

MAESER WATER IMPROVEMENT DISTRICT
WATER CONSERVATION PLAN

From: Board of Trustees, Maeser Water Improvement District
To: Maeser Water Users

Copy to: State of Utah Department of Natural Resources, Division of Water Resources
County Commissioners, Uintah County
Editor, Vernal Express

Subject: Water Conservation Plan

Introduction

Code Requirements

The State of Utah Water Conservation Plan Act (73-10-32 Utah Code) requires all water suppliers with more than 500 connections to create and adopt a Water Conservation Plan. The Maeser Water Improvement District (District or MWID) has maintained a conservation plan, with the most recent update in 2014.

The code requires that the water conservation plan include:

- Clearly stated culinary water reduction goal;
- An implementation plan for each water conservation measure chosen;
- A timeline for each action;
- An evaluation process to measure progress;
- Devote part of at least one regular meeting of the governing board every five years to a discussion and formal adoption of the water conservation plan, and allow public comment on it;
- Include a copy of the minutes of the meeting, including the public notification procedure, as an appendix to the plan.

The code further requires that:

- A notification procedure be implemented that includes delivery of the plan to the media and to the governing body of the municipality and county served by the water provider.
- Before adopting or amending a water conservation plan, each water provider shall hold a public hearing with reasonable, advance public notice.
- File a copy of the water conservation plan or amended plan with the Division of Water Resources.

Accordingly, the existing District’s 2014 Water Conservation Plan is amended and is to be replaced by this 2020 Plan. This revised plan has been written to help guide proper use of the district’s current water resources and assist in planning for adequate water in the future. We believe the dynamics of the future will likely require an unconventional approach, particularly in the area of revenue generation.

State Conservation Guidance

To aid water districts in their conservation efforts, the Utah Division of Water Resources (DWRe) has updated their approach to setting goals to guide conservation efforts in the state. Rather than a blanket percent reduction by 2025, the Division has put forth regional goals which are more tuned to local situations.

Uintah, Duchesne and Daggett Counties constitute the Green River District in the DWRe’s report¹. The report shows Municipal and Industrial (M&I) water use for the Green River District in 2015 (baseline) at 284 gallons per capita per day² (gpcd). It recommends the goal of 234 gpcd by 2030. The report also provides an estimated goal for the year 2040 of 225 gpcd, which remains the target use through 2065. This represents a decrease in gpcd usage of 18% from 2015 to 2030 and 21% from 2015 to 2040.

The emphasis from the MWID board of trustees is to make safe drinking water available in sufficient quantities to support health, sanitation, and quality of life objectives without disruption, while striving to comply with the requirements for conservation.



THE EMPHASIS IS TO MAKE SAFE DRINKING WATER
AVAILABLE IN SUFFICIENT QUANTITIES TO SUPPORT HEALTH,
SANITATION, AND QUALITY OF LIFE WHILE STRIVING TO
COMPLY WITH CONSERVATION REQUIREMENTS

Description of MWID & Its Water System

The MWID is located in northeastern Utah, in the northwest corner of the valley commonly referred to as “Ashley Valley”. MWID covers approximately 15 square miles. The district has a total of 1,442 water connections to its system and serves a population of approximately 4,550 people (3.2 people x number of residential connections). Of the 1,442 connections, 1,422 are residential, 15 are commercial, and 5 are institutional. The District does not have any industrial customers.

¹ Utah’s Regional M&I Water Conservation Goals, November 2019, p ES-3, found at <https://water.utah.gov/wp-content/uploads/2019/12/Regional-Water-Conservation-Goals-Report-Final.pdf>

² To calculate the gpcd use of M&I water in Maeser Water, all residential, commercial, institutional, and industrial usage is divided by the permanent population in the MWID.

The system is comprised of over 35 miles of transmission and distribution water lines and has over 200 fire hydrants. MWID has a combined total of 2.8 million gallons of storage located in four different storage tanks. See Figure 1 for a map of the system.

The main water sources for the District are Ashley Spring and Red Fleet Reservoir. The District also has the Painted Hills Well, which is typically not used due to undesirable odor.

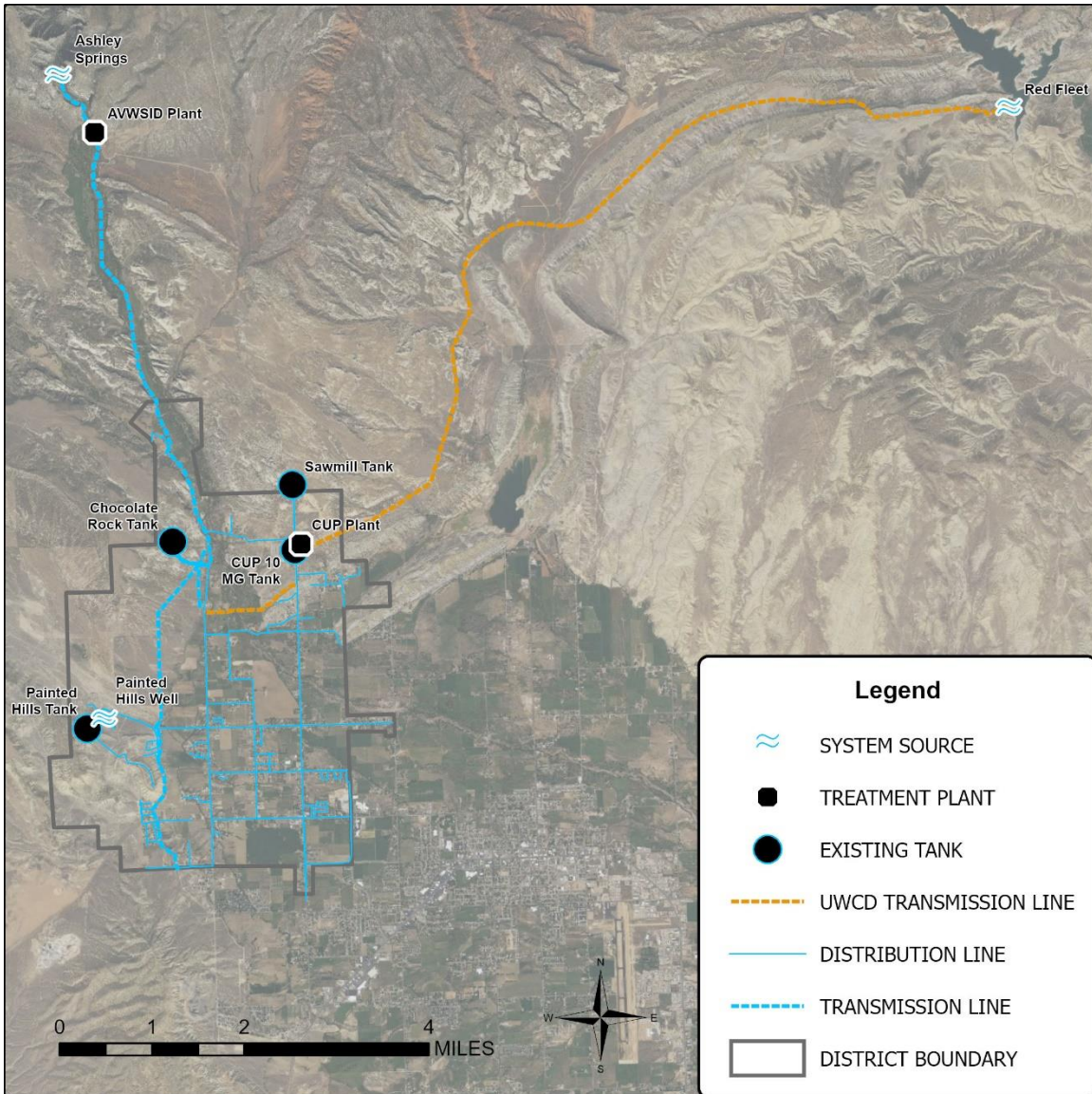


Figure 1: System map of Maeser Water Improvement District

Water Use

Quantities of water purchased by the District are measured at master meter locations where wholesale water enters the system. Water sold by the District is metered at service locations, the vast majority of which are residences. The District has converted their meters to radio-read meters, which benefits District customers by allowing meters to be

read through the winter months. This improves billing accuracy and has identified leaks customers have had during the winter, minimizing water lost from the system.

The District strives to keep water loss to a minimum by informing homeowners when meter data indicates a potential leak on the line to their home, by repairing leaks discovered in the District-owned lines, and by keeping the system infrastructure in good working condition. Table 1 shows the current water use by connection type in both millions of gallons and in gallons per capita per day.

Table 1: Water use

| Connection Type | Total 2019 ³ Use (MG) | GPCD Use |
|-----------------|----------------------------------|----------|
| Residential | 190 | 123 |
| Commercial | 1.4 | 1 |
| Institutional | 17 | 11 |
| Industrial | 0 | 0 |
| Total | 209 | 135 |

The 2019 report from the DWRe changes the State’s approach to conservation goals considerably by establishing dividing the state into regions, establishing a baseline gpcd usage for each region, and projecting future use targets by region. Figure 2 shows the new goal method with MWID’s historic water use.

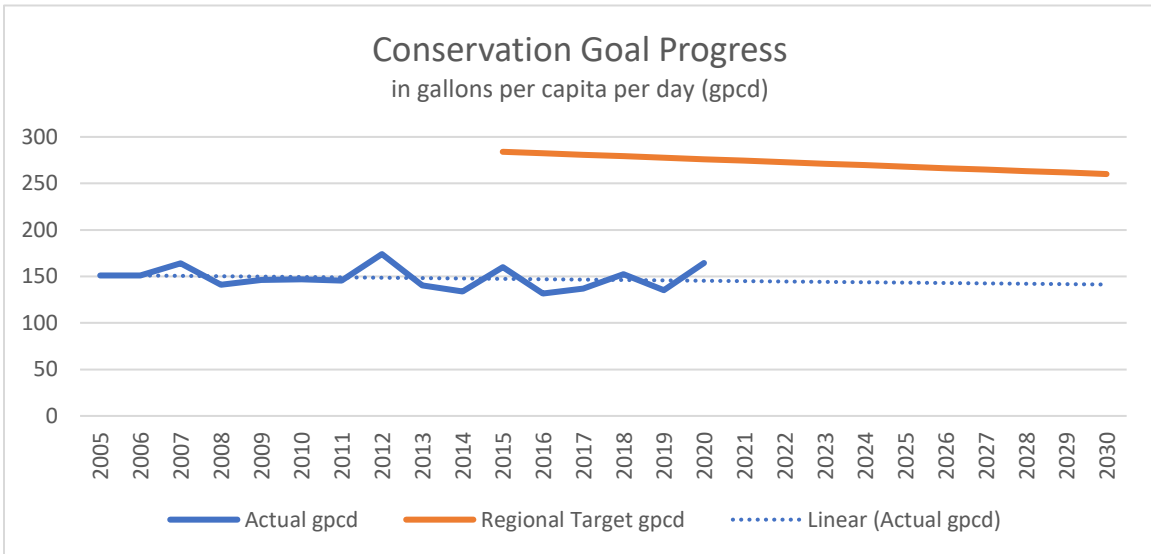


Figure 2: Conservation goal progress

³ Most recent data that includes the full year.

Maeser Water customers already have a per capita use well below the State’s goal for 2030 in the Green River region and the trend for per capita water use in the District is decreasing.

The use of water in the District for the past six years is shown in Figure 2. Despite population growth over these years, at times very rapid growth, and with years of dry conditions (like 2020), per capita water use has gone down over time.

Conservation Goals and Measures

The trustees of the board have elected to approach the topic of culinary water use and reduction with a conservative point of view. Their goals have been chosen to allow the District to fulfill its objective stated previously, while meeting conservation goals that the State has recommended.

Measure 1: Rates

The first conservation measure put in place with the 2009 plan was to redesign water rates and make a tiered rate structure. A tiered structure is used to increase the cost per thousand gallons of water used with increasing water use. This tiered approach encourages water users to use less water by making additional amounts of water increasingly more expensive. Table 2 shows a summary of the changes that have been made to the rate structure since 2008.

Table 2: Historic rate structure with prices per thousand gallons

| Description | 2008 | 2009 | 2012 | 2013 | 2014 to 2020 |
|------------------------|-------------------------------|--------------------------------|---------------------------------|-------------------------------|-------------------------------|
| Monthly service charge | \$10.00 | \$10.00 | \$24.00 | \$30.00 | \$32.50 |
| 1st Tier | \$1.33; 0 - 8,000 gal | \$1.53; 0 - 6,000 | \$1.53; 0 - 6,000 | \$0.00; 0 - 6,000 | \$0.00; 0 - 6,000 |
| 2nd Tier | \$1.80; 9,000 - 24,000 | \$2.07; 7,000 - 20,000 | \$2.07; 7,000 - 30,000 | \$2.26; 7,000 - 50,000 | \$2.26; 7,000 - 50,000 |
| 3rd Tier | \$2.63; 25,000 - 50,000 | \$3.02; 21,000 - 45,000 | \$3.00; 31,000- 75,000 | \$3.16; 51,000- 100,000 | \$3.16; 51,000- 100,000 |
| 4th Tier | \$3.00; over 51,000 | \$3.50; 46,000 - 100,000 | \$3.25; 76,000 - 125,000 | \$4.16; over 101,000 | \$4.16; over 101,000 |
| 5th Tier | NA | \$4.03; over 101,000 | \$3.75; 126,000 - 175,000 | NA | NA |
| 6th Tier | NA | NA | \$4.00; over 176,000 | NA | NA |

Since 2008, significant changes have been made to the rate structure. The monthly charge has increased significantly to cover base-line operating costs for the system. Conservation measures have been implemented by decreasing the amount of water in the first tier and charging more for each thousand gallons used in the other tiers.

From Figure 2, it appears that the block rate billing has inspired users in the District to conserve water. Annual water use from 2009 to 2014 was significantly lower than prior years. If this measure continues to be effective in meeting our conservation goals, further restrictions will be considered only if water availability is compromised.

Measure 2: Education

To assist water customers in their conservation efforts, each year on the April bill, the District will remind users of the goal to conserve water.

For situations such as dry years when water availability is low, the District has an Emergency Conservation Plan which outlines steps to take to ensure clean drinking water is available for life sustaining needs. The plan outlines graduated steps from self-imposed conservation measures to mandated/enforced measures as the situation worsens.



**NOTE: THE EMERGENCY CONSERVATION PLAN HAS
RECOMMENDED ACTIONS IN SITUATIONS OF LOW WATER
AVAILABILITY.**

Copies available at the office.

Measure 3: Water Meter Upgrades

The District has recently upgraded all the service meters in the system to radio read meters, allowing readings to continue through winter months. This has demonstrated a successful conservation measure as winter-time leaks have been detected on private lines going to homes. As these leaks are suspected, homeowners are notified and the leak can be repaired much sooner than it previously would have been.

Future Projections

The growth in the area is largely affected by the oil industry which causes wide swings in the growth rate. In a recent water master plan for the District, the growth rate was shown to be 3.0% from 2001 to 2018.

At a constant 3% growth rate going forward, in the year 2030 the District will be serving a population of 5,862 and have a projected per capita use of 145 gpcd, requiring 952 AF of water to supply the needs. By 2050, the population will be 10,588 with the same per capita water use. The 2050 water demand is projected to be 1,720 AF.

Inventory of water resources

The district gets its water from Ashley Spring and has a contract with Ashley Valley Water & Sewer Improvement District to treat the water. The district also has three artesian water wells, two of which are used to exchange ground water for Ashley Spring water. The third well is used to supplement the culinary water supply. Additionally, the district has recently acquired an additional 560 acre-feet of Red Fleet Reservoir water.

Current resource yields are calculated at 2,418 acre-feet based on an average water supply year, and a reliable “Dry year” water supply yield of 2,188 acre-ft. This shows that the District, with its recent purchase of additional water from Red Fleet Reservoir, will be able to meet their projected demands

| Water Source | Average Year (ac-ft per year) | Dry Year (ac-ft per year) |
|---|--|--------------------------------------|
| Ashley Creek Primary Allotment (0.6% of flow) | 251 | 83 |
| Ashley Creek Winter Stock Water | 36 | 36 |
| Steinaker M&I Water | 200 | 200 |
| Ashley Reservoir Company Stock | 70 | 8 |
| Underground Water Right ¹ | 2100 | 2100 |
| Maeser WID Secondary (non-potable) | 290 | 290 |
| Red Fleet Reservoir (2014 purchase) | 560 | 560 |
| Total | 3507 | 3277 |

¹ Hullinger Well exchanges 336 AF. Other wells' flow varies by year

Tracking Progress

Figure 2 shows that the District is below the average expected per capita use for the Green River region and the trend of per capita use is downward. Conservation efforts will continue in the District.

To measure the progress toward the conservation goal, the District will calculate the per capita use of water each year in November and review it with the Board of Trustees. This will provide a sense of whether the education and other conservation efforts are effective or not. Additionally, it will help maintain focus on the goal. If it is determined that adjustments are needed to the plan, they will be discussed at that time.

Rate adjustments will be the subject of public hearings during December each year as it is reflected within the annual budgeting process. Should the need arise for emergency rate hike measures, this action will be announced in advance and the public invited to participate in board meetings prior to any change taking effect.

Maeser Water

From: <support@utah.gov>
Date: Wednesday, June 8, 2022 11:52 AM
To: <mwid@mystratamail.com>
Subject: Public Notice for Maeser Water Improvement District

Utah Public Notice

Maeser Water Improvement District

Board Meeting

Notice Date & Time: 6/9/22 1:00 PM -6/9/22 4:00 PM

Description/Agenda:

June 9th, 2022

NOTICE: The regularly scheduled meeting of the Board of Trustees, Maeser Water Improvement District will be held at 1:00 P.M. June 9th, 2022.

AGENDA:

1. Opening prayer.
2. Public attendees.
Bart Jensen, Jones & Demille Engineering
Craig Nebeker, CRS
3. Approve May minutes.
4. Follow up May minutes:
2500 W Road Reconstruction Project request to UTSSD
Jason Carr and land owners Request for letter from Maeser Water ID that connecting 11 lots to public sewer is not practical.
5. Report from staff:
PEHP LGRP Refund \$ 2,101.00
Scrap Metal / Brass = 1784.43
2021Financial Audit - In progress
Public Hearing UWCD 06/14/2022 at 10:00 AM UWCD Offices issuance of up to \$ 27,000,000.00 in bonds
6. Sewer board report:
7. Safety: Trench Safety
8. New Business:
Burdick Materials Request for water for Concrete batch plant Maeser pit.
Mitch Hacking 1 in 10 year leak adjustment Account # 1827, 882n 3500w
Approval to sign for Certified Tax Rate 2022

Public Hearing to adopt Resolution # 22160 Water Conservation Plan
Adopt Resolution # 22160 Water Conservation Plan
General Manager is requesting for a portion of his vacation time to be paid in lieu of time off.

9. Review of bills paid.

10. Closed Session: Executive sessions can be held with a 2/3 vote for the following reasons. Discussion of the character, professional competence, or physical or mental health of an individual. Collective bargaining strategy litigation strategy and the attorney-client privilege. To discuss the purchase or sale of property. Security information. Investigations of criminal misconduct. Discussing commercial information and trade secrets.

11. Adjourn.

Notice of Special Accommodations:

Maeser District office spaces are equipped for persons with disabilities. Anyone needing special assistance should contact office staff at 789-2353 prior to the meeting.

Notice of Electronic or telephone participation:

No electronic participation anticipated or planned.

Other information:

Location:

1063 N 2500 W, Vernal, 84078

Contact information:

Jennifer Tarbell , mwid@mystratamail.com, (435)789-2353

Minutes of the Maeser Water Improvement District Board of Trustees meeting. Held at 1:00 P.M. on May 12, 2022 at 1063 North 2500 West, Vernal, Utah.

Present: Chairman Richard K. Jolley, Trustees, Nolan Jackson, Bob Leake, Jim Jenkins, and GaLynn Oaks. Staff Dusty McCormick, Branden Lammert.

Excused: Jennifer Tarbell

Prayer: Richard Jolley

Public Attendees: Bart Jensen, Jones & Demille Engineering, Jason & Shelby Carr.

Approval of April 14, 2022 minutes: Nolan motioned to approve the April minutes, GaLynn seconded, motion carried. Richard yea, Bob yea, Jim yea.

Follow up:

2500 W Road Reconstruction Project: Dusty reached out to the Chairman of the UTSSD, Dan Dilsaver and explained the request to partner with them on this project. Dan requested that we get on the agenda for May and that he could see the benefit in partnering on the project.

CUP Connection 1500 N 1500 W: Dusty spoke with Ryan Goodrich with Ashley Valley Water & Sewer Improvement District about the connection. Ryan is in agreement that another connection at the same location was probably not needed. Ryan explained that their connection is rarely used and could meet each of the district's needs. Ryan was going to speak to his engineers about the hydraulic model to see if there would be any concerns.

Lead and Copper Rule, GIS Arc View Asset Management: CRS Engineers gave us a proposal to help with the GIS and app building process for the rule. The Cost is \$ 3,500.00 Dusty indicated that we would be moving forward with the GIS proposal from CRS Engineers.

Eric Pye Lot Split: Dusty reported that our crew has located the 20" water line on the property. We have contacted Rocky Mountain surveyors, whom Mr. Pye had hired and let them know it was ready to survey.

Cost Share on Fiber Project from Treatment plant at the Mouth of Ashley Spring to Spring House: Dusty reported that he had informed the other entities, Vernal City, Ashley Valley and CUP that Maeser Water had agreed to contribute to the project. We have not

received an invoice yet. There was some discussion that the CUP may be pulling out the funds they had committed to the project.

Clint Speirs 22 lot Subdivision: The subdivision appears to be moving forward and is still in the county approval stage.

Sidewalk project: Bidding documents have been prepared by Uintah Engineering & Land Surveying. Discussion on the availability of materials and increased costs may prevent us from doing the project. Decision was to move forward with the bidding of the project.

Cross Connection Hazard Assessment: Doug Hansen our lead operator in cross connection has begun the 2022 hazard assessment. He is working from 2500n and 3250w area south and east. 10 percent of the district is assessed annually.

Service Connection Installation's: Dusty reported that water service connections installs are being completed by our crews and that more connections are being purchased. We hope to be able to keep up with the demand.

Blue Stakes: We are seeing a large influx in the amount of blue stake request's. We have been able to keep up but it is requiring a lot more of our time. So far this year we have not had any damage to our infrastructure due to excavations by other utility crews and contractors.

Weed Control: Our crew had applied a ground killer on our lot to the south of the office and it is working very well. They have also sprayed the building and grounds with Round up. This is the first application for the year.

Daily Master Meter Reads: We are now reading the master meters daily so that we can be in compliance with the Division of Drinking Waters requirement to report our peak day demand for 2022.

Sewer Board Report: Quality Fencing, installing new fencing on lift station property. June financial report looked good. Purchased leased Backhoe for \$ 69,000.00

Safety Meeting: This month's safety meeting was on Traffic Control.

Steinaker Dam: Received final repayment schedule for Safety of Dams work completed on Steinaker Dam. Maeser portion of the repayment is for 200 acre feet at \$ 38.98554 per share that is \$ 7,797.11 annually.

Sewer Line Extension: Tracy Buehler has applied for a sewer line extension at approximately 2255n 3250w. It will service 4 lots. They are working on engineering the sewer line and staff will review and approve engineering and create an escrow agreement.

Lease of Surplus Water to Ashley Valley Water & Sewer Improvement District: Dusty Reported that Ryan Goodrich had contacted him about Maeser waters ability to lease its surplus water on an annual basis. Dusty is to negotiate the price and terms with Ryan and put it on the agenda for acceptance.

6" Water line Abandonment: Philip Murphy has requested that we abandon and allow him to use a portion of a 6" water line that once connected the Hullinger well to the water system. The well is not an approved drinking water source and the water line is no longer connected to the culinary water system. Dusty was asked to negotiate with Philip for a ROW that could be needed in the future along the Ashley Creek on land owned by the Murphy's.

Jason Carr sewer Line extension: Jason and Shelby Carr attended the meeting to request that the board withdraw the letters of sewer availability that had been given by the District for his 11 lots located at 3210n 2500w. The reason for the request is that the Tyzack aqueduct owned by the Bureau has its own ROW and requires a permit and engineering to cross the water line. The line will need to be crossed in order to get sewer to the lots. This process can take a considerable amount of time and expense. The Carr's would like to apply to the Tri County Health department for onsite waste water permits "septic tank and drain field" for the 11 lots. The Board reviewed the engineering plans that have been prepared for the project. The board also went over the correspondence from the Bureau concerning the crossing and the permit. In the correspondence the bureau requested that the permit application be filled out as soon as possible, and that they had hired additional engineers to help with the application reviews. The Board asked the Carr's if the application had been completed and their response was that it had not. The Carr's had also indicated that they had sold six of the eleven lots. The Carr's concluded with their request and left the meeting. The Board had a discussion concerning the longevity of onsite waste water systems, future home owners will at some point need to connect to the sewer system due to a failed septic system, those home owners could then look to the District to pay for the project and not the developer.. Bob Leake motioned to deny the Carr's request. Second by Nolen Jackson all in favor, Jim yea, GaLynn yea, and Richard yea motion carried.

Approval of April 14 Minutes: Nolen Jackson Motioned to approve the April 14 minutes, Galynn Oaks second Jim yea, Bob yea, and Richard yea motion carried.

Review of Bills Paid: Bob Leake motioned to accept into the record without exception the bills paid through April 14, 2022. Jim Jenkins second GaLynn yea, Nolen yea, and Richard yea motion carried.

Closed Session: Nolen Jackson made a motion to go into closed session for the purpose of discussing an employee's character and competence. GaLynn Oaks second, Bob yea, Jim yea, and Richard yea motion carried.

Open Session: Bob Leake made a motion to end the closed session and reopen the public meeting, GaLynn second, Nolen yea, Jim yea, and Richard yea motion carried.

Signatories' for all banking and finance accounts: Bob leake made a motion to have GaLynn Oaks, Dustin McCormick, and Branden Lammert placed as thee signatories' on all of Maeser Water Improvement District financial accounts including CD accounts, PTIF accounts, savings and checking accounts. Second by GaLynn Oaks, all in favor Nolen yea, Jim yea, and Richard yea motion carried.

Outsourcing of various administrative and office functions. Dusty proposed that the board consider the additional services that are offered from Pelorus Methods that could be employed by the District. This would be an attempted to decrease the risks and liabilities that the District has because of its nature of being a smaller organization and only a few full time employees. We have been using Pelorus for our billing, accounting, and software support for many years. Dusty presented a proposal from Pelorus with a cost sheet. The cost for all of the additional services they offer is \$ 100.00 per hour or \$ 10,000.00 per year. The regular fees for software and support remain the same. Nolen Jackson made a motion to accept the proposal from Pelorus for the annual fee of \$ 10,000.00 and to try the services over the next year and then reevaluate at that point. Second by Bob Leake all in favor, GaLynn yea, Jim nay, and Richard yea motion carried.

Adjourn: GaLynn motioned to adjourn. Nolan seconded

APPROVED:

Dusty McCormick, Clerk

Richard K. Jolley, Chairman

A RESOLUTION ADOPTING
WATER CONSERVATION PLAN

WHEREAS, a resolution #22160 was passed on the 9th day of June 2022, by the Board of Trustees of the Maeser Water Improvement District, Uintah County, State of Utah, declaring its intent to adopt a water conservation plan, pursuant to the State of Utah Water Conservation Plan Act (73-10-32, Utah Code), and,

WHEREAS, a public hearing was held pursuant to (73-10-32, Utah Code), 3, B, (iii) A. on 9th of June, 2022, at 1:00 o'clock P.M. before the Board of Trustees of Maeser Water Improvement District assembled at a public hearing at the Maeser Water Office for that purpose, and,

WHEREAS, no persons, individual or corporate, filed in writing or appeared in person to protest the adoption of said proposed water conservation plan, and,

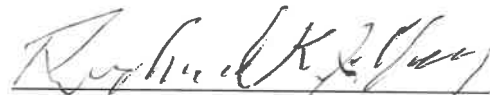
WHEREAS, the leadership and management of the Maeser Water Improvement District understands the necessity for conservation, good business practices demonstrates the value of having in place, a living, workable document that clearly articulates goals and objectives instrumental in success.

NOW THEREFORE, it is HEREBY RESOLVED and pursuant to the authority of the Board of Trustees of Maeser Water Improvement District, Uintah County there is established, on this 9th day of June, 2022 a resolution #22160, adopting the water conservation plan.

ATTEST:




Dustin C McCormick, Clerk




Richard K. Jolley, Chair

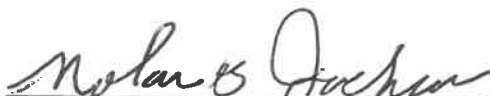
James L. Jenkins, Vice Chair



Galynn F. Oaks, Treasurer



Robert W. Leake, Trustee



Nolan G. Jackson, Trustee