PUBLIC WORKS

WATER RECLAMATION FACILITY - IFFP/IFA

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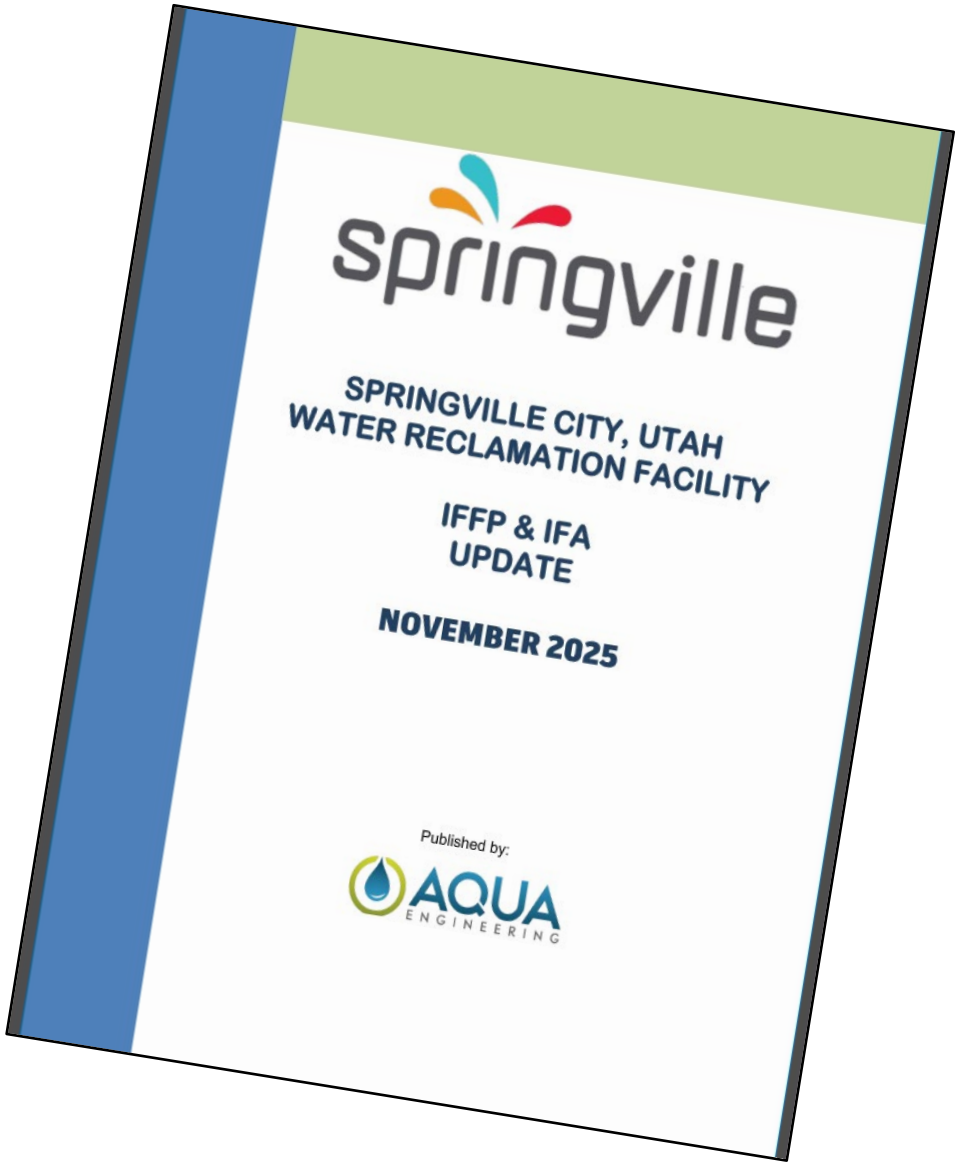
Utility Board Meeting – November 19, 2025 - Recommendation
Planning Commission – December 09, 2025 - Recommendation
City Council Work Session – January 20, 2026 - Discussion
City Council Meeting – March 17, 2026 - Adoption

WATER RECLAMATION FACILITY IMPACT FEE FACILITIES PLAN & IMPACT FEE ANALYSIS

- Confirm Growth Projections
- Update Capital Projects
  - Verify Scope of Growth-Related Projects
  - Adjust for Inflation, Labor & Material Costs
- Determine Impact Fee Eligible Costs
- Calculate Impact Fee Assessment



EXISTING CAPACITY IMPACT FEE ELIGIBLE COSTS

Table 2-2: Summary of existing WRF capacity and estimated impact fees.

Springville WRF - Past Improvements Impact Fee Summary						
Project	Existing ERUs Served	Nestle ERUs Served	New ERUs Served	% Impact Fee Eligible	Impact Fee Eligible	Impact Fee (per ERU)
Initial Plant -Alle ERUs[1]	17,120	3,400	1,480	6.73%	$ 623,961.49	$ 421.60
2010 WRF Upgrade & Expansion[2]	17,120	3,400	5,880	52.36%[2]	$ 5,604,391.28	$ 953.13
Post 2010 Plant Upgrades	17,120	3,400	5,880	22.27%	$ 485,824.62	$ 82.62
SUBTOTAL OF IMPACT FEES FROM PREVIOUS IMPROVEMENTS					$ 6,714,177.39	$1,457.35[3]

1 Original plant design and buy-in was based on 5.5 MGD capacity (22,000 ERUs).

2 2010 Expansion provides ammonia polishing for existing connections and full ammonia and full BOD removal for new connections, resulting in a net 52.36% of the expanded capacity remaining for future connections.

3 Impact fee for past improvements will reduce by $421.60 once the remaining 1,480 ERUs from the original plant are connected.

GROWTH-RELATED IMPACT FEE PROJECTS - 10 Years

Table 3-1: Impact fees for proposed projects.

IMPACT FEE PROJECTS - SEPTEMBER 2025						
Springville WRF - Proposed Projects Impact Fee Summary						
Project Description	Existing ERUs Served	Nestle ERUs Served	New ERUs Served	% Impact Fee Eligible	Estimated Total Cost	Impact Fee Eligible
Headworks Upgrades	17,120	-0-	5,880	25.57%	$ 2,697,177.77	$ 689,539.36
Standby Generator	17,120	3,400	5,880	22.27%	$ 922,906.46	$ 205,556.44
Sludge Dewatering Upgrades	17,120	3,400	5,880	22.27%	$ 2,107,505.40	$ 469,398.93
				IMPACT FEE FOR PROPOSED PROJECTS	$5,727,589.62	$1,364,494.73
					IMPACT FEE PER ERU	$ 232.06

WRF PROPOSED IMPACT FEE COSTS

Table ES-1: WRF Impact Fee Summary.

Total WRF Impact Fee Summary		
Fee Source	Fee Amount	
	to 2030*	Post 2030
Past Projects	$ 1,457.35	$ 1,035.75
New Projects	$ 232.06	$ 232.06
Planning	$ 24.93	$ 24.93
Total Impact Fee	**$ 1,714.34**	**$ 1,292.74**

* Remaining 1,480 ERUs from the original 22,000 ERU facility are expected to be connected by 2030.

Current Wastewater Treatment Impact Fee $1,685.53

UTAH COUNTY IMPACT FEES COMPARISON

WASTEWATER COLLECTION & TREATMENT

Wastewater Impact Fees:	Current	Proposed
• Collection	$1,199	$1,423
• Treatment	$1,686	$1,714
Total	$2,885	$3,137

8.7% ⇧

CITY	WASTEWATER COLLECTION & TREATMENT
Salem	$10,763
Eagle Mountain	$10,699
Highland	$8,704
Woodland Hills	$7,177
Saratoga Springs	$7,148
Elk Ridge	$7,019
Pleasant Grove	$6,965
Cedar Hills	$6,860
Lehi	$6,803
American Fork	$6,771
Vineyard	$6,568
Alpine	$6,294
COUNTY AVERAGE	$5,854
Santaquin	$5,096
Provo	$4,450
Spanish Fork	$4,215
Mapleton	$3,157
Springville Proposed	$3,137
Springville Current	$2,885
Payson	$2,848
Lindon	$1,809
Orem	$847

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QUESTIONS?

STORM WATER - IFFP, IFA UPDATE 2025

- Confirm Growth Projections
- Update Capital Projects
  - Verify Scope of Growth-Related Projects
  - Adjust for Inflation, Labor & Material Costs
- Determine Impact Fee Eligible Costs
- Calculate Impact Fee Assessment

CONVEYANCE UPSIZE PERCENTAGE

Table 2-1
Storm Drain Pipe Upsize Percentage

Pipe Size	Upsize Percentage
18″ Storm Pipe	6.27%
20″ Storm Pipe	10.15%
21″ Storm Pipe	12.13%
24″ Storm Pipe	19.53%
28″ Storm Pipe	30.72%
30″ Storm Pipe	35.23%
36″ Storm Pipe	52.77%
42″ Storm Pipe	59.08%
48″ Storm Pipe	64.22%
54″ Storm Pipe	70.24%
60″ Storm Pipe	73.33%
66″ Storm Pipe	75.98%
72″ Storm Pipe	78.15%
Box Culvert	84.87%

SINGLE-FAMILY RESIDENTIAL LOT RANGES

Table 1-6
Single-Family Residential Lot Impervious Area Ranges

Lot Size	Typical Impervious Area	% Impervious	ERC Ratio
2,000 sq-ft or less	1,700 sq-ft	85.0%	0.45
2,001-4,000 sq-ft	1,900 sq-ft	63.3%	0.50
4,001-6,000 sq-ft	2,650 sq-ft	53.0%	0.70
6,001-8,000 sq-ft	3,450 sq-ft	49.3%	0.91
8,001-10,000 sq-ft	**3,800 sq-ft**	**42.2%**	**1.00**
10,001-20,000 sq-ft	5,450 sq-ft	35.3%	1.43
Greater than 20,000 sq-ft	9,425 sq-ft	32.5%	2.48

Source: IFFP

IMPACT FEE ELIGIBLE COSTS

Table 3-5
Storm Drain Impact Fee Facilities Plan

Conveyance	Year	Total Cost	IF %	IF Cost	Total Volume	Cost/cf	Weighted Average
C30 - Spring Canyon	FY2025	$885,245	56.40%	$499,298	8,359 cf	$105.90	$67.23
1600 S UDOT Betterment	FY2026	$2,458,178	26.81%	$659,143	41,369 cf	$59.42	
Detention	**Year**	**Total Cost**	**IF %**	**IF Cost**	**Total Volume**	**Cost/cf**	**Weighted Average**
1200 W and 400 S Basin	FY2023	$815,404	100.00%	$815,404	114,843 cf	$7.10	$8.17
Spring Canyon Basin	FY2025	$85,186	100.00%	$85,186	9,651 cf	$8.83	
SUVPS 1600 S Basin	FY2026	$1,238,123	100.00%	$1,238,123	137,214 cf	$9.02	
Misc Facilities	**Year**	**Total Cost**	**IF %**	**IF Cost**	**Begin ERUs**	**End ERUs**	**ERUs Served**
Planning	**Year**	**Total Cost**	**IF %**	**IF Cost**	**Begin ERUs**	**ERUs in 6 Yrs**	**ERUs Served**
Impact Fee Studies	FY2022	$72,925	100.00%	$72,925	22,720 ERUs	31,157 ERUs	8,437 ERUs
Master Plan Studies	FY2022	$185,498	100.00%	$185,498			

PROPOSED STORMWATER IMPACT FEE

Current fee $2,808

Table 2-10
Total Impact Fee Schedules with Credits

Year	Single Family Residential	Multi-Family & Non-Residential
2026	$2,770.14/ERU	$0.72/sq ft
2027	$2,770.70/ERU	$0.72/sq ft
2028	$2,771.23/ERU	$0.72/sq ft
2029	$2,771.72/ERU	$0.72/sq ft
2030	$2,772.19/ERU	$0.72/sq ft
2031	$2,772.62/ERU	$0.72/sq ft

COMPARING UTAH COUNTY IMPACT FEE COSTS

CITY	STORM WATER COLLECTION
Springville Current	$2,808
Payson	$2,794
Springville Proposed	$2,770
Pleasant Grove	$2,242
Salem	$1,950
Provo	$1,900
Highland	$1,500
Spanish Fork	$1,446
COUNTY AVERAGE	$981
Alpine	$800
Lindon	$799
Santaquin	$770
Saratoga Springs	$595
Eagle Mountain	$537
Orem	$489
Lehi	$348
American Fork	$347
Vineyard	$337
Woodland Hills	$0
Elk Ridge	$0
Cedar Hills	$0
Mapleton	$0

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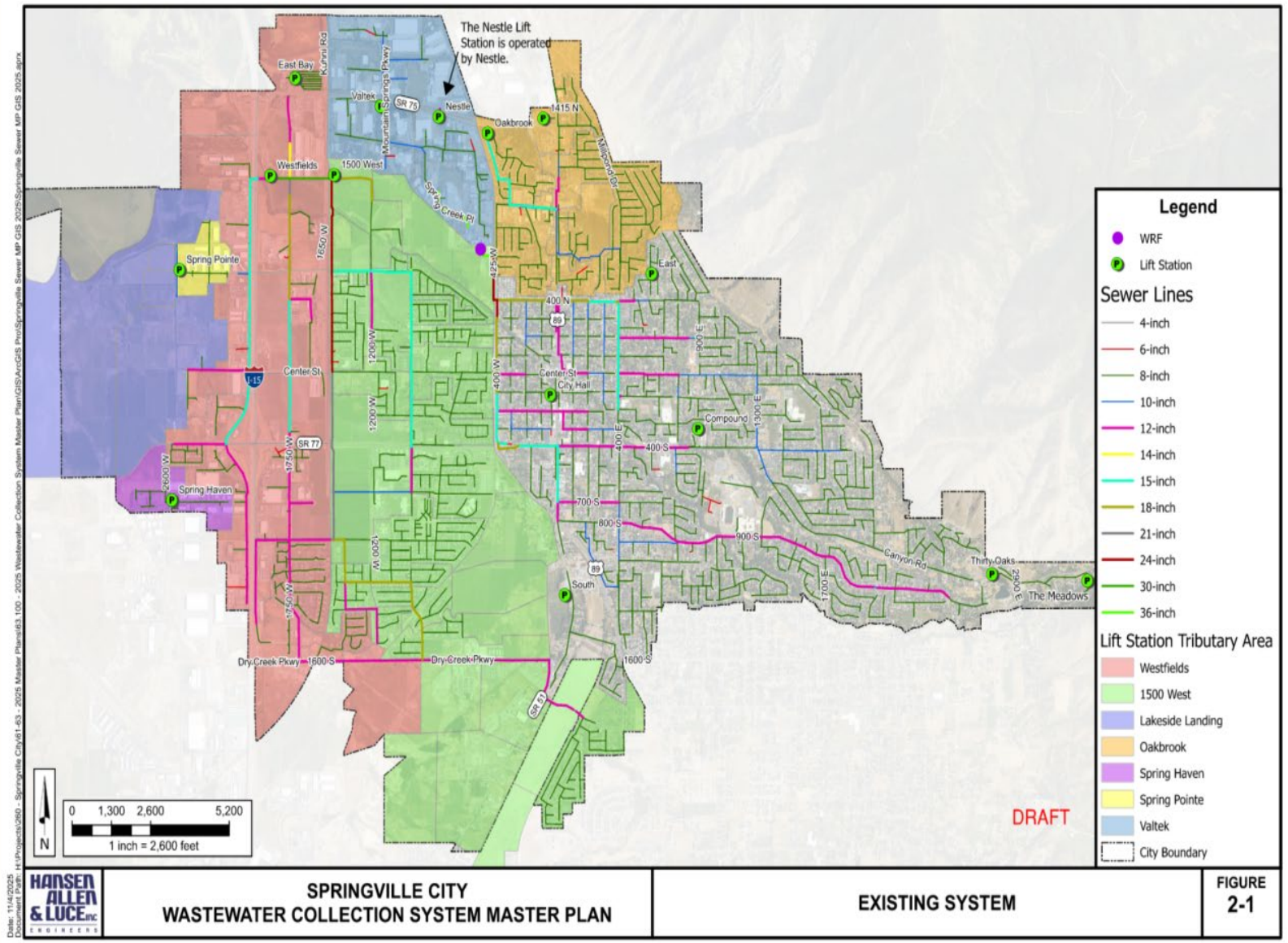
QUESTIONS?

WASTEWATER COLLECTION MASTER PLAN, IFFP, AND IFA

Previous Master Plan – August 2020

Why Master Plans?

- Establish Levels of Service
- Project/Estimate Growth
- Quantify System Assets
- Gather Flow Data
- Develop Hydraulic Model
- Evaluate System
- Formulate Capital Projects



Establish Levels of Service

ERU = Equivalent Residential Unit

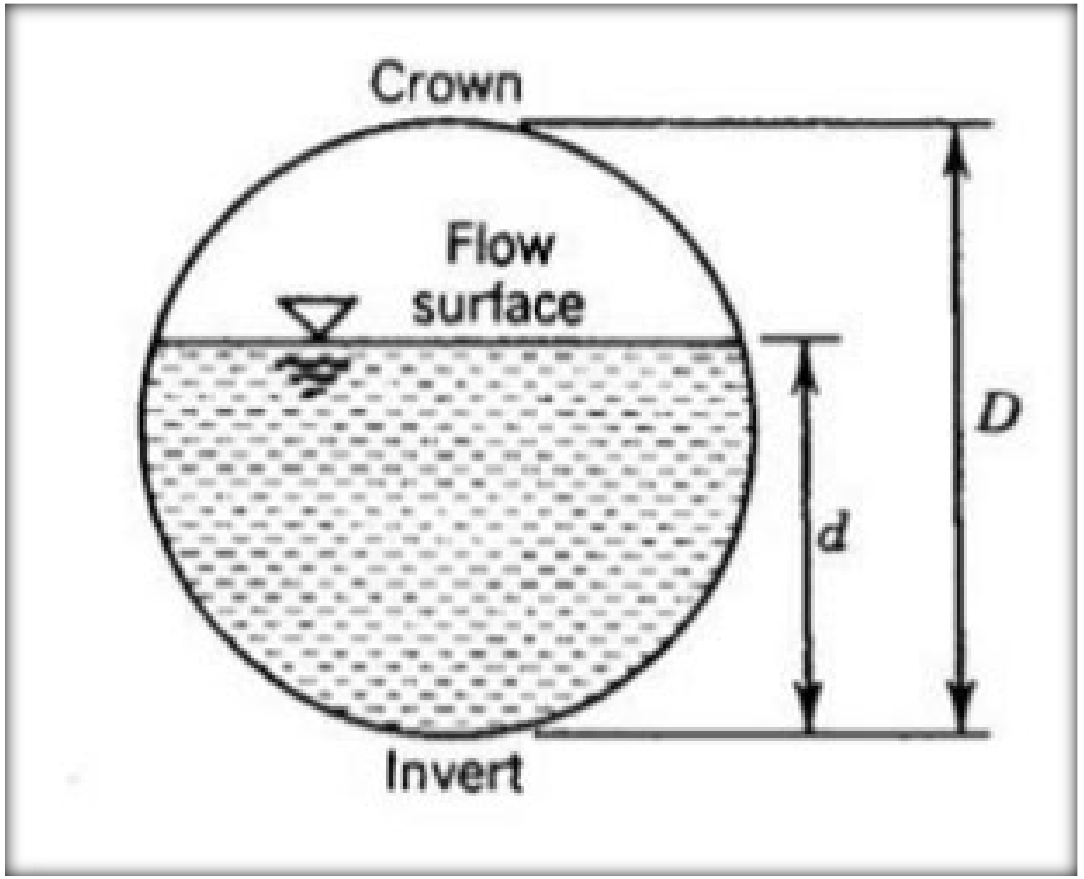
- 250 gallons per day per ERU

Peak Daily Flow in Pipe

- Not to exceed a depth/diameter ratio of 0.75

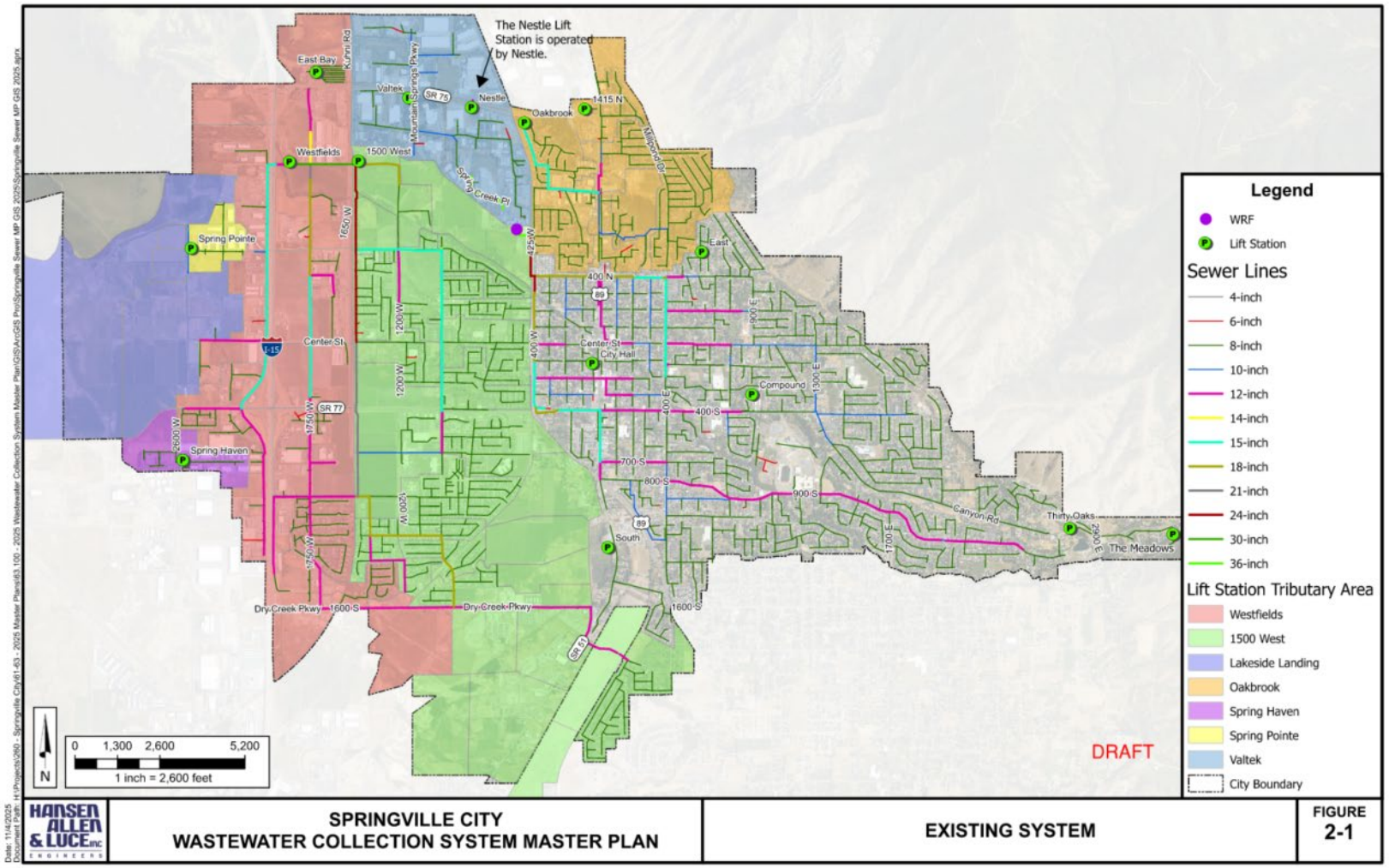
Minimum pipe diameter (State Standard)

- 8-inches



Quantify System Assets

- 150 miles of gravity & pressure pipelines
- Gravity Mains 6” to 36” diameter
- 14 Sewer Pumping Stations
  - Force Mains 2” to 12” diameter
- 2,900 Manholes



Gather Flow Data

Key flow study locations throughout City

- Diurnal variations
- WFR meter data
- Infiltration – groundwater
  - Changes in the base-flow (minimum flow)
  - 0.4 MGD
- Inflow – surface water
  - 1.0 MGD

Calculate Peaking Factors

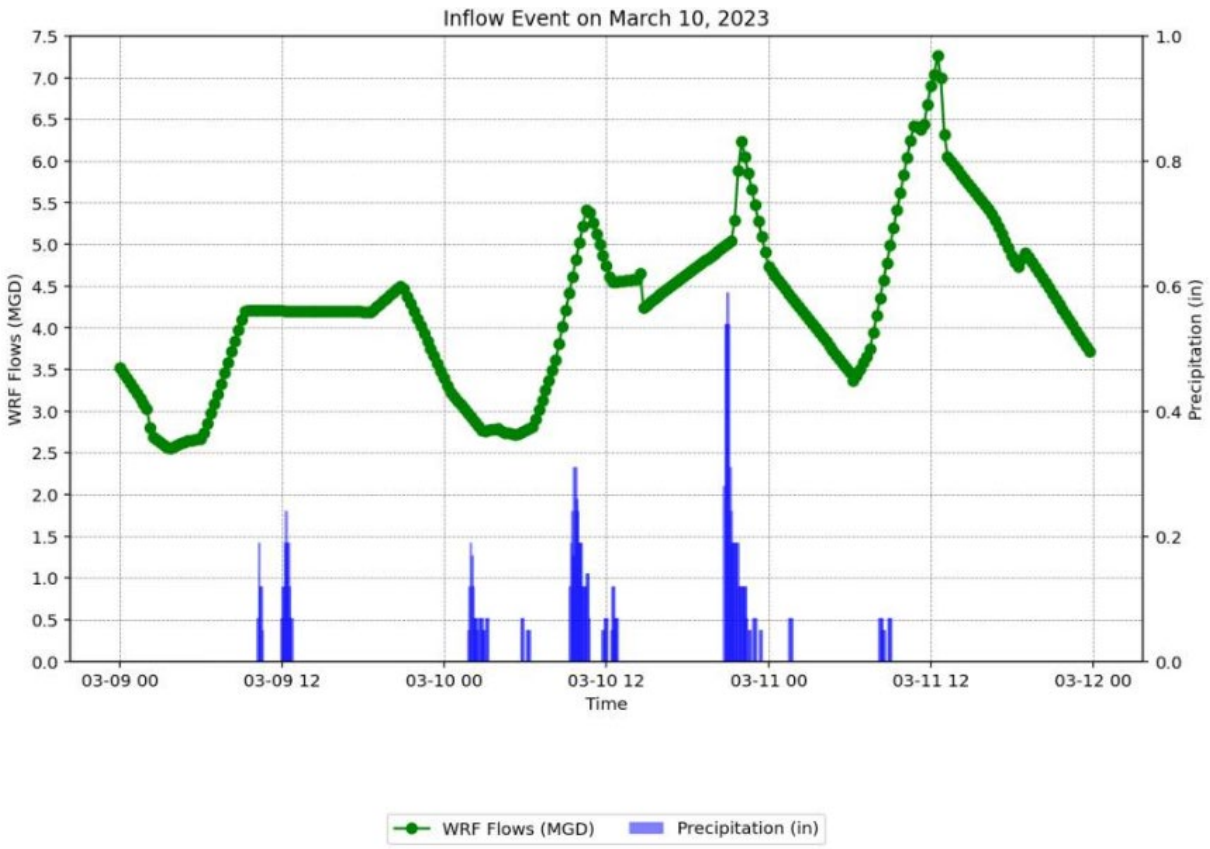


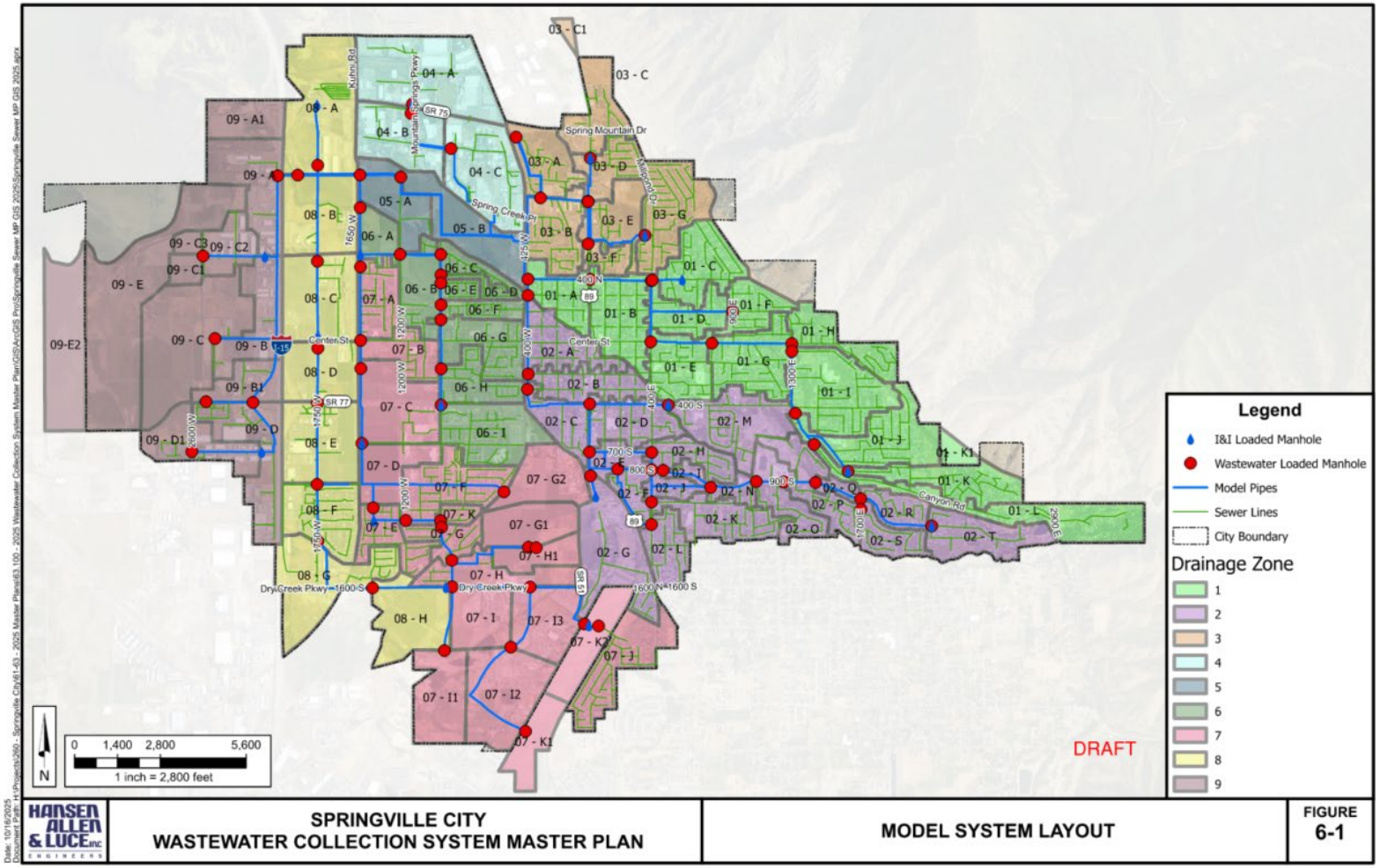
FIGURE 4-6 WRF FLOW VS. PRECIPITATION

Develop Hydraulic Model

Calibrate model from data received

Determine flow patterns and variations

- Proper sizing of:
  - Pipelines
  - Pumping Stations
  - Wastewater Treatment Plant



Evaluate Wastewater Collection System

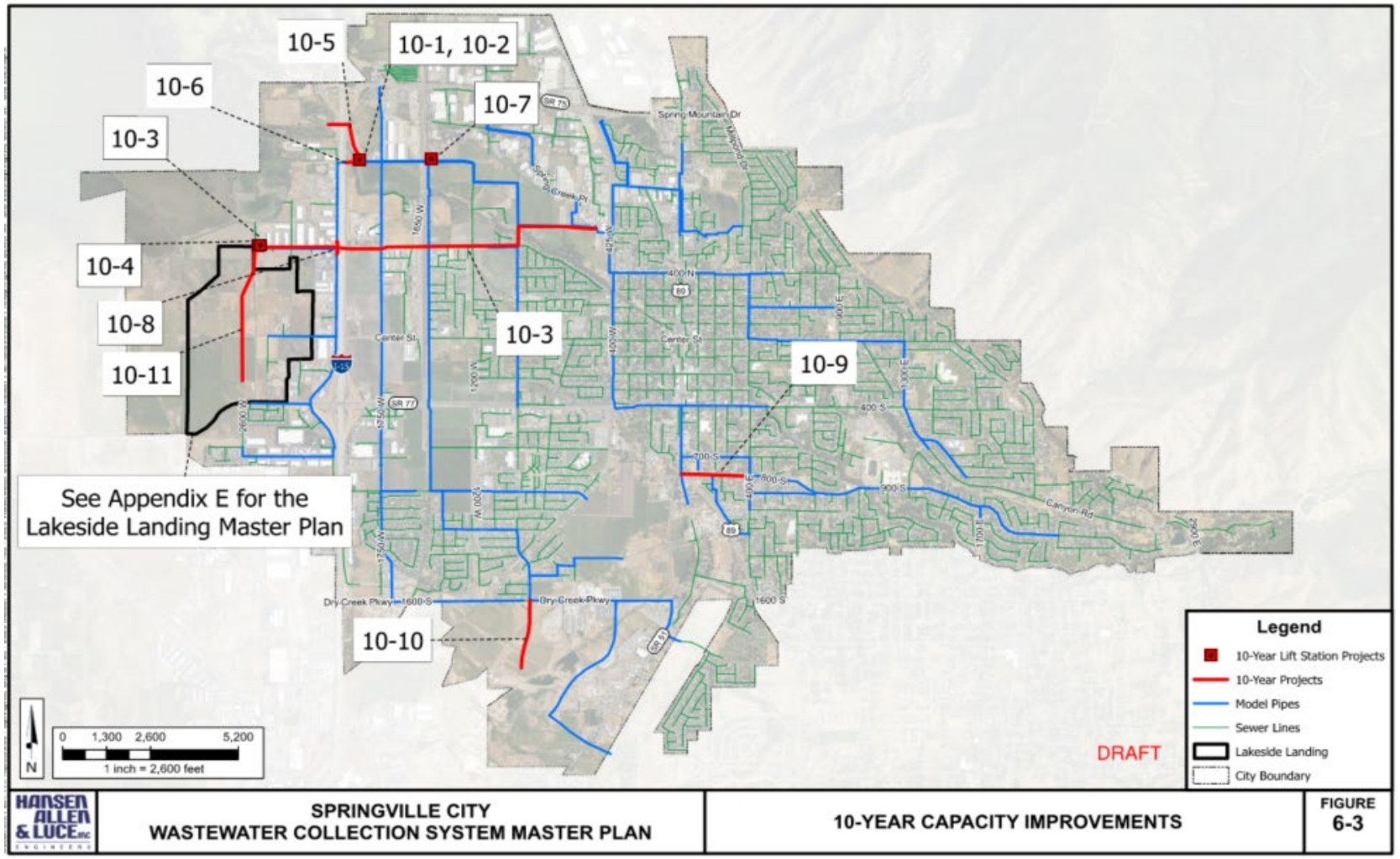
Identify existing deficiencies

- Oakbrook Sewer Pumping Station

Formulate Capital Projects

Growth Related

10-Year Capacity Improvement Projects



IFFP – Identify Growth Related Projects

Growth Related Projects

- Lakeside
- Buc-ee's
- 1600 South

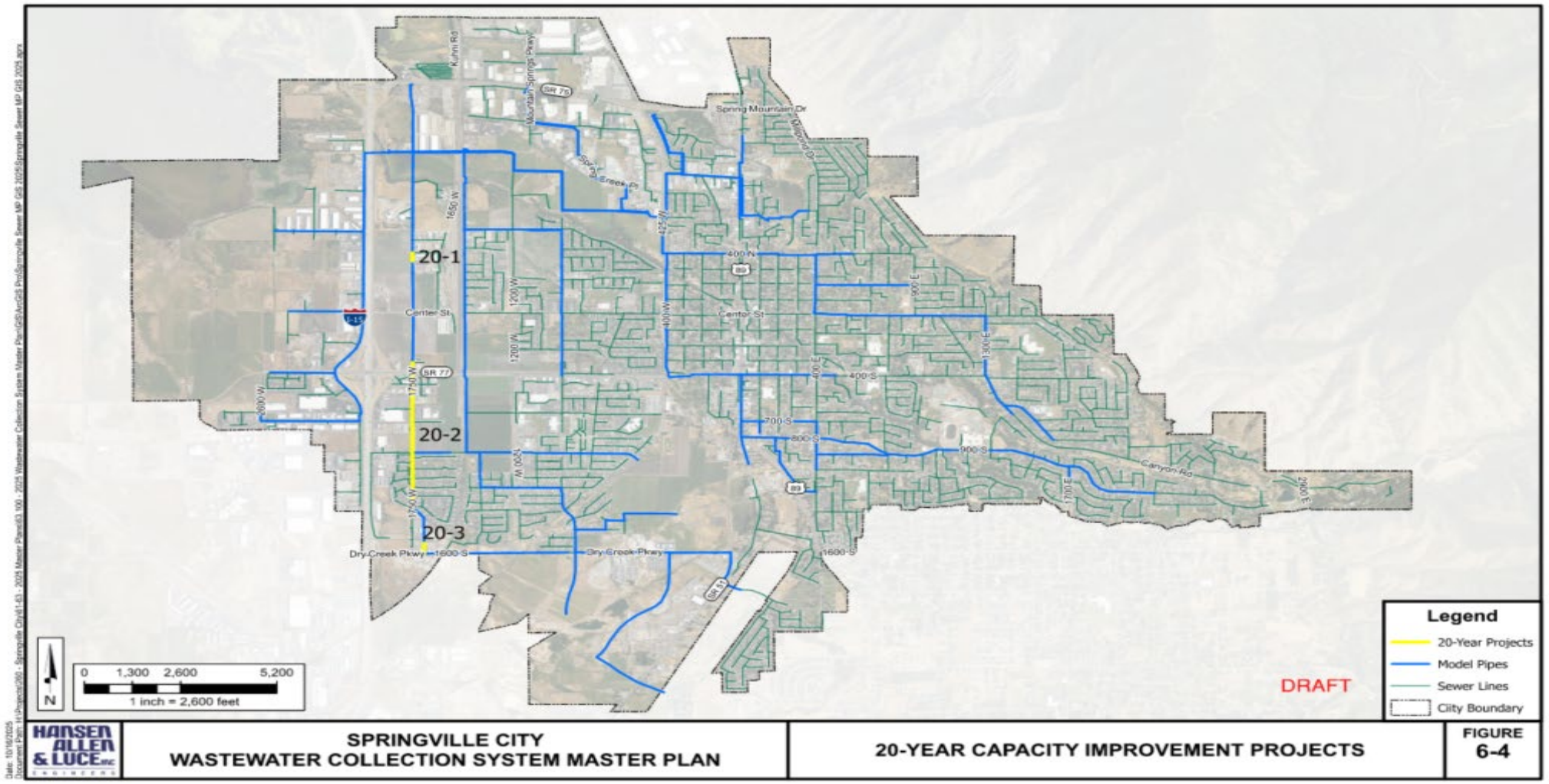
Table 3-4
Estimated Cost of Growth-Related Facilities

Project	Map ID[1]	Total Cost[2]	Cost for Development Within 10 Years[3]
Westfields Lift Station Pump Replacement	10-1	$98,000	$29,522
Westfields Lift Station Upgrades	10-2	$2,841,000	$855,845
New Lift Station near Spring Pointe	10-3	$11,167,000	$3,364,036
Decommission Spring Pointe Lift Station	10-4	$46,000	$13,857
Bore under I-15 (1400 N)	10-5	$1,742,000	$524,774
1000 N Sewer Under Hobble Creek	10-6	$573,000	$172,615
1500 W Lift Station Upgrades	10-7	$130,000	$39,162
2000 W and 500 N Sewer Line	10-8	$281,000	$84,651
800 S Sewer Line	10-9	$1,087,000	$327,457
950 W Sewer Line	10-10	$27,000	$8,134
2600 W Sewer Line	10-11	$419,000	$126,223
	Total	**$18,411,000**	**$5,546,276**

1. Refer to Figure 6-3 of the wastewater collection system master plan for the project and its corresponding ID number. This figure has been included in Appendix A for reference.
2. Only the impact fee eligible costs are shown in this table.
3. Future costs for development within 10 years were calculated for the ERUs within 10 years by assigning a proportionate share of the impact fee eligible costs to the ERUs within 10 years. (4,452 / 14,778) x Total Cost. Refer to Table 3-6.

Formulate Capital Projects

Growth Related 20-Year Capacity Improvement Projects



PROPOSED WASTEWATER COLLECTION IMPACT FEE

Table 3-9
Proposed Wastewater Collection Impact Fee Per ERU

Component	Impact Fee-Eligible Cost	ERUs Served	Cost per ERU
Collection	$6,125,608	4,452	$1,376
Planning	$209,010	4,452	$47
Total			**$1,423**

Current Wastewater Collections Impact Fee - $1,199

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QUESTIONS?

Sewer Collection Master Plan Motion

I move that the Planning Commission recommend to the City Council the approval and adoption of the Sewer Collection Master Plan as presented.

Sewer Collection IFFP & IFA Motion

I move that the Planning Commission recommend to the City Council the approval and adoption of the Sewer Collection Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) as presented. In addition, I recommend that the City Council adopt the maximum allowable impact fee as calculated in the IFA, in accordance with the requirements of the Utah Impact Fees Act.

Establish Level of Service

ERU = Equivalent Residential User – 2.3 persons

- 250 gpd (peak flow)

Strength of Wastewater

- 0.46 lbs BOD/day (at 0.20 lbs. BOD/day per person)
  - BOD = Biological Oxygen Demand – measurement of organic material
- 0.35 lbs. TSS/day (at 0.156 lbs. TSS/day per person)
  - TSS = Total Suspended Solids – measurement of organic & inorganic solids
- 0.072 lbs. TKN/day (at an influent concentration of 45 mg/L)
  - TKN = Total Kjeldahl Nitrogen – organic nitrogen & ammonia
- 0.013 lbs. Phosphorus/day (at an influent concentration of 6.5 mg/L)

Project/Estimate Growth

ERU's – 6,197 next 20-years

Nestle + 3,400 ERU's

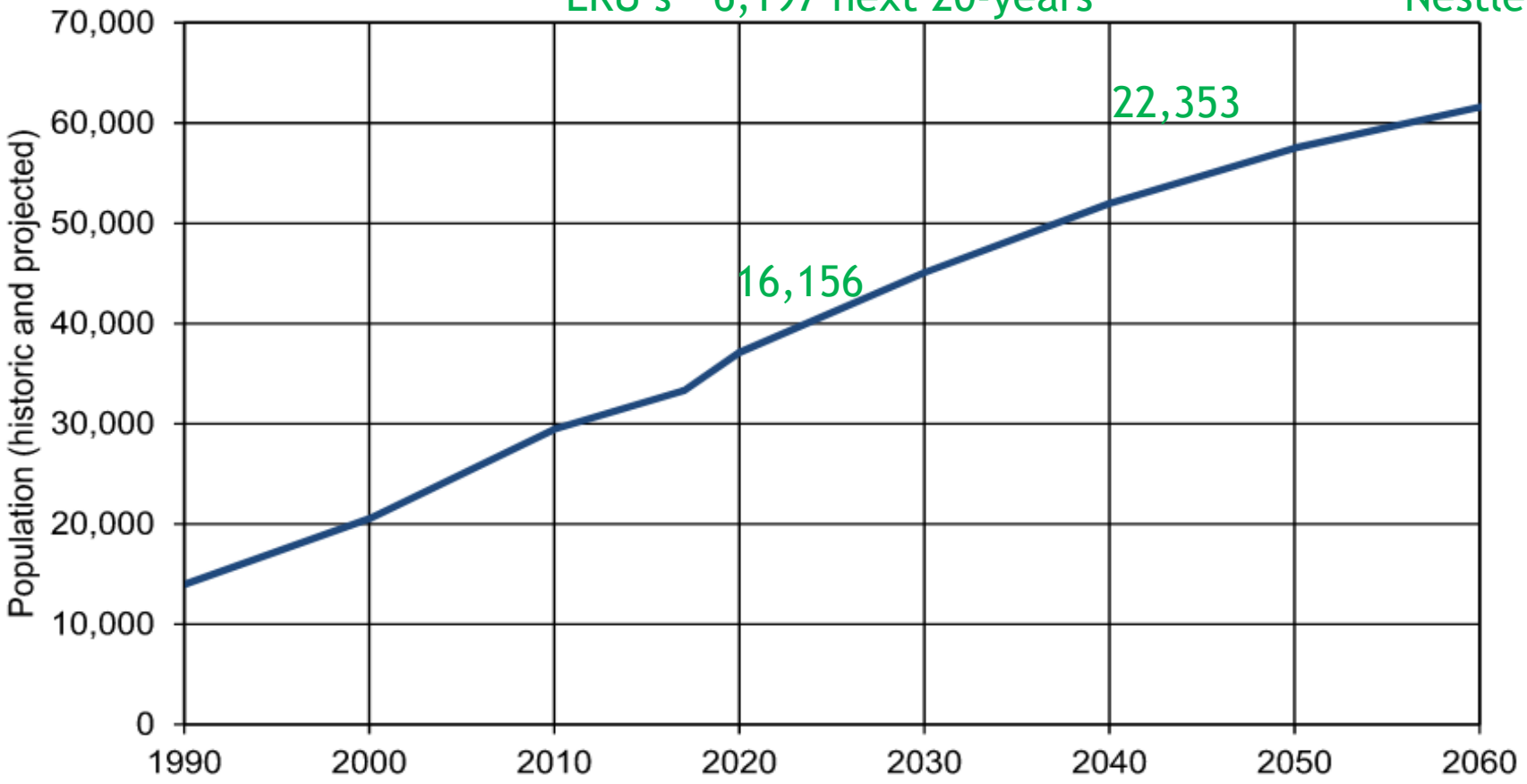


Figure 1-1: Springville Historic and Projected Population
(U.S. Census Bureau 1990, 2000; 2010; GOMB 2017)

Water Reclamation Facility IFFP & IFA Motion

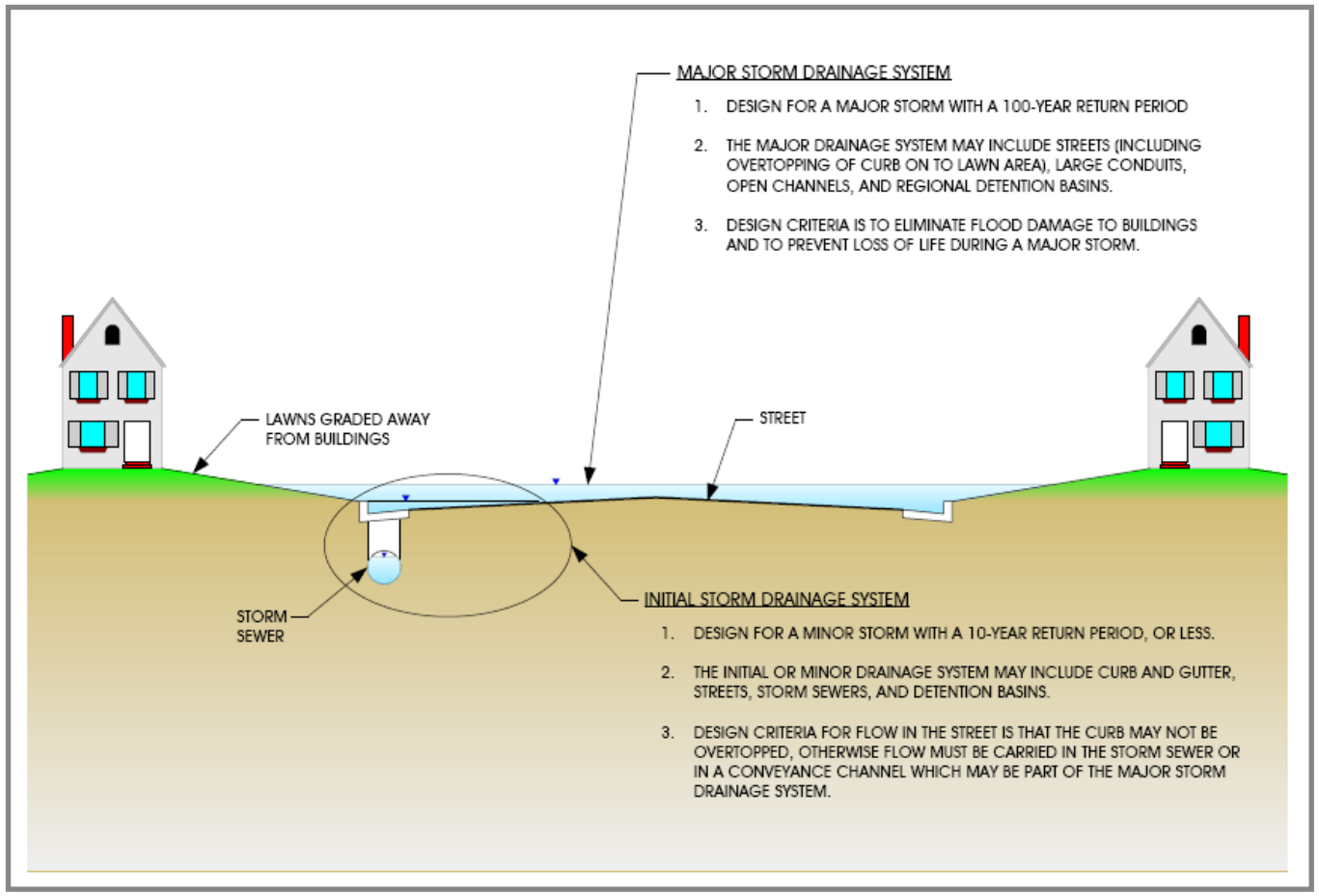
I move that the Planning Commission recommend to the City Council the approval and adoption of the Water Reclamation Facility Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) as presented. In addition, I recommend that the City Council adopt the maximum allowable impact fee as calculated in the IFA, in accordance with the requirements of the Utah Impact Fees Act.

Stormwater IFFP & IFA Motion

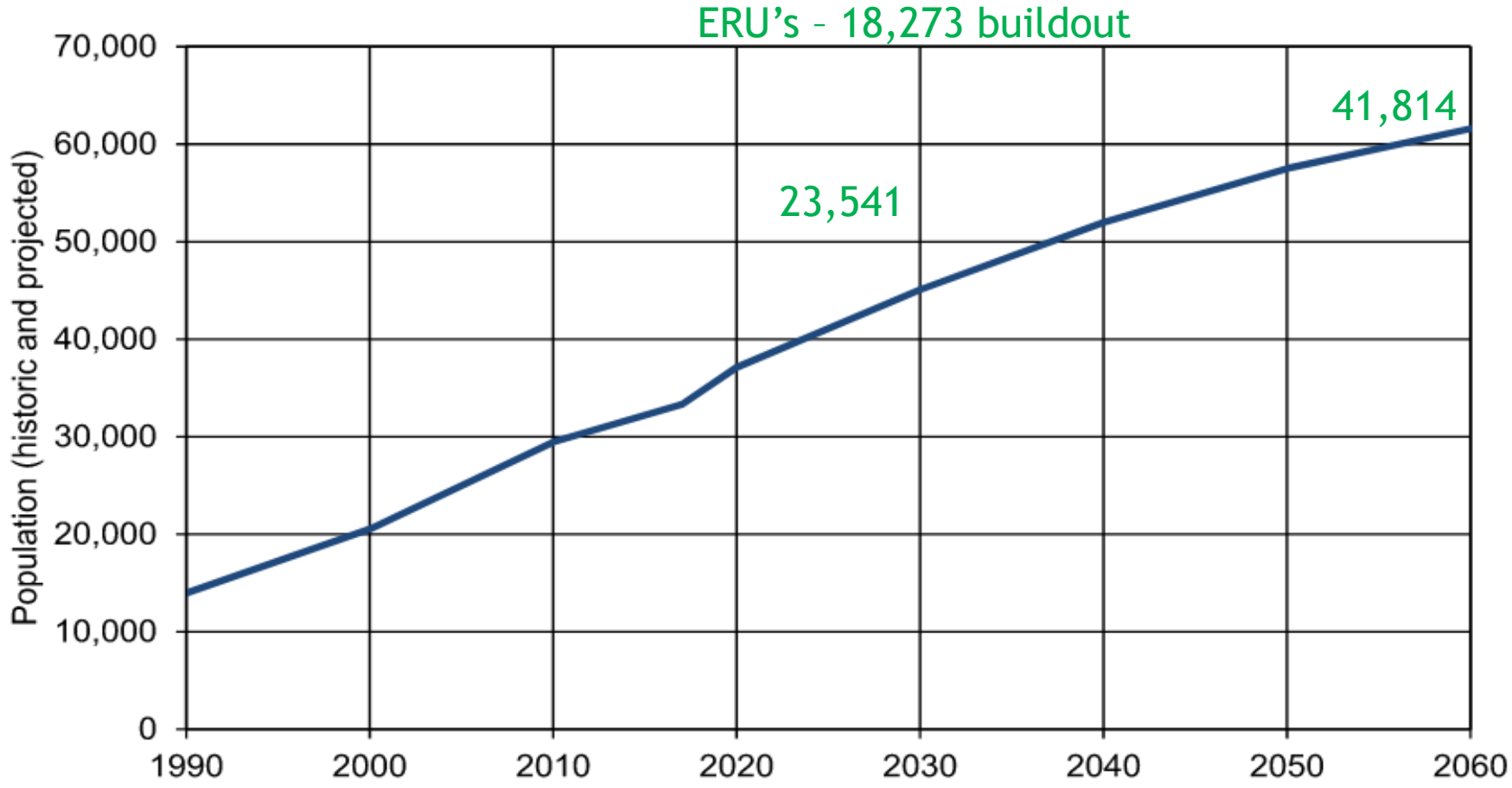
I move that the Planning Commission recommend to the City Council the approval and adoption of the Stormwater Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) as presented. In addition, I recommend that the City Council adopt the maximum allowable impact fee as calculated in the IFA, in accordance with the requirements of the Utah Impact Fees Act.

ESTABLISHED LEVELS OF SERVICE

- Design Storm
  - Intensity:
    - 10-year for initial drainage system pipes
    - 25-yr for regional detention basins local/temporary basins – release rate 0.15 cfs/acre
    - 100-yr storm must be considered to prevent flooding of homes/structures - (contained in ROW)
  - Duration: 3 hours – (3hr , 10yr = 1.16 in)
  - Distribution: Modified Farmer-Fletcher
- Regional Detention
  - Larger Size/More cost-effective
  - Dual use potential
  - City-owned and maintained



Project/Estimate Growth



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(U.S. Census Bureau 1990, 2000; 2010; GOMB 2017)