JORDANELLE SPECIAL SERVICE DISTRICT SEWER IMPACT FEE FACILITIES PLAN

OCTOBER 2025

DRAFT

Prepared for:

JORDANELLE SPECIAL SERVICE DISTRICT

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EXECUTIVE SUMMARY

Jordanelle Special Service District (JSSD or District) has retained Bowen Collins & Associates (BC&A) to prepare an impact fee facility plan (IFFP) for sanitary sewer services provided by the District. The purpose of an IFFP is to identify demands placed upon District facilities by future development and evaluate how these demands will be met by the District. The IFFP is also intended to outline the improvements which may be funded through impact fees.

Why is an IFFP Needed?

The IFFP provides a technical basis for assessing and establishing impact fees throughout the District. This document will address the future infrastructure needed to serve the District based on current land use planning. The existing and future capital projects documented in this IFFP will ensure that level of service standards are maintained for all existing and future residents who reside within the District. Local governments must pay strict attention to the required elements of the Impact Fee Facilities Plan which are enumerated in the Impact Fees Act (Utah Code Annotated 11-36a-306(1)).

Projected Future Growth

To evaluate the use of existing capacity and the need for future capacity, it is first necessary to calculate the demand associated with existing development and projected growth. Using available information for existing development and growth projections from the District's Sewer System Master Plan, projected growth in system demand is summarized in Table ES-1 in terms of Sewer Capacity Units (SCUs). A SCU represents the demand that a typical single-family residence places on the system.

Table ES-1
District Sewer Growth Projections

Year	Total SCUs	Total Annual Growth Rate	Projected Peak 14-Day Average Flow (GPD)	Projected Peak Day Flow (GPD)
2024	2,975	8.5%	742,847	922,833
2025	3,414	14.8%	912,094	1,015,406
2026	3,746	9.7%	982,081	1,113,152
2027	4,110	9.7%	1,057,368	1,219,437
2028	4,493	9.3%	1,135,213	1,330,963
2029	4,895	9.0%	1,215,466	1,447,675
2030	5,318	8.6%	1,297,926	1,569,457
2031	5,760	8.3%	1,388,478	1,696,129
2032	6,215	0.9%	1,480,496	1,825,907
2033	6,695	0.8%	1,576,143	1,961,715
2034	7,199	0.8%	1,675,145	2,103,271

As shown in the table above, the growth expected within the 10-year planning window is 4,224 SCUs.

Existing Capacity Available to Serve Future Growth

Projected future growth will be met through a combination of utilizing available excess capacity in existing facilities and the construction of additional capacity in new facilities. The percentage of existing capacity available for use by future growth has been calculated in Table ES-2.

Required System Improvements

Beyond the available existing capacity, additional improvements required to serve new growth are summarized in Table ES-2.

To satisfy the requirements of state law, Table ES-2 provides a breakdown of the percentage of the project costs attributed to existing and future users. For future use, capacity has been divided between capacity to be used by growth within the 10-year planning window of this IFFP and capacity that will be available for growth beyond the 10-year window. Project costs haven been recovered from the 2025 District Sewer System Master Plan with indicated costs recovered from developer estimates were applicable.

Table ES-2
10 Year Projects

Project ID	Project Description	System Level Project Cost	Percent to Existing Users	Percent to 10-Year Growth-Bonded Users	Percent to 10-Year Growth-Unbonded Users	Percent to >10-Year Growth-Bonded Users	Percent to >10-Year Growth-Unbonded Users
Collection							
LS-1	Keetley	$3,300,000	19.6%	7.3%	10.7%	33.4%	28.9%
P-1	State Park FM	$442,000	19.6%	7.3%	10.7%	33.4%	28.9%
C-1	Construction to Maintain Infrastructure: Manhole lining	$1,000,000	19.6%	7.3%	10.7%	33.4%	28.9%
LS-3A	Ross Creek	$3,240,000	32.5%	3.8%	22.4%	13.4%	27.9%
Treatment							
T-1	JSSD Phase 2 Attributable Treatment	$39,443,936	16.3%	9.1%	22.6%	16.9%	35.1%
Building & Administration							
Future Shop Building		$594,329	11.6%	5.0%	12.4%	23.0%	48.0%

IMPACT FEE FACILITIES PLAN

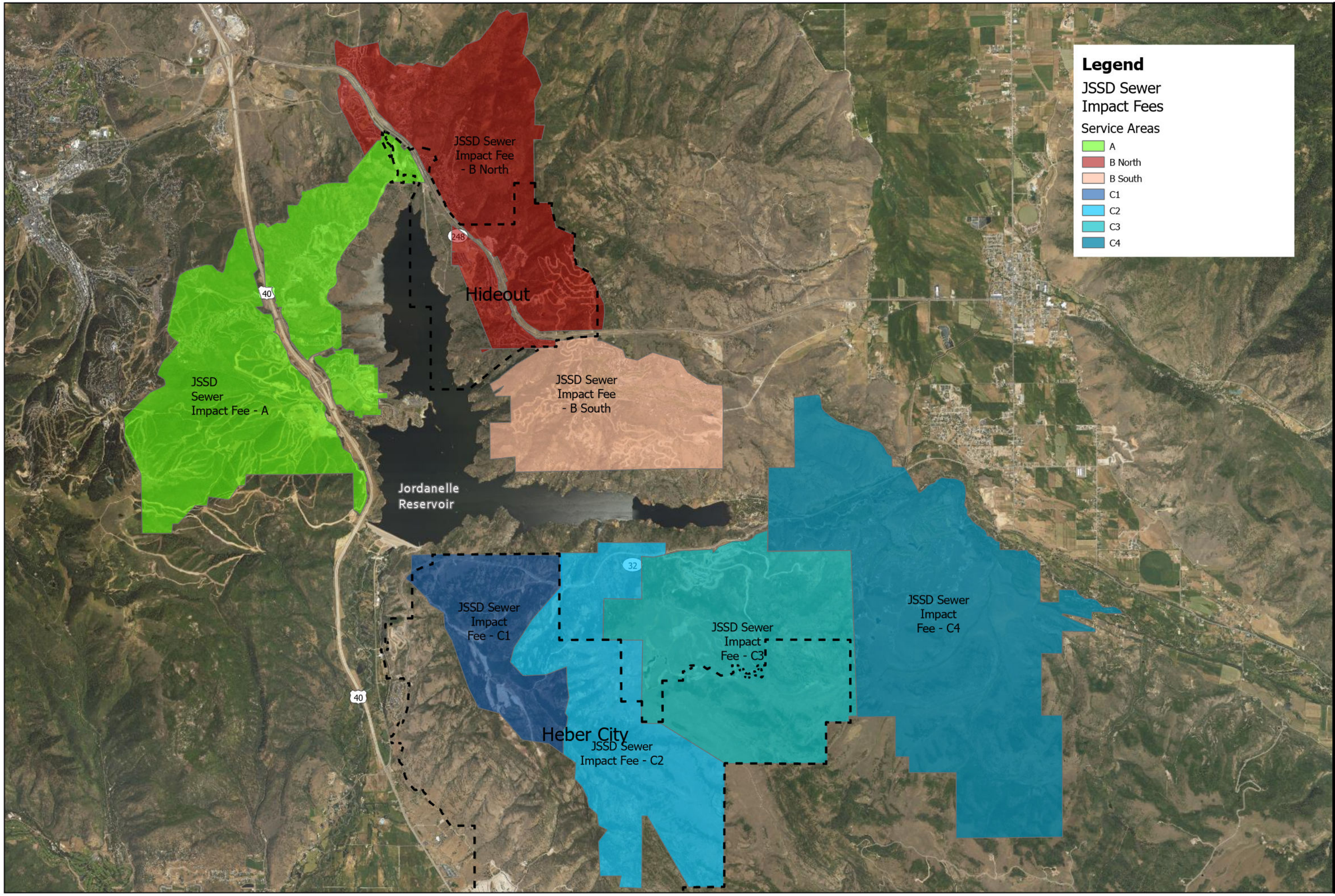
Introduction

The District of Jordanelle Special Service District (JSSD or District) has retained Bowen Collins & Associates (BC&A) to prepare an impact fee facility plan (IFFP) for sanitary sewer services provided by the District. The purpose of an IFFP is to determine the public facilities required to serve development resulting from new development activity. The IFFP is also intended to outline the improvements which may be funded through impact fees.

Much of the analysis forming the basis of this IFFP has been taken from the District's Sewer System Master Plan, which was also prepared by BC&A. The reader should refer to the 2025 Sewer Master Plan for additional discussion of planning and evaluation methodology beyond what is contained in this IFFP.

Service Area

For the purpose of impact fee calculations, the District system will be divided into 7 different Service Areas: A, B-North, B-South, C-1, C-2, C3, and C-4. Each area will potentially have a unique impact fee depending on portion infrastructure used. For a breakdown of impact fee service areas, please see Figure 1 below:



SCALE: 0 1,250 2,500 US Feet

NORTH: NORTH

JSSD SEWER IMPACT FEE AREAS

JORDANELLE SPECIAL SERVICE DISTRICT

JSSD SEWER IMPACT FEE ANALYSIS

BOWEN COLLINS & ASSOCIATES

FIGURE NO. 1

P:\Jordanelle SSD\456-17-01.45 2024 Rate Study\4.0 GIS\4.4 APRX\Impact Fee Areas Map.aprx bjnoe 10/23/2025

Impact Fee Facility Plan Components

Requirements for the preparation of an IFFP are outlined in Title 11, Chapter 36a of the Utah Code Annotated (the Impact Fees Act). Under these requirements, an IFFP shall accomplish the following for each facility:

1. Identify the existing level of service
2. Establish a proposed level of service
3. Identify excess capacity to accommodate future growth at the proposed level of service
4. Identify demands placed upon existing public facilities by new development
5. Identify the means by which demands from new development will be met
6. Consider the following additional issues
    a. revenue sources to finance required system improvements
    b. necessity of improvements to maintain the proposed level of service
    c. need for facilities relative to planned locations of schools

The following sections of this report have been organized to address each of these requirements.

EXISTING LEVEL OF SERVICE - UTAH CODE ANNOTATED 11-36a-302(1)(a)(i)

Level of service is defined in the Impact Fees Act as "the defined performance standard or unit of demand for each capital component of a public facility within a service area". This section discusses the level of service currently being provided to existing users.

Performance Standard

The performance standard defines the level of service the District has established to satisfy District performance requirements. The District desires to provide sewer capacity for its residents and businesses and to balance the cost of sewer improvements with the amount of demand in the system. Thus, the performance standard as documented in the District's Sewer System Master Plan is based on standards similar to the level of service adopted by other sewer systems of similar size and nature in Utah. If the existing level of service is less than the performance standard, it is a deficiency.

Sewer Main Level of Service

The following criteria were used as the existing performance standard for sewer main facilities:

- A pipe capacity deficiency has been defined as any point where the modeled peak flow in the pipe is greater than 75 percent of the full flow capacity.
- The remaining 25 percent of pipe capacity is reserved for inflow, unaccounted-for fluctuations in domestic flow, and infiltration.

Force Main Level of Service

The following criteria were used as the existing performance standard for force main facilities:

- A force main pipe where any point the velocity is greater than 7 feet per second.
- Where there are pressures greater than the system can handle.
- By eliminating excessive pipeline velocities, this standard optimizes pump efficiency, limits potential for hydraulic surge issues, and maximizes the lift of the force main.

Lift Station Level of Service

The following criteria were used as the existing performance standard for lift station facilities:

- A lift station should not exceed 75 percent of the lift station's hydraulic pumping capacity therefore, the minimum design level of service for lift stations in JSSD is correspondingly 25 percent higher than estimated peak flows at buildout.
- Based on manufacturers' recommendations for pump operation, the maximum number of cycles per hour should be six or less. Exceeding this value will significantly shorten the lifespan of the lift station pumps.

Unit of Demand Level of Service

The projected flow used to design and evaluate system components will vary depending on the nature of each component.

For the purposes of this analysis, it is useful to define these various demands in terms of Sewer Capacity Units (SCUs). SCUs are a way to provide a common unit of measurement for both residential and non-residential development. SCUs in JSSD are based on average wastewater production for a typical residential unit within the District.

Level of Service Summary

The existing level of service for The District of North Village Special Service District sewer facilities can be summarized as follows:

Table 1: Level of Service Standards

Type	Existing Performance Standard
Gravity	75% of Full Flow Capacity
Force Main	Max of 7 fps
Lift Station	75% of full lift station's hydraulic capacity
Flow Rates per SCU	See 2024 Sewer Master Plan

The existing JSSD system level of service meets the performance standard for all areas currently connected.

Proposed Level of Service - Utah Code Annotated 11-36a-302(1)(b) and 11-36a-302(1)(c)(i)

The proposed level of service is the performance standard used to evaluate system needs in the future. The Impact Fee Act indicates that the proposed level of service may:

1. diminish or equal the existing level of service; or
2. exceed the existing level of service if, independent of the use of impact fees, the District implements and maintains the means to increase the level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

It should be noted that Jordanelle Special Service District has experienced a decrease in Level of Service since the 2015 IFFA. In 2015 the Existing Peak 14-day Average Dry Weather Flow was 340 gpd/SCU. That decreased in 2024 to 228.9 gpd/SCU. This has resulted in lower-than-expected impact

fees for some areas, most notably treatment. Future facilities will be constructed to meet the current performance standards identified for the existing level of service.

EXCESS CAPACITY TO ACCOMMODATE FUTURE GROWTH - UTAH CODE ANNOTATED 11-36A-302(1)(A)(III)

The sewer needs of projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities.

Existing Sewer Infrastructure

The current district sewer infrastructure consists of seven connected service areas that feed into the JSSD Water Reclamation Facility. In the next 10 years the projects listed below will need updates due to age and/or will exceed capacity. The projects are as follows:

- LS-1: Keetley Lift Station will run out of capacity and due to unsafe conditions will need to be converted to a Dry Pit Style. The capacity will be increased to 2,800 gpm.
- LS-3A: Ross Creek Lift Station is old and overdue for site improvements and construction. New Ross Creek Lift Station will be equipped for 1,400 gpm.
- P-1: Due to low capacity, a new 21-inch gravity line will be installed Upstream of State Park Lift Station.
- M-1: Many manholes over the next 10-years are due for Manhole Lining Repairs. This will cost ~$100,000 per year.

Existing Demand and Determination of Excess Capacity

Current existing facilities represent some impact fee recoverable capital cost to JSSD. Table 2 summarizes these existing facilities with distributions of costs that are allocated to the existing, 10-year, and beyond 10-year user. Facility costs were recovered from the District book asset values, developer system level project costs, and the district engineer estimates as indicated.

Table 1: Impact Fee Eligible Existing Projects

Project	System Level Project Cost	Percent to Existing Users	Percent to 10-Year Growth-Bonded Users	Percent to 10-Year Growth-Unbonded Users	Percent to >10-Year Growth-Bonded Users	Percent to >10-Year Growth-Unbonded Users
Collection						
Old Hwy 40 trunk line	$647,159	19.6%	7.3%	10.7%	33.4%	28.9%
State Park LS	$3,989,068	23.4%	8.7%	12.8%	29.6%	25.6%
State Park to HVSSD	$3,420,793	19.6%	7.3%	10.7%	33.4%	28.9%
Sewer Off the Dam	$765,000	19.6%	7.3%	10.7%	33.4%	28.9%
Railroad 1A.1	$865,939	19.6%	7.3%	10.7%	33.4%	28.9%
1998-2000 Sewer Line	$1,242,280	19.6%	7.3%	10.7%	33.4%	28.9%
Railroad 1A.2	$865,939	28.9%	3.4%	19.9%	15.5%	32.3%
HWY 248 Phase 1	$643,000	28.9%	3.4%	19.9%	15.5%	32.3%
HWY 248 Phase 2	$1,056,500	13.4%	8.3%	7.8%	38.1%	32.5%
Building & Administration						
Existing Buildings	$279,845	11.6%	5.0%	12.4%	23.0%	48.0%

DEMANDS PLACED ON FACILITIES BY NEW DEVELOPMENT - UTAH CODE ANNOTATED 11-36A-302(1)(A)(IV)

The planning period to be used for this IFFP is 10 years. Table 3 lists the growth projections for the 10-year planning window (2024 – 2034).

Table 3: District Sewer Growth Projections

Year	Total SCUs	Total Annual Growth Rate	Projected Peak 14-Day Average Flow (GPD)	Projected Peak Day Flow (GPD)
2024	2,975	8.5%	742,847	922,833
2025	3,414	14.8%	912,094	1,015,406
2026	3,746	9.7%	982,081	1,113,152
2027	4,110	9.7%	1,057,368	1,219,437
2028	4,493	9.3%	1,135,213	1,330,963
2029	4,895	9.0%	1,215,466	1,447,675
2030	5,318	8.6%	1,297,926	1,569,457
2031	5,760	8.3%	1,388,478	1,696,129
2032	6,215	0.9%	1,480,496	1,825,907
2033	6,695	0.8%	1,576,143	1,961,715
2034	7,199	0.8%	1,675,145	2,103,271

As shown in the table above, the expected growth within the 10-year planning window is 4,224 SCUs.

Infrastructure Required to Meet Demands of New Development – Utah Code Annotated 11-36a-302(1)(a)(v)

To satisfy the requirements of state law, demand placed upon system facilities by future development was projected using the process outlined below.

1. **Existing Demand** – The demand existing development places on the District's system was estimated based on Sewer Flow patterns and SCU's per area observed in similar systems.
2. **Existing Capacity** – The capacities of existing system collection facilities were estimated using size data provided by the District and a hydraulic computer model as part of the Sewer System Master Plan.
3. **Existing Deficiencies** – Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities.
4. **Future Demand** - The demand that future development will place on the system was estimated based on development projections as discussed previously.
5. **Future Deficiencies** - Future deficiencies in the collection system (portions of the system that are inadequate to accommodate the demand created by future growth) were identified using the defined level of service and results from a hydraulic computer model.

6. **Recommended Improvements** – Needed system improvements were identified to meet demands associated with future development.

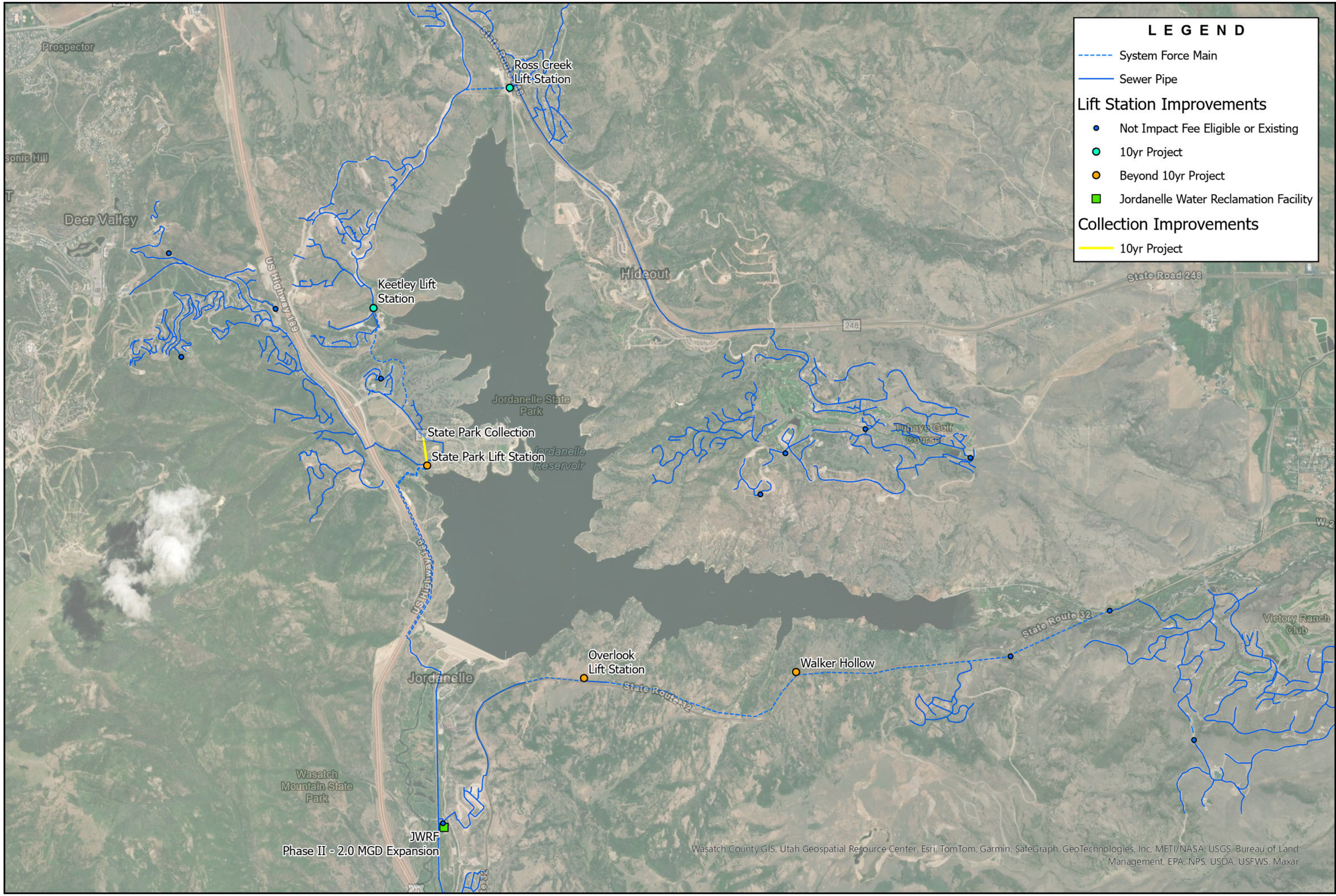
The steps listed above describe the "demands placed upon existing public facilities by new development activity at the proposed level of service; and… the means by which the political subdivision or private entity will meet those growth demands" (Section 11-36a-302(1)(a) of the Utah Code Annotated).

10-Year Improvement Plan

Planned improvements to satisfy level of service requirements for projected demands within the next 10 years have been identified for the District area in the District's Sewer System Master Plan and are summarized in Table 4. These improvements will be constructed in phases as funding becomes available. Only infrastructure planned for construction within a ten-year window will be considered in the calculation of these impact fees to avoid uncertainty surrounding improvements further into the future. The locations of projects to be completed in the next 10 years are approximately shown in Figure 2. It should be noted that Figure 2 only includes those projects with components of cost that are eligible to be included in the impact fee calculation.

Table 4: Impact Fee Eligible Capital Projects

Project ID	Project Description	System Level Project Cost	Percent to Existing Users	Percent to 10-Year Growth-Bonded Users	Percent to 10-Year Growth-Unbonded Users	Percent to >10-Year Growth-Bonded Users	Percent to >10-Year Growth-Unbonded Users
Collection							
LS-1	Keetley	$3,300,000	19.6%	7.3%	10.7%	33.4%	28.9%
P-1	State Park FM	$442,000	19.6%	7.3%	10.7%	33.4%	28.9%
C-1	Construction to Maintain Infrastructure: Manhole lining	$1,000,000	19.6%	7.3%	10.7%	33.4%	28.9%
LS-3A	Ross Creek	$3,240,000	32.5%	3.8%	22.4%	13.4%	27.9%
Treatment							
T-1	JSSD Phase 2 Attributable Treatment	$39,443,936	16.3%	9.1%	22.6%	16.9%	35.1%
Building & Administration							
Future Shop Building		$594,329	11.6%	5.0%	12.4%	23.0%	48.0%



SEWER SYSTEM LEVEL PROJECTS IN 10YR PLANNING WINDOW

JORDANELLE SPECIAL SERVICES DISTRICT

JSSD SEWER IMPACT FEE FACILITIES PLAN

BOWEN COLLINS & ASSOCIATES

FIGURE NO.

6-1

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Project Cost Attributable to Future Growth

To satisfy the requirements of state law, Table 4 provides a breakdown of the impact fee facility projects and the percentage of the project costs attributed to existing and future users. As defined in Section 11-36-304, the impact fee facilities plan should only include "the proportionate share of the costs of public facilities [that] are reasonably related to the new development activity." While some projects from the capital facilities plan are required to meet future growth, some projects also provide benefit to existing users. Projects that benefit existing users include those projects addressing existing capacity deficiencies, maintenance related projects, or projects increasing the level of service for existing users.

For some projects, the division of costs between existing and future users is easy because 100 percent of the project costs can be attributed to one category or the other (e.g. infrastructure needed solely to serve new development can be 100 percent attributed to new growth). For projects needed to address both existing deficiencies and new growth, the costs were divided based on maximum use of capacity at buildout (flow rate or SCUs for most facilities).

It should be noted that Table 4 does not include bond costs related to paying for impact fee eligible improvements. These costs, if any, should be added as part of the impact fee analysis.

Further Division of Project Cost – Cost Attributable to 10 Year Growth

Included in Table 4 is a breakdown of capacity associated with growth through the next 10 years and for growth beyond 10 years. A challenge of sewer infrastructure is that it is not cost effective to add capacity in small increments. Once a pipeline is being built, it needs to be built to satisfy long-term capacity needs. As a result, the improvements proposed in the impact fee facility plan will include capacity for growth beyond the 10-year planning window. To most accurately evaluate the cost of providing service for growth during the next ten years, added consideration has been given to evaluating how much of each improvement will be used in the next 10 years. This has been done following the same methodology as described above.

Basis of Construction Cost Estimates

The costs of construction for projects to be completed within ten years have been estimated based on past BC&A experience with projects of a similar nature. Pipeline project costs are based on average per foot costs for pipes of a similar nature. Lift Station project costs are based on average lift station flow rates for facilities of a similar nature. Details of the cost estimates can be found in the District's Sewer System Master Plan. Additionally, where possible and verified, developer estimated costs were used as IFFP system level cost estimates for all aspects of the sewer. Developer estimated costs are indicated within Table 4.

ADDITIONAL CONSIDERATIONS

Manner of Financing - Utah Code Annotated 11-36a-302(2)

The District may fund the infrastructure identified in this IFFP through a combination of different revenue sources.

Federal and State Grants and Donations

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the District has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If grants become available for constructing facilities, impact fees will need to be recalculated and an appropriate credit given. Any existing infrastructure funded through past grants will be removed from the system value during the impact fee analysis.

Bonds

It should be noted that the costs contained in the Water Reclamation Facility include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFPP may be added to the calculation of the impact fee. This will be considered in the impact fee analysis.

Interfund Loans

Because infrastructure must generally be built ahead of growth, there often arises situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. Consideration of potential interfund loans will be included in the impact fee analysis and should also be considered in subsequent accounting of impact fee expenditures.

Impact Fees

It is recommended that impact fees be used to fund growth-related capital projects as they help to maintain the proposed level of service and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an impact fee analysis will be able to calculate a fair and legal fee that new growth should pay to fund the portion of the existing and new facilities that will benefit new development.

Developer Dedications and Exactions

Developer exactions are not the same as grants. Developer exactions may be considered in the inventory of current and future infrastructure. If a developer constructs a system improvement or dedicates land for a system improvement identified in this IFFP or dedicates a public facility that is recognized to reduce the need for a system improvement, the developer will be entitled to an appropriate credit against that particular developer's impact fee liability or a proportionate reimbursement.

If the value of the credit is less than the development's impact fee liability, the developer will owe the balance of the liability to the District. If the recognized value of the improvements/land dedicated is more than the development's impact fee liability, the District must reimburse the difference to the developer.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan),

developers will be responsible for the construction of the improvements without credit against the impact fee.

Planned Improvement District (PID) Dedications

PID dedications are not the same as Developer dedications. A PID funds improvement by bonding (typically) against special property tax revenues from property owners. Thus, if a PID constructs a system improvement identified in this IFFP or dedicates a public facility that is recognized to reduce the need for a system improvement, the new development within the PID is entitled to an appropriate credit against the impact fees of new development within the PID. The preferred method of accounting for this credit is to provide credit to PID properties equal to value of system level improvements constructed. This is the same approach taken with developer dedications described above. And just like in that case, if the value of system level improvements by the PID exceeds the PID properties' impact fee liability, a reimbursement agreement with the PID can provide reimbursement from impact fees collected outside of the PID.

Credit to new development within the PID for PID dedications should be proportionate to the dedication's value in the impact fee. If the dedication's proportionate value in the impact fee is less than the impact fee, new development within the PID will owe the balance of the impact fee. If the dedication's proportionate value in the impact fee is greater than the impact fee, the District should reimburse the difference to the PID.

It should be emphasized that the concept of impact fee credits and reimbursements pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan), developers will be responsible for the construction of the improvements without credit against the impact fee.

Necessity of Improvements to Maintain Level of Service - Utah Code Annotated 11-36a-302(3)

According to State statute, impact fees cannot be used to correct deficiencies in the District's system and must be necessary to maintain the proposed level of service established for all users. Only those facilities or portions of facilities that are required to maintain the proposed level of service for future growth have been included in this IFFP. This will result in an equitable fee as future users will not be expected to fund any portion of the facilities that will benefit existing residents.

School Related Infrastructure - Utah Code Annotated 11-36a-302(2)

As part of the noticing and data collection process for this plan, information was gathered regarding future school district and charter school development. Where the District is aware of the planned location of a school, required public facilities to serve the school have been included in the impact fee analysis.

Noticing and Adoption Requirements - Utah Code Annotated 11-36a-502

The Impact Fees Act requires that entities must publish a notice of intent to prepare or modify any IFFP. If an entity prepares an independent IFFP rather than include a capital facilities element in the general plan, the actual IFFP must be adopted by enactment. Before the IFFP can be adopted, a reasonable notice of the public hearing must be published in a local newspaper at least 10 days before the actual hearing. A copy of the proposed IFFP must be made available in each public library within the District during the 10-day noticing period for public review and in a minimum of 3 public locations. Utah Code requires that the District must post a copy of the ordinance in at least three places. These places may include the District offices and the public libraries within the District's jurisdiction. Following the 10-day noticing period, a public hearing will be held, after which the District may adopt, amend and adopt, or reject the proposed IFFP.