

ORDINANCE NO. O-43-2026

AN ORDINANCE OF EAGLE MOUNTAIN CITY, UTAH,
APPROVING THE CULINARY WATER
IMPACT FEE FACILITIES PLAN (IFFP)

PREAMBLE

WHEREAS, the City Council of Eagle Mountain City, Utah, finds that it is in the public interest to approve the Culinary Water Impact Fee Facilities Plan (IFFP), as set forth in Exhibit A.

NOW THEREFORE, BE IT ORDAINED by the City Council of Eagle Mountain City, Utah:

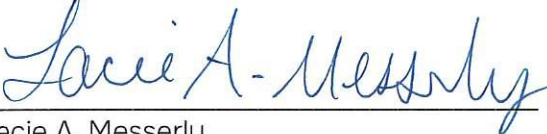
1. The City Council finds that all required notices and hearings have been completed as required by law to consider and approve the Culinary Water Impact Fee Facilities Plan (IFFP), as set forth in Exhibit A.
2. The Culinary Water Impact Fee Facilities Plan (IFFP), as set forth in Exhibit A, is hereby approved.
3. The City Council has considered the impact of this Ordinance on and found it consistent with family health, stability, and formation as required by Utah law.
4. This Ordinance shall become effective immediately upon its passing.

ADOPTED by the City Council of Eagle Mountain City, Utah, this 6th day of October, 2026.

EAGLE MOUNTAIN CITY, UTAH


Jared R. Gray, Mayor

ATTEST:


Lacie A. Messerly
City Recorder



CERTIFICATION

The above Resolution was adopted by the City Council of Eagle Mountain City, Utah on the 6th day of October, 2026.

Those voting yes:	Those voting no:	Those excused:	Those abstaining:
☒ Melissa Clark	☐ Melissa Clark	☐ Melissa Clark	☐ Melissa Clark
☒ Zachory Huish	☐ Zachory Huish	☐ Zachory Huish	☐ Zachory Huish
☒ Craig Whiting	☐ Craig Whiting	☐ Craig Whiting	☐ Craig Whiting
☒ Rich Wood	☐ Rich Wood	☐ Rich Wood	☐ Rich Wood
☒ Brett Wright	☐ Brett Wright	☐ Brett Wright	☐ Brett Wright



A handwritten signature in blue ink, reading "Lacie A. Messerly".

Lacie A. Messerly
City Recorder

Posted on 10/9/2024 by SA.

Exhibit A

EAGLE MOUNTAIN CITY WATER IMPACT FEE FACILITY PLAN

August 10, 2026

Prepared for:

Eagle Mountain City
1650 E Stagecoach Run
Eagle Mountain, UT

Prepared by:

P S O M A S

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South Jordan, UT 84095

Project No. 8EMC011900

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APPENDIX A. EXHIBITS

- Exhibit 3.1 – Eagle Mountain Existing Water System
- Exhibit 3.2 – Eagle Mountain Existing System at Buildout
- Exhibit 3.3 – Eagle Mountain Current and Planning Period Improvements
- Exhibit 3.4 – Eagle Mountain Pressure Zones

APPENDIX B. BUILDOUT PROJECTS COST OPINION

1.1 Introduction

In November 2021, a Capital Facilities Plan (CFP) was completed for Eagle Mountain City titled, Eagle Mountain Impact Fee Facilities Plan, November 2021. Recently, Eagle Mountain has been experiencing enormous growth, growing from 13,118 Equivalent Residential Units (ERU) in 2021 to approximately 20,200 ERUs in 2024.

1.2 Definitions

CUWCD	Central Utah Water Conservancy District	gpm	gallons per minute
ERU	Equivalent Residential Units	PRV	Pressure Reducing Valve
DDW	Division of Drinking Water	LOS	Level of Service
IFFP	Impact Fee Facilities Plan	SID	Special Improvement District
psi	Pounds Per Square Inch	IFC	International Fire Code

1.2.1 Equivalent Residential Connection (ERU)

For ease of calculations in water master plans, land uses other than residential are converted to ERU's. For this report, these values were calculated from actual water usage data provided by Eagle Mountain City from 2023. See Table 1 for the ERU conversions used for this IFFP.

Table 1. Equivalent Residential Connections Conversions

Type	ERC
Large Lots (Zone 4)	1.14
All other Residential	1.00
Commercial	12.83
Institutional	21.13
Condos	0.87
Industrial	18.90

1.3 Level of Service

The State of Utah Division of Drinking Water (DDW) Rules and the International Fire Code (IFC) govern the minimum Level of Service (LOS) that Eagle Mountain City Water Department is required to provide. The current LOS within the water system are stated as follows:

Storage

- 577 gallons of storage per ERU for indoor and outdoor use
- 2,848 gallons per irrigated acre for outdoor use in Zone 4
- Emergency storage is based upon an assessment of risk and the desired degree of system dependability (percent after fire storage is considered).
- Fire storage for the largest building within the zone

Source

- 1,511 gallons per day of source capacity for indoor and outdoor use per ERU
- Per conversation with the DDW, safe yield of a well is assumed to be two thirds of the pump capacity

Minimum Water Pressure Requirements

- 40 psi during peak day demands
- 30 psi during peak instantaneous demands
- 20 psi during peak day demands with fire

Water Rights

- 0.53 acre-feet per ERU
- 2.5 acre-feet per irrigated acre

In addition to the State rule requirements, the City requires developments to maintain 30 psi at any moment during the modeled peak hour of the peak day scenario for new developments, assuming either Well 1 or Well 2 is out of service.

2.1 Existing System

Eagle Mountain City currently provides water to customers in Eagle Mountain and the White Hills area. For discussion purposes the City has been broken into 3 areas: the West, the North, and the South (or City Center). Projects have been constructed to connect the White Hills water system into the City's system. See Figure 1 for the location of each Service Area and Exhibit 3.1 for a map of the existing water system.

From the City's billing information, it was determined that there is currently a total of 20,200 equivalent residential connections which equates to a peak day flow of 21,190 gpm.

The City has a separate secondary system in the south part of the City that will remove some public outdoor use from the culinary system. The secondary system is currently also serving limited areas of residential irrigation however, most residential and commercial irrigation will continue to be served by the culinary system.

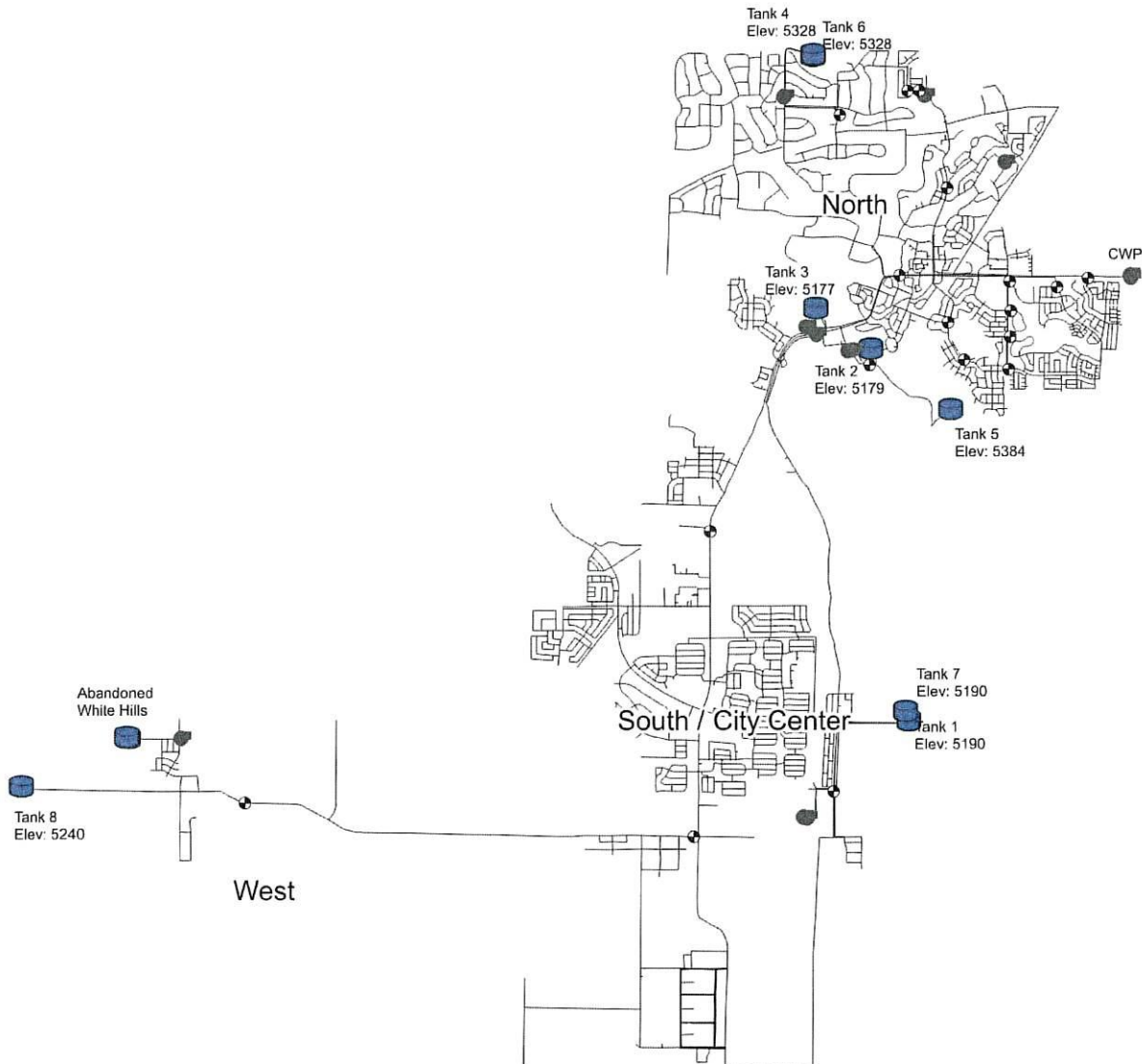


Figure 1. Eagle Mountain's Water System

The City is divided into eight pressure zones including three zones in White Hills, with most of the current development occurring in Zone 1. See Table 2 for a list of the pressure zones and pressure

elevations. The water for the pressure zones is currently supplied by nine tanks, which are normally filled by five wells and water from the CWP pump station.

2.2 Existing Project Funding

Several facilities in the existing system were funded using Special Improvement District (SID) Bonds, reimbursement agreements, and Revenue Bonds however, these have currently all been paid off.

3.1 Planning Period and Growth Projections

Planning Period

To evaluate City growth and system improvements as part of this IFFP, a ten-year planning period will be used to identify specific system needs. To assist the City in long-range planning, additional anticipated projections to build out (year 2060) will also be evaluated.

Growth Projections

Eagle Mountain is growing rapidly and is among the fastest growing cities in the State. Per the Economic Development Master plan that was completed in 2023, it is assumed that the City will grow at an estimated 5,200 additional people each year. This is equivalent to an additional 1,410 residential connections every year. The City had a population of 75,000 or the equivalent of 20,194 residential connections in 2025. See Figure 2 for the projected population growth.

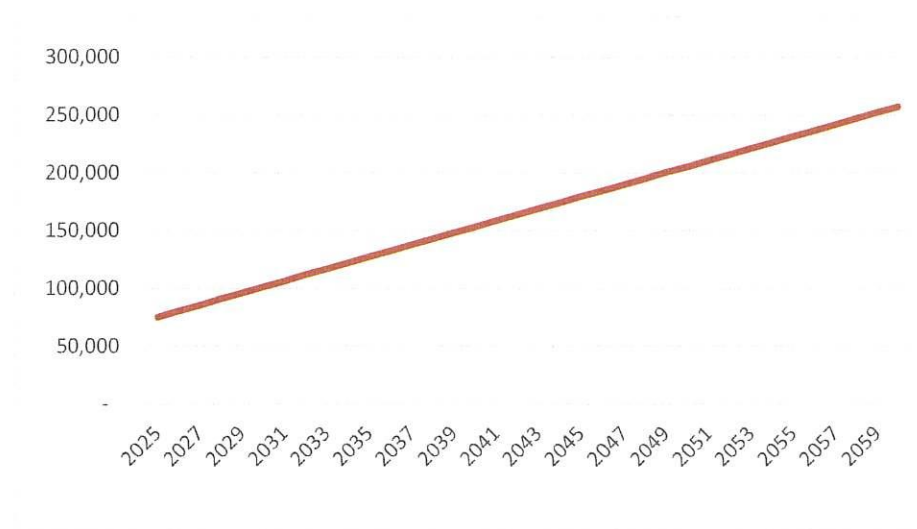


Figure 2. Population

3.2 System Improvements

3.2.1 Pressure Zones

As stated earlier, Eagle Mountain City's water system is currently divided into nine pressure zones. At the City's full build out, an additional five pressure zones will be necessary. Within the City's water model, new pressure zones were created to maintain water pressures within a desired range of 70-120 psi. In some instances, this pressure range was expanded to eliminate the need for additional smaller pressure zones, but the minimum service levels were still maintained. See Table 2 and Exhibit 3.4 for a summary of the pressure zones.

Table 2. Pressure Zones

Pressure Zone	Served from	HGL	40 psi Elevation	70 psi Elevation	120 psi elevation	140 psi elevation
Zone 1	Tank 1 and 7	5101	5008.6	4939.3	4823.8	4777.6
Ranches	PRVs	5070	4977.6	4908.3	4792.8	4746.6
Zone 3	Tank 3 and 4	5180	5087.6	5018.3	4902.8	4856.6
Zone 4	Tank 4 and 6	5320	5227.6	5158.3	5042.8	4996.6
Zone 5	PRVs	5370	5277.6	5208.3	5092.8	5046.6
Ox Bridge	PRVs	5231	5138.6	5069.3	4953.8	4907.6
Bridge	PRVs	5233.7	5141.3	5072	4956.5	4910.3
WH Mid	White Hills tanks	5300	5207.6	5138.3	5022.8	4976.6
WH Lower	PRVs	5198	5105.6	5036.3	4920.8	4874.6
Future Zone 6		4955	4862.6	4793.3	4677.8	4631.6
Future Zone 7		5540	5447.6	5378.3	5262.8	5216.6
Future Zone 8		5540	5447.6	5378.3	5262.8	5216.6
Future Zone 9		5750	5657.6	5588.3	5472.8	5426.6
Future Zone 10		5950	5857.6	5788.3	5672.8	5626.6

Most of the new pressure zones will be created in undeveloped areas on the eastern side of the City as development moves east into the Lake Mountain area. If some of these areas are determined to be unbuildable, some of the planned pressure zones may not be needed.

3.2.2 Storage Capacity Improvements

Currently, there are eight water storage tanks in Eagle Mountain City that provide the total storage capacity for the City's culinary water system, including the new White Hills Tank now completed and an additional tank under design south of Tank 1. The new White Hills Tank (Tank 8) has replaced the two smaller existing tanks in the white hills service zone.

To convert the existing storage capacity of the individual tanks to ERU's, the DDW requires volumes for both fire and emergency storage to be determined. The fire storage for the City has been calculated based on the largest building in the City, which is equivalent to 360,000 gallons. The higher zones, White

Hills, Tanks 4 and 6, and Tank 5 are at a higher pressures and so require adequate fire storage for the zones they serve.

Currently, the Upper White Hills Zone only has residential connections and therefore will only require 1,500 gpm for 2 hours of fire storage. Although the Tyson plant can be fed from either Tank 1 and 7 or the White Hills tank, it currently has the fire storage in Tanks 1 and 7. However, because of its proximity to the new tank, we recommend that the entirety of the Tyson plant's fire storage be allocated to the new White Hills Tank.

Because the higher zones can service the lower zones through PRVs, the fire storage is available for the other zones. However, due to the distance of Zone 1 from other tanks, we recommended most of Zone 1 storage be accounted for in Tanks 1 and 7 and in the White Hills Tank.

Each tank also needs additional storage set aside for emergencies. The DDW does not have a volume requirement for emergency storage. The DDW rule only states that "Emergency storage shall be considered during the design process. The amount of emergency storage shall be based upon an assessment of risk and the desired degree of system dependability." Per the Technical Memorandum on the Division of Drinking Water Sizing Requirements Study memo by Jones and DeMille, the emergency storage requirement has been set at 5% of the total tank volume.

After the fire and emergency storage, the remaining capacity in the tanks is the equalization storage. Equalization storage includes both indoor and outdoor storage needs. Per the system specific source analysis, 584 gallons of storage is required for each ERU. See Table 3 for a summary of each tank's ERU capacity.

Tank	Total Volume (gal)	Fire Storage (gal)	Emergency Storage (gal)	Equalization Storage (gal)	ERU
ST-001/Tank 1	1,000,000	120,000	50,000	830,000	1,438.47
ST-002/Tank 2	1,000,000	90,000	50,000	860,000	1,490.47
ST-003/Tank 3	2,000,000	90,000	100,000	1,810,000	3,136.92
ST-004/Tank 4	600,000	120,000	30,000	450,000	779.90
ST-005/Tank 5	2,000,000	240,000	100,000	1,660,000	2,876.95
ST-006/Tank 6	2,500,000	120,000	125,000	2,255,000	3,908.15
ST-007/Tank 7	3,500,000	120,000	175,000	3,205,000	5,554.59
White Hills Tank	ABANDONED WITH TANK 8				
Tank 8	4,000,000	360,000	200,000	3,440,000	5,961.87
Total 2025	16,600,000	1,260,000	830,000	14,510,000	25,147

Table 3. Existing Tank Storage Capacity

By the year 2040, the City will require over a total of 24.5 million gallons of storage. If the growth rate follows projections, additional storage will generally be required every three years. See Table 4 for the additional storage required and the estimated year additional storage will be needed.

Table 4. Storage Improvements Required Through 2,040

Year	Population	Required Equilization Storage (gal)	Available Equilization Storage (gal)	Excess/ Deficiency (gal)	Added Storage (gal)
2025	75,000	11,652,247	11,535,492	(116,755)	
2026	80,200	12,407,754	14,510,000	2,102,246	3,320,535
2027	85,400	13,163,262	14,510,000	1,346,738	
2028	90,600	13,918,769	18,310,000	4,391,231	4,000,000
2029	95,800	14,674,276	18,310,000	3,635,724	
2030	101,000	15,429,784	18,310,000	2,880,216	
2031	106,200	16,185,291	18,310,000	2,124,709	
2032	111,400	16,940,798	18,310,000	1,369,202	
2033	116,600	17,696,306	22,110,000	4,413,694	4,000,000
2034	121,800	18,451,813	22,110,000	3,658,187	
2035	127,000	19,207,320	22,110,000	2,902,680	
2036	132,200	19,962,827	22,110,000	2,147,173	
2037	137,400	20,718,335	25,435,000	4,716,665	3,500,000
2038	142,600	21,473,842	25,435,000	3,961,158	
2039	147,800	22,229,349	25,435,000	3,205,651	
2040	153,000	22,984,857	25,435,000	2,450,143	

3.2.2a Storage Capacity South of Unity Pass

The area south of Unity Pass is currently served by two tanks totaling 4,500,000 gallons of storage. By themselves, these tanks can provide service to approximately 6,900 ERC. The current system has approximately 5,615 connections. Although this is more than what the two tanks can serve, tanks in White Hills and north of Unity Pass can service this area as well.

In addition, a new 4MG tank, Tank 9, is currently being designed in this zone which will be able to supply an additional 5,921 ERC.

3.2.2b Storage Capacity North of SR-73

The area north of SR-73 is fed from two tanks, a 600,000 gallon tank and a 2.5 million gallon tank. It is estimated that 1,134 connections currently exist north of SR-73. The storage in this zone is enough for 4,600 ERC.

3.2.2c Storage Capacity Zone 5

Currently, has a small number of lots connected to it well below the 2,863 ERC available from this tank. Until this zone builds out this tank can feed into the main zone.

3.2.2d Storage Capacity White Hills

A new 4-million-gallon tank serves this area which replaces the two smaller tanks that previously fed this zone. Per the Firefly West system IFFP, an additional tank will be required in the next 10 years to provide additional storage for the area.

3.2.3 Source Capacity Improvements

Currently, the City's system is served by five wells, one of which is not in operation due to water quality issues (Well 4). Additionally, the City has a Purchase Agreement with Central Utah Water Conservancy District (CUWCD) to purchase 15,000 acre-feet per year of water. During Peak day the City currently utilizes 6,865 gpm. The City also has two additional wells under construction and upgrades at two of the existing wells.

Per the DDW, the safe yield of a well is two-thirds of the operating point of a pump. Table 5 summarizes the current available source and projected amount with current projects. Because all of the sources are in the same pressure zone and then pumped to the existing tanks or can flow to lower portions of the City, the City's source demands can be evaluated for the entire City together.

The ERU capacity was determined by adding the indoor and outdoor use ERU requirements and dividing it by the total source capacity.

Table 5.Existing Source Capacity

Source	Current Source (gpm)	Current Safe Yield (gpm)	Projected Source (gpm)	Projected Safe yield (gpm)
Well 1	2700	1800.00	2700	1800.00
Well 2	2200	1466.67	2200	1466.67
Well 3	1700	1133.33	1700	1133.33
Well 5	3200	2133.33	4500	3000.00
White Hills well 1	1400	933.33	1400	933.33
White hills Well 2	1400	933.33	3000	2000.00
Well 7	0		4000	2666.67
Well 8	0		3200	2133.33
CUWCD	7193	7193	7193	7193
Total	19793	15593.00	29893.00	22326.33

Because the City system is currently below the required source capacity of 21,190 gpm, several projects are in the design/construction stages to alleviate the shortages. These source improvements include improvements to Well 5 and the White Hills Wells and the construction of two new wells, Well 7 and

Well 8. In total, the current projects should add approximately 10,400 gpm of new source capacity which will be constructed over the next couple of years.

Even with these projects, as a result of the rapid growth the City will still be below its source requirement and the City will need to continue with ongoing source projects. See Table 6 for the anticipated source requirements and timing. It should be noted that when constructing a well, the ultimate capacity is uncertain until the well is built. Therefore, if a constructed well does not provide the anticipated capacity, multiple smaller wells will need to be constructed over the same time frame to achieve the necessary source requirement.

Table 6. Source Improvements Required Through 2,040

Year	Population	ERU	Required Source (gpm)	Available Source (gpm)	Excess/ Deficiency (gpm)	Additional CWP contract	Amount Added (gpm)
2025	75,000	20,194.54	21,190	15,593	(5,597)	945.96	
2026	80,200	21,503.91	22,564	20,606	(1,958)	945.96	4,067
2027	85,400	22,813.28	23,938	24,218	280	945.96	2,666
2028	90,600	24,122.65	25,312	25,164	(148)	945.96	
2029	95,800	25,432.02	26,686	29,077	2,391	913.11	3,000
2030	101,000	26,741.39	28,060	29,990	1,930	913.11	
2031	106,200	28,050.76	29,434	30,903	1,469	913.11	
2032	111,400	29,360.14	30,808	31,521	713	617.50	
2033	116,600	30,669.51	32,182	35,138	2,957	617.50	3,000
2034	121,800	31,978.88	33,556	35,756	2,200	617.50	
2035	127,000	33,288.25	34,930	36,373	1,444	617.50	
2036	132,200	34,597.62	36,303	36,991	687	617.50	
2037	137,400	35,906.99	37,677	40,608	2,931	617.50	3,000
2038	142,600	37,216.36	39,051	41,226	2,174	617.50	
2039	147,800	38,525.74	40,425	41,843	1,418	617.50	
2040	153,000	39,835.11	41,799	42,461	661	617.50	

3.2.3a Source Capacity South of Unity Pass

The current system has a bottleneck that limits the flow from north of Unity Pass into the City Center. Therefore, this area has also been evaluated separately. It is estimated that the area currently has 5,615 connections and requires 6,401 gpm of source capacity.

The area can utilize approximately 4,500 gpm from the area north of Unity Pass, which has the majority of the system's existing source capacity. The area is also fed from Well 1, which has a safe yield of 1,800 gpm and a new well is currently in the final stages of construction and is anticipated to come on line at any time. The new well 8 will provide the area with an additional 3,000 gpm of safe yield which will help provide the required source capacity for the continued growth and redundancy in the area.

The area can also be fed from the White Hills Wells, which currently have a maximum capacity of 1,400 gpm. The capacity of these wells is planned to be expanded. One of the two wells would be planned to operate as a redundant pump to the White Hills Zone

In addition, several projects have been evaluated to increase the flow from the City's main sources to the City Center. See Section 4.1 for a full list of these projects. The projects will continue to add redundancy to the area and provide additional supply to help meet the demands of the projected growth.

3.2.3b Source Capacity North of SR-73

The area north of SR-73 is fed from two pump stations that lift water from the main City source into this area's two storage tanks. It is estimated that 1,134 connections exist north of SR-73. Because these lots are typically larger, we have estimated that each lot utilizes approximately 1.23 gpm/lot for a total flow for the area of 1,395 gpm. The two pump stations can pump 1,457 gpm. Both of the pump stations include a backup pump and should be able to keep up with demand.

During July 2024, the area struggled to keep up with demand. After further evaluation, it appears that water being pumped to this zone is being discharged to other areas of the City, utilizing supply that is needed for this zone.

Because these pumps currently operate continuously during the summer, a new pump station was planned to be operational by the beginning of June 2026. Once the area is fully built out including Talons Cove and the area West of the new middle school an additional booster will be required to help boost additional water to Tank 4 and 6. It is recommended that this booster be located at the high point of the north CWP pipeline project to minimize the pumping requirements.

3.2.3c Source Capacity Zone 5

Currently, the pump station that pumps to the Zone 5 serves a small number of lots and has enough capacity to serve the Zone. Once lots are connected to the Zone or the connection from Tank 5 to Lake Mountain Road is made, a pump and PRV should be adjusted to ensure that the capacity is being utilized by the Zone. Once additional development occurs the area should be equipped with a back-up pump from Pony Express Road.

3.2.3d Source Capacity White Hills

Currently, the White Hills Well has a capacity of 1,400 gpm which is served by two wells, although only one can operate at a time. Per the Firefly IFFP, one will be expanded to 3,100 gpm. With the additional anticipated growth in the Firefly IFFP, these wells will be over capacity. Once Capacity is reached Firefly will be required to come up with a solution for the additional source.

4.0 Current Projects

Since the 2021 IFFP, several projects have been completed or are under construction. They are summarized below:

- 1) A pump station that pumps water over Unity Pass to Tanks 1 and 7 has been constructed and is in operation.
- 2) A 4 MG tank in the White Hills Area. This tank is set at a higher elevation and will be able to serve the area better. This project will replace the existing White Hills Tanks (included as part of the Firefly Master Plan). (Project 15)
- 3) Upgrades to the White Hills Wells. It is anticipated that this will increase the source capacity to 5,200 gpm (included in the Firefly Master Plan) (Project 4).
- 4) The City has two new wells, Well 7 and Well 8, under design/construction. Well 7 is located near the new pump station at Unity Pass and Well 8 is adjacent to Well 1. (Project 7a and 16)
- 5) The City is in the process of increasing the capacity of Well 5. (Project 26)
- 6) A new 4 MG tank in the South Service Area south of Tanks 1 and 7 is under construction. (Project 9)
- 7) An additional Zone 4 pump is under design. (Project 5)
- 8) A parallel Waterline from the new Unity Pass Pump station to Lake Mountain Road (Project 27)
- 9) A 16" line from Well 8 to Tank 8 (Scarlet Tank) and PRV (Project 39)

4.1 Facilities Planning

As the City continues to grow, the water system will need to expand to keep up with the additional demand. From current land use and zoning maps, a City full build-out scenario was created and used to anticipate pipelines, PRV's, storage, and source projects that will be necessary. This scenario is summarized in Exhibit 3.2

The needed improvements for the planning period have been phased into 5-year increments: 2025-2030 and 2030-2035. To assist the City with long range planning, improvements beyond 2035 have also been included. See Exhibit 3.3 for locations of these projects. The projects needed by 2030 are described in this section. Costs for projects beyond 2030 are given in Appendix B.

In addition to the timing, budgetary project costs have been developed for the necessary improvements. These budgetary costs include materials, construction, engineering, legal, and right-of-way acquisitions.

These projects have been analyzed and the timing of the projects is determined based on best available data, current growth projections, and known development plans. If new development occurs in locations that were not anticipated in the model, or if growth occurs quicker than anticipated, some projects may need to be initiated sooner than the projections.

4.1.1 Years 2025-2030

In addition to the projects that have recently been completed, and those that are under construction (listed in Section 4.0), several other projects will be needed in the next 5 years. See Appendix B for a summary of cost for these improvements.

Water Source Projects

- 1) Construct a well North of Lone Tree Development (Project 7)
- 2) Construct a new well in White Hills (Project 21)
- 3) First phase of the CUWCD Pump station North of SR73 (6000 gpm) (Project 14)
- 4) A redundant booster to Tank 5 (Project 43)

Water Line Projects

- 5) Install a parallel 16-inch waterline along Lake Mountain Road from new waterline in Project 9 to Eagle Mountain Blvd (Project 34)
- 6) Complete the water line on SR-73 (24 & 30 inch) (Project 10)
- 7) Install a waterline from Pony Express to the west connecting south to the existing waterline in Mid-Valley Road (Project 35)
- 8) Install new waterline from the airport south to proposed waterline project described in Project 7. (Project 19)
- 9) A new waterline from Tank 5 to Lake Mountain Road (Project 25)
- 10) Parallel waterlines in SR-73 (Project 17)
- 11) A new line from the CWP along the northern City Boundary (Project 40)

4.1.2 Year 2030-2035

Water Line Projects

- 12) Waterline from existing PRV in Pony Express to Eagle Mountain Blvd (Project 35)
- 13) Install a parallel waterline along Pony Express from Lake Mountain to the existing PRV (Project 37)
- 14) Water line connecting Eagle Mountain Blvd to Pole Canyon along Lehi-Fairfield Road (Project 29)
- 15) Install a 12" pipe to Upper Zone in Talons cove (Project 42)
- 16) Parallel waterlines in SR-73 (Project 13)

Water Tank Projects

- 17) 4 MG tank west of Tank 4 with 16" waterline from suction side of pump (project 28)

Water Source Projects

- 18) Additional Tank 4 Booster (Project 43)

5.0 Conclusion and Recommendations

Like many communities in the west, Eagle Mountain City is growing rapidly with limited resources to acquire and expand its water system to meet the growing needs. The improvements recommended in Section 4.1 were outlined based on projected growth rates and anticipated locations of future development. Since growth rates and location of growth may vary from projections, some of the recommended improvements may be needed sooner or later than anticipated.

The current water system is short on source supplies and storage and, even with the current projects, additional improvements will continue to be required to meet the LOS standards.

Beyond the immediate improvements, Eagle Mountain City should begin planning strategic locations for additional storage projects and development of new water sources. As the City continues to experience rapid growth, we recommend that the Master Plan and Impact Fee Facility Plan be reviewed and updated every few years and the system model be kept up to date.

APPENDIX A

Exhibits

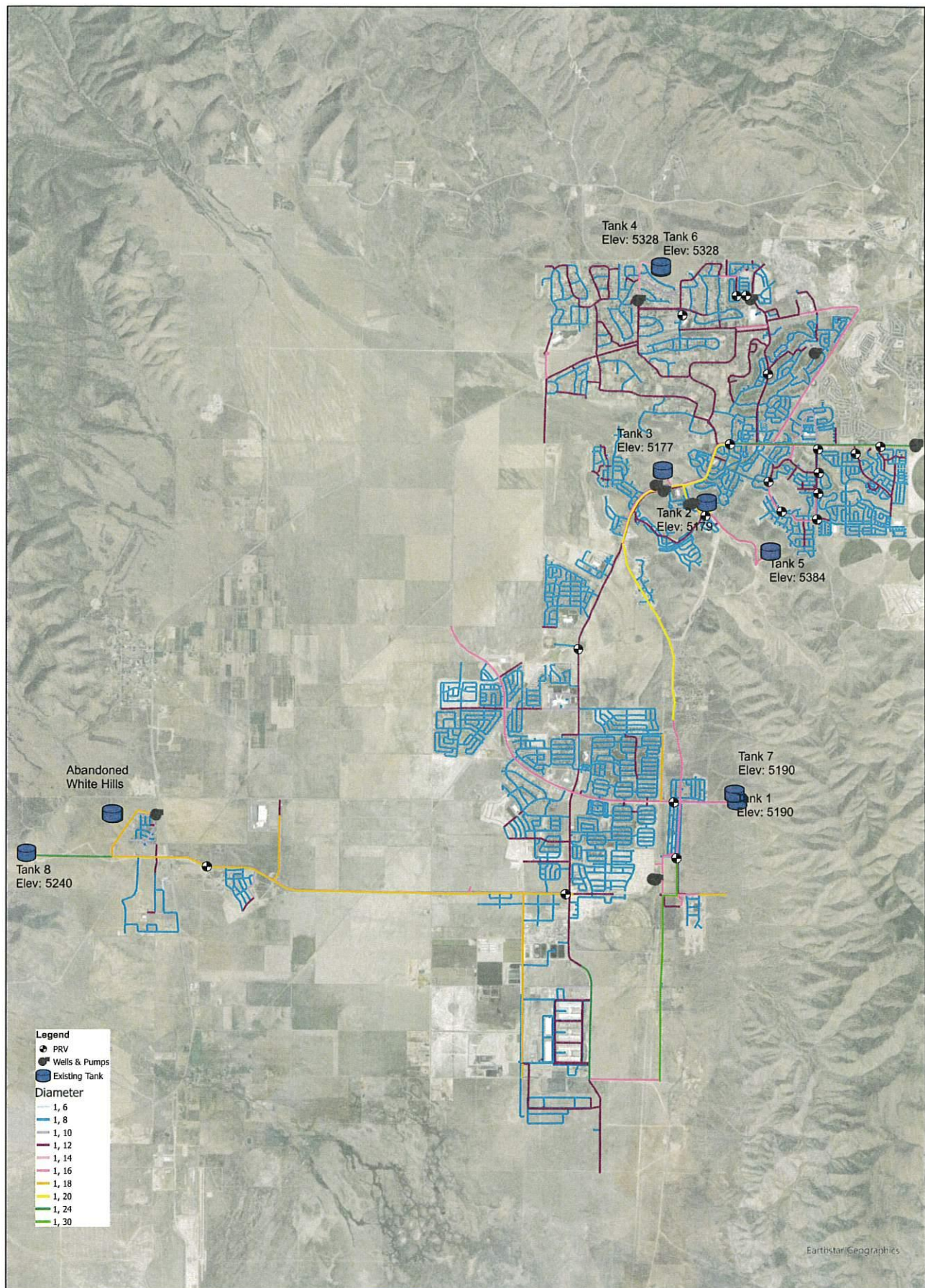
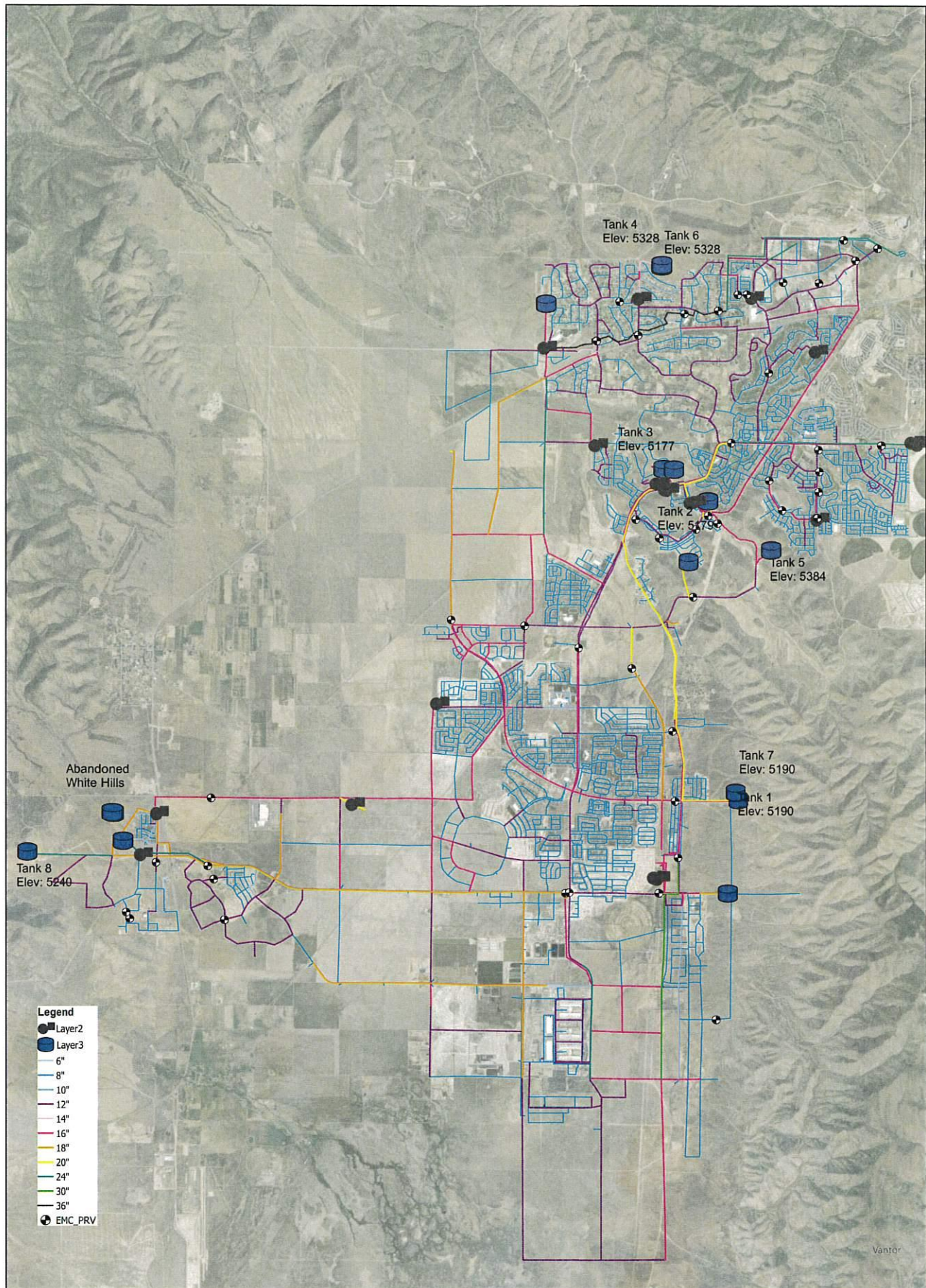


Figure 3.1 Existing Water System



3.2 Full Buildout Projects



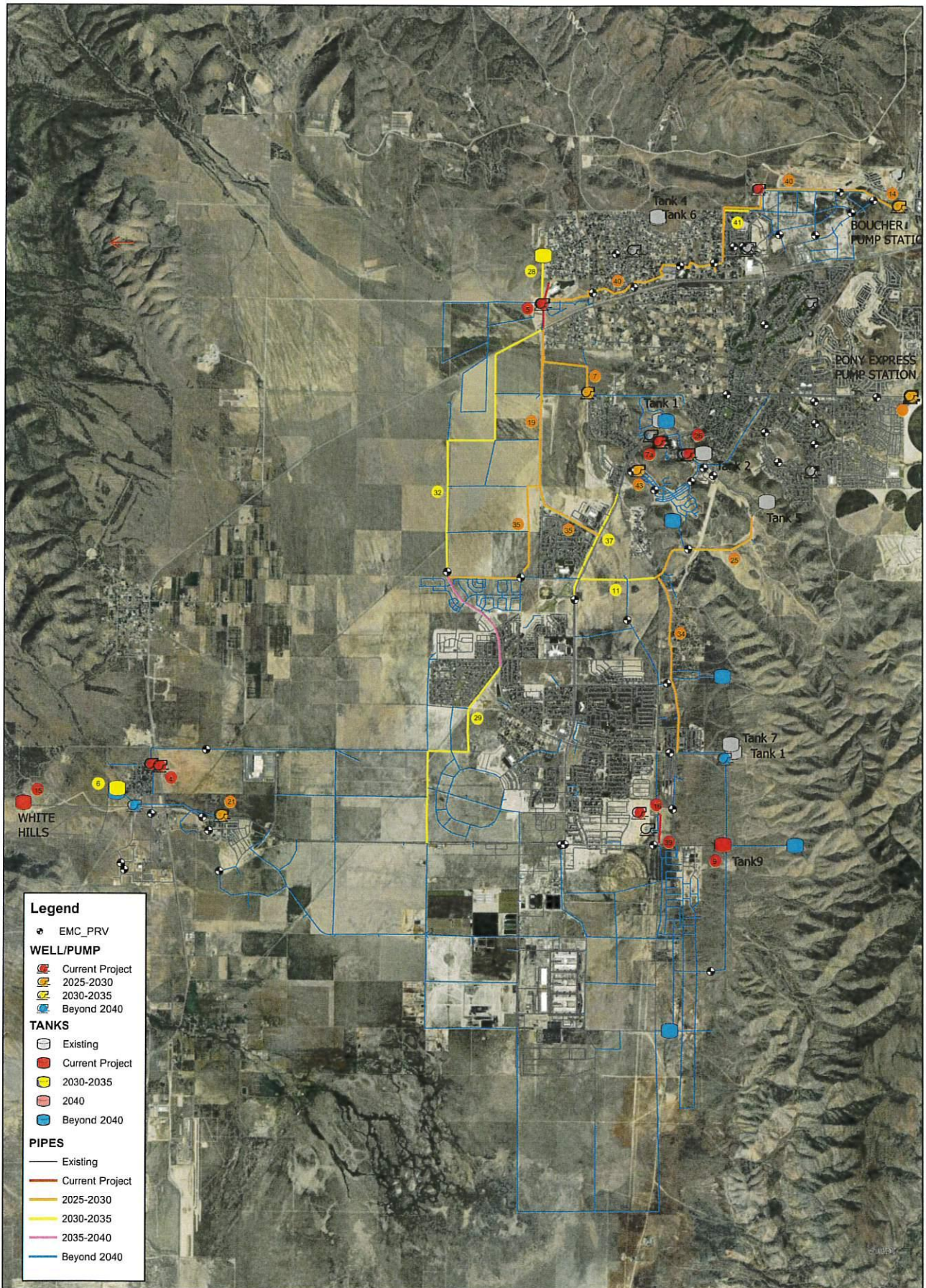


Figure 3.3 Recommended Projects

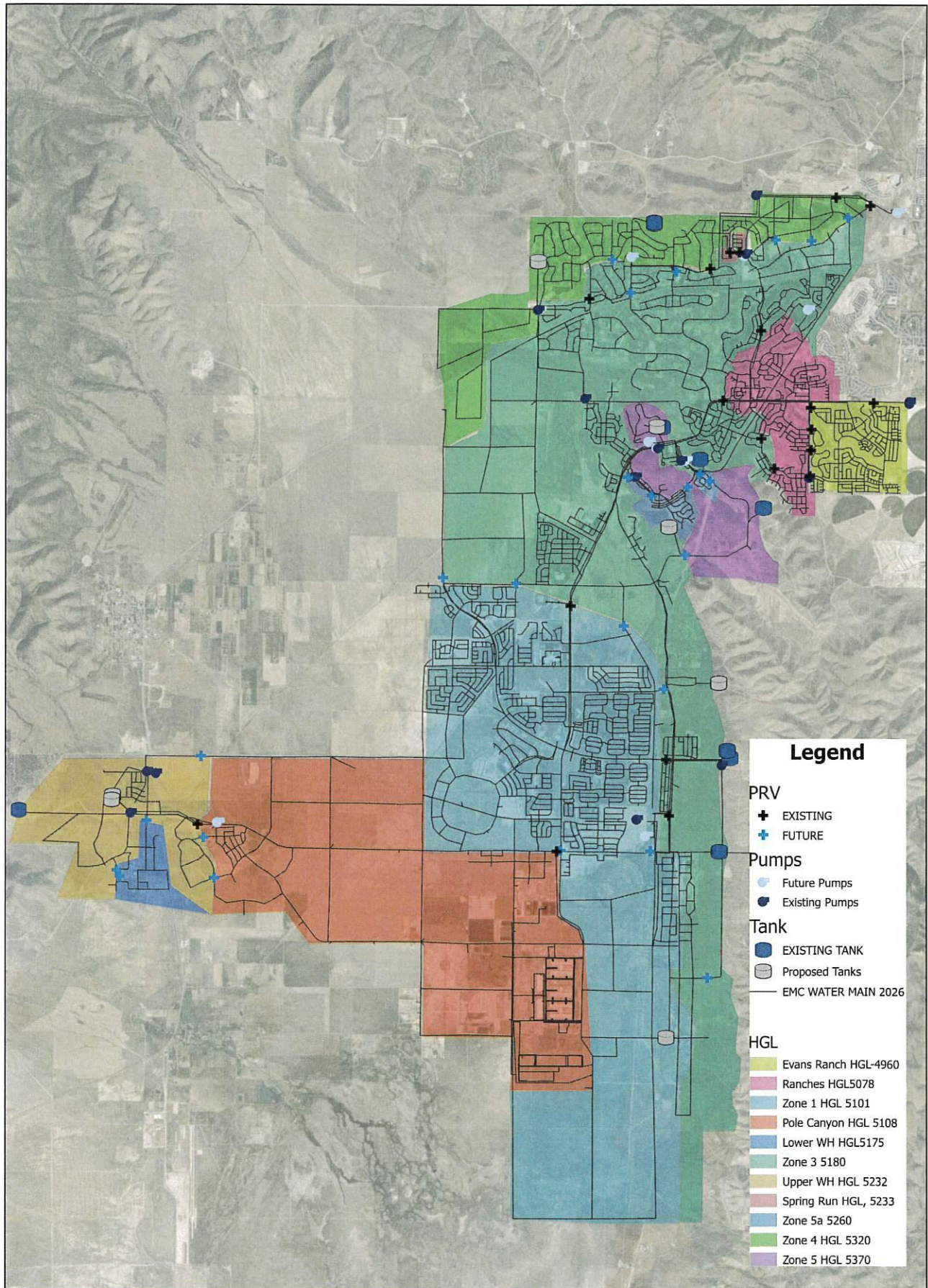


Figure 3.4 Pressure Zones

APPENDIX B

Cost Estimates

Years 2025-2030

IFFP Project Number	Description	Cost	Amount used in the next 10 years	Cost to new development
Current Projects				
7a	3,000 gpm reliable source well (Well 7)	\$ 5,500,000	100%	\$ 5,500,000
7a	.75 ac well propoerty	\$ 300,000	100%	\$ 300,000
16	3,000 gpm reliable source well (Well 8)	\$ 5,500,000	100%	\$ 5,500,000
16	.75 ac well propoerty	\$ 300,000	100%	\$ 300,000
9	4MG Tank 9 (South of tank 1)	\$ 7,700,000	100%	\$ 7,700,000
15	4 MG White Hills Tank	\$ 6,500,000	100%	\$ 6,500,000
27	Pony Express Parallel Water line	\$ 1,147,693	100%	\$ 1,147,693
5	Belle Street Booster	\$ 1,500,000	100%	\$ 1,500,000
26	Well 5 Improvements	\$ 3,600,000	100%	\$ 3,600,000
4	Cooke Well Improvements	\$ 2,000,000	100%	\$ 2,000,000
7	3,000 gpm reliable source well (Well 9)	\$ 5,500,000	100%	\$ 5,500,000
7	.75 ac well propoerty	\$ 300,000	100%	\$ 300,000
21	White hills well	\$ 5,500,000	100%	\$ 5,500,000
21	.75 ac well propoerty	\$ 300,000	100%	\$ 300,000
34	Install Line along Lake Mountain Road from project 9 to Eagle Mountain Blvd	\$ 6,766,945	90%	\$ 6,090,251
35	Install Line from Pony Express to the west connecting south to the Line in Mid-valley road.	\$ 5,035,134	70%	\$ 3,524,594
35	Easement	\$ 1,000,000	80%	\$ 800,000
19	Water line in Airport Road (Up to Belle Street)	\$ 5,355,264	70%	\$ 3,748,685
25	A new water line from Tank 5 to Lake Mountain Road	\$ 1,068,853	100%	\$ 1,068,853
25	Easement	\$ 600,000	100%	\$ 600,000
14	First Phase of CWP (Boucher Booster Pump	\$10,000,000.00	60%	\$ 6,000,000.00
14	.75 ac well propoerty	\$ 300,000.00	90%	\$ 270,000.00
12	Upgrade White Hill 6" Waterline	\$ 500,000	100%	\$ 500,000
16a	New Public Works (cost shared with Waste Water)	\$ 5,000,000	100%	\$ 5,000,000
39	New Line from Well 1 to Tank 9	\$ 1,244,156	100%	\$ 1,244,156
40	New Line From CWP North to SR-73	\$ 26,612,520	50%	\$ 13,306,260
43	Redundant Tank 5 booster pump	\$ 2,400,000	100%	\$ 2,400,000
	Total	\$ 109,130,565	80%	\$ 87,800,492

Years 2030-2035

IFFP Project Number	Description	Cost	Amount used in the next 10 years	Cost to new development
11	Install 12" line between lake mountain and pony express	\$ 471,494.00	80%	\$ 377,195.20
37	Install a Parallel line along Pony Express from Lake Mountain to the Existing PRV	\$ 959,241.00	70%	\$ 671,468.70
29	A new water line along Fairfield Lehi Road connecting Eagle Mountain Blvd to Pole Canyon	\$ 5,521,086.21	70%	\$ 3,864,760.35
28	4 MG tank west of Tank 4.	\$ 8,000,000.00	100%	\$ 8,000,000.00
28	1 acre tank property	\$ 300,000.00	100%	\$ 300,000.00
6	4MG TANK	\$ 8,000,000.00	50%	\$ 4,000,000.00
6	1 acre tank property	\$ 300,000.00	70%	\$ 210,000.00
	upgrades to Boucher Booster	\$ 785,800.00	50%	\$ 392,900.00
41	Additional line to talons cove	\$ 345,769.50	90%	\$ 311,192.55
32	Down Eagle Mountain Blvd	\$ 10,717,758.10	90%	\$ 9,645,982.29
42	booster to Tank 4	\$ 1,600,000.00	90%	\$ 1,440,000.00
		\$ 23,551,821.21	74%	\$ 17,423,424.25