

Tab 3

Environmental Committee report





Consider approval of Utah State University water audits program for 2025

Last Update: January 14, 2025

Objective: Provide an update to the board regarding the water audit contract and seek a recommendation for approval of the expenditure for another year.

Background: Water checks are conducted from mid-May through August for Salt Lake City and Sandy City residents and CII (commercial, industrial, and institutional) entities. Both member cities indicate continued support for the program. The Water Audit Program is a voluntary program. When a resident or business requests a water audit, Utah State arranges for a Water Check employee to conduct the water check.

The District entered into a contract with Utah State University (USU) for water audits on January 13, 2021 that allows for up to five (5) twelve (12) month extensions. The contract year begins February 1 and ends January 31. The annual contract amount will not exceed \$80,000.

In January 2022, the board approved increasing the water check budget from \$80,000 to \$116,000 to address the record number of requests received in 2021. The increase allowed for USU to hire a scheduler and two more water checkers which increased the total teams from two to three teams. In 2023 and 2024, the board supported maintaining the budget at \$116,000.

Currently, we are approximately \$37,754 under budget due to a couple of reasons. First, the scheduler's salary was covered through USU CWEL funds this year and, secondly, water checkers took more time off this summer than in past years.

In 2024, the District entered into an MOU with SLCPU which allows USU to hire an additional team of water checkers to help Salt Lake City perform water checks at City and other facilities. The District will pay USU for the services performed for this additional audit team. The District will then seek reimbursement from Salt Lake City for services up to \$22,000.

In summary, the expenses incurred by the District in 2024 will be less than \$79,000.

Feb 1- Jan 31	Not to Exceed Contract Amount	Expenses Incurred	Water checks completed (Residential/CII)
2021	\$80,000	\$80,000	217/27
2022 (1 st extension)	\$116,000	\$116,000	654/17
2023 (2 nd extension)	\$116,000	\$115,989.43	231/22
2024 (3 rd extension)	\$116,000	\$79,000 (estimated)	266/19
2025 (4 th extension)	\$116,000		

Committee Activity: The Environmental Committee met on January 7, 2025 and discussed the 2025 budget for the water audit program. The committee recommends approval by the full board of an amount not to exceed \$116,000 for total compensation for services performed in 2025.

Recommendation: Approval by the full board of an amount not to exceed \$116,000 for total compensation for water audit services performed in 2025.



Attachments:

- 2025 Water Check Program budget
- Scope of work for 2025

2025 PROPOSED WATER CHECK BUDGET

Item	Amount	Benefits	Total
Program Administrator/Manager (Kelly Kopp)	\$21,000	\$9,471	\$30,471
Water Checker (1 @ \$18/hr x 30 hrs/wk x 12 wks)	\$6,480	\$499	\$6,979
Water Checkers (5 @ \$16/hr x 40 hrs/wk x 12 wks)	\$38,400	\$2,957	\$41,357
Scheduler (1 @ \$20/hr x 20 hrs/wk x 12 wks)	\$4,800	\$2,165	\$6,965
Travel	\$6,830		\$6,830
Supplies, App & Database Management	\$8,000		\$8,000
Subtotal			\$100,602
Overhead Costs (Required by USU)	15.3% of total cost		\$15,392
Total			\$115,994

Budget Justification

Program administrator and scheduler salaries are benefited at a rate of 45.1%, as per USU requirement.

Water Check intern wages are benefited at a rate of 7.7%, as per USU requirement.

Overhead costs represent the infrastructure costs assessed by USU for relevant facilities and equipment use. For internal budgeting purposes, and to meet federal requirements, these costs must be separated from other program fees in accordance with USU policy.

The proposed budget includes the cost of three teams of interns to perform the outdoor water audits. Based on previous experience, we estimate that a single team of interns will be able to complete as many as 240 audits over the course of the growing season, depending on the size of the properties evaluated.

Should MWDSLs determine that more audits performed in the service area are desirable, an additional team may be added with the associated increases in costs. The cost per team is estimated at \$16,558 per season (assuming \$16/hour per person).

Metropolitan Water District of Salt Lake and Sandy Water Check Program-2025

Scope of Work

The proposed work continues the Water Check Program in the Metropolitan Water District of Salt Lake and Sandy (MWDSLS) service area in 2025. We will continue to utilize the Water Check application for the collection of program data and automated data storage and reporting.

Introduction

Water supplies in Utah continue to be strained by increasing demand due to population growth and periodic drought. And while the winter of 2024 has offered some relief, there is no guarantee that future water supplies will not be strained by growth and drought. In response, irrigation water applied to landscapes continues to be a focus of MWDSLS's conservation efforts.

Landscape irrigation system evaluations accompanied by irrigation schedules, otherwise known as Water Checks or audits, have been used by MWDSLS to reduce water use in its service area. To date, the District's focus on landscape water conservation through the Water Check Program has resulted in an average annual savings of 64,000 gallons of water and associated financial savings per participant household.

A Water Check consists of evaluating system effectiveness by testing uniformity of water application and irrigation system maintenance and assessing operational factors that limit system efficiency in applying water. This evaluation is combined with a recommended irrigation schedule and educational materials that are presented to program participants and reviewed for clarity and to answer participant questions.

In 2025, the recommended irrigation schedule and requested educational materials will be provided by email to program participants. In the eventuality that a participant does not utilize email, the recommended irrigation schedule and educational materials will be provided onsite, sent to the participant by mail, or hand-delivered in the course of nearby work (report will also be reviewed onsite with participant).

Two explicit outcomes are expected from Water Checks; sustained reduced water consumption and enhanced public relations and awareness. A third expectation underlies both of these outcomes: Water Checks help reach the population of water users with the greatest capacity to conserve. Our ability to reach customers with the highest capacity to conserve was greatly improved in 2020, as a WaterMaps® analysis of the Salt Lake City Service area was completed by USU colleague, Dr. Joanna Endter-Wada. This analysis has identified areas and neighborhoods in the city with high rates of outdoor irrigation, allowing us to the opportunity focus our efforts more directly in these neighborhoods. WaterMaps® analyses are repeated periodically and, in 2025, we plan to continue reaching out to those customers and neighborhoods that have exhibited the highest capacity to conserve.

The proposed Water Check Program will continue to provide landscape irrigation system evaluations and irrigation schedules as a free service (underwritten by the District) available to residential and commercial-industrial-institutional (CII) water users within the service area of MWDSL. The program will also continue analyses of existing program data, including the prioritization of irrigation system flaws in terms of their effect on irrigation system efficiency.

In addition, the Water Check program will continue to evaluate the following questions:

- Do Water Checks encourage end users to conserve water compared to historical use patterns?
- Do Water Check participants conserve water in comparison to the general population not receiving Water Checks?
- Are the water savings achieved by Water Checks sustainable over time and for how long?
- Is the pattern of water use in the population requesting Water Checks the same as the general population?

In addition to these ongoing efforts, Water Check program employees/interns will also perform assessments within the Salt Lake City Department of Public Utilities service area of residential and CII landscape composition as scheduling and location allows. These assessments will provide supplemental information about landscape composition as it relates to the Utility's usage of the WaterMAPS water demand management tool. To support this effort and to conduct detailed Water Checks at SLC golf courses, the SLCDPU Conservation Program will provide budget support for additional Water Check team members, if necessary.

Methods

The procedure for conducting Water Checks is comprised of introductory training for program employees/interns and specific procedures for performing each Water Check.

Training for program employees/interns includes:

- Detailed instruction on ornamental plant-soil systems, with an emphasis on common landscape problems;
- In-depth study of irrigation scheduling as it pertains to climate data, allowing employees/interns to tailor irrigation schedules to clients receiving checks;
- Performance of several "sample" Water Checks with an experienced trainer; and,
- Spot-checking and confirmation of procedures over the course of the growing season.

Additional training related to the use of the application will include:

- Detailed instruction on data entry utilizing i-Pads;
- Detailed instruction on report development for participants;

- Detailed instruction on uploading each day's data to the program database over wireless internet connection.
- Instruction on utilizing and implementing the GIS-based mapping tool for Home-Owner Associations (HOAs).

Water check procedures include:

- Work by Water Check teams, allowing for increased quality of data collection and safety;
- Measurement of physical area for turfgrass, shrub/tree, hardscape, and permeable surface areas;
- Identification of landscape and irrigation system characteristics and flaws;
- Performance of catch cup tests of irrigation system distribution uniformity;
- Evaluation of soil texture and plant rooting depth; and,
- Instruction of program participants on programming their irrigation controller.

Program Impacts

With the permission and assistance of the District's member cities, billing data may be requested for each client receiving a Water Check. Landscaped areas determined from the Water Check may then be used to normalize billing data from volume units to depth units. The following comparisons may then be made to:

- Estimate water needs. Comparison of the water use of program participants to estimated needs determined from climate data collected from local weather stations. Estimated needs of program participants will be normalized by measured local evapotranspiration (ET) rates.
- Determine historical outdoor water use for an individual client. This comparison will depend on initial baseline water use as well as the limitations of the available water billing data.
- Compare program participants with non-participating population. A control population of water users of the same type (residential) may be selected each year for comparison to water check recipients where such data is obtainable. The control group's actual water use will be calculated based on billing data and estimated irrigated landscape area. The control group will be matched to program recipients in terms of property location, value, and size.

Reporting

In 2025, reporting to the District's member cities will occur weekly. These reports, delivered by email, will include:

- Participant names, addresses, and contact information;
- Date they submitted their request for a Water Check; and

- Date the scheduled Water Check was conducted.



Environmental Committee reporting items

Last Update: January 13, 2025

Objective: Provide an update to the board regarding the water audit contract and seek a recommendation for approval of the expenditure for another year.

Background: In 2018 the Environmental Committee developed an objectives summary that represented the spectrum of responsibility assigned to the Environmental Committee. These objectives correlate with the District's overall mission statement. The board finalized the following Environmental Mission Statement in February 2018.

Environmental Mission Statement

Actively promote the long term, sustainable development and wise use of water, energy and other resources under the stewardship of the Metropolitan Water District through conserving water and energy, protecting water quality and the watershed and assuring regulatory and environmental compliance. All actions will take into consideration the relevant goals and activities of the member cities, associated districts, and the state.

On an annual basis, the District will provide an update on efforts to support the objectives of the Environmental Mission Statement. Overall, the District continues to be very active in supporting these objectives. An explanation of these efforts in 2024 is included (Attachment A).

Committee Activity: The Environmental Committee reviewed and provided input on the mission objectives during the January 7, 2025 committee meeting. The committee recommended sharing the Environmental Mission Statement and review of objectives for 2024 with the full board.

Recommendation: For discussion and reporting purposes.

Attachment A

Water and Energy Conservation

Support water conservation and best management practices for energy and water conservation

- 1) Support our member cities' implementation of effective water conservation measures
 - a) Participate in the Utah State University water audits program
 - District continued to support the Utah State University (USU) Water Audits program during 2024.
 - The annual contract amount for 2024 water checks and analysis is \$116,000.
 - In the District's service area, 266 residential water checks were conducted in 2024 compared to 231 water checks in 2023, a 15% increase.
 - b) Support member cities' conservation programs
 - Support of member cities' conservation programs was through the USU Water Audits program and participation in the Governor's Water Conservation Team.
 - The Utah Division of Water Resources finalized regional water conservation goals. Goals were established for nine regions around the state for municipal and industrial (M&I) water conservation. M&I includes residential, commercial, institutional, and industrial water use. The goals vary by region. When every region reaches its goal, a 16% water use reduction will be realized by 2030. The Salt Lake regional goal is an 11% reduction from 210 gallons per capita per day to 187. The regional goals replace the 25% by 2025 goal. The District supports member cities conservation programs as they work to reach the regional goals.
 - c) Participation in the Governor's Water Conservation Team
 - District is a member of the Governor's Water Conservation Team (GWCT) and Annalee Munsey is the District representative on this team. The GWCT is transitioning to Utah Water Ways (UWW).
 - The current annual cost for the District to participate in the GWCT/UWW as a funding member is \$36,400.
 - In 2025, Utah Water Ways replaces the GWCT. Established through HB 307 (2023 GS), Utah Water Ways is a 501(c)(3) public-private partnership dedicated to coordinating efforts within Utah to optimize the use of the state's water resources. Tage Flint serves as the Executive Director and Greg Miller as the Chair of the Utah Water Ways Board of Directors.
 - d) Implement the District's water conservation plan
 - The District's Water Conservation Plan was adopted in December 2005 and the plan was updated in December 2010. Recommended updates to the plan were considered in 2015 but have not been finalized. The District is not required to have a water conservation plan unless it is applying for grant funds that would require a conservation plan. In 2024, the District applied

for and received a loan from the Department of Water Resources. To be eligible, the District updated its conservation plan which was approved, after a public hearing, by Resolution 1931 in February 2024.

e) Provide annual Utah Lake System reporting

- Since 2000, the District has tracked per capita water use which documents conservation performance by the District and its member cities. This information is used to track the District's progress in meeting the ULS conservation goals of a 12.5% water use reduction by 2020 and a 25% water use reduction by 2050. The trend line of actual conservation is below the state conservation goal. The District completed its annual conservation report and submitted it to Central Utah Water Conservancy District in March.

2) Implement effective supply-side conservation measures

- Bowen Collins & Associates completed a comprehensive water supply and demand study in February 2019. Salt Lake City and Sandy City were involved in similar efforts. The District is currently making updates to its water supply and demand study, scheduled for completion in March 2025. This report is coordinated with similar efforts with the member cities.

3) Plan and participate in Aquifer Storage and Recovery efforts

- Consistent with the District's Fiscal and Budget policy, when revenue is available, the District has contributed to the Aquifer Storage and Recovery (ASR) Reserve fund. The current fund balance, as of October 31, 2024, is \$181,421.
- The Managed Aquifer Recharge Design and Construction capacity improvement project is in progress. The District's 2021 Managed Aquifer Recharge (MAR) Implementation Plan includes a six-phase approach to storing up to 8,790 ac-ft of water annually in the ground. The District successfully obtained funding from the American Rescue Plan Act (ARPA) to construct portions of the first two project phases (pilot and Phase 1) which include surface infiltration basins and an aquifer injection well. All work, except the transformer, is anticipated to be complete by December 31, 2024. Remaining work to be finished spring 2025.

4) Adopt best management practices for energy and water conservation at all District lands, properties, and facilities

a) Implement the District's Energy Management Plan

- Consistent with recommendations from the Emergency Management Plan, the District created an Energy Management Team. The team includes staff from Engineering, Maintenance, I&E, and Operations. The team meets quarterly to evaluate and consider the development of renewable energy sources, such as solar, either as independent capital improvement projects, or in conjunction with the implementation of other capital improvement projects.

b) Evaluate other energy and water conservation BMPs

- The District will continue to improve energy conservation through proactive operational/maintenance changes and through replacing failing equipment with energy efficient options.
 - The District is eligible to receive funding from Rocky Mountain Power for proactive projects that improve energy conservation.
- 5) Promote public education regarding water conservation
- a) Participate in public outreach through events such as Water Week
- Water Week activities were held on May 9, 2024. Tours of the LCWTP continue yearly for smaller groups including educational groups from Elementary to College age.
 - Tours of District facilities were provided to newly elected Councilmembers Eva Lopez and Sarah Young of Salt Lake City.

Water Quality Protection

Support District's mission to provide high quality water to our customers

- 1) Monitor and respond to harmful algal blooms in source water reservoirs
- The District's Harmful Algal Bloom (HAB) and Cyanotoxin Response Plan, last updated in February 2024, continues to direct efforts to prevent HABs through source protection endeavors, to monitor for HABs through a cooperative effort with the Provo River Watershed Council and to respond to reports of HABs when they occur.
- 2) Monitor and respond to aquatic invasive species such as quagga mussel
- District continues to monitor aquatic invasive species, especially quagga mussels. As a part of this effort, the District provides funding for the Aquatic Invasive Species (AIS) program through the PRWC.
- 3) Monitor and respond to the introduction of new water supplies in District conveyance and distribution systems
- District has coordinated quarterly meetings with Jordan Valley Water Conservancy District and Salt Lake City Public Utilities to discuss potential water quality issues or concerns with deliveries through the Jordan Aqueduct facilities to 21st South. The most recent meeting was held on November 8, 2024.
- 4) Monitor and respond to introduction of PFASs (perfluoroalkyl substances)
- Since October 2019, the District had conducted quarterly testing for PFASs (perfluoroalkyl substances) in Little Cottonwood Creek. The District had also been conducting PFAS monitoring as part of a project lead by the Division of Drinking Water. Due to lack of detection, the District does not currently test for PFAS substances. On March 14, 2023, the EPA announced the proposed National Primary Drinking Water Regulations for six PFASs substances. Staff are preparing for the actual rule scheduled for 2027.

Watershed Planning and Protection Program

Support District's mission to effectively manage valuable resources and promote the sustainable use of water resources

- 1) Implement and maintain the District's source water protection plans
 - The District maintains source water protection plans for the following water sources: Provo River, Little Cottonwood Creek, Southeast Mountain Streams, Battle Creek, and Grove Creek.
 - The District has coordinated efforts with Central Utah Water Conservancy District and Jordan Valley Water Conservancy District on the Provo River source water protection plan. Every six years the source water protection plans are reviewed. These plans were updated in December 2019.
- 2) Participate in watershed planning programs and efforts to protect the watershed
 - a) Support Provo River Watershed Council
 - District is a member of the Provo River Watershed Council (PRWC). Eric Sorensen is the District representative on this council.
 - The current annual cost for the District to participate in the PRWC as a funding member is \$110,000.
 - The Council's strategic plan identifies risks in the watershed. Wildfire is one of the top risks and the council is exploring efforts to support mitigation efforts.
 - b) Support Central Wasatch Commission (formerly Mountain Accord) efforts
 - District continues to support the Central Wasatch Commission (CWC) efforts.
 - In 2022, Annalee was elected as an ex-officio board member of the CWC and represents the District on the board. The annual contribution is \$15,000.
 - The CWC funded a Central Wasatch Visitor Use Study to evaluate Millcreek Canyon, Big Cottonwood, and Little Cottonwood canyons. After two years of study and multiple phase reports, the Central Wasatch Commission released the final phase report associated with its Visitor-Use Study.
 - The data collected through the Visitor Use Study have been integrated into the Central Wasatch Commission's Environmental Dashboard, serving as the foundation for a sixth, "human" element, providing insight to any impact that human recreation in the Central Wasatch Mountains may have on the environment. The human element incorporates data that reflect the temporal and spatial dynamics of outdoor recreation use within Little Cottonwood Canyon, Big Cottonwood Canyon, and Millcreek Canyon. The online tool is available at [CWC Environmental Dashboard \(utah.gov\)](https://www.utah.gov/cwc-environmental-dashboard)
 - c) Monitor and respond to legislative threats to watershed protection
 - District staff continues to monitor potential legislation that relates to protection of drinking water sources. Staff and the District's lobbyist track these bills and attend meetings, as needed.
 - The District has representation at the Utah Water Task Force (UWTF) monthly meeting. UWTF has provided input on water banking, watershed

councils, watershed protection, water conservation, water rights, and other water-related legislation.

- d) Monitor and respond to developments in the watershed
 - District continues to monitor development in the watershed areas. On a monthly basis, District staff develop a report on potential development activity in the Provo River watershed and provide it to Sandy Wingert, Upper Provo and Jordan River Coordinator at the Division of Water Quality. This report is also shared with the Provo River Watershed Council.
- e) Consider monitoring other watershed areas that have a potential impact on District source water supplies
 - The council utilizes SWCA Environmental Consultants to provide engineering services for Provo River Watershed Water Quality Analysis. SWCA developed an interactive Provo River Watershed Story Map.
 - Also, Barr Engineering provides professional engineering services for the review of development (construction) plans. Barr Engineering is also conducting routine observations of storm water collection systems for the purpose of protecting surface water quality.
- f) Consider and understand the implications of climate change to the District and its customers
 - District engaged Bowen Collins & Associates to complete a comprehensive water supply and demand study, which included an analysis of climate change implications. This study was completed in February 2019. Salt Lake City and Sandy City were involved in similar efforts. The District coordinated efforts with the member cities. An update to this study is being performed by Bowen, Collins & Associates and is scheduled to be complete by March 2025.

Regulatory Compliance

Recommend practices and programs that ensure regulatory compliance with the Division of Drinking Water and EPA

- 1) Monitor and respond to changes in water quality regulatory compliance requirements that may impact water treatment processes as well as practices of the District's certified lab
 - a) District completed Sanitary Survey
 - The IPS rule (Improvement Priority System) is an approach to evaluating and rating water systems. Ratings are in accordance with the Rule R309-400 – Water System Rating Criteria. The three possible ratings are: Approved, Correction Action (system deficiencies are in the process of being corrected), and Not Approved (significant deficiencies exist).
 - The District's water system was evaluated on June 20, 2023. A copy of the survey is available if board members are interested. The current rating is "Approved" and we received a 0 point score, the best score available. The next survey will be conducted in 2026.

Environmental Compliance

Recommend action to the Board regarding environmental compliance

1) Participate in NEPA compliance reviews as needed

- District has participated in two UDOT Environmental Impact Statement (EIS) National Environmental Policy Act (NEPA) processes. The Parley's Interchange EIS (near Terminal Reservoir) has been completed. The District has provided comments as well as Salt Lake City and Sandy on the Little Cottonwood Canyon EIS.
- In July 12, 2023, UDOT released the Little Cottonwood Canyon EIS Record of Decision for transportation improvements. UDOT selected Gondola Alternative B with phased implementation of components of the Enhanced Bus Service Alternative. Staff provided comments throughout the EIS process.
- Staff provided comments on the Wasatch Front Regional Council draft 2023 Regional Transportation Plan.