



2015 SANITARY SEWER IMPACT FEE

SOUTH SALT LAKE CITY, UTAH

NOVEMBER 2015





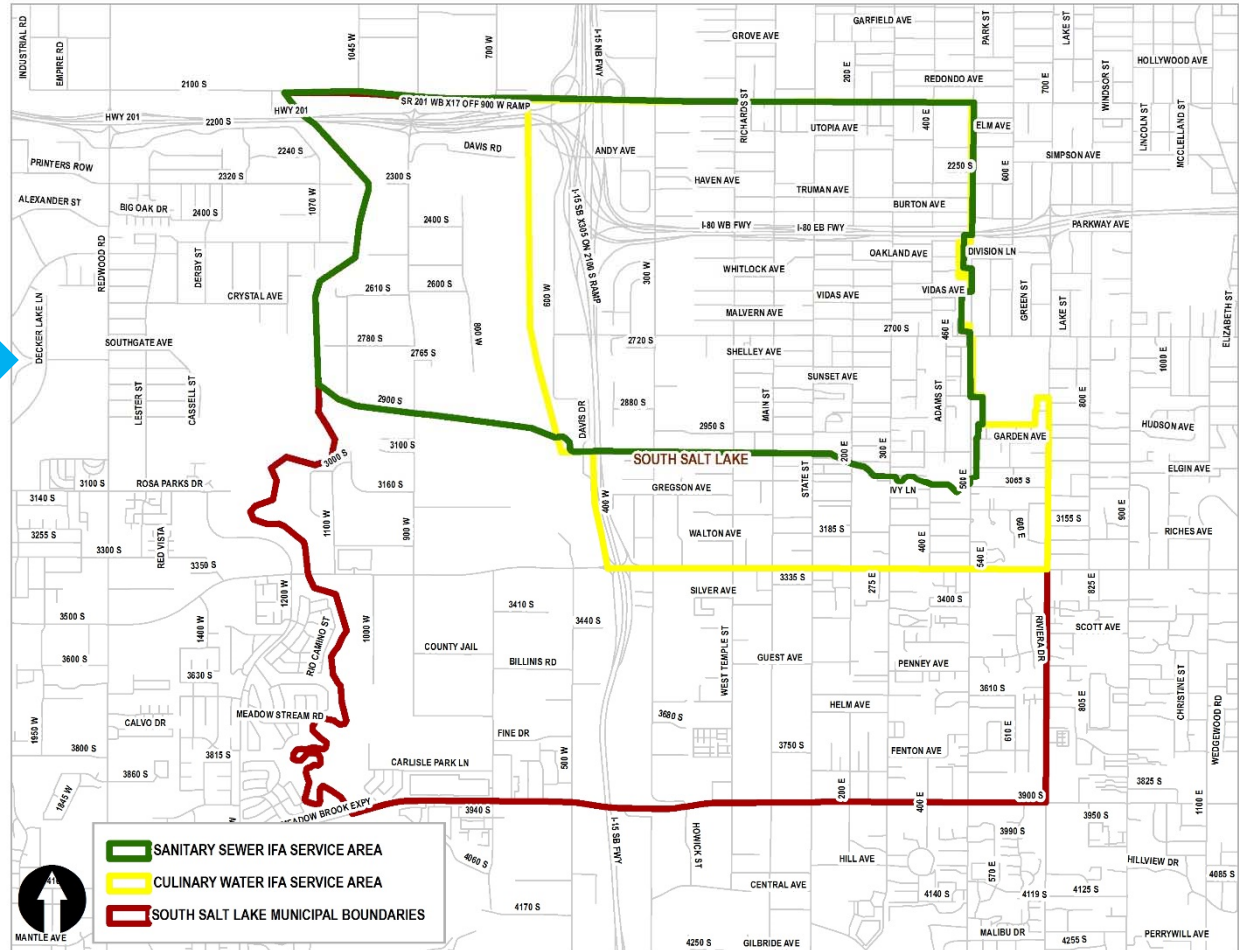
IFFP/IFA METHODOLOGY

1. Determine Existing & Future Demand within the Service Area
2. Provide Inventory of Existing Facilities
3. Establish Existing Level of Service
4. Identify Existing and Future Capital Facilities Necessary to Serve New Growth
5. Consider All Revenue Resources to Finance System Improvements
6. Conduct Proportionate Share Analysis



SERVICE AREA & DEMAND

Sewer Service Area





SERVICE AREA & DEMAND

- Demand Analysis:
 - Growth in ERCs is expected to reach 9,651 at buildout (Water is at 12,677 at buildout).
 - The City anticipates 1,642 additional ERCs in the IFFP planning horizon (through 2025).

	ERCs	Change in ERCs
2015	4,954	
2016	5,122	168
2017	5,295	173
2018	5,474	179
2019	5,659	185
2020	5,851	192
2021	5,993	142
2022	6,138	145
2023	6,287	149
2024	6,440	153
2025	6,596	156
IFFP ERCs (2015-2025)		1,642



EXISTING FACILITIES

- **Collection**

The existing SSLC sanitary sewer collection system consists of nearly 38 miles of pipeline and over 557 manholes. The pipe sizes range from 6-inch diameter to 33-inch diameter pipe. The system also has force main piping ranging from 4-inch diameter to 18-inch diameter pipe.

- **Pump Stations**

Table II-1: Pump Station Inventory (Sanitary Sewer Master Plan p.II-2)

ID	PUMP TYPE	LOCATION	PUMP CAPACITY	PUMP TDH (ft)	HORSEPOWER (hp)
1	ABS	2250 S 600 W	4,100 gpm	39 ft	67 hp
1	ABS	2250 S 600 W	4,100 gpm	39 ft	67 hp
2	Flygt	2280 S 900 W	1,100 gpm	40 ft	15 hp
3	Flygt	949 W 2610 S	260 gpm	15 ft	2.3 hp



EXISTING FACILITIES (CONT.)

- Treatment: Central Valley Regional Plant Ownership

	Original Equity	Revised Equity	CVWRF Allocation Total
Cottonwood Improvement District	24.40%	19.57%	13.48
District #1 (Mount Olympus Improvement District)	24.50%	25.62%	19.92
Granger-Hunter Improvement District	18.10%	21.12%	17.11
Kearns Improvement District	5.60%	5.98%	4.87
Murray City	10.40%	8.89%	6.57
South Salt Lake City	5.60%	6.12%	3.93
Taylorville-Bennion Improvement District	11.40%	12.69%	9.12
Total	100.00%	100.00%	

Source: CVWRD

Million Gallons (MG)

Original CVWRF Capacity	62.5
Expansion	12.5
Total Capacity	75.0



LEVEL OF SERVICE

Flow Condition	Existing Model	State Standard
Average Flow per Capita (gpcd)	171	100
Peak Flow at Outfall per Capita (gpcd)	415	250
Peak Flow at Lateral per Capita (gpcd)	423	400

Source: Master Plan, p.V-2

LOS

With I&I	350	gpcd
Proposed for New Development	80	gpcd
Proposed for New Development	200	gpd/ERC
New Flows through 2050	939,303	



EXCESS CAPACITY

- Collection:

New ERCs in IFFP	1,642
Percent of 2050 ERCs	17.0%
Total Collection System Value	\$4,740,641
Value to New Growth	\$806,324



EXCESS CAPACITY

- Pump Stations:

ID	Pump Station	Pump Manufacturer	Capacity (gpm)	Existing Modeled Peak Flow (gpm)	Future Modeled Peak Flow (gpm)
1	Main Lift	ABS	4,100	2,545	3,582
2	2280 S. Lift	Flygt	1,100	673	673
3	2610 S. Lift	Flygt	260	92	92
Total			5,460	3,310	4,347
Percent of Total				60.6%	79.6%
% Excess Capacity Used Through 2050					19.0%
Value of Pump Stations					\$1,059,537
Value of Excess Capacity					\$201,234
ERCs Served by Excess Capacity					4,697
New ERCs in IFFP					1,642
Percent to IFFP Demand					35.0%
Value to New Growth					\$70,335



EXCESS CAPACITY

- Treatment:

	USING FLOW ONLY	ORIGINAL INVESTMENT EQUITY	EXPANSION EQUITY	SLUDGE LAND	DIGESTER	CLARIFIER	SUM TOTAL
Methodology	Q (MGD)	Q (MGD)	Q (MGD)	BOD (lbs/day)	BOD (lbs/day)	TSS (lbs/day)	
Original Value	\$9,092,917	\$7,934,273	\$514,551	\$237,372	\$208,516	\$198,205	\$9,092,917
Bonding/Interest Expense	\$171,753	\$171,753	-	-	-	-	\$171,753
Total Original System Value	\$9,264,670	\$8,106,026	\$514,551	\$237,372	\$208,516	\$198,205	\$9,264,670
Total Capacity	3,930,000	3,930,000	3,930,000	7,724	7,724	6,834	
Existing Utilized Capacity	3,040,000	3,040,000	3,040,000	5,386	5,386	3,863	
Total Excess Capacity	890,000	890,000	890,000	2,338	2,338	2,971	
Percent of Total	22.6%	22.6%	22.6%	30.3%	30.3%	43.5%	
Value of Excess Capacity	\$2,098,106	\$1,835,716	\$116,527	\$71,851	\$63,116	\$86,167	\$2,173,377
New Demand through 2025 (MGD or lbs/day)	328,303	328,303	328,303	1,784	1,784	1,280	
Percent of Total	36.9%	36.9%	36.9%	76.3%	76.3%	43.1%	39.6%
Value to New Growth	\$773,948	\$677,158	\$42,984	\$54,840	\$48,174	\$37,120	\$860,277



FUTURE FACILITIES

- No Future Facilities Related to Growth within IFFP Horizon



PROPOSED IFA

	ORIGINAL VALUE	COST TO IFFP	ERCs SERVED	FEE PER ERC
Treatment Buy-In	\$9,264,670	\$860,277	1,642	\$524
Collection Buy-In	\$4,740,641	\$806,324	1,642	\$491
Pump Stations Buy-in	\$1,059,537	\$70,335	1,642	\$43
Future Facilities	-	-	1,642	-
Impact Fee Fund Balance	-	-	1,642	-
Professional Expense	\$8,700	\$8,700	1,642	\$5
Totals	\$15,073,548	\$1,745,635	Total	\$1,063

METER SIZE	MULTIPLIER	IMPACT FEE PER METER SIZE
0.75	1.00	\$1,063
1.00	2.12	\$2,259
1.50	7.76	\$8,252
2.00	10.38	\$11,038
3.00	22.73	\$24,167
4.00	38.96	\$41,417
6.00	63.68	\$67,694

Multipliers based on 2014 City water usage data and AWWA M6 Water Manual statistics



NEXT STEPS

- Finalize IFA
- Prepare Ordinance (City)
- Complete noticing for IFA (LYRB/City)
- Hold Public Hearing (ALL)
- Adopt, modify or reject proposed impact fee (City Council)
- 90 Day wait period