs for system	COVERED BRIDGE CANYON	0.25
9/14/2021	Worked on job description and ad for PW opening	HANNA WTR/SWR DIST	1.00
9/15/2021	Contacted Michelle at Willard re: IPS pending points	WILLARD CITY	0.50
9/15/2021	Visit w/Bruce Parker, Planning & Development re: Master Plan	WILLARD CITY	0.50
9/15/2021	Visit w/Wendi re: rules and regulations	HANNA WTR/SWR DIST	0.75

9/15/2021	Set up for tonight's meeting and discussed water rate study w/Lacey	CENTERFIELD TOWN	0.75
9/15/2021	Present water rate study w/drought rate to Centerfield City Council	CENTERFIELD TOWN	1.25
9/16/2021	Update water rate study for Centerfield with new requests/info	CENTERFIELD TOWN	0.50
9/16/2021	Review IPS reports for possible projects/compliance	CENTRAL VLY WTR RECL	0.25
9/16/2021	Touch base w/Greg to see how project was coming	LAKE ROCKPORT EST	0.25
9/16/2021	Review IPS reports for possible projects/compliance	VENICE WARD CHURCH	0.25
9/16/2021	Review IPS reports for possible projects/compliance	AURORA CITY	0.25
9/16/2021	Contact Wendy re: energy efficiency of system	HANNA WTR/SWR DIST	1.00
9/16/2021	Review IPS reports for possible projects/compliance	REDMOND TOWN	0.25
9/16/2021	Review IPS reports for possible projects/compliance	MAYFIELD TOWN	0.25
9/16/2021	Review IPS reports to see if anything had been cleared up	CENTERFIELD TOWN	0.25
9/16/2021	Review IPS reports to see if anything had been cleared up	GUNNISON CITY	0.25
9/16/2021	Review IPS reports for possible projects/compliance	STERLING TOWN	0.25
9/16/2021	Contacted Jen and Piper to see about progress on rates and get letter	ALTA TOWN	0.25
9/16/2021	Reviewed IPS and contacted to see where they were at on project	BIG WATER MUNICIPAL	0.25
9/16/2021	Review IPS reports and contacted Kaelyn to see where project was at	BALLARD W/S DISTRICT	0.25
9/16/2021	Started to review IPS and will contact to see progress	CLARK BENCH (13060)	0.25
9/20/2021	Review funding options for Covered Bridge Water	COVERED BRIDGE CANYON	0.50
9/20/2021	Contact Jenifer at Big Water re: progress on project, rates, assets	BIG WATER MUNICIPAL	0.50
9/20/2021	Contact Greg re: job in Central then contacted potential operator	CENTRAL VLY WTR RECL	0.75
9/20/2021	Discuss High Valley w/Curt and meeting schedule for next week	HIGH VALLEY WATER CO	0.50
9/20/2021	Look up Hoytsville info on DDW for compliance, discuss w/Jake	HOYTSVILLE PIPE WTR CO	1.25
9/20/2021	Discuss HR and hiring practices w/councilmember Taylor	GUNNISON CITY	2.25
9/21/2021	Review Price info to visit, IPS, etc.	PRICE CITY	0.25
9/21/2021	Review Elmo info to visit, IPS, etc.	ELMO TOWN	0.25
9/21/2021	Review Cleveland info to visit, IPS, etc.	CLEVELAND TOWN	0.25
9/21/2021	Review Ferron info to visit, IPS, etc.	FERRON CITY	0.25
9/21/2021	Review Huntington info to visit, IPS, etc.	HUNTINGTON CITY	0.25
9/21/2021	Review Clawson info to visit, IPS, etc.	CLAWSON TOWN	0.25
9/21/2021	Contacted by Jeffrey re: drought survey response	KANAB CITY	0.25
9/21/2021	Review Castle Valley SSD info	CASTLE VALLEY SSD	0.25
9/21/2021	Stopped in Centerfield City Hall to discuss rate study w/Lacey	CENTERFIELD TOWN	0.25
9/21/2021	Discuss algae blooms w/Miles and planned future projects	PRICE CITY	0.50

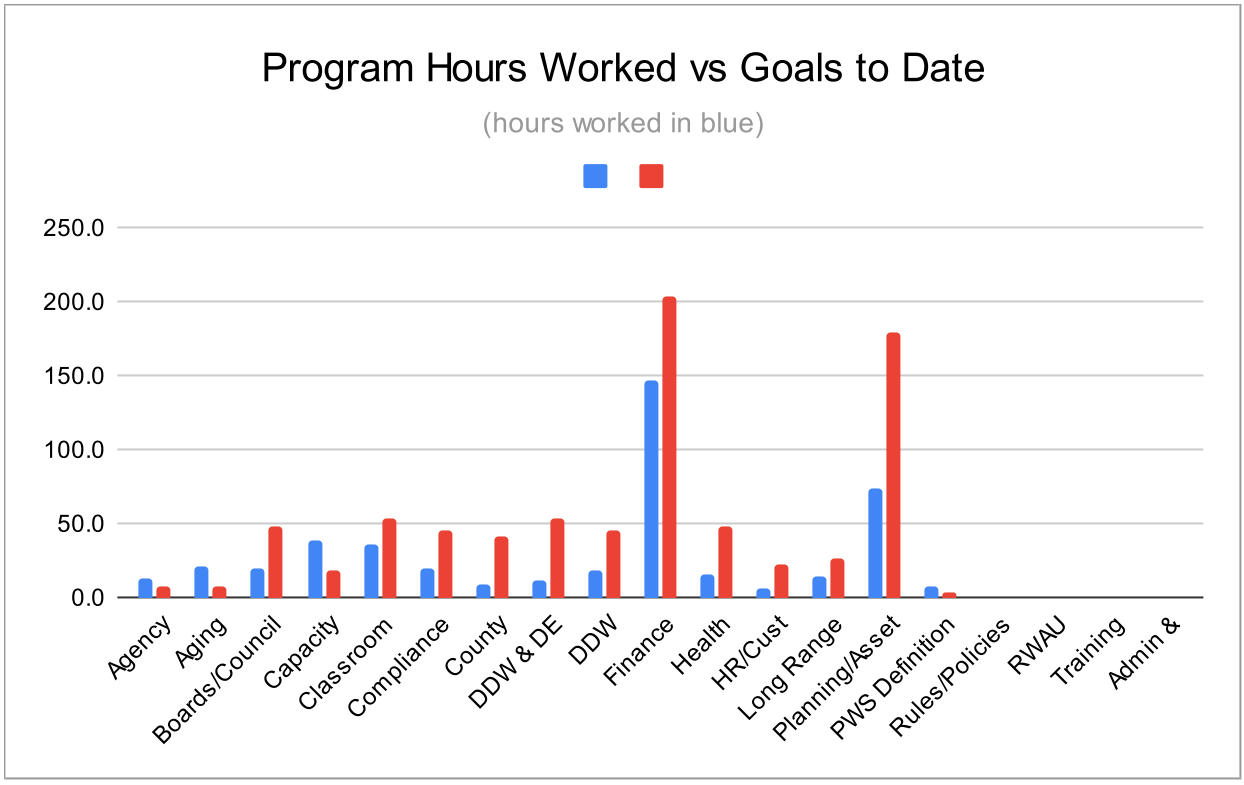
9/21/2021	Contact Jacob-just left for a ball game, will contact him tomorrow	HUNTINGTON CITY	0.25
9/22/2021	Called Jacob Sharp to discuss water systems he takes care of	CASTLE VALLEY SSD	0.25
9/22/2021	Contacted Delena at Elmo re: projects and help needed	ELMO TOWN	0.25
9/22/2021	Contacted Maegan at Clawson re: projects and help needed	CLAWSON TOWN	0.25
9/22/2021	Contacted Shannon at Cleveland re: projects and help needed	CLEVELAND TOWN	0.25
9/22/2021	Contacted Tara at Emery re: projects and help needed	EMERY TOWN	0.25
9/22/2021	Contacted Brittany at Ferron re: projects and help needed	FERRON CITY	0.25
9/22/2021	Contacted Jenene at Huntington re: projects and help needed	HUNTINGTON CITY	0.25
9/22/2021	Contacted by Brydi at Cleveland re: job opening	CLEVELAND TOWN	0.25
9/22/2021	Contacted Maegan at Orangeville re: projects and help needed	ORANGEVILLE CITY	0.25
9/22/2021	Called Alyssa at Paradise re: water projects, asset management	PARADISE TOWN	0.50
9/27/2021	Phone call from Curt re: High Valley Board mtg. tomorrow night	HIGH VALLEY WATER CO	0.50
9/27/2021	Reviewed engineers report for High Valley-compared info	HIGH VALLEY WATER CO	1.25
9/27/2021	Contacted by Mike-would like help with wrs	COTTONWOOD IMP DIST	0.50
9/27/2021	Contacted by Jenene re: water situation, rates and assets	HUNTINGTON CITY	0.25
9/27/2021	Contacted by Mike again re: water rate study, set up meeting	COTTONWOOD IMP DIST	0.50
9/27/2021	Discuss compliance rules and asset mgmt w/Councilmember Taylor	GUNNISON CITY	2.00
9/27/2021	Discuss budget w/City Treasurer, DeAnn	GUNNISON CITY	0.75
9/27/2021	Research info for trip tomorrow to Cottonwood Mutual	COTTONWOOD MUTUAL	0.25
9/27/2021	Research info for trip tomorrow to Morgan City	MORGAN CITY	0.25
9/27/2021	Research info for trip tomorrow to Echo	ECHO MUTUAL WATER CO	0.25
9/28/2021	Phone call w/Curt re: High Valley MAGI	HIGH VALLEY WATER CO	0.25
9/28/2021	Contact Heather at DDW re: MAGI for High Valley	HIGH VALLEY WATER CO	0.25
9/28/2021	Phone call w/Curt re: engineers updates to High Valley budget	HIGH VALLEY WATER CO	0.50
9/28/2021	Contact Liz at Clark Bench for progress on getting system approved	CLARK BENCH (13060)	0.25
9/28/2021	Phone call from Curt re: info from Sunrise about funding	HIGH VALLEY WATER CO	0.25
9/28/2021	Contacted by Vickie-needed help w/asset management sheet	SIGURD TOWN WATER	0.75
9/28/2021	Meet w/High Valley Water Board re: project, water loss, funding	HIGH VALLEY WATER CO	2.25
9/29/2021	Visit w/Stephanie re: water situation, IPS, will call Chad next week	MORGAN CITY	0.25
9/29/2021	Met w/Water Board re: secondary water concerns, rates, policies	COTTONWOOD IMP DIST	2.00
9/29/2021	Contact Kory to discuss water loss situation	ECHO MUTUAL WATER CO	1.00
9/30/2021	Work on asset management sheet for Sigurd	SIGURD TOWN WATER	1.00
9/30/2021	Go over water loss w/Travis and project to improve system	SIGURD TOWN WATER	2.00

Rural Water Association - DWB Report

Report Period: September, 2021

Curt Ludvigson - Development Specialist

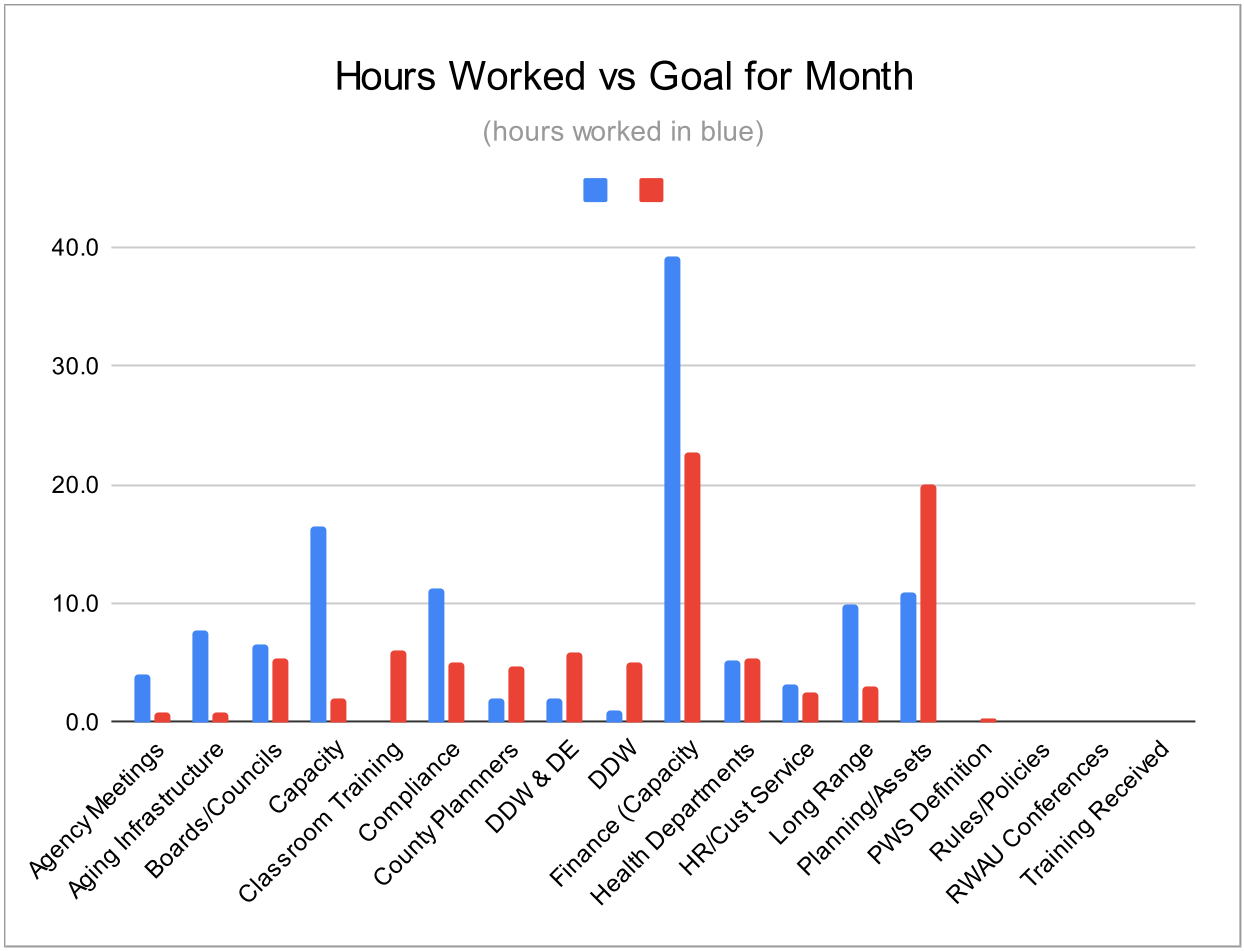
Contract Goal Titles	YTD Goal Hours Achieved	YTD Goal Hours	Annual Program Goals
Agency Meetings	13	8	10
Aging Infrastructure Planning	20	8	10
Boards/Councils	19	48	64
Capacity Development Planning	38	18	24
Classroom Training	36	54	72
Compliance (Capacity Development)	20	45	60
County Plannners	9	42	56
DDW & DE	12	53	71
DDW Interaction/Meetings	18	45	60
Finance (Capacity Development)	146	204	272
Health Departments	16	48	64
HR/Cust Service (Capacity Development)	6	23	30
Long Range Planning	15	27	36
Planning/Assets (Capacity Development)	73	180	240
PWS Definition Training	8	3	4
RWAU Conferences	9	27	36
Training Received	1	18	24
Totals:	**462**	**850**	**1,133**



Report Period: September, 2021

Notable Assistance & Work Performed

System	Description:
CORNISH TOWN CORP	I met with the Town Clerk of Cornish Town and worked on an applicatio
WELLSVILLE CITY	I met with the Public Works Director and the City Recorder and went ov
BRIDGERLAND WATER CO	I met with the owner of Bridgerland Mutual and discussed the issues th
COVERED BRIDGE CANYON	I met with the Board of Covered Bridge and did a Long Range Planning
INDIAN RIDGE WCD	I met with the President of Indian Ridge Water and went over plans that
FAIRVIEW CITY	Preparing information to present to the Fairview Council for a Long Ran
GUNNISON CITY	I met with one of the Gunnison Councilmembers and discussed the idea
LOA WATERWORKS	Meeting with the Town Clerk going over the rates I have been working o
TEASDALE SSD	I met with the Secretary of the Teasdale SSD and went over the issues
COVERED BRIDGE CANYON	Continued my session with the Board of Covered Bridge on Long Rang
OAKLEY CITY	I met with the City Recorder and the Operator and went over some of th
PINE MOUNTAINS MUT WTR	I met with the Pine Mountain Mutual Board and also many public citizen
HIGH VALLEY WATER CO	Zoom meeting with High Valley Water where we discussed the projects
CENTERVILLE CITY	Lunch Meeting with the Public Works Director of Centerville discussing
GENOLA TOWN	I met with the Councilmember over the water and discussed the progre



Agenda Item 10(A)

Board Enforcement Report November 2021						
PWS ID	System Name	PWS Type	Population	IPS PTS	Rating	Rating Date
Adminstrative Order Systems						
UTAH11043	OLD MEADOWS WATER CO	C	48	65	Not Approved	4/18/2017
Corrective Action Systems						
UTAH13001	ALTON TOWN WATER SYSTEM	C	136	50	Corrective Action	6/24/2021
UTAH18104	MOUNTAIN DELL CAFE AND GOLF COURSE	NC	300	45	Corrective Action	10/14/2020
UTAH18179	L & B RESOURCES	NTNC	100	440	Corrective Action	8/27/2020
UTAH25184	BATEMANS MOSIDA FARMS	C	90	240	Corrective Action	4/24/2020
UTAH02062	WILLOW CREEK WATER CO	C	175	0	Corrective Action	8/11/2020
UTAH08043	TRAIL CYN RESIDENTS ASSN	C	42	175	Corrective Action	9/2/2020
UTAH23022	TOOELE ARMY DEPOT NORTH	NTNC	541	0	Corrective Action	2/9/2021
UTAH02010	EAST GROUSE CREEK PIPELINE CO	C	70	100	Corrective Action	9/9/2020
UTAH25013	GOSHEN TOWN WATER SYSTEM	C	925	115	Corrective Action	3/8/2016
UTAH02031	GIRLS HOME	NC	300	65	Corrective Action	5/27/2020
UTAH22003	ECHO MUTUAL WATER SYSTEM	C	70	60	Corrective Action	8/28/2020
UTAH22114	BULL MOOSE WATERWORKS	NC	136	70	Corrective Action	8/18/2020
UTAH22001	CLUFF WARD PIPELINE CO	C	188	200	Corrective Action	9/30/2019
UTAH26033	DEER CREEK PARK	NC	150	410	Corrective Action	7/8/2020
UTAH27093	BIG PLAINS SW SSD - CANAAN RANCH	C	56	245	Corrective Action	8/26/2020
UTAH15027	ROUND VALLEY COUNTRY CLUB	NC	25	65	Corrective Action	4/10/2019
UTAH25133	JEHOVAHS WITNESS CHURCH	NC	100	5	Corrective Action	9/16/2019
UTAH26059	WASATCH MOBILE HOME PARK	C	31	305	Corrective Action	10/16/2020
UTAH27086	NORTH VALLEY RANCHES SUB	C	63	195	Corrective Action	5/4/2021
Not Approved Systems						
UTAH07039	ESCAPE RV RESORTS - LAKESIDE PARK	NC	28	75	Not Approved	11/3/2016
UTAH02078	M & J TRAILER HOME COMMUNITY	C	27	95	Not Approved	8/20/2018
UTAH25077	RIVERBEND GROVE INC	NC	25	600	Not Approved	2/10/2021
UTAH07067	SOUTH DUCHESNE CULINARY WATER	C	525	100	Not Approved	4/24/2019
UTAH15029	STODDARD INN	NC	25	144	Not Approved	4/24/2020