**19-4-104. Powers of board.**

(1)

(a) The board may make rules in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act:

(i) establishing standards that prescribe the maximum contaminant levels in any public water system and provide for monitoring, record-keeping, and reporting of water quality related matters;

(ii) governing design, construction, operation, and maintenance of public water systems;

(iii) granting variances and exemptions to the requirements established under this chapter that are not less stringent than those allowed under federal law;

(iv) protecting watersheds and water sources used for public water systems;

(v) governing capacity development in compliance with Section 1420 of the federal Safe Drinking Water Act, 42 U.S.C. Sec. 300f et seq.; and

(vi) for a community water system failing to comply with the reporting requirements under Subsections (1)(c)(iv) and (v):

(A) establishing fines and penalties, including posting on the division's web page those community water systems that fail to comply with the reporting requirements; and

(B) allowing a community water system, in lieu of penalties established under Subsection (1)(a)(vi)(A), to enter into a corrective action agreement with the division that requires compliance and establishes a compliance schedule approved by the director.

(b) The board may:

(i) order the director to:

(A) issue orders necessary to enforce the provisions of this chapter;

(B) enforce the orders by appropriate administrative and judicial proceedings; or

(C) institute judicial proceedings to secure compliance with this chapter;

(ii)

(A) hold a hearing that is not an adjudicative proceeding relating to the administration of this chapter; or

(B) appoint hearing officers to conduct a hearing that is not an adjudicative proceeding; or

(iii) request and accept financial assistance from other public agencies, private entities,

and the federal government to carry out the purposes of this chapter.

(c) The board shall:

(i) require the submission to the director of plans and specifications for construction of, substantial addition to, or alteration of public water systems for review and approval by the board before that action begins and require any modifications or impose any conditions that may be necessary to carry out the purposes of this chapter;

(ii) advise, consult, cooperate with, provide technical assistance to, and enter into agreements, contracts, or cooperative arrangements with state, federal, or interstate agencies, municipalities, local health departments, educational institutions, and others necessary to carry out the purposes of this chapter and to support the laws, ordinances, rules, and regulations of local jurisdictions;

(iii) develop and implement an emergency plan to protect the public when declining drinking water quality or quantity creates a serious health risk and issue emergency orders if a health risk is imminent;

(iv) require a community water system serving a population of 500 or more to annually collect accurate water use data, described in Subsection (6), and annually report that data to the Division of Water Rights;

(v) require a certified operator, or a professional engineer performing the duties of a certified water operator, to verify by certification or license number the accuracy of water use data reported by a public water system, including the data required from a community water system under Subsection (1)(c)(iv); and

(vi) meet the requirements of federal law related or pertaining to drinking water.

(2)

(a) The board may adopt and enforce standards and establish fees for certification of operators of any public water system.

(b) The board may not require certification of operators for a water system serving a population of 800 or less except:

(i) to the extent required for compliance with Section 1419 of the federal Safe Drinking Water Act, 42 U.S.C. Sec. 300f et seq.; and

(ii) for a system that is required to treat its drinking water.

(c) The certification program shall be funded from certification and renewal fees.

(3) Routine extensions or repairs of existing public water systems that comply with the rules and do not alter the system's ability to provide an adequate supply of water are exempt from the provisions of Subsection (1)(c)(i).

(4)

(a) The board may adopt and enforce standards and establish fees for certification of persons engaged in administering cross connection control programs or backflow prevention assembly training, repair, and maintenance testing.

(b) The certification program shall be funded from certification and renewal fees.

(5) A board member may not speak or act for the board unless the board member is authorized by a majority of a quorum of the board in a vote taken at a meeting of the board.

(6)

(a) The water use data required to be collected in Subsection (1)(c)(iv) shall include peak day source demand, average annual demand, the number of equivalent residential connections for retail service, and the quantity of non-revenue water.

(b) The division may, by rule, establish:

(i) other types of water use data required to be collected in addition to that listed in Subsection (6)(a); and

(ii) alternative methods for calculating the water use data listed in Subsection (6)(a).

Repealed and Re-enacted by Chapter 5, 2018 Special Session 2

***Effective 7/21/2018***

**19-4-114. Source and storage minimum sizing requirements for public water systems.**

(1)

(a) Except as provided in Subsection (1)(b) and upon submission of plans for a substantial addition to or alteration of a community water system, the director shall establish system-specific source and storage minimum sizing requirements for a community water system serving a population of more than 3,300 based on at least the most recent three years of a community water system's actual water use data submitted in accordance with Subsections 19-4-104(1)(c)(iv) and (v).

(b) If the water use data required under Subsection 19-4-104(1)(c)(iv) is not available to the division, or if the community water system determines that the data submitted does not represent future system use, the director may establish source and storage minimum sizing requirements for the community water system based on:

(i) an engineering study submitted by the community water system and accepted by the director; or

(ii) at least three years of historical water use data that is:

(A) submitted by the community water system; and

(B) accepted by the director.

(c) A community water system serving a population of more than 3,300 shall provide the information necessary to establish the system-specific standards described in this Subsection (1) by no later than March 1, 2019.

(2)

(a) By no later than October 1, 2023, and except as provided in Subsection (2)(b), the director shall establish system-specific source and storage minimum sizing requirements for a community water system serving a population of between 500 and no more than 3,300 based on at least the most recent three years of a community water system's actual water use data submitted in accordance with Subsections 19-4-104(1)(c)(iv) and (v).

(b) If the water use data required under Subsection 19-4-104(1)(c)(iv) is not available to the division, or if the community water system determines that the data submitted does not represent future system use, the director may establish source and storage minimum sizing requirements for the community water system based on:

(i) an engineering study submitted by the community water system and accepted by the director; or

(ii) at least three years of historical water use data that is:

(A) submitted by the community water system; and

(B) accepted by the director.

(c) A community water system serving a population of between 500 and no more than 3,300 shall provide the information necessary to establish system-specific standards described in this Subsection (2) by no later than March 1, 2023.

(3) The director shall establish system-specific source and storage minimum sizing requirements for a community water system serving a population of fewer than 500 based on:

(a) at least the most recent three years of a community water system's actual water use data submitted to the division and accepted by the director;

(b) an engineering study submitted by the community water system and accepted by the director;

(c) standards, comparable to those of established community water systems, as determined by the director; or

(d) relevant information, as determined by the director.

(4) The director shall:

(a) for community water systems described in Subsection (3), establish a schedule to transition from statewide sizing standards to system-specific standards;

(b) establish minimum sizing standards for public water systems that are not community water systems;

(c) provide for the routine evaluation of changes to the system-specific standards; and

(d) include, as part of system-specific standards, necessary fire storage capacity in accordance with the state fire code adopted under Section 15A-1-403 and as determined by the local fire code official.

(5) The director may adjust system-specific sizing standards, established under this section for a public water system, based on information submitted by the public water system addressing the effect of any wholesale water deliveries or other system-specific conditions affecting infrastructure needs.

(6) A wholesale water supplier is exempt from this section if the wholesale water supplier serves:

(a) a total population of more than 10,000; and

(b) a wholesale population that is 75% or more of the total population served.

Repealed and Re-enacted by Chapter 5, 2018 Special Session 2

***Effective 7/21/2018***

# Summary of New Water Use Data Reporting and Water System Minimum Sizing Requirements
(2018 Legislative Revisions to Utah Code 19-4-104 and 114)

## I. Annual Water Use Data Reporting by All Community Water Systems Serving 500 People or More

| Water Use Data to Be Collected: | Reporting Frequency: | Report Data to: | Reporting Due: |
|---|---|---|---|
| 1. Peak Day Source Demand<br>2. Average Annual Demand<br>3. Number of Retail Equivalent Residential Connections *[Number of Total ERCs]*<br>4. Quantity of Non-revenue Water | Annual | Division of Water Rights (**DWRi**) | **March 1, 2019** for 2018 data; as specified by DWRi for future years |

## II. Schedule of Water Use Data Reporting and Minimum Sizing Requirements for Community Water Systems (CWS)

| Water System Type | 3 Years of Data Due | Report Data to | DDW Sets System-Specific Sizing Requirements by |
|---|---|---|---|
| Community Water Systems serving over 3,300 people | March 1, 2019 | • DWRi – Annual Water Use Data described in 19-4-104(6)(a)<br>• DDW – Engineering Study | After Division of Drinking Water (**DDW**) receives acceptable data |
| Community Water Systems serving between 500 and 3,300 people | March 1, 2023 | • DWRi – Annual Water Use Data described in 19-4-104(6)(a)<br>• DDW – Engineering Study | October 1, 2023 |
| Community Water Systems serving fewer than 500 people | TBD | DWRi – Water Use Data (as previously required by DWRi) | TBD |
| Wholesale Water Suppliers that serve a total population of more than 10,000 people and the wholesale population is 75% or more of the total population served | March 1, 2019 (assume to be same as CWS serving over 3,300 people) | DWRi – Annual Water Use Data | Not Applicable |

## III. Non-Community Water Systems

DDW Director to establish minimum source and storage sizing standards - no water use reporting or deadlines given for water systems

**Process of Analyzing Water Use Data and Establishing Minimum Sizing Requirements**

**Data Submission**: Water systems certify and report the water use data to Division of Water Rights (DWRi) each year.

↓

**Data Review**: The water use data are processed and reviewed by DWRi and Division of Water Resources (DWRe). The processed data are forwarded to Division of Drinking Water (DDW).

↓

**Process "per ERC" Data**: The DDW program calculates and converts the DWRi data to three data types (see D.1):

- **"Peak Day Demand per ERC" Data**
- **"Average Annual Demand per ERC" Data**
- **"Equalization Storage per ERC" Data**

↓

**Set Minimum Sizing Requirements**: The DDW program evaluates the "per ERC" data, selects a specific value from each "per ERC" data type for further calculation, and checks for anomalies that trigger further evaluation. If no anomalies are identified, the DDW program then applies a "system-specific variation factor" to the selected value and sets the corresponding "per ERC minimum sizing requirement" (see D.4.a through e):

- **Peak Day Demand per ERC Minimum Sizing Requirement**
- **Average Annual Demand per ERC Minimum Sizing Requirement**
- **Equalization Storage per ERC Minimum Sizing Requirement**

↓

**Set Customized Minimum Sizing Requirements:** If a water system's "per ERC" data trigger further evaluation in the DDW program, a DDW committee reviews the data and selects a specific value from each "per ERC" data type for further calculation. The DDW committee determines a customized "system-specific variation" factor, applies the factor to the selected value, and sets the corresponding "per ERC minimum sizing requirement" (see D.4.f).

↓

**Capacity Evaluation**: When source/storage capacity evaluation of a water system's current/future needs are needed:

- The "Peak Day Demand per ERC Minimum Sizing Requirement" and the "Average Annual Demand per ERC Minimum Sizing Requirement" are used to evaluate the water system's source capacity. (see E.2)
- The "Equalization Storage per ERC Minimum Sizing Requirement" is used to evaluate the water system's storage capacity. (see E.3)

To Calculate the Data:

**Quantity of Non-Revenue Water** (in gallons) =
[Average Annual Demand] – [Water Volume Metered/Billed] – [Wholesale Delivery Outflow]

**"Peak Day Demand per ERC" Data** = $\frac{\text{[Peak Day Source Demand]}}{\text{[Total Number of ERCs]}}$
(in gallons/day)

**"Average Annual Demand per ERC" Data** = $\frac{\text{[Average Annual Demand]}}{\text{[Total Number of ERCs]}}$
(in gallons/year)

**"Equalization Storage per ERC" Data** = $\frac{\text{[Average Annual Demand per ERC]}}{\text{[Operational Days in a Year]}}$
(in gallons)

To Calculate the "per ERC Minimum Sizing Requirements":

**System-Specific Variation Factor** = $\frac{\text{[Highest Data Value] – [Lowest Data Value]}}{\text{[Lowest Data Value]}}$

**Peak Day Demand per ERC Minimum Sizing Requirement** (in gallons/day) =
["Peak Day Demand per ERC" selected value] × [1 + System-Specific Variability Factor]

**Average Annual Demand per ERC Minimum Sizing Requirement** (in gallons/year) =
["Average Annual Demand per ERC" selected value] × [1 + System-Specific Variability Factor]

**Equalization Storage per ERC Minimum Sizing Requirement** (in gallons) =
["Equalization Storage per ERC" selected value] × [1 + System-Specific Variability Factor]

To Calculate Source Capacity:

**Source Capacity Needed to Meet the Peak Day Source Demand** (in gallons/day) =
[Peak Day Demand per ERC Minimum Sizing Requirement] × [Total Number of ERCs]

**Source Capacity Needed to Meet the Average Annual Demand** (in gallons/year) =
[Average Annual Demand per ERC Minimum Sizing Requirement] × [Total Number of ERCs]

To Calculate Storage Capacity:

**Total Storage Capacity Required** (in gallons) =
[Equalization Storage] + [Fire Suppression Storage] + [Emergency Storage (optional)]

**Equalization Storage Required in Utah** (in gallons) =
[Equalization Storage per ERC Minimum Sizing Requirement] × [Total Number of ERCs]

**Fire Suppression Storage Required by Local Fire Code Authority** (in gallons) =
[Required Fire Flow (in gallons per minute)] × [Required Duration (in minutes)]