



August 28, 2023

Hon. Scott Bartholomew, Chair Hon Reed Hatch Hon. Scott Collard Sanpete County Commission 160 North Main P.O. Box 157 Manti, UT 84642

Re: Water Right Dedication/Exaction Requirements For New Connections SMSSD

Dear Commissioners,

This firm represents Skyline Mountain Special Service District, ("SMSSD"). As you know, SMSSD was created by Sanpete County ("County") to provide culinary water in the area of the Skyline Mountain Resort, ("SMR"). In order for SMSSD to serve new connections/customers it is required to follow the "Addendum On Water Requirements" ("Addendum") to the Sanpete County Land Use Ordinance. The water right requirements in the Addendum often cause water providers to mandate dedication/exaction of water rights to serve new connections/customers. A copy of the Addendum is attached as Exhibit A. It is SMSSD's understanding that, unless SMSSD has water rights surplus to its present and expected future customers within SMR, it cannot add any additional connections/customers or expand its service area. However, recent events necessitate a review of the water dedication standards imposed on SMSSD by the County

I. Introduction

Recently, in 2019, the engineering firm of Hansen Allen Luce completed a "Projected Water Rights Use Analysis (40-Year Plan)" ("Water Demand Study") for SMSSD which projects water demand up to 2059. According to the Water Demand Study, applying the County standard per residence found in the Addendum of 0.45 acre-feet of water per year, SMSSD would only need an additional 86 acre-feet of water, in addition to the 222.85 acre-feet already held by SMSSD, to

¹ Water Demand Studies which project water demands for forty years are required by the Utah Division of Water Rights for "Public Water Suppliers, such as SMSSD, to take advantage of the provisions of Utah Code Ann. § 73-1-4, which allow Public Water Suppliers to stockpile surplus water rights for their reasonable future needs within the next forty years and protects the stockpiled water rights from forfeiture for nonuse.

Letter to Sanpete County Re: Water Right Dedication Standard of SMSSD August 25, 2023
Page 2 of 6

serve full buildout within its existing service area. This includes the future extension of its Water System to serve what are known as "cabins on the mountain" which currently are not served. This, of course, does not include expanding the service area and SMSSD boundary to include additional adjacent area. Currently, SMSSD serves five customers outside of SMR.

As mentioned above, the Addendum requires a specific amount of water required per residence. The Addendum has the following listed as state requirements for the amount of water rights SMSSD must hold to serve each new residential connection/customer:

- 0.45 acre-foot for full time residence. (No outside watering)
- 0.25 acre-foot for part-time residence, 181 days or less. (No outside watering)
- 3.00 acre-foot for each acre watered."²

As discussed below, following the procedure established by Utah law, a new and lower acre foot requirement SMSSD must have per residence has been established for SMSSD. The purpose of this letter is to request the County recognize and apply this new standard.³

Recently, SMSSD was given a new Water System specific Source and Storage requirement by the Utah Division of Drinking Water, ("**DDW**"). As explained below, DDW's Source and Storage requirement is both the basis for and tied directly to the water right needed for a connection/customer.

This letter formally requests the County to recognize the new System Source and Storage requirement and accordingly modify the water right requirement for SMSSD that is found in the Addendum to be consistent with the new System Source and Storage requirement of 0.17 acrefeet per equivalent residential connection ("ERC") for indoor use for a full time residence in place of the 0.45 acre-feet. This letter will also provide some background to help the Commission understand the purpose and need for this request.

II. Background of 0.45 Acre-Feet Standard

For reasons explained below, for many years the requirement of 0.45 acre-feet per ERC, per year, for indoor use was the *de facto* standard in Utah. While many believe the 0.45 acre-feet standard for a full-time residence per year, (the **"0.45 Standard"**) came from the State Engineer of Utah, in reality it was derived from DDW Source and Storage Rules. The 0.45 Standard was never a requirement of the Utah State Engineer, nor does this requirement accurately

² This same 0.45 acre foot water right requirement for full time residence indoor use is also found in the County Subdivision Ordinance.

³ Not only will this new standard apply to new connections/customers but also to existing customers.

⁴ ERC is used by DDW to identify a typical residence. As you likely know, SMSSD customers are a mix of full time and part time residences.

Letter to Sanpete County Re: Water Right Dedication Standard of SMSSD August 25, 2023
Page 3 of 6

estimate actual indoor water use. In 2018 then State Engineer, Kent Jones, P.E. issued a Memorandum clarifying the position of the State Engineer on the 0.45 Standard, stating the 0.45 Standard, is only to be used "when there is no evidence that it should be different." (Memorandum of Kent L. Jones, PE, State Engineer, dated December 28, 2018, attached as **Exhibit B.**) In this same Memorandum, State Engineer Jones also states that indoor water use of "70 gallons per person per day may be a more reasonable indoor domestic use in Utah.... or 0.28 acre-feet/year..."

The 0.45 Standard is derived from Rules found in Utah Administrative Code R 309-510-7 and R 309-510-8, adopted by the DDW. (A copy of these Rules are attached as **Exhibit C**.) These DDW Rules require source and storage to provide, on average, 400 gallons per day ("**gpd**") per ERC. Over a year's time 400 gpd equals 146,000 gallons per year, or 0.448 acre-feet per year.

However, beginning in 2009 studies began to reveal that literally no ERC requires 0.45 acre-feet for indoor domestic use. The Utah Division of Water Resources ("**UDWRe**") released a survey tracking actual water use in 17 Utah communities. The "2009 Residential Water Use" Survey, found that actual indoor use per household ranged from 142 gpd (Blanding City) to 227gpd (Taylorsville City). The average for all 17 Utah cities surveyed was 173 gpd, which is less than half of the 400 gpd used to justify the 0.45 Standard.⁵

The 2009 Survey led to other state studies and audits of domestic indoor use in Utah. Two Utah Legislative Audits of state water right dedication standards, both confirm the UDWRe conclusion that the 0.45 af/400 gpd standard is far exceeds actual domestic water use per ERC. In fact, one Audit, "A Review of the Division of Drinking Water's Minimum Source Sizing Requirements" by the Utah Legislative Auditor in December 2014, explicitly reached the following conclusion:

"the average day indoor requirement [imposed by the Division of Drinking Water Regulations] of at least 400 gpd per connection appears excessive for three reasons: First, research suggests the average Utah resident uses less water than the state requirement. Second, water use data from Salt Lake City also shows residential use is less than the state requirement. Third, engineers who design municipal water systems provided us with data suggesting the state requirement is excessive. Collectively, these points appear to warrant a formal review of and reduction to the state average day indoor requirement."

The Utah Legislature, recognizing that the commonly used 0.45 Standard derived from the DDW's Source and Storage standards did not reflect actual water use, passed legislation in 2018 which specifically amended Utah's Safe Drinking Water Act. This amendment required DDW to develop system source and storage requirements, rather than a statewide requirement. For a water system serving a population of more than 3,300, the statutory deadline to develop "system

⁵ A copy of the Survey is readily available on the UDWRe website.

⁶ A copy of this Audit is available on the website of the Office of Legislative Auditor General.

Letter to Sanpete County Re: Water Right Dedication Standard of SMSSD August 25, 2023
Page 4 of 6

specific" storage and sizing standards was "no later than March 1, 2019." A copy of Utah Code Ann. § 19-4-114 is attached as **Exhibit D**. For water systems, such as the SMSSD system, serving between 500 and 3,300 the legislative deadline to establish a specific, system based, standard for Source and Storage is October 31, 2023.

III. SMSSD System Specific Water Requirements

To allow DDW to comply with this legislative mandate, SMSSD submitted the required three years of water use records to DDW. Based on this information DDW issued a letter to SMSSD dated August 10, 2023. A copy of the letter is attached as **Exhibit E**.

According to the DDW letter issued on August 10, 2023 (Ex. E) The System Specific Source and Storage standard for SMSSD is now:

Peak Day Source Demand (gal/day/ERC) – 415 gal/day/ERC Average Annual Demand (gal/yr/ERC) – 55,000 gal/yr/ERC Average Annual Demand (ac-ft/yr/ERC) – 0.17 ac-ft/yr/ERC Equalization Storage (gal/ERC) – 151 gal/ERC Fire Storage (gal) – 210,000 gal

Ex. E. pg. 1

Rather than the 495 full time ERCs SMSSD is able to serve with its 222.85 acre-feet of water when the 0.45 Standard is applied, SMSSD is now able to serve 1,310 full time ERCs with the new, 0.17, standard. The 1,310 ERCs is far beyond the full buildout of SMSSD which is 952 ERCs. Thus, SMSSD has surplus capacity to serve an additional 358 ERCs.

IV. State Law Applicable to Water Dedications/Exactions

In light of this new standard of 0.17 acre-feet per ERC, it is important to note Utah law requires water dedication be proportional to the actual use. Utah Code § 17-27a-507 states:

- (1) A county may impose an exaction or exactions on development proposed in a land use application, including, subject to Subsection (3), an exaction for a water interest, if:
- (a) an essential link exists between a legitimate governmental interest and each exaction; and
- (b) each exaction is roughly proportionate, both in nature and extent, to the impact of the proposed development.
- (2) If a land use authority imposes an exaction for another governmental entity:

Letter to Sanpete County Re: Water Right Dedication Standard of SMSSD August 25, 2023
Page 5 of 6

- (a) the governmental entity shall request the exaction; and
- (b) the land use authority shall transfer the exaction to the governmental entity for which it was exacted.
- (3) (a) (i) Subject to the requirements of this Subsection (3) a county or, if applicable, the county's culinary water authority shall base any exaction for a water interest on the culinary water authority's established calculations of projected water interest requirements.
- (ii) Except as described in Subsection (3)(a) (iii), a culinary water authority shall base an exaction for a culinary water interest on:
 - (A) consideration of the system-wide minimum sizing standards established for the culinary water authority by the Division of Drinking Water pursuant to Section 19-4-114; and
 - (B) the number of equivalent residential connections associated with the culinary water demand for each specific development proposed in the development's land use application, applying lower exactions for developments with lower equivalent residential connections as demonstrated by at least five years of usage data for like land uses within the county.

Emphasis added. A copy of this statute is enclosed as Exhibit F.

V. Conclusion

In light of the above, SMSSD respectfully suggests that neither SMSSD nor the County has any option, other than to modify the water dedication/exaction standard for SMSSD from the 0.45 Standard to the new DDW Source and Storage Standard of 0.17 acre-feet per ERC based on the actual use within SMSSD.

Currently, there are several property owners/developers who have petitioned for their land to be included within the service area/district boundary of SMSSD. SMSSD had initially agreed to provide water service to one such property owner/developer. Due to the water dedication/exaction requirement found in the Addendum, SMSSD did not have sufficient additional water rights to serve these new potential connections/customers and the County would not approve building permits for the same. However, in light of DDW's resetting of the per ERC requirement from 0.45 to 0.17, it appears that there is sufficient surplus water rights held by SMSSD to serve these new connections/customers.

I along with Roy Fox, the Water Superintendent of SMSSD and Craig Godwin, Board Chairman of SMSSD, are happy to meet with you or County staff if such a meeting would be helpful. We are also available to answer any questions you or County staff may have. Thank you for your attention to this important matter.

Letter to Sanpete County Re: Water Right Dedication Standard of SMSSD August 25, 2023
Page 6 of 6

Sincerely,

SMITH HARTVIGSEN, PLLC

J. Craig Smith

Cc: M. Roy Fox, District Manager
SMSSD Trustees
Beca Mark, District Clerk
Kevin Daniels, Sanpete County Attorney
Linda Christiansen, Sanpete County Clerk
Steven Jenson, Zoning Administrator, Sanpete County
Kim Hansen, SMR Manger

EXHIBIT A

("Addendum on Water Requirements" -Sanpete County Land Use Ordinance)

ADDENDUM ON WATER REQUIREMENTS

After the well is drilled Sanpete County will approve building permits in legally recorded subdivisions for the amount of water approved for each lot at the time the subdivision was recorded, provided it is not less than what the State Water Rights require at that time*. This addendum applies only to subdivisions recorded prior to April 6th 2004.

All other lots not in a recorded subdivision must comply with the water requirements of the current subdivision ordinances.

- *State Water Rights requirements
- .45 acre-foot for full time residence. (No outside watering)
- .25 acre-foot for part-time residence, 181 days or less. (No outside watering)
- 3 acre-foot for each acre watered.

EXHIBIT B

(December 28, 2018 Memorandum of Kent L. Jones, PE, State Engineer)



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Water Rights

KENT L. JONES
State Engineer/Division Director

Internal Correspondence

Division of Water Rights

To:

Water Rights Division Staff

From:

Kent L. Jones, P.E.

State Engineer

Director – Utah Division of Water Rights

Date:

December 28, 2018

Subject:

POLICY FOR DOMESTIC DUTY CONSIDERATIONS

Since the early 1980's, the State Engineer has recognized and used inside domestic use duties based on 400 gallons/connection/day which is about 0.45 acre-foot/connection/year. With continuing conservation efforts, studies have shown that 70 gallons per person per day may be a more reasonable estimate for indoor domestic use in Utah. With an estimated 3.6 people per connection, that would equal about 250 gallons/connection/day or about 0.28 acre-foot/year, on average, for a fulltime, year-round residence. Part-time recreational usage may only require 0.16 acre-foot/connection/year or less based on those numbers.

Using the study amounts of 70 gallons/connection/day, 0.45 acre-foot would supply the annual inside domestic needs of 5.7 people. While some homes exceed that number, on the average there are less people per connection than 5.7.

In practice, 0.45 acre-foot/connection is a safe number to use covering most household usage per connection. That amount of water may not be needed to meet the projected needs of the residential users in any particular situation. It is a number we will continue to use if there is no evidence that it should be different.

The State Engineer will consider reduced amounts of water required per connection in applications filed if the projected usage rate numbers are based on scientific evaluations and the water used is measured and reported to the Division of Water Rights through the Water Use Program. Proof and Certificate documents would be based on actual measurements of water substantiating the volumes of water diverted and depleted.



EXHIBIT C

(Utah Administrative Code R 309-510-7 and R 309-510-8

authority, and shall be accepted by the Director.

(7) The Director may re-evaluate any reduction if the nature or use of the water system changes.

Guidance: The Division of Drinking Water has developed two documents to aid public water systems in understanding the information needed to request a reduction in the source or storage requirement.

- "Information Needed for Reduction in Source Sizing"
- "Information Needed for Reduction in Storage Sizing"

These documents are available on the Division of Drinking Water's website.

R309-510-6. Water Conservation.

Drinking water systems shall use the water resources of the state efficiently. The minimum sizing requirements of this rule are based on typical water consumption patterns in the State of Utah. Where legally-enforceable water conservation measures exist, the sizing requirements in this rule may be reduced on a case-by-case basis by the Director.

R309-510-7. Source Sizing.

(1) Peak Day Demand and Average Yearly Demand.

Sources shall legally and physically meet water demands under two conditions:

- (a) The water system's source capacity shall be able to meet the anticipated water demand on the day of highest water consumption, which is the peak day demand.
- (b) The water system's source capacity shall also be able to provide one year's supply of water, which is the average yearly demand.

Guidance: Water systems should investigate the availability and validity of water rights for their systems. Consult the Division of Water Rights concerning the legal right to use water.

(2) Indoor Water Use.

Tables 510-1 and 510-2 shall be used as the minimum sizing requirements for peak day demand and average yearly demand for indoor water use unless a public water system has obtained a reduction per R309-510-5.

Table 510-1		
Source Demand for Indoor	Jse	
Type of Connection	Peak Day Demand	Average Yearly Demand
Year-Round Use		
Residential	800 gpd/conn	146,000 gal./conn
Equivalent Residential Connection (ERC)	800 gpd/ERC	146,000 gal./ERC
Seasonal / Non-Residential	Use	
Modern Recreation Camp	60 gpd/person	(See Note 1)
Semi-Developed Camp		
 a. With pit privies 	5 gpd/person	(See Note 1)
b. With flush toilets	20 gpd/person	(See Note 1)
Hotels, Motel & Resort	150 gpd/unit	(See Note 1)
Labor Camp	50 gpd/person	(See Note 1)
Recreational Vehicle Park	100 gpd/pad	(See Note 1)
Roadway Rest Stop	7 gpd/vehicle	(See Note 1)
Recreational Home		
Development (i.e.,	400 and/22m	(Cas Nata 1)
developments with limited	400 gpd/conn	(See Note 1)
water use) [See Note 2]		

NOTES FOR TABLE 510-1:

Note 1. Average yearly demand shall be calculated by multiplying the number of days in the designated water system operating period by the peak day demand unless a reduction has been granted in accordance with R309-510-5.

Note 2. To be considered a Recreational Home Development (i.e., developments with limited water use) as listed in Table 510-1, dwellings shall not have more than 8 plumbing fixture units, in accordance with the state-adopted plumbing code, and shall not be larger than 1,000 square feet. For a new not-yet-constructed development to be considered as a development with limited water use, it must have enforceable restrictions in place that are enforced by the water system or local authority and are accepted by the Director.

Guidance: The Division of Drinking Water is in the process of proposing a study to gather water use data from public water systems representing various sizes, types, and locations throughout the state. The residential source demand requirements in Table 510-1 will be re-evaluated based on the water use study data.

TABLE 510-2 Source Demand for Inc	loor Use - Individual Establishments (Note 1)
Type of Establishment	Peak Day Demand (gpd) (Notes 2 & 3)
Airports	3

R309-510-8. Storage Sizing.

(1) General.

Each public water system, or storage facility serving connections within a specific area, shall provide:

- (a) equalization storage volume, to satisfy average day demands for water for indoor use and irrigation use,
- (b) fire flow storage volume, if the water system is equipped with fire hydrants intended to provide fire suppression water or as required by the local fire code official, and
- (c) emergency storage, if deemed appropriate by the water supplier or the Director.

(2) Equalization Storage.

- (a) All public drinking water systems shall provide equalization storage. The amount of equalization storage varies with the nature of the water system, the extent of irrigation use, and the location and configuration of the water system.
- (b) Table 510-4 lists required equalization storage for indoor use. Storage requirements for non-community systems not listed in this table shall be determined by calculating the average day demands from the information given in Table 510-2.

Guidance: Water systems capable of meeting the intent of the equalization storage requirements, for example, by redundancy configuration or operation strategy, may request a reduction in storage sizing requirements per R309-510-5.

Table 510-4		
Storage Volume for Indoor Use		
Type	Volume Required (gallons)	
Community Systems		
Residential; per single resident service connection	400	
Non-Residential; per Equivalent Residential	400	
Connection (ERC)	400	
Non-Community Systems		
Modern Recreation Camp; per person	30	
Semi-Developed Camp; per person		
a. with Pit Privies	2.5	
b. with Flush Toilets	10	
Hotel, Motel, & Resorts; per unit	75	

R309-510 Facility Design and Operation: Minimum Sizing Requirements

Labor Camp; per unit	25
Recreational Vehicle Park; per pad	50
Roadway Rest Stop; per vehicle	3.5
Recreational Home Development (i.e.,	
developments with limited water use); per	
connection (See Note 2 in Table 510-1)	400

(c) Where a drinking water system provides water for irrigation use, Table 510-5 shall be used to determine the minimum equalization storage volumes for irrigation. The procedure for determining the map zone and irrigated acreage for using Table 510-5 is outlined in R309-510-7(3).

Table 510-5 Storage Volume for Irrigat	
Map Zone	Volume Required
	(gallons/irrigated acre)
1	1,782
2	1,873
3	2,528
4	2,848
5	4,081
6	4,964

(3) Fire Flow Storage.

- (a) Fire flow storage shall be provided if fire flow is required by the local fire code official or if fire hydrants intended for fire flow are installed.
- (b) Water systems shall consult with the local fire code official regarding needed fire flows in the area under consideration. The fire flow information shall be provided to the Division during the plan review process.
- (c) When direction from the local fire code official is not available, the water system shall use Appendix B of the International Fire Code, 2015 edition, for guidance. Unless otherwise approved by the local fire code official, the fire flow and fire flow duration shall not be less than 1,000 gallons per minute for 60 minutes.

Guidance: Utah has adopted a state-wide fire code. However, local fire code officials are authorized to determine fire flow requirements in their jurisdictions.

(4) Emergency Storage.

Emergency storage shall be considered during the design process. The amount of emergency storage shall be based upon an assessment of risk and the desired degree of system

R309-510 Facility Design and Operation: Minimum Sizing Requirements

dependability. The Director may require emergency storage when it is warranted to protect public health and welfare.

Guidance: It is advisable to provide water storage for emergency situations, such as pipeline failures, major trunk main failures, equipment failures, electrical power outages, water treatment facility failures, raw-water supply contamination, or natural disasters. Generally, the need for emergency storage shall be determined by the water supplier and design engineer.

EXHIBIT D

(Utah Code Ann. § 19-4-114)

Effective 5/3/2023

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

(1)

- (a) Except as provided in Subsection (1)(b), 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) Except as provided for under Subsection (7), 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.
- (7) Upon request of a wholesale water supplier and the community water systems receiving water from the wholesale water supplier, the director may establish regional source and storage minimum sizing standards for community water systems receiving water from the wholesale water supplier using actual water use data submitted by the wholesale water supplier and the community water systems served by the wholesale water supplier.
- (8) The director may adjust system-specific sizing standards established under this section for a public water system based on adopted enforceable water conservation measures that are consistent with regional water conservation goals adopted pursuant to Subsection 73-10-32(2) (d)(ii)(A) or (B).

Amended by Chapter 238, 2023 General Session

EXHIBIT E

(August 10, 2023 Letter from DDW)



SPENCER J. COX Governor

DEIDRE HENDERSON Lieutenant Governor

Department of Environmental Quality

Kimberly D. Shelley Executive Director

DIVISION OF DRINKING WATER Tim Davis Director

August 10, 2023

Roy Fox Skyline Mountain SSD 2201 SMR Fairview, Utah 84629

Subject: System-Specific Minimum Sizing Standards

Skyline Mountain SSD, System #20043, File #13416

Dear Roy Fox:

Based on the water use data submitted to the Division of Water Rights (DWRi), the following system-specific minimum sizing standards have been set for Skyline Mountain SSD:

Peak Day Source Demand (gal/day/ERC) – 415 gal/day/ERC Average Annual Demand (gal/yr/ERC) – 55,000 gal/yr/ERC Average Annual Demand (ac-ft/yr/ERC) – 0.17 ac-ft/yr/ERC Equalization Storage (gal/ERC) – 151 gal/ERC Fire Storage (gal) – 210,000 gal

These standards are effective as of the date of this letter. A summary of the water use data and calculations used to set the minimum sizing standards are attached for your reference. The Division plans to evaluate these standards every 3 years, or upon request.

Water System Background

Skyline Mountain SSD (the System) is a community water system in Sanpete County, Utah. The System serves a population of about 271 people. There are about 229 residential and 19 commercial connections. Included in the commercial connections are about 484 fill access accounts for those who do not have metered connection but have access to District fill stations. Since the system is less than the required population of 500 to report peak day data, the System decided to submit an engineering study to first set its equalization storage requirement while still using the statewide minimum. A second engineering study was submitted to set the system specific sizing for the peak day.

Roy Fox Page 2 of 3 August 10, 2023

Minimum Sizing Standard Background

Per Utah Code 19-4-114, the information needed for the Division of Drinking Water (the Division) to set system-specific minimum sizing standards may be based on water use data submitted to the DWRi, or alternatively, a community water system can submit an engineering study to the Division if the water system's water use data is not representative of future use or the water system does not yet have actual water use data.

Actual water use data was partly available through DWRi, and an engineering study was submitted to the Division for review from your consultant, Ridley Griggs, P.E., on June 16, 2023. The Division agreed with the engineering study that proposed to set the annual average and equalization storage for the System and use the statewide minimum while an additional engineering report is being prepared. The second engineering report was received your consultant, Ridley Griggs, P.E. on July 26, 2023, and it proposed to use a peaking factor to find the peak day for Thad's Peak Well. The Division agrees with this methodology and has requested the System continue to use the same methodology for future water use reporting until an upgraded meter is installed at the well. Therefore, the Division is setting the system-specific minimum sizing standard for the System.

Water Use Data Definitions

Peak Day Source Demand is the total flow into a public water system to meet the demand of the water system on the day of the highest water consumption in a calendar year.

Average Annual Demand is the total quantity of drinking water flowing into a public water system within a calendar year.

Total Equivalent Residential Connections (ERCs) term represents the number of residential service connections and the number of equivalent residential connections for non-residential connections (commercial, industrial, institutional connections).

Minimum Equalization Storage requirement is a volume that is equivalent to the amount of water needed to meet the average day culinary demand for public water systems. Equalized storage per ERC is calculated by dividing the Average Annual Demand per ERC data by the number of operational days in a year.

Fire Storage information was received with the second engineering report dated July 26, 2023.

Storage Capacity

Based on your system's storage facilities and the storage minimum sizing requirement established in this letter, your system compliant with the minimum storage capacity requirements.

Roy Fox Page 3 of 3 August 10, 2023

Source Capacity

The Division has documentation of established safe yields for all of your system sources. Using total system-wide safe yields and the source minimum sizing requirement established in this letter indicates your water system is compliant with minimum source capacity requirements.

This resolves the deficiency of S091 due to lacking less than 20% of the required source capacity. This is a minor 15-point deficiency. An updated IPS report is available at https://waterlink.utah.gov. Please contact Jennifer Yee at (385) 515-1501 or jyee@utah.gov for questions related to the System's IPS report or deficiencies.

If you have any questions regarding this letter, please contact Dani Zebelean, of this office, at (384) 278-5110, or Michael Newberry, Engineering Manager, at (385) 515-1464.

Sincerely,

Michael Newberry, P.E. Engineering Manager

DZ/mrn/mdb

Enclosures

1. Utah Department of Environmental Quality Division of Drinking Water Minimum Sizing Standards Summary Report

cc: Eric Larsen, Central Utah Health Department, elarsen@centralutahhealth.org
John Chartier, Central District Engineer, jchartier@utah.gov
Roy Fox, Skyline Mountain SSD, smssd2013@gmail.com
Dani Zebelean, Division of Drinking Water, dzebelean@utah.gov
Jen Yee, Division of Drinking Water, jyee@utah.gov
Ted Black, Office of the State Fire Marshal, tblack@utah.gov

DDW-2023-034730



Utah Department of Environmental Quality Division of Drinking Water Minimum Sizing Standards

SKYLINE MTN SSD

PWS ID: UTAH20043

Admin Name: ROY FOX Address: 2201 SMR

City, State, Zip: Fairview, UT 84629

Phone: 435-469-1661

Email: SMSSD2013@GMAIL.COM

System Type: Community

Population: 271

MINIMUM SIZING STANDARD

Date Standard Effective: Thu Aug 03 16:48:54 MDT 2023 Peak Day Source Demand per ERC (gal/day): 415^a Average Annual Demand per ERC (gal/year): 55,000^b

Equalization Storage per ERC (gal): 151°

^cUpdated to match Engineering Report Dated June 16, 2023

MINIMUM SIZING STANDARD CALCULATIONS		VARIABILITY				
Data from these reporting years: 2020, 2021, 2022 Peak Day Source Demand per ERC (gal/day): 419 Average Annual Demand per ERC (gal/year): 44,726 Equalization Storage per ERC (gal): 122	X X X	(1 + 0.0) (1 + 0.0) (1 + 0.0)	= =	419 44,726 122		

DWRI WATER USE DATA REPORTED

aUpdated to match Engineering Report Dated July 26, 2023

^bUpdated to match Engineering Report Dated June 16, 2023

Year	Peak Day Source Demand (gal/day)	Average Annual Demand (gallons)	ERCs	Peak Demand per ERC (gal/day)	Avg Annual Demand per ERC (gal/year)	Equaliza tion Storage per ERC (gal)	OP Days
2022	162,925	17,990,233.71	446	365	40,296	110	365
2021	140,115	16,722,673.32	496	283	33,739	92	365
2020	166,184	17,732,811.42	396	419	44,726	122	366
Variabi	lity:		0.253	0.0	0.0	0.0	

Year	Peak Month Average (gal/day)	Peak Month Average per ERD (gal/day)	Ratio of PD/ERC to Peak Month Avg/ERC
2022	53,502	120	3.05
2021	81,136	164	1.73
2020	89,136	225	1.86

CAPACITY CALCULATIONS FOR STORAGE

Equalization per ERC (gal): 151 Existing Storage (gal): 311,000

ERCs: 496

Required Storage w/o Fire Flow: 74,896 Required Fire Storage (gal): 210,000 Required Storage w/Fire (gal): 284,896

Storage Deficiency: 0 Storage Deficiency (%): 0.0 No Storage Deficiency

CAPACITY CALCULATIONS FOR SOURCES

Peak Day Source Demand per ERC (gpm): 0.29

Existing Source Capacity (gpm): 217

ERCs: 496

Required Source Capacity (gpm): 144

Source Deficiency: 0 Source Deficiency (%): 0.0 No Source Deficiency

SYSTEM STORAGE AND SOURCE INVENTORY

Storage ID	Storage Name	Effective Volume (GAL)
ST001	SPRINGVIEW TANK	55,000
ST002	THADS PEAK TANK	6,000
ST003	JUNIPER TANK	250,000
		Storage Totals: 311,000 GAI

Source Name	Flow Rate (GPM)
CLUBHOUSE WELL	120
THADS PEAK WELL	37
GOLF COURSE WELL	60
	CLUBHOUSE WELL THADS PEAK WELL

EXHIBIT F

(Utah Code § 17-27a-507)

Effective 5/3/2023

17-27a-507 Exactions -- Exaction for water interest -- Requirement to offer to original owner property acquired by exaction.

- (1) A county may impose an exaction or exactions on development proposed in a land use application, including, subject to Subsection (3), an exaction for a water interest, if:
 - (a) an essential link exists between a legitimate governmental interest and each exaction; and
 - (b) each exaction is roughly proportionate, both in nature and extent, to the impact of the proposed development.
- (2) If a land use authority imposes an exaction for another governmental entity:
 - (a) the governmental entity shall request the exaction; and
 - (b) the land use authority shall transfer the exaction to the governmental entity for which it was exacted.

(3)

(a)

- (i) Subject to the requirements of this Subsection (3), a county or, if applicable, the county's culinary water authority shall base any exaction for a water interest on the culinary water authority's established calculations of projected water interest requirements.
- (ii) Except as described in Subsection (3)(a)(iii), a culinary water authority shall base an exaction for a culinary water interest on:
 - (A) consideration of the system-wide minimum sizing standards established for the culinary water authority by the Division of Drinking Water pursuant to Section 19-4-114; and
 - (B) the number of equivalent residential connections associated with the culinary water demand for each specific development proposed in the development's land use application, applying lower exactions for developments with lower equivalent residential connections as demonstrated by at least five years of usage data for like land uses within the county.
- (iii) A county or culinary water authority may impose an exaction for a culinary water interest that results in less water being exacted than would otherwise be exacted under Subsection (3)(a)(ii) if the county or culinary water authority, at the county's or culinary water authority's sole discretion, determines there is good cause to do so.
- (iv) A county shall make public the methodology used to comply with Subsection (3)(a)(ii)(B). A land use applicant may appeal to the county's governing body an exaction calculation used by the county or the county's culinary water authority under Subsection (3)(a)(ii). A land use applicant may present data and other information that illustrates a need for an exaction recalculation and the county's governing body shall respond with due process.
- (v) Upon an applicant's request, the culinary water authority shall provide the applicant with the basis for the culinary water authority's calculations under Subsection (3)(a)(i) on which an exaction for a water interest is based.
- (b) A county or its culinary water authority may not impose an exaction for a water interest if the culinary water authority's existing available water interests exceed the water interests needed to meet the reasonable future water requirement of the public, as determined under Subsection 73-1-4(2)(f).

(4)

(a) If a county plans to dispose of surplus real property under Section 17-50-312 that was acquired under this section and has been owned by the county for less than 15 years, the county shall first offer to reconvey the property, without receiving additional consideration, to the person who granted the property to the county.

- (b) A person to whom a county offers to reconvey property under Subsection (4)(a) has 90 days to accept or reject the county's offer.
- (c) If a person to whom a county offers to reconvey property declines the offer, the county may offer the property for sale.
- (d) Subsection (4)(a) does not apply to the disposal of property acquired by exaction by a community development or urban renewal agency.

(5)

- (a) A county may not, as part of an infrastructure improvement, require the installation of pavement on a residential roadway at a width in excess of 32 feet.
- (b) Subsection (5)(a) does not apply if a county requires the installation of pavement in excess of 32 feet:
 - (i) in a vehicle turnaround area;
 - (ii) in a cul-de-sac;
 - (iii) to address specific traffic flow constraints at an intersection, mid-block crossings, or other areas;
 - (iv) to address an applicable general or master plan improvement, including transportation, bicycle lanes, trails, or other similar improvements that are not included within an impact fee area:
 - (v) to address traffic flow constraints for service to or abutting higher density developments or uses that generate higher traffic volumes, including community centers, schools, and other similar uses;
 - (vi) as needed for the installation or location of a utility which is maintained by the county and is considered a transmission line or requires additional roadway width;
 - (vii) for third-party utility lines that have an easement preventing the installation of utilities maintained by the county within the roadway;
 - (viii) for utilities over 12 feet in depth;
 - (ix) for roadways with a design speed that exceeds 25 miles per hour;
 - (x) as needed for flood and stormwater routing;
- (xi) as needed to meet fire code requirements for parking and hydrants; or
- (xii) as needed to accommodate street parking.
- (c) Nothing in this section shall be construed to prevent a county from approving a road cross section with a pavement width less than 32 feet.

(d)

- (i) A land use applicant may appeal a municipal requirement for pavement in excess of 32 feet on a residential roadway.
- (ii) A land use applicant that has appealed a municipal specification for a residential roadway pavement width in excess of 32 feet may request that the county assemble a panel of qualified experts to serve as the appeal authority for purposes of determining the technical aspects of the appeal.
- (iii) Unless otherwise agreed by the applicant and the county, the panel described in Subsection (5)(d)(ii) shall consist of the following three experts:
 - (A) one licensed engineer, designated by the county;
 - (B) one licensed engineer, designated by the land use applicant; and
 - (C) one licensed engineer, agreed upon and designated by the two designated engineers under Subsections (5)(d)(iii)(A) and (B).
- (iv) A member of the panel assembled by the county under Subsection (5)(d)(ii) may not have an interest in the application that is the subject of the appeal.
- (v) The land use applicant shall pay:

- (A) 50% of the cost of the panel; and
- (B) the county's published appeal fee.
- (vi) The decision of the panel is a final decision, subject to a petition for review under Subsection (5)(d)(vii).
- (vii) Pursuant to Section 17-27a-801, a land use applicant or the county may file a petition for review of the decision with the district court within 30 days after the date that the decision is final.

Amended by Chapter 255, 2023 General Session Amended by Chapter 478, 2023 General Session



SMITH HARTVIGSEN, PLLC

257 East 200 South. Ste. 500 Salt Lake City, UT 84111

SMITH HARTVIGSENPLIC

Hon Reed Hatch Sanpete County Commission 160 North Main P.O. Box 157 Manti, UT 84642



SMITH HARTVIGSEN, PLLC 257 East 200 South. Ste. 500 Salt Lake City, UT 84111

SMITH HARTVIGSENPLO

Hon. Scott Collard Sanpete County Commission 160 North Main P.O. Box 157 Manti, UT 84642



SMITH HARTVIGSEN, PLLC

257 East 200 South. Ste. 500 Salt Lake City, UT 84111

SMITH HARTVIGSEN PLACE AT LORINGE AT LORINGE AT LORINGE AT LORINGE AT LAW

Hon. Scott Bartholomew, Chair Sanpete County Commission 160 North Main P.O. Box 157 Manti, UT 84642