Drinking Water Board Packet

February 28, 2019

Agenda

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

DRINKING WATER BOARD MEETING
February 28, 2019 – 2:00 pm
Dixie Convention Center – Garden Room
1835 Convention Center Drive
St. George, Utah 84790

Marie Owens' Cell Phone #: (801) 505-1973

1. Call to Order

2. Roll Call – Marie Owens

3. Approval of the Minutes
   A. January 15, 2019

4. Discussion on Programmatic Financing – Michael Grange

5. Financial Assistance Committee Report
   A. Status Report – Michael Grange
   B. Project Priority List – Michael Grange
   C. SRF Applications
      i. STATE:
         a) Kane County Water Conservancy District – Heather Bobb
      ii. FEDERAL:
         a) Diamond Valley Acres – Lisa Nelson
         b) Granger Hunter Improvement District – Lisa Nelson
         c) M & J Trailer Home Community – Heather Bobb

6. Rulemaking Activities
   A. Current Rulemaking Activities (Board Action Needed)
      i. None
   B. Future Rulemaking Activities (Informational)
      i. R309-300: Certification Rules for Water Supply Operators – Michael Grange
         a) Impact to Water Systems
         b) Coordination with Stakeholders
      ii. R309-400: Water System Rating Criteria – Rachael Cassady
         a) Proposed Draft Rule Language
         b) Existing Rule Language
         c) IPS Implementation Policy and Table of IPS Points (Proposed Draft)
         d) Impact and Outreach

iii. R309-105: Administration: General Responsibilities of Public Water Systems
   a) Customer Complaints – Marie Owens
   b) Emergency Response – Ryan Dearing

7. Rural Water Association Report – Dale Pierson

8. Open Board Discussion – Betty Naylor

9. Directors Report
   A. Enforcement Report
   B. Other

10. Other

11. Public Comment Period

12. Next Board Meeting:

Date:	Tuesday, April 9, 2019
Time:	1:00 pm
Place:	Multi Agency State Office Building Board Room 1015 195 North 1950 West Salt Lake City, Utah 84116

13. Adjourn

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources, at: (801) 297-3828, TDD (801) 903-3978, at least five working days prior to the scheduled meeting.

Agenda Item 3(A)

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF DRINKING WATER
Marie E. Owens, P.E.
Director

DRINKING WATER BOARD MEETING
January 15, 2019 – 1:00 pm
Multi Agency State Office Building – Board Room 1015
195 North 1950 West
Salt Lake City, Utah 84116

DRAFT MINUTES

1. Call to Order

Betty Naylor, Board Chairman called the meeting to order at 1:03 p.m.

2. Roll Call

Board Members present: Betty Naylor, Roger Fridal, Kristi Bell, David Stevens, Jeff Coombs, Eric Franson, Tage Flint and Alan Matheson.

Division Staff present: Marie Owens, Hayley Shaffer, Michael Grange, Jennifer Yee, Heather Bobb, and Lisa Nelson.

3. Approval of the Minutes:

A. November 13, 2018

Betty Naylor noted in the previous minutes the ratification of Kristi Bell as the newest Drinking Water Board member had not been included and suggested an edit to the minutes to include this action. Kristi Bell also noted her name had been omitted from the list of Board members present during roll call.

- Jeff Coombs moved to approve the November 13, 2018 minutes as amended in the discussion above. Roger Fridal seconded. The motion was carried unanimously by the Board.

4. Financial Assistance Committee Report

A. Status Report – Michael Grange

Michael Grange, Technical Assistance Section Manager with the Division of Drinking Water (DDW, the Division) reported there is currently a balance of $1.6 million in the State SRF fund. Over the course of the next year, the Division is expecting an additional $4.3 million to come into the fund, for a total of approximately $5.9 million for project allocation through December 31, 2019. Michael reported the Division has considerably improved the length of time it takes to close authorized loans, and therefore get the projects underway sooner.

Betty asked if Moroni City should be listed under the proposed projects for January. Michael replied that indeed this project should be listed here, however due to the short notice of their application based on an emergency situation; there was not enough time to update the State SRF worksheet.

Michael then reported currently there is approximately $63 million in the Federal SRF fund which include both first and second round funds. Over the course of the next year, the Division is expecting about $20.5 million to come into the fund from the FY19 federal grant, for a total of approximately $83.5 million for project allocation by January 1, 2020.

Michael pointed out three projects of interest to the Board including: San Juan Spanish Valley which is anticipated to close next month in February; Cove Special Service District was anticipated to close last month in December, however their bids came in high and they are looking to possibly reduce the scope of their project or increase the requested amount on their application to the board; and finally, the Twin Creeks Phase I project closed. Phase II of this project (includes a treatment plant) is anticipated to take slightly longer to close due to the scope and extended engineering and design associated with this phase.

Betty asked if the M & J Trailer Home Community listed under the proposed projects for review is still accurate to appear on this list. Michael replied this is correct and this project is anticipated to come before the Board next month during the February meeting.

Marie Owens added the Federal shutdown has created a lot of problems; however the Board should feel comfortable obligating the funds that have been authorized, even though there may be a delay in receiving them until the government is caught up. She also noted for members' awareness, the amount of principal forgiveness recommended to be granted for projects on this agenda would consume the entire amount of principal forgiveness the Board would be able to authorize for the entire year.

B. Project Priority List – Michael Grange

Michael reported there are five new projects recommended to be added to the Project Priority List this month including: M & J Trailer Home Community with 50.2 points, Virgin Town with 31.6 points, Canyon Meadows with 30.7 points, Tridell Lapoint with 24.6 points, and Lincoln Culinary Water with 16.6 points. The Financial Assistance Committee recommends the Board approve the updated Project Priority List as presented, with the addition of these five projects.

- Tage Flint moved to approve the updated Project Priority List. Kristi Bell seconded. <u>The motion was carried unanimously by the Board.</u>

Based on the training that preceded this meeting, Betty asked if any member of the Board has any conflicts of interest, or potential conflicts of interest needing disclosure prior to the start of the following agenda item. There were no reported conflicts of interest disclosed.

C. SRF Applications

i. STATE:

a) Eastland SSD – Heather Bobb

Representing Eastland SSD was Janet Ross and Diane Romesha.

Heather Bobb informed the Board Eastland SSD is requesting $70,469 in financial assistance to fund the cost of a pump replacement. The current pump is showing significant wear and impending failure. It is also undersized for the current static water level during the recent drought.

The MAGI is 97% of the State's MAGI and with the proposed funding package, the average water bill would be approximately $102.29 per month, or 2.77% of the local MAGI. Therefore, they qualify as a hardship community to receive principal forgiveness. The Financial Assistance Committee recommends the Board authorize a grant of $70,469, contingent upon the resolution of all issues on the system's compliance report including a current source protection plan, a missing vent and improper overflow on the storage facility, missing screens, etc.

Marie reaffirmed the importance of fixing the issues on the compliance report and asked what the plan is to resolve these issues. Janet informed the Board they do plan to fix all deficiencies and have been working with Heather and their system manager to facilitate this. Marie explained some of these deficiencies will have a larger cost to fix, and how they plan to pay for these additional costs in order to be in compliance. Janet explained the entire Board changed at the end of 2017 and are diligently working to correct the deficiencies and get back into compliance with the state since that time.

Eric Franson asked who is providing technical assistance to Eastland SSD on the analysis of the current static water level, and that the recommendation is indeed a new pump to correct the problem so as not to repeat the issue if the pump is not the only issue. Janet Ross replied Jeremy Redshaw, who has a well and pump business provided technical assistance and the estimate on the project with the assistance of the Eastland SSD system manager.

Betty asked in consideration of the deficiencies, has the system received an estimate of the costs associated with the repair of these issues. Diane replied they were not under the impression the cost to fix these issues would be anything more than some minor expenses, however they have not received an official bid. Janet explained the system does have funds available in their operation and maintenance budget if needed to cover these costs.

Tage Flint asked Marie if the cost of the deficiencies on the compliance report had been included in the application, would that have changed the conditions of this grant recommendation. Marie replied the total amount would have increased, however the

eligibility level would not have changed. Tage then asked if this application is possibly premature and should be reworked to include these additional expenses and brought back to the February Board meeting. Janet responded the need for fixing the pump is more immediate than having to wait the additional time to include the compliance related issues.

Marie reminded the Board if this application were to wait and come back at the February meeting with an increased amount, there is no guarantee the grant money will be available as the majority of it, if proceeding applications are approved, will be obligated to other projects.

Marie continued stating that while it has never been done previously, the Board could consider the option of authorizing the grant funds for this project, with the contingency that all issues on the compliance report must be back into compliance within one year or the funds will then switch to a loan and must be repaid.

Betty reminded members of Janet's previous statement that the system does indeed have the financial ability to resolve these issues without postponing the action by the Board.

Jeff Coombs also stated that while this is true from their perspective, they have also not received an estimate on the amount of these costs, and therefore, do not fully know if they will have the funds to cover all of the associated costs to get back into compliance.

- Tage Flint moved to authorize a $70,469 grant to Eastland SSD for the project as described, with the condition that all items on the compliance report be resolved within one year. Eric Franson seconded. The motion was carried unanimously by the Board.

Jeff Coombs asked what the consequences will be if there is non-compliance within that one year allotment. Diane provided some perspective on the issues of concern on the report and explained they are confident the costs will not exceed the O&M budget funds available to facilitate these fixes. She stated previously the Board was not operating at full capacity, however with the change in membership, is assured this will not be a concern going forward.

David Stevens asked what it will take to fix the overflow on the tank. Diane explained it should be a quick replacement once the snow and ice melts and they are able to access the top of the tower. Kristi Bell asked how long this particular item has been out of compliance. Marie replied this deficiency was noted in October 2018.

In discussion, it was stated that most, if not all deficiencies in the compliance report should be able to be resolved even before closing of the funds.

Eric reminded Eastland SSD to ensure on the technical side this project is completed by a reputable company and is a long term solution done correctly. He made the suggestion to staff to possibly include in the project description who is providing the technical assistance on future projects to ensure the Board is comfortable moving forward with the Financial Assistance Committee's recommendations.

David Stevens asked if the cost of the pump includes installation. Janet replied yes, the cost is included.

Tage asked Marie, based on the discussion above, should staff automatically include deficiencies into the project each time it is being considered and included in the total amount requested by the Board. Marie replied if the deficiency listed on a system's compliance report is significant, staff should include this as a part of the overall project cost in order to resolve these issues at the same time. She continued stating minor deficiencies should be resolved prior to the system approaching the Board for the funding of any projects. Tage modified this stance suggesting the Board provide some leniency in that a system would have until the closing of the loan or grant to be in compliance. Board members agreed there could always be exceptions and projects will be decided upon on a case by case basis.

b) Moroni City – Heather Bobb

Representing Moroni City was Orson L. Cook, Robert Worley, and Thayne Atkinson.

Heather informed the Board Moroni City is requesting $110,000 in financial assistance to fund an emergency project consisting of transmission line replacement of approximately 400 linear feet. The current lines are lying in a rock bed and have broken several times causing damage to personal property and the City to be left without water. The lines will need to be re-routed to have adequate distance between them, and some new valves will need to be installed.

The MAGI is 80% of the State's MAGI which would qualify Moroni City as a hardship community to receive principal forgiveness. However, with the average water bill being less than the recommended 1.75% of local MAGI, the staff recommends the Board authorize a loan of $110,000 at 2.34% interest or fee for 20 years, contingent upon the resolution of all issues on the system's compliance report. Due to the emergency nature of this project, it was not presented to the Financial Assistance Committee.

City representative, Orson Cook explained the urgent need for the replacement of this pipe and requested the Board consider another option of 80% Hardship Grant and Moroni City would cover the other 20% of the total requested amount.

Eric asked Moroni City representatives the type of pipe that is anticipated to be used as the pipe replacement. Robert Worley reported they have looked into both PVC and HDPE with good results; however it is still undetermined at this time.

Kristi asked if most of the related issues are in the same area the City is looking to replace with this financial assistance. Orson replied confirmed this is the area needing the most emergent response as it has failed on four separate occasions over the last ten years.

David Stevens asked if the issues are related both to the bedding and age of the pipe. City representatives replied the issue is mostly related to the rock bedding, creating wear and tear on the pipe.

Betty asked Heather a question regarding the discrepancy of the water bill in the packet handout. Heather explained the City charges an irrigation fee of $20/month to residents that was not included in the analysis of the financial assistance recommendation. The total water bill with this irrigation fee would be approximately $56.54 per month.

- Eric Franson moved to authorize a $110,000 loan at 2.34% interest or fee for 20 years to Moroni City with the condition that all items on the compliance report be resolved within one year. Jeff Coombs seconded. Roger Fridal and Betty Naylor voted null. The motion was carried by the Board.

Marie reviewed the conditions needing to be addressed on the compliance report including a previous year's Consumer Confidence Report (CCR), and an updated source protection plan.

Eric asked the City representatives if they are comfortable with the motion that was previously made, and if it would be accepted as it currently stands. Board members clarified the request of the system differed from the motion and they would prefer a grant of 80% of the total amount of $110,000. Orson replied the City's Board may not be comfortable taking on another payment and all other funds have been earmarked for other obligations.

Board members returned to the original motion and resumed the vote.

ii. FEDERAL:

a) Lincoln Culinary Water – Lisa Nelson

Representing Lincoln Culinary Water was Steven Smith, Kelly Chappell, and Doug Sagers.

Lisa Nelson informed the Board Lincoln Culinary Water is requesting $2,516,000 in financial assistance for a new well and the installation of approximately 28,000 feet of 8 and 10 inch PVC water lines. The current lines are undersized for fire protection and capacity needs as well as aging and deteriorating.

Lisa reviewed and answered the questions that arose from the Financial Assistance Committee in regard to how this project specifically relates to the irrigation company, specifically the terms of the contract. Lisa informed the Board that indeed the terms are in perpetuity.

The MAGI is 109% of the State's MAGI. The current average water bill is approximately $50.80 per month, which is 1.22% of the local MAGI. The proposed project will increase the monthly water rate to greater than 1.75% of the MAGI, and therefore qualifies Lincoln Culinary Water for subsidy. The Financial Assistance Committee recommends the Board authorize a loan of $2,516,000 at 1.25% hardship grant assessment fee for 30 years with $1,006,000 in principal forgiveness, with a repayable amount of $1,510,000.

Tage asked if the water association is a non-profit company and if there has been any discussion of becoming a special service district. Doug Sagers responded that this may be a possibility in the future, but will need time to work through the details.

Marie thanked Lincoln Culinary Water for their efforts in not having any deficiencies listed on their compliance report.

Betty asked the water system representatives if the monthly water bill increase of $28.17 has been vetted through public comment. Steve replied the increase has been taken to public comment. He explained that some in the community were not happy about the increase; however they also understand the need.

- David Stevens moved to authorize a loan of $2,516,000 at 1.25% hardship grant assessment fee for 30 years with $1,006,000 in principal forgiveness to Lincoln Culinary Water, with a repayable amount of $1,510,000. Jeff Coombs seconded. The motion was carried unanimously by the Board.

b) Tridell Lapoint – Lisa Nelson

Representing Tridell Lapoint was Jared McKee, Ron Wallace, and Aaron Jensen.

Lisa informed the Board Tridell Lapoint is requesting $1,037,500 in financial assistance for construction of a new 500,000 gallon concrete storage tank and the replacement of approximately 5,300 linear feet of undersized water line ranging from 3-8 inches. This amount is approximately half of the full cost of the project, of which the other half is anticipated to be approved through the Community Impact Board (CIB).

Lisa explained the weighted MAGI for Tridell Lapoint is 104% of the State's MAGI with a current average water bill of $77.21 which is 1.94% of the weighted MAGI. The current water rate exceeds 1.75% of the weighted MAGI so the system qualifies for subsidy. The staff recommends the Board authorize a loan of $1,037,500 at 1.75% hardship grant assessment fee for 30 years with $260,500 in principal forgiveness. The repayable amount will be $777,000. This authorization is conditioned on Tridell Lapoint Water Improvement District being authorized the balance of project funding ($1,037,500) from CIB.

Jared McKee informed the Board Tridell Lapoint was scheduled to be heard at the CIB meeting in January; however the meeting was cancelled and has been rescheduled for February 5th. He continued, expressing the need for the tank and increased size of the pipes in the community due to increased demands on the system.

Eric asked due to the large discrepancy in MAGI's from Fort Duchesne versus Tridell Lapoint, are connections charged differently based on the community or if everyone is charged the same. Jared explained everyone is charged the same due to not feasibly being able to justify different rates to the communities served.

Marie thanked Tridell Lapoint for their efforts in not having any deficiencies listed on their compliance report. She also informed the Board this water system is a member of the Utah Water Quality Alliance and active in participating in this organization. Jared thanked Marie and indicated the water system continually strives for excellence.

- Roger Fridal moved to authorize a loan of $1,037,500 at 1.75% hardship grant assessment fee for 30 years with $260,500 in principal forgiveness. The repayable

amount will be $777,000. This authorization is conditioned on Tridell Lapoint Water Improvement District being authorized the balance of project funding ($1,037,500) from the CIB. Tage Flint seconded. The motion was carried unanimously by the Board.

c) Canyon Meadows – Lisa Nelson

Representing Canyon Meadows was Rick Kartchner and Bradey Wilde.

Lisa informed the Board Canyon Meadows is requesting $1,925,000 in financial assistance to replace their existing treatment system with a closed media filtration system, construction of a new 300,000 gallon concrete storage tank, and to replace approximately 15,000 linear feet of existing water line. The system was built in the early 1980's, is aging, and requiring a great deal of maintenance in order to remain operable.

The project scope and requested funding amount has changed from what was presented to the Financial Assistance Committee. The project originally called for a new 150,000 gallon storage tank and the system intended to continue to use the old 150,000 gallon tank. At the request of the Financial Assistance Committee, staff consulted with the system and their engineer to explore the feasibility of building a new 300,000 gallon tank and no longer using the old tank. This option added $200,000 to the project cost. Given the poor condition of the existing tank, staff is recommending the project scope include the 300,000 gallon tank.

Lisa explained Canyon Meadows is a private water system. The local MAGI is 180% of the State's MAGI. The current average water bill is $82.77 per month, which is 1.20% of the local MAGI. The recommended funding package would raise the average monthly water rate to $144.95/month. This monthly rate is 2.10% of the local MAGI and exceeds 1.75% of MAGI, so this system would qualify for subsidy. Staff recommends a subsidy in the form of an extended loan term, reduced interest rate and 10% principal forgiveness and the authorization of a loan of $1,925,000 at 1.0% hardship grant assessment fee for 30 years with $385,000 in principal forgiveness. The repayable amount will be $1,540,000.

Betty thanked Lisa for her work on this application to explore additional options with the applicant and the result of the increased tank capacity.

Lisa informed the Board the system currently has 102 IPS points on their compliance report; with 70 of these points related to microbial and monitoring, of which will be addressed and resolved by the completion of this project. The remaining points are related to cross connection control and administrative.

Marie followed up asking how this project will actively resolve monitoring violations. Bradey Wilde responded explaining the existing treatment plant is outdated and uses an open tank sand filtration system providing opportunities for microbial issues.

Marie continued verifying this project will be a completely different treatment process and asked if the system has a certified operator in place to run the plant that understands the new processes. The representatives responded they do have a certified distribution and

wastewater operator, however will need to implement some administrative action in order to be in compliance with the requirements of having a certified treatment operator.

- Tage Flint moved to authorize a $1,925,000 loan at 1.0% hardship grant assessment fee for 30 years with $385,000 in principal forgiveness to Canyon Meadows, with a repayable amount of $1,540,000 with the condition that all items on the compliance report be resolved by the loan closing date. David Stevens seconded. The motion was carried unanimously by the Board.

d) Virgin Town – Heather Bobb

Representing Virgin Town was LeRoy Thompson and Rod Mills.

Heather informed the Virgin Town is requesting $800,000 in financial assistance for construction of a new 500,000 gallon concrete storage tank to replace an old system that is subject to impending failure as well as contamination. The project will also consist of installing a connection from the new tank into the existing system, and replacing deteriorating distribution lines. The total cost of the project is $1,200,000 and Virgin Town will contribute $400,000 toward the project.

The MAGI is 98% of the State's MAGI but their after project water bill is 2.62% of the local MAGI. Therefore, they do qualify as a hardship community to receive principal forgiveness. The Financial Assistance Committee recommends the Board authorize a loan of $800,000 loan with $400,000 in principal forgiveness at 0% interest/fee for 20 years. The repayable amount would be $400,000.

Virgin Town representatives provided a history and need for the proposed project before the Board.

Eric pointed out the packet reflected $0 under the contingency cost estimate, asking if the representatives felt comfortable in the accuracy of this. Rod Mills replied stating they did a lot of preliminary engineering, therefore they do feel comfortable not listing any contingency costs and trust these estimates.

David asked in relation to the population growth if the modest estimates listed could be greatly increased with the spillover from surrounding cities including Hurricane, St. George, and Washington. LeRoy Thompson replied it is hard to determine for sure, however there is less land available to be developed which may keep the modest growth estimates in line.

- Jeff Coombs moved to authorize a $800,000 loan with $400,000 in principal forgiveness at 0% interest/fee for 20 years. The repayable amount would be $400,000. Kristi Bell seconded. The motion was carried unanimously by the Board.

Betty asked if any member of the Board has any conflicts of interest, or potential conflicts of interest needing disclosure prior to the start of the following agenda item.

- Tage Flint disclosed he is the manager of a large water system which would be impacted and subject to these rules.

- Roger Fridal disclosed he has a potential conflict of interest.
- Kristi Bell disclosed she also manages a small town water system which could be impacted and subject to these rules.

Betty asked if the Board as a whole have reason to not include these three members in the voting of the rulemaking process.

- Eric Franson made a motion to include all members of the Board in light of the disclosed potential conflicts of interest. David Stevens seconded. The motion was carried unanimously by the Board.

5. Rulemaking Process

A. Authorization to Adopt Revised Total Coliform Rule (RTCR) – Jennifer Yee

Jennifer Yee, Environmental Coordinator with DDW reported there were no substantive comments received during the open comment period through the Office of Administrative Rules. Division staff recommends adoption of R309-100-9, R309-105-4, R309-110-4, R309-200, R309-210-8, R309-211, R309-215-10&16, R309-220-4, and R309-225-4.

Kristi noted minor grammatical edits that were determined to be non-substantive by the Board.

- Eric Franson made a motion to adopt the amendments to R309-100-9, R309-105-4, R309-110-4, R309-200, R309-210-8, R309-211, R309-215-10&16, R309-220-4 and R309-225-4 as amended and presented with the non-substantive grammatical edits. Tage Flint seconded. The motion was carried unanimously by the Board.

6. Rural Water Association Report – Dale Pierson

Dale Pierson with Rural Water Association of Utah (RWAU) reminded the Board of the reports in the packet. He informed members they are moving forward with the national apprenticeship program with their first apprentice onboard from Draper Irrigation/WaterPro.

The Association met with Division staff for the halfway point review of the 5-year contract concerning the managerial and circuit rider contracts. Both parties agreed this has proved to be very beneficial work for both agencies and are open to adjustments as needed. Dale continued informing members that Brian Pattee has been asked to help water systems navigate the upcoming changes to the Improvement Priority System Rule, Terry Smith will be focused on capacity development and appointed official management, and circuit rider, Jake Woods recently assisted South Duchesne with emergency response related needs.

Dale reminded members the next Drinking Water Board meeting will be held at the RWAU conference in St. George and anticipate great attendance at the conference. Betty thanked RWAU staff for their work and services.

7. Open Board Discussion – Betty Naylor

Betty followed up on Dale's reminder to the Board regarding the location of the next meeting. She encouraged members to ensure travel arrangements have been taken care of and to work with Hayley Shaffer and Marianne Booth for anticipated plans and needs. Marie added it is important for all travel to go through the State Travel system and not booked independently in order to reimburse for related expenses.

Eric brought up the previous suggestion by Tage to begin connecting funding requests with a system's compliance, and believes this is a positive addition to the decision making process of an applicant's request. Tage added this information should be a supplemental piece of information the staff and Financial Assistance Committee provide in the recommendation to the Board along with a suggested timeframe.

David brought up the concern of the possibility of a water system leaving deficiencies unfixed or out of compliance as a means to come before the Board to receive additional funding. He stated the Board should not fund compliance related issues.

Marie suggested the Board maintain the flexibility to decide to fund a system's deficiencies on a case by case basis. Tage agreed and clarified these would be relative to physical deficiencies, not monitoring deficiencies.

The Board reviewed other possible benefits and concerns and members decided they would like to discuss the compliance report for each financial assistance request that comes before them during the project discussion. The recommendation by the staff should include the compliance report and clarify if a deficiency is physical or monitoring related, as well as a recommendation to the Board on the timeframe to get the system back into compliance. The physical deficiencies will be reviewed as a part of the overall project and decided upon on a case by case basis.

8. Director's Report

A. 2018 Year in Review

Marie provided the Board with an informational presentation reviewing the Division's statistics during 2018 including: permitting and engineering, rule implementation, technical assistance and inspections, emergency response, SRF program, and the changes in the organizational structure of the Division.

Board members thanked Marie for the overview and summary of the year. David expressed the need to begin brainstorming how to use more of the federal money. Marie agreed and stated these funds have to be solicited differently due to the federal requirements that go along with the money. She explained the staff is working to market the available funds to larger water systems that are equipped to manage the additional constraints of the federal dollars.

B. Legislative Update

Marie reviewed a list of the current House and Senate Bills the Division is following closely during this upcoming legislative session.

She reviewed the letter of intent from the Governor to EPA to participate in the Water Infrastructure Improvements for the Nation Act (WIIN) grant for lead testing in schools and childcare facilities. The Division was named by the Governor as the entity to administer the grant. Marie explained it is undetermined at this time the amount of money that will be distributed to the State; however estimates could be close to $200,000 for testing purposes.

Betty asked how a childcare facility is being classified in this context. Marie replied this will generally be applicable to licensed facilities; however there will be flexibility in making that determination.

Marie mentioned the other WIIN grant of note is the disadvantaged community grant. Like the lead testing in schools, this is a non-competitive grant. However, this grant does require a state match. The proposal was made to include the match in the Governor's Budget, which is $100,000. If all goes through, this will provide $300,000 for emergency funding purposes. Staff will then prepare recommendations to the Board to consider on how to disseminate the funds.

C. Other

Marie Owens had no other items for discussion.

9. Other

There were no other items for discussion.

10. Public Comment Period

There were no public comments at this time.

11. Next Board Meeting:

Date: Thursday, February 28, 2019
Time: 2:00 pm
Place: Dixie Convention Center
Garden Room
1835 Convention Center Drive
St. George, Utah 84790

12. Adjourn

- David Stevens moved to adjourn the meeting. The motion was carried unanimously by the Board.

The meeting adjourned at 3:26 p.m.

Agenda Item 4

DRINKING WATER BOARD PACKET
Programmatic Financing Information Update

One perceived weakness of the SRF program is the historical use of a project-by-project funding model. As you may be aware, when a municipality uses other available bond options (municipal bond market, banks, etc.), there is no limit to the projects that can be financed from that bond's proceeds.

The question was asked: "Why can't the SRF program fund an entire capital improvement program, rather than individual projects, the way a municipal bond does?"

The answer to that question is the Programmatic Financing Option, referred to as "Pro-Fi" for short.

Here's how the Pro-Fi Option works:

State SRF program managers evaluate cash flow and lending projections for the near future to identify the amount of funds available for the Pro-Fi customer.

Decision-makers at the community or utility review their capital improvement plans and identify all SRF-eligible activities that they expect to move forward soon.

The community or utility submits a single SRF application listing all of the eligible activities. The activities could span dozens of different projects in various stages of planning, design, and construction.

The state SRF program issues a loan agreement to the Pro-Fi borrower. The loan agreement states that the money may be disbursed for any of the eligible activities identified in the loan agreement as long as they have complied with applicable SRF requirements. The loan agreement might also require invoices to be submitted on a regular basis, often monthly. The loan agreement will also require that repayments begin within a specified time period.

The borrower continues work on its capital improvement plan. As project activities occur, the borrower regularly submits invoices to the SRF program for any of the activities included in the loan agreement. Since the SRF loan agreement encompasses such a broad array of eligible activities, the program is guaranteed to disburse its SRF funds. If one of the projects in the loan agreement is delayed, there are many other ongoing activities to receive disbursements in its place.

Certain SRF requirements are "bundled" to incorporate all of the activities listed in the loan agreement.

- A single SRF application is used for all of the Pro-Fi activities and the borrower can submit a single authorizing resolution.
- A weighted average scoring process can be used for priority ranking, or the activities may be ranked separately.

- A single loan agreement is signed, and the activities can be treated as a single loan for the purposes of Disadvantaged Business Enterprise (DBE), Single Audit Act compliance, and potentially others.

Summary: Key Considerations for Implementing Programmatic Financing

Programmatic Financing is an alternative to project-by-project funding that can allow state SRF programs and their large borrowers to maintain a simpler, more reliable funding relationship. However, the Pro-Fi option requires commitment and planning from both parties, and may not work for every state SRF program.

Below are some factors that create ideal conditions for a state SRF program to offer Programmatic Financing:

- A large, reliable borrower that has continuous CIP construction, a flexible budget process, and is responsive to the SRF process (i.e, submits disbursement requests and invoices in a timely manner)
- Strong financial modeling capabilities
- Ability to allow a more flexible application process (i.e., bundling certain requirements, reports, and certifications)

Agenda Item 5(A)

DIVISION OF DRINKING WATER

STATE LOAN FUNDS

AS OF January 31, 2019

	SUMMARY		
	Total State Fund:	$16,139,117	
	Total State Hardship Fund:	$2,021,722	
	Subtotal:	$18,160,839	
LESS AUTHORIZED	Less:		
	Authorized Loans & Closed loans in construction:	$14,059,000	*(see Page 2 for details)*
	Authorized Hardship:	$864,119	
	Subtotal:	$14,923,119	
	Total available after Authorized deducted	**$3,237,720**	
PROPOSED	**Proposed Loan Project(s):**	**$170,000**	*(see Page 2 for details)*
	Proposed Hardship Project(s):	**$0**	
	Subtotal:	**$170,000**	
AS OF:			
January 31, 2019	**TOTAL REMAINING STATE LOAN FUNDS:**	**$1,910,117**	
	TOTAL REMAINING STATE HARDSHIP FUNDS:	**$1,157,603**	

Total Balance of ALL Funds: **$3,067,720**

Projected Receipts Next Twelve Months:		
and Sales Tax Revenue		
Annual Maximum Sales Tax Projection	**$3,587,500**	
Less State Match for 2018 Federal Grant	$0	
Less State Match for 2019 Federal Grant	($2,221,400)	
	$0	
Less Appropriation to DDW/Board	($993,100)	
SUBTOTAL Sales Tax Revenue including adjustments:		$373,000
Payment:		
Interest on Investments (Both Loan and Hardship Accounts)		$384,000
Principal payments		$2,852,254
Interest payments		$720,396
Total Projections:		$4,329,649

Total Estimated State SRF Funds Available through 1-31-2020	**$7,397,369**

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF January 31, 2019

Community	Loan #	Cost Estimate	Date Authorized	Date Closed/Anticipated	Authorized Funding		
					Loan	Grant	Total
Ephraim 1% int, 20 yrs	3S251	1,422,905	Mar-18		1,145,000	127,150	1,272,150
Laketown 1.5% int @ 30 yrs	3S248	1,863,636	May-18		1,110,000	0	1,110,000
Mtn Regional-Community Wtr 2% 20 yr	3S254	2,600,000	Jul-18	Mar-19	2,600,000	0	2,600,000
Aurora City 0.75% int 30 yrs	3S258	4,228,000	Aug-18		3,804,000	424,000	4,228,000
Eastland SSD	3S1697	70,469	Jan-19			70,469	70,469
Moroni 2.34%, 20 yr	3S1705	110,000	Jan-19		110,000		110,000
Subtotal Loans and Grants Authorized					8,769,000	621,619	9,390,619
PLANNING LOANS / GRANTS IN PROCESS							
							0
Circleville	3S260P	40,000	Aug-18	system req to deauth	40,000		40,000
Enoch City	3S256P	27,500	Jul-18	Jul-18		27,500	27,500
Paragonah	3S257P	10,000	Jul-18	Aug-18		10,000	10,000
						0	0
						0	0
					40,000	37,500	77,500
CLOSED LOANS (partially disbursed)							
Daggett Co - Dutch John 0% int 30 yrs	3S216	1,020,000	Jan-15	Feb-16	0	100,000	100,000
Henrieville	3S241	345,000	Aug-16	Nov-16	0	105,000	105,000
Mutton Hollow Imp Dist 2% int 30 yr	3S253	2,060,000	Jul-18	Sep-18	800,000		800,000
Grantsville 1.5% int, 20 yrs	3S249	3,500,000	Mar-18	Dec-18	2,500,000		2,500,000
Pleasant Grove 2% int, 20 yrs	3S255	2,300,000	May-18	Jan-19	1,950,000		1,950,000
							0
Subtotal Planning Loans/Grants Auth					5,250,000	205,000	5,455,000
Total authorized or closed but not yet funded					$14,059,000	$864,119	$14,923,119
PROPOSED PROJECTS for FEBRUARY 2019							
							0
Circleville	3S260P	(40,000)	Aug-18	deauthorization	(40,000)		(40,000)
Kane Co WCD .81% int	3S1712	210,000			210,000		210,000
							0
							0
Total Proposed Projects					170,000	0	170,000

DIVISION OF DRINKING WATER
STATE LOAN FUNDS
AS OF January 31, 2019

	5235 Loan Funds	5240 Interest (use for Grants)	Total
Cash:	$16,139,117	$2,021,722	$18,160,839
Less:			
Loans & Grants authorized but not yet closed (schedule attached)	(8,809,000)	(659,119)	(9,468,119)
Loans & Grants closed but not fully disbursed (schedule attached)	(5,250,000)	(205,000)	(5,455,000)
Proposed loans & grants	(170,000)	0	(170,000)
Administrative quarterly charge for entire year	(993,100)		(993,100)
Appropriation to DDW	0		0
FY 2018 Federal SRF 20% match	0		0
FY 2019 Federal SRF 20% match	(2,221,400)		(2,221,400)
	(1,304,383)	**1,157,603**	**(146,780)**
Projected repayments during the next twelve months			
Thru 01-31-2020			
Principal	2,852,254		2,852,254
Interest		720,396	720,396
Projected annual investment earnings on invested cash balance		384,000	384,000
Sales Tax allocation thru Jan-31-2020	3,587,500		3,587,500
Total	**$5,135,371**	**$2,261,999**	**$7,397,369**
* All interest is added to the Hardship Fee account.			

DIVISION OF DRINKING WATER
FEDERAL SRF
AS OF January 31, 2019

FIRST ROUND FUND	
1997 thru 2017 SRF Grants	
Net Federal SRF Grants:	$169,738,751
Total State Matches:	$39,050,300
Closed Loans:	-$205,475,651
Total Grant Dollars:	**$3,313,400**

FEDERAL SECOND ROUND FUND	
Principal Repayments	
Principal (P):	$60,060,285
Interest (I):	$17,190,906
Total P & I:	**$77,251,191**

Earnings on Invested Cash Balance	
Total:	**$1,199,751**

Hardship Fund	
Total:	**$1,707,633**

SUMMARY	
Total Federal State Revolving Fund:	$81,764,342
Total Federal Hardship Fund:	$1,707,633
Subtotal:	$83,471,975

LESS AUTHORIZED & PARTIALLY DISBURSED			
Less:			
	Authorized & Partially Disbursed Closed Loans:	$16,315,836	*(see Page 2 for details)*
	Authorized Federal Hardship:	$401,904	
	Subtotal:	$16,717,740	

PROPOSED			
	Proposed Federal Project(s):	**$20,235,000**	*(see Page 2 for details)*
	Proposed Federal Hardship Project(s):	**$1,198,000**	
	Subtotal:	**$21,433,000**	

AS OF:	**January 31, 2019**		
		TOTAL REMAINING LOAN FUNDS:	**$45,213,506**
		TOTAL REMAINING HARDSHIP FUNDS:	**$107,729**

Total Balance of ALL Funds after deducting proposed actions: $45,321,235

Projected Receipts thru February 1, 2020		
2019 Fed SRF Grant	$8,200,000	
2019 State Match	$2,221,400	
Interest on Investments	$1,698,000	
Principal Payments	$6,685,203	**Receive 60% in January**
Interest	$1,456,573	
Hardship & Technical Assistance fees	$260,398	
RWAU DS Contract 1 year	-$135,200	
Total:	$20,386,374	

Total Estimated Federal SRF Funds Available through: 02/01/2020 **$65,707,609**

DIVISION OF DRINKING WATER
FEDERAL STATE REVOVING FUND

PROJECTS AUTHORIZED BUT NOT YET CLOSED
AS OF January 31, 2019

COMMUNITY	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	
Cove SSD	1,085,000	0% int, 30 yrs	3F285	Mar-17	Feb-19	600,000	485,000	1,085,000	
Swiss Alpine Water Company	947,000	3.53% hgf, 25 YRS	3F300	Mar-18	Jul-19	807,000		807,000	
Twin Creeks SSD (Phase II)	3,976,000	1.87% hgf, 30 yrs	3F295	Nov-17		3,395,000	300,000	3,695,000	
West Corinne Water Co	553,000	2.5% hgf, 20 yrs	3F305	Aug-18		500,000		500,000	
CU WCD - Duchesne Valley WTP	3,706,000	1.5% hgf, 30 yrs	3F307	Aug-18		3,100,000		3,100,000	
Lincoln Culinary Water Assn	2,516,000	60/40 1.25% hgf, 30 yrs	3F1696	Jan-19		1,510,000	1,006,000	2,516,000	
Virgin Town	1,200,000	50% PF 0% int, 20 yrs	3F1702	Jan-19		400,000	400,000	800,000	
Canyon Meadows Mutual Wtr	1,925,000	90/10 1.0% hgf, 30 yrs	3F1700	Jan-19		1,540,000	385,000	1,925,000	
Tridell LaPoint WID	2,075,000	75/25 1.75% hgf, 30 yrs	3F1701	Jan-19		777,000	260,500	1,037,500	
TOTAL CONSTRUCTION AUTHORIZED:						**$ 12,629,000**	**$ 2,836,500**	**$ 15,465,500**	**$ -**
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	78,000
Forest Glen Plat A HOA	1,438,986	0% int, 30 yrs	3F222	Feb-14	Dec-14	68,000	29,986	97,986	
Springdale	7,840,000	.5% int/hgf, 30 yrs	3F264	May-16	Oct-17	571,500	54,850	626,350	
Moab	90,000	100% pf	3F292P	Aug-17	Feb-18		90,000	90,000	
Johnson Water Imp Dist	90,000	100% pf	3F299P	Mar-18	May-18		36,000	36,000	
Marble Hills Water Co	40,400	1.85% int, 20 yrs	3F296	Nov-17	Mar-18			0	5,284.06
Monticello	39,000	Eng study 10 yr 0% int	3F281P	Nov-16	May-18			0	39,000
Summit Special Service District	36,600	100% pf	3F303P	Jun-18	Jul-18			0	23,140
Green River City	40,000	100% pf	3F304P	Jul-18	Jul-18			0	40,000
Wilson Arch Water & Sewer	40,000	100% pf	3F311P	Aug-18	Sep-18			0	8,229
Minersville	23,250	100% pf	3F310P	Jul-18	Sep-18			0	23,250
Marysvale	40,000	100% pf	3F306P	Jul-18	Aug-18			0	40,000
Old Meadows	25,000	100% pf	3F312P	Sep-18				0	25,000
Sigurd	40,000	100% pf	3F1695P	Oct-18				0	40,000
Mexican Hat	40,000	100% pf	3F1703P	Nov-18					40,000
Hildale City	40,000	100% pf	3F1704P						40,000
TOTAL PLANNING AUTHORIZED:						**$639,500**	**$210,836**	**$850,336**	**$401,904**
TOTAL CONSTRUCTION & PLANNING:								**$16,315,836**	**$401,904**
AVAILABLE PROJECT FUNDS:									**$65,448,506**
AVAILABLE HARDSHIP FUNDS:									**$1,305,729**
PROPOSED PROJECTS FOR FEBRUARY 2019:									
								0	
								0	
M & J Trailer	1,198,000	under review	3F1702	Feb-19				0	1,198,000
Diamond Valley Acres	235,000	2.50% HGA 20 yrs	3F1706	Feb-19		235,000		235,000	
Granger Hunter ID	20,000,000	1.25% HGA 20 yrs	3F1708	Feb-19		20,000,000		20,000,000	
								0	
								0	
TOTAL PROPOSED PROJECTS FOR THIS MEETING:						**$20,235,000**	**$0**	**$20,235,000**	**$1,198,000**
*RWAU hardship grant is being disbursed monthly									
TOTAL FUNDS AFTER PROPOSED PROJECTS ARE FUNDED:									**$45,213,506**
TOTAL FUNDS AFTER PROPOSED HS PROJECTS ARE FUNDED:									**$107,729**
NOTES OF LOAN CLOSINGS SINCE LAST BOARD MEETING:									
Twin Creeks SSD	5,619,000	1.87% hgf, 30 yrs	3F295	Nov-17	Dec-18	1,343,000	300,000	1,643,000	
San Juan Spanish Valley SSD	5,100,000	0% int, 30yrs (combined w/CIB)	3F275	Aug-16	Jan-19	1,785,000	765,000	2,550,000	
Total Recent Loan Closings						**$3,128,000**	**$1,065,000**	**$4,193,000**	**$0**

DIVISION OF DRINKING WATER
FEDERAL SRF LOAN FUNDS
AS OF January 31, 2019

	Loan Funds 1st Round	Loan Payments 2nd Round Principal	Loan Payments 2nd Round Interest	Loan Payments Hardship Fund	TOTAL
Federal Capitalization Grants and State 20% match thru 2015	$208,789,051				
Earnings on Invested 1st Round Funds			1,199,751		
Repayments (including interest earnings on 2nd round receipts)		60,060,285	17,190,906	1,707,633	288,947,626
Less:					
Closed loans and grants	-205,475,651				-205,475,651
SUBTOTAL of Funds Available	**$3,313,400**	**$60,060,285**	**$18,390,657**	**$1,707,633**	**$83,471,975**
Loans & Grants authorized but not yet closed or fully disbursed	-12,685,500	-3,419,500	-210,836	-401,904	-16,717,740
SUBTOTAL of Funds Available less Authorized	**-$9,372,100**	**$56,640,785**	**$18,179,821**	**$1,305,729**	**$66,754,235**
Future Estimates:					
Proposed Loans/Grants for current board package	-20,235,000			-1,198,000	-21,433,000
SUBTOTAL of Funds Available less Proposed Loans & Grants	**-$29,607,100**	**$56,640,785**	**$18,179,821**	**$107,729**	**$45,321,235**
PROJECTIONS THRU February-2020					
	0				
2017 SRF Capitalization Grant (Loan Portion)	8,200,000				
2017 SRF Capitalization State Match	2,221,400				
Projected repayments & revenue during the next twelve months		6,685,203	1,456,573	125,198	8,266,974
Projected annual investment earnings on invested cash balance		1,320,000	348,000	30,000	1,698,000
TOTAL	**-$19,185,700**	**$64,645,988**	**$19,984,394**	**$262,927**	**$65,707,609**

Agenda Item 5(B)

Project Priority List
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD
PACKET FOR PROJECT PRIORITY LIST

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

Diamond Valley Acres is being added to the Project Priority List with 7.2 points. Their project consists of a well equipping and a connection to the system.

Granger-Hunter Improvement District is being added to the Project Priority List with 33.3 points. Their project consists of reservoir storage, distribution lines, booster station and well treatment.

FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board approve the updated Project Priority List.

Agenda Item 5(C)(i)(a)

Kane County WCD
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN

APPLICANT'S REQUEST:

Kane County Water Conservancy District is requesting $210,000 in financial assistance for a transmission/distribution line to the Duck Creek Townsite parcel. The total cost of the project is $419,095. Kane County is requesting funding to purchase the materials for the project and will be paying for the labor and engineering as an in-kind match of $209,458.

STAFF COMMENTS:

The local MAGI for Kane County is approximately $31,958 (70% of the state MAGI), their after project water bill is 1.24% of the local MAGI. They do qualify for additional subsidy based on the less than 80% of the State MAGI.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Grant or Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	Full Loan	$210,000	0.81%	20 yrs	0	$33.15	1.24 %
2	Full Loan	$210,000	0.00%	20 yrs	0	$33.05	1.24%
2	20% PF	$168,000	0.81%	20 yrs	$42,000	$33.08	1.24%
2	30% PF	$147,000	0.81%	20 yrs	$63,000	$33.04	1.24%

STAFF RECOMMENDATION:

The Drinking Water Board authorize a loan of $210,000 at 0.81% Interest/Fee for 20 years.

APPLICANT'S LOCATION:

Kane County WCD is located in Kane County, offices located in Kanab. The Duck Creek Village is located approximately 40 miles East of Cedar City.

MAP OF APPLICANT'S LOCATION:

PROJECT DESCRIPTION:

Kane County WCD is working on a large wastewater facility in the Duck Creek system and is in need of a transmission line to bring water to the facility and other public entities that will share the parcel including Kane County Sheriff, Kane County Roads, Solid Waste District, Fire Protection District and the Kane County Water Conservancy District.

POPULATION GROWTH:

Projected populations and number of connections are shown in the table below:

Year	Population	Connections
2020	7,075	3,289
2025	7,811	3,631
2030	8,624	4,009
2035	9,522	4,426
2040	10,513	4,887

COST ALLOCATION:

The cost allocation proposed for the project is shown below:

Funding Source	Cost Sharing	Percent of Project
DWB Loan	$210,000	50%
Applicant Share	$209,458	50%
TOTAL	$419,458	100%

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
M001	Current Emergency Response Program	-10		
TD65	**FACILITY LACKS EMERGENCY EYEWASH AND SAFETY SHOWER**	3 (not effective)		
	Total = -10	-10	0	0

CONTACT INFORMATION:

APPLICANT:	Kane County Water Conservancy District 725 East Kaneplex Drive Kanab, UT 84741 435-644-3997 kanecowater@gmail.com
PRESIDING OFFICIAL & CONTACT PERSON:	Michael Noel Executive Administrator 725 East Kaneplex Drive Kanab, UT 84741 435-644-3997 kanecowater@gmail.com
CONSULTING ENGINEER:	Joe Phillips Sunrise Engineering 11 North 300 West Washington, UT 84780 435-652-8450 jphillips@sunrise-eng.com
RECORDER:	Amanda Buhler 435-664-3997 kanecowater@gmail.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Kane Co
COUNTY: Kane Co
PROJECT DESCRIPTION: Transmission line

FUNDING SOURCE: State SRF

100 % Loan & 0 % Grant

ESTIMATED POPULATION:	6,800	NO. OF CONNECTIONS:	3161 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$63.52 *			PROJECT TOTAL:	$419,095
CURRENT % OF AGI:	2.38%	FINANCIAL PTS:	87	LOAN AMOUNT:	$209,095
ESTIMATED MEDIAN AGI:	$31,958			GRANT AMOUNT:	$0
STATE AGI:	$45,895			TOTAL REQUEST:	$209,095
SYSTEM % OF STATE AGI:	70%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	3.92%		0.81%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	20	20		20
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		0.81%
REQUIRED DEBT SERVICE:	$10,454.75	$15,276.78		$11,366.63
*PARTIAL COVERAGE (15%):	$1,568.21	$2,291.52		$1,704.99
*ADD. COVERAGE AND RESERVE (10%):	$1,045.48	$1,527.68		$1,136.66
ANNUAL NEW DEBT PER CONNECTION:	$4.13	$6.04		$4.49
O & M + FUNDED DEPRECIATION:	$1,243,338.00	$1,243,338.00		$1,243,338.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$393.34	$393.34		$393.34
TOTAL SYSTEM EXPENSES	$1,256,406.44	$1,262,433.98		$1,257,546.29
TAX REVENUE:	$948,268.00	$948,268.00		$948,268.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$33.12	$33.28		$33.15
% OF ADJUSTED GROSS INCOME:	1.24%	1.25%		1.24%

* Equivalent Residential Connections

Agenda Item 5(C)(ii)(a)

Diamond Valley Acres Water Company
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE
AUTHORIZATION

APPLICANT'S REQUEST:

Diamond Valley Acres Water Company is requesting $235,000 in financial assistance to fund the equipping of an existing well and to connect it to the distribution system.

STAFF COMMENTS:

Diamond Valley Acres Water Company (DVAWC) is a private water system. The local MAGI for DVAWC is $34,007 which is 74% of the State MAGI and the current average water bill is $53.14 per month, which is 1.88% of the local MAGI. Their current rates appear to be sufficient to cover the proposed debt service. Staff's recommendation is a reduction in interest rate, based on the system's MAGI.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	Full Loan	$ 235,000	3.92%	20 yrs	0	$42.78	1.51%
2	Full Loan	$ 235,000	**2.50%**	**20 yrs**	**0**	**$42.13**	**1.49%**

FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board authorize a loan of $235,000 at 2.50% Interest/Fee for 20 years to the Diamond Valley Acres Water Company.

APPLICANT'S LOCATION:

Diamond Valley Acres Water Company is located in Washington County in in an unincorporated suburb of St. George.

MAP OF APPLICANT'S LOCATION:

PROJECT DESCRIPTION:

Diamond Valley Water Acres Company drilled the Topaz Well #2 (WS009) in 2007, however that well is currently inactive and it was never equipped. The proposed project includes the construction of a well house and the necessary appurtenances to equip the well, including piping, electrical equipping and connection to the existing distribution system.

POPULATION GROWTH:

	Year	Population	Connections
Current:	2019	1,370	334
Projected:	2040	1,395	339
Annual growth rate		0.09%	0.07%

COST ESTIMATE:

Legal/Bonding (self-fund)	$	0
Engineering – Design (~6%)	$	15,000
Engineering – CMS (self-fund)	$	0
Construction	$	200,000
Contingency (~ 10%)	$	20,000
Total	**$**	**235,000**

COST ALLOCATION:

DVAWC is not bringing a local contribution to this project, but do intend to pay for any legal costs and construction management.

Funding Source	Cost Sharing		Percent of Project
DWB	$	235,000	100%
Local Contribution	$	0	0%
	$	235,000	100%

IMPLEMENTATION SCHEDULE:

FA Committee Conference Call:	January 30, 2019
DWB Funding Authorization:	February 28, 2019
Complete Design:	March 2019
Plan Approval:	April 2019
Advertise for Bids:	April 2019
Begin Construction:	June 2019
Complete Construction:	October 2019

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
M001	Current Emergency Response Program	-10		
S024	No Check Valve On Discharge Piping	1		
V004	Storage Facility Inadequate Ladders or Railings	2		
V008	Storage Access Not a Min of 4-in Above Surface	3		
V010	Storage Facility Lacks Proper Shoebox Access	3		
V011	Storage Facility Overflow Pipe Lacks Freefall	5		
V016	Storage Facility Drainline Lacks Freefall	5		
	Total = 9	9	0	0

CONTACT INFORMATION:

APPLICANT:	Diamond Valley Acres Water Company 1618 W. Diamond Valley Drive St. George, Utah 84770 435-268-1110
PRESIDING OFFICIAL	Scott Bulloch, President 8737 N 700 W St. George, Utah 84770 435-680-1445 sbulloch@infowest.com
CONSULTING ENGINEER:	Justin Christensen, P.E. Ensign Engineering 1870 North Main Street, Suite 104 Cedar City, Utah 84720 435-865-1453 jchristensen@ensignutah.com
RECORDER:	Barbara Johnston 435-268-1110 dvawcbilling@gmail.com
ATTORNEY:	Mike Nobis Boyack, Christiansen and Nobis PO Box 1575 St. George, Utah 84770 435-674-2564 nobismike@gmail.com
FINANCIAL CONSULTANT:	Kurt Nelson Snow & Jensen 640 E 700 S St. George, Utah 84770 435-673-7131 knelson@snowandjensen.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Diamond Valley Acres Water Company FUNDING SOURCE: Federal SRF
COUNTY: Washington
PROJECT DESCRIPTION: Equip Existing Well and connect to Distribution System

100 % Loan & 0 % P.F.

ESTIMATED POPULATION:	1,370	NO. OF CONNECTIONS:	334 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$53.14 *			PROJECT TOTAL:	$235,000
CURRENT % OF AGI:	1.88%	FINANCIAL PTS:	44	LOAN AMOUNT:	$235,000
ESTIMATED MEDIAN AGI:	$34,007			PRINC. FORGIVE.:	$0
STATE AGI:	$45,895			TOTAL REQUEST:	$235,000
SYSTEM % OF STATE AGI:	74%				

	@ ZERO % RATE 0%	@ RBBI MKT RATE 3.92%		AFTER REPAYMENT PENALTY & POINTS 2.50%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	20	20		20
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		2.50%
REQUIRED DEBT SERVICE:	$11,750.00	$17,169.44		$15,074.58
*PARTIAL COVERAGE (15%):	$1,762.50	$2,575.42		$2,261.19
*ADD. COVERAGE AND RESERVE (10%):	$1,175.00	$1,716.94		$1,507.46
ANNUAL NEW DEBT PER CONNECTION:	$43.97	$64.26		$56.42
O & M + FUNDED DEPRECIATION:	$150,000.00	$150,000.00		$150,000.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$449.10	$449.10		$449.10
TOTAL SYSTEM EXPENSES	$164,687.50	$171,461.80		$168,843.22
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$41.09	$42.78		$42.13
% OF ADJUSTED GROSS INCOME:	1.45%	1.51%		1.49%

* Equivalent Residential Connections

Agenda Item 5(C)(ii)(b)

Granger-Hunter Improvement District
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE

APPLICANT'S REQUEST:

Granger-Hunter Improvement District (GHID) is requesting $20,000,000 in financial assistance to fund numerous system improvements from their Capital Improvements Plan that will occur over the course of several years. These improvements include new wells, new storage tanks and repair of existing storage tanks, and installation of water line.

STAFF COMMENTS:

Granger-Hunter Improvement District (GHID) is a public water system. The local MAGI for GHID is $35,701 which is 78% of the State MAGI therefore Granger Hunter is eligible for subsidy. The current average water bill is $45.60 per month, which is 1.53% of the local MAGI, so rates are already sufficient to cover the proposed debt service. GHID is also contributing $5,950,000 towards this project.
Due to limited principal forgiveness funds in the Federal program, Staff recommends a reduced interest rate for the Granger Hunter project. Both as subsidy and as incentive to participate in the Federal Program's "Programmatic Financing" option.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	Full Loan	$ 20,000,000	3.92%	20 yrs	0	$37.43	1.26%
2	Full Loan	$ 20,000,000	1.50%	20 yrs	0	$36.63	1.23%
3	Full Loan	$ 20,000,000	**1.25%**	**20 yrs**	**0**	**$36.55**	**1.23%**

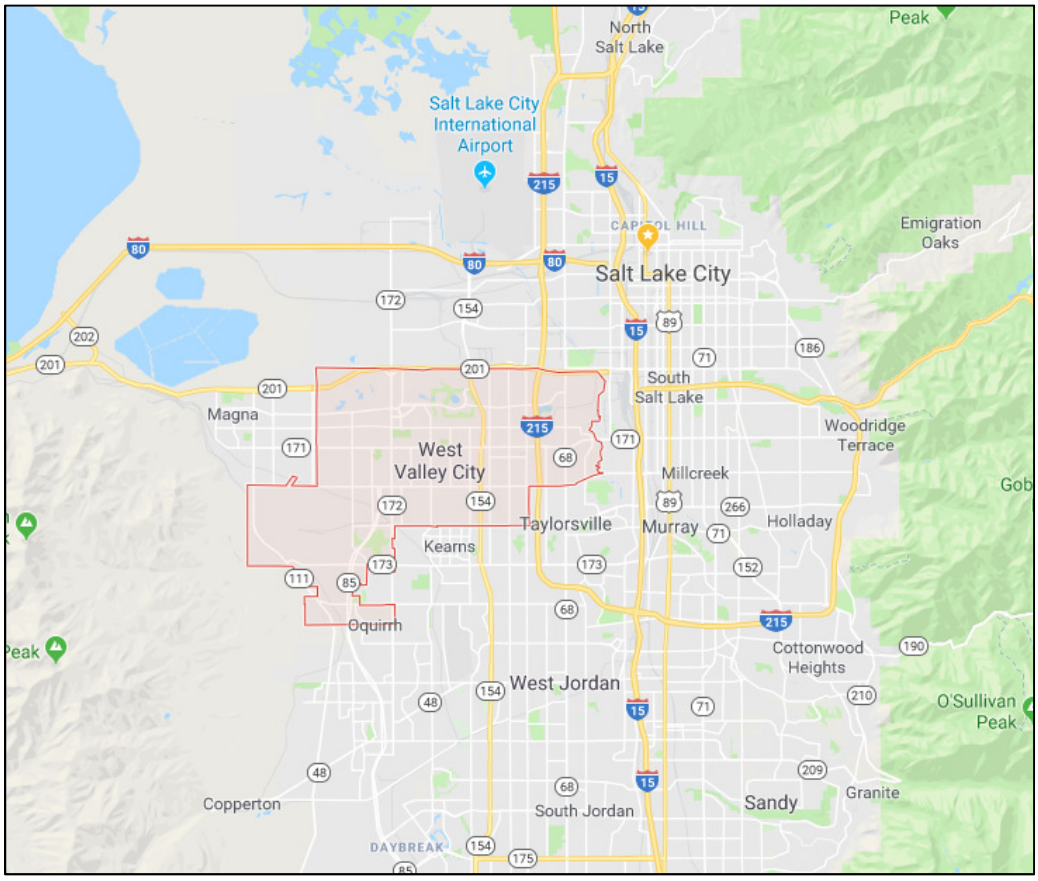
FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board authorize a loan of $20,000,000 at 1.25% Interest/Fee for 20 years.

APPLICANT'S LOCATION:

Granger-Hunter Improvement District is located in Salt Lake County, serving primarily the area of West Valley City.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

Granger-Hunter Improvement District (GHID) was organized in 1950. GHID is a drinking water and sanitary sewer utility provider which serves residents of West Valley City, but also provides services to portions of Salt Lake County. The water system contains over 400 miles of distribution pipe ranging in size from 4 to 30 inches in diameter, about 3,600 fire hydrants, more than 8,000 valves, and 9 water storage reservoirs totaling 27 million gallons. Jordan Valley Water Conservancy District (JVWCD) provides most of the water to GHID.

GHID's 2016 Master Plan has identified numerous drinking water system improvements that will be necessary for GHID to continue to meet the current and future demands of its customers. These improvements include new wells, new storage tanks and repair of existing storage tanks, and installation of water line, etc.

POPULATION GROWTH:

	Year	Population	Connections
Current:	2019	119,000	27,345
Projected:	2040	125,070	28,740
Annual growth rate		0.24%	0.24%

COST ESTIMATE:

The identified individual system upgrades are outlined in detail in the system's Master Plan

New Wells and New JVWCD Connection
New Tanks and Tank Upgrades
Water line (24, 16 and 8 inch)

COST ALLOCATION:

Funding Source	Cost Sharing	Percent of Project
DWB	$ 20,000,000	77%
Local Contribution	$ 5,950,000	23%
	$ 25,950,000	100%

IMPLEMENTATION SCHEDULE:

This request is for multiple system improvement projects that will take place over a number of years.

FA Committee Conference Call:	January 30, 2019
DWB Funding Authorization:	February 28, 2019
Complete Design:	ongoing
Plan Approval:	ongoing
Advertise for Bids:	ongoing
Begin Construction:	ongoing
Complete Construction:	2023

IPS SUMMARY:

Code	Description	Physical Facilities	Quality & Monitoring	Significant Deficiency Violations
M001	Current Emergency Response Program	-10		
V009	Storage Facility Access Lacks Proper Gasket	3		
V011	Storage Facility Overflow Pipe Lacks Freefall	5		
	Chemical Monitoring Rule Violation RRAD		20	
	Total = 18	-2	20	0

CONTACT INFORMATION:

APPLICANT:	Granger-Hunter Improvement District 2888 South 3600 West West Valley City, Utah 84119 801-968-3551 info@ghid.org
PRESIDING OFFICIAL	Clinton Jensen, General Manager 2888 South 3600 West West Valley City, Utah 84119 801-955-2208 cjensen@ghid.org
CONSULTING ENGINEER:	Marv Allen, P.E. Hansen, Allen and Luce 859 West South Jordan Pkway #200 South Jordan, Utah 84095 801-566-5599 info@hansenallenluce.com
RECORDER:	Kim Coleman 801-955-2253
BOND ATTORNEY:	Randall Larsen Gilmore Bell 15 West South Temple, Suite 1450 Salt Lake City, UT 84101 801-364-5080 rlarsen@gilmorebell.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Granger-Hunter Improvement District FUNDING SOURCE: Federal SRF
COUNTY: Salt Lake
PROJECT DESCRIPTION: Storage Tanks, Distribution Piping, Booster Station Replacement and Well Treatment

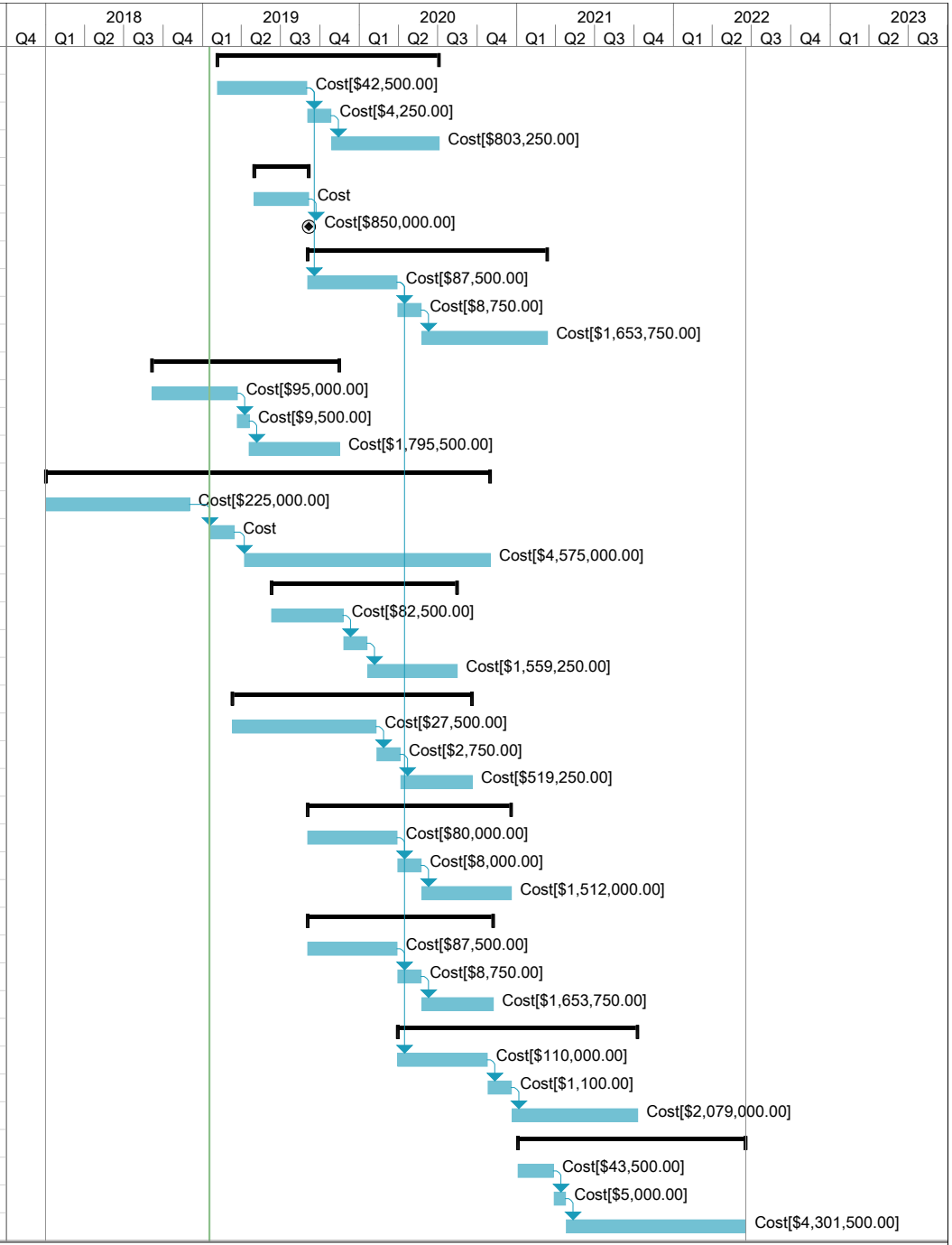
100 % Loan & 0 % P.F.

ESTIMATED POPULATION:	27,345	NO. OF CONNECTIONS:	35537 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	$45.60 *			PROJECT TOTAL:	$25,950,000
CURRENT % OF AGI:	1.53%	FINANCIAL PTS:	74	LOAN AMOUNT:	$20,000,000
ESTIMATED MEDIAN AGI:	$35,701			PRINC. FORGIVE.:	$0
STATE AGI:	$45,895			TOTAL REQUEST:	$20,000,000
SYSTEM % OF STATE AGI:	78%				

	BASE RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	1.50%	3.92%		1.25%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	20	20		20
ASSUMED NET EFFECTIVE INT. RATE:	1.50%	3.92%		1.25%
REQUIRED DEBT SERVICE:	$1,164,914.72	$1,461,228.93		$1,136,407.79
*PARTIAL COVERAGE (15%):	$174,737.21	$219,184.34		$170,461.17
*ADD. COVERAGE AND RESERVE (10%):	$0.00	$0.00		$0.00
ANNUAL NEW DEBT PER CONNECTION:	$37.70	$47.29		$36.77
O & M + FUNDED DEPRECIATION:	$14,280,000.00	$14,280,000.00		$14,280,000.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$401.83	$401.83		$401.83
TOTAL SYSTEM EXPENSES	$15,619,651.93	$15,960,413.26		$15,586,868.96
TAX REVENUE:	$2,017,427.00	$2,017,427.00		$2,017,427.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$36.63	$37.43		$36.55
% OF ADJUSTED GROSS INCOME:	1.23%	1.26%		1.23%

* Equivalent Residential Connections

ID	Task Name	Duration	Start	Finish
1	**17F: Tank Farm Piping**	**370 days**	**Mon 2/4/19**	**Fri 7/3/20**
2	Design	150 days	Mon 2/4/19	Fri 8/30/19
3	Bidding	40 days	Mon 9/2/19	Fri 10/25/19
4	Construction	180 days	Mon 10/28/19	Fri 7/3/20
5	**Tank Farm Storage Purchase**	**91 days**	**Wed 5/1/19**	**Wed 9/4/19**
6	Negotiation	90 days	Wed 5/1/19	Tue 9/3/19
7	Purchase	1 day	Wed 9/4/19	Wed 9/4/19
8	**Tank Farm Booster Replacement**	**400 days**	**Mon 9/2/19**	**Fri 3/12/21**
9	Design	150 days	Mon 9/2/19	Fri 3/27/20
10	Bidding	40 days	Mon 3/30/20	Fri 5/22/20
11	Construction	210 days	Mon 5/25/20	Fri 3/12/21
12	**18K: Printers Row Waterline Replacement Project**	**312 days**	**Wed 9/5/18**	**Thu 11/14/19**
13	Design	142 days	Wed 9/5/18	Thu 3/21/19
14	Bidding	20 days	Fri 3/22/19	Thu 4/18/19
15	Construction	150 days	Fri 4/19/19	Thu 11/14/19
16	**18B 4100 South Waterlines Project**	**740 days**	**Mon 1/1/18**	**Fri 10/30/20**
17	Design	240 days	Mon 1/1/18	Fri 11/30/18
18	Bidding	40 days	Fri 1/18/19	Thu 3/14/19
19	Construction	410 days	Mon 4/8/19	Fri 10/30/20
20	**Well No. 4 - 3600 West Waterline**	**310 days**	**Mon 6/10/19**	**Fri 8/14/20**
21	Design	120 days	Mon 6/10/19	Fri 11/22/19
22	Bidding	40 days	Mon 11/25/19	Fri 1/17/20
23	Construction	150 days	Mon 1/20/20	Fri 8/14/20
24	**2200 West Waterline**	**400 days**	**Mon 3/11/19**	**Fri 9/18/20**
25	Design	240 days	Mon 3/11/19	Fri 2/7/20
26	Bidding	40 days	Mon 2/10/20	Fri 4/3/20
27	Construction	120 days	Mon 4/6/20	Fri 9/18/20
28	**Redwood Road Waterline - South Segment**	**340 days**	**Mon 9/2/19**	**Fri 12/18/20**
29	Design	150 days	Mon 9/2/19	Fri 3/27/20
30	Bidding	40 days	Mon 3/30/20	Fri 5/22/20
31	Construction	150 days	Mon 5/25/20	Fri 12/18/20
32	**Redwood Road Waterline - North Segment**	**310 days**	**Mon 9/2/19**	**Fri 11/6/20**
33	Design	150 days	Mon 9/2/19	Fri 3/27/20
34	Bidding	40 days	Mon 3/30/20	Fri 5/22/20
35	Construction	120 days	Mon 5/25/20	Fri 11/6/20
36	**Ridgeland Booster Replacement**	**400 days**	**Mon 3/30/20**	**Fri 10/8/21**
37	Design	150 days	Mon 3/30/20	Fri 10/23/20
38	Bidding	40 days	Mon 10/26/20	Fri 12/18/20
39	Construction	210 days	Mon 12/21/20	Fri 10/8/21
40	**Wells No. 1, 12 and 17 Treatment**	**380 days**	**Mon 1/4/21**	**Fri 6/17/22**
41	Design	60 days	Mon 1/4/21	Fri 3/26/21
42	Bidding	20 days	Mon 3/29/21	Fri 4/23/21
43	Construction	300 days	Mon 4/26/21	Fri 6/17/22



Agenda Item 5(C)(ii)(c)

M & J Trailer Home Community
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN

APPLICANT'S REQUEST:

M & J Trailer Home Community is a private water system in Box Elder County that is owned by Jenamac LLC. The project consists of a new well, 2,200 feet of distribution line, 25,000 gallon tank and arsenic treatment. They scored 50.2 points on the project priority list. The cost of the project is estimated at $1,200,000. After purchasing the trailer park, Jenamac LLC learned of all the problems with the water system and wants to come in to compliance and become an approved system again.

STAFF COMMENTS:

M & J Trailer Home Community has a significant number of deficiencies on their IPS report, is a "not approved" water system and has a "no-use" order. There is a DRAFT version of a CA/EO with the Division to correct the deficiencies and become an approved water system. A large portion of these deficiencies will be corrected with this project as they are basically replacing the entire system.

They have explored several options to correct the system, including regionalizing with another system. The closest system is Ukon Water, which requires each connection to purchase one share of company stock. This would require each individual connection to purchase a share and increase the cost of the project significantly and availability of shares is unknown. Fielding Town has also been contacted, they informed us they receive their water from Ukon, which brings us back to the same issue.

M & J has also approached Bear River Water Conservancy District, who expressed support of this project, with a suggestion of drilling a test well to determine quantity and quality of water.

Based on the engineering pre-design report, the most feasible and cost effective option is for M & J to replace the entire system.

As this is a small community, they did an independent income survey to obtain their local MAGI which is approximately $18,292 (41% of the state MAGI), their after project water bill, with 0% interest would need to be $352.31 which is 23.11% of the local MAGI. Therefore they do qualify as a hardship community to receive principal forgiveness.

Due to the nature of this project and the unaffordability of any option, staff has created a table to show the cost to each connection from many different options to invite discussion from the Board.

Based on the Status Report for Federal funds available, there is money available in the Hardship Grant Fund that this project can be funded with. The funding will be determined at the time of closing and where funds are available at that time.

Option #	Description	Repayable Loan Amount	Interest Rate	Term	Grant or Principal Forgiveness	Monthly Water Rate	% Local MAGI
1	Full Loan	$ 1,210,000	3.05%	20 yrs	0	$491.47	32.24 %
2	20% PF	$968,000	0.00%	20 yrs	$242,000	$296.57	19.46%
3	20% PF	$968,000	0.00%	30 yrs	$242,000	$197.71	12.97%
4	50% PF	$605,000	0.00%	20 yrs	$605,000	$185.36	12.16%
5	50% PF	$605,000	0.00%	30 yrs	$605,000	$123.57	8.11%
6	70% PF	$363,000	0.00%	20 yrs	$847,000	$111.21	7.03%
7	70% PF	$363,000	0.00%	30 yrs	$847,000	$74.14	4.86%

FINANCIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Financial Assistance Committee recommend the Drinking Water Board not authorize a funding package.

APPLICANT'S LOCATION:

M & J Trailer Home Community is located in Box Elder County approximately 11 miles North of Tremonton.

MAP OF APPLICANT'S LOCATION:

PROJECT DESCRIPTION:

Jenamac LLC has had an engineering pre-design report completed to evaluate many options to determine the best and most cost effective method to bring the system into compliance. Based on this report, the best option is to replace the existing system. This will include drilling a new well. With data collected from surrounding areas and based on the tests from the current wells, they are anticipating the need for arsenic treatment. This project will also include a 25,000 gallon concrete storage tank, and new distribution lines to replace all the old, deteriorating lines currently in the system. They will also install meters at each connection.

POPULATION GROWTH:

Projected populations and number of connections are shown in the table below:

Year	Population	Connections
2020	22	17
2025	22	17
2030	22	17
2035	22	17
2040	22	17

IMPLEMENTATION SCHEDULE:

DWB Funding Authorization:	Feb 2019
Complete Design:	Mar 2019
Plan Approval:	July 2019
Advertise for Bids:	Aug 2019
Begin Construction:	Oct 2019
Complete Construction:	Apr 2021

COST ESTIMATE:

Legal – Bonding, Admin	$22,000
Engineering- Plan, Design, CMS	$82,000
Construction – distribution line	$229,000
Construction – storage tank	$192,000
Construction – treatment facility	$220,000
Hydrants, surface restoration, mobilization	$143,000
Source – well drilling	$98,000
Contingency	$224,000
Total Project Cost	**$1,210,000**

COST ALLOCATION:

The cost allocation proposed for the project is shown below:

Funding Source	Cost Sharing	Percent of Project
DWB Loan	$605,000	50%
DWB Principal Forgiveness	$605,000	50%
Total	$1,210,000	100%

CONTACT INFORMATION:

APPLICANT:	M & J Trailer Home Community 18170 North 4400 West Fielding, Utah 84311 801-998-8852 jesseboone@utahredzone.com
PRESIDING OFFICIAL & CONTACT PERSON:	Jesse Boone CEO 9448 South 1210 East Sandy, Utah 84094 801-998-8852 jesseboone@utahredzone.com
CONSULTING ENGINEER:	Justin Dietrich Bowen Collins 154 East 14000 South Draper, UT 84020 801-495-2224 jdietrich@bowencollins.com
RECORDER:	n/a
CITY ATTORNEY:	Joshua Jewkes Gordon Law Group 345 West 600 South ste 108 Heber City, Utah 84032 435-657-3753

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: M & J Trailer
COUNTY: Box Elder
PROJECT DESCRIPTION: Well. Tank. Dist lines. Trmnt

FUNDING SOURCE: Federal SRF

100 % Loan & 0 % P.F.

ESTIMATED POPULATION:	20	NO. OF CONNECTIONS:	17 *	SYSTEM RATING:	NOT APPROVED
CURRENT AVG WATER BILL:	$0.00 *			PROJECT TOTAL:	$1,210,000
CURRENT % OF AGI:	0.00%	FINANCIAL PTS:	35	LOAN AMOUNT:	$1,210,000
ESTIMATED MEDIAN AGI:	$18,292			PRINC. FORGIVE.:	$0
STATE AGI:	$44,268			TOTAL REQUEST:	$1,210,000
SYSTEM % OF STATE AGI:	41%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	3.92%		2.85%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	20	20		20
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		2.85%
REQUIRED DEBT SERVICE:	$60,500.00	$88,404.35		$80,207.28
*PARTIAL COVERAGE (15%):	$9,075.00	$13,260.65		$12,031.09
*ADD. COVERAGE AND RESERVE (10%):	$6,050.00	$8,840.44		$8,020.73
ANNUAL NEW DEBT PER CONNECTION:	$4,448.53	$6,500.32		$5,897.59
O & M + FUNDED DEPRECIATION:	$0.00	$0.00		$0.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$0.00	$0.00		$0.00
TOTAL SYSTEM EXPENSES	$75,625.00	$110,505.44		$100,259.10
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$370.71	$541.69		$491.47
% OF ADJUSTED GROSS INCOME:	24.32%	35.54%		32.24%

* Equivalent Residential Connections

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: M & J Trailer
COUNTY: Box Elder
PROJECT DESCRIPTION: Well. Tank. Dist lines. Trmnt

FUNDING SOURCE: Federal SRF

80 % Loan & 20 % P.F.

ESTIMATED POPULATION:	20	NO. OF CONNECTIONS:	17 *	SYSTEM RATING:	NOT APPROVED
CURRENT AVG WATER BILL:	$0.00 *			PROJECT TOTAL:	$1,210,000
CURRENT % OF AGI:	0.00%	FINANCIAL PTS:	35	LOAN AMOUNT:	$968,000
ESTIMATED MEDIAN AGI:	$18,292			PRINC. FORGIVE.:	$242,000
STATE AGI:	$44,268			TOTAL REQUEST:	$1,210,000
SYSTEM % OF STATE AGI:	41%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	3.92%		0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		0.00%
REQUIRED DEBT SERVICE:	$32,266.67	$55,437.06		$32,266.67
*PARTIAL COVERAGE (15%):	$4,840.00	$8,315.56		$4,840.00
*ADD. COVERAGE AND RESERVE (10%):	$3,226.67	$5,543.71		$3,226.67
ANNUAL NEW DEBT PER CONNECTION:	$2,372.55	$4,076.25		$2,372.55
O & M + FUNDED DEPRECIATION:	$0.00	$0.00		$0.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$0.00	$0.00		$0.00
TOTAL SYSTEM EXPENSES	$40,333.33	$69,296.32		$40,333.33
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$197.71	$339.69		$197.71
% OF ADJUSTED GROSS INCOME:	12.97%	22.28%		12.97%

* Equivalent Residential Connections

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: M & J Trailer
COUNTY: Box Elder
PROJECT DESCRIPTION: Well. Tank. Dist lines. Trmnt

FUNDING SOURCE: Federal SRF

50 % Loan & 50 % P.F.

ESTIMATED POPULATION:	20	NO. OF CONNECTIONS:	17 *	SYSTEM RATING:	NOT APPROVED
CURRENT AVG WATER BILL:	$0.00 *			PROJECT TOTAL:	$1,210,000
CURRENT % OF AGI:	0.00%	FINANCIAL PTS:	35	LOAN AMOUNT:	$605,000
ESTIMATED MEDIAN AGI:	$18,292			PRINC. FORGIVE.:	$605,000
STATE AGI:	$44,268			TOTAL REQUEST:	$1,210,000
SYSTEM % OF STATE AGI:	41%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	3.92%		0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		0.00%
REQUIRED DEBT SERVICE:	$20,166.67	$34,648.16		$20,166.67
*PARTIAL COVERAGE (15%):	$3,025.00	$5,197.22		$3,025.00
*ADD. COVERAGE AND RESERVE (10%):	$2,016.67	$3,464.82		$2,016.67
ANNUAL NEW DEBT PER CONNECTION:	$1,482.84	$2,547.66		$1,482.84
O & M + FUNDED DEPRECIATION:	$0.00	$0.00		$0.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$0.00	$0.00		$0.00
TOTAL SYSTEM EXPENSES	$25,208.33	$43,310.20		$25,208.33
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$123.57	$212.30		$123.57
% OF ADJUSTED GROSS INCOME:	8.11%	13.93%		8.11%

* Equivalent Residential Connections

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: M & J Trailer
COUNTY: Box Elder
PROJECT DESCRIPTION: Well. Tank. Dist lines. Trmnt

FUNDING SOURCE: Federal SRF

30 % Loan & 70 % P.F.

ESTIMATED POPULATION:	20	NO. OF CONNECTIONS:	17 *	SYSTEM RATING:	NOT APPROVED
CURRENT AVG WATER BILL:	$0.00 *			PROJECT TOTAL:	$1,210,000
CURRENT % OF AGI:	0.00%	FINANCIAL PTS:	35	LOAN AMOUNT:	$363,000
ESTIMATED MEDIAN AGI:	$18,292			PRINC. FORGIVE.:	$847,000
STATE AGI:	$44,268			TOTAL REQUEST:	$1,210,000
SYSTEM % OF STATE AGI:	41%				

	@ ZERO % RATE	@ RBBI MKT RATE		AFTER REPAYMENT PENALTY & POINTS
	0%	3.92%		0.00%
SYSTEM				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.92%		0.00%
REQUIRED DEBT SERVICE:	$12,100.00	$20,788.90		$12,100.00
*PARTIAL COVERAGE (15%):	$1,815.00	$3,118.33		$1,815.00
*ADD. COVERAGE AND RESERVE (10%):	$1,210.00	$2,078.89		$1,210.00
ANNUAL NEW DEBT PER CONNECTION:	$889.71	$1,528.60		$889.71
O & M + FUNDED DEPRECIATION:	$0.00	$0.00		$0.00
OTHER DEBT + COVERAGE:	$0.00	$0.00		$0.00
REPLACEMENT RESERVE ACCOUNT:	$0.00	$0.00		$0.00
ANNUAL EXPENSES PER CONNECTION:	$0.00	$0.00		$0.00
TOTAL SYSTEM EXPENSES	$15,125.00	$25,986.12		$15,125.00
TAX REVENUE:	$0.00	$0.00		$0.00
RESIDENCE				
MONTHLY NEEDED WATER BILL:	$74.14	$127.38		$74.14
% OF ADJUSTED GROSS INCOME:	4.86%	8.36%		4.86%

* Equivalent Residential Connections

Agenda Item 6(B)(i)

DRINKING WATER BOARD PACKET
Future Rulemaking Information Update

Report on rulemaking progress for revising **R309-300 Certification Rules for Water Supply Operators**, specifically with respect to Impact to Water Systems and Coordination with Stakeholders.

IMPACT TO WATER SYSTEMS

Continuing Education Unit requirements

Revising this requirement may increase costs to operators/water systems since additional training in different facets of water system operation will be required.

Currently there are no restrictions or qualifications on the types of CEUs operators can submit to renew their certification. Although the rule does state that the CEUs must be "applicable to waterworks operation."

Over the course of the past year I have identified that many operators are submitting CEU requests that are limited to narrowly-focused study areas, such as safety.

In order to encourage better-trained, more broadly educated operators, the revised rule will require that CEUs must be obtained in each of the five areas covered by the Certification Exam, plus a general "other" category, with a maximum of 40% of total CEUs from a single category, as follows:

- general water supply knowledge
- control processes in water treatment or distribution (including disinfection)
- operation, maintenance, and emergency procedures in treatment or distribution
- proper record keeping
- laws and requirements, and water quality standards
- other (general management, communication, safety, traffic control, etc.)

Water System Classification

A water system's classification determines the level at which its operators must be certified. Revising the system classification process may increase costs to water systems as some systems may need operators certified at a higher level than those currently on staff.

The Federal Guidelines for Operator Certification Programs require that drinking water systems be classified "based on indicators of public health risk." For distribution systems the indicators may include system size or complexity. For treatment systems the indicators may include system/facility size or complexity, as well as source water conditions.

System/Facility Complexity

Distribution System complexity may include the following: number of pressure zones, number of booster stations, number of storage tanks, fire protection, chlorination, variations in customer type, potential for cross-connections, demand variations, variations in pipe sizes, total length of pipe in the sysytem, or quantity of water distributed.

Treatment System/Facility complexity may include the following: source water type and variability, difficulty controlling delivered water quality, potential effect to the consumer, operator safety, population served, number of service connections, or quantity of water treated.

The current rule makes no provision for classifying a distribution system based on complexity, relying solely on population served to determine the operator certification level. Division staff has identified systems that, based on population, are currently classified as small systems. However, in reality these systems are much more complex than the small system classification might suggest. One such system has multiple pressures zones, multiple sources, multiple storage tanks, and miles of pipeline of various sizes. The rule review committee believes it is imperative that distribution system operator certification levels be based on criteria that accurately reflect the system's operational complexity. Therefore, a distribution system complexity table has been added to the revised rule.

The treatment system/facility complexity table in the current rule is outdated and cumbersome. The review committee has revised this table to more accurately reflect current water treatment technologies and treatment system/facility complexity.

COORDINATION WITH STAKEHOLDERS

The draft revised rule was prepared by a stakeholder group consisting of Division staff, selected water system operators, and selected technical assistance providers. This diverse group of subject matter experts has over 100 years of collective experience in the drinking water industry, most of it in water system or water treatment facility operation.

The draft revised rule was further vetted through an internal review process within the Division of Drinking Water and with our District Engineers. The Division also plans to conduct an informal public review.

IMPLEMENTATION SCHEDULE

The revised rule will be presented to the Operator Certification Commission for review and approval in March 2019.

Based on the Operator Certification Commission's recommendation, Staff expects to have the revised rule before the Board at the April 9, 2019 meeting for authorization to begin the rule-making process.

Agenda Item 6(B)(ii)(a)

R309-400. Improvement Priority System and Public Water System Ratings.

R309-400-1. Purpose.

The purpose of this rule is to establish the Improvement Priority System used by the division to assign compliance ratings to public water systems and to prioritize enforcement action based on points assessed for noncompliance with drinking water rules.

R309-400-2. Authority.

This rule is promulgated by the Drinking Water Board as authorized by Title 19, Environmental Quality Code, Chapter 4, Safe Drinking Water Act, Subsection 104, of the Utah Code and in accordance with 63G, Chapter 3 of the same, known as the Administrative Rulemaking Act.

R309-400-3. Definitions.

"Improvement Priority System (IPS)" is a point system used by the division to evaluate a public water system's performance and compliance with the drinking water rules in Title 309, *Environmental Quality, Drinking Water.*

"Public Water System Rating" is assigned to a public water system by the director to characterize the water system's compliance with drinking water rules and overall operation and performance.

R309-400-4. Improvement Priority System – Assessment of Points.

1. The division shall:

    a. maintain and make public an IPS implementation policy that includes:

        i. a table specifying the number of points associated with each instance of noncompliance with a drinking water rule requirement and noncompliance with a directive or order issued by the director, and

        ii. the point thresholds for assigning an Approved or Not Approved rating to each type of public water system; and

    b. obtain approval from the Drinking Water Board for substantive revisions to the policy.

2. The director may assess points to a public water system and take enforcement action in accordance with the implementation policy and the table of points based on:

    a. noncompliance with Title R309 of the Utah Administrative Code;

    b. noncompliance with a directive or order issued by the director; or

    c. operational practices or performance that may result in a threat to public health.

R309-400-5. Public Water System Ratings.

1. The director may assign a rating to a public water system of:

    a. Approved based on the total number of points assessed for noncompliance;

    b. Not Approved based on:

        i. the total number of points assessed for noncompliance, or

        ii. an immediate public health threat; or

    c. Corrective Action based on a current, written agreement with the division to resolve underlying noncompliance according to a compliance schedule.

2. A public water system shall maintain an Approved rating.

3. A public water system with a Not Approved rating shall:

    a. take immediate action to resolve the noncompliance that resulted in the Not Approved rating; or

    b. enter into a written agreement with the division to resolve the noncompliance that resulted in the Not Approved rating according to a compliance schedule.

R309-400-6. Administrative Appeals.

1. The assessment of points does not constitute a permit order per R305-7-102(1)(l) and may not be appealed pursuant to R305-7.

2. The assignment of a rating to a public water system constitutes an initial order per R309-7-102(1)(g) and may be appealed by submitting, filing, and serving a written Request for Agency Action pursuant to R305-7-303 within 30 days of the date of the order issued by the director.

KEY: drinking water, environmental protection, penalties
Date of Enactment or Last Substantive Amendment: [~~November 22, 2016~~]
Notice of Continuation: March 22, 2010
Authorizing, and Implemented or Interpreted Law: 19-4-104

Agenda Item 6(B)(ii)(b)

R309-400. Water System Rating Criteria.

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R309-400. Water System Rating Criteria.

R309-400-1. Authority.

Under authority of Utah Code Annotated, Section 19-4-104, the Drinking Water Board adopts this rule in order to evaluate a public water system's standard of operation and service delivered in compliance with R309-100 through R309-705 hereinafter referred to as Rules.

R309-400-2. Extent of Coverage.

This rule shall apply to all public water systems as defined in R309-100.

R309-400-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

Corrective Action Plan - an agreement between the Division of Drinking Water and a public drinking water system establishing conditions and timelines for addressing significant deficiencies or E. coli contamination of a drinking water source.

Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

Treatment Technique Violation - failure to correct significant deficiencies, address E. coil positive source contamination or adhere to specific terms of a Corrective Action Plan.

R309-400-4. Water System Ratings.

(1) The Director shall assign a rating to each public water system in order to provide a concise indication of its condition and performance. This rating shall be assigned based on the evaluation of the operation and performance of the water system in accordance with the requirements of the Rules. Points shall be assessed to water systems for each violation of these requirements (R309-100 through R309-705) as the requirements apply to each individual water system. The number of points that shall be assessed is outlined in the following sections of this rule. The number of points represents the threat to the quality of the water and thereby public health.

(2) Points are assessed in the following categories: Quality, Monitoring and Public Notification; Physical Deficiencies; Operator Certification; Cross Connection Control; Drinking Water Source Protection; Administrative Issues; and, Reporting and Record

Maintenance.

(3) Based upon the accumulation of points, the public water system shall be assigned one of the following ratings:

(a) Approved - In order to qualify for an Approved rating, the public water system must maintain a point total less than the following:

(i) Community water system - 150 points;

(ii) Non-Transient Non-Community water system - 120 points; and

(iii) Non-Community water system - 100 points.

(b) Not Approved - In order for a public water system to receive a Not Approved rating the accumulation of points for the water system must exceed the totals listed above.

(c) Corrective Action - In order to qualify for a Corrective Action rating the public water system must submit the following:

(i) A written agreement to the Director stating a willingness to comply with the requirements set forth in the Rules; and,

(ii) A compliance schedule and time table agreed upon by the Director outlining the necessary construction or changes to correct any physical deficiencies or monitoring failures; and,

(iii) Proof of the financial ability of the water system or that the financial arrangements are in place to correct the water system deficiencies.

(iv) The Corrective Action rating shall continue until the total project is completed or until a suitable construction inspection or sanitary survey is conducted to determine the effectiveness of the improvements or the accumulation of points drops below the threshold for a not approved rating whichever is later.

(4) The water system point accumulation shall be adjusted on a quarterly basis or as current information is available to the Director. The appropriate water system rating shall then be adjusted to reflect the current point total.

(5) The Director may at any time rate a water system Not Approved, if an immediate threat to public health exists. This rating shall remain in place until such time as the threat is alleviated and the cause is corrected.

(6) Any water system may appeal its assigned rating or assessed points as provided in

R305-7.

R309-400-5. Quality, Monitoring and Public Notification Violations.

(1) Total Coliform Rule:

All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5(6); or the monitoring requirements in R309-210-5; and the associated public notification requirements in R309-220. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent twelve month period or the most recent 4 quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For each major bacteriological routine monitoring violation, 35 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.

(b) For each minor bacteriological routine monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(c) For each major bacteriological repeat monitoring violation, 40 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.

(d) For each minor bacteriological repeat monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(e) For each additional monitoring violation (R309-210-5(2)(e)), 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.

(f) For each non-acute bacteriological MCL violation (R309-200-5(6)(a)), 40 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(g) For each acute bacteriological MCL violation (R309-200-5(6)(b)), 50 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(2) Ground Water Rule:

All points assessed to public water systems via this subsection are based on violations of the standards in R309-215-16. Points assessed for any significant deficiency shall be deleted as the deficiencies are corrected and are reported to the Director. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period or the most recent four quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For failure to collect triggered source samples in violation of R309-215-16(2)(a)(i)(A) and (a)(i)(B), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(b) For failure to collect assessment source samples in violation of R309-215-16(2)(b)(i), 5 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(c) For failure to correct a significant deficiency in violation of R309-215-16(4)(a)(i) and (ii), R309-215-16(4)(c) or R309-215-16(4)(d), 35 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(d) For an Escherichia coli. in violation of R309-215-16(4)(b)(i) and (ii), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(3) Chemical:

All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5; or the monitoring requirements in R309-205, 210 and 215; and the associated public notification requirements in R309-220. The chemical assessments shall be updated on a quarterly basis with the total number of points reflecting the most recent compliance period unless otherwise specified. Points for any chemical MCL violation shall remain on record until the quality issue is resolved. Points for any monitoring violation shall be deleted as the required chemical samples are taken and the analytical results are reported to the Director.

(a) Inorganic and Metal Contaminants:

(i) For each major chemical monitoring violation for inorganic and metal contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for inorganic and metal contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for inorganic and metal contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(b) Sulfate (for non-community water systems only):

(i) For each major chemical monitoring violation for sulfate, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for sulfate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for sulfate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(c) Radiologic Contaminants:

(i) For each major chemical monitoring violation for radiological contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for radiological contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for radiological contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(d) Asbestos Contaminants:

(i) For each major chemical monitoring violation for source water or distribution system asbestos, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for source water or distribution system asbestos, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for source water or distribution system asbestos, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(e) Nitrate:

(i) For each routine chemical monitoring violation for nitrate, 50 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each MCL exceedance of nitrate, 60 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(f) Nitrite:

(i) For each routine chemical monitoring violation for nitrite, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each MCL exceedance of nitrite, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(g) Volatile Organic Chemicals:

(i) For each major chemical monitoring violation for volatile organic chemical contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for volatile organic chemical contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for volatile organic chemical contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(h) Pesticides/PCBs/SOCs

(i) For each major chemical monitoring violation for pesticide/PCB/SOC contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for pesticide/PCB/SOC contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for pesticide/PCB/SOC contaminants, 30 points shall be assessed. For each failure to perform the associated public

notification, 5 points shall be assessed.

(i) Disinfection Byproducts:

(i) Total Trihalomethanes:

(A) For each routine chemical monitoring violation for total trihalomethanes, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for total trihalomethanes, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) Haloacetic Acids (HAA5):

(A) For each routine chemical monitoring violation for HAA5, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for HAA5, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Bromate:

(A) For each routine chemical monitoring violation for bromate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for bromate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iv) Chlorite:

(A) For each routine chemical monitoring violation for chlorite, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorite, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(j) Disinfectant Residuals:

(i) Chlorine:

(A) For each routine chemical monitoring violation for chlorine, 10 points shall be assessed. R309-210-8(3)(a). For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorine, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For a disinfected system that does not maintain a trace residual at all points of the distribution system, 2 points shall be assessed. R309-105-10(1) and R309-200-5(7).

(D) For a disinfected system that lacks an adequate number of disinfection residual sample sites, 2 points shall be assessed. R309-210-8(3)(a)(i)(z15).

(ii) Chloramines:

(A) For each routine chemical monitoring violation for chloramines, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chloramines, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Chlorine Dioxide:

(A) For each routine monitoring violation for chlorine dioxide, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each non-acute chlorine dioxide MCL violation, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For each acute chlorine dioxide MCL violation, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(iv) Ground Water Rule, where a water system has received a 4-Log exemption from triggered source water monitoring:

(A) For a ground water treatment facility serving greater than 3300

population lacking equipment to measure chlorine residuals continuously entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(B) For a ground water system serving greater than 3300 people failing to continuously monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(I).

(C) For a ground water system serving less than 3300 people failing to collect a daily grab sample during peak demand to monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(II).

(D) For a ground water system that during the past year, the disinfection process was not operated uninterrupted while water was being produced, points will be assessed based on monthly and quarterly treatment reports. R309-200-5(7).

(E) For a ground water system that is required to provide continuous disinfection but fails to do so, 10 points shall be assessed for each month the failure continues. R309-520-6(1).

(k) Lead and Copper:

(i) For each major chemical monitoring violation for lead and copper contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for lead and copper contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) A system that fails to install, by the designated deadline, optimal corrosion control if the lead or copper action level has been exceeded shall be assessed 35 points. For each failure to perform the associated public notification, 10 point shall be assessed.

(iv) A system that fails to install source water treatment if the source waters exceed the lead or copper action level shall be assessed 35 points. For each failure to perform the associated public notification, 10 points shall be assessed.

(v) A system that fails to complete public notification/education if the lead/copper action levels have been exceeded shall be assessed 10 points for each calendar quarter that the system fails to provide public

notification/education.

(vi) A system that still exceeds the lead action level and is not on schedule for lead line replacement shall be assessed 5 points annually. For each failure to perform the associated public notification, 2 point shall be assessed.

(vii) A system that fails to notify its customers of their lead and copper sample results, 5 points shall be assessed.

(viii) A system that fails to send the lead and copper certification notice to the Division, 5 points shall be assessed.

(l) Groundwater Turbidity:

(i) For each monitoring violation for turbidity, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each confirmed MCL exceedance of turbidity, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(m) Surface Water Treatment:

(i) For water systems having sources, which are classified as under direct influence from surface water and which fail to abandon, retrofit or provide conventional complete treatment or its equivalent within 18 months of notification shall be assessed 150 points. For the associated failure to perform public notification 10 points shall be assessed. The points shall be assessed as the failure occurs and shall remain on record until adequate treatment is provided or the source is physically disconnected.

(ii) Quality and Monitoring: The surface water treatment assessments shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period.

(A) Turbidity:

(I) For each turbidity exceedance that requires tier 1 notification under R309-220-5(1)(e) or (f), 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(II) For each turbidity exceedance that requires tier 2 notification under R309-220-5(1)(e) or (f), 35 points shall be

assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(III) For each month where the percentage of turbidity interpretations meeting the treatment plant limit is less than 95 percent, 25 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(IV) For any period of time that exceeds 4 hours where the system fails to continuously measure (or perform grab samples) the combined filter effluent turbidity, 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(V) For a water system whose failure to repair continuous turbidity monitoring equipment within 5 working days, 50 points shall be assessed.

(B) Disinfection:

(I) For each instance where the disinfectant level in water entering the distribution system is less than 0.2 milligrams per liter for more than 4 hours, 25 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(II) For each instance where there is insufficient disinfectant contact time, 35 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(iii) Treatment Process Control:

(A) For each instance a treatment facility exceeds the assigned filter rates, 30 points shall be assessed.

(B) For each month a water system fails to verify calibration of the plant turbidimeters, 5 points shall be assessed.

(C) For each month a water system fails to submit a water treatment plant report, 50 points shall be assessed.

R309-400-6. Physical Facilities.

All points assessed to public water systems via this subsection are based upon violation of R309-500 through R309-705 unless otherwise noted. These points shall be assessed and updated upon notification of the Director and shall remain until the violation or deficiency no longer exists.

(1) New Source Approval:

(a) Use of an unapproved source shall be assessed 200 points.

(2) Surface Water Diversion Structures and Impoundments:

(a) For each surface water intake structure that does not allow for withdrawal of water from more than one level if quality significantly varies with depth, 2 points shall be assessed. R309-515-5(5)(a).

(b) Where diversion facilities are not capable of keeping large quantities of fish or debris from entering the intake, 2 points shall be assessed. R309-515-5(5)(e).

(c) Where impoundment reservoirs have not had brush and trees removed to the high water level, 2 points shall be assessed. R309-515-5(6)(a).

(d) Where reservoir watershed management has not provided adequate precautions to limit nutrient loading, 10 points shall be assessed. R309-515-5(6)(d).

(3) Well Sources

(a) For each well that is not equipped with a sanitary seal, or has any unsealed opening into the well casing, 50 points shall be assessed. R309-515-6(6)(i).

(b) For each well that does not utilize food grade mineral oil for pump lubrication, 25 points shall be assessed. R309-515-8(2).

(c) For each well casing that does not terminate at least 12 inches above the well house floor, 18 inches above the final ground surface, or shows evidence of being subject to flooding, 20 points shall be assessed. R309-515-6(6)(b)(vi) and R309-515-6(13)(a) and (d).

(d) For each well fitted with a pitless adaptor that does not maintain a water tight seal throughout, 50 points shall be assessed. R309-515-6(12)(c)(x).

(e) For each wellhead that is not properly secured to protect the quality of the well water, 20 points shall be assessed. R309-515-6(13)(f).

(f) For each well that is equipped with a pump to waste line that does not discharge

with a minimum of 12-inch clearance to the flood rim, 20 points shall be assessed. R309-515-6(12)(d)(ix).

(g) For each well that is equipped with a pump to waste line without a downturned discharge end covered with a No. 4 mesh screen, 5 points shall be assessed. R309-515-6(12)(d)(ix).

(h) For each well that is equipped with a pump to waste line that discharges to a receptacle without local authorization, 2 points shall be assessed.

(i) For each well that does not have a means to permit periodic measurement of water levels, 2 points shall be assessed. R309-515-6(12)(e)(i) and (ii).

(j) For each well casing vent that is not covered with a No. 14 or finer mesh screen, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(k) For each well casing vent that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b). Also Division of Water Rights Rule R655-4-11.7.11.

(l) For each well casing vent that does not have adequate clearance to prevent the contaminants from entering the well, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(m) For each well (excluding the naturally flowing wells) that has discharge piping that is not equipped with 1) a smooth nosed sampling tap 2) check valve 3) pressure gauge 4) means of measuring flow, and 5) shut-off valve, 1 point shall be assessed for each component not present. R309-515-6(12)(d)(iv).

(n) For each well that pumps directly into a distribution system and does not have a means to release trapped air from the discharge piping (for example, release air through an air release vacuum relief valve, through a pump to waste line or pumps directly to a tank), 5 points shall be assessed. R309-515-6(12)(d)(v).

(o) For each well house that is not at least 6 inches above the final ground level, is not sloped to drain, or shows evidence of being subject to flooding, 5 points shall be assessed. R309-515-6(13)(b).

(p) For each well that has a cross connection present in the discharge piping, 20 points shall be assessed. R309-105-12(1) and R309-515-6(12)(d)(iii).

(q) For each well with an air vacuum relief valve on the well discharge piping that is not screened, 2 points shall be assessed. R309-515-6(12)(d)(v).

(r) For each well with an air vacuum relief valve on the well discharge piping that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(v).

(s) For each well with an air vacuum relief valve on the well discharging piping that does not have a 6-inch clearance to prevent contaminants from entering the piping, 2 points shall be assessed. R309-515-6(12)(d)(v).

(t) For each well that has rotating and electrical equipment that is not provided with protective guards, 2 points shall be assessed.

(4) Spring Sources:

(a) For each spring source that allows surface water to stand or pond upon the spring collection area (within 50 feet from collection devices), 10 or 20 points shall be assessed. The number of points shall be based upon the size and extent of the ponding; the possible source (rainfall or incomplete collection); or the presence of moss or other indicators of long term presence of standing water. R309-515-7 (7)(i).

(b) For each spring area that does not have a minimum of ten feet of relative impervious soil or an acceptable alternate design with liner, or the spring collection area shows evidence of damaged liner or impervious soil cover, 10 points shall be assessed. R309-515-7(7)(a) and (b).

(c) For each spring area that has deep-rooted vegetation within the fenced collection area, 10 points shall be assessed. R309-515-7(7)(f).

(d) For each spring area that has deep rooted vegetation interfering with the spring collection, 10 points shall be assessed. R309-515-7(7)(f).

(e) For each spring with a spring collection/junction box that does not have a proper shoebox lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(f) For each spring with a spring collection/junction box that does not have a proper gasket on the lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(g) For each spring with a spring collection/junction box that lacks an adequate air vent, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(h) For each spring with a spring collection/junction box with a vent that is not screened with No. 14 mesh screen, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(i) For each spring with a spring collection/junction box with a vent that is not down-turned or inverted, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(1).

(j) For each spring with a spring collection/junction box with a vent that does not have sufficient clearance to prevent ice blockage, or is not at least 24 inches above the earthen cover, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(2).

(k) For each spring with a spring collection/junction box that lacks a raised access entry, at least 4 inches above the spring box or 18 inches above the earthen cover, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(1).

(l) For each spring with a spring collection/junction box that is not secured against unauthorized access, 20 points shall be assessed. R309-515-7(7)(d) and R309-545-14(3).

(m) For each spring collection area without a proper fence, 10 points shall be assessed. R309-515-7(7)(e).

(n) For each spring collection area that does not have a diversion channel, or berm capable of diverting surface water away from the collection area, 5 points shall be assessed. R309-515-7(7)(g).

(o) For each spring system that does not have a permanent flow measuring device, 5 points shall be assessed. R309-515-7(7)(h).

(p) For each spring area with an overflowor a combined overflow/drain discharge that is not screened with a No. 4 mesh screen, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.

(q) For each spring collection/junction box overflow that does not have a freefall of 12 to 24 inches between the bottom of the discharge pipe and the surrounding ground, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.

(r) For each spring collection/junction box that has any unsealed opening(s) resulting in public health risk, 50 points shall be assessed. R309-515-7(7)(d) and R309-545-9(1).

(5) Pump Stations.

(a) For a pumping facility that does not have a standard pressure gauge on the discharge line, 1 point shall be assessed. R309-540-5(6)(c)(i).

(b) For a pumping facility building without adequate drainage or showing evidence of flooding, 5 points shall be assessed. R309-540-5(2)(a)(v) and (vi).

(c) For a pumping facility where the discharge line from the air release valve is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed.

R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(d) For an air release valve located within a building, if the discharge line terminates less than six inches above the floor, 2 points shall be assessed. R309-515-6(12)(d)(v) and R309-540-5(6)(b)(ii).

(e) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade, or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(f) For a pumping facility where the discharge line from the air release valve is not down-turned, 2 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(g) For a pumping facility where there is inadequate heating, lighting or ventilation, 5 points shall be assessed. R309-540-5(2)(e), (f) and (g).

(h) For a pumping facility where there are cross connections present, 20 points shall be assessed. R309-105-12(1).

(i) For an inline booster pumping facility designed to provide pressure directly to the distribution system, which does not have at least two pumping units such that with any one pump out of service the remaining pump or pumps are capable of meeting the peak day demand of the specific portion of the system served, 20 points shall be assessed. R309-540-5(4)(b).

(j) For a pumping facility which does not have protective guards on rotating and electrical equipment, 2 points shall be assessed. R309-525-21.

(k) For a pumping facility which is not secured against unauthorized access shall be assessed, 5 points. R309-540-5(1)(a)(v).

(6) Hydropneumatic pressure tanks.

(a) For diaphragm or air tanks located below ground without adequate provisions for drainage, maintenance and flood protection, 10 points shall be assessed. R309-540-6(2).

(b) For a pressure tank with a pump cycle that cycles more frequently than once every 4 minutes, 5 points shall be assessed. R309-540-6(5).

(7) Storage:

(a) A water system with uncovered finished water storage shall immediately be assessed a rating of not approved, 200 points shall be assessed. R309-545-9(1) and (2).

(b) For each storage tank roof showing evidence of water ponding with deterioration, 10 points shall be assessed. R309.545-9(4).

(c) For each storage tank that does not have an access to the interior for cleaning and maintenance, 9 points shall be assessed. R309-545-14.

(d) For each storage tank access that does not have a shoebox type lid with a minimum of a 2-inch overlap, 3 points shall be assessed. R309-545-14(2).

(e) For each storage tank access that lacks a proper gasket between the lid and frame, 3 points shall be assessed. R309-545-14(2).

(f) For each storage tank access that lacks a minimum rise of 4 inches above the tank roof or a minimum of 18 inches above an earthen cover, 3 points shall be assessed. R309-545-14(1).

(g) For each storage tank that is not vented, 6 points shall be assessed. R309-545-15.

(h) For each finished water storage tank vent that is not downturned or covered from rain and dust, 2 points shall be assessed. R309-545-15(1).

(i) For each storage tank vent that does not terminate a minimum of 24 inches above the surface of the storage tank roof if the tank is a buried structure, 2 points shall be assessed. R309-545-15(2).

(j) For each storage tank vent that is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed. R309-545-15(4).

(k) For each storage tank that lacks an overflow, 15 points shall be assessed. R309-545-13.

(l) For each storage tank overflow that does not terminated 12 to 24 inches above the ground, 5 points shall be assessed.R309-545-13.

(m) For each storage tank overflow that is not screened with number 4 non-corrodible mesh screen, 5 points shall be assessed. R309-545-13(3).

(n) For each storage tank overflow that is connected to a sewer system without an adequate air gap, 5 points shall be assessed. R309-545-13(5).

(o) For each storage tank with a drain that does not discharge through a physical

airgap of at least 2 pipe diameters, 5 points shall be assessed. R309-545-10(1).

(p) For each storage tank with inadequate or improper means of site drainage or showing evidence of standing surface water within 50 feet of the tank, 5 points shall be assessed. R309-545-7(4).

(q) For each storage tank with any unsealed roof or wall penetrations, 50 points shall be assessed. R309-545-9(2).

(r) For each storage tank where the roof and sidewalls show signs of deterioration, 10 to 50 points shall be assessed based upon the size and number of cracks, the loss of structural integrity, and the access of contamination to the drinking water. R309-545-9(1).

(s) For each storage tank without a safe access (such as ladders for tanks in excess of 20 feet, ladder guards, or railings) or safely located entrance hatches, 2 points shall be assessed. R309-545-19(1), (2) and (3).

(t) For each storage tank with internal coatings not in compliance with ANSI/NSF standard 61, 30 points shall be assessed. R309-545-11.

(u) For a storage facility that is not secured against unauthorized access, 20 points shall be assessed. R309-545-14(3).

(8) Distribution System:

(a) A water system that fails to provide the minimum water pressures as required in R309-105-9 at all times and at all locations within the distribution system, 50 points shall be assessed. R309-105-9 and R309-550-5(1).

(b) A water system using pipe and materials not meeting the ANSI/NSF 61 standard shall be assessed 30 points. R309-550-6.

(c) A water system with pipelines installed without adequate separation distance from the sanitary sewer lines shall be assessed 30 points. R309-550-7.

(d) A new water system constructed after January 1, 2007 or an existing water system modification without adequate pressure as defined in R309-105-9(2) shall be assessed 50 points.

(e) A water system which has a distribution line that crosses under a surface water body without adequate protection as outlined in R309-550-8(8)(b) shall be assessed 50 points.

(f) A water system which has distribution system flushing devices, blow-offs or air

relief valves, which are directly connected to a sewer or do not have a proper air gap, shall be assessed 20 points. R309-550-6 and R309-550-9.

(g) For a water system that does not properly follow the AWWA disinfection standards 10 points shall be assessed. R309-550-8(10).

(h) For a water system that is required by the local fire authority to provide fire protection or has fire hydrants connected with water mains less than 8 inches in diameter, 5 points shall be assessed. These points will only be assessed for water mains installed after 1995. R309-550-5(4) and (5).

(i) For each air relief valve vent piping, which is not screened with a No. 14 mesh and downturned, 10 points shall be assessed. R309-550-6(6)(b).

(j) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-550-6(6)(b).

(k) For each air relief valve located in a chamber without a drain or adequate sump, or showing evidence of being subject to flooding, 30 points shall be assessed. R309-550-7.

(l) For each air vacuum release valve chamber that is flooded at the time of inspection, 50 points shall be assessed.

(m) For an unprotected cross-connection in the distribution system as required in R309-550-9, 50 points shall be assessed.

(9) Quantity requirements

(a) A water system without sufficient source capacity to meet peak day and average yearly flow requirements, from 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage, including the number of times and duration of water outages or low pressure. R309-510-7.

(b) A water system without sufficient storage capacity to meet average day demand, plus the required fire suppression volume if applicable, 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage including the number of times and duration of water outages. R309-510-8.

R309-400-7. Treatment Processes.

(1) General Treatment.

(a) For a treatment facility without anti-siphon control to assure that liquid chemical solutions cannot be siphoned through solution feeders into the process units, 2 points shall be assessed. R309-525-11(9)(b)(ii) and (c).

(b) For a treatment facility with a process tank that is not properly labeled to designate the chemical contained, 2 points shall be assessed. R309-525-11(8)(c)(vii).

(c) For a treatment facility with chemicals not stored in covered or unopened shipping containers, unless the chemical is transferred into a covered storage unit, 2 points shall be assessed. R309-525-11(6)(a)(iii).

(d) For a treatment facility with no cross connection control provided to assure that no direct connections exist between any sewer and the drain or overflow from the feeder, solution chamber, or tank by providing that all pipes terminate at least six inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit, or waste receptacle, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(e) For a treatment facility with no spare parts available for all feeders to replace parts that are subject to wear and damage, 2 points shall be assessed. R309-525-11(7)(b)(v).

(f) For a treatment facility where incompatible chemicals are fed, stored or handled together, 2 points shall be assessed. R309-525-11(7)(a)(iv).

(g) For a treatment facility where daily operating records do not reflect chemical dosages and total quantities used, 2 points shall be assessed. R309-105-14(3).

(h) For a water system that fails to maintain and properly calibrate all instrumentation needed to verify the treatment process, 2 points shall be assessed. R309-525-25(4).

(i) For a treatment facility without the means to accurately measure the quantities of chemicals used, 20 points shall be assessed. R309-525-11(7)(a)(i) and R309-525-11(6)(b)(iii).

(j) A water system that does not keep acids and caustics in closed corrosion-resistant shipping containers or storage units, 2 points shall be assessed. R309-525-11(11)(a)(i).

(k) For a treatment facility that does not have the vent hose from the feeder to discharge to the outside atmosphere above grade or have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(l) For a treatment facility that uses any chemical that is added to water being treated for use in a public water system for human consumption that does not comply with ANSI/NSF Standard 60, 25 points shall be assessed. R309-525-11(5).

(m) For a treatment facility that does not have a finished water sampling tap(s), 2 points shall be assessed. R309-525-18.

(n) For a treatment facility that is not performing adequate process control testing consistent with the specific treatment process, 30 points shall be assessed. R309-525-19.

(o) For a surface water treatment facility that does not have continuous residual disinfection equipment to measure the residual in mg/L entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(p) For a treatment facility without provisions for disposing of empty bags, drums or barrels by an acceptable procedure that will minimize operator exposure to dusts, 2 points shall be assessed. R309-525-11(6)(b) and (c).

(q) For a treatment facility that does not provide cross connection control on the make-up waterlines discharging to solution tanks, 10 points shall be assessed. R309-525-11(9)(b)(i).

(r) For a treatment facility with solution tank overflow pipes that do not have a free fall discharge or are not located where noticeable, 2 points shall be assessed. R309-525-11(8)(b)(v).

(s) For a treatment facility without adequate spill containment provisions, 2 points shall be assessed. R309-525-11(6)(a)(iv)(B).

(t) For a treatment facility with acid storage tanks that are not vented to the outside atmosphere with separate screened vents, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(u) For a treatment facility without provisions for the proper disposal of water treatment plant waste (such as sanitary, laboratory, sludge, and filter backwash water), 5 points shall be assessed. R309-525-23.

(v) For a treatment facility where cross connection control is not provided on the feed lines to the solution tanks, 10 points shall be assessed. R309-525-11(9)(b) and (c).

(w) For a treatment facility that does not have a means to measure water flow rate, 10 points shall be assessed.

(x) For a surface water treatment facility where the piping is not labeled and color coded to identify the direction of flow and the contained liquid, 2 points shall be assessed. R309-525-8.

(y) Treatment facilities not secured against unauthorized access, 20 points shall be assessed.

(z) For a treatment facility using expired chemical reagents for process control, 5 points shall be assessed.

(aa) For a treatment facility with no access to lab or test kits for process testing, 2 points shall be assessed. R309-525-17(1).

(bb) For a treatment facility lacking cross connection control for the in-plant water supply, 10 points shall be assessed. R309-525-11(9)(b)

(2) Disinfection.

(a) General.

(i) For a chlorination facility which is not heated, lighted or ventilated as necessary to assure proper operation or the equipment and serviceability, 2 points shall be assessed. R309-520-7(1)(l).

(ii) For a disinfection facility without cross connection control on the solution feeders into the process units as required in R309-525-11(9)(c), 10 points shall assessed. R309-525-11(9)(b)(ii).

(iii) For a chlorination facility where there is no standby disinfection equipment of sufficient capacity available to replace the largest unit, 10 points shall be assessed. R309-520-7(1)(k).

(iv) For a disinfection facility where the correct reagent is not used for testing free disinfectant residual, 2 points shall be assessed.

(v) For a treatment facility where the pre- and post-chlorination processes are not independent of each other, to prevent possible siphoning of partially treated water into the clear well, 50 points shall be assessed. R309-525-11(9)(b)(iv).

(vi) For a disinfection facility where chemical solution tanks are not kept covered, 2 points shall be assessed. R309-525-11(8)(b)(iii).

(vii) For a disinfection facility without disinfectant residual test equipment, 2 points shall be assessed. R309-520-7(1)(j).

(viii) For a disinfection facility where there is no means to measure the volume of water treated, 2 points shall be assessed. R309-520-7(1)(i).

(b) Gas chlorination.

(i) For a gas chlorination facility without an automatic switch over of chlorine cylinders to assure continuous disinfection, 2 points shall be assessed. R309-520-7(2)(a).

(ii) For a gas chlorination facility without scales for weighing cylinders, 2 points shall be assessed. R309-520-7(2)(k).

(iii) For a gas chlorination facility without a leak repair kit, 15 points shall be assessed. R309-520-7(2)(p).

(iv) For a gas chlorination facility without respiratory equipment available and stored at a convenient location, 5 points shall be assessed. R309-520-7(2)(o).

(v) For a gas chlorination facility housed in a water treatment plant building where the chlorine gas feed and storage area is not enclosed and separated from other operating areas, 2 points shall be assessed. R309-520-7(2)(h).

(vi) For a gas chlorination facility where the chlorination equipment rooms are not vented such that the ventilating fan(s) take suction near the floor, as far as practical from the door and air inlet, with the point of discharge so located as not to contaminate air inlets of any rooms or structures, 5 points shall be assessed. R309-520-7(2)(e)(ii).

(vii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that air inlets are through louvers near the ceiling, 2 points shall be assessed. R309-520-7(2)(e)(iii).

(viii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that separate switches for the fans and lights are outside of the chlorine room, at the entrance to the chlorination equipment room and protected from vandalism, 2 points shall be assessed. R309-520-7(2)(e)(v).

(ix) For a gas chlorination facility where the vent hose from the feeder to discharge to the outside atmosphere is not above grade or does not have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(x) For a gas chlorination facility without a bottle of ammonium hydroxide (56%) available for leak detection, 2 points shall be assessed. R309-520-

7(2)(p).

(xi) For a gas chlorination facility where full and empty cylinders of chlorine gas are not restrained in position to prevent upset, 2 points shall be assessed. R309-520-7(2)(i)(ii).

(xii) For a gas chlorination facility with full and empty cylinders of chlorine gas stored in areas in direct sunlight or exposed to excessive heat, 2 points shall be assessed. R309-520-7(2)(i)(iii).

(xiii) For a gas chlorination facility in a water treatment plant building where the chlorine room is constructed in a manner that any openings between the chlorine room and the remainder of the plant are not sealed, 2 points shall be assessed. R309-520-7(2)(h)(ii).

(xiv) For a gas chlorination facility housed in a water treatment plant building that lacks outward-opening doors with panic bars, 2 points shall be assessed. R309-520-7(2)(h)(iii).

(xv) For a gas chlorination facility housed in a water treatment plant building with floor drains that do not discharge to the outside of the building and are not connected to other internal or external drain systems, 5 points shall be assessed. R309-520-7(2)(h)(iv).

(xvi) For a gas chlorination facility without a means of chlorine leak detection, such as a bottle of ammonia hydroxide solution or chlorine leak detection equipment, 15 points shall be assessed. R309-520-7(2)(p).

(c) Chlorine dioxide.

(i) For a chlorine dioxide disinfection facility where provisions are not made for proper storage of sodium chlorite to eliminate any danger of explosion 2 points shall be assessed. R309-520-10(3)(b) and R309-525-11(11)(b)(i).

(ii) For a chlorine dioxide disinfection facility where sodium chlorite is not stored by itself in a separate room and away from organic materials that would react violently with sodium chlorite, 2 points shall be assessed. R309-520-10(5)(a) and R309-525-11(11) (b)(i)(A).

(iii) For a chlorine dioxide disinfection facility where sodium chlorite storage structures are not constructed of noncombustible materials, 2 points shall be assessed. R309-520-10(3)(b)(iv) and R309-525-11(11)(b)(i)(B).

(iv) For a chlorine dioxide disinfection facility where a sodium chlorite storage structure is not located in an area where a fire may occur, water

should be available to keep the sodium chlorite area sufficiently cool to prevent decomposition from heat and resultant potential explosive conditions. 2 points shall be assessed if this is not the case. R309-520-10(4)(d) and R309-525-11(11)(b)(i)(C).

(v) For a chlorine dioxide disinfection facility that stores combustible or reactive materials in the operating area, 2 points shall be assessed. R309-520-10(5)(a).

(vi) For a chlorine dioxide disinfection facility that does not store personal protective equipment nearby, 5 points shall be assessed. R309-520-10(5)(c)

(vii) For a chlorine dioxide disinfection facility that does not have an emergency eyewash and shower immediately outside the operating area, 2 points shall be assessed. R309-520-10(3)(b)(viii)

(viii) For a chlorine dioxide disinfection facility that lacks an emergency shutoff for flows to the chlorine dioxide generator, 2 points shall be assessed. R309-520-10(3)(b)(ix)

(ix) For a chlorine dioxide disinfection facility that lacks a distinguishable alarm triggered by an ambient air chlorine dioxide sensor, 2 points shall be assessed. R309-520-10(3)(b)(v)

(x) For a chlorine dioxide disinfection facility that lacks wash down water available in the operating area, 2 points shall be assessed. R309-520-10(3)(b)(xvi)

(xi) For a chlorine dioxide disinfection facility that does not maintain the temperature of the chlorine dioxide operating area between 60 and 100°F, 2 points shall be assessed. R309-520-10(5)(d)

(xii) For a chlorine dioxide disinfection facility that lacks an Operation and Maintenance Manual including safety and emergency response procedures, 2 points shall be assessed. R309-520-10(5)(f)

(d) Ultraviolet (UV)

(i) For a UV disinfection facility that lacks an operating procedure in place to handle UV lamp breakage, power supply interruption, response to alarms, 2 points shall be assessed. R309-520-8(4)(b)

(ii) For a UV disinfection facility that does not calibrate and operate UV intensity sensors per manufacturer's instruction, 2 points shall be assessed R309-520-8(4)

(iii) For a UV disinfection facility that does not use ANSI/NSF Standard 60 chemicals in the cleaning of the UV, 25 points shall be assessed. R309-520-8(3)(j)

(iv) For a UV disinfection facility that can't isolate the UV disinfection system or each UV reactor for maintenance, 2 points shall be assessed. R309-520-8(3)(g)

(v) For a UV disinfection facility that lacks a backup power source for the UV disinfection system, 2 points shall be assessed. R309-520-8(3)(l)

(vi) For a UV disinfection facility that lacks a redundant primary disinfection mechanism, 5 points shall be assessed. R309-520-8(3)(m)

(e) Ozone

(i) For an ozone disinfection facility without a minimum of two ozone aqueous residual analyzers, 2 points shall be assessed. R309-520-9(7)(c)

(ii) For an ozone disinfection facility using chemicals that do not meet ANSI/NSF Standard 60 quench the residual ozone, 25 points shall be assessed. R309-520-9(4)(h)

(iii) For an ozone disinfection facility lacking properly functioning ozone off-gas blowers from the contactor, 2 points shall be assessed. R309-520-9(5)(b)

(iv) For an ozone disinfection facility that lacks a system for treating the final off-gas from each ozone contactor, 2 points shall be assessed. R309-520-9(5)(a)

(v) For an ozone disinfection facility discharging an ozone concentration in the gas discharge exceeding 0.1 ppm by volume, 2 points shall be assessed. R309-520-9(5)(d)

(3) Fluoridation.

(a) General

(i) For a fluoridation facility that does not calculate fluoride concentrations, including chemical dosages and total water quantities daily, 2 points shall be assessed. R309-105-14(3).

(ii) For a fluoridation facility without a fail-safe device incorporated in the fluoride feed control system to prevent overfeeding fluoride, 30 points shall

be assessed. R309-535-5(3).

(iii) For a fluoridation facility that uses fluoride chemicals that do not conform to the applicable AWWA standards or with ANSI/NSF Standard 60, 25 points shall be assessed. R309-535-5.

(iv) For a fluoridation facility without scales, loss-of-weight recorders or liquid level indicators, as appropriate, 2 points shall be assessed. R309-535-5(2)(a).

(v) For a fluoridation facility without proper personal protective equipment as required in R309-525-11(10) for operators handling fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility lacking a sampling location for measuring the final fluoride level, 2 points shall be assessed. R309-525-18.

(vii) For a fluoridation facility that does not have a means to measure the flow of water to be treated, 2 points shall be assessed. R309-535-5(2)(g).

(viii) For a fluoridation facility without fluoride testing equipment not properly verified or calibrated, 2 points shall be assessed. R309-525-25(4).

(ix) For a fluoride facility adding fluoride compound before lime-soda softening, 2 points shall be assessed. R309-535-5(2)(c).

(x) For a Fluoridation facility lacking cross connection control so that no direct connections exist between any sewer and a drain or overflow from the feeder, solution chamber or tank, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(xi) For a fluoridation facility storing incompatible chemicals in the fluoride storage or injection areas, 10 points shall be assessed. R309-525-11(7)(a)(iv).

(xii) For a fluoridation facility lacking a floor drain to facilitate the washdown of floors, 2 points shall be assessed. R309-535-5(5)(b)

(b) Acid

(i) For a fluoridation facility without deluge showers and eye wash devices, 10 points shall be assessed. R309-535-5(4).

(ii) For a fluoridation facility lacking adequate spill containment provisions, 2 points shall be assessed R309-525-11(6)(a)(iv)(B).

(iii) For a fluoridation facility lacking a vent in the fluorosilicic acid storage units that vents to the atmosphere, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(c) Dry

(i) For a fluoridation facility where the make-up water used for sodium fluoride dissolution is not treated to reduce hardness to less than 75 mg/l as calcium carbonate, 2 points shall be assessed. R309-535-5(2)(i).

(ii) For a fluoridation facility without a spring opposed diaphragm type anti-siphon device for all fluoride feed lines and dilution water lines, 10 points shall be assessed. R309-535-5(2)(f).

(iii) For a fluoridation facility with saturators that do not have a flow meter on the inlet or outlet line, 2 points shall be assessed. R309-535-5(2)(l).

(iv) For a fluoridation facility without an adequate level of fluoride crystals in the saturator, 2 points shall be assessed. R309-525-11(8)(b)(i).

(v) For a fluoridation facility without a NIOSH/MSHA certified dust respirator approved for fluoride dust removal as required in R309-525-11(10) for operators handling dry fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility where an overflow from the day tank will not drain by gravity back into the bulk storage tank or a containment system, 10 points shall be assessed. R309-525-11(8)(c)(v).

(vii) For a fluoridation facility using the sodium fluoride dry chemical where the saturators are not of the up-flow type, 2 points shall be assessed. R309-535-5(2)(l).

(viii) For a fluoride facility where fluoride chemicals stored in uncovered or opened shipping containers and are stored inside a building on pallets, 2 points shall be assessed. R309-535-5(1).

(ix) For a fluoride feed pump that is not tied directly to the well pump or service pump, 30 points shall be assessed. R309-535-5(2)(k).

(x) For a fluoridation facility lacking a vent in the dry chemical storage areas that vents to the atmosphere outside the building, 2 points shall be assessed. R309-535-5(5)(a).

(xi) For a fluoridation facility using sodium fluoride dry chemical and lacking a hopper equipped with an exhaust fan and dust filter and under a

negative pressure during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xii) For a fluoridation facility that does not vent air from fluoride handling equipment through a dust filter to the outside atmosphere of the building for dust control during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xiii) For a fluoridation facility using sodium fluoride dry chemical and lacking a means of disposing of empty bags, drums or barrels handled in a manner that minimizes operators' exposure to fluoride dusts shall be assessed, 10 points. R309-535-5(5)(b).

(4) Filtration Treatment.

(a) For a filtration facility that does not have equipment for each individual filter to continuously monitor the effluent turbidity, 30 points shall be assessed.

(b) For a surface water filtration facility that does not have at least two filter units, each capable of meeting the plant design capacity, 20 points shall be assessed. R309-525-15(3).

(c) For a conventional surface water filtration facility that does not have the ability to filter to waste (to allow a filter to ripen before introduction finished water into the clearwell), 20 points shall be assessed.

(d) For a filtration facility where instrumentation and controls are inoperable, 2 points shall be assessed.

(e) For a filtration facility where a backwash tank is not provided with finished drinking water, 20 points shall be assessed. R309-525-15(7)(a)(ix).

(f) For a conventional surface water filtration facility where the backwash waste water is not settled prior to being recycled to the head of the treatment plant, 2 points shall be assessed. R309-525-15(7)(a).

(g) For a membrane filtration facility where automatic membrane integrity tests are not performed at least daily, 2 points shall be assessed. R309-530-8(3)(b).

(h) For a membrane filtration facility not using ANSI/NSF 60 approved chemicals, 25 points shall be assessed. R309-525-11(5)(b).

(i) For a membrane filtration facility lacking cross-connection control protection for the treatment process, 10 points shall be assessed.

(5) Ion Exchange

(a) For an ion exchange facility without a depth of the exchange resin at least 3 feet, 2 points shall be assessed. R309-535-8(1)(b)(iii).

(b) For an ion exchange facility using a salt for the brine solution not having an ANSI/NSF 60 certification, 25 points shall be assessed. R309-525-11(5)(b).

(c) For an ion exchange facility make-up water inlet that lacks protection from back-siphonage, 2 points shall be assessed

(d) For an ion exchange facility where the overflow discharge piping is not protected with a corrosion resistant screen or is not terminated with a downturned bend with adequate clearance to prevent cross connection, 10 points shall be assessed. R309-525-11(9)(b).

(e) For an ion exchange facility that lacks a brine measuring tank or means of metering provided to obtain proper dilution, 2 points shall be assessed. R309-525-11(8)(b)(i).

(6) Sequestration

(a) For a polyphosphate sequestration facility that uses chemicals not meeting ANSI/NSF 60 certification, 25 points shall be assessed. R309-535-11(5)(d).

(b) For a sequestration facility using phosphate chemicals where total phosphate applied exceed 10 milligrams per liter as PO4, 2 points shall be assessed. R309-535-11(5)(b).

(c) For a sequestration facility that lacks sample taps located on each raw water source, each treatment unit influent and each treatment unit effluent, 2 points shall be assessed. R309-535-11(5)(d).

(d) For a sequestration facility that lacks the testing equipment for accurately measuring the phosphate dosage, 2 points shall be assessed. R309-535-11(5).

R309-400-8. Operator Certification.

(1) A water system that is required to have a certified operator and does not, 30 points shall be assessed.

(2) A water system where the operator is not certified at the appropriate level, 10 points shall be assessed.

(3) A grade 3 or 4 water system that does not have all direct responsible charge operators (as specified in R309-300-5(5)) certified at the level of the system, 5 to 15 points shall be assessed. The number of points shall be based on the percentage of time that the water system is operated by operators not certified at the required level.

(4) A water system where the certified operator does not live within a one hour response time, 20 points shall be assessed.

(5) A water system may be credited up to a maximum of 20 points, which shall remain on record for as long as the conditions apply. The following items are eligible for credit:

(a) A water system that is not required to have a certified operator and does shall be credited 10 points.

(b) A water system that has operators that are certified at a higher level than required shall be credited 10 points.

(c) A water system that has operators certified in other areas that are not required by that water system, such as treatment shall be credited 10 points.

R309-400-9. Cross Connection Control Program.

(1) A water system, which does not have any of the below listed components of a cross connection control program in place, 50 points shall be assessed.

(2) A water system, which only has some of the components of a cross connection control program in place, shall be assessed the following number of points:

(a) A water system which does not have local authority to enforce a cross connection control program (e.g., ordinance, bylaw or policy), 10 points shall be assessed.

(b) A water system that does not provided public education or awareness material or presentations on an annual basis, 10 points shall be assessed.

(c) A water system that does not have an operator with training in the area of cross connection control or backflow prevention, 10 points shall be assessed.

(d) A water system with no written records of cross connection control activities, such as, backflow assembly inventory and test history, 10 points shall be assessed.

(e) A water system that does not have on-going enforcement activities (hazard assessments and enforcement actions), 10 points shall be assessed.

R309-400-10. Drinking Water Source Protection.

Drinking water source protection (for ground water and surface water sources): Points shall be assessed for each source after a system fails to complete source protection requirements according to schedules or deadlines specified in R309-600 and R309-605, unless extensions have been requested from and granted by the Director. The points shall remain until such time as the violation or deficiency is corrected or resolved.

(1) For a water system that has not appointed a designated person for source protection and notified the Division, 5 points shall be assessed.

(2) For a water system that has not upgraded a Preliminary Evaluation Report to a Drinking Water Source Protection plan, 30 points shall be assessed.

(3) For a water system that has not submitted an updated Drinking Water Source Protection plan, 10 points shall be assessed.

(4) For a water system with any new (see R309-110) sources for which a Preliminary Evaluation Report has not been submitted, 150 points shall be assessed. These points shall be included with the points for an unapproved source, not added to them.

(5) For a water system that has any existing (see R309-110) sources that have come into use for which a source protection plan has not been submitted, 30 points shall be assessed.

(6) For a water system that has reconstructed or redeveloped a water source and has not submitted a revised source protection plan, 20 points shall be assessed.

(7) For a water system that has a disapproved plan, update or Preliminary Evaluation Report, 20 points shall be assessed.

R309-400-11. Administrative Issues.

Points in this area shall be assessed at the time that the failure occurs or upon notification of the Director, and shall remain until the issue is resolved unless otherwise specified.

(1) Administrative Data -

(a) A water system, that has not designated a person or organizational official responsible for the system including a current address and phone number,10 points shall be assessed.

(b) A water system project constructed without proper plan approval, 50 to 200 points shall be assessed based on an evaluation of the project which shall include the

structural or engineering integrity of the project; whether the plans and specifications were prepared and stamped by a licensed professional engineer; the adequacy of the materials used and the impact on the operation of the water system (good or bad).

(2) A water system with a current written Emergency Response Program

shall be credited 10 points that shall remain on record as long as the Program remains current.

(3) A water system with a written Financial Management Plan

including an appropriate rate structure, infra-structure replacement fund, and master plan shall be credited 10 points that shall remain on record as long as the Plan is current.

(4) Sampling Site Plans:

(a) A water system, which does not have an adequate bacteriological sampling site plan, 5 points shall be assessed.

(b) A water system, which does not have a lead/copper sampling site plan, 10 points shall be assessed.

(5) Customer Complaint:

(a) 25 to 100 points may be assessed for valid and documented customer complaints. The customer complaints include but are not limited to the following:

(i) Turbidity;

(ii) Pressure;

(iii) Taste and Odor;

(iv) Sickness (water suspected); and

(v) Waterborne Disease Outbreak (R309-104-9).

(vi) Periods of Water Outage

(b) The number of points shall be based upon the extent and documentation of the problem and the potential impact to public health. The documentation shall consist

of an investigation by Department of Environmental Quality, Department of Health or Local Health Department personnel and may include an epidemiological study linking the drinking water to reported outbreaks of illness where appropriate.

(c) In the case of a documented waterborne disease outbreak, the water system shall automatically be rated Not Approved for at least the duration of the threat to the quality of the drinking water and as long as it takes the water system to correct any deficiency that caused the outbreak.

(d) Points shall only be assessed once per issue and shall not be additive based on the number of calls per issue. These points shall be assessed and updated upon verification of the complaint by the Director and shall remain on record until the issue or deficiency no longer exists. Points may have already been assessed in other areas as appropriate.

(6) (a) The Director may issue directives

to a water system that include, but are not limited to the following:

(i) Administrative Orders;

(ii) Rule defined action;

(iii) Rule defined compliance schedule;

(iv) Variance/Exemption requirements;

(v) Bilateral Compliance Agreement;

(vi) Notice of Violation and Compliance Order; and

(vii) Compliance Action/Enforcement Order.

(b) If the water system does not comply with the directive, the Director may assess 25 to 200 points to the water system. Points shall be assessed based upon the severity of the non-compliance, the threat to public health and the underlying basis for the original directive.

(7) Data Falsification –

The Director may assess a water system points for data falsification. The water system may be assessed 25 to 200 points for each occurrence based upon:

(a) the severity of the falsification;

(b) the threat to public health;

(c) the intent of the water system personnel; and,

(d) the type of falsification.

(i) Reports only good data

(ii) Doctored results from the laboratory

(iii) Non-valid sample

Data reported to the Director includes but is not limited to Water Treatment Plant Reports, Disinfection Reports, bacteriological and chemical analyses, and Annual Reports. This assessment of points shall be in addition to any other penalty provided by law.

(8) Water Hauling:

(a) For a community water system that is hauling water as a permanent method of culinary water distribution, 150 points shall be assessed. R309-550-10(1).

(b) For a non-community system that is hauling water as a permanent method of culinary water distribution without approval from the director, 150 points shall be assessed. R309-550-10(2).

(c) For a water system, which has been granted an exception to haul water, if any part of the water hauling guidelines is not followed, 50 points shall be assessed. R309-550-10.

R309-400-12. Reporting and Record Maintenance Issues.

Points may be assessed for failure to provide required reports to the Director by the reporting deadline. The points shall be assigned as the failure occurs and shall remain on record for a period of one year.

(1) Monthly Reports:

(a) For each failure to report the monthly water treatment plant report, 100 points shall be assessed.

(2) Quarterly Reports:

(a) For each failure to report the quarterly disinfection report, 50 points shall be assessed.

(3) Annual and Other Reports:

(a) A public water system that fails to submit water use data required by a state agency or fails to verify the accuracy of the data by including a certification by a certified operator or a professional engineer performing the duties of a certified operator shall be assessed 50 points.

(b) Community water systems that fail to send a certification to the Division stating how the consumer confidence report was distributed to its customers as required in R309-225-7(3), 10 points shall be assessed.

(c) Community water systems that fail to mail a copy of the consumer confidence report to the Division as required in R309-225-7(3), 10 points shall be assessed.

(d) A public water system that fails to submit operational reports or other reports required by the Division shall be assessed 20 points.

KEY: drinking water, environmental protection, water system rating, penalties
Date of Enactment or Last Substantive Amendment: November 22, 2016
Notice of Continuation: March 22, 2010
Authorizing, and Implemented or Interpreted Law: 19-4-104

Agenda Item 6(B)(ii)(c)

IPS Implementation Policy **(DRAFT 2/8/2019)**

I. Introduction

The Improvement Priority System (IPS) is used by the Division of Drinking Water to evaluate a public water system's compliance with Title R309 of the Utah Administrative Code and to prioritize noncompliance for enforcement action. Under IPS, the Division assesses points for noncompliance and assigns ratings to public water systems.

Implementation of IPS is based on three documents:

1. Utah Administrative Code R309-400, I*mprovement Priority System and Public Water System Ratings* − the IPS rule establishes the IPS program, the Division's and the Director's authority, and a public water system's responsibility. Changes to the rule must go through the official rulemaking process.

2. The *IPS Implementation Policy* – the IPS policy, which is this document, establishes the points associated with noncompliance and the point thresholds for assigning public water system ratings. Changes to the implementation policy need to be reviewed and approved by the Drinking Water Board.

3. The *IPS Implementation Standard Operating Procedure (SOP)* – the IPS SOP outlines the Division's internal procedures for implementing the IPS program in detail. The SOP may be modified as needed by the Division.

II. Assessment of Points

1. The Division will assess points based on noncompliance with Title R309 of the Utah Administrative Code, noncompliance with a directive or order issued by the director, or operational practices or performance that may result in a threat to public health.

2. In general, the **Points** assessed for each category of health threat are as follows:

    a) Low health risk – 5 points
    b) Minor potential to cause harm – 15 points
    c) Moderate potential to cause harm; harm becomes worse if not addressed – 25 points
    d) Significant potential to cause harm – 50 points
    e) Monitoring violations – 100 points
    f) Imminent health threat (automatic not-approved status) – 200 Points

3. **Appendix 1** of this document contains tables specifying the number of points associated with each instance of noncompliance with a drinking water rule requirement and noncompliance with a directive or order issued by the director.

4. The Division will remove points when a water system submits written documentation of correction of a deficiency with supporting evidence or when the noncompliance is resolved. In some cases, a site inspection by DDW may be required.

III. Public Water System Rating Thresholds

1. The Division will rate a public water system based on the point thresholds shown below or based on a written agreement with the director.

2. The point thresholds for rating a public water system as Approved or Not Approved are different for each type of water system and are given below:
    - Community Water System – 150 points
    - Non-transient Non-community Water System – 120 points
    - Transient Non-community Water System – 100 points

3. Per R309-400, the Division will assign Ratings to water systems as follows:
    - **Approved** – the total number of points is below the point threshold
    - **Not Approved** – the total number of points is equal to or greater than the point threshold or the Director finds a threat to public health
    - **Corrective Action** – a water system has entered into a written agreement with the Director to resolve its deficiencies according to a compliance schedule

IV. Changes to the IPS Implementation Policy

1. The Division may make changes to the IPS Implementation Policy when dictated by the need to revise its enforcement priority system.
2. All changes to the policy, except for non-substantive changes, will be reviewed and approved by the Drinking Water Board.

This is a sample of the IPS Deficiency Table. The complete table can be found at: https://deq.utah.gov/drinking-water/reworking-the-ips-improvement-priority-system

Deficiency Code	(CURRENT) Database Description	(CURRENT) Deficiency Type	(CURRENT) IPS	*DRAFT Database Description*	(PROPOSED) Deficiency Type	(PROPOSED) IPS Points	Rule Reference
General							
G004	INSUFFICIENT SYSTEM OWNERSHIP INFORMATION	MIN	10	Designated Legal Ownership	Sig	25	R309-100-4(3)
R000	LACKS LEAD/COPPER SAMPLE SITE PLAN	MIN	10	Monitoring/sample site plan (ie arsenic, blending, LCR, DBP, etc)	Min	5	R309-210
				Systems must submit annual water use data to DWRi and verify water use data accuracy (points acrew each year of violation)	Min	15	
A025	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	MIN	25	Administrative Issues - see R309-400 for details	Min	15	R309-400-11
A050	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	50	Administrative Issues - see R309-400 for details	Sig	25	R309-400-11
A075	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	75	Administrative Issues - see R309-400 for details	Sig	50	R309-400-11
A100	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	100	Administrative Issues - see R309-400 for details	Sig	100	R309-400-11
A150	ADMINISTRATIVE ISSUES - SEE NOTES FOR SPECIFIC DETAILS	SIG	200	Administrative Issues - see R309-400 for details	Sig	200	R309-400-11
Cross Connection Control, Operator Certification, Emergency Response							
M020	UNPROTECTED CROSS CONN PRESENT IN DIST SYSTEM	SIG	50	Cross connections absent in the water system	Sig	50	R309-105-12(1)
M003	CCC-LACKS LOCAL AUTHORITY	MIN	10	Water System has a cross connection control program that includes a legally adopted and functional authority statement	Min	15	R309-105-12(2)
M004	CCC-NO ANNUAL PUBLIC EDUCATION OR AWARENESS	MIN	10	Water System has a cross connection control program that includes annual public education or awareness material	Min	15	R309-105-12(2)
M005	CCC-LACKS OPERATOR TRAINING	MIN	10	Water System has a cross connection control program that includes an operator with adequate training in the area of cross connection control or backflow prevention	Min	15	R309-105-12(2)
M006	CCC-LACKS WRITTEN RECORDS	MIN	10	Water System has a cross connection control program that include written records of cross connection control activities, such as, backflow assembly inventory and assembly testing	Min	15	R309-105-12(2)

M007	CCC-LACKS ON-GOING ENFORCEMENT PLAN	MIN	10	Water System has a cross connection control program that includes documentation of on-going enforcement activities	Min	15	R309-105-12(2)
M001	CURRENT EMERGENCY RESPONSE PROGRAM	REC	-10				
M001	CURRENT EMERGENCY RESPONSE PROGRAM	REC	-10				
C001	NO CERTIFIED OPERATOR WHEN REQUIRED FOR SYSTEM	SIG	30	Operator certified at the level required for the system and avaialbe within one hour travel time	Sig	50	
C002	OPERATOR NOT AVAILABLE WITHIN 1 HOUR TRAVEL TIME	MIN	20				
C004	OPERATOR CERTIFIED AT A HIGHER LEVEL THAN REQUIRED	REC	-20				
M002	CURRENT FINANCIAL CAPACITY PLAN IN PLACE	REC	-10				
Plan Review							
G001	WATER SYSTEM FACILITY LACKS PLAN APPROVAL	SIG	50	Water System has received Plan Approval and/or Operating Permit for all active drinking water facilities as defined in R309-500-5(1)	Sig	50	R309-100-5(1&2), R309-105-6(1)(a), R309-500-6, R309-500-9, R309-550-9(3)
S001	SOURCE LACKS PLAN APPROVAL	SIG	200	All Active Water Sources (Springs and Wells) have received Plan Approval and/or Operating Permit	Sig	200	R309-515-6(1)(5) & R309-515-7(7)
M025	INTERCONNECTION LACKS DDW APPROVAL	SIG	200	If the system purchases water, the interconnection has been approved by the Division	Sig	50	R309-550-9(3)
Minimum Sizing Requirements							
V030	SYSTEM LACKS 10% OF REQUIRED STORAGE CAPACITY	MIN	10	Storage tank size meets the minimum storage volumes per R309-510; > 80% (not considering fire flow demand)	Min	15	R309-510-8
V031	SYSTEM LACKS 20% OF REQUIRED STORAGE CAPACITY	SIG	20				
V032	SYSTEM LACKS 30% OF REQUIRED STORAGE CAPACITY	SIG	30	Storage tank size meets the minimum storage volumes per R309-510; < or = 80% (not considering fire flow demand)	Sig	50	
V033	SYSTEM LACKS 40% OF REQUIRED STORAGE CAPACITY	SIG	40				

Vio Code	Violation	Rule-Analyte	(CUURENT) IPS	Proposed Rules Deficiencies	Deficiency/ Violation Type	(PROPOSED) IPS Points	Rule Reference
01	MCL, SINGLE SAMPLE	0100 TURBIDITY	10	Turbidity MCL Exceedance	Acute	50	R309-205-8/215-9
01	MCL, SINGLE SAMPLE	1038 NITRATE-NITRITE	60	Nitrate-Nitrite MCL Exceedance	Acute	100	R309-205-5(4)
01	MCL, SINGLE SAMPLE	1040 NITRATE	60	Nitrate MCL Exceedance	Acute	100	R309-205-5(4)
01	MCL, SINGLE SAMPLE	1041 NITRITE	50	Nitrite MCL Exceedance	Acute	50	R309-205-5(5)
01	MCL, SINGLE SAMPLE	3008 GIARDIA LAMBLIA	50	Log removal/inactivation of Giardia Lamblia not achieved	Acute	50	R309-215-7/505-6(2)(a)&(b)
02	MCL, AVERAGE	ALL OTHER ANALYTES	10	Running Annual Average MCL Exceedance	Acute	50	R309-205/215
02	MCL, AVERAGE	1040 NITRATE or 1038 NITRATE-NITRITE	35	Nitrate Running Annual Average MCL Exceedance	Acute	100	R309-205-5(4)
03	MONITORING, ROUTINE MAJOR	ALL OTHER ANALYTES	35	Chem Monitoring Violation	Monitoring	25	R309-205/215
03	MONITORING, ROUTINE MAJOR	1040 NITRATE or 1038 NITRATE-NITRITE	50	Nitrate Monitoring Violation	Monitoring	50	R309-205-5(4)
10	OPERATIONS REPORT	0200 SWTR	100	Monthly SWTR Report	Reporting	50	R309-215-8
11	MRDL (CHLORINE/CHLORAMINE)	0400 DBP STAGE 1	10	Residuals exceed 4 mg running annual average	Chronic	50	R309-215-12
19	MONITOR GWR ASSESSMENT, MAJOR	3014 TCR	5	Failure to submit GWR Assessment Source Sample	Monitoring	5	R309-215-16
1A	MCL, E. COLI, POS E COLI	3014 RTCR	50	Confirmed Positive E. coli Sample	Acute	50	R309-211-9
1A	MCL, E. COLI, POS E COLI	8000 RTCR	50	Confirmed Positive E. coli Sample	Acute	50	R309-211-9
27	MONITORING, ROUTINE (DBP), MAJOR	0999 CHLORINE	10	Failure to collect distribution system residuals	Reporting	15	R309-215-12
27	MONITORING, ROUTINE (DBP), MAJOR	2456 TOTAL HALOACETIC ACIDS (HAA5)	20	Monitoring & reporting Stage 1 DBP	Monitoring	15	R309-215-12
29	FAILURE TO PRODUCE FILTER ASSESSMENT	0300 IESWTR/LT1	35	Failure to perform filter assessment	Monitoring	25	R309-525-15
2A	LEVEL 1 ASSESS, MULTIPLE TC POS	8000 RTCR	40	Failure to complete a Level One Assessment for Multiple TC Pos	Chronic	50	R309-211-9
2A	LEVEL 1 ASSESS, TC POS RT NO RPT	8000 RTCR	40	Failure to complete a Level One Assessment for TC Pos with no repeats	Chronic	50	R309-211-9
2D	STARTUP PROCEDURES TT	8000 RTCR	50	Failure to complete a Seasonal Start Up Form	Reporting	50	R309-211-9
34	MONITOR GWR TRIGGERED/ADDITIONAL, MAJOR	0700 GROUNDWATER RULE	40	Failure to take Triggered Source sample after monthly Routine TC+ sample	Monitoring	25	R309-215-16
36	MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	0999 CHLORINE	10	FTM and Report distribution residuals for SW PWS	Reporting	15	R309-215-8
3A	MONITORING, ROUTINE, MAJOR	3014 RTCR	35	Failure to complete all the required monthly RTCR sampling	Monitoring	25	R309-211-9
3A	MONITORING, ROUTINE, MINOR	3014 RTCR	10	Failure to complete some of the required monthly RTCR sampling	Monitoring	15	R309-211-9
41	MONTHLY COMB. FILTER EFFLUENT (SWTR	0100 TURBIDITY	25	Failure to meet NTU standards	Acute	100	R309-215-9
41	MONTHLY COMB. FILTER EFFLUENT (SWTR	0200 SWTR	25	Failure to maintain entry point residual	Acute	100	R309-215-8
41	RES DISINFECT CONCENTRATION (SWTR)	0999 CHLORINE	25	Failure to maintain at least a trace level of CL at furthest ends of dist	Acute	100	R309-215-8
42	FAILURE TO FILTER (SWTR)	0200 SWTR	50	Failure to provide treatment	Chronic	100	R309-215-8
43	SINGLE COMB FLTR EFFLUENT (IESWTR/LT1)	0300 IESWTR	50	Exceeds Turb 1 NTU	Acute	100	R309-215-8
44	MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	0300 IESWTR	50	Exceeds Turb 0.3 NTU	Acute	100	R309-215-8
45	FAILURE ADDRESS DEFICIENCY (GWR)	0700 GROUNDWATER RULE	35	Significant Deficiency Failure to Fix Violation GW PWS	Chronic	50	R209-215-16(3)(a)(iii)

Vio Code	Violation	Rule-Analyte	(CUURENT) IPS	Proposed Rules Deficiencies	Deficiency/ Violation Type	(PROPOSED) IPS Points	Rule Reference
45	FAILURE ADDRESS DEFICIENCY (EPA SURVEY)	0800 LT2ESWTR	0	Significant Deficiency Failure to Fix Violation SW PWS	Chronic	50	R209-215-16(3)(a)(iii)
46	INADEQUATE DBP PRECURSOR REMOVAL	2920 DBP Stage 1	20	Precursor removal	Chronic	50	R309-215-12
4B	REPORT SAMPLE RESULT/FAIL MONITOR	8000 RTCR	1	Failure to submit RTCR monthly sample results on time	Reporting	5	R309-211-9
51	INITIAL TAP SAMPLING (LCR)	5000 LEAD & COPPER RULE	20	Failure to sample on 6 month monitoringfor Lead and Copper	Monitoring	25	R309-210-6
52	FOLLOW-UP OR ROUTINE TAP M/R (LCR)	5000 LEAD & COPPER RULE	20	Failure to sample for Lead and Copper	Monitoring	25	R309-210-6
57	OCCT/SOWT RECOMMENDATION/STUDY (LCR)	5000 LEAD & COPPER RULE	35	Failure to submit Corrosion Control Recommendation/Study	Chronic	50	R309-210-6
5A	SAMPLE SITING PLAN ERRORS	8000 RTCR	0	Failure to submit RTCR Sample Site Plan	Reporting	5	R309-211-9
65	PUBLIC EDUCATION (LCR)	5000 LEAD & COPPER RULE	10	Failure to submit LCR MCL public notice	Chronic	50	R309-210-6
71	CCR REPORT	7000 CONSUMER CONFIDENCE RULE	10	Failure to submit CCR	Reporting	15	R309-225-4
72	CCR ADEQUACY/AVAILABILITY/CONTENT	7000 CONSUMER CONFIDENCE RULE	10	Failure to submit proof of CCR delivery notification	Reporting	15	R309-225-4
75	PUBLIC NOTICE RULE LINKED TO VIOLATION	ALL ANALYTES	5	Failure to submit Tier 3 PN	Reporting	5	R309-220
75	PUBLIC NOTICE RULE LINKED TO VIOLATION	ALL ANALYTES	2	Failure to submit Tier 2 PN	Reporting	5	R309-220
75	PUBLIC NOTICE RULE LINKED TO VIOLATION	ALL ANALYTES	10	Failure to submit Tier 1 PN	Reporting	15	R309-220
76		7500 PUBLIC NOTICE		Other Non-NPDWR Potential Health Risks	Reporting	50	R309-220
03	LT24 MAJOR	3014 ECOLI	25	FTM and Report all LT2 required samples for a month	Monitoring	25	R309-215-15
03	LT24 MINOR	3014 ECOLI	5	FTM and Report some LT2 required samples for a month	Monitoring	5	R309-215-15
4A		8000 RTCR		Failure to Timely Submit Level 1 Assessment Forms	Reporting	15	R309-211-11
4C		8000 RTCR		Failure to Timely Submit Seasonal Start-up Certification Form for Properly Conducted Start-up Procedures	Reporting	15	R309-211-11

Agenda Item 6(B)(iii)(a)

R309-105. Administration: General Responsibilities of Public Water Systems.

(DRAFT 2/8/2019)

R309-105-19. Water-Related Customer Complaints.

1. A community water system and a non-transient non-community water system shall:
    a. have in place and implement a written procedure for handling customer complaints;
    b. investigate, respond to, and if needed take action to resolve the cause of a customer complaint;
    c. maintain written records that track and document, as a minimum, customer complaints, water system responses, notifications, and related dates;
    d. retain written records for a minimum of five years; and
    e. make written records related to customer complaints available upon request.

2. A public water system that receives drinking water from another water system shall notify that water system within two business days of receiving a customer complaint related to the supplied water.

3. A public water system that supplies drinking water to another public water system and receives notification of a customer complaint from that water system shall:
    a. investigate and take needed action upon receiving notification concerning the water delivered; and
    b. track and document, as a minimum, the complaint, water system response, notification, and related dates.

Agenda Item 6(B)(iii)(b)

R309-105-18. Emergencies.

(1) The Director or the local health department shall be informed by telephone by a water supplier of any "emergency situation". The term "emergency situation" includes the following:

(a) The malfunction of any disinfection facility such that a detectable residual cannot be maintained at all points in the distribution system.

(b) The malfunction of any "complete" treatment plant such that a clearwell effluent turbidity greater than 5 NTU is maintained longer than fifteen minutes.

(c) Muddy or discolored water (which cannot be explained by air entrainment or re-suspension of sediments normally deposited within the distribution system) is experienced by a significant number of individuals on a system.

(d) An accident has occurred which has, or could have, permitted the entry of untreated surface water and/or other contamination into the system (e.g. break in an unpressurized transmission line, flooded spring area, chemical spill, etc.)

(e) A threat of sabotage has been received by the water supplier or there is evidence of vandalism or sabotage to any public drinking water supply facility which may affect the quality of the delivered water.

(f) Any instance where a consumer reports becoming sick by drinking from a public water supply and the illness is substantiated by a doctor's diagnosis (unsubstantiated claims should also be reported to the Division of Drinking Water, but this is not required).

(2) If an emergency situation exists, the water supplier shall then contact the Division in Salt Lake City within eight hours. Division personnel may be reached at all times through 801-536-4123.

(3) All suppliers are advised to develop contingency plans to cope with possible emergency situations. In many areas of the state the possibility of earthquake damage shall be realistically considered.

KEY: drinking water, watershed management
Date of Enactment or Last Substantive Amendment: November 8, 2017
Notice of Continuation: March 13, 2015Authorizing, and Implemented or Interpreted Law: 19-4-104

Proposed Revisions to R309-105-18. Emergencies.

The division intends to make the following revisions to R309-105-18, which dates back to 1992:

1. Provide a clearer definition of emergencies that a Public Water System must report to the director

2. Revise the timeframe for reporting emergencies to the director

3. Provide another option for reporting emergencies 24 hours a day

4. Delete advisory language, not appropriate for a rule, concerning development of contingency plans for emergencies

5. Delete the advisory language, not appropriate for a rule, for considering the possibility of earthquake damage

6. State explicitly that a Public Water System is responsible for reporting emergencies

Agenda Item 7

Rural Water Association Report
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD PACKET
Rural Water Association Report

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Rural Water Association of Utah

February 28th - Drinking Water Board Report: Activities Overview

Employee/Position: Terry Smith - Management Technician

Report Date Range: 12/21/2018 - 2/5/2019

December

- Vacation, December 24th - January 2nd.

January

Onsite:

- Proctored 7 operator certification exams throughout month.
- Wanship Mutual Water: On the 28th I met with the town water board to discuss funding options and a long-term evaluation/plan pertaining to the water system expansion and asset management, through the creation of a water system master plan.
- Old Meadows Water Company: Met with the water board where I went over their assessed deficiencies (under an AO) and possible ways to remedy. We discussed funding options, asset management and system sustainability planning.

Offsite:

- Manila Town: At the system's request, I began creating a rate analysis to help them establish a revenue stream that was adequate for long-term sustainability, and also treated the classes of customer equitably, based upon demand on the system - residential and commercial.
- Toquerville City: I created a rate model/analysis for them last year. They have decided to explore some other rate structure options, and requested that I modify the spreadsheet in order to allow them to do this.
- Hidden Lake: Helping them explore funding options and planning for asset management
- Skyline SSD: They are looking for funding to replace a water tank as well as adjusting rates to bring in required revenue. After several discussions, we have a meeting with management scheduled for February.

February

Offsite:

- Town of Manila: Working on budget/revenue analysis for them . In particular, analysis of the impact of commercial customers vs residential. Sent draft to the Mayor/Clerk and will incorporation additional requested evaluation options into the spreadsheet.
- Teasdale SSD: Finished the system water capacity analysis. This will allow them to not only evaluate how many ERC's they can allow with the capacity of the current water sources, but what their current water rights will sustain as well.

Rural Water Association of Utah

Drinking Water Board Report - Activities Overview

Employee/Position: BRIAN PATTEE, Compliance Circuit Rider
Report Date Range: December 24th 2018—February 8th 2019

January 1st thru January 31st

Onsite/or direct Contact with Operator:

- 1-7th thru 11th Hurricane City/ Washington County Cross Connection Control Program Administrator Certification , (participating systems) Hurricane City, Washington City , Saint George City, Ivins, Nucor Steel, American Pacific, Monroe, 3 points center , Zion under canvas, Vernal, Tocqueville, Virgin , Leeds Domestic water, Santa Clara, Iron Co Outdoor Rec.
- 1-23, West Jordan Cross Connection Coalition Meeting, DDW new rule & RWAU Role, Systems in Attendance,- Water Pro, West Jordan , South Jordan , Kearns Improvement, Taylorsville Bennion, Salt Lake county Health, Sandy City,
- 1- 24, Clearfield Cross Connection Coalition Meeting, DDW new rule & RWAU Role, Systems in Attendance,- Clearfield, Logan City, Ogden city , Kaysville , Davis Co Health Dept. ,North Salt Lake, etc.
- 1- 24, Stockton TALs Inspection Visit.
- 1- 28, Logan City , CCC TA
- 1 – 29, Willard, request for CCC program Assistance.
- 1-30, Orem Cross Connection Coalition Meeting, DDW new rule & RWAU Role , Systems' In Attendance – Orem City , Vineyard, Central Utah Conservancy District, Springville, Lehi city, Spanish Fork,

Offsite:

- 1-14,18, Cottonwood Coves , TA with sample reporting , & compliance reporting
- 1-17 Toquerville , - Advice and CCC authority statement
- 1-29 Willard , CCC hazard assessment scheduling

In addition to the above activities during this time frame, I have been reviewing by request of DDW, Cross Connection Control Rule Change, and asked to focus on IPS2020 Rule Change.

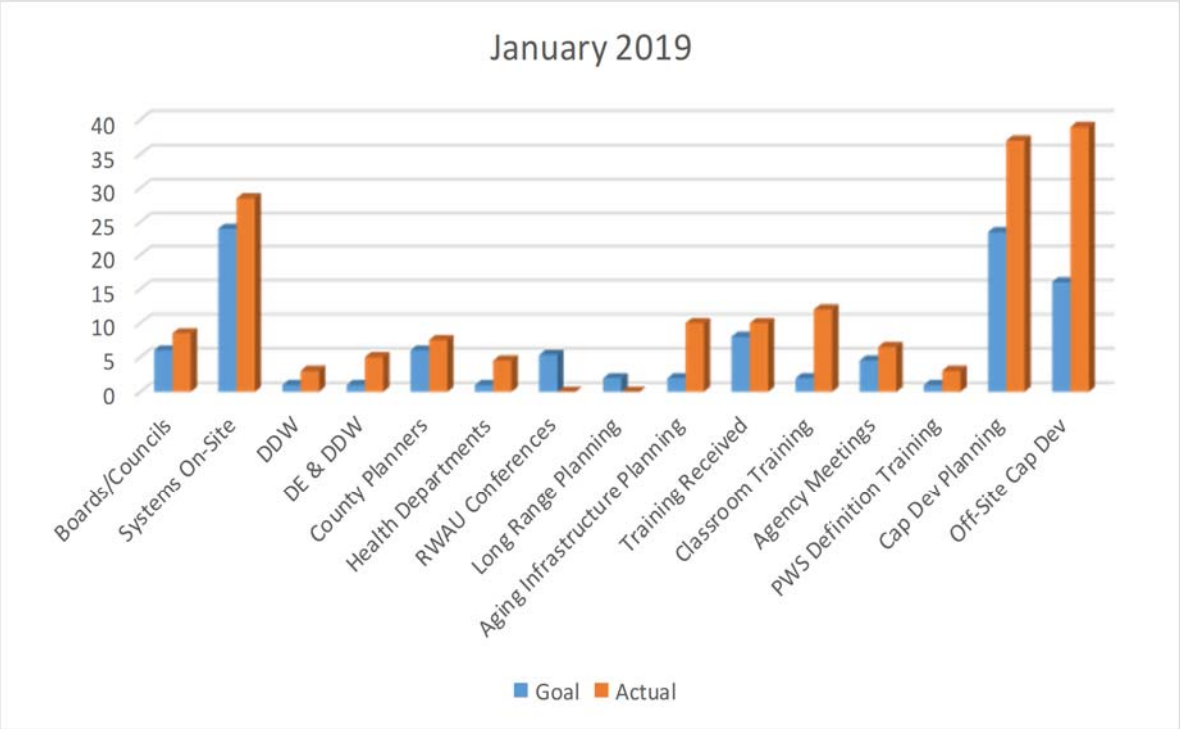
RURAL WATER ASSOCIATION OF UTAH
76 Red Pine Drive • Alpine, UT 84004 • Phone: 801-756-5123 • Fax: 801-756-5036

Drinking Water Board Report

Development Contract

June 2018 – May 2023

RWAU Employee: Curtis Ludvigson



Work Performed	Goal	Actual
Boards/Councils	6	8.5
Systems On-Site	24	28.5
DDW	1	3
DE & DDW	1	5
County Planners	6	7.5
Health Departments	1	4.5
RWAU Conferences	5.33	0
Long Range Planning	2	0
Aging Infrastructure Planning	2	10
Training Received	8	10
Classroom Training	2	12
Agency Meetings	4.5	6.5
PWS Definition Training	1	3
Cap Dev Planning	23.5	37
Off-Site Cap Dev	16	39
Total	**103.33**	**174.5**

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Drinking Water Board Report

Development Contract

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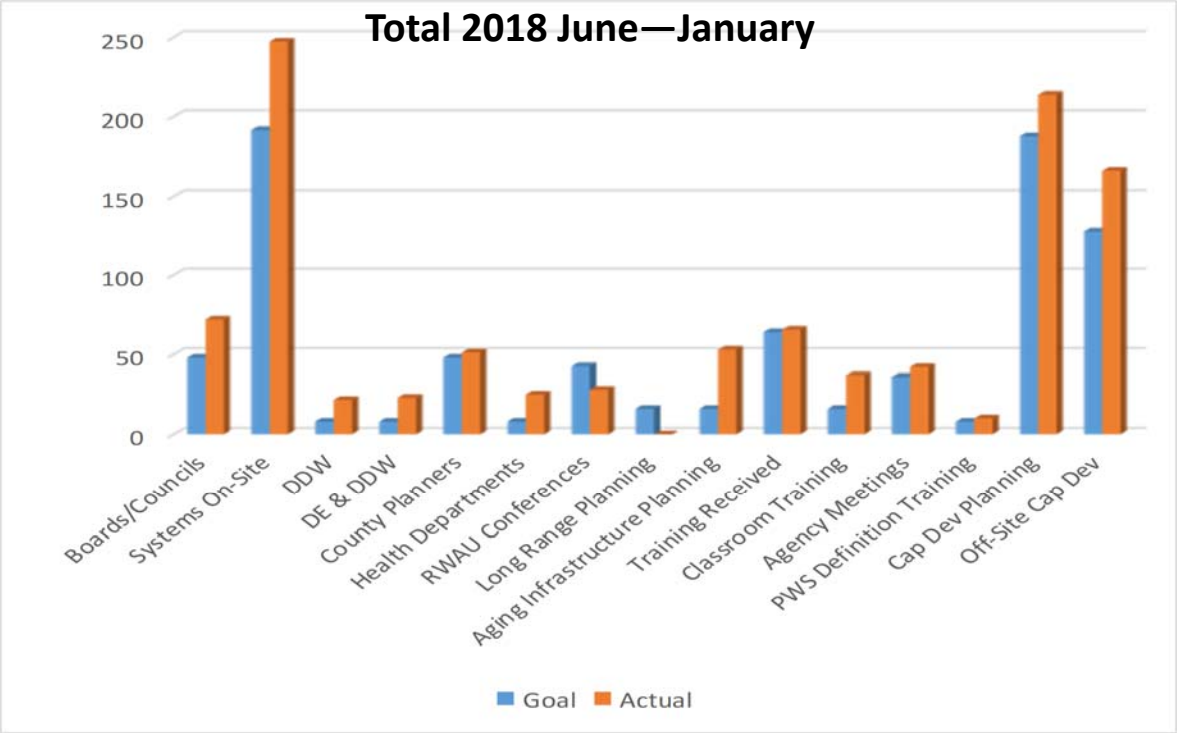

Work Performed	Goal	Actual
Boards/Councils	48	72
Systems On-Site	192	247.25
DDW	8	21.5
DE & DDW	8	23
County Planners	48	51.25
Health Departments	8	25
RWAU Conferences	42.64	28
Long Range Planning	16	0
Aging Infrastructure Planning	16	53
Training Received	64	65.5
Classroom Training	16	37
Agency Meetings	36	42.25
PWS Definition Training	8	10
Cap Dev Planning	188	213.75
Off-Site Cap Dev	128	166.25
Total	**826.64**	**1055.75**

RURAL WATER ASSOCIATION OF UTAH
76 Red Pine Drive • Alpine, UT 84004 • Phone: 801-756-5123 • Fax: 801-756-5036

On-Site Assistance & Work Performed

Tabiona	Budget Analysis, Rates review, Training on Elected Officials Responsibilities
Green River	Rates Review, RFP, Aging Infrastructure Training
Moab	Aging Infrastructure Training, Master Planning
Monticello	Master Planning, Rates & Revenue Review
Kanab	RFP, Project Funding, Master Planning
Big Water	Budget Analysis, Planning for a Waste Water System
Orderville	Water Ordinance Updates, Prepare a Resolution for new Water Rates
Panguitch	RFP, System Expansion Training, Funding Applications, Spring Rehab projects
Tropic	Income Survey
Henrieville	Income Survey
Toquerville	Budget and Rates Analysis
Genola	RFP, Master Planning, Funding Applications, Additional Water Tank and Well Study
Wellington	Project Applications, Rates Analysis
Axtell SSD	Spring Redevelopment needs, RFP, Funding Applications for Planning
Moroni	RFP, Funding Applications, Emergency Issues, Aging Infrastructure Training
Ephraim	Spring Redevelopment Training, Funding Applications, Master Planning

Agency & Other Meetings

Entity	Hours
Division of Drinking Water	5
Division of Water Rights	1.5

Agenda Item 9(A)

Enforcement Report February 8, 2019						
PWS ID	PWS Name	PWS Type	Pop Served	IPS Pts	Rating	Rating Date
Adminstrative Orders						
UTAH09034	BEAR PAW LAKEVIEW RESORT	Non-Community	80	241	Not Approved	3/31/2016
UTAH07039	CAMPER WORLD LAKESIDE PARK	Non-Community	28	130	Not Approved	11/03/2016
UTAH11043	OLD MEADOWS	Community	48	379	Not Approved	4/18/2017
UTAH10033	SORREL RIVER RANCH	NTNC	260	45	Not Approved	7/26/2017
UTAH22008	MARION WATERWORKS	Community	445	160	Not Approved	1/11/2019
Compliance Agreement/Enforcement Order Systems						
UTAH26073	DIAMOND HILLS ASSOCIATION	Non-Community	125	306	Corrective Action	1/14/2010
UTAH25129	LINCOLN BEACH	Non-Community	32	118	Corrective Action	1/15/2015
UTAH25013	GOSHEN TOWN WATER SYSTEM	Community	925	196	Corrective Action	3/8/2016
UTAH26049	SWISS ALPINE WATER CO	Community	300	90	Corrective Action	4/14/2016
UTAH25077	RIVERBEND GROVE, INC.	Non-Community	25	278	Corrective Action	12/13/2016
UTAH15038	TAGGARTS GRILL	Non-Community	60	66	Corrective Action	2/6/2018
UTAH25179	RIGTRUP EGG FARM	Non-Transient	35	19	Corrective Action	8/21/2018
UTAH21050	LIZARD BENCH WATER	Community	63	20	Corrective Action	11/8/2018
UTAH20063	PALISADES WATER COMPANY	Community	51	0	Corrective Action	11/8/2018
UTAH22104	LAKE ROCKPORT ESTATES	Non-Community	200	-20	Corrective Action	12/7/2018
UTAH09077	BRISTLECONE	Non-Community	180	0	Corrective Action	1/1/2019
UTAH22149	OAKRIDGE	Community	73	9	Corrective Action	2/1/2019
Not Approved Systems						
UTAH07061	VALLE DEL PADRES SUBDIV	Non-Transient	98	152	Not Approved	6/10/1999
UTAH09084	JNB MARINE	Non-Community	36	86	Not Approved	9/17/2002
UTAH09053	SKOOTS CREEK SUBDIVISION	Non-Community	69	341	Not Approved	12/15/2004
UTAH02069	SUNSET PARK WATER CO.	Community	44	5	Not Approved	5/29/2013
UTAH26074	SOAPSTONE SUMMER HOMES	Non-Community	110	68	Not Approved	4/3/2014
UTAH23028	DELLE AUTO TRUCK STOP	Non-Community	29	118	Not Approved	6/29/2015
UTAH15001	CROYDON PIPELINE CORPORATION	Community	92	20	Not Approved	7/7/2015
UTAH12004	EUREKA TOWN	Community	760	13	Not Approved	3/31/2016
UTAH06008	WEBER BASIN JOB CORPS	Community	230	15	Not Approved	6/15/2016
UTAH03076	SHERWOOD HILLS RESORT	Non-Transient	50	433	Not Approved	11/3/2016
UTAH10034	SUN ARCHVIEW LLC	Non-Community	506	40	Not Approved	4/18/2017
UTAH20056	CAMPERWORLD - MT PLEASANT	Non-Community	2	95	Not Approved	4/27/2017
UTAH18140	CARDIFF A.P.O.	Non-Community	83	70	Not Approved	5/11/2017
UTAH26042	LITTLE DEER CREEK CAMP	Non-Community	60	90	Not Approved	11/1/2017
UTAH13032	BRYCE-ZION CAMPGROUND	Non-Community	170	35	Not Approved	3/15/2018
UTAH26061	CAMP ROGER YMCA	Non-Community	210	45	Not Approved	3/15/2018
UTAH28026	HOLLOW MOUNTAIN	Non-Community	102	1	Not Approved	3/15/2018
UTAH09074	LAKE FRONT ESTATES	Non-Community	25	96	Not Approved	3/15/2018
UTAH25035	WILDWOOD SUBDIVISION	Non-Community	162	133	Not Approved	3/15/2018
UTAH13039	ZION FRONTIER RESORT	Non-Community	25	57	Not Approved	6/4/2018
UTAH09069	PARADISE RV PARK	Non-Community	120	206	Not Approved	6/14/2018
UTAH02078	M & J TRAILER HOME COMMUNITY	Community	27	65	Not Approved	8/20/2018
UTAH25023	BRICKERHAVEN SUBDIVISION	Non-Community	150	216	Not Approved	9/5/2018
UTAH03005	CORNISH TOWN WATER SYSTEM	Community	270	71	Not Approved	9/27/2018
UTAH22025	CAMP STEINER	Non-Community	300	109	Not Approved	9/27/2018
UTAH22072	ECHO RESORT	Non-Community	915	72	Not Approved	9/27/2018
UTAH07017	IRON MINE CAMPGROUND	Non-Community	90	102	Not Approved	9/27/2018
UTAH25133	JEHOVAHS WITNESS CHURCH	Non-Community	100	123	Not Approved	9/27/2018
UTAH07055	UPPER STILLWATER CAMPGROUND	Non-Community	320	145	Not Approved	9/27/2018
UTAH19037	WIND WHISTLE CAMPGROUND	Non-Community	39	60	Not Approved	9/27/2018
UTAH07023	YELLOWSTONE CAMPGROUND	Non-Community	25	230	Not Approved	9/27/2018
UTAH25004	SPRING LAKE	Community	475	306	Not Approved	1/11/2019

Current News

Current News
Presented to the Drinking Water Board
February 28, 2019

DRINKING WATER BOARD PACKET
Current News

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How an obscure Trump administration could put Utah's wetlands at risk

By: Emma Penrod, Pactio; January 8, 2019; pactio.us
https://pactio.us/news/how-an-obscure-trump-administration-tax-reform-could-put-utah%E2%80%99s-wetlands-at-risk

Buried within the Trump administration's sweeping tax reforms is a little-known provision that could offer builder's incentives to develop some of Utah's most endangered wetland habitats.

Beside deep corporate tax cuts and certain still-inscrutable policies, the tax reforms introduced a new concept known as Qualified Opportunity Zones, where developers can buy and improve land essentially tax-free.

Where Opportunity Zones are designated is determined by local officials. In Utah, the governor's selection includes about 130,000 acres of known wetlands, according to an analysis by Aubin Douglas, an ecology student at Utah State University who is pursuing a master's degree in bioregional planning.

Opportunity Zones were created to spur economic development. Typically, when real estate investors sell a property, they pay a tax based on the value of the sale, minus the property's original purchase price. In an Opportunity Zone, investors do not pay taxes on any improvements or appreciation that took place within the Opportunity Zone.

This makes buying and developing properties within these areas much cheaper, which could attract investment to traditionally disadvantaged communities. But when wetlands are included in the zones, it could also convince developers that the regulatory costs associated with developing such areas might be worth it.

The Clean Water Act, generally speaking, prohibits the destruction of wetland areas unless a developer agrees to protect, or create, an equal amount of wetlands someplace else. But last month's rollback of Clean Water rules eliminates protections for isolated wetlands that are removed from large bodies of water—not an uncommon occurrence in Utah. And even in areas that remain protected, the Clean Water Act has actually done a poor job of preventing development in wetlands, according to Joro Walker, an attorney specializing in environmental law for Western Resource Advocates.

Engineered wetlands tend not to provide the same variety of high-quality habitat available in natural wetlands, Walker said. And they're not immune to future development, either, resulting in a gradual but steady loss of wetland habitat in Utah and across the nation.

"Some of these areas aren't developed because of the law intended to protect them," Walker said. "But if you keep chipping away from the edges, soon you don't have anything left."
Douglas said she doubts that the entire 130,000 acres is at risk of development. Some of the designated lands are private wildlife reserves whose owners are unlikely to sell; other areas are

state public lands. Other areas are underwater during some or even most of the year, making it unlikely anyone would build there. The most likely opportunity zone wetlands facing development, Douglas said, are in Salt Lake County's Northwest Quadrant—the future home of Utah's state prison and inland port.

It's not clear why Governor Gary Herbert chose to designate Opportunity Zones containing wetlands. According to a spokeswoman for the Governor's Office of Economic Development, the Association of Governments worked with local stakeholders to identify low-income areas that might benefit from development incentives. The local authorities who nominated the tracts containing Farmington and Gilbert bays—both critical bird habitats—did not respond to requests for comment.

Missing water data, costly repairs, and other water issues are likely to make waves in Utah this year

By: Emma Penrod, Pactio; January 15, 2019; pactio.us
https://pactio.us/news/missing-water-data-costly-repairs-and-other-water-issues-are-likely-to-make-waves-in-utah-this-year

News agencies across the West are predicting a big year for water issues, especially with Colorado River drought negotiations approaching a federal deadline. Within the Beehive State, several other water issues are simmering.

In addition to federal indecisiveness about the Lake Powell Pipeline, the state's plans for development on the Bear River, and the impact of climate change on water supply, local water managers continue to wrangle with insufficient water data, outdated infrastructure, and toxic algae. Here are three stories unfolding behind the scenes this year.

The mystery of Utah's missing water data

One of Utah's key water problems is the absence of detailed, reliable water use data on which to base decisions. A new law aims to change that, but compliance is off to a less than stellar start.
In the past, Utah's water systems have provided their state overseers with annual water use estimates—or, well, they were supposed to. Last year, the State Legislature passed a law that will require Utah's largest water systems to provide the divisions of Water Rights and Drinking Water with three years of raw data—actual, detailed data, straight from the meter.

There's just been one issue so far, according to Marie Owens, director of the Division of Drinking Water: The data are due this March, and so far, not one of the 120 water systems required to comply with the law has supplied any information.

"It's going to be an interesting roll-out," Owens said, "because we've been trying to tell them we need this data, and we are bound to follow through" with the consequences state legislators established last year.

According to the provisions of the new law, the Division of Drinking Water will be prohibited from approving any expansion of a water system that has not provided a full three years of data.

Backlogged infrastructure upgrades will cost taxpayers millions

Two costly trends are on a collision course for 2019 in Utah—a nation-wide backlog of water system maintenance, and the state's growing problem with toxic algal blooms.

Utah's 2017 State Water Strategy estimates that water systems across the state need $13-$33 billion in repairs and upgrades. In addition, wastewater systems face a 2020 deadline to come

into compliance with new limits on the phosphorus they discharge—a regulation aimed at reducing the amount of algae that grows in waterways on the Wasatch Front.

Between these two issues, Erica Gaddis, director of the Utah Division of Water Quality, said the state has seen a surge in requests for loans and grants to cover the costs of replacing old, worn-out water treatment plants. The division's board of directors approved $150 million in wastewater funding during the final meeting of 2018, and Gaddis expects the division's budget will soon be stretched thin.

Part of the run on state funding is tied to the need to build new for upgraded wastewater treatment facilities before the 2020 deadline. State wastewater managers plan to break ground on nearly a dozen new plants in 2019 alone; by 2025, Gaddis estimates the state will have invested more than $1 billion in new water treatment plants.

Tech innovators may clean up Utah Lake's algal blooms

For years, Utah's entrepreneurial community has proffered ideas ranging from semi-sane to outright outlandish aimed at Utah Lake's ongoing algae woes. And for years, serious scientists and state regulators have basically dismissed them. Until now.

Severe algal blooms have repeatedly closed Utah Lake to recreation in recent years, which has harmed local businesses. The results of a study aimed at identifying the source of the problem aren't due for another three years. So the Division of Water Quality has offered inventors of Utah an olive branch, asking them to formally submit their ideas for cleaning up Utah Lake.

The division is still collecting and vetting proposals, according to Gaddis, but officials hope to test a few of the ideas this summer in the hope that something will work.

Any tech-based solution would likely be short-term, and only effective in a limited area. But even that would help to mitigate the worst effects of the blooms by keeping beaches and marinas clear of toxic scum, Gaddis said. Long term, she said, the division still hopes to rehabilitate the lake entirely by reducing the amount of pollutants discharged into local waterways.

3 years later, no one is in jail over Flint tainted water

By: Ed White, Salt Lake Tribune; January 18, 2019; sltrib.com
https://www.sltrib.com/news/nation-world/2019/01/18/years-later-no-one-is/

Detroit • Michigan's attorney general in 2016 promised to investigate "without fear or favor" the scandal over Flint's lead-tainted drinking water and pledged that state regulators would be locked up for fudging data and misleading the public.

Yet three years later, no one is behind bars. Instead, seven of 15 defendants have pleaded no contest to misdemeanors, some as minor as disrupting a public meeting. Their records eventually will be scrubbed clean.

That has angered some people in Flint who believe key players who could have prevented the lead disaster are getting off easy. Four of five people at the state Department of Environmental Quality who were on the front line of the crisis have struck deals. The remaining cases mostly center on a deadly outbreak of Legionnaires' disease and early disastrous decisions to use water from the Flint River.

"I'm furious — absolutely furious," said LeeAnne Walters, a mother of four who is credited with exposing the lead contamination. "It's a slap in the face to every victim in the city of Flint."

Walters, 40, said she was repeatedly brushed off by the Department of Environmental Quality, known as DEQ, even as she confronted officials with bottles of brown water. She testified in Congress after then-Gov. Rick Snyder in 2015 finally acknowledged the lead mess, and she later was honored with an international prize for grassroots environmental activism.

"Instead of people being held accountable, they're getting a free pass," Walters said. "The fact remains there wouldn't have been a problem with the lead and the legionella if the water had been treated properly, if MDEQ would have done their job."

Flint was one of the worst man-made environmental disasters in U.S. history. While waiting for a new pipeline to bring water from Lake Huron, the majority-black city of 100,000 pulled water from a river in 2014-15 without treating it to reduce corrosive effects on old pipes. Lead infected the distribution system in Flint, where 41 percent of residents are classified by the government as living in poverty.

Due to poor finances, Flint was being run by financial managers appointed by the governor. The uproar over water quality reached a peak by fall 2015 when a doctor reported high levels of lead in children, which can cause brain damage. The water no longer comes from the river and has significantly improved, but some residents are so distrustful that they continue to use bottled water.

Liane Shekter Smith, who was fired as head of Michigan's drinking water office, was charged with misconduct in office and neglect of duty. Special prosecutor Todd Flood later put her on notice that he would pursue an involuntary manslaughter charge, arguing that she could have shut down the Flint water plant and reduced the threat of legionella bacteria, which causes Legionnaires'.

But charges were dropped on Jan. 7 in exchange for a no-contest plea to an obscure misdemeanor that will not result in any jail time: disturbance of a lawful meeting. She had declined to accept a report about water quality from Walters and others. Two other key agency employees, Michael Prysby and Stephen Busch, made deals on Dec. 26. All three will have their records erased if they cooperate with Flood.

Shekter Smith wanted "to put some closure on this matter," attorney Brian Morley said of her plea agreement. "Criminal charges weren't warranted."

State Sen. Jim Ananich of Flint, who runs his water through a filter, said he's listened to frustrated residents.

"At the beginning there was a feeling of good, someone is going to be held accountable. Now people don't believe anyone is going to be held accountable," he said.

The outcome so far is different than the dramatic scene in 2016 when Attorney General Bill Schuette, a Republican who was poised to run for governor, traveled to Flint to announce felony charges against Prysby, a DEQ engineer, and Busch, a DEQ regional supervisor.

"Mr. Busch and Mr. Prysby misled federal and local authorities, regulatory officials, and failed to provide safe and clean water to families of Flint," Schuette declared at that time. "When we prove these allegations — and we will — Mr. Busch and Mr. Prysby will be facing five years in prison for this count alone."

Andy Arena, a Flint water investigator and former head of the FBI in Detroit, believes the plea deals are appropriate.

"There are culpable folks out there that we need to get to," he said. "This is how it works: You cut deals with certain people to move the case up the line. I believe these people have some information that could significantly assist in our ongoing investigation."

Schuette, who lost the governor's race and is out of public office, said: "I stand with Andy," referring to Arena. Flood declined to comment on his strategy.

The new attorney general, Dana Nessel, has asked a Detroit-area prosecutor to review the remaining cases, including involuntary manslaughter charges against Nick Lyon, the former head of the Michigan health department who has been ordered to trial.

Lyon is accused of failing to alert the public in a timely manner about the Legionnaires' outbreak, which has been linked to foul water and at least 12 deaths. Dr. Eden Wells, who was

Michigan's chief medical executive, also is facing an involuntary manslaughter trial, although both cases are tied up in appeals by aggressive defense teams.

Gerald Ambrose and Darnell Earley, who were state-appointed emergency managers when Flint was using river water, are also charged. They’re accused of being obsessed with saving money instead of protecting residents. All have pleaded not guilty.

Lake Powell could become a ‘dead pool’ as climate change, political wars and unabated growth drain its waers

By: Brian Maffly, Salt Lake Tribune; January 20, 2019; sltrib.com
https://www.sltrib.com/news/environment/2019/01/20/lake-powell-could-become/

Ever since the Colorado River began filling Utah’s Glen Canyon and its countless side canyons in 1963, conservationists have been calling for emptying the lake that now supports a recreation economy and power generation.

Climate change, unbridled development and Western water politics are conspiring to gradually grant this wish. The reservoir has shed an average of 155 billion gallons a year over the past two decades, the result of drought-depleted river flows coupled with rising demands from powerful downstream water users.

Without a change in how the Colorado River is managed, Lake Powell is headed toward becoming a “dead pool,” essentially useless as a reservoir while revealing a sandstone wonderland once thought drowned forever by humanity’s insatiable desire to bend nature to its will.

“Lake Powell is doomed,” says Gary Wockner, an author and scientist who heads the group Save the Colorado. “The sooner we accept that inevitability, the sooner we will find a permanent solution.”

Unless water managers curb releases from Glen Canyon Dam, the lake, within a couple of years, Wockner warns, could fall below the level at which its turbines can crank out power, effectively negating a reason for the dam in the first place.

Utah water captains dispute Wockner’s dire forecast, but everyone agrees that the Colorado River is in crisis.

With seven Western states vying for what’s left of the Colorado River’s diminishing flows, Lake Powell and its older downstream partner, Lake Mead, are shrinking in the face of unrelenting demands on the water stored behind their mighty dams. The crux of the problem is the fact that the two reservoirs’ combined storage sits below 46 percent of capacity, the lowest since Powell began filling, according to Bureau of Reclamation Commissioner Brenda Burman.

“We are teetering on the brink of a shortage today,” she told the Colorado River Water Users Association in November, “and we see real risk of rapid declines in reservoir elevations.”

Lake Powell operates as a key cog in a vast system that supplies water to 30 million people and irrigates 5 million acres.

To get a feel for the 55-year-old reservoir's plight, it helps to be in a boat sidled up against its vertical shoreline, oddly plastered with a white coating where normally the Entrada sandstone hums with pinks and reds streaked with dark varnishes.

Scott Hynek, a hydrologist with the U.S. Geological Survey, stands on the bow of a research vessel exploring the reservoir's Colorado River arm, examining the milky mineral deposits that extend 80 feet above his head. The vast stripe rimming Powell is a testament to how far its level has dropped since 2000, when the Colorado's flows began a steady decline in response to persistent drought, warming temperatures and the unabated thirst of a civilization that often pays insufficient heed to nature's limits.

The 1,450-mile Colorado River is subject to a complicated water-sharing agreement that is under severe strain as Utah and six other Western states craft "drought contingency plans" to align their water use with reality.

There will be no winners and plenty of losers, but everyone suffers if a consensus is not reached soon.

"The latest hydrological information is sobering," Burman told the 1,000 water managers and scientists gathered in Las Vegas. "Today's level of risk is unacceptable and the chance for crisis is far too high."

The pressures on the river raise the possibility that Lake Powell or Lake Mead — or both — could cease functioning as designed. Water levels could become too low to produce power, to go boating, to store water, and, in Powell's case, to meet downstream delivery demands.

"It is fair to say that the politics of water in the Southwest are more concerned about the future of Lake Mead than Powell. You can connect the dots to say the future of Lake Powell is questionable," says Doug Kenney, a Western water law scholar at the University of Colorado.

After all, California, whose residents in the south rely on water from Lake Mead, has more than twice as many members of Congress as the four Upper Basin states combined.

"The conversation now is how do we manage the pain and spread it around so it's not too devastating to one party," said Kenney, who leads the Colorado River Research Group. "At some point, you can't ignore reality anymore, and the reality is we need to use a lot less water in the Colorado Basin."

Last August, his group of scholars released a white paper arguing that the river's status quo cannot be sustained, and structural changes are needed to avert a crisis.

Under a 1922 interstate compact, the river's water is evenly divided between its Upper Basin (Wyoming, Colorado, New Mexico and Utah) and Lower Basin (Arizona, Nevada and California) states. Each basin is supposed to receive 7.5 million acre-feet, with Mexico getting 1.5 million. But, in reality, far less water than that has been available during the past two decades, while the Lower Basin states have been pulling more than its allocated share.

For example, Utah is entitled to 23 percent of the Upper Basin's share, or 1.7 million acre-feet. It uses about two-thirds of that allotment.

Even with the Upper Basin taking far less than its share, the level of Utah's Lake Powell, which stores runoff originating in these upriver states, has been steadily dropping. Today, its surface sits at 3,575 feet above sea level, holding 10 million acre-feet of water, about half as much as it did in 2000, when its elevation was about 100 feet higher. Four of the 10 lowest-runoff years have occurred during this time period.

According to Reclamation forecasts, Powell's inflows this year are expected to be about two-thirds of normal, and the lake will end the water year at an elevation of 3,571 feet, or 38 percent capacity. It would reach "dead pool" at 3,370 feet.

"Continuing this operational pattern will further drain Lake Powell and erode the benefits associated with its water storage," the researchers say in the report. "If storage in Lake Powell cannot rebound in an era where the Upper Basin consumes less than two-thirds of its legal apportionment, then the crisis is already real."

The report recommended managing Powell and Mead as a single giant reservoir, albeit one separated by a "ditch" known as the Grand Canyon. "Managing — and thinking — of these facilities as two distinct reservoirs, one for the benefit of the Upper Basin and one for the Lower, now seems outdated."

Utah State University hydrologist Jack Schmidt, a co-author of the report, likens Powell to a bathtub where water is draining out of the bottom faster than it enters from the Green, San Juan, Dolores and other Upper Basin tributaries.

"The Lower Basin is using more water than is sustainable," he says. "It's like a complicated game of chicken where the Upper Basin states say, 'You in the Lower Basin need to make the drain smaller,' and the guys with access to water coming out of the drain saying, 'You guys in the Upper Basin can't use any more water.'"

Either way, Lake Powell is losing water to evaporation and seepage at rates that are poorly understood and inadequately monitored, according to Schmidt. He suspects Powell loses up to 50,000 acre-feet a year to seepage and evaporates water at about the same rate as the lower-elevation Mead, but the data have yet to be gathered and analyzed to know for sure.

"Mead has been studied closely for a long time," Schmidt says. "In contrast, [evaporation] measurements out of Powell have not been seriously recorded since the 1970s."

In response to a report he released two years ago referencing this information shortfall, Reclamation has initiated a program to measure evaporation with the sophisticated techniques in place at Mead.

To gauge rates of seepage, the bureau drilled observation wells around Glen Canyon Dam back when it was built 60 years ago, but the data they yield, Schmidt notes, are just sitting in books without being examined.

Even amid all this uncertainty, Upper Basin states are pursuing more diversions, which could funnel up to 300,000 acre-feet from Powell.

One of those projects, Utah's Lake Powell pipeline to St. George, would siphon off 86,000 acre-feet. Critics argue the billion-dollar-plus undertaking defies the lake's dropping levels and fails to consider other options for meeting the water needs of mushrooming southwestern Utah.

Eric Millis, director of the Utah Division of Water Resources, however, contends it is unlikely Lake Powell will plunge to a critical level if the Upper Basin states' contingency plan is followed.

"If it does, there are ways to work around that," Millis says. "We believe the [water] supply for the pipeline is secure, and we are justified in expecting that we can use that water for a needed purpose."

Utah was among the first states to submit a draft drought contingency plan to federal water honchos, but it is short on specifics and does not call for mandatory reductions in water use, in contrast with what's expected from Arizona.

It instead proposes allowing Utah and other Upper Basin users to "bank" water deliveries in Lake Powell so they can receive future credit for water conserved. This arrangement would require changes to water law in all four states.

The plan also proposes compensating agricultural users that don't take their water, a practice that has already been used to keep water in the Price River.

Millis says the plan has the four Upper Basin states working together to ensure Powell maintains a minimum level of 3,525 feet. That's the elevation at which generating power gets complicated. Ominously, it's also only 50 feet lower than the current elevation.

"At that point, we would see if people are willing to enter voluntary agreements and be compensated to forebear use of the water so we can get it to Lake Powell," Millis says. "That Lake Mead keeps dropping is testament to its overuse. Something has to be done."

Receipts from power generation pay for endangered-fish recovery, desalination and other projects that mitigate the environmental damage wrought by water diversions on the Colorado.

Critics argue the Upper Basin's proposed contingency plans are based on wishful thinking.

"They are proposing to drain and destroy hundreds of thousands of acres of farms using billions of dollars of taxpayer money to try and save Lake Powell in opposition to scientific reality as

well as political and financial common sense," says Wockner, executive director of Save the Colorado.

Between 2015 and 2017, $4.5 million was spent compensating Upper Basin farmers to forgo irrigation water, saving about 22,000 acre-feet. Wockner calculated that 478,000 acre-feet would need to be secured year after year just to stabilize Powell.

"Doing so won't increase the lake level," Wockner emphasizes, "and, further, won't address any future decrease in the lake level due to the increasing impacts of climate change, which will further decrease the flow of water in the Colorado River."

Meanwhile, it remains to be determined how to pay for these water purchases and account for the water that is being banked in Lake Powell, according to Bart Miller, who leads Western Resource Advocates' Healthy Rivers Program.

"Each of those states needs to develop a program for actually putting water into that account. That will be really interesting work over the next several years to figure out when, where and who is putting that water in there on a voluntary, compensated basis," he says. "It's clear there has to be a funding source because it won't be done for free."

Western Resource Advocates contends municipal users, especially in Utah, need to cut back, even though agriculture laps up the lion's share. With higher per-capita water use than nearly any other state, Utah has plenty of room to conserve, but the political will is wanting, according to Amelia Nuding, a policy expert with the group.

A big obstacle to residential conservation is how Utahns pay for the water they use.

"There are so many providers who rely on property taxes to fund their operations, so users pay very low rates for the water they use, and that's a problem throughout the state," Nuding says. "It is more common throughout the basin for users to pay the full cost of water through their water-use rates."

She contends metering secondary water and reducing tax subsidies need to be part of any conservation strategy.

"When you are talking about billion-dollar water projects," Nuding says, "the only rational thing to do first is to make sure everyone knows how much water they are using, and they are paying the appropriate amount for that water."

But Millis says tapping tax revenue is critical to obtain low-cost financing for water projects. Meanwhile, he adds, Utah water districts are looking to boost "tiered" rates so that those who use more water pay higher rates.

Most of the Colorado's flow originates in its Upper Basin, but most of the water is consumed downstream in Arizona, Nevada and California, an imbalance that promises to foment friction

among water users as the feds finalize an overall Drought Contingency Plan gleaned from the various state proposals, which are due by Jan. 31.

Absent cutbacks to deliveries to the Lower Basin, a day could come when water managers may have little choice but to lower the waters that have inundated Utah's Glen Canyon for the past half-century. Already much of the lakebed is exposed, opening countless side canyons to daylight and severely narrowing options for recreational boating.

Green and red buoys direct pilots where to point their bows to stay in safe water, while up-lake marinas have been left high and dry. The tiny shelled carcasses of an invasive mussel called quaggablanket the ground, still clinging to rocky outcrops — as if waiting for the waters to return.

Buoys at Hite, the ghost town where the Dirty Devil and the Colorado used to enter the lake, are tethered to ground that is nowhere near water. A half-mile hike across sun-cracked sediments deposited by the receding lake now separates the boat ramp from the river.

These sediments washing down countless tributaries are slowly filling the pool behind Glen Canyon Dam.

This process, which Hynek, the USGS hydrologist, is studying, reveals the limited life span of the reservoir named for John Wesley Powell, the 19th-century explorer who devoted his scientific career to warning about the limits of the arid West to support civilization.

Scientists study Lake Powell sediments to see how climate change, humans are affecting the water

By: Brian Maffly, Salt Lake Tribune; January 20, 2019; sltrib.com
https://www.sltrib.com/news/environment/2019/01/20/scientists-study-lake/

Water is hardly the only substance Glen Canyon Dam holds back.

When Lake Powell's water passes through the dam's hydropower turbines, it comes out the other side clear and cold, completely different than the turbid flows coming in from the Colorado and San Juan rivers and tributaries with names like Dirty Devil and Muddy Creek.

This is because the sediments carried by these rivers and their tributaries draining the Colorado Plateau accumulate on the lakebed.

After 55 years, those deposits are now up to 200 feet thick at the upper ends of the lake. Some contain toxic metals emanating from a century of hard rock mining in the San Juan's headwaters, sending unknown amounts of arsenic, cadmium, copper, mercury, lead, selenium and zinc downstream.

For years, federal hydrologists such as Scott Hynek have wanted to study Lake Powell's sediments, which hold clues to how human activity and climate change are affecting the landscape and degrading the reservoir's water quality.

The disastrous 2015 Gold King Mine discharge, which sent 3 million gallons of mine sludge into the San Juan River, was the event that prompted federal and Utah agencies to finally act and turn Hynek loose on Lake Powell with a floating drill rig. He and his team with the U.S. Geological Survey spent last November extracting and processing a comprehensive set of cores from the lakebed using a barge lashed to houseboats.

"We set out to do four to six holes in each arm, but we ended up with 30 holes. We exceeded all expectations and are slightly over budget," he said, while riding the barge as it slowly made its way down the Colorado arm for the last day of drilling. The drill barge logged about 500 miles of travel by the time it was taken out at Page, Ariz., at the end of November.

The sediments were extracted with a hydraulic piston corer, rather than a rotary drill. The result was 212 cores, 2.5 inches in diameter and 3 meters long, encased in clear acrylic tubes. That's more than 2,000 feet of cores that now have to be analyzed. Preliminary results will be ready by early next year.

"This study will help us understand whether human activities such as mining in the San Juan River watershed have impacted or pose a risk to the important recreational, aquatic life, and cultural resources of the San Juan River and Lake Powell," said Erica Gaddis, director of the

Utah Division of Water Quality. “This project is a great example of applying science to inform water resources management.”

The coring project is the initial phase of a multiyear analysis in partnership with the Utah Department of Environmental Quality, the National Park Service and the U.S. Bureau of Reclamation. The agencies have set aside $1.3 million for the study, about half going toward extracting the cores.

At the end of the trip, the samples were transported to Salt Lake City to be sliced in half lengthwise, imaged and characterized by sediment qualities. One side will undergo further analysis; the other will go to a core archive in Minnesota, where they will be available for future studies.

The Gold King disaster, which released an estimated 540 tons of toxic metals that settled in the lake, motivated the study, but its findings will be useful on a variety of issues for years to come.

“We could look at the total mass of the sediments, look at the metals in there,” Hynek said. “We would have total metal content, but it’s not distributed evenly. Are there nasties in there? Where are they? At what levels? Are they susceptible to be remobilized when lake levels come down?”

With cores from both major arms, the study can compare the mine-tainted sediments in the San Juan with the sediments from the Colorado, which drains an area that saw little hard rock mining, but did see plenty of uranium prospecting before the 710-foot-high dam was completed in 1963.

Understanding the volume, distribution and biological availability of the metals will shed light on the risks to the environment and human health, and help resource managers make more-informed decisions for Lake Powell, which has been shrinking by about 475,000 acre-feet a year since 2000.

The Glen Canyon National Recreation Area hosts 2.5 million visitors a year, many coming for the boating and fishing the lake provides. Yet, since 2012, a fish consumption advisory has been in place because of high mercury levels in certain fish populations.

Now about 100 feet below its level of two decades ago, the receding lake has exposed vast stretches of sediments at the deltas where the San Juan and Colorado rivers used to enter the lake. Now those rivers cut through these sediments, pushing them farther downlake to be deposited on top of layers that settled years ago.

Hynek and other hydrologists are keenly interested in rates of sedimentation on the lakebed and how climate change is altering them.

In the 23 years after the lake began impounding the Colorado River, it accumulated 868,000 acre-feet of sediments, eliminating 3.2 percent of its water-holding capacity, according to an earlier study. At that rate, Glen Canyon could become clogged with mud in a few hundred years.

Hydrologists suspect climate change, which has the Colorado Plateau receiving more of its precipitation as rain and less from snow, could be speeding up rates of deposition. This is because monsoonal storms carry more erosive power that snowmelt.

Hynek hopes the cores can be read like the cross-section of a tree with its annual growth rings. If specific sediment layers can be pegged to particular years, whose weather data are already in the scientific record, scientists could better understand the lake's precarious future in the face of environmental and economic pressures that show no signs of relenting.

Water Summit Brings Hundreds to Vernal

By: Jack Gillund, Uintah Basin Standard; January 21, 2019; ubmedia.biz
http://www.ubmedia.biz/news/article_279a9282-1c2c-11e9-999b-3ff7293743d5.html

Hundreds of farmers and area business professionals gathered Wednesday at Vernal's Uintah Conference Center for the 2019 Uintah Basin Water Summit.

"Water is a really important thing, especially with the fact that we just had a drought, said Rep. Scott Chew, who attended the event. "This year, when I looked last, we had 39 Bills that mention water. They're anything from instream flow to injection to wastewater. Out of those 39, 22 of them are dealing with agriculture in one form or another. Nine of the 39 are dealing with drinking water."

According to Chew, there is currently talk at the State Capital about getting big cities to control the watershed, something he says concerns him.

"I'm sure a lot of you have heard of the Saint George pipeline," Chew said. "That's an interesting one because if some of those types of proposals had gotten through – this is just an example that I've wondered about – if the Saint George pipeline, if it'd talked about the watershed that would entail, possibly, the entire Colorado River for drainage.

While this year's water summit didn't have legislative issues on the agenda, a full slate of topics filled the day. Participants listened to experts teach them about drought contingency plans, cloud seeding, the Central Utah Treatment Plant and fire effects, Irrigation Schedular mobile, maximizing production with limited water, and the water outlook. Presentation about repairs at Steinaker Dam; proposed changes to Flaming Gorge operations; as well as local projects in Duchesne, Uintah and Daggett counties were also on the agenda.

At the end of the day, participants went away with a better understanding about how to protect a precious resource.

"Here in the Basin, we need to make sure that our resources are protected," said Sen. Ron Winterton, who was also on hand for the conference.

To help them ensure they are doing the most for area farmers, both Winterton and Chew asked the participants to keep them informed.

"Water Bills concern me. I've seen three of them that really concern me. I look to you guys to send me an email if you have concerns on a Bill," Winterton said. "Give me a heads up because, like Scott (Chew) said, you can't read every Bill and you can't monitor them."

Western states near deadline for Colorado River drought plan

By: Felicia Fonseca, Salt Lake Tribune; January 28, 2019; sltrib.com
https://www.sltrib.com/news/nation-world/2019/01/28/western-states-near/

Western states are watching with interest as Arizona comes up against a deadline to approve a plan to ensure a key reservoir doesn't become unusable for the farmers, cities, tribes and developers that depend on it.

The other six states in the Colorado River basin have agreed to plans that recognize a long-running drought, the dwindling supply of water and how they intend to cope with it. Arizona's plan has broad support but it hasn't been approved by the Legislature, a factor that has made the negotiations on the drought contingency plan more complex. No other state required lawmakers to sign off.

The U.S. Bureau of Reclamation expects full agreement Thursday. If the deadline isn't met, the agency will ask states to weigh in on how the overtaxed river water should be allocated ahead of its shortage projections in August. Without a consensus plan, the federal agency has said it will make the rules.

"To date, Interior is very supportive and extremely patient with the pace of progress of the DCP (Drought Contingency Plan)," the agency said in a statement. "The delay increases the risk for us all."

The deadline requires only that the states sign off on the drought plan. There is no legal requirement to figure out exactly how states will live up to the reductions outlined.

Under existing guidelines, Arizona would be first hit and hardest in the lower basin if Lake Mead on the state's border with Nevada falls below 1,075 feet because Arizona has the lowest priority rights to the river. If the drought plan is approved, cuts would be spread more widely and eventually loop in California. Mexico also has agreed to cutbacks.

Arizona lawmakers want to see exactly how the plan will affect their constituents before they cast a vote, and tweaks to a handful of bills expected to be introduced will create more uncertainty. The Gila River Indian Community, for example, said it would pull support for the drought plan if other legislation attacks its water rights gained in a federal settlement.

"I want to be absolutely certain that we look at this from every angle," said Republican state Sen. Sine Kerr from Buckeye, who owns a large dairy farm. "My greatest fear in any legislation, but in something this critical, are those unintended consequences. Did we think of everything?"

Arizona Gov. Doug Ducey has made the plan a top priority. His budget includes $30 million to protect the levels in Lake Mead and $5 million for groundwater infrastructure. He's also highlighted the white bathtub ring around Lake Mead on his Twitter page.

"Without DCP, there is not mitigation for anyone," said Warren Tenney, executive director of the Arizona Municipal Water Users Association. "As a state, there will be a cloud of uncertainty over our water future. We view the Jan. 31 deadline as a very real deadline."

The four Upper Basin states — Colorado, Wyoming, Utah and New Mexico, had their drought contingency plan in place in December. If Arizona's plan collapses and the federal government steps in, those states could put in motion at least some of their own plan to meet their obligation to the lower basin states, water managers there said. Those include sending water from large reservoirs upstream of Lake Powell on the Arizona-Utah line to keep it from dropping so low water could not be delivered to Lake Mead.

"In terms of signing ink on documents, we have been really waiting to have a seven-state package that has seven state flags on top of a cover letter," said James Eklund, Colorado's representative on the Upper Colorado River Commission.

The Interior Department, the parent agency of the Bureau of Reclamation, is the water master of the river that serves 40 million people. Reclamation Commissioner Brenda Burman has said she's facing pressure from other states to limit Arizona's water deliveries without a complete drought plan. She's also predicted lawsuits.

Lawmakers in Arizona say they don't want to be rushed into making a decision. A bill authorizing the director of the Arizona Department of Water Resources to sign off on Arizona's plan has been introduced. A handful of others that deal with water storage credits, money for conservation and the value of effluent water have not. All need to pass or the drought plan will fail.

"We've got to do that quickly," said Sen. David Bradley of Tucson, the top Democrat in the Senate. "The less time you give us, the more complicated this is going to get."

Arizona must find a way to reduce its use of Colorado River water by up to 700,000 acre-feet — more than twice Nevada's yearly allocation under the drought plan. An acre-foot is enough to meet the needs of one to two households per year.

An agreement negotiated by nearly 40 members of an Arizona steering committee representing tribes, cities, farmers, developers and others say they support the plan, mostly.

Farmers in Pinal County want more money to drill wells and for other infrastructure to pump groundwater after access to Colorado River ends and an assurance the federal government will help financially. The drought plan gives them more water than they would have under current guidelines that expire in 2026 — the anticipated end of the drought plan.

"In our view, that would be a major failure of the DCP if that piece doesn't come to fruition, so we're still looking for ways to backstop that," Paul Orme, who represents four irrigation districts, said at a recent Central Arizona Project board meeting.

In California, the Imperial Irrigation District has signed intrastate agreements for the drought plan but said it won't implement the plan if it doesn't get $200 million to manage the Salton Sea. Falling water levels in the state's largest lake increase its salinity, exposing a dusty lakebed that worsens air quality when wind sweeps into nearby communities.

"It should not be a secret to anybody on the river that this is a hanging issue for us," said Antonio Ortega, a district spokesman.

The Metropolitan Water District, another major water user of Colorado River water in California, is pumping more water through its aqueducts to ensure the 500,000 acre-feet of water it has stored behind Lake Mead won't be stranded if the reservoir levels fall drastically and Arizona isn't on board with the drought plan, said the district's general manager, Jeff Kightlinger. "At the end of the day, Arizona needs this deal more than anybody and they know it," Kightlinger said. "California is stepping up to the plate here. We actually have the senior right to the river. Some people in California are saying, 'Why should we give anything?'"

As Utah dries up, lawmakers look for smarter ways to transfer, use – and not use – water

By: Brian Maffley, Salt Lake Tribune; January 28, 2019; sltrib.com
https://www.sltrib.com/news/environment/2019/01/28/utah-dries-up-lawmakers/

Will Utah have sufficient water in an era of declining stream flows to support a population expected to double, strong agriculture, recreation economies and a healthy environment?

While that sounds like having your Diet Coke and drinking it, too, water policy honchos believe Utah can meet its future water needs, though not without developing new sources and improving the way water is currently used.

The use-it-or-lose-it foundation of Western water law promotes waste or at least suboptimal use of this most precious natural resource and is fraught with disincentives for conservation.

Several bills cued up for this legislative session seek to reduce Utahns' notoriously profligate water use and to add flexibility to the ways water rights are administered. In general, lawmakers prefer addressing the water question with "market-based voluntary transactions" as opposed to regulatory "command and control" oversight.

A 'bank' for liquid assets

At the forefront of this discussion is a resolution championed by Sen. Jani Iwamoto, D-Holladay, to promote "water banking," a program that enables growers to pause their water use without risk of forfeiting their right to the water. With agriculture accounting for 80 percent of use, banking could go a long way to solving the state's water woes.

The idea, which is already being tested on the Provo River and in Cache Valley, is to allow water that would otherwise be used for irrigation to remain in a waterway, where it would support in-stream flows and reach downstream reservoirs. Farmers who do that now can find themselves without water in the future because someone else might want to use that water.

Gov. Gary Herbert's water strategy advisory team recently released recommendations that included developing a system to facilitate temporary water-right transfers through leases and contracts to supply competing users with water to meet short-term needs. Water banks could help implement such a recommendation, according to Iwamoto's SJR1.

"This is something worth doing for the benefit of the state," water attorney Steve Clyde told the Legislature's Water Development Commission at its last meeting in November. "But we have to make sure these are valid water rights that are being banked, that people aren't dealing with prior forfeited rights and paper rights and the speculators we have seen out there in the marketplace."

Water banking is a critical piece of Utah's strategy to ensure enough water remains in the Colorado River to meet downstream obligations and preserve Lake Mead and Lake Powell, which are now less than half full.

HB143, sponsored by freshman Rep. Suzanne Harrison, D-Draper, would require water districts to update their conservation plans to include an analysis of achieving per-capita water use reduction targets.

"We are some of the highest water users in the country in the second driest state," Harrison said. "The bill simply asks districts to go through the exercise of thinking about how they could get to 175 gallons per day."

The bill wouldn't mandate water providers to achieve that goal, which is far less than what most Utahns use, but rather evaluate the measures that could get them there. It would also require the districts to estimates the costs they incur by providing water above that level.

"Saving water is the cheapest source of new water," Harrison said.

A 175 gallons aligns with daily use in many big Southwestern cities, such as Phoenix, Denver and Albuquerque, according to the Utah Rivers Council. That figure is 40 percent less than the Utah Division of Water Resources estimated to be the state's per-capita water use in 2000, when it was 295 gallons.

"If we reduced use by 40 percent, that would mean there is no need for Bear River [diversion] and Lake Powell [pipeline] projects," said the council's executive director, Zach Frankel, referring to Utah's two most costly water diversion proposals.

Reining in the sprinklers

Sen. Jacob Anderegg's SB52 would require water districts to meter all the untreated "secondary water" they provide through pressurized systems by 2030. A study released last year found that Utah districts underestimate the amount of secondary water they deliver by as much 34 percent.

Metering would not only improve water planning but also enable providers to bill users appropriately for what they take. By imposing a "price signal" on water used on gardens, people will be inclined to use less, according to Amelia Nuding, a water resources analyst with Western Resource Advocates.

Metering this water won't be cheap, but conservation advocates such as Frankel and Nuding say it would be worth the investment and pay for itself.

It costs up to $1,000 per connection to install meters, and there would be additional costs to read them and bill customers. The bill's price tag could reach into the tens of millions of dollars.

“This idea that it is too costly is ludicrous because there is a revenue stream there. If they raise [water] rates nominally, they can pay for it,” Frankel said. “For us to debate whether to require metering is a sign of how far behind the times Utah is.”

The Division of Water Resources has estimated that Utahns use about 115,000 acre-feet a year in secondary water, although the recent audits suggest the actual volume could be much higher. Metering would cut that use by 40 percent, resulting in a potential savings of at least 46,000 acre-feet, according to an analysis Frankel cited.

Anderegg, a Lehi Republican, proposes appropriating money for loans and grants to help defray metering costs to the tune of $5 million a year through 2030.

EPA's chemical decision worries Republicans

By: Annie Snider & Anthony Adragna, POLITICO; January 29, 2019; politico.com
https://www.politico.com/story/2019/01/29/epa-chemical-decision-republicans-1129824

Key congressional Republicans voiced concerns Tuesday about the prospect that EPA will not set drinking water limits for two toxic chemicals — an issue that raises new hurdles for acting Administrator Andrew Wheeler's bid to permanently lead the agency.

POLITICO reported Monday that Wheeler has signed off on a still-unpublished decision not to regulate the chemicals under the Safe Drinking Water Act. The chemicals, known as PFOA and PFOS, are linked to dangerous health effects, including kidney and testicular cancer, and have been found in millions of Americans' drinking water after being used for decades in products such as Teflon and military firefighting foam.

"I'm concerned about it," said Sen. Shelley Moore Capito (R-W.Va.), whose state has had two major contamination cases tied to the chemicals. "I'm concerned about what he thinks the reasoning is for how we're going to get to a safer water standard if that's not the direction they go. I think I need a fuller explanation from him."

Capito, who is facing reelection in 2020, will be a crucial Republican vote when the closely divided Senate Environment and Public Works Committee votes on Wheeler's nomination. She said she had a telephone call scheduled with Wheeler later Tuesday to discuss the water issue.

The committee has 11 Republicans and 10 Democrats, meaning one Republican defection could prevent the nomination from advancing.

In the House, some lawmakers are already calling for Congress to step in and force EPA to set a drinking water limit if the Trump administration does not act.

Rep. Fred Upton (R-Mich.), whose district uncovered a significant contamination from the chemicals this summer, told POLITICO that "doing nothing is not acceptable." He added, "We'll have ample opportunity to grill EPA."

The drinking water decision is included in a chemical management plan that EPA sent to the White House for review in December, as POLITICO reported based on sources familiar with the matter. Wheeler told lawmakers the plan was poised for release this month before the partial government shutdown delayed it.

EPA water chief David Ross issued a statement Tuesday stressing that the plan has not received final sign off from the White House and that "any information that speculates what is included in the plan is premature." However, he did not dispute the substance of POLITICO's report.

"The agency is committed to following the Safe Drinking Water Act process for evaluating new drinking water standards, which is just one of the many components of the draft plan that is currently undergoing interagency review," Ross said.

Sen. Tom Carper (D-Del.), the top Democrat on the environment committee, said he thought Wheeler could still be pressured to change the agency's decision on a drinking water standard.

"I don't think the last part of the play has been written on that," Carper told reporters. "He's going to hear that from a lot of people — Democrats and Republicans. There's a lot of concern."

Carper said the issue was important to Republicans, many of whom are dealing with significant drinking water contamination issues in their states.

"They care about it as much as we do," Carper said. "It's an important issue [to Wheeler's confirmation]. I think there's a growing realization that that's the case."

Controversy around the same class of chemicals already helped derail one Trump EPA nominee. In 2017, North Carolina's two Republican senators came out in opposition to Michael Dourson's nomination to head EPA's chemical safety office, forcing his withdrawal.

Dourson, a toxicologist with a reputation for minimizing chemicals' risks, had led a panel that in 2002 recommended a safety threshold to the state of West Virginia that was 150 times higher than chemical company DuPont's own internal limit for its employees. It was also thousands of times higher than the standard EPA later endorsed in 2016.

One senator who could face increased political pressure over the chemicals is Colorado Republican Cory Gardner, who is up for reelection in 2020 and whose state has its own contamination problems. He told POLITICO he expected there would be a federal role in regulating the chemicals, but he wanted to see the results of a health study included in the fiscal 2018 National Defense Authorization Act.

"I think it's very important that we get as much information as we can and then act appropriately," he said.

Sen. Joe Manchin (D-W.Va.), the only Democrat still in the Senate who backed Wheeler's nomination as deputy administrator last year, told POLITICO the revelations concerned him and vowed to demand answers.

Rep. Dan Kildee (D-Mich.), the Democratic co-chair of Fitzpatrick's chemical task force, called the decision not to regulate the two substances "almost incomprehensible."

"I think it just increases the need for Congress to act," Kildee told POLITICO.

Meanwhile, three senior members of the House Energy and Commerce Committee — Chairman Frank Pallone (D-N.J.), Oversight and Investigations Subcommittee Chair Diana DeGette (D-Colo.) and Environment and Climate Change Subcommittee Chairman Paul Tonko (D-N.Y.) — used the news to renew a request for documents, originally made in May 2018, concerning efforts by EPA political appointees to block a safety hazard study focused on that class of chemicals.

Senators call on EPA to restrict key drinking water contaminants

By: Timothy Cama, The Hill; February 1, 2019; thehill.com
https://thehill.com/policy/energy-environment/428102-senators-call-on-epa-to-restrict-key-drinking-water-contaminants

A bipartisan group of 20 senators has called on the Environmental Protection Agency (EPA) to regulate allowable drinking water levels of two chemicals linked to various health problems.

The letter was sent Friday by Sens. Jeanne Shaheen (D-N.H.), Shelley Moore Capito (R-W.Va.) and others, days after Politico reported that the EPA is expected to decide against setting drinking water limits for perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) as part of an upcoming national strategy for dealing with the class of chemicals known as per- and polyfluoroalkyl substances (PFAS).

“If this is accurate, EPA’s inaction would be a major setback to states and affected communities,” the senators wrote to acting EPA chief Andrew Wheeler.

“Therefore, we ask you to develop enforceable federal drinking water standards for PFOA and PFOS, as well as institute immediate actions to protect the public from contamination from additional per- and polyfluoroalkyl substances (PFAS).”

EPA did not directly deny Politico's report, but said in a statement earlier this week that officials had not published a final decision on whether to regulate the substances' levels in drinking water. The letter comes days before the Senate Environment and Public Works Committee votes on Wheeler’s nomination to be the EPA’s official administrator. Capito and many of the Democrats who signed onto the demand sit on that committee.

PFOS and PFOA have been used to manufacturer various products like firefighting foam and non-stick materials. They could be cancerous, and have been linked to other health problems like immune system disorders and developmental delays.

Communities around the country have started to discover PFOS and PFOA in their drinking water supplies, leading to growing calls for EPA action.