



**MOUNTAIN REGIONAL WATER**  
**SPECIAL SERVICE DISTRICT**

# Mountain Regional Water, Special Service District

## Drought Response Plan

2021

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## 1. Intent

The intent of this document is to provide a response framework for the Mountain Regional Water Special Service District (the District) to a qualifying drought condition. This response framework will guide the District through the challenges imposed by varying drought conditions and support the improvement of water supply conditions until a response is no longer needed.

## 2. Authority

The District's Administrative Control Board has authority over the identification of Drought Level, the enactment of drought surcharges when water use restrictions impair the District's ability to meet debt service coverage ratios (required per the District's bond covenants and District policy), the amendment of currently adopted fees for water use non-compliance, and the use of Drought (and other) Reserve funds. The District General Manager will provide a Drought Level recommendation to the Board annually, during the April Board meeting, and direct enforcement activities for the District. The County Council has authority over the annual budget and will be included in the approval process to the extent the effects of the drought lead to amendments to the annual budget. All statutory requirements of the above actions shall be followed by the District.

## 3. Introduction

The District delivers approximately 3,900 acre-feet (1 acre-foot = 325,851 gallons) of drinking water to its 4,800 customers as of the end of the year 2020. Of this 3,900 acre-feet, 47% is sourced from the Weber River and treated at the District's Signal Hill Surface Water Treatment Plant; the balance, 53% is delivered from groundwater sources, including wells (13 active as of this report date) and a spring (1, shared source).

As our region experiences varying levels of drought, the impacts to the District may be felt due to straining of surface water sources, groundwater sources, or both. Accordingly, drought response triggers may be related to an independent source of water, a water source category (such as groundwater), a combination of categories, or due to environmental events or circumstances. Additionally, greater than 80% of the District's water right portfolio is made up of Weber Basin Water Conservancy District (WBWCD) Exchange Rights and water supply contracts. This dependence on WBWCD requires the District to have a Drought Response Plan which includes demand reduction triggers and associated responses which are consistent with WBWCDs.

The following sections of this framework identify the District's Drought Response Levels, its drought response triggers, the associated demand reduction targets, the tactics/approach for meeting the demand reduction targets, the financial impacts and response, our coordination and outreach, implementation, and enforcement.

## 4. Definition of Drought Response Levels

The District has adopted a response framework associated with the five Drought Response Levels identified in Table 1. These Response Levels are determined in accordance with the triggers defined in Section 5.

*Table 1: The District's Five Drought Response Levels*

Drought Response Level	Water Shortage Description
1	Normal
2	Advisory
3	Moderate
4	Severe
5	Extreme

The District's Drought Response Levels are consistent with WBWCD's defined Drought Response Levels and include escalating demand reduction targets and associated communication and reduction strategies to be employed by the District and its customers.

## 5. Identification of Drought Response Triggers

The Drought Response Levels may be initiated or triggered due to the following situations or events:

1. Weber Basin Demand Reduction
2. Unsustainable Groundwater Recharge
3. Declared State of Emergency, Executive Order, or Local Ordinance

### a. Weber Basin Demand Reduction

In 2018, the WBWCD adopted a Drought Contingency Plan which identifies the process by which demand reduction targets are applied to its customers (District, 2018). Figure 1 below illustrates their annual drought monitoring process and the timing of key decision points.

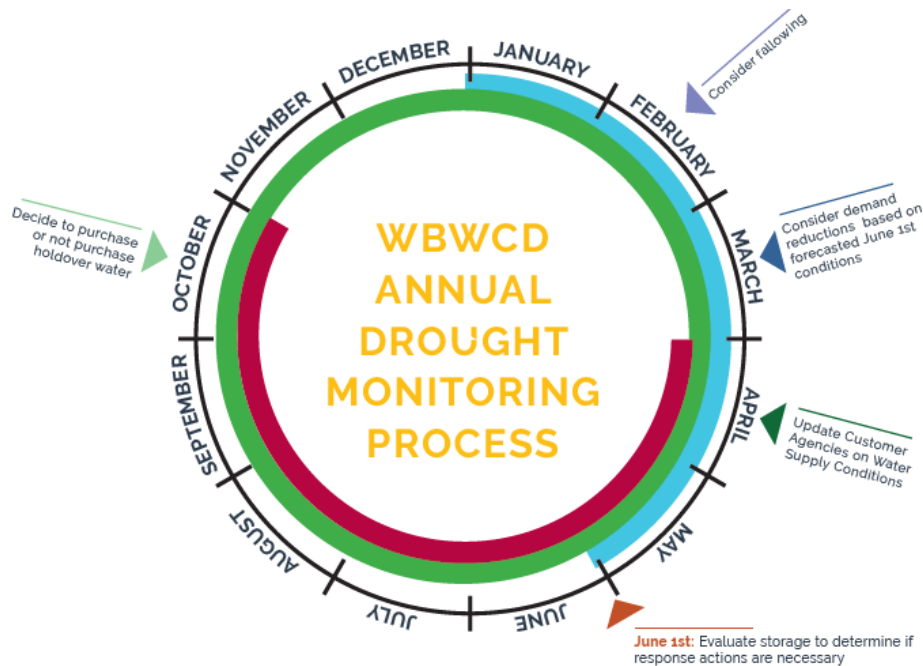


Figure 1: WBWCD Annual Drought Monitoring Process (District, 2018)

The WBWCD Board of Trustees decides whether to initiate demand reduction procedures in their March meeting based on June 1<sup>st</sup> storage projections. The staff of WBWCD then updates their customer base on the application of demand reductions in April. A final determination of response action is identified in June, once peak storage levels are well understood for the given year.

These become key dates for the District’s planning and response actions related to drought and consideration for demand reduction targets for District customers.

WBWCD has identified five Drought Response Levels and associated triggers (the District has matched these levels for consistency). The trigger for the identification of the Normal and Advisory Drought Response Levels is the U.S. Drought Monitor Intensity Classification (<https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?UT>). The trigger for a Moderate, Severe, or Extreme Drought Response Level is based on either the Total Basin or Upstream Basin Storage projections, whichever is lower. Figure 2 illustrates WBWCD’s five Response Levels, their descriptions, and triggers.

Drought Levels		Drought Level Triggers		
Response Level	Water Shortage Description	<sup>1</sup> Projected June 1st Total Basin Storage (Acre Feet)	<sup>2</sup> Projected June 1st Total Upstream Basin Storage (Acre Feet)	<sup>3</sup> U.S. Drought Monitor Intensity Classification
1	Normal	Greater than 380,000	Greater than 245,000	No Drought Intensity Classification or D0 (Abnormally Dry)
2	Advisory	Greater than 380,000	Greater than 245,000	D1 (Moderate Drought) or more severe
3	Moderate	380,000 to 340,000	245,000 to 200,000	U.S. Drought Monitor is not a trigger for this response level
4	Severe	340,000 to 280,000	200,000 to 160,000	U.S. Drought Monitor is not a trigger for this response level
5	Extreme	Less than 280,000	Less than 160,000	U.S. Drought Monitor is not a trigger for this response level

<sup>1</sup>Active storage (Total Basin Storage)

<sup>2</sup>Active storage excluding Willard Bay (Total Upstream Basin Storage)

<sup>3</sup>National Drought Mitigation Center:

<http://drought.unl.edu/monitoringtools/usdroughtmonitor.aspx>

Figure 2 WBWCD's Drought Response Levels and Triggers (District, 2018)

Along with the determination of Drought Response Level, WBWCD has also identified the demand reduction targets for various categories of water use, including Municipal and Industrial (M&I) use, the category the District falls within. Figure 3 illustrates these demand reduction targets as well as the coinciding response actions.

## Demand Reduction Targets

Drought Levels		Demand Reduction Targets				
RESPONSE LEVEL	WATER SHORTAGE DESCRIPTION	SECONDARY WATER <sup>4</sup>	AGRICULTURAL IRRIGATION <sup>5</sup>	M&I CULINARY OUTDOOR WATER <sup>4</sup>	M&I CULINARY INDOOR WATER <sup>4</sup>	TOTAL YEAR 2020 DEMAND REDUCTION (ACRE-FEET) <sup>6</sup>
1	Normal	0%	0%	0%	0%	0
2	Advisory	Reduce demands through messaging and general water conservation				0 to 43,000
3	Moderate	20%	20%	20%	0%	43,000
4	Severe	60%	40%	60%	10%	123,000
5	Extreme	95%	70%	95%	25%	206,000

<sup>4</sup>Assumed that water use reductions will be met across the entire WBWCD service area

<sup>5</sup>Assumed that only WBWCD agricultural supplies will be reduced. Does not include agricultural demands in the basin that are not managed by the District

## WBWCD Drought Response Actions

Drought Levels		Response Actions
RESPONSE LEVEL	WATER SHORTAGE DESCRIPTION	
1	Normal	Continue current conservation efforts to meet statewide goal to reduce usage by 25% between year 2000 and 2025.
2	Advisory	Begin messaging to inform the public that water shortages are possible if drought conditions continue and that additional conservation efforts are needed.
3	Moderate	Increased messaging, implement yellow drought rates and shortened irrigation season, and increased advisory group meetings.
4	Severe	Increased messaging, implement orange drought rates, exercise following agreements, cut watering of lawns in half, reduce agricultural water use, start indoor water reduction strategies, and increased advisory group meetings.
5	Extreme	Increased messaging, implement red drought rates, exercise following agreements, no residential lawn watering (trees and gardens yes), and increased advisory group meetings.

Figure 3 WBWCD's Demand Reduction Targets and Associated Response Actions (District, 2018)

Under a WBWCD demand reduction trigger, WBWCD's Drought Response Levels and demand reduction targets are used to guide the District's response levels, identify demand reduction targets, and identify appropriate financial responses.

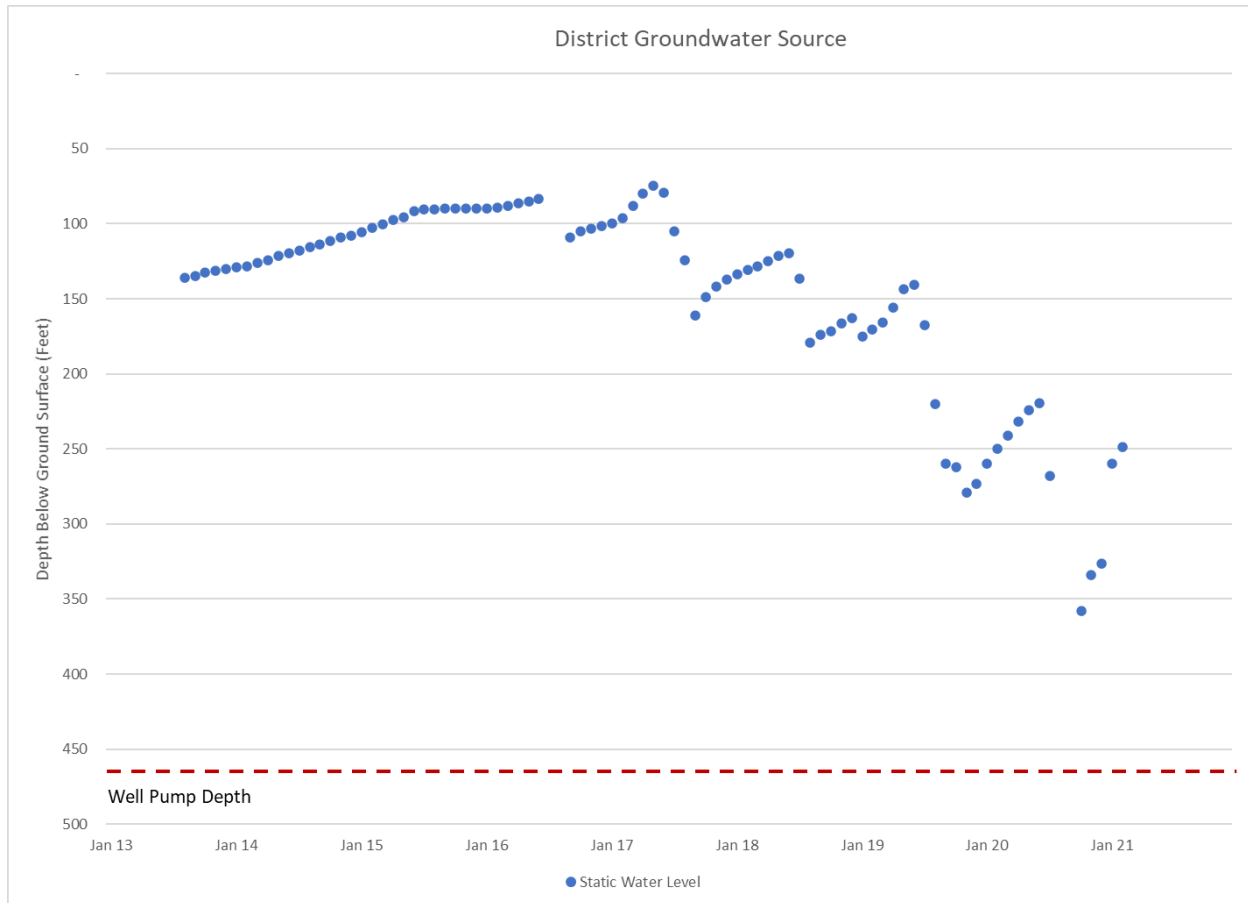
### b. Unsustainable Groundwater Recharge

The District closely monitors its groundwater levels and seasonal recharge. In the event seasonal recharge of a groundwater source does not allow for its full utilization, the District may have to implement a drought response.

Annual modeling of current groundwater conditions and planned utilization for each source will be reviewed by the General Manager and a determination regarding the need for usage



reductions will be made. An example of a District source groundwater model which illustrates a need for reduced production is provided in Figure 4.



*Figure 4: Example of Source Groundwater Model*

The groundwater model presented in Figure 4 illustrates declining groundwater levels that if not corrected would reach the pump level and impair the ability to deliver at its current production levels. The General Manager shall identify a reduced pumping capacity to reach sustainable yield (a balancing of recharge and withdrawals leading to a stabilization of groundwater level) and evaluate the source portfolio as a whole against District experience and industry standards for percent utilization of source production on peak day (or the relevant period) and identify and recommend a Drought Response Level for Board approval which is suitable to ensure essential water service can be maintained.

**c. Declared State of Emergency, Executive Order, or Local Ordinance**

Under a Declared State of Emergency, Executive Order, or implementation of a local ordinance due to drought conditions, the General Manager will provide a recommendation to the District’s Administrative Control Board for identification or adjustment of the District’s current Drought Response Level as needed or dictated by the declaration, order, or ordinance and the District will respond accordingly per the latest adopted Drought Response Plan.

## 6. Identification of District Demand Reduction Targets

Along with Drought Response Levels, the District has identified demand reduction targets which are consistent with WBWCD’s. In the event WBWCD implements demand reductions on the District or the District implements demand reductions for reasons other than implementation by WBWCD, the annual reduction targets identified in Table 2 are recommended.

*Table 2: District Drought Response Levels and Associated Annual Demand Reduction Targets*

Response Level	Water Shortage Description	Outdoor Demand Reduction Target	Indoor Demand Reduction Target	Per Customer* Water Demand Reduction (Acre-Feet)	Per Customer* Water Demand Reduction (Gallons)
1	Normal	0%	0%	0	0
2	Advisory	Messaging and General Conservation		0	0
3	Moderate	20%	0%	0.026	8,500
4	Severe	60%	10%	0.11	36,000
5	Extreme	95%	25%	0.19	62,000

\*Calculation based on the District’s average residential customer.

## 7. Overview of Tactics & Approaches for Meeting Demand Reduction Targets

### a. Level 1 & 2 Objective (Normal & Advisory): Build a Presence

#### o District Actions:

##### ▪ General Communication (mailers, communication with the media):

- Publish the latest U.S. Drought Monitor results
- Promote an awareness of the arid nature of Park City (for example, Utah is the second driest state in the U.S.)
- Provide water use reduction tips and savings
- Connect conservation with energy savings
- Highlight available incentive programs
- Conduct Public Service Announcements (PSA), Radio Interviews during Drinking Water Week
- Share what the District is doing to conserve (ex. leak detection)

##### ▪ Water Audits:

**Water savings from a public information campaign alone range from 5 to 20 percent, depending on the time, money, and effort spent.**

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- Establish a program to work with highest water users
- Include assessment from a trained professional which covers appropriate usage for current landscape, setting of clocks, recommendations for landscape changes for reduced water loss. District provides in depth review of usage and billing through end of irrigation season.
- Education:
  - Annual Water Fair for 4<sup>th</sup> Grade students in Summit County school districts
  - Consider a conservation based open house/fair; include industry professionals, local partners, etc.
- Customer Actions:
  - Minimize irrigated area
  - Make drought tolerant landscape choices in irrigated areas
  - Monitor usage using the EyeOnWater® (<https://www.eyeonwater.com/signin>) meter application
  - Install water efficient fixtures in your home
  - Consider a District or third-party water audit
  - Landscape irrigation restricted to designated watering days and times

b. Level 3 Objective (Moderate): Reduce Outdoor Irrigation Demand by 20%

- District Actions: (in addition to those in Level 1 & 2)
  - General Communication (mailers, communication with the media):
    - Direct communication to the community establishing the goal of reaching a 20% reduction.
      - Provide specific actions that are required such as adherence to watering days and times (<https://www.mtregional.org/conservation>). Multi-year droughts may require further restrictions such as watering only 2x per week.
      - Identify the specific benefits and impacts of the reduction (why does it matter)
    - Increased Social Media presence
    - Increased and targeted media presence including PSAs, radio interviews, newspaper articles
    - Targeted communications with non-compliant customers (door hangers, reviews of water usage to identify daily watering, etc.).
    - Meet with large water users (parks, schools, industrial) to identify strategies for reduction.
    - Provide monthly progress updates via media and social media

- Create a District Dashboard detailing drought statistics (i.e. levels of drought by county, soil moisture levels, snowpack and reservoir storage level)
    - Establish a conservation hotline
  - Coordinated drought response messaging and actions with other local water utilities and stakeholders
  - Initiate “Drought Response Level 3”
    - Enforcement of irrigation rules per Section 13 of this document and Section 9.6, Irrigation Schedules and Restrictions, of the District’s Rules and Regulations, as amended.
    - Identify opportunities for expense reduction
    - Administrative Control Board authorizes the use of the Drought Reserve Fund to cover revenue shortages due to reduced usage.
    - The District may institute a Drought Surcharge if Level 3 persists across multiple budget cycles.
  - Conduct monthly internal usage audits to identify targeted communication needs
    - By user group
    - By area
  - Work with developers on phased landscape plans (no turf until conditions improve) and require offset (water conservation) projects to provide for the addition of new connections to the system.
- Customer Actions: (in addition to those in Level 1 & 2)
  - Meet 20% reduction in outdoor irrigation demand
    - Reduce water cycles and times and only water during allowed periods
    - Identify leaks and irrigation system issues (caps blown off drip lines, broken lines, etc.)
- c. Level 4 Objective (Severe): Reduce Outdoor Irrigation Demand by 60%, Indoor Demand by 10%
- District Actions: (in addition to those in Level 3)

**It is standard practice for water suppliers to maintain dry-year contingency reserve fund to protect revenue through two or more consecutive years of supply reductions below normal demand levels.**

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- General Communication (mailers, communication with the media):
        - Contract with advertising agency to carry out major publicity campaign
        - Regular media presence
        - Promote the most economic indoor demand reduction strategies
      - Initiate “Drought Response Level 4”
        - Enforcement of irrigation rules per Section 13 of this document and Section 9.6, Irrigation Schedules and Restrictions, of the District’s Rules and Regulations, as amended.
        - Implement Level 4 financial planning and response
          - Implementation of “Level 4 Drought Surcharges”
          - Hold public meeting about Level 4 surcharges
          - Suspension of non-essential capital projects
          - Elimination of all nonessential expenses
          - Develop a plan for continuing/escalating revenue shortages
      - Widespread coordination with stakeholders with frequent (bi-weekly) meetings.
      - In person meetings with large user groups and stakeholders (HOAs, property management companies)
      - Door to door communication
      - Hire additional temporary staff in Customer Service and Distribution.
      - Expand water enforcement to 24 hours a day, 7 days a week
    - Customer Actions: (in addition to those in Level 3)
      - Limit irrigation to landscape saving measures. See resources at Utah State University’s Center for Water-Efficient Landscaping: <https://cwel.usu.edu/>
        - Irrigation using automatic sprinklers limited to 1x per week
        - Hand water only as needed
      - Work together with neighbors and HOAs to establish neighborhood goals
      - Initiate indoor water reduction strategies, such as:
        - Turning water off while brushing teeth
        - Only running dishwasher or laundry when full
        - Not running water when washing dishes by hand; soap and then rinse
- d. Level 5 Objective (Extreme): Reduce Outdoor Irrigation Demand by 95%, Indoor Demand by 25%
- District Actions: (in addition to those in Level 4)
  - Implement crisis communications plan and campaign

- Implement accelerated escalation of penalties for non-compliance
- Regular communication across all platforms. Regular updates including progress and impacts
- Initiate as much human-to-human communication and coordination across all users as feasible
- Identify and work with customers who are unable to meet demand reductions, provide tips and tools where possible, and identify District strategies for making up the difference. An example customer type is a hospital which may not be able to reduce indoor usage without compromising public health.
- Initiate “Drought Response Level 5”
  - Enforcement of irrigation rules per Section 13 of this document and Section 9.6, Irrigation Schedules and Restrictions, of the District’s Rules and Regulations, as amended.
  - Implement Level 5 financial planning and response
    - Implementation of “Level 5 Drought Surcharges”
    - Hold public meeting about Level 5 surcharges
- Customer Actions: (in addition to those in Level 4)
  - Cease all outdoor irrigation
  - Expand indoor water reduction strategies, see District website for complete list of recommendations

## 8. Exemptions from Water Use Restrictions

In accordance with the District’s Rules and Regulations, as amended, the General Manager may grant an exemption for the uses of water otherwise prohibited herein if he/she finds and determines that compliance with demand reduction targets will be detrimental to the health, safety and welfare of the public. Upon granting of such an exception, the General Manager may impose any conditions he/she determines to be reasonable and proper.

## 9. District Reductions in Water Use

The District has an important role to play in the reduction of water demand both at the system and site levels. Wherever possible, site water use including irrigation, wash down activities, and equipment and vehicle washing should be reduced to a minimum. The District shall work with developers and contractors installing new infrastructure to identify ways to minimize water use and reuse water for dust control and other non potable uses. Nonrevenue water should be heavily scrutinized and minimized through the following actions:

- Increased focus on leak detection
- Manual inspection of distribution appurtenances such as pressure relief valves to ensure they are operating as designed

- Flushing programs reduced to those areas which present the highest risk or are most critical

## 10. Financial Impacts & Response

The financial impacts of Drought Levels 3-5 are significant, and if the drought spans multiple years, the District will have to exercise flexibility in the approaches below. Table 3 gives a summary of how the District plans to combat the financial impacts of the varying drought levels. All three levels shown (Levels 3-5) will consist of expense saving strategies and a draw down on Drought Reserve funds. Levels 4 and 5 will require implementation of Drought Surcharges to help offset the loss in revenue.

*Table 3: Sources of Revenue Recovery Assuming a Total Impact of 100%*

Drought Response Level	Revenue Recovery Sources		
	Expense Reduction (% of Revenue Recovery)	Drought Surcharges (% of Revenue Recovery)	Applied Drought Reserves (% of Revenue Recovery)
3	30%	0%	70%
4	25%	50%	25%
5	30%	50%	20%

Table 4 provides an example of the financial impacts of each Drought Level, using 2020 water sales data, and the values of the revenue recovery sources. The derivation of the financial impacts are provided in Appendix A: Detail of Revenue Impacts for Drought Levels 3 Through 5 Based on 2020 Water Use. Details of the Drought Surcharges are provided in Appendix B: Drought Contingency Rate Table.

*Table 4: Financial Impact Example Based on 2020 Water Sales*

Drought Response Level	Total Financial Impact	Loss Mitigation Measures		
		Expense Reduction	Drought Surcharges	Applied Drought Reserves
3	\$765,000	\$230,000	\$0	\$535,000
4	\$2.3M	\$560,000	\$1.14M	\$600,000
5	\$3.6M	\$1.1M	\$1.7M	\$800,000

#### a. Level 3 Discussion

The financial impact of a 20% reduction in outdoor usage, per the District's Level 3 demand reduction targets, is anticipated to be approximately 16% of annual usage revenue. Based on 2020 water sales data, this amounts to approximately \$765,000. This figure takes into account a 20% reduction on a per customer basis and the understanding that as reductions occur, it's the highest cost water for a given user which is eliminated from their typical usage. The result of this reality is that a 20% reduction in outdoor water use leads to greater than a 20% reduction in outdoor usage revenue.

To overcome this revenue deficit and maintain revenue levels which meet the District's required debt service ratios, the District shall target reducing cash expenses by at least 3% to cover at least 30% of the financial impact (expected savings of \$230,000 based on 2021 budget) and make up the remaining shortfall, 70% in this case, with its Drought Reserve Fund (expected expenditure of \$535,000 based on 2020 usage if no additional assistance identified). Expense savings at this level consist of variable expenses related to the production and distribution of water, including electricity and treatment chemicals. Repair costs are also expected to decrease due to less wear and tear on the system. Utilization of Drought Reserve Funds shall be approved by the Administrative Control Board.

#### b. Level 4 Discussion

The financial impact of a 60% reduction in outdoor usage and 10% in indoor usage, per the District's Level 4 demand reduction targets, is anticipated to be 47% of annual usage revenue. Based on 2020 water sales data, this amounts to approximately \$2.3M.

To overcome this revenue deficit and maintain revenue levels which meet the District's required debt service ratios, the District shall target reducing cash expenses by at least 7.25% to cover at least 25% of the financial impact (expected savings based on 2021 budget of \$560,000), implement Level 4 Drought Surcharges to cover approximately 50% of the financial impact (\$1.14M based on 2020 usage), and make up the remaining shortfall, approximately 25% in this case, with the Drought Reserve Fund (\$600,000 based on 2020 usage if no additional assistance identified). Expenses savings at this level will consist of proportional decreases to the variable expenses discussed in the Level 3 discussion above. Additionally, non-critical maintenance and repairs will be delayed to further decrease expenses. Additional means of revenue recovery, such as the suspension of all non-essential capital projects and the identification of any available assistance or grant funds, should be pursued. The District will evaluate staffing needs to support customer contact, communication, and enforcement activities and hire additional staff as necessary.

Mitigation measures shall be recommended by the District General Manager as part of the Administrative Control Board's approval of the Drought Level and associated surcharges during the April Board meeting.



### c. Level 5 Discussion

The financial impact of a 95% reduction in outdoor usage and 25% in indoor usage, per the District's Level 5 demand reduction targets, is anticipated to be 75% of annual usage revenue. Based on 2020 water sales data, this amounts to approximately \$3.6M.

To overcome this revenue deficit and maintain revenue levels which meet the District's required debt service ratios, the District shall identify all available expense reduction measures including reducing staff to minimum (essential) levels, suspending non-essential capital spending, and keeping expenses to a bare minimum. The District will target a minimum of 14% in cash expense savings (\$1.1M based on 2021 budget) to cover 30% of the shortfall, implement Level 5 Drought Surcharges to cover 50% of the shortfall (\$1.7M based on 2020 usage), and make up the remaining 20% shortfall with the Drought Reserve Fund (\$800,000 based on 2020 usage if no additional assistance identified). The District will evaluate staffing needs to support customer contact, communication, and enforcement activities and hire additional staff as necessary. The District will also pursue any available assistance or grant funds.

Mitigation measures shall be recommended by the District General Manager as part of the Administrative Control Board's approval of the Drought Level and associated surcharges during the April Board meeting.

## 11. Grants and Other Funding Opportunities

District staff is in the process of identifying potential funding opportunities through grants, such as WaterSMART (<https://www.usbr.gov/watersmart/>) and conservation grants; assistance organizations, such as the Federal Emergency Management Association (FEMA) and the State of Utah during States of Emergency and Executive Orders; Insurance, through the Utah Government's Trust, and other unique sources such as hedge funds.

## 12. Coordination with Local Stakeholders

As the Drought Response Level increases, the level of coordination with local stakeholders will similarly increase. It is expected that each water utility serving the Park City area will approach the problem differently, wherever possible, consistent messaging and collaborative communication should be sought. The largest water utility stakeholders in Park City include:

- WBWCD
- Park City Municipal
- Summit Water Distribution Company
- Gorgoza Mutual Water Company
- High Valley

The District should consider other local stakeholders who are not directly involved with water delivery such as county governmental agencies, environmental groups and nature-based organizations, nurseries and landscaping retailers, schools, and other large community

organizations when building its support network and communication strategies. Organizations in this group include:

- Summit County
- Summit County Health Department
- Snyderville Basin Water Reclamation District
- Swaner Nature Conservancy
- Recycle Utah
- Park City Nursery
- Park City School District
- Basin Recreation
- Vail Resorts (Park City Mountain)
- Alterra Mountain Company (Deer Valley Resort)
- Utah Olympic Park

### 13. Enforcement

The identification and enforcement of irrigation schedules, practices, and water use will be required at Drought Levels 3 through 5 for the District to successfully meet its reduction goals. Per Section 9.6 of the District’s Rules and Regulations, the District has the legal provision to do so:

*Irrigation Schedules and Restrictions:*

*The District may curtail outside watering or irrigation in any fashion it deems necessary to protect its water supplies during drought conditions or failure of one or more water sources. Restrictions may be set as voluntary or mandatory. If restrictions are mandatory, the District may impose fines and/or penalties to enforce the restrictions on a level to be set at the time, depending on the seriousness of the water shortages. In all cases, and for all types of Customers in the District, whether a drought condition exists or not, outside watering will be scheduled at a maximum interval of every other day.*

**Enforcement mechanisms are needed for maximum effectiveness of demand reduction actions.**

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#### a. Allowed Irrigation Uses & Practices

Although watering restrictions may evolve during a drought event as the water supply situation improves or worsens, the following guidance is recommended as a starting point:

- Drought Level 3 – Outdoor water usage reduction of 20%:
  - Irrigation is allowed a maximum of every other day between the hours of 6pm and 10am. Homes or businesses with odd numbered addresses are to water only on odd numbered days; even numbered addresses water on even numbered days.

- Drought Level 4 – Outdoor water usage reduction of 60%:
  - Limit irrigation to landscape saving measures. See resources at Utah State University’s Center for Water-Efficient Landscaping: <https://cwel.usu.edu/>
    - Irrigation using automatic sprinklers limited to 1x per week
      - For Addresses ending with:
        - 0 or 1: Monday
        - 2 or 3: Tuesday
        - 4 or 5: Wednesday
        - 6 or 7: Thursday
        - 8 or 9: Friday
        - Saturday or Sunday: no irrigation with sprinklers
      - Hand water only as needed
- Drought Level 5 – Outdoor water usage reduction of 95%
  - Outdoor irrigation is not allowed unless an exception is approved per Section 8.

#### b. Identification of Noncompliance

The District’s approach to identification of noncompliance will take on various forms, including but not limited to the following:

- The Badger metering system (EyeOnWater®) should be utilized to the extent possible by investigating the capability for alarm triggers to both the District and customer for usage patterns which are out of compliance. This allows for remote enforcement.
- Conduct active enforcement in the field using compliance patrols to identify irrigation runoff (waste) and irrigation schedule non-compliance

#### c. Fines & Penalties

The District shall impose an escalating penalty system for non-compliant water uses during drought periods. A written notice (and other means available to the District) shall be provided for each offense along with educational materials on the current Drought Level and allowed irrigation uses and schedules. Following the completion of all necessary public process steps, the following escalation of warnings and fines shall be applied to non-compliant water uses during drought periods:

1. First Offense – Warning.
2. Second Offense – Fine Level 1, as defined in the District Fee Schedule (\$150)
3. Third Offense – Fine Level 2, as defined in the District Fee Schedule (\$1,000)
4. Fourth Offense – Suspension of Service (all applicable and adopted fees for termination and resumption shall apply)

#### d. Appeals and Hearings

The appeal and hearing processes shall be in accordance with the District’s Rules and Regulations, as amended.

## 14. Implementation

### a. Weber Basin Demand Reduction

The District's General Manager shall identify the District's likely Drought Level following WBWCD's March Board of Trustees meeting and initiate the tactics and approaches in Section 7. The General Manager shall seek Administrative Control Board approval of the Drought Level designation in the April Board meeting and shall complete all public process requirements to enable enactment of applicable surcharges and penalties. Implementation of Drought Surcharges (Levels 4 & 5) shall begin with May water use. Close coordination with WBWCD will be needed to identify any likely changes in course leading up to WBWCD's June Board of Trustees meeting.

### b. Unsustainable Groundwater Recharge

Following review of the District's projected groundwater utilization model (typically done as part of the District's Concurrency Report submittal due May 1<sup>st</sup>), the General Manager shall determine if usage reductions are needed. The source portfolio as a whole shall be evaluated against industry standards for percent utilization of source production on peak day (or the relevant period) and the General Manager shall recommend to the Board for approval, in the April Board meeting, a Drought Response Level suitable to ensure essential water service can be maintained. If demand reductions are needed, the tactics and approaches in Section 7 shall be employed.

### c. Declared State of Emergency, Executive Order, or Local Ordinance

The District's General Manager shall follow the guidance in a drought induced declared State of Emergency, Executive Order, or implementation of local ordinance and tie to a Drought Response Level as needed for implementation. The Drought Level shall be recommended to the Board for approval.

## Appendix A: Detail of Revenue Impacts for Drought Levels 3 Through 5 Based on 2020 Water Use

Based on 2020 Results

	<b>20% Outdoor Decrease</b>					
	Base	Usage	Total	<b>20% outdoor</b>	% Total	% Usage
101 - Residential	\$ 3,050,734	\$ 2,781,190	\$ 5,831,923	\$ <b>438,696</b>	7.52%	15.77%
120 - Irrigation	\$ 61,642	\$ 119,012	\$ 180,653	\$ <b>40,500</b>	22.42%	34.03%
122 - Commercial	\$ 504,759	\$ 656,092	\$ 1,160,851	\$ <b>73,221</b>	6.31%	11.16%
125 - Raw Water	\$ 3,300	\$ 422,321	\$ 425,621	\$ <b>87,481</b>	20.55%	20.71%
155 - Sports Park	\$ 29,966	\$ 205,179	\$ 235,145	\$ <b>14,615</b>	6.22%	7.12%
162 - Common Wall	\$ -	\$ 38,893	\$ 38,893	\$ <b>8,115</b>	20.86%	20.86%
175 - Park City	\$ -	\$ 198,891	\$ 198,891	\$ <b>27,399</b>	13.78%	13.78%
180 - Stagecoach	\$ 46,569	\$ 11,383	\$ 57,952			
190 - CW w/ Base	\$ 365,225	\$ 51,779	\$ 417,005			
192 - CW w/o Base	\$ -	\$ 23,386	\$ 23,386			
Sub-Total	\$ 411,794	\$ 86,548	\$ 498,343	\$ <b>16,231</b>	3.26%	18.75%
HEPS (Rate 901-909)	\$ -	\$ 385,564	\$ 385,564	\$ <b>58,559</b>	15.19%	15.19%
<b>TOTALS</b>	\$ 4,062,195	\$ 4,893,689	\$ 8,955,884	\$ <b>764,815</b>	8.54%	15.63%

	<b>60% Outdoor and 10% Indoor Decrease</b>					
	Base	Usage	Total	<b>60% outdoor, 10% indoor</b>	% Total	% Usage
101 - Residential	\$ 3,050,734	\$ 2,781,190	\$ 5,831,923	\$ <b>1,320,143</b>	22.64%	47.47%
120 - Irrigation	\$ 61,642	\$ 119,012	\$ 180,653	\$ <b>93,737</b>	51.89%	78.76%
122 - Commercial	\$ 504,759	\$ 656,092	\$ 1,160,851	\$ <b>248,838</b>	21.44%	37.93%
125 - Raw Water	\$ 3,300	\$ 422,321	\$ 425,621	\$ <b>262,442</b>	61.66%	62.14%
155 - Sports Park	\$ 29,966	\$ 205,179	\$ 235,145	\$ <b>57,055</b>	24.26%	27.81%
162 - Common Wall	\$ -	\$ 38,893	\$ 38,893	\$ <b>23,305</b>	59.92%	59.92%
175 - Park City	\$ -	\$ 198,891	\$ 198,891	\$ <b>88,386</b>	44.44%	44.44%
180 - Stagecoach	\$ 46,569	\$ 11,383	\$ 57,952			
190 - CW w/ Base	\$ 365,225	\$ 51,779	\$ 417,005			
192 - CW w/o Base	\$ -	\$ 23,386	\$ 23,386			
Sub-Total	\$ 411,794	\$ 86,548	\$ 498,343	\$ <b>40,491</b>	8.13%	46.78%
HEPS (Rate 901-909)	\$ -	\$ 385,564	\$ 385,564	\$ <b>184,285</b>	47.80%	47.80%
<b>TOTALS</b>	\$ 4,062,195	\$ 4,893,689	\$ 8,955,884	\$ <b>2,318,681</b>	25.89%	47.38%

	<b>95% Outdoor and 25% Indoor Decrease</b>					
	Base	Usage	Total	<b>95% outdoor, 25% indoor</b>	% Total	% Usage
101 - Residential	\$ 3,050,734	\$ 2,781,190	\$ 5,831,923	\$ <b>2,073,863</b>	35.56%	74.57%
120 - Irrigation	\$ 61,642	\$ 119,012	\$ 180,653	\$ <b>117,887</b>	65.26%	99.06%
122 - Commercial	\$ 504,759	\$ 656,092	\$ 1,160,851	\$ <b>410,297</b>	35.34%	62.54%
125 - Raw Water	\$ 3,300	\$ 422,321	\$ 425,621	\$ <b>415,533</b>	97.63%	98.39%
155 - Sports Park	\$ 29,966	\$ 205,179	\$ 235,145	\$ <b>102,446</b>	43.57%	49.93%
162 - Common Wall	\$ -	\$ 38,893	\$ 38,893	\$ <b>38,545</b>	99.11%	99.11%
175 - Park City	\$ -	\$ 198,891	\$ 198,891	\$ <b>145,619</b>	73.22%	73.22%
180 - Stagecoach	\$ 46,569	\$ 11,383	\$ 57,952			
190 - CW w/ Base	\$ 365,225	\$ 51,779	\$ 417,005			
192 - CW w/o Base	\$ -	\$ 23,386	\$ 23,386			
Sub-Total	\$ 411,794	\$ 86,548	\$ 498,343	\$ <b>57,783</b>	11.60%	66.76%
HEPS (Rate 901-909)	\$ -	\$ 385,564	\$ 385,564	\$ <b>299,677</b>	77.72%	77.72%
<b>TOTALS</b>	\$ 4,062,195	\$ 4,893,689	\$ 8,955,884	\$ <b>3,661,651</b>	40.89%	74.82%

## Appendix B: Drought Contingency Rate Table

RATE 101, 180, 190, 192 (Residential)					
	Usage	Rate per 1,000 gallons		Drought 60% Out, 10% In	Drought 95% Out, 25% In
		20% Out	Drought		
Tier 1	Zero to 5,000	\$ 1.80	\$ 1.80	\$ 1.80	\$ 1.80
Tier 2	5,001 to 20,000	\$ 4.64	\$ 4.64	\$ 4.80	\$ 7.00
Tier 3	20,001 to 30,000	\$ 5.15	\$ 5.15	\$ 7.50	\$ 12.25
Tier 4	30,001 to 40,000	\$ 8.24	\$ 8.24	\$ 20.00	\$ 25.00
Tier 5	40,001 to 60,000	\$ 12.36	\$ 12.36	\$ 30.00	\$ 35.00
Tier 6	60,001 to 80,000	\$ 15.45	\$ 15.45	\$ 45.00	\$ 50.00
Tier 7	80,001 to 100,000	\$ 18.54	\$ 18.54	\$ 60.00	\$ 65.00
Tier 8	Above 100,000	\$ 21.63	\$ 21.63	\$ 75.00	\$ 80.00
<b>Drought Surcharge per ERC</b>		<b>n/a</b>	<b>n/a</b>	<b>\$3.15</b>	<b>\$13.50</b>

RATE 120 (Culinary Irrigation)					
	Usage	Rate per 1,000 gallons		Drought 60% Out, 10% In	Drought 95% Out, 25% In
		20% Out	Drought		
Tier 1	Zero to 5,000	\$ 2.83	\$ 2.83	\$ 8.00	\$ 10.00
Tier 2	5,001 to 30,000	\$ 4.64	\$ 4.64	\$ 20.00	\$ 25.00
Tier 3	30,001 to 40,000	\$ 8.24	\$ 8.24	\$ 30.00	\$ 35.00
Tier 4	40,001 to 60,000	\$ 12.36	\$ 12.36	\$ 45.00	\$ 50.00
Tier 5	60,001 to 80,000	\$ 15.45	\$ 15.45	\$ 60.00	\$ 65.00
Tier 6	80,001 to 100,000	\$ 18.54	\$ 18.54	\$ 75.00	\$ 80.00
Tier 7	Above 100,000	\$ 21.63	\$ 21.63	\$ 80.00	\$ 90.00
<b>Drought Surcharge per ERC</b>		<b>n/a</b>	<b>n/a</b>	<b>\$3.15</b>	<b>\$13.50</b>

RATE 122 (Commercial)					
	Usage	Rate per 1,000 gallons		Drought 60% Out, 10% In	Drought 95% Out, 25% In
		20% Out	Drought		
Tier 1	Zero to 5,000	\$ 2.83	\$ 2.83	\$ 2.83	\$ 2.83
Tier 2	5,001 to 30,000	\$ 4.64	\$ 4.64	\$ 4.80	\$ 7.50
Tier 3	30,001 to 40,000	\$ 8.24	\$ 8.24	\$ 8.50	\$ 12.25
Tier 4	40,001 to 60,000	\$ 12.36	\$ 12.36	\$ 20.00	\$ 25.00
Tier 5	60,001 to 80,000	\$ 13.39	\$ 13.39	\$ 30.00	\$ 35.00
Tier 6	80,001 to 100,000	\$ 14.42	\$ 14.42	\$ 45.00	\$ 50.00
Tier 7	Above 100,000	\$ 15.45	\$ 15.45	\$ 60.00	\$ 75.00
<b>Drought Surcharge per ERC</b>		<b>n/a</b>	<b>n/a</b>	<b>\$3.15</b>	<b>\$13.50</b>

RATE 162 (Common Wall Irrigation)					
	Usage	Rate per 1,000 gallons		Drought 60% Out, 10% In	Drought 95% Out, 25% In
		20% Out	Drought		
Tier 1	Zero to 5,000	\$ 1.80	\$ 1.80	\$ 8.00	\$ 10.00
Tier 2	5,001 to 20,000	\$ 4.64	\$ 4.64	\$ 20.00	\$ 25.00
Tier 3	20,001 to 30,000	\$ 5.15	\$ 5.15	\$ 30.00	\$ 35.00
Tier 4	30,001 to 40,000	\$ 8.24	\$ 8.24	\$ 45.00	\$ 50.00
Tier 5	40,001 to 60,000	\$ 12.36	\$ 12.36	\$ 60.00	\$ 65.00
Tier 6	60,001 to 80,000	\$ 15.45	\$ 15.45	\$ 75.00	\$ 80.00
Tier 7	80,001 to 100,000	\$ 18.54	\$ 18.54	\$ 80.00	\$ 85.00
Tier 8	Above 100,000	\$ 21.63	\$ 21.63	\$ 80.00	\$ 90.00
<b>Drought Surcharge per ERC</b>		<b>n/a</b>	<b>n/a</b>	<b>\$3.15</b>	<b>\$13.50</b>

High Elevation Pumping Surcharge					
	Usage	Rate per 1,000 gallons		Drought 60% Out, 10% In	Drought 95% Out, 25% In
		20% Out	Drought		
Rate 901	Colony	\$ 2.40	\$ 2.40	\$ 2.88	\$ 2.88
Rate 902	Summit Park	\$ 0.78	\$ 0.78	\$ 0.94	\$ 0.94
Rate 903	Stagecoach	\$ 2.86	\$ 2.86	\$ 3.43	\$ 3.43
Rate 904	Sun Peak	\$ 1.21	\$ 1.21	\$ 1.45	\$ 1.45
Rate 905	Glenwild	\$ 0.49	\$ 0.49	\$ 0.59	\$ 0.59
Rate 906	Preserve	\$ 2.22	\$ 2.22	\$ 2.66	\$ 2.66
Rate 907	Redhawk	\$ 0.80	\$ 0.80	\$ 0.96	\$ 0.96
Rate 908	Prom. West Hills	\$ 0.28	\$ 0.28	\$ 0.34	\$ 0.34
Rate 909	Prom. Mdl. Valley	\$ 0.14	\$ 0.14	\$ 0.17	\$ 0.17

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