

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT
RESOLUTION NO. 2023-2

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SKYLINE MOUNTAIN
SPECIAL SERVICE DISTRICT TO ESTABLISH IMPACT FEES**

WHEREAS, Skyline Special Service District (the “**District**”) has constructed and implemented certain wells, storage tanks, and delivery systems (together, the “**System**”) for the purpose of creating water systems for the benefit of customers and properties within the District; and

WHEREAS, Utah Code Ann. Section 11-36a authorizes the District to establish impact fees and its Water System Operating Agreement, Page #2 “Revenues” (**Exhibit A**); and

WHEREAS, the District hired Hansen Allen Luce, Inc. to perform an impact fee analysis (the “**IFA**”) (a copy of the IFA is attached hereto as **Exhibit B**) for the construction and implementation of the System and to develop the District’s Master Plan (**Exhibit C**); and

WHEREAS, the IFA concluded that a maximum impact fee of \$29,861.00 (the “**Projected Impact Fee**”) would be necessary to pay for adding pressurized culinary water to the System with build out predicted over a 40-year period (the “**Improvements**”); and

WHEREAS, all required public notices were timely and properly noticed; and

WHEREAS, a public hearing was held on July 27, 2022, to discuss and receive public comment on a resolution to implement a monthly bill to pay for the Projected Impact Fee; and

WHEREAS, public comment was positive regarding larger impact fees for the benefit of having a pressurized system or an \$80.00-\$120.00 monthly bill to make a bond payment for the Projected Impact Fee; and

WHEREAS, the Board of Directors of the Skyline Mountain Special Service District (the “**Board of Directors**” or “**Board**”) made, seconded, and unanimously carried a motion to pass the resolution;

	YES	NO	ABSTAIN	ABSENT
Craig Godwin	X	_____	_____	_____
Don Hunter	X	_____	_____	_____
Rebeca Mark	X	_____	_____	_____
Gene Nielsen	X	_____	_____	_____
David Weber	X	_____	_____	_____

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT:

SECTION 1. Authorization of the Total Impact Fee. The Board of Directors does hereby approve and establish a Total Impact Fee of \$10,000.00 (the “**Total Impact Fee**”) for the Improvements to the System.

SECTION 2. Service Areas. The service areas subject to the Total Impact Fee are coterminous with the boundaries of the District. All land uses and development, including cabins, for which a county building permit including habitable living space is required within the service areas are subject to the Total Impact Fee. Additionally, any development which will receive water service from the District through water hauling or direct connections is subject to the Total Impact Fee.

SECTION 3. Schedule of Impact Fees. The formula to establish Total Impact Fee was based on the approximately one-third (1/3) of the IFA’s Projected Impact Fee, with the Total Impact Fee of \$10,000 being universally applicable. The remainder of the costs to cover the System improvements may come from bonds, grants, donations, fees, loans, or any other lawful source of revenue for the District.

SECTION 4. Adjustments. The Board of Directors is authorized to adjust the standard impact fee to:

- (i) Respond to:
 - a. Unusual circumstances in specific cases; or
 - b. Request a prompt and individualized impact fee review for the development activity of the state, a school district, or a charter school and an offset or credit for a public facility for which an impact fee has been or will be collected; and
- (ii) Ensure that the impact fees are imposed fairly; or
- (iii) In response to studies and data submitted by a developer that inform the governing calculation of the amount of the impact fee to be imposed on a particular development

SECTION 5. Credits. Developers, including a school district or a charter school, may receive a credit against or proportionate reimbursement of an impact fee if the developer:

- (i) Dedicates land to the System Improvements;
- (ii) Builds and dedicates some or all of the System Improvements; or
- (iii) Dedicates a public facility that the District and the developer agree will reduce the need for the System Improvements.

The District shall require a credit against impact fees for developers who dedicate land towards, construct, or improve facilities that:

- (i) Are part of the System Improvements; or

- (ii) Are:
 - a. Dedicated to the public; and
 - b. Offset the need for the System Improvements.

SECTION 6. Effective Date. This Resolution will be effective immediately upon passage, and the District may begin collecting Total Impact Fees ninety (90) days after passage.

[SIGNATURE PAGE FOLLOWS]

APPROVED BY THE BOARD OF DIRECTORS OF THE SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT ON THIS 28 TH DAY OF December, 2023, BY THE FOLLOWING VOTE:

	YES	NO	ABSTAIN	ABSENT
Craig Godwin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Don Hunter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rebeca Mark	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gene Nielsen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trent Andersen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Chair: Craig Godwin
 Craig Godwin – Chairman

Attest: Rebeca Mark
 Rebeca Mark – Secretary (C) - R.M.K.



EXHIBIT A

Water System Operating Agreement

WATER SYSTEM OPERATING AGREEMENT

PIPELINES & EASEMENTS/RIGHTS-OF-WAY

WATER SYSTEM OPERATING AGREEMENT

This Water System Operating Agreement ("Agreement") is entered into as of February 1, 2013, by and between the **Skyline Mountain Special Service District**, a Utah special service district whose address is 2201 Skyline Mountain Resort, Fairview, Utah 84629 ("District"), and **Sports Haven International**, a Utah non-profit corporation, DBA Skyline Mountain Resort whose address is 11860 East Clubhouse Drive, RR 1 PO Box 247, Fairview, Utah 84629 ("Company").

RECITALS

- A. The District owns a culinary water system in the Fairview area of Sanpete County.
- B. The District's culinary water system consists generally of water rights, wells, a storage tank, distribution lines, certain real property interests, and certain personal property, as is more particularly itemized in Exhibit A (collectively, the "System" as more fully defined herein).
- C. The Company, as a homeowner's association, owns and operates real properties, including recreational properties, such as a swimming pool, golf course, club house, and areas for primary and secondary homes that are within the service area of the District.
- D. The District's System is in need of certain upgrades and new facilities (the "Project") and the District has obtained a \$3,007,000 funding commitment from the State of Utah Department of Environmental Quality, Drinking Water Board ("DWB" or "Drinking Water Board") for such improvements.
- E. The value of the Company properties will be enhanced by the District's upgraded facilities, which value would be further enhanced by providing quality management and operation of the District's System.
- F. Because of the legal structure of the Company, in the event of non-payment of invoices and other amounts owing by members of the Company, it has certain enforcement measures available to it that are not available to the District, including the ability to place liens against properties of the Company's members, associated with unpaid invoices.
- G. It is the intent of the parties that the Company will send out and collect invoices for the District.

AGREEMENT

NOW THEREFORE, in consideration of the terms and conditions contained herein, which the parties expressly deem to be legally sufficient consideration, the parties hereby agree as follows:

DEFINITIONS

“Bondholder” or “Registered Owner” means the holder of any indebtedness of the District.

“Bonds” means any indebtedness of the District.

“Closing” means the closing by the District on its loan approved by the Utah Department of Environmental Quality, Drinking Water Board, whereby the District obtains funding for System improvements.

“Net Revenues” means the Revenues after provision has been made for the payment therefrom of Operation and Maintenance Expenses.

“Operation and Maintenance Expenses” means all expenses reasonably incurred in connection with the operation and maintenance of the System, after tax revenues, if any, are applied to such expenses, including the cost of water and water treatment, whether incurred by the District or paid to any other municipality or company pursuant to contract or otherwise, repairs and renewals (other than capital improvements) necessary to keep the System in efficient operating condition, the cost of audits hereinafter required, fees of the paying agents on Bonds, payment of premiums for insurance on the System hereafter required and, generally, all expenses, exclusive of depreciation, which under generally accepted accounting practices are properly allocable to operation and maintenance of the System, but only such expenses as are reasonably and properly necessary to the efficient operation and maintenance of the System shall be included.

“Project” means the acquisition and construction of drinking water system improvements, and other related improvements to the District’s System, including all equipment and necessary appurtenances thereof related to the funding approved by the Drinking Water Board.

“Revenues” means all gross income and revenues of any kind, from any source whatsoever, derived from the operation of the System, including, without limitation, all fees, rates, connection charges, impact fees imposed with respect to the Project to the extent such impact fees are pledged and available for payment of Bonds, if any, and other charges, the gross revenues of all improvements, additions, and extensions of the System hereafter constructed or acquired, and all interest earned by and profits derived from the sale of investments made with the income and Revenues. Revenues does not mean property taxes imposed or collected by or on behalf of the District to be used for Operation and Maintenance Expenses.

"System" means the whole and each and every part of the culinary water system of the District, including the Project to be acquired and constructed pursuant to the funding from the DWB, and all property, real, personal and mixed, of every nature now or hereafter owned by the District and used or useful in the operation of such water system, together with all improvements, extensions, enlargements, additions, and repairs thereto which may be made.

1. OWNERSHIP OF WATER SYSTEM

The parties hereby acknowledge and recognize that at all times the District's System and all parts and components thereof, including all water rights, rights-of-way, easements, wells, tanks, etc., including, but not limited to, all assets listed on Exhibit A, are exclusively owned by the District, and only the District, and that the Company has no real or personal property interest in any part or component of the District's culinary water System, whether set forth in Exhibit A or otherwise, either now existing, or as may be acquired hereafter except the Company's reversionary interest as set forth in the Company's Bill of Sale to the District dated February 28, 2009, the Company's Water Rights Deed to the District dated February 28, 2009 and recorded in the Office of the Sanpete County Recorder on September 8, 2009 in Book 593 at Page 1204, as entry number 165581, and the License Agreement between the District and the Company dated December 5, 2012 and recorded in the Office of the Sanpete County Recorder on December 13, 2012 in Book 640 at Page 1182, as entry number 187954. The parties further acknowledge and recognize that all assets and funds of the District's System must be kept separate, apart and independent from any assets and funds of the Company and that any and all additions or improvements to the District's System shall be the sole and exclusive property of the District and that the Company shall have no ownership interest now, or at any time, in any part or component of the District's System except the Company's reversionary interest referred to above. The Company hereby agrees that it shall keep all District assets and funds separate, apart and independent from any and all Company assets and funds. Pursuant to the Company's reversionary interest referred to above in this paragraph 1, hereinafter referred to as the "Company's Reversionary Interest", title to the water distribution system, water rights, and license described in the above-referenced Bill of Sale, Water Rights Deed, and License Agreement, respectively, automatically revert to the Company upon the initiation of the dissolution process of the District. The Company's Reversionary Interest is hereby amended by adding the following requirement thereto: In the event the dissolution process of the District is initiated at any time after the date of this Agreement, said water distribution system, water rights, and license shall not revert back to the Company unless and until the Company, concurrently therewith, pays the then outstanding balance(s) of the District's Bonds, plus any amount, including penalties, to taxing authorities, that may become due and owing as a consequence of losing or no longer qualifying for tax exempt funding on System improvements. However, the Company at that time shall have the right, in the Company's sole discretion and in lieu of the foregoing, to waive the Company's Reversionary Interest, or to

assign the Company's Reversionary Interest and the assumption of the then outstanding balance(s) of the District's Bonds to a local governmental entity such as Sanpete County.

2. OPERATION OF WATER SYSTEM

- a. The Company, for and on behalf of the District, shall invoice all water customers of the District's System and shall take any and all steps or measures available to the Company to collect all invoices for the District, including delinquent or late payments, and the Company shall use all enforcement measures or methods available to it to collect such invoices, including the ability to place liens against property associated with members of the Company who are also customers of the System who are delinquent or late in payments to the District, consistent with the District's regulations. All Revenues collected related to the System are the funds and monies of the District and not the Company and shall be immediately delivered to the District, even if collected with the assistance of the Company. The District shall reimburse the Company for recording fees, court costs, and reasonable attorney fees expended by the Company to collect such invoices, including placing liens against property associated with members of the Company and any such lien foreclosure action or other debt collection action to collect on such invoices.
- b. Other than invoicing and collecting water payments, the System shall be operated by the District. The Company only agrees hereunder to send invoices and collect invoices for the District and otherwise does not agree to operate the District's System.
- c. The Company agrees to advise the District and its Board regarding water rates so that the rates for all water service supplied by the System to all customers within or without the boundaries of the District shall be sufficient to pay the cost of operating and maintaining the System and the payment of debt obligations secured by the Revenues of the System including approved funding from the Drinking Water Board any other Bonds or indebtedness of the District, which rates shall be sufficient to produce Net Revenues that are equal to or greater than 125% of the annual debt service on all debt obligations secured by the Revenues, provided such rates must be reasonable rates for the type, kind, and character of the service rendered. There shall be no free service to any customers, including the District.
- d. The Company will not sell, lease, mortgage, encumber, or in any manner dispose of the System or any substantial part thereof, including any and all extensions and additions that may be made. The District will not sell, lease, or in any manner dispose of the

System or any substantial part thereof, including any and all extensions and additions that may be made.

- e. The Company will not grant a franchise for the operation of any competing water system within District's limits or service area, and the Company shall not take any action or do anything that would provide competing water service within the District or its service area.
- f. The Company will maintain its identity, will make no attempt to cause its existence to be abolished and will resist all attempts by other entities to annex all or any part of the territory now or hereafter in the District or served by the System.

3. **DISTRICT NOT LIABLE FOR COMPANY OBLIGATIONS**

By this Agreement, the District does not assume any liabilities of the Company, nor take responsibility for any assets of the Company, nor assume any liability for the operations of the Company. The Company agrees to indemnify the District from any and all liabilities of the Company, such as employment taxes or other obligations of the Company related to Company employees or agents.

4. **REPRESENTATIONS AND WARRANTIES**

4.1 **Representations and Warranties of the Company.** The Company hereby represents and warrants to the District as follows:

- (a) **Status.** The Company is a Utah corporation validly existing and in good standing at this time under the laws of the State of Utah.
- (b) **Authority.** The Company has the absolute right, power, authority and capacity to enter into and perform this Agreement in accordance with its terms.
- (c) **Execution.** The execution and performance of this Agreement by the Company will not violate, or result in a breach of, or constitute a default under, any agreement, instrument, judgment, order or decree to which the Company is a party or to which the Company may be subject, nor will such execution or performance constitute a violation of any fiduciary duty to which the Company is subject.
- (d) **Binding Agreement.** Upon execution and delivery hereof, this Agreement and the agreements and instruments contemplated herein shall be legal, valid and binding obligations of the Company and shall be enforceable against the Company in accordance with their respective terms.

- (e) Suits and Proceedings. There are no suits or proceedings known to the Company to be pending or threatened in any court, arbiter or mediator, or before any administrative board, commission, or by any federal, state or other governmental department or agency, which directly or indirectly affect the District's culinary water System, or which, if adversely determined, would have a material adverse affect on the System or the transactions contemplated by this Agreement.
- (g) Third-Party Approvals. Other than Drinking Water Board approvals, no consents or approvals of any third party or parties are required prior to the execution, delivery and performance of this Agreement and the other documents referred to herein.
- (h) No Material Adverse Changes. Since the date of this Agreement there has not been and will not be any undisclosed, material adverse changes in the Company, its management or its assets, that are known to the Company.
- (i) No Misstatements. No statements of information or fact by the Company contained in this Agreement or furnished by the Company to the District pursuant to this Agreement, contain or will contain any untrue statement of a material fact, or have omitted any material fact(s) necessary to make such statements or information not misleading. There are no facts known to the Company which have not been disclosed to the District and which, in light of the circumstances presently prevailing, could reasonably be expected to have a material adverse effect on the District's System.

4.2 Representations and Warranties of the District. The District hereby represents and warrants to the Company as follows:

- (a) Status. The District is a Utah special service district duly organized, validly existing, and in good standing under the laws of the State of Utah, and has full power and authority to own, operate and lease its properties as presently owned, operated and leased.
- (b) Authority. The District has the absolute right, power, authority and capacity to enter into and perform this Agreement in accordance with its terms without any other or further authorization, action or proceeding.
- (c) Ownership of Water System. The District owns and holds legal and beneficial title of record to its culinary water System and all of the assets and rights constituting the same will be expressly set forth in Exhibit A.

- (d) Execution. The execution and performance of this Agreement by the District will not violate, or result in a breach of, or constitute a default under, any agreement, instrument, judgment, order or decree to which the District is a party or to which the District may be subject, nor will such execution or performance constitute a violation of any fiduciary duty to which the District is subject.
- (e) Binding Agreement. Upon execution and delivery hereof and as of Closing, this Agreement and the agreements and instruments contemplated herein shall be legal, valid and binding obligations of the District and shall be enforceable against the District in accordance with their respective terms.
- (f) Suits and Proceedings. There are no suits or proceedings known to the District to be pending or threatened in any court, arbiter or mediator, or before any administrative board, commission, or by any federal, state or other governmental department or agency, which directly or indirectly affect the water System, or which, if adversely determined, would have a material adverse effect on the System or the transactions contemplated by this Agreement.
- (f) Third-Party Approvals. Other than Drinking Water Board approvals, no consents or approvals of any third party or parties are required prior to the execution, delivery and performance of this Agreement and the other documents referred to herein.
- (g) No Misstatements. No statements of information or fact by the District contained in this Agreement or furnished by the District to the Company pursuant to this Agreement, contain or will contain any untrue statement of a material fact, or have omitted any material fact(s) necessary to make such statements or information not misleading. There are no facts known to the District which have not been disclosed to the Company and which, in light of the circumstances presently prevailing, could reasonably be expected to have a material adverse effect on this transaction.

5. **CONDITIONS PRECEDENT**

5.1 **Conditions of the Company's Obligation to Close**. The obligation of the Company to consummate the transactions contemplated by this Agreement is subject to the fulfillment (or the waiver thereof by the Company in writing) of the following conditions at or before Closing:

- (a) The District's Representations. All representations and warranties made by the District shall be true, accurate and correct as of Closing, and there shall be no breach in the warranties or covenants made hereunder by the District.

(b) Delivery of Documents. The District shall have executed and delivered to the Company any and all documents necessary or advisable to consummate the transactions contemplated by this Agreement.

5.2 Conditions of the District's Obligation to Close. The obligation of the District to consummate the transactions contemplated by this Agreement is subject to the fulfillment (or the waiver thereof by the District in writing) of the following conditions at or before Closing:

(a) The Company's Representations. All representations and warranties made by the Company shall be true, accurate and correct as of Closing, and there shall be no breach in the warranties or covenants made hereunder by the Company.

(b) Delivery of Documents. The Company shall have executed and delivered to the District any and all documents required or necessary to consummate the transactions contemplated by this Agreement.

6. INDEMNIFICATION

6.1 Indemnification of the Company. Without waiving, and subject to, any governmental immunity provided by law to either party, the District shall indemnify, defend, and hold harmless the Company, and its officers, directors, employees and agents from any and all damages, claims, liabilities, losses, costs and expenses whatsoever arising out of, attributed to, or incurred with respect to: (a) any untruth, inaccuracy, or breach of any warranty or representation made by the District under this Agreement; (b) the untruths or inaccuracy of any representation in, or omission from any certificate or instrument executed and delivered or to be executed and delivered by or on behalf of the District in connection with this Agreement; (c) any obligation assumed by the District pursuant to this Agreement; and (d) any act or omission by the District in any liability, claim, loss or litigation involving the System and that relates to facts or circumstances arising prior to the Closing.

6.2 Indemnification of the District. Without waiving, and subject to, any governmental immunity provided by law to either party, the Company shall indemnify, defend, and hold harmless the District, and its officers, trustees, employees and agents from any and all damages, claims, liabilities, losses, costs and expenses whatsoever arising out of, attributed to, or incurred with respect to: (a) any untruth, inaccuracy, or breach of any warranty or representation made by the Company under this Agreement; (b) the untruths or inaccuracy of any representation in, or omission from any certificate or instrument executed and delivered or to be executed and delivered by or on behalf of the Company in connection with this Agreement; (c) any obligations of the Company; and (d) any act or omission by the Company in any liability, claim, loss or litigation

involving the System that relates to facts or circumstances not identified in Exhibit B arising after the Closing.

- 6.3 **Indemnification Procedures.** Upon receipt by an indemnified party of notice of any action, suit, proceeding, claim, demand or assessment against such indemnified party which might give rise to a claim for indemnification, each indemnified party shall give written notice of it to the indemnifying party indicating the nature of such matter and the basis for it. A claim to indemnity may, at the option of the indemnified party, be asserted as soon as such action has been threatened by a third party orally or in writing, regardless of whether actual harm has been suffered or out-of-pocket expenses incurred. The indemnifying party, at its expense, shall assume the complete defense of such action, suit, proceeding, claim, demand, or assessment with full authority to conduct such defense and to settle or otherwise dispose of the same, and the indemnified party will fully cooperate in such defense, and shall have the right to participate in such defense at its own cost and expense. Any such action shall be handled consistently with the commercially reasonable normal business practices of the indemnifying party. Notwithstanding anything to the contrary, the indemnifying party will not, in defense of any such action, suit, proceeding, claim, demand, or assessment, except with the consent of the indemnified party, consent to the entry of any judgment against the indemnified party or enter into any settlement which does not include as an unconditional term of it the giving by the claimant or plaintiff to the indemnified party of a release from all liability in respect of such matter. If the indemnifying party is precluded from, fails, or refuses to provide an adequate defense of the indemnified party, and the indemnified party has given notice to the indemnifying party of a demand to defend, the indemnifying party shall be liable to the indemnified party for such legal or other expenses subsequently incurred by the indemnified party in connection with the defense of any action, suit, proceeding, claim, demand, or assessment.

7. **DEFAULT**

In the event that any of the following occurs, the non-defaulting party shall be entitled to terminate this Agreement and to pursue any and all legal and/or equitable rights and remedies which it may have against the defaulting party including, without limitation, the remedy of specific performance:

- 7.1 **False Statement.** Any written representation, warranty or statement made by either party hereto, or any written statement, report or document which is required to be furnished to either party hereunder, which is materially false or misleading; or
- 7.2 **Failure to Comply.** Failure by either party to comply with any or all terms of this Agreement, provided that such failure has continued for ten (10) days following receipt by the other party of written notice specifying

with particularity such failure and requesting the defaulting party to cure such failure.

8. ADDITIONAL PROVISIONS

- 8.1 **Cooperation.** Both the Company and the District agree to cooperate with each other in carrying out the express intent of this Agreement, including the timely execution of all necessary documents and the provision of records and information to the other party as requested.
- 8.2 **Survival of Representations and Warranties.** The respective obligations of the District and the Company hereunder and all representations and warranties made in this Agreement, all exhibits hereto, and all certificates and documents delivered pursuant hereto, shall survive Closing.
- 8.3 **Binding Agreement.** This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the respective parties hereto.
- 8.4 **Captions.** The headings used in this Agreement are inserted for reference purposes only and shall not be deemed to define, limit, extend, describe, or affect in any way the meaning, scope or interpretation of any of the terms or provisions of this Agreement or the intent hereof.
- 8.5 **Counterparts.** This Agreement may be signed in any number of counterparts with the same effect as if the signatures upon any counterpart were upon the same instrument. All signed counterparts shall be deemed to be one original.
- 8.6 **Severability.** The provisions of this Agreement are severable, and should any provision hereof be void, voidable, unenforceable or invalid, such void, voidable, unenforceable or invalid provision shall not affect the other provisions of this Agreement.
- 8.7 **Waiver of Breach.** Any waiver by either party of any breach of any kind or character whatsoever by the other, whether such be direct or implied, shall not be construed as a continuing waiver of, or consent to, any subsequent breach of this Agreement.
- 8.8 **Cumulative Remedies.** The rights and remedies of the parties hereto shall be construed cumulatively, and none of such rights and remedies shall be exclusive of, or in lieu or limitation of, any other right, remedy or priority allowed by law.
- 8.9 **Merger.** Except for the Bill of Sale, Water Rights Deed, and License Agreement, all as described and referred to in paragraph 1 above, this Agreement constitutes the entire agreement between the parties relating

to the operation of the District's culinary water System and supersedes, terminates, and/or consolidates all prior agreements and negotiations concerning the matters addressed herein.

- 8.10 **Amendment.** This Agreement may not be modified except by an instrument in writing signed by the parties hereto.
- 8.11 **Interpretation.** This Agreement shall be interpreted, construed and enforced according to the substantive laws of the state of Utah.
- 8.12 **Attorney Fees.** In the event any action or proceeding is brought by either party concerning this Agreement, the prevailing party shall be entitled to recover its expenses and reasonable attorney fees, whether such sums are expended with or without suit, at trial, on appeal or in any bankruptcy or insolvency proceeding.
- 8.13 **Term.** The initial term of this Agreement shall be for ten (10) years. This Agreement shall automatically be renewed for two additional ten (10) year terms unless either party provides notice in writing to the other party within one (1) year immediately preceding the expiration of the initial ten (10) year term of this Agreement or within one (1) year immediately preceding the expiration of the first renewal ten (10) year term of this Agreement, as the case may be, that the notifying party elects to not renew the Agreement. Either party may terminate this Agreement upon providing written notice to the other party at least twelve (12) months prior to termination of this Agreement.
- 8.14 **Notice.** All notices provided for herein shall be in writing and shall be given by first class mail, certified or registered, postage prepaid, addressed to the parties at their respective addresses set forth below or to such address as may hereafter be designated to the other party in writing:

to the Company: Skyline Mountain Resort
11860 East Clubhouse Drive
RR1, Box 247
Fairview, UT 84629

with a copy to: Michael R. Jensen
90 W. 100 N., Suite 3
Price, UT 84501

to the District: Skyline Mountain Special Service District
2201 SMR
Fairview, Utah 84629

with a copy to: J.Craig Smith
Smith Hartvigsen, PLLC

175 S. Main, Suite 300
Salt Lake City, Utah 84111

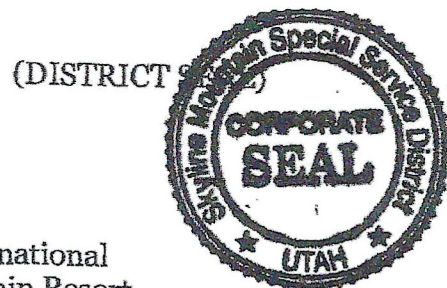
- 8.14 **Exhibits and Recitals.** All exhibits and/or addenda attached or to be attached hereto before closing and recitals shall be considered to be fully incorporated into, and made a part of, this Agreement as if such exhibits, addenda, and/or recitals were fully and completely set forth herein. Any internal inconsistencies, however, shall be resolved in favor of the terms specifically set forth in the body of this Agreement.
- 8.15 **Time of Essence.** Time is the essence of this Agreement.
- 8.16 **Costs.** All costs and expenses, including attorney fees, incurred by either party in conjunction with this Agreement shall be paid by the party which has incurred such costs and expenses, except as otherwise set forth herein.
- 8.17 **Assignment.** Neither party may assign its rights or delegate its duties under this Agreement to any third party without the other's prior written consent, which consent may not be unreasonably withheld or delayed.
- 8.18 **Public Announcement.** Any notices to third parties and other publicity concerning this Agreement and transactions contemplated by this Agreement must be first approved by the other party, but such approval will not be unreasonably withheld or delayed, provided, however, compliance with the Requirements of the Utah Government Records Management Act shall not be interpreted or construed as a violation of this provision. In addition, this provision does not apply to routine notices concerning Company Board and Shareholder Meetings or the District's Board Meetings, to the agenda for such meetings, or to notices or information provided in connection with obtaining lending approvals.

The District:
Skyline Mountain Special Service District

By: Edward M. Collins
Edward M. Collins, Chair

ATTEST:

Roy Fox
Roy Fox, District Clerk



Company:
Sports Haven International
dba Skyline Mountain Resort

By: Everett Taylor
Everett Taylor, President

ATTEST:

Sue Schmidt
Sue Schmidt, Secretary

EXHIBIT B

Impact Fee Analysis



WATER SYSTEM IMPACT FEE FACILITY PLAN AND IMPACT FEE ANALYSIS

(HAL Project No.: 299.09.100)

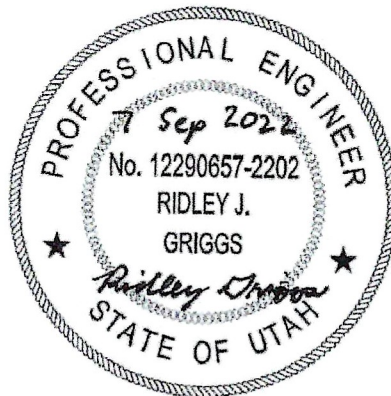
September 2022

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT

WATER IMPACT FEE

FACILITY PLAN AND ANALYSIS

(HAL Project No.:299.09.100)



Ridley J. Griggs, P.E.
Project Engineer



SEPTEMBER 2022

ACKNOWLEDGEMENTS

Hansen, Allen & Luce thanks the following individuals for their contributions to this project:

SMSSD Government

Craig Godwin, Chairman
Don Hunter, Vice-Chair
Beca Mark, Clerk
Gene Nielsen, Secretary
David Weber, SMSSD/SMR Liaison
Roy Fox, Treasurer

SMSSD Staff

Roy Fox, Water Superintendent
Jeremy Fox, Water Operator

Hansen, Allen & Luce, Inc.

Richard M. Noble, P.E., Project Manager
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Easton G. Hopkins, Staff Engineer

IMPACT FEE CERTIFICATION

The Utah Impact Fee Act requires certifications for the Impact Fee Facilities Plan (IFFP) and the Impact Fee Analysis (IFA). Hansen, Allen & Luce provides these certifications with the understanding that the recommendations in the IFFP and IFA are followed by District Staff and elected officials. If all or a portion of the IFFP or IFA are modified or amended, or if assumptions presented in this analysis change substantially, this certification is no longer valid. All information provided to Hansen, Allen & Luce, Inc. is assumed to be correct, complete, and accurate.

IFFP Certification

Hansen, Allen & Luce, Inc. certifies that the Impact Fee Facilities Plan (IFFP) prepared for the water system:

1. includes only the costs of public facilities that are:
 - a. allowed under the Impact Fees Act; and
 - b. actually incurred; or
 - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act.

HANSEN, ALLEN & LUCE, INC.

IFA Certification

Hansen, Allen & Luce, Inc. certifies that the Impact Fee Analysis (IFA) prepared for the water system:

1. includes only the costs of public facilities that are:
 - a. allowed under the Impact Fees Act; and
 - b. actually incurred; or
 - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
 - d. costs with grants or other alternate sources of payment; and
3. complies in each and every relevant respect with the Impact Fees Act.

HANSEN, ALLEN & LUCE, INC.

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IMPACT FEE SUMMARY

The **purpose** of the Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) is to comply with the requirements of the Utah Impact Fees Act by identifying demands placed on the existing water system by new development and by identifying the means by which the District will meet these new demands. The Skyline Mountain Special Service District (SMSSD) Water System Master Plan has been used in support of this analysis. There are several growth-related capital facilities anticipated to be needed in the next 10 years, so the calculated impact fee is based on anticipated capital facility projects as well as existing excess capacity and documented historic costs.

The impact fee **service area** is the water system service area, which includes the current district boundary and future areas anticipated to be annexed into the district.

The existing and proposed **level of service** for the water system includes the following:

Water Supply

- Peak Day Indoor Source Capacity: 270 gallons per day per equivalent residential connection (gpd/ERC)
- Indoor Source Volume: 0.30 acre-feet/ERC (Annual Demand)
- Indoor Storage Capacity: 270 Gallons/ERC
- Peak Day Outdoor Source Capacity: 10,800 gallons per day per irrigated acre
- Outdoor Source Volume: 3.0 acre-feet per irrigated acre (Annual Demand)
- Outdoor Storage Volume: 2,680 gal/irr-ac
- Fire Storage Capacity: 378 Gallons/ERC
- Transmission Capacity: 40 pounds per square inch (psi) minimum during peak day demand conditions and 30 psi minimum during peak instantaneous conditions

Fire Suppression

- Minimum Fire Flow: 1,000 gpm for 2 hours (120,000 gallons) for existing infrastructure and 1,500 gpm for 2 hours (180,000 gallons) for future infrastructure.
- Minimum Pressure: 20 psi residual during peak day + fire flow event

The existing system served about 247 equivalent residential connections and 8 irrigated acres at the end of 2021. Additionally, 311 improved lots exist in Areas 2 and 3 of the District but are not connected to the water system. Projected **growth** adds 276 equivalent residential connections and 9.3 irrigated acres in the next 10 years for a total of 834 connections or equivalent and 17.3 irrigated acres.

This IFFP and IFA does not consider projects needed to correct existing deficiencies. The costs calculated for the capacity required for growth in the next 10 years comes from the proportional historical buy-in costs of **excess capacity** and **new projects** required entirely to provide capacity for new development.

The **water impact fee** is calculated based on the buy-in cost for facilities which have capacity remaining, and the estimated cost of projects required to support future growth. These costs were added together and divided by the number of equivalent residential connections (ERCs) that are projected to be added within the next 10 years.

Components of the impact fee are presented in the table below. The maximum allowable water system impact fee for one ERC is **\$29,881** for indoor use only.

MAXIMUM ALLOWABLE IMPACT FEE BY COMPONENT

Component	Per Typical Residential Connection (Indoor Use)	Per Irrigated Acre
Source	\$1,495.24	\$59,809.73
Storage	\$525.46	\$5,215.64
Transmission	\$27,800.32	\$0.00
Planning	\$59.87	\$0.00
Total	\$29,881	\$65,025

1. It is assumed that any irrigated acreage will be associated with indoor ERCs. Planning costs are accounted for in the indoor fees

Impact fees for irrigated acreage should be charged to users who plant irrigated landscaping and are not connected to the separate irrigation system. The maximum water system impact fee for one irrigated acre is **\$65,025**. For example, the proposed water system impact fee for a residential connection with 0.15 irrigated acres is **\$39,635** ($\$29,881 + (0.15 \times \$65,025)$).

SMSSD may choose to charge an initial impact fee less than the maximum allowable fee and recover the remainder of project costs through rates or other means.

SECTION 1 INTRODUCTION

1.1 Background

Skyline Mountain Special Service District serves a 480-acre portion of Sanpete County, Utah. Its service area includes the resort and cabins up the mountain to the east. In 2021 SMSSD reported a service population of 96. SMSSD's primary water source is three existing wells.

1.2 Purpose

The District has recognized the need to plan for increased demands on its water system as a result of growth. To do so, an Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) were completed to allow the District to charge an impact fee to help pay for capital projects necessary to support future growth.

This report identifies those items that the Utah Impact Fees Act specifically requires, including demands placed upon existing facilities by new development and the proposed means by which the municipality will meet those demands. This analysis was based on the Water Master Plan that was prepared in 2022. The master plan identified several growth-related projects needed within the 10-year planning window. Therefore, the calculated impact fee is based on excess capacity and documented historic costs, as well as future capital projects.

1.3 Impact Fee Collection

Impact fees enable local governments to finance public facility improvements necessary for growth, without burdening existing customers with costs that are exclusively attributable to growth.

An impact fee is a one-time charge on new development to pay for that portion of a public facility that is required to support that new development.

In order to determine the appropriate impact fee, the cost of the facilities associated with future development must be proportionately distributed. As a guideline in determining the "proportionate share," the fee must be found to be roughly proportionate and reasonably related to the impact caused by the new development.

1.4 Master Planning

A Water System Master Plan was prepared in 2022 and used in conjunction with this analysis. The master plan for the District's water system is more comprehensive than the IFFP and IFA. It provides the basis for the IFFP and IFA and identifies all capital facilities required for the water system inside the 20-year planning range, including maintenance, repair, replacement, and growth-related projects.

The recommendations made within the master plan are in compliance with current District policies and standard engineering practices.

A hydraulic model of the water system was used to complete the Water System Master Plan. The model was used to assess existing performance, level of service, to establish a proposed level of service and to confirm the effectiveness of the proposed capital facility projects to maintain the proposed level of service over the next 10 years.

SECTION 2 EXISTING SYSTEM AND REMAINING CAPACITY

2.1 General

The purpose of this section is to provide information regarding the existing water system, identify the current level of service, and analyze the remaining capacity of the existing system's facilities.

SMSSD's existing water system is comprised of a pipe network, water storage facilities, and water sources. Figure 2-1 illustrates the existing water system that services the entire District.

2.2 Service Areas

SMSSD is comprised of three service areas. Connections to the existing system presently exist only in Area 1. Areas 2 and 3 currently consist of a mixture of improved and unimproved lots with no water service except at District fill stations. The master plan identified the proper capital facilities projects to serve those existing users and support future anticipated growth.

2.3 Existing Equivalent Residential Connections and Irrigated Acreage

The majority of SMSSD is residential users that are counted as one Equivalent Residential Connection (ERC). The use of ERCs is a common engineering practice used to describe the entire system's usage based on a common unit of measurement. An ERC is equal to the average demand of one residential connection. Using ERCs for analysis is a way to allocate existing and future demands over non-residential land uses.

A separate irrigation system exists that serves the golf course and adjacent properties in the "A" and "GC" sections of the resort. In the future, customers in these areas will be allowed to connect to the irrigation system if they convey shares in Birch Creek Irrigation Company to the irrigation system. Customers without shares in Birch Creek Irrigation Company would either irrigate from the drinking water system or not irrigate at all.

At the end of 2021, the District was estimated to have 247 ERCs and 8 irrigated acres served by the water system.





2.4 Level of Service

The proposed level of service provided by the water system has been established by the District to provide a reasonable supply of water to their residents. This level of service establishes the sizing criteria for the District's distribution (pipelines), source, storage facilities, and water rights for the water system. The proposed level of service standards are provided below:







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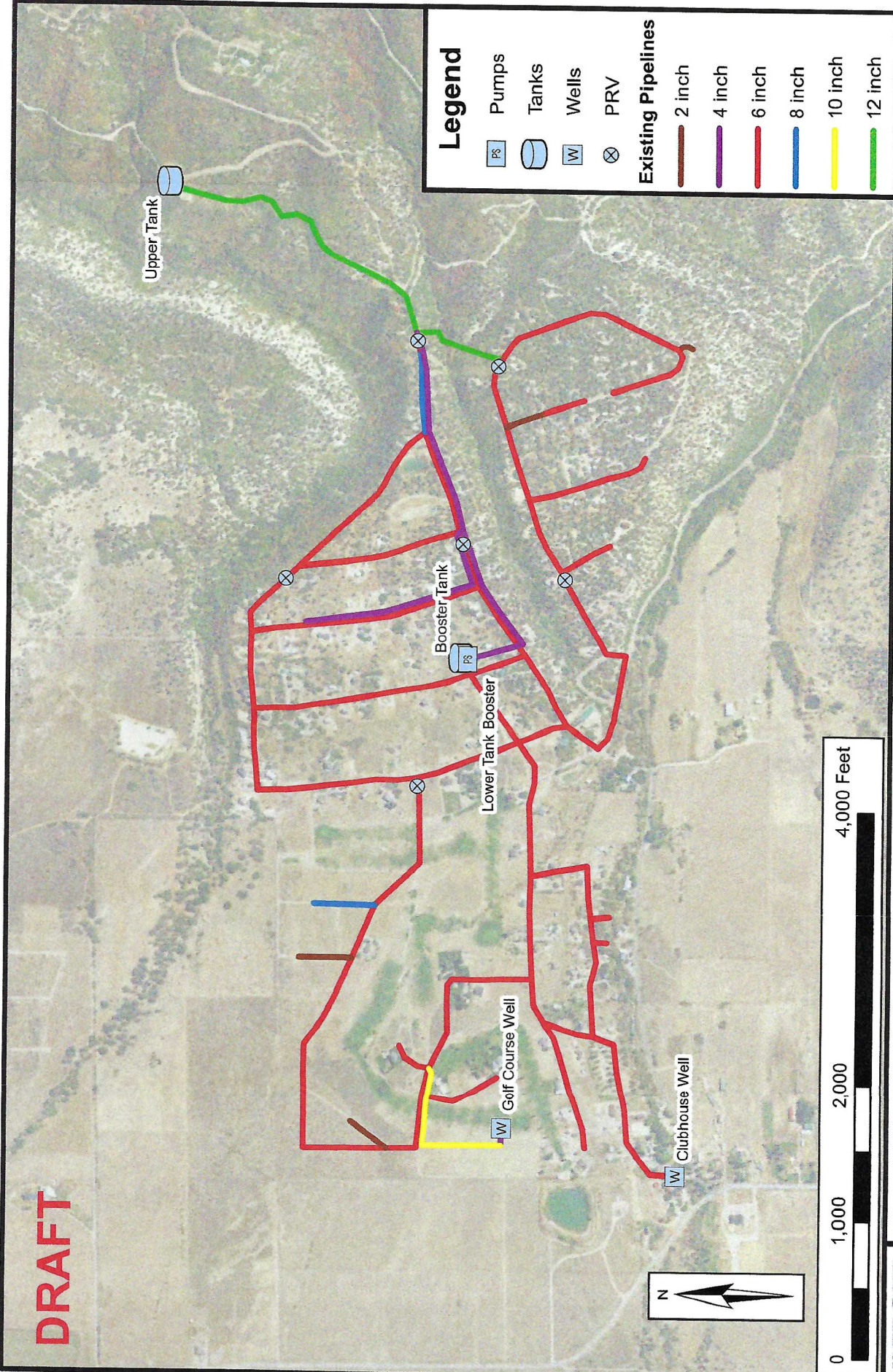
Upper Tank

Legend

-  Pumps
-  Tanks
-  Wells
-  PRV

Existing Pipelines

-  2 inch
-  4 inch
-  6 inch
-  8 inch
-  10 inch
-  12 inch



**HANSEN
ALLEN
& LUCE, INC.**
ENGINEERS

**SKYLINE MOUNTAIN
SPECIAL SERVICE DISTRICT**

**EXISTING
WATER SYSTEM**

**FIGURE
2-1**

Water Supply

- Indoor Source Capacity: 270 gpd/ERC (Peak Day)
- Indoor Source Volume: 0.30 ac-ft/ERC (Annual Demand)
- Indoor Storage Capacity: 270 Gallons/ERC
- Outdoor Source Capacity: 10,800 gpd/irr-ac (Peak Day)
- Outdoor Source Volume: 3.0 ac-ft/irr-ac (Annual Demand)
- Outdoor Storage Capacity: 2,680 Gallons/irr-ac
- Fire Storage Capacity: 378 Gallons/ERC
- Transmission Capacity: 40 psi minimum during peak day demand conditions and 30 psi minimum during peak instantaneous conditions

Fire Suppression

- Minimum Fire Flow: 1,000 gpm for 2 hours (120,000 gallons) for existing infrastructure and 1,500 gpm for 2 hours (180,000 gallons) for future infrastructure.
- Minimum Pressure: 20 psi residual during peak day + fire flow event

2.5 Methodology Used to Determine Existing System Capacity

Each component of the water system was assessed a capacity in terms of gallons per minute (for peak day source), acre-feet per year (for annual source), or gallons (for storage). Demands on each component were computed by applying the level of service to the amount of ERCs and irrigated areas served by each component. The difference between the capacity of the component and the demand on the component is the component's remaining capacity, which can be used to serve either ERCs or irrigated acres. A hydraulic model was developed for the purpose of assessing system operation and transmission capacity.

2.6 Water Source & Remaining Capacity

SMSSD's primary source of water comes from several wells. Table 2-1 summarizes the information of each source and all sources total.

**Table 2-1
Existing Water Sources**

Source	Available Flow (gpm)	Existing Demand (ERCs)	Existing Demand (irr-ac)	Existing Demand (gpm)	Remaining Capacity (gpm)
Golf Course Well	65	247	8	106	14
Clubhouse Well	55				
Thad's Peak Well	38	0	0	0	38
Total	158	247	8	106	52

Projections for source requirements indicate that the SMSSD water system will require additional source capacity to support growth within the 10-year planning window. Existing source projects have been completed in the last several years to provide source for that window and are impact fee eligible. Several future projects required to accommodate growth are shown in Table 2-2 below with their respective capacities.

**Table 2-2
Future Source Projects and Capacity**

Project	Capacity (gpm)
Area 1 Cottonwood Spring Connection	100
Area 2 Proposed Well	50
Area 3 Colledge Well Purchase	75
Total	225

2.7 Storage Facilities & Remaining Capacity

SMSSD currently operates two water storage tanks totaling 325,000 gallons. The storage level of service is 270 gallons of storage per ERC plus fire flow storage. The fire flow storage requirements were provided by the Fairview City Fire Chief during the 2022 master planning effort as per IFC. A summary of each tank is shown below in Table 2-3.

**Table 2-3
Existing Water Storage**

Tank	Capacity (gallons)	Existing Equalization Demand (gallons)	Fire Storage (gallons)	Emergency Storage (gallons)	Existing Storage Demand (gallons)	Remaining Capacity (gallons)
Booster	55,000	88,130	93,403	0	181,533	143,467
Upper	270,000					
Total	325,000	88,130	93,403	0	181,533	143,467

Projections indicate that the SMSSD water system will require more storage capacity to support growth within the 10-year planning window. Existing storage projects have been completed in the last several years to provide source for that window and are impact fee eligible. The future storage projects required to accommodate growth with their proposed capacities are shown in Table 2-4.

**Table 2-4
Future Storage Projects and Capacity**

Project	Capacity (gallons)	Capacity Added (gallons)
Area 1 Tank ¹	250,000	195,000
Area 2 Tank	310,000	310,000
Area 3 Tank	225,000	225,000
Total	785,000	730,000

1. The Area 1 tank project will replace the existing 55,000 gallon tank with a 250,000 gallon tank for a total increase in capacity of 195,000 gallons.

2.8 Water Rights & Remaining Capacity

The District owns a total of 222.35 acre-feet (AF) of water rights that are available to the water system. The level of service for water rights is 0.30 ac-ft/ERC and 3.0 ac-ft/irr-ac.

2.9 Distribution System

Pipe diameters range from 2 inches to 12 inches in diameter, with the majority being 6 inches in diameter. The larger pipes in the system were provided as transmission lines to fill the storage tanks and meet peak day and fire flow demands. Figure 2-1 illustrates the existing distribution pipelines. More pipes will be needed to support future growth.

2.10 Capital Facilities to Meet System Deficiencies

The existing water system meets the proposed level of service.

SECTION 3 IMPACT FEE FACILITY PLAN AND ANALYSIS

3.1 General

This section relies on the data presented in the previous sections to calculate a proposed impact fee based on an appropriate buy-in cost of available existing excess capacity previously purchased by the District, and the cost of projects needed to support projected growth.

The costs of the water system facility projects are presented. Also included in this section are the possible revenue sources that the District may consider to fund the recommended projects.

3.2 Growth Projections

The development of impact fees requires growth projections over the next ten years. Growth projections for SMSSD were made by incorporating the growth rate presented in the Master Plan. Total growth projections for the District through 2032 are summarized in Table 3-1.

**TABLE 3-1
GROWTH PROJECTIONS OVER NEXT TEN YEARS**

Year	ERCs	Irrigated Acres
2022	558 ¹	8.0
2023	587	8.6
2024	617	9.3
2025	648	10.1
2026	682	10.9
2027	716	11.8
2028	741	12.7
2029	763	13.7
2030	785	14.8
2031	809	16.0
2032	834	17.3

1. Accounts for 311 existing users in Areas 2 and 3 not currently connected into existing water system

The existing system served about 247 ERCs and 8 irrigated acres at the end of 2021. An additional 311 users exist in Areas 2 and 3 but are not currently connected to the water system. Projected growth adds 279 ERCs and 9.3 irrigated acres in the next 10 years for a total of 834 ERCs and 17.3 irrigated acres.

3.3 Cost of Existing and Future Water Facilities

Future growth can be served either by excess capacity in existing facilities or by constructing new facilities. Projected growth will necessitate the construction of more facilities. Both excess capacity and future projects were considered when developing impact fees.

Previously constructed water projects which have remaining capacity to support growth are shown in Table 3-2 and included in Appendix A. The impact fee eligible cost for each existing facility is also shown. These values are based on the remaining capacity for each facility. The remaining cost is attributable to growth and can be counted towards the impact fee.

**Table 3-2
Impact Fee Eligible Cost of Existing Facilities**

Project	Total Cost	% Eligible	Eligible Cost
Area 1 Transmission	\$2,425,826.46	23.05% ¹	\$559,224.79
Area 1 Source	\$264,292.38	32.72% ²	\$86,480.48
Area 1 Storage	\$316,881.17	44.14% ³	\$139,882.69
Total	\$3,007,000.00	-	\$785,587.97

1. Distribution infrastructure is sized to accommodate future users through buildout (321) in Area 1. A remaining capacity of 74 ERCs was calculated as the projected year buildout ERCs (321) minus ERCs existing at the beginning of year 2021 (247). This was then divided by 321 ERCs to obtain an eligible percent.
2. Calculated as the difference between peak day level of service (106.3 gpm) and peak day capacity for existing sources (158 gpm) divided by total source capacity.
3. Calculated as the remaining capacity in the entire system (143,467 gallons) divided by the total capacity of the system (325,000 gallons).

Future facilities needed to support growth are shown in Table 3-3 and on Figure 3-1. Estimated costs for these facilities are included as Appendix B.

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Project #5: Construct new 310,000 gallon tank
Project #4: Drill additional 50 gpm Well

Project #2: Develop Cottonwood Springs to convey spring water to Area 1

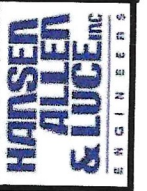
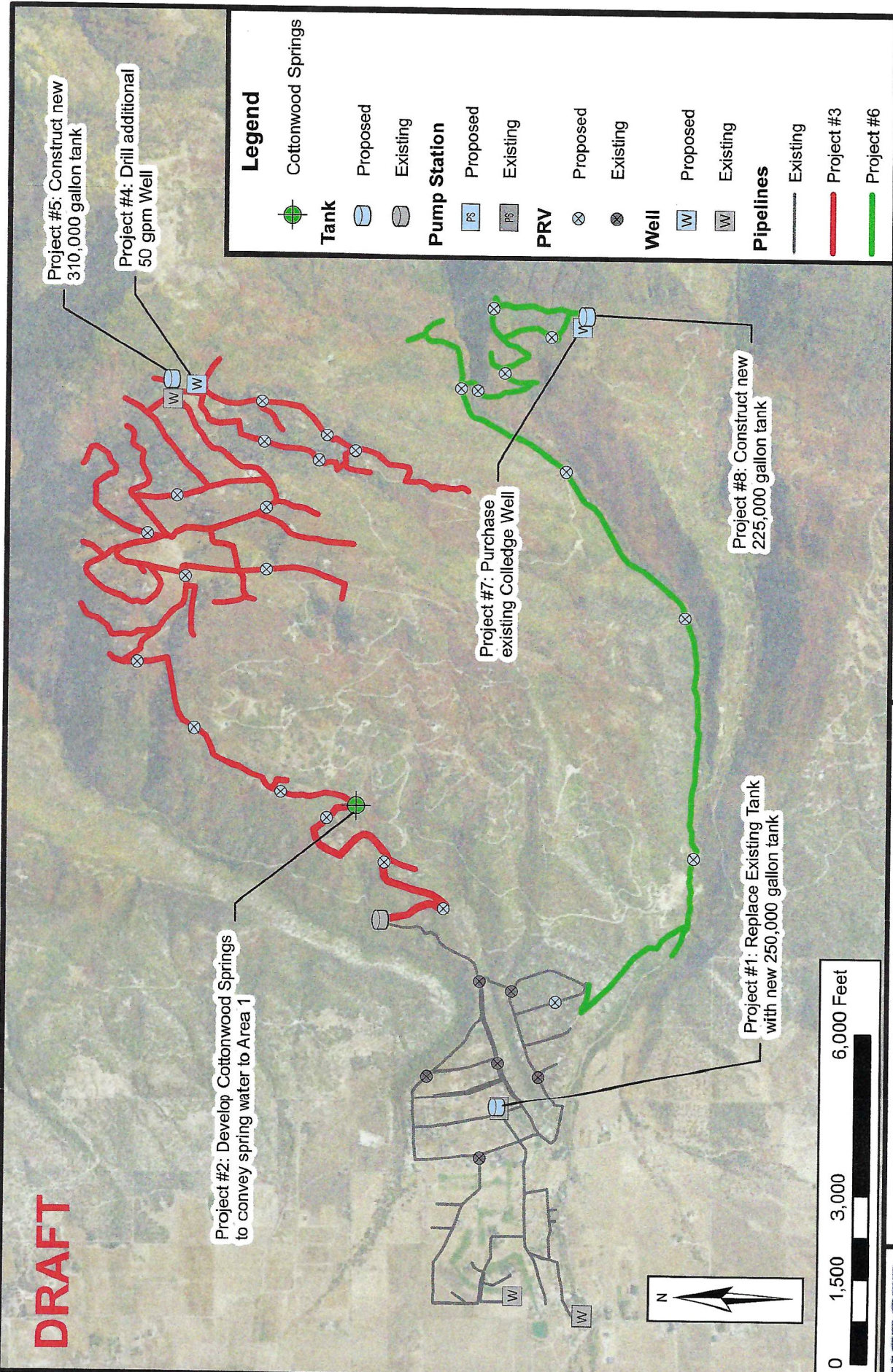
Project #7: Purchase existing Colledge Well

Project #1: Replace Existing Tank with new 250,000 gallon tank

Project #8: Construct new 225,000 gallon tank

Legend

- Cottonwood Springs
- Tank: Proposed (blue circle), Existing (grey circle)
- Pump Station: Proposed (PS in blue box), Existing (PS in grey box)
- PRV: Proposed (circle with X), Existing (circle with X)
- Well: Proposed (W in blue box), Existing (W in grey box)
- Pipelines: Existing (black line), Project #3 (red line), Project #6 (green line)



**SKYLINE MOUNTAIN
SPECIAL SERVICE DISTRICT**

**IMPACT FEE
FACILITY PLAN PROJECTS**

**FIGURE
3-1**

**Table 3-3
Estimated Impact Fee Eligible Cost of Future Facilities**

Project	Map ID	Source	Transmission	Storage	Total
Area 1 Storage Capacity	1	\$0.00	\$0.00	\$410,000.00	\$410,000.00
Equip Cottonwood Springs for Use	2	\$1,300,000	\$0	\$0	\$1,300,000
Area 2 Transmission Upgrades	3	\$0	\$13,340,000.00	\$0	\$13,340,000
Area 2 Source Capacity Upgrade	4	\$710,000.00	\$0	\$0	\$710,000
Area 2 Storage Capacity Upgrade	5	\$0	\$0	\$680,000.00	\$680,000
Area 3 Transmission Upgrade	6	\$0	\$5,700,000.00	\$0	\$5,700,000
Area 3 Source Capacity Upgrade	7	\$110,000.00	\$0	\$0	\$110,000
Area 3 Storage Capacity Upgrade	8	\$0	\$0	\$470,000.00	\$470,000
Totals		\$2,120,000.00	\$19,040,000.00	\$1,560,000.00	\$22,720,000.00

3.4 Impact Fee Unit Calculation

Only those costs attributed to the new growth in the next 10 years can be included in the impact fee. The following sections describe the impact fee calculation for each component.

Source

The District has recently funded the construction of several source projects to meet the demands in the Water System (See Table 3-2). The impact fee eligible costs as well as the costs for future sources projects is shown in Table 3-4.

**Table 3-4
Source Impact Fee Unit Calculation**

	Existing ¹	Future ²	Total
Eligible Cost	\$86,480.00	\$2,120,000.00	\$2,206,480.48
Capacity (gpm)	52	225	277
Source Impact (per gpm) ³ :			\$7,974.63
Source Impact (per ERC) ⁴ :			\$1,495.24
Source Impact (per irr-ac) ⁵			\$59,809.73

1. See Tables 2-1 and 3-2
2. See Table 2-2 and 3-3
3. Calculated as the sum of existing and future eligible costs divided by the sum of existing and future eligible capacity
4. Calculated at a proposed level of service of 270 gpd/ERC or 0.1875 gpm/ERC
5. Calculated at a proposed level of service of 10,800 gpd/irr-ac or 7.5 gpm/irr-ac

The portion of the source impact fee attributable to growth within 10 years was calculated considering additional capacity created by future projects and the remaining capacity in the water system. These results are shown in Table 3-5.

**Table 3-5
Source Cost by Time Period**

Time Period	ERCs served	Irr-ac Served	Buy-in Cost	Growth Cost	Total Cost
Existing Area 1	247	8	\$177,811.90	\$0.00	\$177,811.90
Existing Areas 2 and 3	311	0	\$18,225.95	\$446,794.67	\$465,020.62
Next 10 Years	276	9.3	\$37,975.62	\$930,941.95	\$968,917.56
Beyond 10 Years	118	0	\$30,278.91	\$742,263.38	\$772,542.30
Total	952	17.3	\$264,292.38	\$2,120,000.00	\$2,384,292.38

Storage

SMSSD's existing storage tanks have remaining capacity that is eligible for impact fees (See Table 3-2); however, future storage tanks will be required to maintain the level of service while accommodating projected growth. The eligible cost of these projects and the impact fee unit calculation is shown in Table 3-6.

**Table 3-6
Storage Impact Fee Unit Calculation**

	Existing ¹	Future ²	Total
Eligible Cost	\$139,882.69	\$1,560,000.00	\$1,699,882.69
Capacity (gal)	143,467	730,000	873,467
Storage impact (per gal)³			\$1.95
Storage impact (per ERC)⁴			\$525.46
Storage Impact (per Irr-ac)⁵			\$5,215.64

1. See Table 2-3 and 3-2
2. See Table 2-4 and 3-3
3. Calculated as the sum of existing and future eligible costs divided by the sum of existing and future eligible capacity
4. Calculated at the proposed level of service of 270 gal/ERC.
5. Calculated at the proposed level of service of 2,680 gal/irr-ac.

The portion of the storage impact fee attributable to growth within 10 years was calculated considering additional capacity created by future projects and the remaining capacity in the water system. These results are shown in Table 3-7.

**Table 3-7
Storage Cost by Time Period**

Time Period	ERCs served	Irr-ac Served	Buy-in Cost	Growth Cost	Total Cost
Existing Area 1	247	8	\$176,998.47	\$0.00	\$176,998.47
Existing Areas 2 and 3	311	0	\$32,281.55	\$360,010.39	\$392,291.94
Next 10 Years	276	9.3	\$32,640.07	\$364,008.69	\$396,648.76
Beyond 10 Years	118	0	\$74,961.07	\$835,980.92	\$910,941.99
Total	952	17.3	\$316,881.17	\$1,560,000.00	\$1,876,881.17

Transmission

Several transmission projects will be required to support projected growth through the 10-year planning period. The portion of the impact fee for these projects is shown in Table 3-8. This includes projects that the District has recently funded and have remaining capacity for growth.

**Table 3-8
Transmission Impact Fee Unit Calculation**

	Existing¹	Future²	Total
Eligible Cost	\$559,224.79	\$19,040,000.00	\$19,599,224.79
Capacity (ERCs) ³	705	705	705
Transmission Impact (per ERC)⁴			\$27,800.32

1. See Table 3-2
2. See Table 3-3
3. Transmission infrastructure is sized to accommodate future users through buildout (705 ERCs).
4. Calculated as the sum of existing and future eligible costs divided by the sum of existing and future eligible capacity

Expected transmission costs by time period are listed in Table 3-9. Transmission facilities are expected to support growth for more than 10 years. The portion of their costs attributable to growth outside of the 10-year planning window is not impact fee-eligible.

**Table 3-9
Transmission Cost by Time Period**

Time Period	ERCs served	Buy-in Cost	Growth Cost	Total Cost
Existing Area 1	247	\$1,866,601.67	\$0.00	\$1,866,601.67
Existing Areas 2 and 3	311	\$246,693.49	\$8,399,205.67	\$8,645,899.16
Next 10 Years	276	\$218,930.56	\$7,453,957.45	\$7,672,888.00
Beyond 10 Years	118	\$93,600.75	\$3,186,836.88	\$3,280,437.62
Total	952	\$2,425,826.46	\$19,040,000.00	\$21,465,826.46

Planning

The planning portion of the impact fee was calculated as shown in Table 3-10. Portions of SMSSD's 2022 master plan study that are attributable to growth (approximately 60% of total expenditures) are impact fee eligible. 100% of costs associated with the Impact Fee Facility Plan and Impact Fee Analysis are impact fee eligible.

**Table 3-10
Planning Component of Impact Fee**

Planning Document	Cost	% of Plan Associated with Growth	Cost Associated with Growth	ERCs Served	Cost per ERC
2022 Master Plan	\$13,045.57	60%	\$7,827.34	276	\$28.36
2022 IFFP and IFA	\$8,697.04	100%	\$8,697.04	276	\$31.51
Total	\$21,742.61	-	\$16,524.38	-	\$59.87

3.5 Total Impact Fee Calculation

The maximum allowable water system impact fee for one ERC is **\$29,881** for indoor use only. See Table 3-11. The maximum allowable water system impact fee for one for one irrigated acre is \$65,025. For example, the maximum allowable water system impact fee for one residential connection with 0.15 acres irrigated with the system is **\$39,635** (\$29,881 + (0.15 x \$65,025)).

**Table 3-11
Maximum Allowable Impact Fee**

Component	Per Typical Residential Connection (Indoor Use)	Per Irrigated Acre
Source	\$1,495.24	\$59,809.73
Storage	\$525.46	\$5,215.64
Transmission	\$27,800.32	\$0.00
Planning	\$59.87	\$0.00
Total	\$29,881	\$65,025

* It is assumed that any irrigated acreage will be associated with indoor ERCs. Planning costs are accounted for in the indoor fees.

3.6 Costs by Time Period

Table 3-12 is a summary of the existing and future facility costs by water system component and by time period. Existing costs are those costs attributed to capacity currently being used by existing connections. Costs attributed to the next 10 years are costs for the existing capacity or new capacity for the assumed growth in the next 10 years (including impact fee eligible planning costs expected to be collected). Costs attributed to beyond 10 years are costs for the existing capacity or new capacity for the assumed growth beyond 10 years.

**Table 3-12
Facility Cost by Time Period**

	Existing Area 1	Existing Areas 2 and 3	Next 10 Years	Beyond 10 Years	Total
Source	\$177,811.90	\$465,020.62	\$968,917.56	\$772,542.30	\$2,384,292.38
Storage	\$176,998.47	\$392,291.94	\$396,648.76	\$910,941.99	\$1,876,881.17
Transmission	\$1,866,601.67	\$8,645,899.16	\$7,672,888.00	\$3,280,437.62	\$21,465,826.46
Planning	\$0.00	\$0.00	\$16,524.38	\$0.00	\$16,524.38
Total Cost	\$2,221,412.03	\$9,503,211.73	\$9,054,978.71	\$4,963,921.91	\$25,743,524.38

3.7 Revenue Options

Revenue options for the recommended projects include: general obligation bonds, revenue bonds, State/Federal grants and loans, user fees, and impact fees. Although this analysis focuses on impact fees, the District may need to consider a combination of these funding options. The following discussion describes each of these options.

General Obligation Bonds through Property Taxes

This form of debt enables the District to issue general obligation bonds for capital improvements and replacement. General Obligation (G.O.) Bonds would be used for items not typically financed through the Water Revenue Bonds (for example, the purchase of water source to ensure a sufficient water supply for the District in the future). G.O. bonds are debt instruments backed by the full faith and credit of the District which would be secured by an unconditional pledge of the District to levy assessments, charges or ad valorem taxes necessary to retire the bonds. G.O. bonds are the lowest-cost form of debt financing available to local governments and can be combined with other revenue sources such as specific fees, or special assessment charges to form a dual security through the District's revenue generating authority. These bonds are supported by the District as a whole, so the amount of debt issued for the water system is limited to a fixed percentage of the real market value for taxable property within the District. For growth related projects this type of revenue places an unfair burden on existing residents as they had previously paid for their level of service.

Revenue Bonds

This form of debt financing is also available to the District for utility related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by the District as a whole, but constitute a lien against the water service charge revenues of a Water Utility. Revenue bonds present a greater risk to the investor than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure /and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally require a higher interest rate than G.O. bonds, although currently interest rates are at historic lows. This type of

debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. Typically, voter approval is not required when issuing revenue bonds. For growth related projects this type of revenue places an unfair burden on existing residents as they had previously paid for their level of service.

State/Federal Grants and Loans

Historically, both local and county governments have experienced significant infrastructure funding support from state and federal government agencies in the form of block grants, direct grants in aid, interagency loans, and general revenue sharing. Federal expenditure pressures and virtual elimination of federal revenue sharing dollars are clear indicators that local government may be left to its own devices regarding infrastructure finance in general. However, state/federal grants and loans should be further investigated as a possible funding source for needed water system improvements.

It is also important to assess likely trends regarding federal / state assistance in infrastructure financing. Future trends indicate that grants will be replaced by loans through a public works revolving fund. Local governments can expect to access these revolving funds or public works trust funds by demonstrating both the need for and the ability to repay the borrowed monies, with interest. As with the revenue bonds discussed earlier, the ability of infrastructure programs to wisely manage their own finances will be a key element in evaluating whether many secondary funding sources, such as federal/state loans, will be available to the District.

Not charging impact fees or significantly lowering them could be viewed negatively from the perspective of State/Federal funding agencies. Charging a proper impact fee signals to these agencies that the community is using all possible means to finance the projects required to provide vital services their residents.

User Fees

Similar to property taxes on existing residents, user fees to pay for improvements related to new growth-related projects places an unfair burden on existing residents as they had previously paid for their level of service.

Impact Fees

As discussed in Section 1, an impact fee is a one-time charge to a new development for the purpose of raising funds for the construction of improvements required by the new growth and to maintain the current level of service. Impact fees in Utah are regulated by the Impact Fee Statute and substantial case law. Impact fees are a form of a development exaction that requires a fee to offset the burdens created by the development on existing municipal services. Funding the future improvements required by growth through impact fees does not place the burden on existing residents to provide funding of these new improvements.

APPENDIX A

Cost of Existing Facilities



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF DRINKING WATER
Kenneth H. Bousfield, P.E.
Director

Drinking Water Board
Paul Hansen, P.E., *Chair*
Ken Bassett, *Vice-Chair*
Terry Beebe
Russell Donoghue
Daniel Fleming
Tage Flint
Heather Jackson
Betty Naylor
Amanda Smith
David Stevens, Ph.D.
James Webb
Kenneth H. Bousfield, P.E.
Executive Secretary

January 19, 2012

Everett Taylor, President
Skyline Mountain Service District
2201 SMR
Fairview, Utah 84629

Dear Mr. Taylor:

Subject: Federal SRF Loan Authorization and Procedures for
Committal of Funds (Project No. 3F186, System #20043)

On January 18, 2012, the Drinking Water Board (hereinafter called the "Board") authorized a **loan of \$3,007,000.00** to Skyline Mountain Service District (hereinafter called the "Applicant") for the construction of a new 235,000 gallon storage tank, a new 150 gpm well with chlorinator and approximately 5.5 miles of water line (hereinafter called the "Project"). The loan from the Board will be secured by General Obligation bond(s), Non-voted Water Revenue bond(s), or a combination thereof; issued by the Applicant as incremental disbursement bond(s) (hereinafter referred to as Bonds) disbursed on a monthly or quarterly basis. The Board has determined the retirement period for the Bonds to be no more than **thirty (30) years**, with interest/fee assessment payable on the unpaid principal from the date of each advance of loan funds. The annual **Interest Rate/Fee is 2.50%**. The Board will require annual principal payments on the Bonds, plus interest assessments totaling approximately \$144,000. Enclosed is the proposed bond repayment schedule (Attachment #1). If a revenue bond is used, a debt service reserve fund equal to this annual amount must be established by no more than ten equal annual deposits.

Special Conditions

This financial assistance was authorized subject to the availability of funds. The assistance represented by this authorization will be funded, in whole or in part, from the proceeds of a federal SRF Capitalization Grant (Section 1452 SDWA) to the State of Utah. Under the SRF Capitalization Grant Program, federal funds are to be made available to the State by way of authorized draws on a letter of credit over the construction period of the Project. Therefore, this authorization is expressly subject to the continued availability of federal funds through the SRF Capitalization Grant and the letter of credit related thereto.

150 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144830 • Salt Lake City, UT 84114-4830
Telephone (801) 536-4200 • Fax (801) 536-4211 • T.D.D. (801) 536-4414

www.deq.utah.gov
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Neither the Board nor the State of Utah shall be bound by this authorization or by any obligation to provide further loan funds to or purchase any bonds from the Applicant if the SRF Capitalization Grant funds to which this authorization relates are not awarded or if payments under the letter of credit are withheld for any reason.

As a condition of this authorization, the Board will require the Applicant to provide a schedule of estimated engineering and construction time for the Project within ninety (90) days of the date of this letter. If the Project has not progressed sufficiently for the Board to purchase the first of the incremental disbursement bond(s) within twelve months of the date of authorization, authorized funding may be withdrawn.

As a condition of this loan, the Board will require the Applicant to establish a capital facilities replacement reserve account. Deposits to that account shall be made at least annually in the amount of five percent (5%) of the Applicant's annual drinking water system budget, including depreciation, and must continue until the Bonds are redeemed. Failure to maintain the reserve account will constitute a technical default on the Bonds and may result in penalties being assessed.

The Bonds may be prepaid, in whole or in part, at any time in minimum amounts of \$1,000 or any integral multiple thereof, with the prepayments applied against the Bond principal in inverse order of maturities. In addition, if any Bond proceeds remain after the Project is completed, those remaining proceeds shall be used to redeem Bond principal in inverse order of maturities. The Bond documents must contain the following provisions:

- i] The Bonds will initially be in the form of a single, fully-registered bond with provisions for incremental advances quarterly, based on a schedule that coincides with the rate at which engineering/construction related costs are expected to be incurred for the Project.
- ii] If revenue bonds are used the Bonds must be secured by a pledge by the Applicant of 100% of the net revenue produced by the Applicant's water system, and the Applicant will be required to warrant and demonstrate that those net revenues equal or exceed 125% of the total annual debt service requirements on the Bonds and any other obligations secured by a pledge of those revenues.
- iii] If interest is payable on the Bonds, that interest must be tax-exempt, and delivery of the Bonds must be accompanied by an opinion of recognized bond counsel that the interest is not subject to state or federal income taxes.
- iv] If a revenue bond is used, and if the Applicant has previously issued bonds or other obligations secured by a pledge of water system revenues, the Bonds to be purchased by the Board should be issued on a parity with those prior bonds or obligations with respect to the revenue. If it is not possible for the Bonds to be issued on a parity basis, the Applicant should contact Michael J. Grange immediately at (801) 536-4200.

Based on the information presented to the Board, the following sources of funding will be available for the construction of the Project:

Agency	Share	% of Total
Drinking Water Board (Loan)	\$3,007,000.00	97%
System contribution	\$95,000.00	3%
Total Project Cost	\$3,102,000.00	100.0%

As a condition to the purchase of the Bonds by the Board, the Applicant must make arrangement for all loan proceeds and all other Project funds to be available for deposit into the escrow account described below at the time the Board delivers funds unless other acceptable arrangements have been previously made.

The financial assistance is conditioned upon the availability of funds at the time of closing, satisfaction of the conditions specified in this letter, and adherence to the project schedule approved at that time. If the Project does not proceed according to the project schedule, the Board may withdraw project authorization, so that projects ready to proceed, can obtain necessary funding. The Board may consider extensions to the project schedule. Any extension requested must be fully justified. After the Project's construction bids have been opened and the below listed requirements have been met, and if the project remains substantially as approved, loan closing will proceed subject to funds available at that time. But, if substantial changes in the project are required, they must be considered by the Board for committal of funds.

As the Applicant you will need to complete the following items before the Board will purchase your Bonds:

1. The State of Utah has assigned Special Assistant Attorney General William L. Prater Esq. the responsibility of reviewing all proceedings and documents relating to the sale of bonds to the Board. His address is:

William L. Prater, L.L.C.
6925 Union Park Center, Suite 265
Midvale, Utah 84047
Telephone number (801) 566-8882
or mail to:
P.O. Box 71368
Salt Lake City, Utah 84171

The Applicant's bond counsel should submit the following items to his office at the times indicated below. A copy of the transmittal letter for the items indicated below must also be sent to the Division of Drinking Water to document project progress.

APPENDIX B

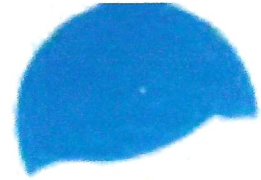
Estimated Cost of Future Facilities

**SMSSD Drinking Water Projects
Water Recommended Improvements
Preliminary Engineers Cost Estimates**

	Item	Unit	Unit Price	Quantity	Total Price
1-1	Area 1 Storage Capacity Upgrade				
	Tank	GAL	\$ 1.75	250000	\$ 437,500
				Engineering & Admin. (10%)	\$ 43,750
				Contingency (10%)	\$ 43,750
	Total to Area 1 Storage Capacity Upgrade				\$ 530,000
1-2	Equip Cottonwood Springs for Use				
	4" Water Line	LF	\$ 135	5800	\$ 784,648
	Develop Springs and Construct Connection	LS	\$ 300,000	1	\$ 300,000
				Engineering & Admin. (10%)	\$ 108,465
				Contingency (10%)	\$ 108,465
	Total to Equip Cottonwood Springs for Use				\$ 1,300,000
					Total Costs for Area 1 \$ 1,830,000
2-1	Area 2 Transmission Upgrades				
	8" Water Line	LF	\$ 170	62500	\$ 10,640,188
	6" PRV	EA	\$ 30,000	16	\$ 480,000
				Engineering & Admin. (10%)	\$ 1,112,019
				Contingency (10%)	\$ 1,112,019
	Total to Area 2 Transmission Upgrades				\$ 13,340,000
2-2	Area 2 Source Capacity Upgrade				
	Well Drilling and Development (50 gpm)	EA	\$ 192,000	1	\$ 192,000
	Well Equipment and Well House	EA	\$ 400,000	1	\$ 400,000
				Engineering & Admin. (10%)	\$ 59,200
				Contingency (10%)	\$ 59,200
	Total to Area 2 Source Capacity Upgrade				\$ 710,000
2-3	Area 2 Storage Capacity Upgrade				
	Tank	GAL	\$ 1.75	325000	\$ 568,750
				Engineering & Admin. (10%)	\$ 56,875
				Contingency (10%)	\$ 56,875
	Total to Area 2 Storage Capacity Upgrade				\$ 680,000
					Total Costs for Area 2 \$ 14,730,000
3-1	Area 3 Transmission Upgrades				
	8" Water Line	LF	\$ 170	26500	\$ 4,511,440
	6" PRV	EA	\$ 30,000	8	\$ 240,000
				Engineering & Admin. (10%)	\$ 475,144
				Contingency (10%)	\$ 475,144
	Total to Area 3 Transmission Upgrades				\$ 5,700,000
3-2	Area 3 Source Capacity Upgrade				
	Purchase of Colledge Well, upgrade to public drinking water source and re-equip to provide 75 gpm	EA	\$ 95,000	1	\$ 95,000
				Engineering & Admin. (10%)	\$ 9,500
				Contingency (10%)	\$ 9,500
	Total to Area 3 Source Capacity Upgrade				\$ 110,000
3-3	Area 3 Storage Capacity Upgrade				
	Tank	GAL	\$ 1.75	225000	\$ 393,750
				Engineering & Admin. (10%)	\$ 39,375
				Contingency (10%)	\$ 39,375
	Total to Area 3 Storage Capacity Upgrade				\$ 470,000
					Total Costs for Area 3 \$ 6,280,000
					Total Costs \$ 22,840,000

EXHIBIT C

Master Plan



**SKYLINE MOUNTAIN
SPECIAL SERVICE DISTRICT**

WATER SYSTEM MASTER PLAN

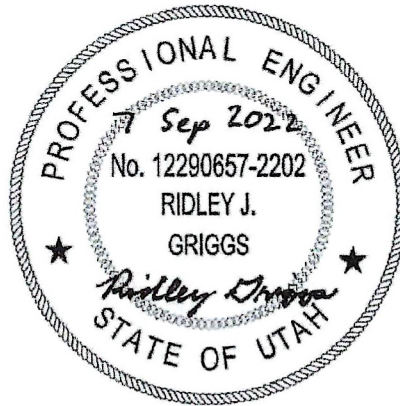
(HAL Project No.: 299.09.100)

September 2022

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT

WATER SYSTEM MASTER PLAN

(HAL Project No.: 299.09.100)



Ridley Griggs, P.E.
Project Engineer

Recommended by

Richard M. Noble, P.E.
Project Manager

**HANSEN
ALLEN
& LUCE^{inc}**
ENGINEERS

September 2022

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GLOSSARY OF TECHNICAL TERMS

Average Daily Flow: The average yearly demand volume expressed in a flow rate.

Average Yearly Demand: The volume of water used during an entire year.

Buildout: When the development density reaches maximum allowed by planned development.

Demand: Required water flow rate or volume.

Distribution System: The network of pipes, valves and appurtenances contained within a water system.

Drinking Water: Water of sufficient quality for human consumption. Also referred to as Culinary or Potable water.

Equivalent Residential Connection: A measure used in comparing water demand from non-residential connections to residential connections.

Fire Flow Requirements: The rate of water delivery required to extinguish a particular fire. Usually it is given in rate of flow (gallons per minute) for a specific period of time (hours).

Head: A measure of the pressure in a distribution system that is exerted by the water. Head represents the height of the free water surface (or pressure reduction valve setting) above any point in the hydraulic system.

Head loss: The amount of pressure lost in a distribution system under dynamic conditions due to the wall roughness and other physical characteristics of pipes in the system.

Peak Day: The day(s) of the year in which a maximum amount of water is used in a 24-hour period.

Peak Day Demand: The average daily flow required to meet the needs imposed on a water system during the peak day(s) of the year.

Peak Instantaneous Demand: The flow required to meet the needs imposed on a water system during maximum flow on a peak day.

Pressure Reducing Valve (PRV): A valve used to reduce excessive pressure in a water distribution system.

Pressure Zone: The area within a distribution system in which water pressure is maintained within specified limits.

Service Area: Typically, the area within the boundaries of the entity or entities that participate in the ownership, planning, design, construction, operation and maintenance of a water system.

Static Pressure: The pressure exerted by water within the pipelines and other water system appurtenances when water is not flowing through the system, i.e., during periods of little or no water use.

Storage Reservoir: A facility used to store, contain and protect water until it is needed by the customers of a water system. Also referred to as a Storage Tank.

Transmission Pipeline: A pipeline that transfers water from a source to a reservoir or from a reservoir to a distribution system.

Water Conservation: Planned management of water to prevent waste.

ABBREVIATIONS AND UNITS

ac	acre [area]
ac-ft	acre-foot (1 ac-ft = 325,851 gal) [volume]
CIP	Capital Improvement Plan
CFP	Capital Facilities Plan
CUWCD	Central Utah Water Conservancy District
CWP	Central Water Project
DIP	Ductile Iron Pipe
DBP	disinfection byproduct
EPA	U.S. Environmental Protection Agency
EPANET	EPA hydraulic network modeling software
ERC	Equivalent Residential Connection
ft	foot [length]
ft/s	feet per second [velocity]
gal	gallon [volume]
gpd	gallons per day [flow rate]
gpm	gallons per minute [flow rate]
HAL	Hansen, Allen & Luce, Inc.
hp	horsepower [power]
hr	hour [time]
IFA	Impact Fee Analysis
IFC	International Fire Code
IFFP	Impact Fee Facilities Plan
in.	inch [length]
kgal	thousand gallons [volume]
kW	kilowatt [power]
kWh	kilowatt hour [energy]
MG	million gallons [volume]
MGD	million gallons per day [flow rate]
mg/L	milligram per liter [concentration]
µg/L	microgram per liter [concentration]
mi	mile [length]
psi	pounds per square inch [pressure]
s	second [time]
SCADA	Supervisory Control and Data Acquisition
THM	trihalomethane
UV	ultraviolet radiation (disinfection method)
wsfu	water supply fixture unit
yr	year[time]

CHAPTER 1 INTRODUCTION

PURPOSE

The purpose of this Master Plan is to provide direction to Skyline Mountain Special Service District (SMSSD) regarding decisions that will be made to construct and maintain a functional and cost-efficient water system now and through buildout (assumed to take place within the next 20 years). The planning period for this master plan is 2022–2042.

The results of the study are limited by the accuracy of growth projections, data provided by SMSSD, and other assumptions used in preparing the study. It is expected that SMSSD will review and update this Master Plan as new trends in water use or land use emerge.

AUTHORIZATION

SMSSD selected Hansen, Allen, & Luce, Inc. (HAL), in 2021 to complete an update to the water system master plan, which was previously produced by HAL in 2007.

CHAPTER 2 SYSTEM DESCRIPTION AND MODEL

SERVICE AREA AND POPULATION

Skyline Mountain Special Service District serves a 480-acre portion of Sanpete County, Utah (Figure 2-1). Its service area includes the resort and cabins up the mountain to the east. In 2021 SMSSD reported a service population of 96 (DWR 2022). There are also five connections outside of Skyline Mountain Resort but within the SMSSD boundary.

SYSTEM DESCRIPTION

Sources

SMSSD owns three wells. The Golf Course Well and Clubhouse Well pump directly into the existing Area 1 water system. The Thad's Peak Well does not currently tie into the existing system, but fills a self-service tank at the top of Area 2. The total production for 2021 was 54.6 ac-ft among the three wells. The existing system, including the locations of the Golf Course and Clubhouse Wells, is shown in Figure 2-2.

SMSSD does not receive water from any other sources or entities or provide water to any other entities.

SMSSD's total source capacity is 138 gpm (peak day) and 222 ac-ft (average yearly).

Pump Stations

SMSSD operates one pump station that boosts water from the Booster Tank to the Upper Tank. It has two pumps, each with a pumping capacity of 120 gpm.

Network

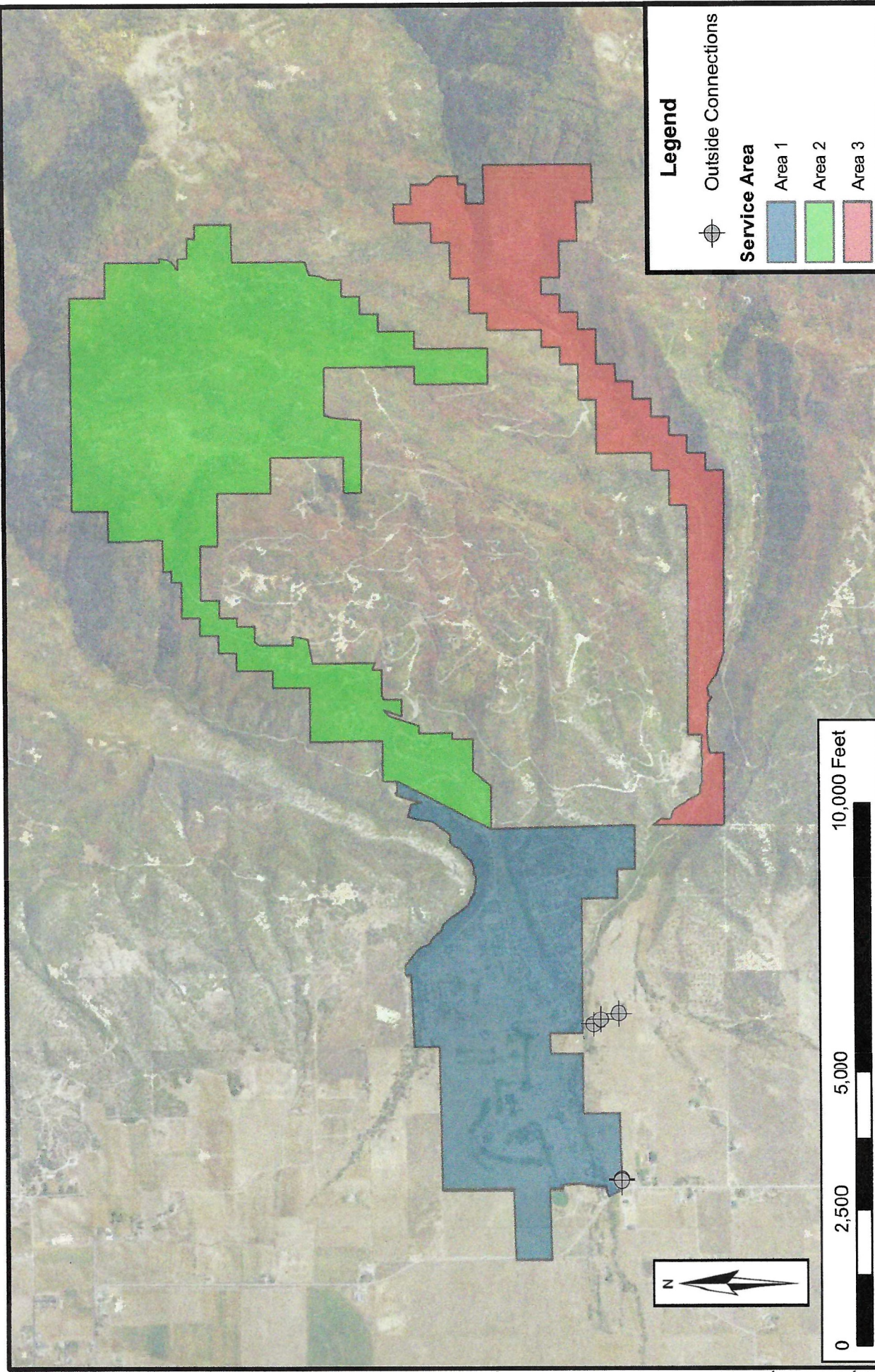
The distribution network contains approximately 8.75 miles of pipe ranging in size from 4 to 12 inches (Figure 2-2).

Storage

SMSSD maintains two storage tanks (270,000 gal and 55,000 gal) in Area 1. Their locations are shown in Figure 2-2.

Fire Flow

Fire flow tests were conducted on April 15, 2015. The hydrant tests showed that the system has a capacity of at least 480 gpm, with most of the hydrants capable of 1,000 gpm and 1,500 gpm. These fire flow tests were simulated with the model and shown in Appendix A. All new construction in the distribution system is planned to accommodate 1,500 gpm, typically requiring 8-inch diameter pipelines.



Legend

⊕ Outside Connections

Service Area

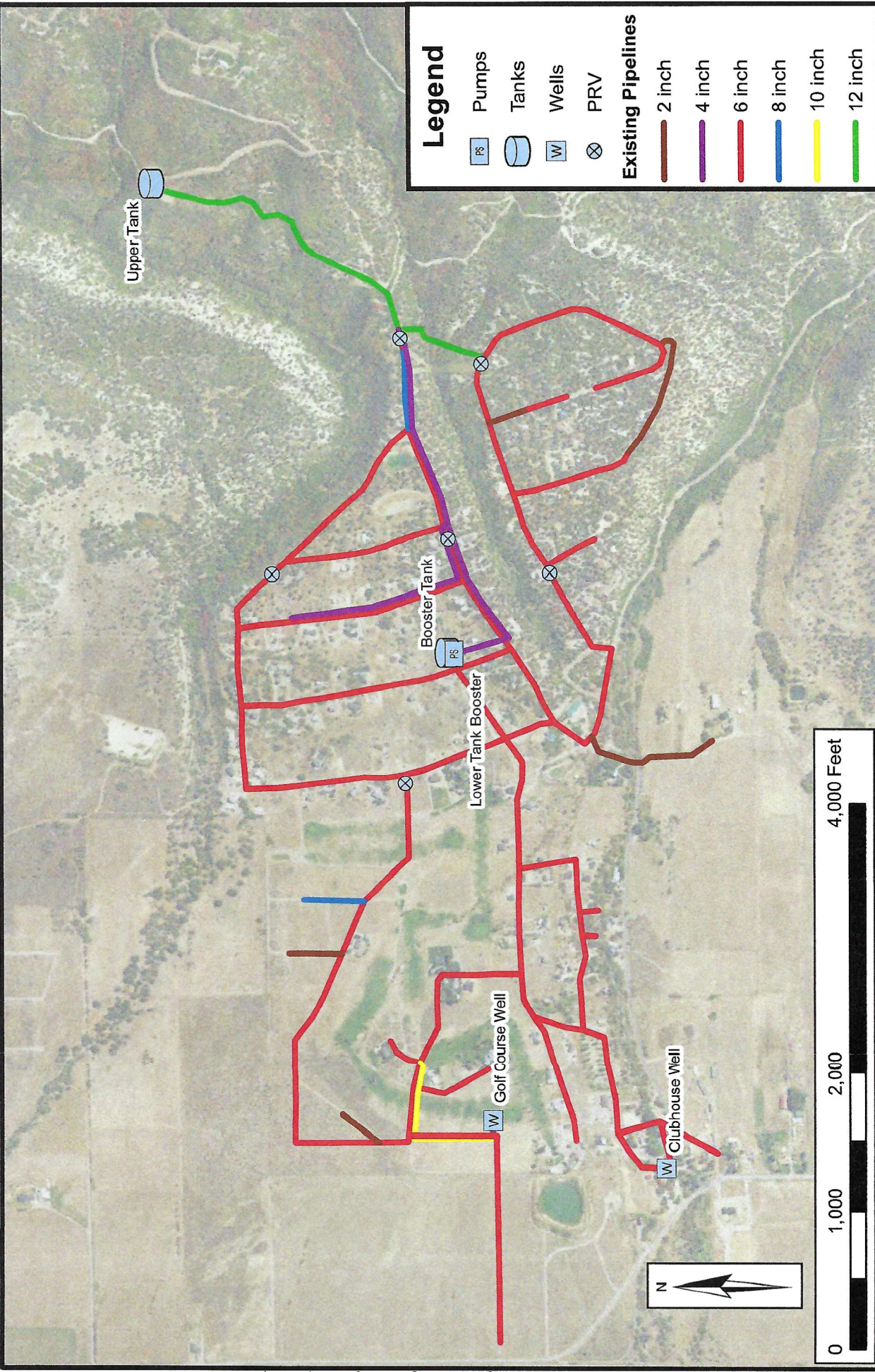
- Area 1
- Area 2
- Area 3

FIGURE 2-1





SERVICE AREAS

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT





Legend

-  Pumps
-  Tanks
-  Wells
-  PRV

Existing Pipelines







-  2 inch
-  4 inch
-  6 inch
-  8 inch
-  10 inch
-  12 inch

FIGURE 2-2

EXISTING WATER SYSTEM

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT



MODEL DEVELOPMENT AND CALIBRATION

An extended-period hydraulic model was developed with InfoWater software, which uses EPANET 2.0 as the main computational engine (EPA). The previous model was updated based on system maps SMSSD provided for this study. All pipes with diameters 2 in. or larger were included in the analysis. Hazen-Williams roughness coefficients of between 120 and 150 were used in the model. SCADA data, tank control setpoints, and measured pump flow rates were reviewed and simulated in the model.

HAL developed models for two phases of drinking water system development. The first phase was a model representing the existing system (existing model). This model was used to calibrate the model and identify deficiencies in the existing system. Calibration was performed using billing data and SCADA data for the pumps and tanks. The model was adjusted until a reasonable match to measured data was achieved. Calibration data is included in Appendix B. The second phase was a model representing future conditions and the improvements necessary to accommodate growth (future model).

CHAPTER 3 EXISTING WATER SYSTEM

CONNECTIONS

Analysis of SMSSD's metered water use in 2021 indicated 247 residential connections or equivalent residential connections (ERCs). A summary of ERCs by Area is shown in Table 3-1.

Outdoor water use is minimal in most areas although some residential lots have irrigated lawns.

**Table 3-1
Existing ERCs by Area**

Area	ERCs
1	247
2	0
3	0
Total	247

DEMANDS

The level of service (LOS) is the water volume and pressure standards that the drinking water system is designed to meet. Level of service is regulated by Utah Administrative Rule 309, which is administered by the Utah Division of Drinking Water (DDW). In the past, the DDW set standard sizing requirements which each water utility was required to meet, based on equivalent residential connections or ERCs. In 2018, the DDW revised this approach to set system-specific sizing requirements.

The level of service for this master plan is based on production and meter data collected and reported by SMSSD over several years. It incorporates appropriate safety factors and is intended to produce a design which is responsible without being unnecessarily expensive. It considers both indoor use and areas which are irrigated using the water system.

Existing demands were found based on an evaluation of billing and production data. The monthly usage for these full-time residents was evaluated to determine an acceptable level of service for existing indoor demands. This level of service recommended for indoor use is 270 gpd/ERC which is approximately 0.3 ac-ft per year. See Table 3-2.

**Table 3-2
SMSSD Indoor Water Demands**

ERCs	Demand (gpd/ERC)	Peak Day Demand (gpm)	Average Yearly Demand (ac-ft/yr)
247	270	46.3	74.7

Outdoor water demands were evaluated based on a review of aerial imagery and billing data for properties with irrigated landscape. Presently, irrigated acreage in SMSSD is confined mostly to the clubhouse area, a few properties near the golf course, and some other properties scattered throughout Area 1. It is estimated that roughly 8 acres of landscape are irrigated by the drinking water system, and that peak day demand for outdoor use is about 7.5 gpm. Average Annual Demand is estimated at 3.0 ac-ft/irr-ac, which is consistent with the water rights irrigation duty value for the area. See Table 3-3.

**Table 3-3
SMSSD Outdoor Water Demands**

Irrigated Acreage	Peak Day Demand (gpm/irr-ac)	Peak Day Demand (gpm)	Average Yearly Demand (ac-ft/irr-ac)	Average Yearly Demand (ac-ft/yr)
8.0	7.5	60.0	3.0	24.0

Because it is rare for all seasonal residents to be present on the same day, the peak day demands shown in Tables 3-2 and 3-3 are higher than historically observed peaks. However, because it is possible that most residents may be present and using water during holiday weekends or other peak times, peak demands for all existing ERCs were considered in the evaluation of the system.

SOURCES

SMSSD owns and operates three wells. The capacity of these wells is shown in Table 3-4. Both the Golf Course and Clubhouse Well are in Area 1 and supply the existing water system. Thad's Peak Well fills a self-service water tank for users in Area 2. Locations of the Golf Course and Clubhouse Wells are shown in Figure 2-2.

**Table 3-4
SMSSD Sources**

Source	Peak Day Capacity (gpm)	Average Yearly Capacity (ac-ft)¹	2021 Peak Month Production (gpm)	2021 Annual Production (ac-ft)
Golf Course Well	65	-	45.9	32.8
Clubhouse Well	55	-	27.7	20.8
Thad's Peak Well ²	38	-	-	0.98
Total	158	254.86	73.6	54.6

1. Average yearly capacity is limited to water rights held by the District
2. Production of the Thad's Peak Well is recorded on an annual basis

The capacity of each well was determined based on information in previous master plans, SCADA flow records, well logs, and other available information. Production data for the Golf Course and Clubhouse Wells was recorded in the SCADA system. Data for the Thad's Peak well is recorded on a totalizing meter and is read on an annual basis.

The Golf Course and Clubhouse Wells have sufficient capacity to meet the proposed level of service for existing users in Area 1.

DISTRIBUTION

SMSSD's water distribution system consists of all pipelines, valves, fittings, and other appurtenances used to convey water from sources and storage tanks to water users. The existing water system contains approximately 8.75 miles of pipe with diameters of 4 inches to 12 inches. A summary of length of pipe by diameter is given in Figure 3-1.

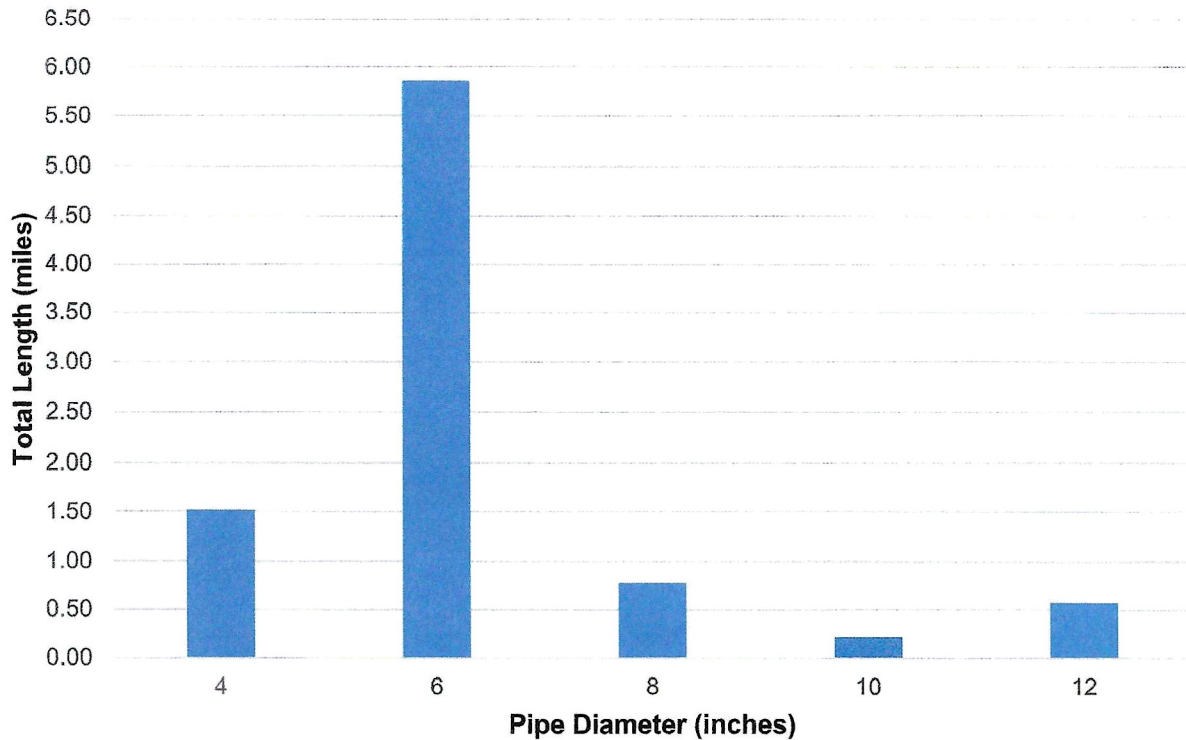


Figure 3-1: Summary of Pipe Length by Diameter

Performance of the drinking water system was evaluated according to the requirements listed in Table 3-5. The Fairview Fire Chief was consulted for recommended fire flow under existing conditions. The Fire Chief expressed an intent to follow requirements as stated in the International Fire Code. Flow requirements of up to 1,750 gpm are expected in Area 1. The contact information of the Fairview Fire Chief is as follows:

Fire Chief: Nathan Miner
Phone: 435-262-1189
Address: 165 N State St.
Fairview, Utah 84629

The system was originally designed to provide a fire flow capacity of 1,000 gpm, which was compliant with fire codes in effect at the time of construction. Locations in the Area 1 system where 1,000 gpm of fire flow capacity can be provided will not be subject to retroactive fire flow requirements and will be considered code compliant as long as they are maintained properly and new construction does not alter the fire flow requirement. As infrastructure is replaced over time, it will be sized appropriately to meet requirements according to current code.

**Table 3-5
Compliance of Existing
Distribution System with Utah Rule**

Condition	Requirement ¹	System Design Flow ²	Compliance Status
Peak Day	Minimum 40 psi service pressure	106 gpm	All connections comply.
Peak Instantaneous	Minimum 30 psi service pressure	213 gpm	All connections comply.
Peak Day plus Fire Flow ³	Minimum 20 psi service pressure	106 gpm (system) Plus 1,000 gpm fire	All areas comply as shown on Figure 3-2.

1. Requirements are as stated in Utah Code R309-105-9(2). The requirement for connections prior to 2007 is a minimum of 20 psi under all conditions.
2. Peak day system flows are shown in Tables 3-2 and 3-3. Peak day flow was multiplied by a factor of 2.0 to produce peak instantaneous flow.
3. Fire flow is discussed in Appendix C. The maximum fire flow requirement in SMSSD is 1,000 gpm under existing conditions.

Figure 3-2 shows the available fire flow throughout the existing system based on model output.

STORAGE

The existing water system is served by two storage tanks located in Area 1. Their locations are shown in Figure 2-1 and their respective dimensions shown in Table 3-6. SCADA data for each tank showed that the Booster Tank typically operates at a level between 6 and 8 feet and the Upper Tank typically operates at a level between 17 and 19 feet.

**Table 3-6
Existing Tanks**

Tank	Existing Capacity (gallons)	Material	Dimensions	Outlet Elevation (ft)	Emergency/Fire Volume (gal)
Booster	55,000	Concrete	25' diam. x 15' deep	6,365	0
Upper	270,000	Concrete	48' diam. x 20' deep	6,834.5	210,000
Total	325,000	-	-	-	

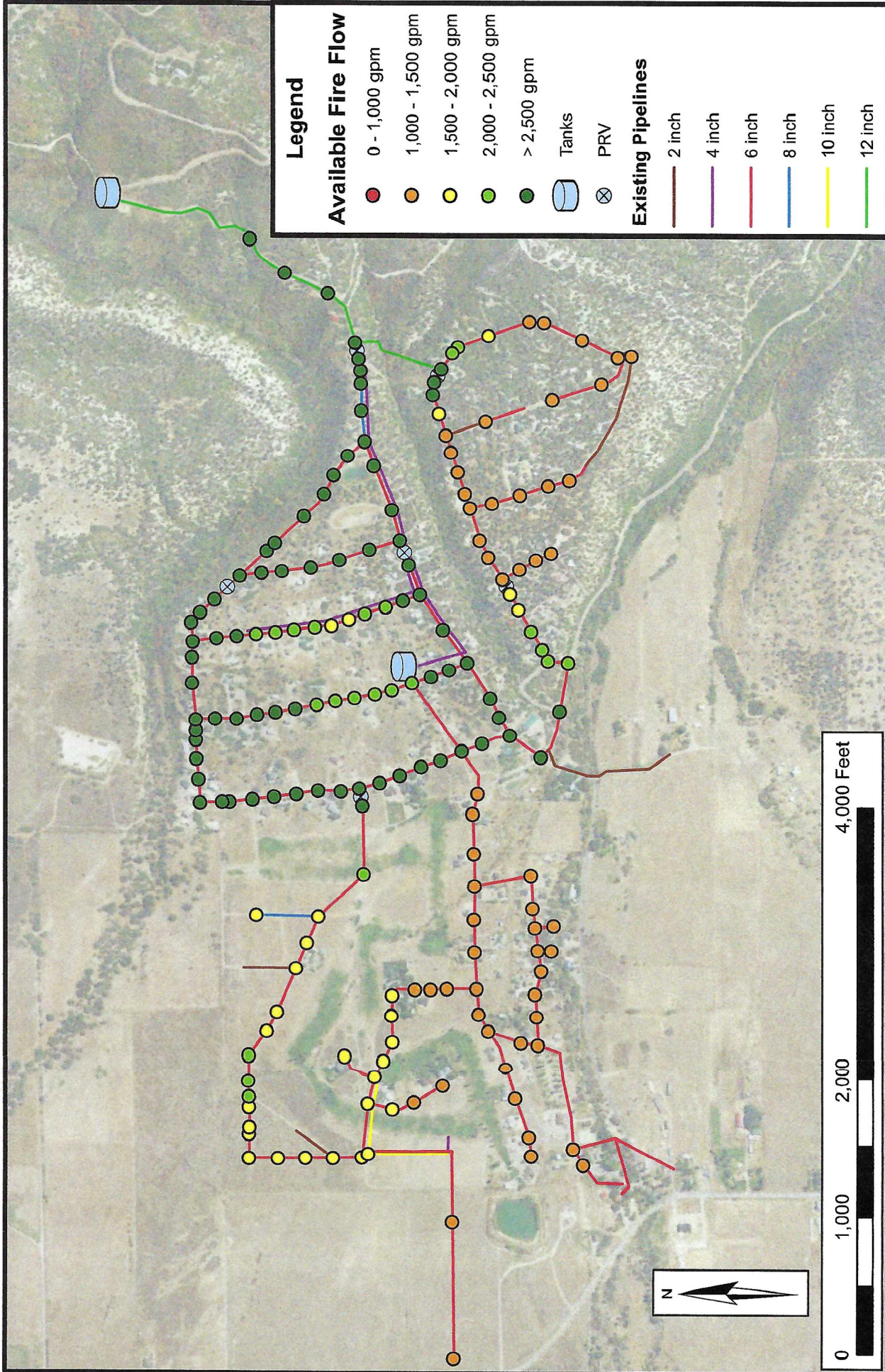
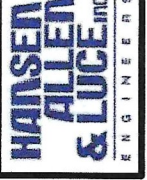


FIGURE 3-2

EXISTING AVAILABLE FIRE FLOW

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT



As specified in Utah R309-510-8, storage sizing requirements are composed of three parameters:

- Equalization Storage
- Emergency Storage
- Fire Storage

It is proposed that a combined equalization and emergency storage requirement of 270 gal/ERC be used for the indoor storage requirement. This amount is equivalent to peak day usage and contains sufficient capacity beyond equalization needs to provide a buffer to the District in the event of a power outage or other service interruption.

The recommended storage requirement for outdoor uses is 2,680 gal/irr-ac. This is approximately equal to average daily use and will provide adequate equalization and emergency storage for outdoor uses.

The Fire Chief for Fairview, Utah was consulted to determine required fire storage. It was determined that required fire storage is equal to the volume required to provide the maximum fire flow of 1,750 gpm for 2 hours (210,000 gallons total). More information can be found in Appendix C. This is consistent with the 2007 master plan. Table 3-7 summarizes the storage requirements and a determination of remaining capacity.

**Table 3-7
Existing Storage Requirements**

Component	Unit Requirement	Service	Total Requirement (gal)
Indoor Equalization and Emergency	270 gal/ERC	247 ERCs	66,690
Outdoor Equalization	2,680 gal/irr-ac	8.0 irr-ac	21,440
Fire	1,750 gpm for 2 hours	Area 1	210,000
Total			298,130
Existing Capacity			325,000
Surplus (+) / Deficit (-)			+26,870

There is sufficient storage capacity for existing users.

CHAPTER 4 FUTURE WATER SYSTEM

The planning horizon for future conditions in this master plan is 2042. It is assumed that nearly all properties within the SMSSD service area will be improved and using water by this time.

Future source and storage requirements were estimated based on a projection of future connections to the SMSSD water system. A summary of these findings is shown in Table 4-1. Development of these requirements is discussed further in this chapter. The existing system does not have the capacity to meet the demands expected at buildout.

**Table 4-1
Summary of Future Demand and Capacity**

Requirement	Existing Capacity	Future Requirement	Surplus (+) / Deficit (-)
Peak Day Source	158 gpm	385 gpm	-227 gpm
Average Yearly Source	222.35 ac-ft/yr	274 ac-ft/yr	-52 ac-ft/yr
Storage	325,000 gal	690,740 gal	-365,740 gal

CONNECTIONS

Connections to the existing system presently exist only in Area 1. Areas 2 and 3 currently consist of a mixture of improved and unimproved lots with no water service. Information about these lots was provided by SMSSD and was evaluated to categorize these lots as either improved or unimproved. This information was used to form the basis for growth projections and projected future connections to the water system.

A growth rate has historically been difficult to develop in the SMSSD service area due to historically variable growth. An arbitrary, but reasonable growth rate of 5 percent was assumed to occur in each area through buildout. Table 4-2 shows the existing number of occupied lots and the estimated growth in each service area.

**Table 4-2
Anticipated Growth in ERCs**

Year	Estimated Total ERCs		
	Area 1	Area 2	Area 3
2022	247	216	95
2023	260	227	100
2024	273	239	105
2025	287	251	110
2026	302	264	116
2027	317	277	122
2028	321	292	128
2029	321	307	135
2030	321	322	142
2031	321	339	149
2032	321	356	157
2033	321	374	160
2034	321	394	160
2035	321	414	160
2036	321	435	160
2037	321	457	160
2038	321	471	160

Table 4-3 shows the existing number of ERCs and the estimated number at buildout. These ERC values assume that all available lots in the district are improved and connected to the water system.

**Table 4-3
Existing and Projected Number of ERCs at Buildout**

Area	Existing ERCs	Buildout ERCs
1	247	321
2	0	471
3	0	160
Total	247	952

Both Areas 2 and 3 are anticipated to see the most growth over the next few years given the higher percentage of lots that are not yet improved.

DEMANDS

Planning for the expected number of ERCs shown in Table 4-2 and following the same methodology described in the previous chapter, SMSSD's expected buildout demands are shown in Table 4-4. It is assumed that Areas 2 and 3 will not have any irrigated acreage due to their natural mountain setting. It is recommended that irrigation from the water system in Areas 2 and 3 be prohibited to help the District make best use of limited water resources.

Future irrigated acreage in Area 1 was forecasted by reviewing irrigated area on existing lots. It was assumed that of the 321 ERCs at buildout, 57 would contain an average of 0.25 acres of irrigated land each (those properties generally located near the golf course), and the remaining 264 ERCs would have an average of 0.05 acres of irrigated land each. These estimates are consistent with existing land use patterns. In total, Area 1 is expected to have 27.5 acres of irrigated land at buildout. These values were used in the hydraulic model to simulate future conditions.

**Table 4-4
SMSSD Buildout Source Demand**

Area	ERCs	Irrigated Area (acres)	Peak Day Source Requirement (gpm)	Average Yearly Source Requirement (ac-ft)
1	321	27.5	266.4	179.6
2	471	0	88.3	70.7
3	160	0	30.0	24.0
Total	952	27.5	384.8	274.2

The proposed demands exceed the existing source capacity in the water system. These values are summarized in Table 4-1 and show that there is a deficit for the peak day demand and average yearly demand of 227 gpm and 52 ac-ft, respectively.

SOURCES

To meet projected future demands, it is proposed to use the Thad's Peak well to supply the Future Zone 2 distribution system, develop and connect into the Cottonwood Springs to serve Area 1, drill a new well to serve Area 2 and purchase the existing Colledge well located in Area 3. A summary of demands by area as compared to existing capacity is shown in Table 4-5.

Water rights are likely to be sufficient for the foreseeable future to buildout given the seasonal use. It is anticipated that less than the expected 274.2 ac-ft will be used annually given that most of the residents in Areas 2 and 3 are seasonal. The numbers shown are a conservative estimate assuming that all of Area 1 residents are full time users and Areas 2 and 3 residents are using water six months of the year.

**Table 4-5
SMSSD Buildout Demand and Existing Capacity**

Area	Capacity (gpm)	Buildout Peak Day Demand (gpm)	Surplus (+) / Deficit (-)
1	120	266.4	-146
2	38	88.3	-50
3	0	30.0	-30
Total	158	384.8	-226.8

An additional capacity of 226.8 gpm is required to meet expected future peak day demands. To meet these demands, the following source projects are proposed and shown in Table 4-6.

**Table 4-6
Proposed Source Projects**

Description	Notes
Area 1 Springs	Develop and utilize the existing Cottonwood Springs to provide approximately 100 gpm of source to Area 1.
Area 2 Well	Drill and equip an additional well in Area 2 to provide at least 50 gpm.
Purchase Existing Colledge Well for Area 3	Purchase and re-equip the existing Colledge Well to provide approximately 75 gpm of source capacity to Area 3.

The locations of these proposed facilities are shown in Figure 4-1. The existing Colledge Well drilling log specified that it can provide 15 gpm; however, SMSSD personnel reported that it was equipped at 15 gpm but is physically capable of producing up to 75 gpm. Re-equipping it to provide 75 gpm will meet expected buildout demands. The location of Cottonwood Springs is also shown on Figure 4-1. It would require a dedicated 4-inch line to connect into the Area 1 distribution system. This project would provide capacity for growth in Area 1, delaying the need of for a new well.

DISTRIBUTION

Areas 2 and 3 have no existing distribution infrastructure and will require installation of a complete system in order to be served. Figure 4-1 shows the proposed pipelines and their recommended minimum diameters. An estimated 17.9 miles of pipeline are required to serve Areas 2 and 3.

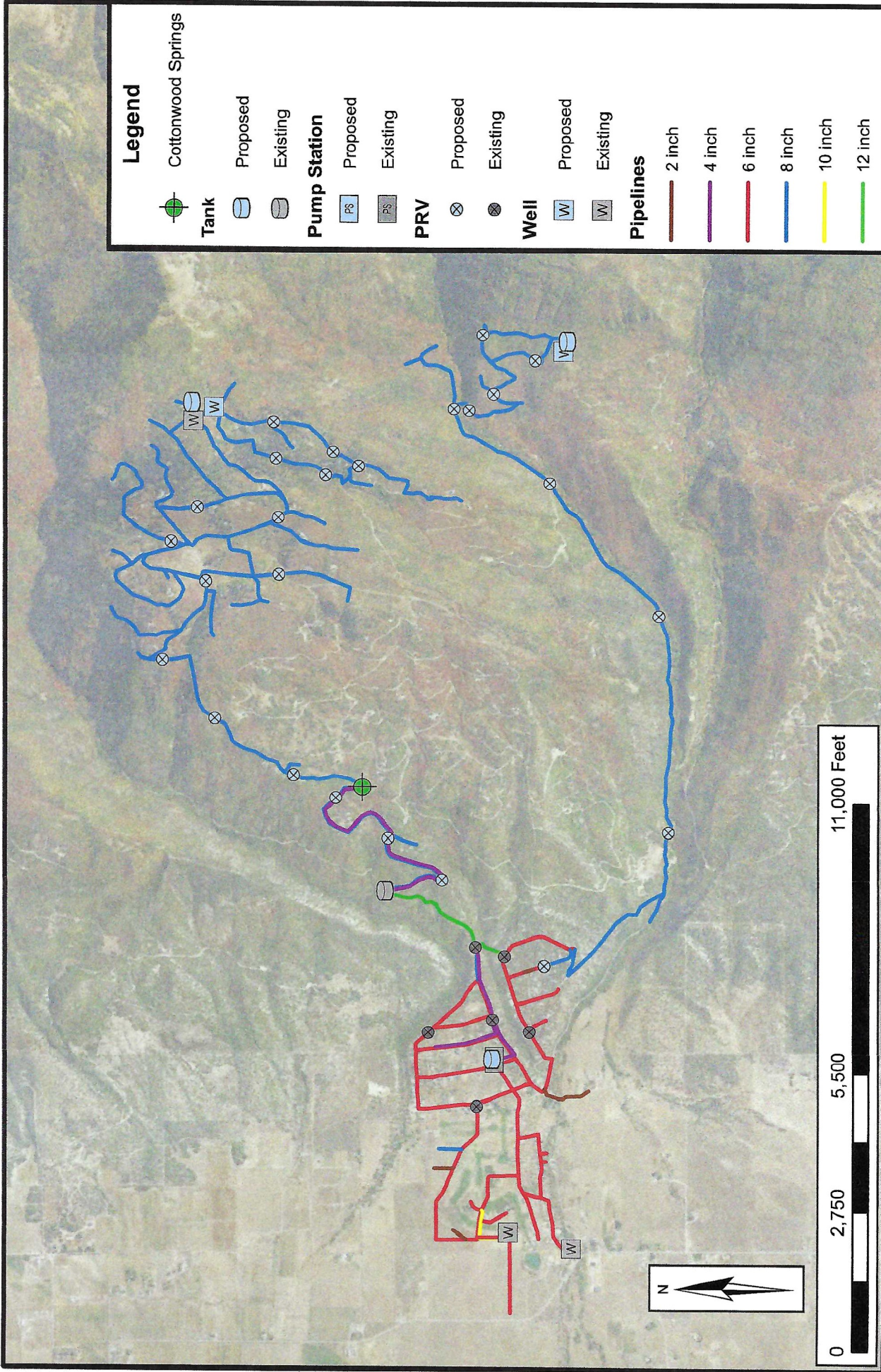
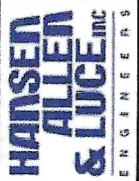
The minimum required size as specified by Utah R309-550-5 is 8 inches for all pipes that supply fire flow. Pipes were then evaluated using the hydraulic model to determine if pipes larger than 8-inch diameter were required to maintain reasonable pipe velocity or service pressure.

To manage pressures associated with the change in elevation throughout the system, approximately twenty-four 6-inch diameter PRVs are required along with the new pipelines. Their

FIGURE 4-1

BUILDOUT WATER SYSTEM

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT



approximate locations are shown in Figure 4-1. Locations of each PRV should be more precisely determined as part of the design for the Areas 2 and 3 water system.

DDW minimum water pressure requirements for distribution systems (R309-105-9) are 20 psi during peak day plus fire flow demand, 30 psi during peak instantaneous demand, and 40 psi during peak day demand.

New construction will require minimum 8 in. diameter pipelines per R309-550-5(5)(a) and fire flow capacity of 1,500 gpm as per the local fire authority. Locations in the Area 1 system where 1,000 gpm of fire flow capacity can be provided will not be subject to retroactive fire flow requirements and will be considered code compliant as long as they are maintained properly and new construction does not alter the fire flow requirement. Figure 4-2 shows the available fire flow for the buildout scenario. Table 4-7 shows the compliance with the Utah Rule based on each condition.

**Table 4-7
Compliance of Buildout
Distribution System with Utah Rule**

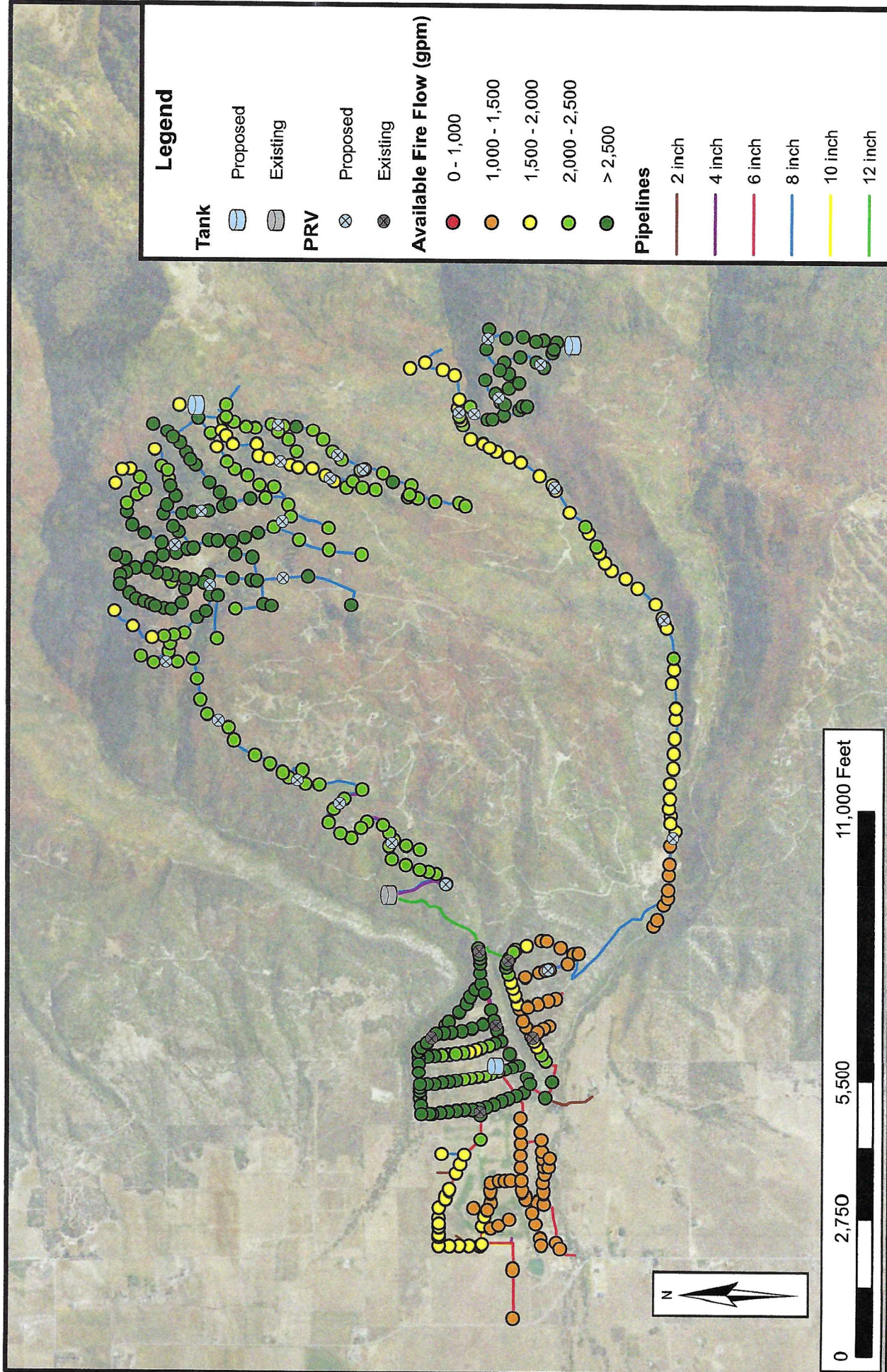
Condition	Requirement ¹	System Design Flow ²	Compliance Status
Peak Day	Minimum 40 psi service pressure	385 gpm	All connections comply.
Peak Instantaneous	Minimum 30 psi service pressure	770 gpm	All connections comply.
Peak Day plus Fire Flow ³	Minimum 20 psi service pressure	385 gpm (system) Plus 1,000/ 1,500 gpm fire	All areas comply as shown on Figure 4-2

1. Requirements are as stated in Utah Code R309-105-9(2). The requirement for connections prior to 2007 is a minimum of 20 psi under all conditions.
2. Peak day system flows are shown in Tables 4-4. Peak day flow was multiplied by a factor of 2.0 to produce peak instantaneous flow.
3. Fire flow is discussed in Appendix C. The minimum fire flow requirement in SMSSD is 1,000 gpm for existing infrastructure and 1,500 gpm for all new construction.

The proposed system satisfies the future peak instantaneous minimum pressure requirement of 30 psi and the future peak day requirement of 40 psi. The simulated minimum pressure in the future system is 40 psi (just downstream of system PRVs). The proposed system also provides adequate fire flow for each respective area while maintaining a minimum service pressure of 20 psi.

STORAGE

Future storage requirements were calculated with similar methodology mentioned in Chapter 3. Emergency storage is to be determined by level of risk and desired system reliability. It is proposed to have a combined equalization and emergency storage requirement of 270 gal/ERC be used for the indoor storage requirement. The proposed outdoor storage requirement is 2,680 gal/irr-ac. A maximum fire flow requirement of 1,750 gpm for two hours is expected for Area 1. Areas 2 and 3 will have a fire flow requirement of 1,500 gpm for two hours. These requirements were determined based on conversations with the District and the Fairview Fire Department. Table 4-8 shows the storage requirements for each area.



Legend

Tank

- Proposed
- Existing

PRV

- Proposed
- Existing

Available Fire Flow (gpm)

- 0 - 1,000
- 1,000 - 1,500
- 1,500 - 2,000
- 2,000 - 2,500
- > 2,500

Pipelines

- 2 inch
- 4 inch
- 6 inch
- 8 inch
- 10 inch
- 12 inch

FIGURE 4-2

BUILDOUT AVAILABLE FIRE FLOW

SKYLINE MOUNTAIN SPECIAL SERVICE DISTRICT



**Table 4-8
SMSSD Buildout Storage Requirements**

Area	ERCs	Irrigated Area (acres)	Fire Requirement (gal) ¹	Equalization Storage Requirement (gal)	Storage Requirement (gal)	Existing Storage (gal)	Surplus (+) / Deficit (-)
1	321	27.5	0	160,370	160,370	325,000	164,630
2	471	0	180,000	127,170	307,170	0	-307,170
3	160	0	180,000	43,200	223,200	0	-223,200
Total	952	27.5	360,000	330,740	690,740	325,000	-365,740

1. Fire storage will be shared between zones with Areas 2 and 3 providing fire storage for Area 1.

The existing system does not have the storage capacity necessary for projected buildout requirements. The projects in Table 4-9 are proposed to be included in the buildout system to provide the required storage. Fire storage will be held in Areas 2 and 3 and fed down to Area 1 through PRVs if needed. The existing 55,000 gallon tank in Area 1 will need to be replaced as it is 50 years old and reaching the end of its service life.

**Table 4-9
Proposed Storage Projects**

Description	Notes
Area 1 Storage Tank	Construct a new storage tank with a capacity of at least 250,000 gallons to replace the existing 55,000 gallon tank in Area 1.
Area 2 Storage Tank	Construct a storage tank with a capacity of at least 310,000 gallons to serve Area 2 and provide fire storage to Areas 1 and 2.
Area 3 Storage Tank	Construct a storage tank that with a capacity of at least 225,000 gallons to serve Area 3 and provide fire storage to Areas 1 and 3.

CHAPTER 5 CAPITAL FACILITY PLAN

The purpose of this section is to identify the drinking water facilities that are required, for the 20-year planning period, to meet the demands placed on the system by future development. Proposed facilities were sized to meet master plan requirements and located to accommodate 20-year growth projections. Each capital facility plan project will require a detailed design analysis before construction to more precisely define the locations of tanks, wells, hydrants, and other key infrastructure. Specific projects with estimated costs are presented at the end of this chapter.

Projects necessary to support growth over the next 20 years are identified and described in the Capital Facility Plan. Conceptual-level cost estimates were prepared for each project. These costs are attributable to new growth for the system.

Table 5-1 briefly summarizes the estimated costs of projects by service area. Figure 4-1 shows the proposed projects and their approximate locations.

**Table 5-1
Capital Projects by Area**

Area	Estimated Cost
1	\$1,830,000
2	\$14,730,000
3	\$6,280,000
Total	\$22,840,000

Each Area has capital projects that will help facilitate future growth. These projects have an estimated cost of **\$22,840,000** (see Table 5-1 and Appendix D). These costs are eligible to be paid for by impact fees from incoming users and connection fees and rates for existing users.

**Table 5-2
System Growth-Related Capital Projects (0 – 20 Years)**

Type	Area	Recommended Project	Estimated Cost
Storage	1	Replace the existing 55,000 gallon tank in Area 1 with a new 250,000 gallon tank.	\$530,000
Source	1	Develop Cottonwood Springs and construct approximately 5,800 feet of 4-inch pipe to convey spring water to Area 1.	\$1,300,000
Transmission	2	Construct new water pipelines necessary to provide water to lots in Area 2.	\$13,340,000
Source	2	Drill an additional well that can provide at least 50 gpm to help meet the expected future demands in Area 2.	\$710,000
Storage	2	Construct a tank with a minimum capacity of 310,000 gallons.	\$680,000
Transmission	3	Construct new water pipelines necessary to provide water to lots in Area 3.	\$5,700,000
Source	3	Purchase the existing Colledge Well Located in Area 3.	\$110,000
Storage	3	Construct a tank with a minimum capacity of 225,000 gallons.	\$470,000
Total			\$22,840,000

OFFICE AND MAINTENANCE BUILDING

As part of this effort, a preliminary site plan for an office and maintenance building was developed. A planning-level estimated cost for this building is \$310,000 or more depending on options chosen. See Appendix E for the site plan and cost estimate.

FUNDING OPTIONS

Funding options for the recommended projects, in addition to water use fees, include: general obligation bonds, revenue bonds, State/Federal grants and loans, and impact fees. In reality, SMSSD may need to consider a combination of these funding options. The following discussion describes each of these options.

General Obligation Bonds

This form of debt enables SMSSD to issue general obligation bonds for capital improvements and replacement. General Obligation (G.O.) bonds would be used for items not typically financed through the Water Revenue Bonds (for example, the purchase of water source to ensure a sufficient water supply for SSMD in the future). G.O. bonds are debt instruments backed by the full faith and credit of SMSSD which would be secured by an unconditional pledge of SMSSD to

levy assessments, charges, or ad valorem taxes necessary to retire the bonds. G.O. bonds are the lowest-cost form of debt financing available to local governments and can be combined with other revenue sources such as specific fees, or special assessment charges to form a dual security through SMSSD's revenue-generating authority. These bonds are supported by SMSSD as a whole, so the amount of debt issued for the water system is limited to a fixed percentage of the real market value for taxable property within SMSSD. G.O. bonds must be approved by a members vote.

Revenue Bonds

This form of debt financing is also available to SMSSD for utility-related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by SMSSD as a whole, but constitute a lien against the water service charge revenues of a Water Utility. Revenue bonds present a greater risk to the lender than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure, and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally require a higher interest rate than G.O. bonds, although current interest rates are quite low. This type of debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. Typically, voter approval is not required when issuing revenue bonds.

State or Federal Grants and Loans

Historically, both local and county governments have experienced significant infrastructure funding support from state and federal government agencies in the form of block grants, direct grants in aid, interagency loans, and general revenue sharing. Federal expenditure pressures and virtual elimination of federal revenue sharing are clear indicators that local government may be left to its own devices regarding infrastructure finance in general. However, state or federal grants and loans should be further investigated as a possible funding source for needed water system improvements.

It is also important to assess likely trends regarding state or federal assistance in infrastructure financing. Future trends indicate that grants will be replaced by loans through a public works revolving fund. Local governments can expect to access these revolving funds or public works trust funds by demonstrating both the need for and the ability to repay the borrowed monies, with interest. As with the revenue bonds discussed earlier, the ability of infrastructure programs to wisely manage their own finances will be a key element in evaluating whether many secondary funding sources, such as federal/state loans, will be available to the District.

Impact Fees

The Utah Impact Fees Act, codified in Title 11, Chapter 36a, of the Utah Code, authorizes municipalities to collect impact fees to fund public facilities. An impact fee is "a payment of money imposed upon new development activity . . . to mitigate the impact of the new development on public infrastructure" (Subsection 11-36a-102(8)). Impact fees enable local governments to finance infrastructure improvements without burdening existing development with costs that are exclusively attributable to growth.

Impact fees can be applied to water-related facilities under the Utah Impact Fees Act. The Act is designed to provide a logical and clear framework for establishing new development assessments. It is also designed to establish the basis for the fee calculation which SMSSD must

follow in order to comply with the statute. The fundamental objective for the fee structure is the imposition on new development of only those costs associated with providing or expanding water infrastructure to meet the capacity needs created by that specific new development. Impact fees cannot be applied retroactively.

An impact fee analysis is provided in a separate document.

CHAPTER 6 MASTER PLAN SUMMARY

SOURCES

The existing sources are sufficient for the current conditions and demands for the water system. The following recommendations are suggested for the sources to ensure that the demands can be met in future conditions:

- Drill and equip a new well in Area 1 that is capable of supplying at least 100 gpm.
- Develop the existing Cottonwood Springs to supply water to Area 1.
- Drill and equip a new well in Area 2 that is capable of supplying at least 65 gpm.
- Purchasing the existing Colledge Well located in Area 3.

These projects will provide adequate peak day source for the estimated buildout demands of Areas 1, 2, and 3. Additional water rights may need to be secured if seasonal use in Areas 2 and 3 amounts to 0.15 ac-ft per ERC as was estimated in this report. However, this is a conservative estimate, and it is likely that existing water rights will be adequate many years into the future. In the future, reviewing annual water use records in Areas 2 and 3 is recommended to more accurately quantify usage in these areas.

DISTRIBUTION

Under existing conditions, SMSSD's existing distribution system satisfies the minimum pressure requirements of R309-510-9 and R309-105-9, including 20 psi during peak day fire flow, 30 psi during peak instantaneous demand, and 40 psi during peak day demand. There are no existing deficiencies. The existing system is also able to meet the fire flow requirements of at least 1,000 gpm while maintaining a service pressure of 20 psi.

To serve Areas 2 and 3, approximately 17.9 miles of new pipe and approximately 24 PRVs must be installed. A map of proposed infrastructure for these areas is shown in Figure 4-1. The proposed infrastructure will satisfy the minimum pressure requirements of R309-510-9 and R309-105-9, including 20 psi during peak day fire flow, 30 psi during peak instantaneous demand, and 40 psi during peak day demand.

STORAGE

SMSSD has sufficient water storage capacity to meet existing requirements. Future growth and aging infrastructure will require the construction of the following projects:

- Replace the existing 55,000 gallon storage tank with a new storage tank with a capacity of 250,000 gallons in Area 1.
- Construct a storage tank that with a capacity of at least 310,000 gallons to serve Area 2
- Construct a storage tank that with a capacity of at least 225,000 gallons to serve Area 3

OPERATIONAL RECOMMENDATIONS

Operational expenses and projects were not covered in detail as part of this master plan. However, over the course of the study, SMSSD personnel suggested several potential improvements to increase redundancy and help with system operation. These suggestions are listed below and recommended for further study.

- Consider drilling or purchasing another Well in Area 3 to provide redundancy.
- Ensure that all meters are functioning properly and installed for every connection.
- Identify all the sizes and locations of pipes and identify what that was not replaced in 2013. Develop a detailed map documenting this information.
- Investigate the peak capacity of Thad's Peak Well to see if its capacity could be increased.

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APPENDIX A

Fire Flow and Hydrant Tests

Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

Pitot Pressure

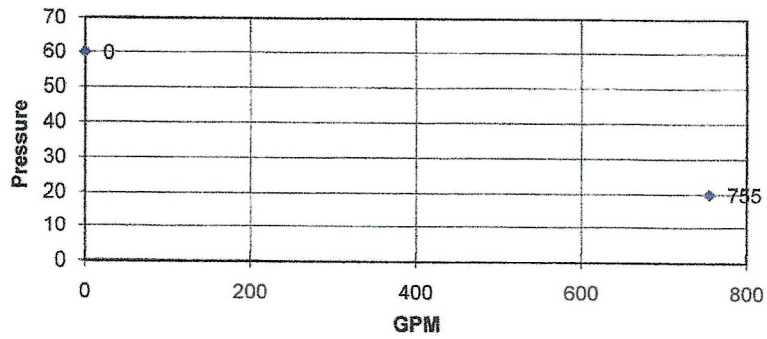
Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=

Hydrant Flow



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

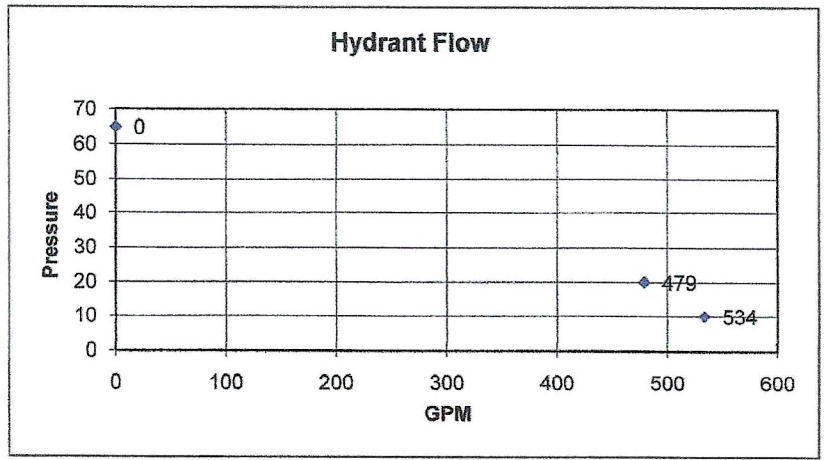
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

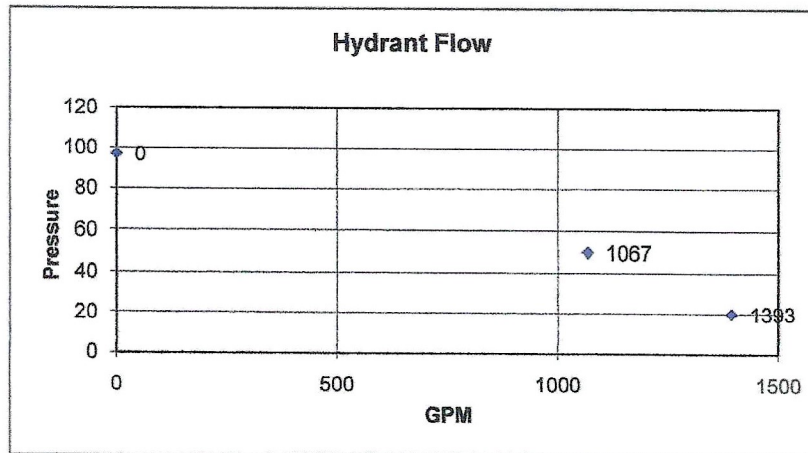
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

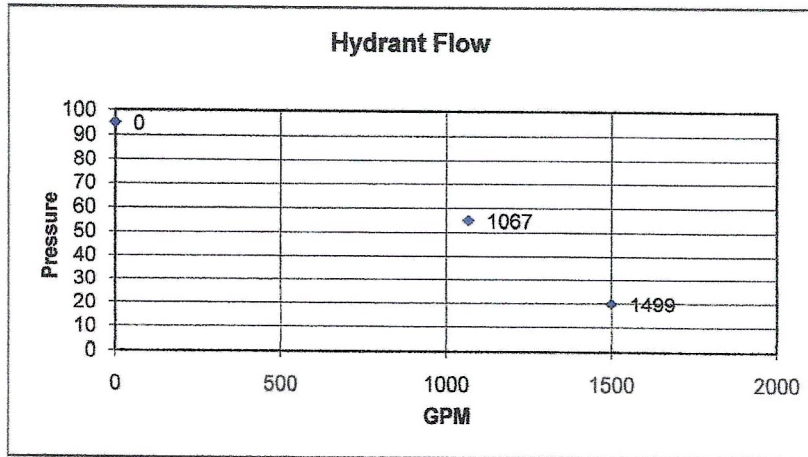
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi =



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

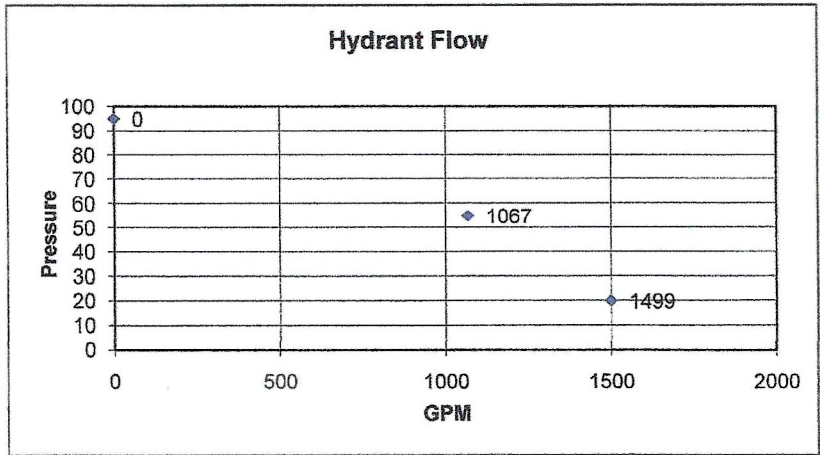
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

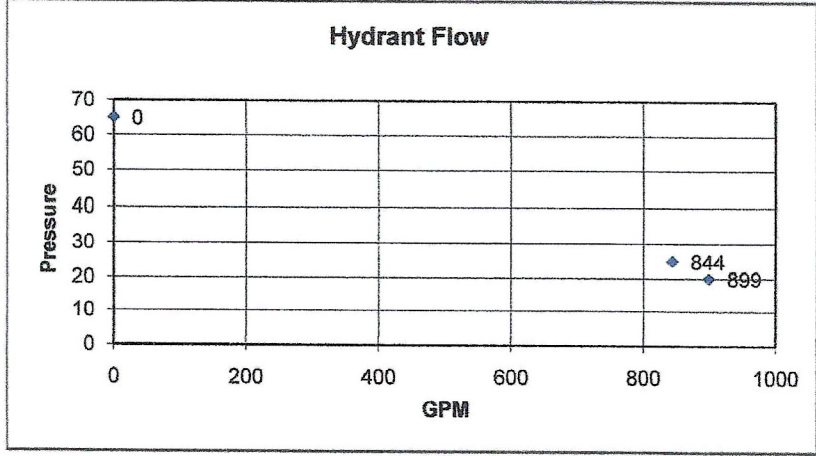
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi =



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

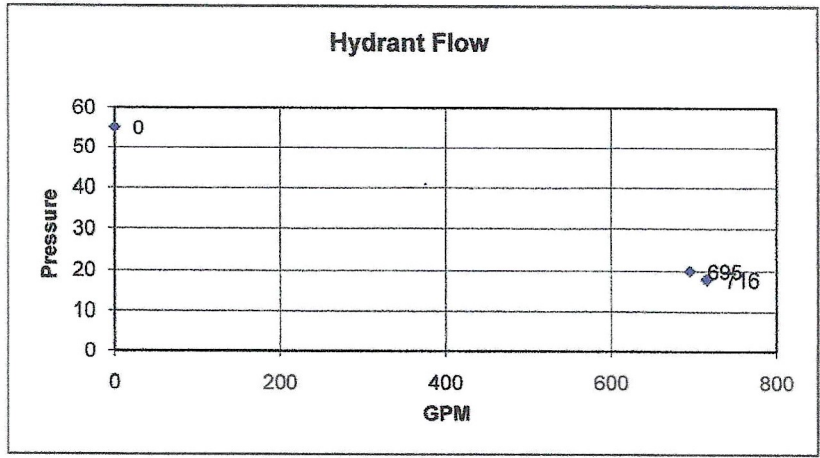
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

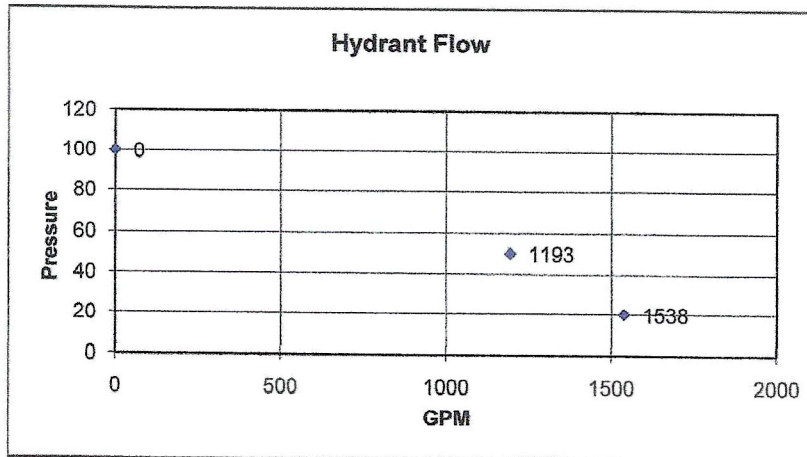
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

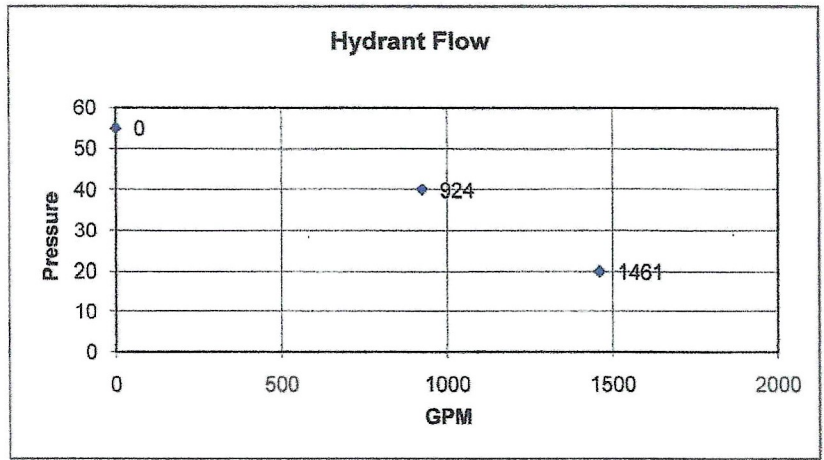
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

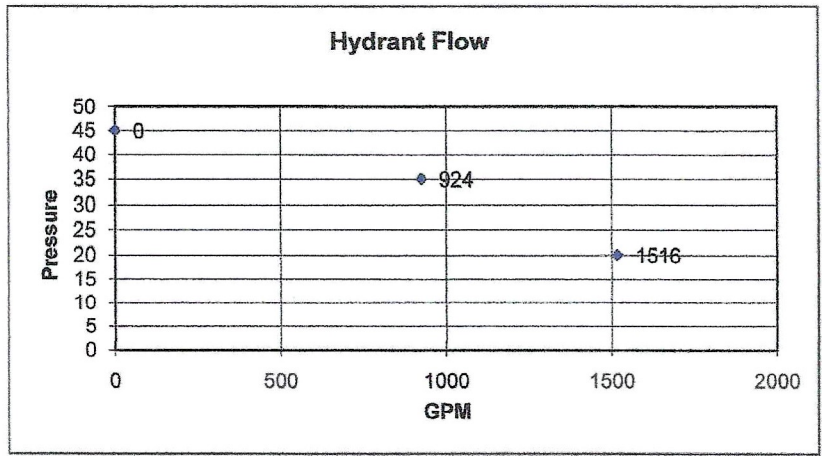
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi=



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

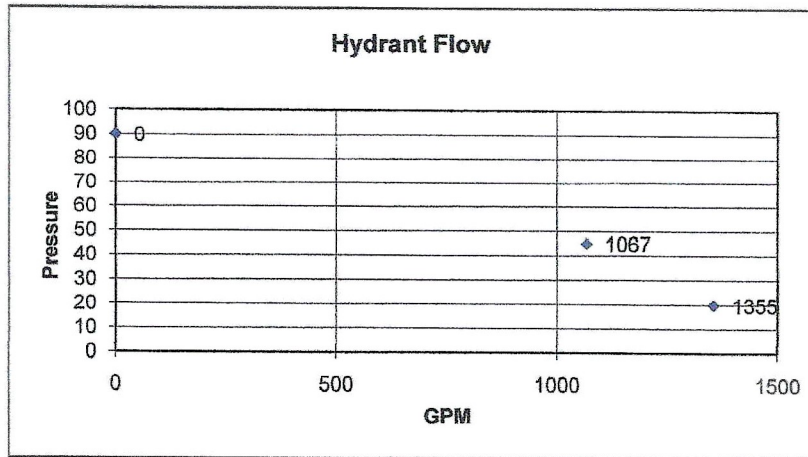
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi =



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

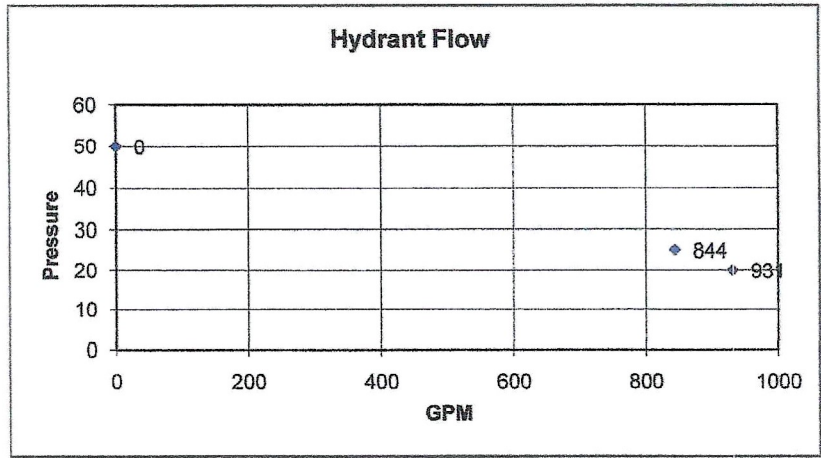
Pitot Pressure

Residual Pressure

Static Pressure

Flow, gpm =

Flow, gpm at 20 psi =



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

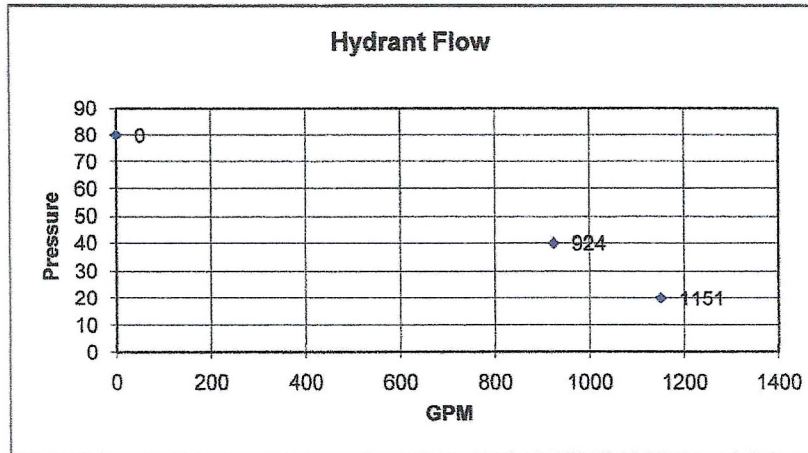
Pitot Pressure

Residual Pressure

Static Pressure

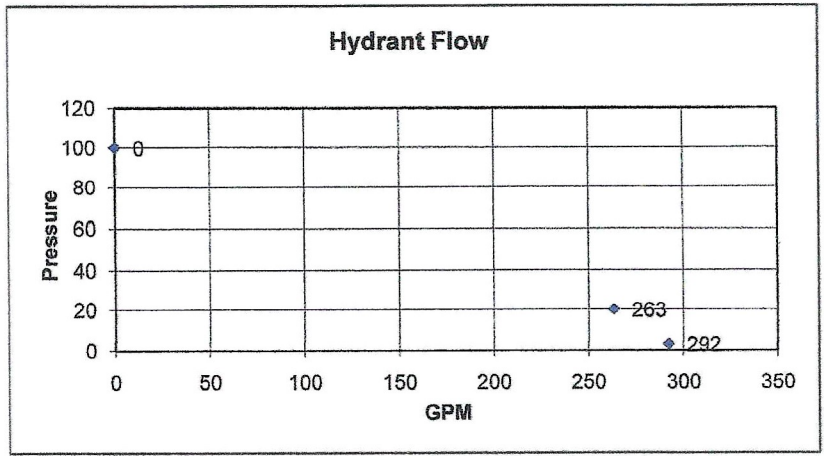
Flow, gpm =

Flow, gpm at 20 psi =



Hydrant Information Sheet

Hydrant Number	E21
Hydrant Location	Skyline Mountain Resort 2213 North Owen Thomas Drive by Old Managers House Fairview, Utah 84629
Nozzle Coefficient	0.90
Nozzle I.D., inches	2.50
Pitot Pressure	3
Residual Pressure	3
Static Pressure	100
Flow, gpm =	292
Flow, gpm at 20 psi=	263



Hydrant Information Sheet

Hydrant Number

Hydrant Location

Nozzle Coefficient

Nozzle I.D., inches

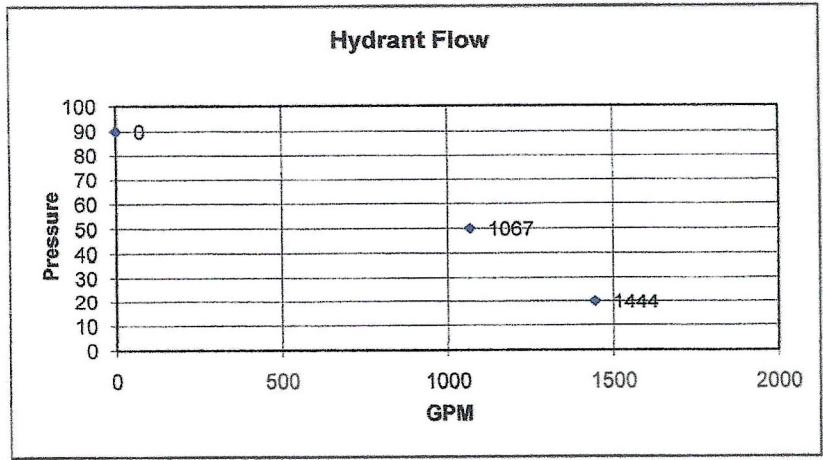
Pitot Pressure

Residual Pressure

Static Pressure

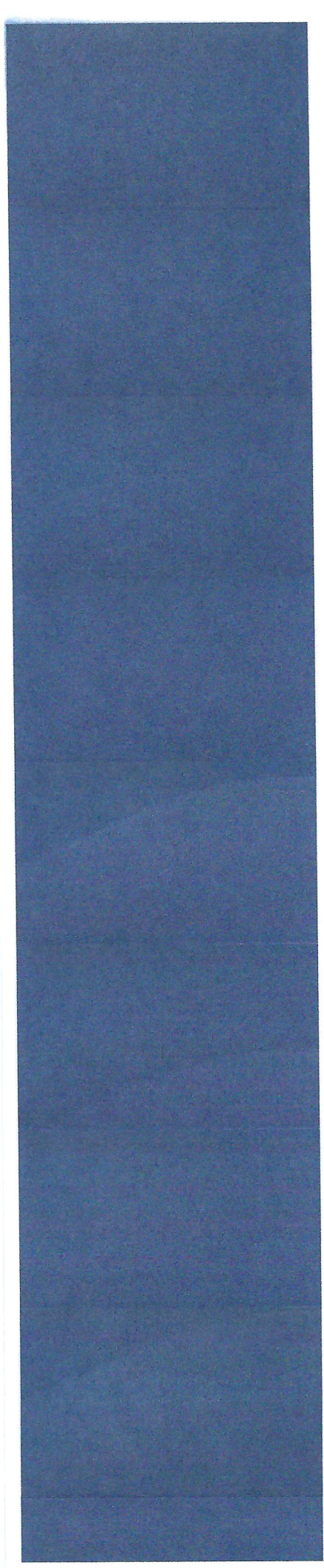
Flow, gpm =

Flow, gpm at 20 psi=

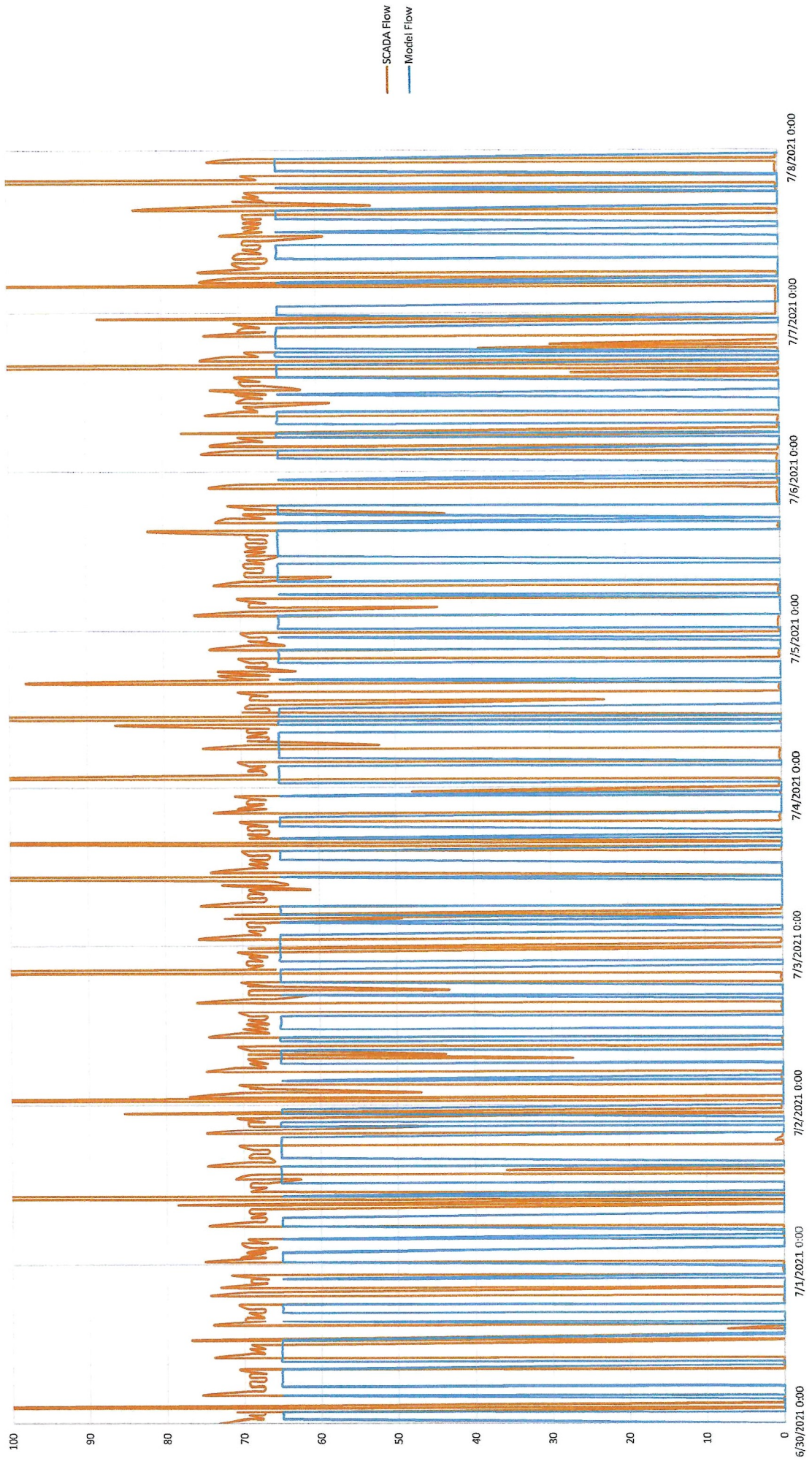


APPENDIX B

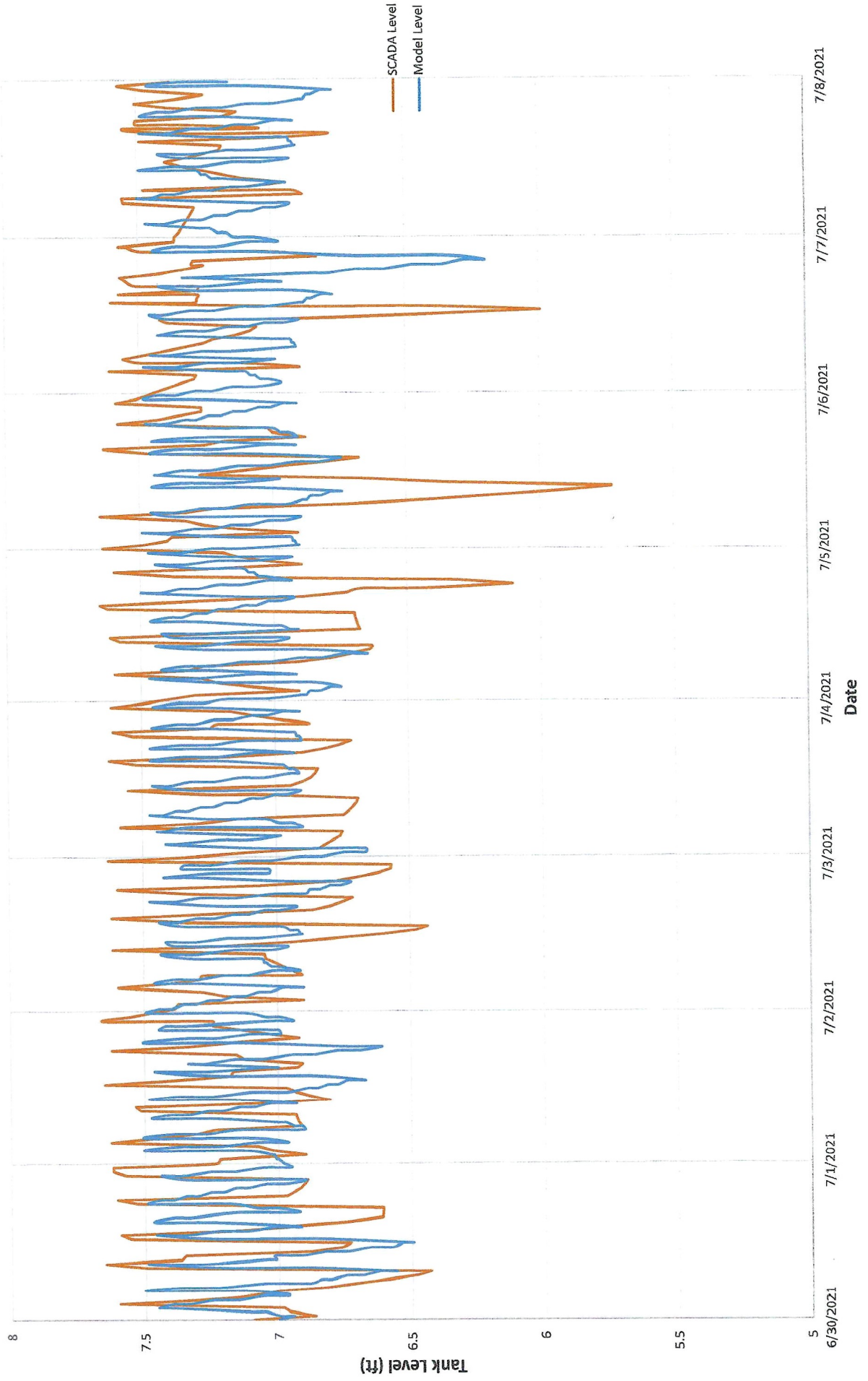
Hydraulic Model Calibration Data



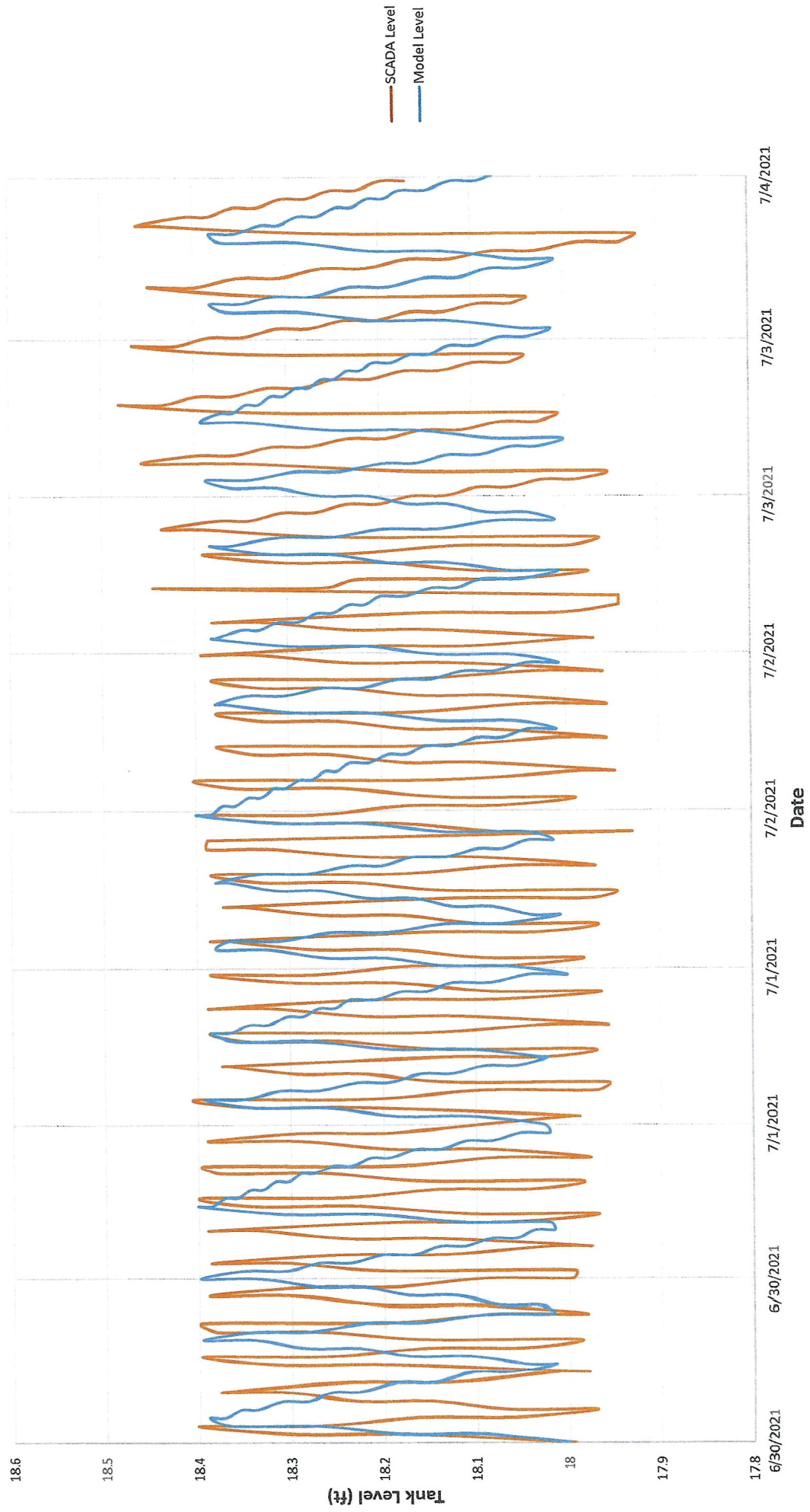
Golf Course Well



Booster Tank



Upper Tank



APPENDIX C

Estimated Project Costs

**SMSSD Drinking Water Projects
Water Recommended Improvements
Preliminary Engineers Cost Estimates**

	Item	Unit	Unit Price	Quantity	Total Price
1-1	Area 1 Storage Capacity Upgrade				
	Tank	GAL	\$ 1.75	250000	\$ 437,500
				Engineering & Admin. (10%)	\$ 43,750
				Contingency (10%)	\$ 43,750
	Total to Area 1 Storage Capacity Upgrade				\$ 530,000
1-2	Equip Cottonwood Springs for Use				
	4" Water Line	LF	\$ 135	5800	\$ 784,648
	Develop Springs and Construct Connection	LS	\$ 300,000	1	\$ 300,000
				Engineering & Admin. (10%)	\$ 108,465
				Contingency (10%)	\$ 108,465
	Total to Equip Cottonwood Springs for Use				\$ 1,300,000
Total Costs for Area 1					\$ 1,830,000
2-1	Area 2 Transmission Upgrades				
	8" Water Line	LF	\$ 170	62500	\$ 10,640,188
	6" PRV	EA	\$ 30,000	16	\$ 480,000
				Engineering & Admin. (10%)	\$ 1,112,019
				Contingency (10%)	\$ 1,112,019
	Total to Area 2 Transmission Upgrades				\$ 13,340,000
2-2	Area 2 Source Capacity Upgrade				
	Well Drilling and Development (50 gpm)	EA	\$ 192,000	1	\$ 192,000
	Well Equipment and Well House	EA	\$ 400,000	1	\$ 400,000
				Engineering & Admin. (10%)	\$ 59,200
				Contingency (10%)	\$ 59,200
	Total to Area 2 Source Capacity Upgrade				\$ 710,000
2-3	Area 2 Storage Capacity Upgrade				
	Tank	GAL	\$ 1.75	325000	\$ 568,750
				Engineering & Admin. (10%)	\$ 56,875
				Contingency (10%)	\$ 56,875
	Total to Area 2 Storage Capacity Upgrade				\$ 680,000
Total Costs for Area 2					\$ 14,730,000
3-1	Area 3 Transmission Upgrades				
	8" Water Line	LF	\$ 170	26500	\$ 4,511,440
	6" PRV	EA	\$ 30,000	8	\$ 240,000
				Engineering & Admin. (10%)	\$ 475,144
				Contingency (10%)	\$ 475,144
	Total to Area 3 Transmission Upgrades				\$ 5,700,000
3-2	Area 3 Source Capacity Upgrade				
	Purchase of Colledge Well, upgrade to public drinking water source and re-equip to provide 75 gpm	EA	\$ 95,000	1	\$ 95,000
				Engineering & Admin. (10%)	\$ 9,500
				Contingency (10%)	\$ 9,500
	Total to Area 3 Source Capacity Upgrade				\$ 110,000
3-3	Area 3 Storage Capacity Upgrade				
	Tank	GAL	\$ 1.75	225000	\$ 393,750
				Engineering & Admin. (10%)	\$ 39,375
				Contingency (10%)	\$ 39,375
	Total to Area 3 Storage Capacity Upgrade				\$ 470,000
Total Costs for Area 3					\$ 6,280,000
Total Costs					\$ 22,840,000

APPENDIX D

Checklist for Hydraulic Modeling Design Elements Report

APPENDIX

CHECKLIST FOR HYDRAULIC MODEL DESIGN ELEMENTS REPORT

The hydraulic model checklist below identifies the components included in the Hydraulic Model Design Elements Report for

Skyline Mountain Special Service District Master Plan
(Project Name or Description)
20043
(Water System Number)
Skyline Mountain SSD Drinking Water System
(Water System Name)
September 7, 2022
(Date)

The checkmarks and/or P.E. initials after each item indicate the conditions supporting P.E. Certification of this Report.

1. The Report contains:

(a) A listing of sources including: the source name, the source type (i.e., well, spring, reservoir, stream etc.) for both existing sources and additional sources identified as needed for system expansion, the minimum reliable flow of the source in gallons per minute, the status of the water right and the flow capacity of the water right. [R309-110-4 "Master Plan" definition] _____

(b) A listing of storage facilities including: the storage tank name, the type of material (i.e., steel, concrete etc.), the diameter, the total volume in gallons, and the elevation of the overflow, the lowest level (elevation) of the equalization volume, the fire suppression volume, and the emergency volume or the outlet. [R309-110-4 "Master Plan" definition] _____

(c) A listing of pump stations including: the pump station name and the pumping capacity in gallons per minute. Under this requirement one does not need to list well pump stations as they are provided in requirement (a) above. [R309-110-4 "Master Plan" definition] _____

(d) A listing of the various pipeline sizes within the distribution system with their associated pipe materials and, if readily available, the approximate length of pipe in each size and material category. A schematic of the distribution piping showing

node points, elevations, length and size of lines, pressure zones, demands, and coefficients used for the hydraulic analysis required by (h) below will suffice.

[R309-110-4 "Master Plan" definition]

(e) A listing by customer type (i.e., single family residence, 40 unit condominium complex, elementary school, junior high school, high school, hospital, post office, industry, commercial etc.) along with an assessment of their associated number of ERCs. [R309-110-4 "Master Plan" definition]

(f) The number of connections along with their associated ERC value that the public drinking water system is committed to serve, but has not yet physically connected to the infrastructure. [R309-110-4 "Master Plan" definition]

(g) A description of the nature and extent of the area currently served by the water system and a plan of action to control addition of new service connections or expansion of the public drinking water system to serve new development(s). The plan shall include current number of service connections and water usage as well as land use projections and forecasts of future water usage. [R309-110-4 "Master Plan" definition]

(h) A hydraulic analysis of the existing distribution system along with any proposed distribution system expansion identified in (g) above. [R309-110-4 "Master Plan" definition]

(i) A description of potential alternatives to manage system growth, including interconnections with other existing public drinking water systems, developer responsibilities and requirements, water rights issues, source and storage capacity issues and distribution issues. [R309-110-4 "Master Plan" definition]

2. At least 80% of the total pipe lengths in the distribution system affected by the proposed project are included in the model. [R309-511-5(1)]

3. 100% of the flow in the distribution system affected by the proposed project is included in the model. If customer usage in the system is metered, water demand allocations in the model account for at least 80% of the flow delivered by the distribution system affected by the proposed project. [R309-511-5(2)]

4. All 8-inch diameter and larger pipes are included in the model. Pipes smaller than 8-inch diameter are also included if they connect pressure zones, storage facilities, major demand areas, pumps, and control valves, or if they are known or expected to be significant conveyers of water such as fire suppression demand. [R309-511-5(3)]

5. All pipes serving areas at higher elevations, dead ends, remote areas of a distribution system, and areas with known under-sized pipelines are included in the model. [R309-511-5(4)] _____
6. All storage facilities and accompanying controls or settings applied to govern the open/closed status of the facility for standard operations are included in the model. [R309-511-5(5)] _____
7. Any applicable pump stations, drivers (constant or variable speed), and accompanying controls and settings applied to govern their on/off/speed status for various operating conditions and drivers are included in the model. [R309-511-5(6)] _____
8. Any control valves or other system features that could significantly affect the flow of water through the distribution system (i.e. interconnections with other systems, pressure reducing valves between pressure zones) for various operating conditions are included in the model. [R309-511-5(7)] _____
9. Imposed peak day and peak instantaneous demands to the water system's facilities are included in the model. The Hydraulic Model Design Elements Report explains which of the Rule-recognized standards for peak day and peak instantaneous demands are implemented in the model (i.e., (i) peak day and peak instantaneous demand values per R309-510, *Minimum Sizing Requirements*, (ii) reduced peak day and peak instantaneous demand values approved by the Director per R309-510-5, *Reduction of Sizing Requirements*, or (iii) peak day and peak instantaneous demand values expected by the water system in excess of the values in R309-510, *Minimum Sizing Requirements*). The Hydraulic Model Design Elements Report explains the multiple model simulations to account for the varying water demand conditions, or it clearly explains why such simulations are not included in the model. The Hydraulic Model Design Elements Report explains the extended period simulations in the model needed to evaluate changes in operating conditions over time, or it clearly explains (e.g., in the context of the water system, the extent of anticipated fire event, or the nature of the new expansion) why such simulations are not included in the model. [R309-511-5(8) & R309-511-6(1)(b)] _____
10. The hydraulic model incorporates the appropriate demand requirements as specified in R309-510, *Minimum Sizing Requirements*, and R309-511, *Hydraulic Modeling Requirements*, in the evaluation of various operating conditions of the public drinking water system. The Report includes:
- the methodology used for calculating demand and allocating it to the model;
 - a summary of pipe length by diameter;

- a hydraulic schematic of the distribution piping showing pressure zones, general pipe connectivity between facilities and pressure zones, storage, elevation, and sources; and
- a list or ranges of values of friction coefficient used in the hydraulic model according to pipe material and condition in the system. In accordance with Rule stipulation, all coefficients of friction used in the hydraulic analysis are consistent with standard practices.

[R309-511-7(4)]

11. The Hydraulic Model Design Elements Report documents the calibration methodology used for the hydraulic model and quantitative summary of the calibration results (i.e., comparison tables or graphs). The hydraulic model is sufficiently accurate to represent conditions likely to be experienced in the water delivery system. The model is calibrated to adequately represent the actual field conditions using field measurements and observations. [R309-511-4(2)(b), R309-511-5(9), R309-511-6(1)(e) & R309-511-7(7)]

12. The Hydraulic Model Design Elements Report includes a statement regarding whether fire hydrants exist within the system. Where fire hydrants are connected to the distribution system, the model incorporates required fire suppression flow standards. The statement that appears in the Report also identifies the local fire authority's name, address, and contact information, as well as the standards for fire flow and duration explicitly adopted from R309-510-9(4), *Fireflow*, or alternatively established by the local fire suppression agency, pursuant to R309-510-9(4), *Fireflow*. The Hydraulic Model Design Elements Report explains if a steady-state model was deemed sufficient for residential fire suppression demand, or acknowledges that significant fire suppression demand warrants extended model simulations and explains the run time used in the simulations for the period of the anticipated fire event. [R309-511-5(10) & R309-511-7(5)]

13. If the public drinking water system provides water for outdoor use, the Report describes the criteria used to estimate this demand. If the irrigation demand map in R309-510-7(3), *Irrigation Use*, is not used, the report provides justification for the alternative demands used in the model. If the irrigation demands are based on the map in R309-510-7(3), *Irrigation Use*, the Report identifies the irrigation zone number, a statement and/or map of how the irrigated acreage is spatially distributed, and the total estimated irrigated acreage. The indicated irrigation demands are used in the model simulations in accordance with Rule stipulation. The model accounts for outdoor water use, such as irrigation, if the drinking water system supplies water for outdoor use. [R309-511-5(11) & R309-511-7(1)]

14. The Report states the total number of connections served by the water system including existing connections and anticipated new connections served by the water system after completion of the construction of the project. [R309-511-7(2)]

15. The Report states the total number of equivalent residential connections (ERC) including both existing connections as well as anticipated new connections associated with the project. In accordance with Rule stipulation, the number of ERC's includes high as well as low volume water users. In accordance with Rule stipulation, the determination of the equivalent residential connections is based on flow requirements using the anticipated demand as outlined in *R309-510, Minimum Sizing Requirements*, or is based on alternative sources of information that are deemed acceptable by the Director. [R309-511-7(3)] _____
16. The Report identifies the locations of the lowest pressures within the distribution system, and areas identified by the hydraulic model as not meeting each scenario of the minimum pressure requirements in *R309-105-9, Minimum Water Pressure*. [R309-511-7(6)] _____
17. The Hydraulic Model Design Elements Report identifies the hydraulic modeling method, and if computer software was used, the Report identifies the software name and version used. [R309-511-6(1)(f)] _____
18. For community water system models, the community water system management has been provided with a copy of input and output data for the hydraulic model with the simulation that shows the worst case results in terms of water system pressure and flow. [R309-511-6(2)(c)] _____
19. The hydraulic model predicts that new construction will not result in any service connection within the new expansion area not meeting the minimum distribution system pressures as specified in *R309-105-9, Minimum Water Pressure*. [R309-511-6(1)(c)] _____
20. The hydraulic model predicts that new construction will not decrease the pressures within the existing water system such that the minimum pressures as specified in *R309-105-9, Minimum Water Pressure* are not met. [R309-511-6(1)(d)] _____
21. The velocities in the model are not excessive and are within industry standards. _____

APPENDIX E

Preliminary Office Building Site Plan



		PROJECT ENGINEER DATE: SEPTEMBER 2022	DESIGNED: RJG DRAFTED: DJL CHECKED: RJG	3 2 1	DATE: SEPTEMBER 2022 NO.: 1	REVISIONS BY: JPOD	SCALE: AS SHOWN	SKYLINE MOUNTAIN SSD 2201 SMR FAIRVIEW, UTAH 84629	SKYLINE MOUNTAIN SSD SITE PLAN OFFICE BUILDING & FILL STATION	SHEET 1 299.00/100
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SMSSD
Office Building
Preliminary Engineers Cost Estimates

	Item	Unit	Unit Price	Quantity	Total Price
O-1	Office Building - Low Range				
	Office Building	SF	\$ 150.00	1728	\$ 259,200
			Engineering & Admin. (10%)		\$ 25,920
			Contingency (10%)		\$ 25,920
			Total to Office Building - Low Range		\$ 310,000
O-1	Office Building - High Range				
	Office Building	SF	\$ 500.00	1728	\$ 864,000
			Engineering & Admin. (10%)		\$ 86,400
			Contingency (10%)		\$ 86,400
			Total to Office Building - High Range		\$ 1,040,000