REGULAR MEETING AGENDA
Mapleton City Council Meeting
Wednesday, August 20, 2025 at 6:00 p.m.
Mapleton City Council Chambers
125 W 400 N, Mapleton, UT 84664

CALL TO ORDER—INVOCATION- PLEDGE OF ALLEGIANCE
MAYOR'S COMMENTS:
CEREMONIAL ITEM: Presentation regarding Chief Glasgow's Administrative Fire Officer award

PUBLIC FORUM: Members of the audience may bring to the attention of the Mayor and Council any item that is not on the agenda. Please sign in. Speakers are generally given two to three minutes, at the discretion of the Mayor to address the Council. State law prohibits the Council from acting on items that do not appear on the agenda. **The Mayor reserves the right to amend the order of the agenda items and to delete items no longer required for consideration.**

CONSENT AGENDA: Items on the consent agenda are routine in nature and do not require discussion or independent action. Members of the Council may ask to remove any items from the consent agenda to be considered individually. Unless that is done, one motion may be used to adopt all recommended actions. If the public has questions or comments regarding the consent agenda, please contact staff prior to the meeting.

1. Approval of City Council meeting minutes- August 6, 2025
2. Consideration of a Resolution authorizing staff to submit accounts to collections. ***Bryce Oyler, Finance Director***
3. Consideration of a Resolution earmarking the Capital Projects Reserves for Future Projects to the discussed projects. ***Bryce Oyler, Finance Director***

PUBLIC HEARING ITEMS:

4. Consideration of an Ordinance adopting Impact Fee Facilities Plans and Impact Fee Analysis and associated impact fees for Parks and Recreation. ***Logan Miner, Parks and Recreation Director***
5. Consideration of an Ordinance adopting the Water Use and Conservation Element of the General Plan. ***Sean Conroy, Assistant City Administrator/Community Development Director***

MAYOR, COUNCIL AND ADMINISTRATIVE REPORTS
ADJOURNMENT FROM REGULAR SESSION

CLOSED MEETING:
Mapleton City Council may adjourn the regular meeting and convene into a closed session pursuant to §52-4-205, as provided by Utah Code.

Camille Brown, City Recorder

The public is invited to participate in all Mapleton city council meetings. This meeting will also be streamed via You Tube at Mapleton City Meetings. There will be no public comment via You Tube viewing. The link for the meeting is: https://www.youtube.com/channel/UCx8-QGmCOXWQOsZq8pGYrsAgendag

THIS AGENDA IS SUBJECT TO CHANGE WITH A MINIMUM OF 24 HOURS NOTICE

A copy of the agenda was posted at the City Offices August 14, 2025, at 12:00 pm also delivered to the Mayor, City Council members. In compliance with the Americans with Disabilities Act, the city will make reasonable accommodations to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Recorder at 801-806-9106 at least three working days prior to the meeting.

City Council Staff Report

Date:
8/20/2025

Applicant:
Mapleton City

Location:
125 W 400 N

Prepared By:
Bryce Oyler

Public Hearing:
No

Attachments
None

REQUEST

Consideration of resolution authorizing Gold Cross Services to write off 38 accounts and send them to collections.

BACKGROUND & DESCRIPTION

Mapleton City is required to have Council approval prior to writing off any amounts that are being sent to collections. Gold Cross processes all the city's ambulance billings. Some of these collections date back as far as 2022. The total amount is $77,161.58 which consists of 38 individual accounts.

With council approval, these accounts will be sent to Mapleton's collection agency. They will continue to work on collecting these amounts. Due to privacy issues, the accounts are not included in this item.

RECOMMENDATION

Adopt a resolution authorizing Gold Cross Services to write off 38 accounts and send them to collections.

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MAPLETON, UTAH TO AUTHORIZE GCS BILLING TO WRITE OFF 38 ACCOUNTS AND SEND THEM TO COLLECTIONS.

WHEREAS, the City Council is required to approve the write off of any accounts receivable,

NOW THEREFORE, be it resolved by the City Council of Mapleton, Utah, authorizes GCS Billing to write off 38 accounts and send them to collections.

Approved and adopted on August 20, 2025.

_____

Dallas Hakes
Mayor

ATTEST:

_____

Camille Brown
City Recorder

City Council Staff Report

Date:
8/20/2025

Applicant:
Mapleton City

Location:
125 W 400 N

Prepared By:
Bryce Oyler

Public Hearing:
No

Attachments
None

REQUEST

Consideration of a resolution earmarking the fund balance assigned for future capital projects as discussed.

BACKGROUND & DESCRIPTION

The Capital Projects Fund has Assigned and Unassigned Fund Balances. Within the Assigned Fund Balance, there are two categories, Future Capital Projects and Vehicle Replacement. This means that the Fund Balance in those categories are assigned to either future capital projects or vehicle replacement. Under the direction of the city's auditor, "future capital projects" should be assigned to specific projects via a council decision.

This resolution assigns the Future Capital Projects fund balance to future projects to include, but not limited to, Myers Park, Parkway Trail Extension, City Park Development, Public Safety building expansion, and the City Hall Remodel. These are projects that have been discussed in detail with City Council during the 2024 retreat meeting. Approving this resolution is not an approval of the projects. City staff will follow the current approval process prior to starting work on any of these projects. This resolution is intended to satisfy a request from the city's auditor.

RECOMMENDATION

Adopt a resolution earmarking the fund balance assigned for future capital projects as discussed.

RESOLUTION NO. 2025 -

CONSIDERATION OF A RESOLUTION EARMARKING THE FUND BALANCE ASSIGNED FOR FUTURE CAPITAL PROJECTS.

WHEREAS, Mapleton City was given directions from the auditor to earmark fund balances,

NOW THEREFORE, be it resolved by the City Council of Mapleton, Utah, to earmark the fund balance assigned for future capital projects to future projects as discussed.

Approved and adopted on August 20, 2025.

_____
Dallas Hakes
Mayor

ATTEST:

_____
Camille Brown
City Recorder

City Council Staff Report

Date:
August 20, 2025

Prepared By: Logan Miner, Parks and Recreation Director

Public Hearing:
Yes

Attachments:
Proposed Ordinance
Impact Fee IFFPs and IFAs

REQUEST

Adopt the Impact Fee Facilities Plan and Impact Fee Analysis for Parks and Recreation, and adopt the associated impact fees.

BACKGROUND & DESCRIPTION

Impact fees are one-time payments imposed on new development activity as a condition of approval to mitigate it's impact on public infrastructure. The establishment, collection and use of impact fee is regulated by Utah Code Section 11.36a. Mapleton City adopted the current Parks and Recreation impact fees in 2021.

- An impact fee ordinance. The ordinance must identify the service areas subject to the impact fees, the impact fee schedule, the formulas for calculating impact fees and the process for adjustments or credits.
- An Impact Fee Facilities Plan (IFFP). The purpose of the IFFP is to determine the public facilities required to serve development growth.
- An Impact Fee Analysis (IFA). The purpose of the IFA is to provide a written analysis of each impact fee that is being proposed.

LRB Public Finance Advisors prepared the Impact Fee Facilities Plan and Impact Fee Analysis for the Parks and Recreation of Mapleton City in accordance with the Utah Code 11-36a.

EVALUATION

In accordance with state law, staff is presenting a revised impact fee ordinance and IFFPs and IFAs for Parks and Recreation. The IFA establishes the maximum allowable fee per capita at $1,628, resulting in the following fee schedule:

Housing Type	Persons/ HH	Current Fee	Proposed Fee	% Change
Single Family	3.60	$3,587	$5,861	63%
Multi-Family/ Mobile Home	1.80	$1,384	$2,930	112%

The proposed impact fees woud be implemented 90 days after adoption, as required by the Impact Fee Act.

RECOMMENDATION

Staff recommends adopting the Impact Fee Facilities Plan, Impact Fee Analysis, and associated Impact Fees for Parks and Recreation.

ORDINANCE NO. 2025-

AN ORDINANCE AMENDING MAPLETON CITY CODE CHAPTER 19 (IMPACT FEES) AND ADOPTING IMPACT FEE FACILITIES PLANS AND IMPACT FEE ANAYLSIS AND ASSOCIATED IMPACT FEES FOR PARKS AND RECREATION

WHEREAS, Utah Code Section 11-36a is known as the Impact Fee Act; and

WHEREAS, the Impact Fee Act outlines the requirements for the preparation and adoption of impact fees as well as for public noticing; and

WHEREAS, Mapleton City has complied with the noticing requirements outlined in the Impact Fee Act; and

WHEREAS, the City has prepared amendments to its Impact Fee Ordinance (MCC Chapter 19) in accordance with the Impact Fee Act; and

WHEREAS, Impact Fee Facilities Plans (IFFP) and Impact Fee Analysis' (IFA) have been prepared in accordance with the Impact Fee Act for Parks and Recreation.

NOW THEREFORE, BE IT RESOLVED by the City Council of Mapleton, Utah, to amend Mapleton City Code Title 19 as described and to adopt the IFFPs and IFAs for and associated impact fees for Parks and Recreation as presented to the Council on August 20th, 2025.

This ordinance adopted this 20th day of August, 2025, by the City Council of Mapleton City, Utah.

_____
Dallas Hakes
Mayor

ATTEST:

_____
Camille Brown
City Recorder

LRB PUBLIC FINANCE ADVISORS

LEWIS | ROBERTSON | BURNINGHAM

MAPLETON
UTAH

MAPLETON, UTAH

PARKS AND RECREATION IMPACT FEE FACILITIES PLAN (IFFP) & IMPACT FEE ANALYSIS (IFA)

JULY 2025

PREPARED BY:

LRB PUBLIC FINANCE ADVISORS
FORMERLY LEWIS YOUNG ROBERTSON & BURNINGHAM INC.

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IFFP AND IFA CERTIFICATION

LRB Public Finance Advisors (formerly Lewis Young Robertson & Burningham, Inc.) certifies that the attached Impact Fee Facilities Plan and Impact Fee Analysis prepared for Parks & Recreation facilities:

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. offsets costs with grants or other alternate sources of payment; and
3. complies in each and every relevant respect with the Impact Fees Act.

LRB makes this certification with the following caveats:

1. All of the recommendations for implementation of the Impact Fee Facilities Plan and the Impact Fee Analysis are followed by City staff and elected officials.
2. If all or a portion of this document is modified or amended, this certification is no longer valid.
3. All information provided to LRB Public Finance Advisors is assumed to be correct, complete, and accurate. This includes information provided by the City as well as outside sources.

LRB PUBLIC FINANCE ADVISORS

SECTION 1: EXECUTIVE SUMMARY

The purpose of the Parks & Recreation Impact Fee Facilities Plan (IFFP), with supporting Impact Fee Analysis (IFA), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and assist Mapleton City (the City) in planning necessary capital improvements for future growth. This document will address the future parks & recreation infrastructure needed to serve the City for up to ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service (LOS).

- **Service Area:** The parks and recreation service area is defined as all areas within the City.
- **Demand Analysis:** The demand unit used in this analysis is population. The City's 2025 population is estimated at approximately 16,214. The future population is used to determine the additional parks & recreational needs. Based on growth estimates, the service area should reach a population of approximately 21,000 residents by 2035. As a result of new growth, the City will need to construct additional parks and recreation facilities to maintain the existing level of service.
- **Level of Service:** The LOS for the analysis is based on maintaining the existing level of investment in current parks and recreation facilities. The LOS consists of two components – the land value per capita and the improvement value per capita (or the cost to purchase land and make improvements in today's dollars). The LOS is shown in more detail in **Sections 4** and **5**.
- **Excess Capacity:** A buy-in component is not considered in this analysis.
- **Capital Facilities:** The City's existing level of investment results in the need to construct an additional $10M in parks and recreation infrastructure.
- **Funding of Future Facilities:** Impact fees will continue to be a significant source of funding for parks and recreation infrastructure as they are an appropriate and fair mechanism for funding growth-related infrastructure.

PROPOSED PARKS AND RECREATION IMPACT FEE

Impact fees are calculated to ensure new development provides sufficient investment to maintain the current LOS standards in the community. The fee per capita is $1,628. Based on the per capita fee, the proposed impact fee per household (HH) is illustrated in **TABLE 1.2.**

TABLE 1.2: PARK IMPACT FEE SCHEDULE

TYPE OF HOUSEHOLD	PERSONS PER HH	PROPOSED FEE PER HH	EXISTING FEE	% CHANGE
Single Family	3.60	$5,861	$3,587	63%
Multi-Family (Including Mobile Homes)	1.80	$2,930	$1,384	112%

NON-STANDARD PARK IMPACT FEES

The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.[1] This adjustment could result in a different impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. The non-standard impact fee is calculated based on the following formula:

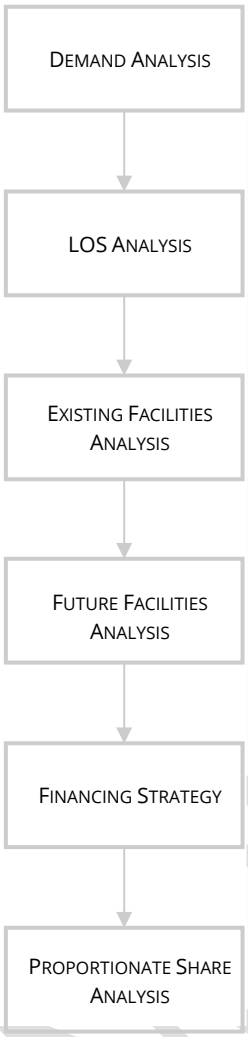
FORMULA FOR NON-STANDARD PARKS AND RECREATION IMPACT FEES

Estimate of Total Population Increase from Development x Estimate of Level of Investment Impact Fee Per Capita ($1,628) = Impact Fee

[1] 11-36a-402(1)(c)

SECTION 2: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE METHODOLOGY



The purpose of this study is to fulfill the requirements of the Impact Fees Act regarding the establishment of an IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service to existing development and ensure that impact fees are not used to raise that LOS. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

The demand analysis serves as the foundation for the IFFP. This element focuses on a specific demand unit related to each public service – the existing demand on public facilities and the future demand as a result of new development that will impact public facilities.

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing LOS. Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the LOS which is provided to a community's existing residents and ensures that future facilities maintain these standards. Any excess capacity identified within existing facilities can be apportioned to new development. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the Impact Fee Facilities Plan provides an inventory of the City's existing system improvements. The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

FUTURE CAPITAL FACILITIES ANALYSIS

The demand analysis, existing facility inventory, and LOS analysis allow for the development of a list of capital projects necessary to serve new growth and to maintain the existing system. This list includes any excess capacity of existing facilities as well as future system improvements necessary to maintain the LOS. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication (i.e., donations) of system improvements, which may be used to

finance system improvements.[2] In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.[3]

PROPORTIONATE SHARE ANALYSIS

The written impact fee analysis (IFA) is required under the Impact Fees Act and must identify the impacts placed on public facilities by development activity and how these impacts are reasonably related to the new development. The written impact fee analysis (IFA) must include a proportionate share analysis, clearly detailing that the cost of future or existing (that have excess capacity) public facilities improvements are roughly proportionate to the reasonably related to the service demands needed for any new development activity. A local political subdivision or private entity may only impose impact fees on development activities when its plan for financing system improvements establishes that impact fees are necessary to maintain the existing level of service (UCA 11-36a-302 (3)). The City has determined that assessing impact fees on development activities are necessary to maintain the existing level of services in the future.

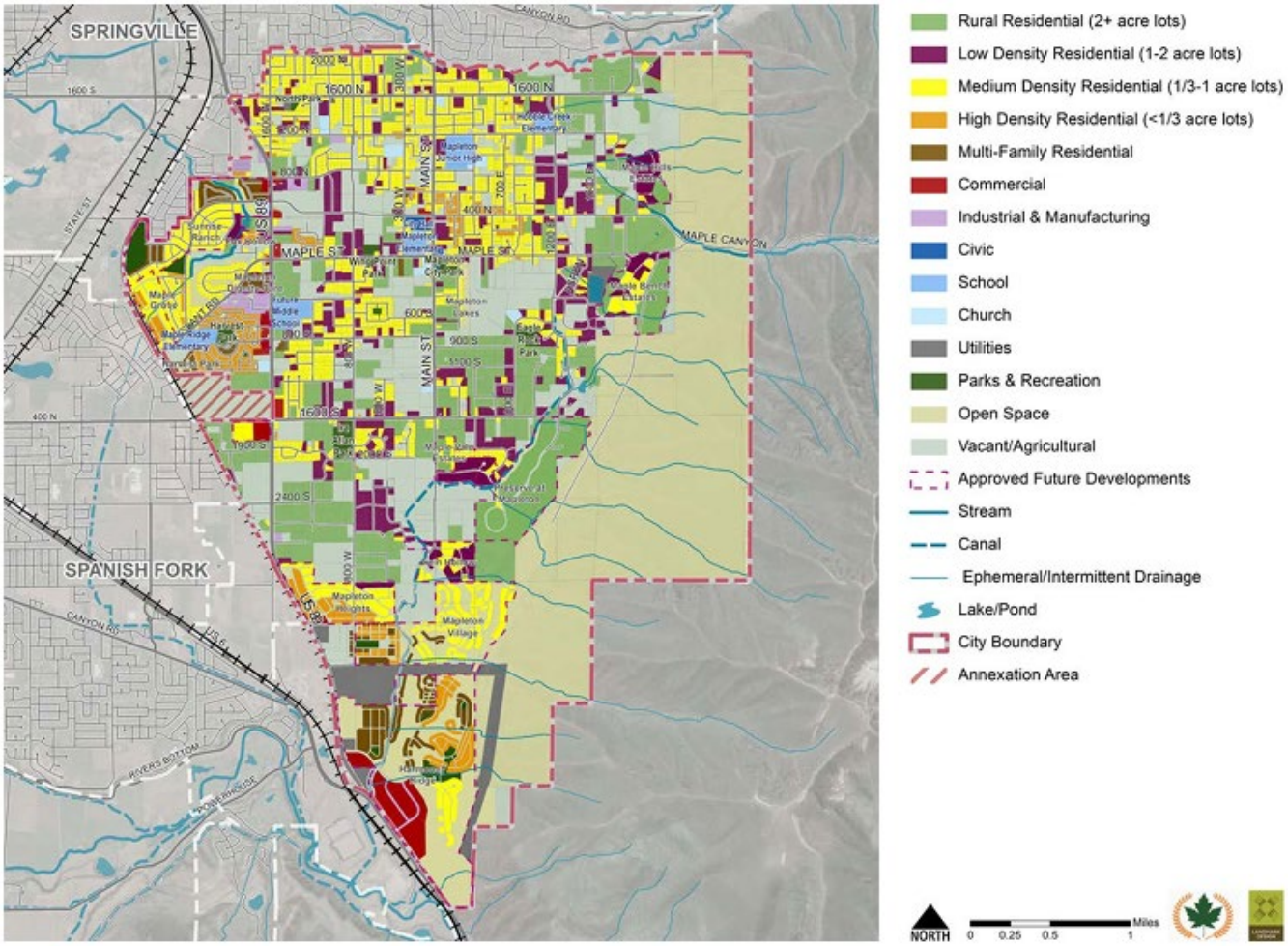
[2] 11-36a-302(2)
[3] 11-36a-302(3)

SECTION 3: OVERVIEW OF MAPLETON CITY AND DEMAND ANALYSIS

SERVICE AREA

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.[4] The Service Area for the impact fees includes all areas within the current municipal boundaries of the City, as shown in **FIGURE 3.1**. This document identifies the necessary future system improvements for the Service Area that will maintain the existing LOS into the future.

FIGURE 3.1: MAPLETON IMPACT FEE SERVICE AREA



Mapleton City General Plan Update 2020 - Land Use & Parks & Recreation

[4] UC 11-36a-402(1)(a)

DEMAND UNITS

The demand unit used in this analysis is population. The population projections are based on several sources including Census data and City general projections. Ultimately, the growth rate derived from Census data was used to project future population growth. The estimated population for 2025 is 14,740. This study also includes details on unoccupied residential units. The inclusion of unoccupied units increases the fully occupied population to **16,214**. When calculating the existing Level of Service, the fully occupied population is used; however, changes in the base population are estimated using Census data.

TABLE 3.1: EXISTING DEMAND ASSUMPTIONS

2025 Population	14,740
2035 Population	21,000
IFFP GROWTH	**6,260**
Average HH Size: Single Family	3.6
Average HH Size: Multifamily	1.8

Source: US Census (ACS 2023) Table DP04, P1

DEMAND ANALYSIS

The future population in the Service Area is used to determine the additional parks & recreational facilities needed to serve the additional population. The LOS for each of these types of improvements has been calculated, with a blended level of service determined for the future population, giving the City flexibility to provide future residents with the types of improvements that are desired. If growth projections and land uses change significantly in the future, the City will need to update the parks and recreation projections, the IFFP, and the impact fees. The Service Area should reach approximately 21,000 residents by 2035. As a result of this growth, the City will need to construct additional parks and recreation facilities to maintain the existing level of service.

SECTION 4: PARKS AND RECREATION IFFP AND IFA

EXISTING FACILITIES

The City's existing parks inventory is shown in **Appendix A.** The improvement costs for parks and recreation are based on the existing improvements to each type of facility and are calculated on a per acre basis. The cost of land is based on recent comparable land sales in the area provided to LRB by City staff. The City-owned acreage and estimated improvement value illustrated below will be the basis for the LOS analysis discussed in the next subsection. The City-owned acreage is calculated at 52.9 acres, as shown in **Table 4.1**.

Existing parks include a variety of services including baseball fields, basketball courts, outdoor lighting, pavilion and picnic spaces, restrooms, skate parks, tennis courts, and other amenities.

LEVEL OF SERVICE ANALYSIS

The level of service (LOS) for this analysis is based on maintaining the existing level of investment in current parks and recreation facilities. The LOS consists of two components – the land value per capita and the improvement value per capita funded by the City (or the cost to purchase the land and make improvements in today's dollars), resulting in a total value per capita for parks and recreation.

Table 4.1: Existing Park Facility Improvements

Park	Total Acreage	IF Eligible Acreage
Ira Allan Sports Park	18.20	18.20
Eagle Rock Park	10.10	10.10
Mapleton City Park	8.00	8.00
Maple Grove Park	6.00	6.00
Harvest Park	6.70	6.70
North Park	2.40	2.40
Wing Pointe Park	1.50	1.50
Regional Trails	0.00	0.00
Harmony Ridge Bike Park	29.81	0.00
Evans Park	9.03	0.00
Sunrise Ranch	22.76	0.00
Whiting Farms	12.43	0.00
Total	**126.93**	**52.90**

This approach uses current construction costs to determine the current value and allows the City to maintain the current LOS standard through the collection and expenditure of impact fees. **Table 4.2** shows the LOS for parks and recreation within the Service Area. The LOS analysis is based on the estimated total household population from both occupied and unoccupied housing units, since park facilities have been constructed from impact fees collected on all housing units, including those that are unoccupied.

The timing of construction for growth-related parks and recreation facilities will depend on the rate of development and the availability of funding. For purposes of this analysis, a specific construction schedule is not required. The construction of park facilities can lag behind development without impeding continued development activity. This analysis assumes that construction of needed park facilities will proceed on a pay-as-you-go basis.

Table 4.2: Level of Service Summary

Park Type	City-Owned Parks & Recreation Acreage	Acreage per 1,000 Capita (Proposed LOS)	Land Value Per Capita	Improvement Value Per Capita	Total Value Per Capita
All Parks	52.90	3.26	$979	$649	$1,628

Source: LRB, Mapleton City

EXCESS CAPACITY

The City does not currently have any facilities with excess capacity, based on the impact fee methodology and level of service utilized in this analysis.

FUTURE CAPITAL FACILITIES ANALYSIS

Future planning for parks and recreation facilities is an ongoing process based on the changes in population and community preference. The City will purchase and improve parks and recreation facilities to maintain the LOS defined in the IFFP. Actual future improvements will be determined as development occurs and the opportunity to acquire and improve park land arises. Impact fees will only be assessed to maintain the existing LOS.

The current LOS for parks is 3.26 acres per 1,000 population. Based on the expected changes in population over the planning horizon, the City will need to invest approximately $10 million in parks, including amenities, to maintain the proposed LOS. The determination of this future investment value is shown in **TABLE 4.3.** The City may invest at a higher level; however, impact fees cannot be used to increase the existing LOS.

TABLE 4.3: ESTIMATED FUTURE PARK INVESTMENT

PROPOSED LOS (ACRES PER 1,000 POPULATION)	IFFP POPULATION INCREASE	NEW PARK ACRES NEEDED TO MAINTAIN LOS	TOTAL VALUE PER ACRE	MINIMUM ESTIMATED FUTURE INVESTMENT
3.26	6,260	20.42	$498,988	$10,191,178

Future investment will be used to acquire additional parks and recreation land and fund new park improvements and amenities or make improvements to existing park facilities to add capacity to the system. The following types of improvements may be considered:

- Land Acquisition
- Sod and Irrigation Improvements
- Pavilions
- Restrooms and other Parks and Recreation Buildings
- Picnic Tables
- Playgrounds
- Trailways/Walkways
- Volleyball Courts
- Tennis Courts
- Basketball Courts
- Other Recreational Courts and Facilities
- Baseball/Softball Field Facilities
- Multi-Purpose Fields
- Field Lighting
- Concession/Buildings
- Parking
- Skate Parks
- Other Park and Recreation Amenities

The timing of construction for growth-related parks and recreation facilities will depend on the rate of development activity and the availability of funding. For the purposes of this analysis, a specific construction schedule is not required. The construction of park facilities can follow development without impeding continued development activity. This analysis assumes that construction of needed park facilities will proceed on a pay-as-you-go basis.

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed and intended to provide services to service areas within the community at large.[5] Project improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.[6] The Impact Fee Analysis may only include the costs of impacts on system improvements related to new growth

[5] 11-36a-102(20)
[6] 11-36a102(13)

within the proportionate share analysis. Only parks and recreation facilities that serve the entire community (i.e. system improvements) are included in the LOS.

FINANCING STRATEGY & CONSIDERATION OF ALL REVENUE SOURCES

This analysis assumes that construction of needed parks and recreation facilities will proceed on a pay-as-you-go basis, and assumes a standard annual dollar amount the City should anticipate collecting and plan to expend on park improvements. The IFFP must also include a consideration of all revenue sources including impact fees and developer dedications of system improvements, which may be used to finance system improvements.[7] In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to maintain the existing LOS.[8]

GENERAL FUND REVENUES

It is anticipated that the City may continue to utilize General Fund revenues, to maintain existing park, recreation, open space, and trail facilities. Impact fee revenues will be a continual source of revenue to fund growth related improvements. The City does not currently assess property tax.

GRANTS AND DONATIONS

New developments may dedicate future system improvements related to park facilities and in such instances the entity that dedicates these system improvements will be entitled to an impact fee credit or reimbursement for the negotiated value of system improvements.

The City may receive grant money to assist with park construction and improvements. This analysis has removed all funding that has come from grants and donations to ensure that none of those infrastructure items are included in the LOS. Therefore, the City's existing LOS standards have been funded by the City's existing residents. Funding future improvements through impact fees places a similar burden upon future users as that which has been placed upon existing users through impact fees, and other revenue sources.

IMPACT FEE REVENUES

Impact fees are an ideal mechanism for funding growth-related infrastructure. Impact fees are currently charged to ensure that new growth pays its proportionate share of the costs for the development of public facilities. Impact fee revenues can also be attributed to the future expansion of public facilities if the revenues are used to maintain an existing LOS. Increases to an existing LOS cannot be funded with impact fee revenues. An impact fee analysis is required to accurately assess the true impact of a particular user on the City public facilities to mitigate the impact of new development on public facilities. The City has determined that assessing impact fees on development activities is necessary to maintain the existing level of services in the future.

DEBT FINANCING

In the event the City has not amassed sufficient impact fees in the future to pay for the construction of time sensitive or urgent public facilities needed to accommodate new growth, the City must look to revenue sources other than impact fees for funding. The Impact Fees Act allows for the costs related to the financing of future public facilities to be legally included in the impact fee. This allows the City to finance and quickly construct infrastructure for new development and reimburse itself later from impact fee revenues for the costs of issuing debt (i.e., interest costs). Future debt financing has not been considered in the calculation of the parks and recreation impact fee.

[7] 11-36a-302(2)
[8] 11-36a-302(3)

PROPOSED PARKS AND RECREATION IMPACT FEES

The calculation of impact fees relies upon the information contained in this analysis. Impact fees are then calculated based on many variables centered on proportionality share and LOS. The following describes the methodology used for calculating impact fees in this analysis.

IMPACT FEE CALCULATION METHODOLOGY

The level of investment methodology utilized in this analysis is based on the increase, or growth, in residential demand. The growth-driven method utilizes the existing LOS and perpetuates that LOS into the future. Impact fees are then calculated to provide sufficient funds for the entity to expand or provide additional facilities, as growth occurs within the community. Under this methodology, impact fees are calculated to ensure new development provides sufficient investment to maintain the current LOS standards in the community. This approach is often used for public facilities that are not governed by specific capacity limitations and do not need to be built before development occurs (e.g., park facilities).

PARKS AND RECREATION IMPACT FEE CALCULATION

Utilizing the estimated per capita land and improvement values calculated for parks and recreation facilities the total fee per capita is shown in **TABLE 4.4**.

TABLE 4.4: TOTAL IMPACT FEE PER CAPITA

PARK TYPE	EST. LAND VALUE	PER CAPITA	EST. IMPROV. VALUE	PER CAPITA	TOTAL PER CAPITA
All Parks	$15,870,000	$979	$10,526,455	$649	$1,628

Based on the per capita fee of **$1,628**, the proposed impact fee per household is summarized in **TABLE 4.5.**

TABLE 4.5: PARK IMPACT FEE SCHEDULE

TYPE OF HOUSEHOLD	PERSONS PER HH	LOS FEE PER HH	EXISTING FEE	% CHANGE
Single Family	3.60	$5,861	$3,587	63%
Multi-Family (Including Mobile Homes)	1.80	$2,930	$1,384	112%

NON-STANDARD PARK IMPACT FEES

The Impact Fees Act[9] allows the City to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City's parks and recreation facilities. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. The following formula will help determine the non-standard impact fee.

FORMULA FOR NON-STANDARD PARKS AND RECREATION IMPACT FEES

Estimate of Total Population Increase from Development x Estimate of Impact Fee Per Capita ($1,628) = Impact Fee

[9] 11-36a-402(1)(c)

SECTION 5: IMPACT FEE CONSIDERATIONS

EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of additional capital infrastructure necessary to maintain the existing LOS caused by future growth. The impact fee calculations are structured for impact fees to fund 100 percent of the growth-related facilities identified in the proportionate share analysis as presented in the impact fee analysis. However, there may be years in which the annual impact fee revenues cannot cover the annual growth-related expenses. In this case, any borrowed funds are to be repaid in their entirety through impact fees.

NECESSITY OF IMPACT FEES

An entity may only impose impact fees on development activity if the entity's plan for financing system improvements establishes that impact fees are necessary to achieve parity between existing and new development. This analysis has identified the improvements to public facilities and the funding mechanisms to complete the suggested improvements. Impact fees are identified as a necessary funding mechanism to help ensure that new growth pays the cost of the additional capital improvements necessary to maintain the existing LOS. In addition, alternative funding mechanisms are identified to help offset the cost of future capital improvements.

CONSIDERATION OF ALL REVENUE SOURCES

The Impact Fees Act requires this document to consider all revenue sources to finance the impacts on system improvements, including: (a) grants; (b) bonds; (c) interfund loans; (d) impact fees; and (e) anticipated or accepted dedications of system improvements. See **Section 4** for further discussion regarding the consideration of revenue sources.

EXPENDITURE OF IMPACT FEES

The Impact Fee Act requires that impact fees should be spent or encumbered within six years after each impact fee is paid, indicating that there is a rolling timeline when identifying the impacts placed on public facilities by development activity. This analysis addresses a 10-year planning horizon to account for the rolling timeline, while ensuring that the assumptions included in the analysis are relevant to new development activity, and accounting for the need for entities to update the impact fee analysis periodically. Impact fees collected in the IFFP planning horizon should be spent only on those system improvements identified to maintain the LOS.

PROPOSED CREDITS OWED TO DEVELOPMENT

Credits may be applied to developers who have constructed and donated system facilities to the City that are included in the IFFP in lieu of impact fees. Credits for system improvements may be available to developers up to, but not exceeding, the amount commensurate with the LOS identified within this IFA. Credits will not be given for the amount by which system improvements exceed the LOS identified within this IFA. This situation does not apply to developer exactions or improvements required to offset density or as a condition of development. Any project that a developer funds must be included in the IFFP if a credit is to be issued.

In the situation where a developer chooses to construct system facilities found in the IFFP in lieu of impact fees, the decision must be made through negotiation with the developer and the City on a case-by-case basis.

GROWTH-DRIVEN EXTRAORDINARY COSTS

The City does not anticipate any extraordinary costs necessary to provide services to future development.

SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure a fair comparison of amounts paid at different times. The LOS for this analysis is based on the current value of parks, recreation facilities, open space and trails in today's dollars. The LOS consists of developed and undeveloped park facilities that have been funded by the City. This ensures the impact fee captures the value of the investment made by current residents while adjusting for the value in today's dollars.

APPENDIX A: INVENTORY OF EXISTING FACILITIES

Park	Type	Total Acreage	Final Acres	% City Owned	% City Funded	Impact Fee Eligible	IF Eligible Acreage	Land Value	Improved Turf	Restroom	Pavilion (Large)	Pavilion (Medium)	Pavilion (Small)	Gazebo	Multipurpose Field	Baseball/Softball	Tennis Courts	Pickle Ball Courts	Futsal Court	Volleyball
									Acre	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each
Ira Allan Sports Park	Community	18.20	18.20	100%	100%	100%	18.20	$5,460,000	-	1.00	2.00	-	-	-	6.00	4.00	-	14.00	1.00	-
Eagle Rock Park	Neighborhood	10.10	10.10	100%	100%	100%	10.10	$3,030,000	-	-	-	-	-	-	-	-	-	-		-
Mapleton City Park	Neighborhood	8.00	8.00	100%	100%	100%	8.00	$2,400,000	-	1.00	2.00	-	1.00	1.00	1.00	2.00	2.00	-		1.00
Maple Grove Park	Neighborhood	6.00	6.00	100%	100%	100%	6.00	$1,800,000	-	1.00	1.00	-	-	-	2.00	-	-	2.00		-
Harvest Park	Neighborhood	6.70	6.70	100%	100%	100%	6.70	$2,010,000	-	1.00	1.00	-	1.00	-	3.00	-	-	-		-
North Park	Local	2.40	2.40	100%	100%	100%	2.40	$720,000	-	1.00	2.00		-	-	1.00	1.00	-	-	-	-
Wing Pointe Park	Local	1.50	1.50	100%	100%	100%	1.50	$450,000	-	-	-	-	-	-	1.00	-	-	-		-
Regional Trails	Trails	0.00	-	100%	100%	100%	0.00	$0	-	-	-	-	-	-	-	-	-	-		-
Harmony Ridge Bike Park		29.81	29.81	100%	0%	100%	0.00	$0	-	-	-	-	-	-	-	-	-	-	-	-
Evans Park		9.03	9.03	100%	0%	100%	0.00	$0	-	-	-	-	-	-	-	-	-	-	-	-
Sunrise Ranch		22.76	22.76	100%	0%	100%	0.00	$0	-	-	-	-	-	-	-	-	-	-	-	-
Whiting Farms		12.43	12.43	100%	0%	100%	0.00	$0	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		**126.93**	**126.93**				**52.90**	**$15,870,000**	**0.00**	**5.00**	**8.00**	**0.00**	**2.00**	**1.00**	**14.00**	**7.00**	**2.00**	**16.00**	**1.00**	**1.00**
									$0	**$1,500,000**	**$2,400,000**	**$0**	**$90,000**	**$20,000**	**$1,400,000**	**$1,050,000**	**$60,000**	**$528,000**	**$225,000**	**$30,000**

Park	Basketball	Playground	Picnic Tables	Barbeque	Benches	Walking Paths	Paved Trails	Unpaved Trails	Parking Lot	Monuments	Frisbee Golf Course
	Each	Each	Each	Each	Each	LF	Miles	Miles	SF	Each	Each
Ira Allan Sports Park	-	1.00	6.00	-	18.00	-	-	-	125,000	-	-
Eagle Rock Park	-	-	5.00	-	-	0.50	-	-	-	-	1.00
Mapleton City Park	-	1.00	25.00	-	6.00	-	-	-	16,700	2.00	-
Maple Grove Park	-	1.00	6.00	-	-	0.40	-	-	19,800	-	-
Harvest Park	-	1.00	6.00	-	2.00	-	-	-	35,000	-	-
North Park	-	1.00	24.00	-	3.00	-	-	-	11,000	-	-
Wing Pointe Park	-	1.00	-	-	3.00	-	0.10	-	-	-	-
Regional Trails	-	-	-	-	-	-	-	-	-	-	-
Harmony Ridge Bike Park	-	-	-	-	-	-	-	-	-	-	-
Evans Park	-	-	-	-	-	-	-	-	-	-	-
Sunrise Ranch	-	-	-	-	-	-	-	-	-	-	-
Whiting Farms	-	-	-	-	-	-	-	-	-	-	-
Totals:	**0.00**	**6.00**	**72.00**	**0.00**	**32.00**	**0.90**	**0.10**	**0.00**	**207,500**	**2.00**	**1.00**
	$0	**$600,000**	**$129,600**	**$0**	**$16,000**	**$5**	**$58,333**	**$0**	**$1,037,500**	**$3,000**	**$6,000**

City Council Staff Report

Date:
8/20/25

Applicant:
Mapleton City

Location:
N/A

Prepared By:
Sean Conroy, Community Development Director

Public Hearing:
Yes

Attachments:
1. Proposed plan.

REQUEST

Consideration of an ordinance adopting the Water Use and Conservation Element of the General Plan.

BACKGROUND & DESCRIPTION

Utah Code section 10-9a-404 requires each city to adopt a general plan that includes elements addressing land use, transportation and moderate-income housing. Recent changes to Utah Code now require cities to also adopt a water use and conservation element. The purpose of this item is to adopt a water use element of the general plan in compliance with Utah Code.

The City already has several master plans addressing water including the Water Resources Master Plan, the Drinking Water Source Protection Plan, the Water Rights Master Plan (40-year plan), and the Water Conservation Plan. Most of the Utah Code requirements for the Water Use and Conservation Element are already addressed in the City's Water Conservation Plan. Rather than adopt an entirely new document that would be redundant, staff is proposing to make some amendments to the existing Water Conservation Plan so that it can also serve as the Water Use and Conservation Element. The changes to the Water Conservation Plan are shown in strikeout and underline in exhibit "A".

Below is a summary of what is required by Utah Code and a reference to where the requirement is covered in the revised plan:

Requirement: *Consider the regional water conservation goals recommended by the Division of Water Resources.*

Response: see section VII – page 11.

Requirement: *Include Water Conservation Policies.*

Response: see sections IV – pages 14-18.

Requirement: *Review the municipality's land use ordinances and include recommendations for changes to any ordinance that promotes the inefficient use of water.*

Response: see section VI - pages 9-11.

Requirement: *Propose landscape options that consider sustainable landscaping.*

Response: see section VI - pages 10-11.

Requirement: *Consider water supply and water distribution planning.*

Response: see sections II, III and IV – pages 1-8.

Requirement: *Include recommendations for water demand reduction strategies.*

Response: see section IV – pages 14-18.

RECOMMENDATION

Approve an Ordinance to adopt the Water Use and Conservation Element of the General Plan.

ORDINANCE NO. 2025-

AN ORDINANCE ADOPTING THE WATER USE AND CONSERVATION ELEMENT OF THE GENERAL PLAN

WHEREAS, Utah Code section 10-9a-404 requires the City to adopt a Water Use and Conservation Element of the General Plan; and

WHEREAS, Mapleton City has already adopted a Water Conservation Plan; and

WHEREAS, many of the state requirements for the Water User and Conservation Element are already covered in the Water Conservation Plan; and

WHEREAS, to avoid redundancy, the Water Conservation Plan is being amended to now also act as the Water Use and Conservation Element of the General Plan; and

WHEREAS, the Planning Commission recommended approval on August 14, 2025.

NOW THEREFORE, BE IT RESOLVED by the City Council of Mapleton, Utah, to adopt the Water User and Conservation Element of the General Plan as described in exhibit "A".

PASSED AND ORDERED PUBLISHED BY THE CITY COUNCIL OF MAPLETON, UTAH,
This 20th Day of August, 2025.

_____
Dallas Hakes
Mayor

ATTEST:

_____
Camille Brown
City Recorder
Publication Date:
Effective Date:

Exhibit "A"

SMALL TOWN
MAPLETON
UTAH
BIG HEART

Water Conservation Plan & Water Use & Conservation Element of the General Plan

MAPLETON
PUBLIC WORKS

MAPLETON
UTAH

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MAPLETON
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MAPLETON CITY WATER CONSERVATION PLAN & WATER USE AND CONSERVATION ELEMENT OF THE GENERAL PLAN

I. Introduction

Located on the east side of Utah Valley, Mapleton City has a current estimated population of ±145,000 residents and growing. The City is primarily a residential area with limited commercial or industrial development. Past development of Mapleton was generally rural in nature with large lots and large homes. However, in recent years, development trends have changed to include more density, although the City maintains its quiet, more rural appeal.

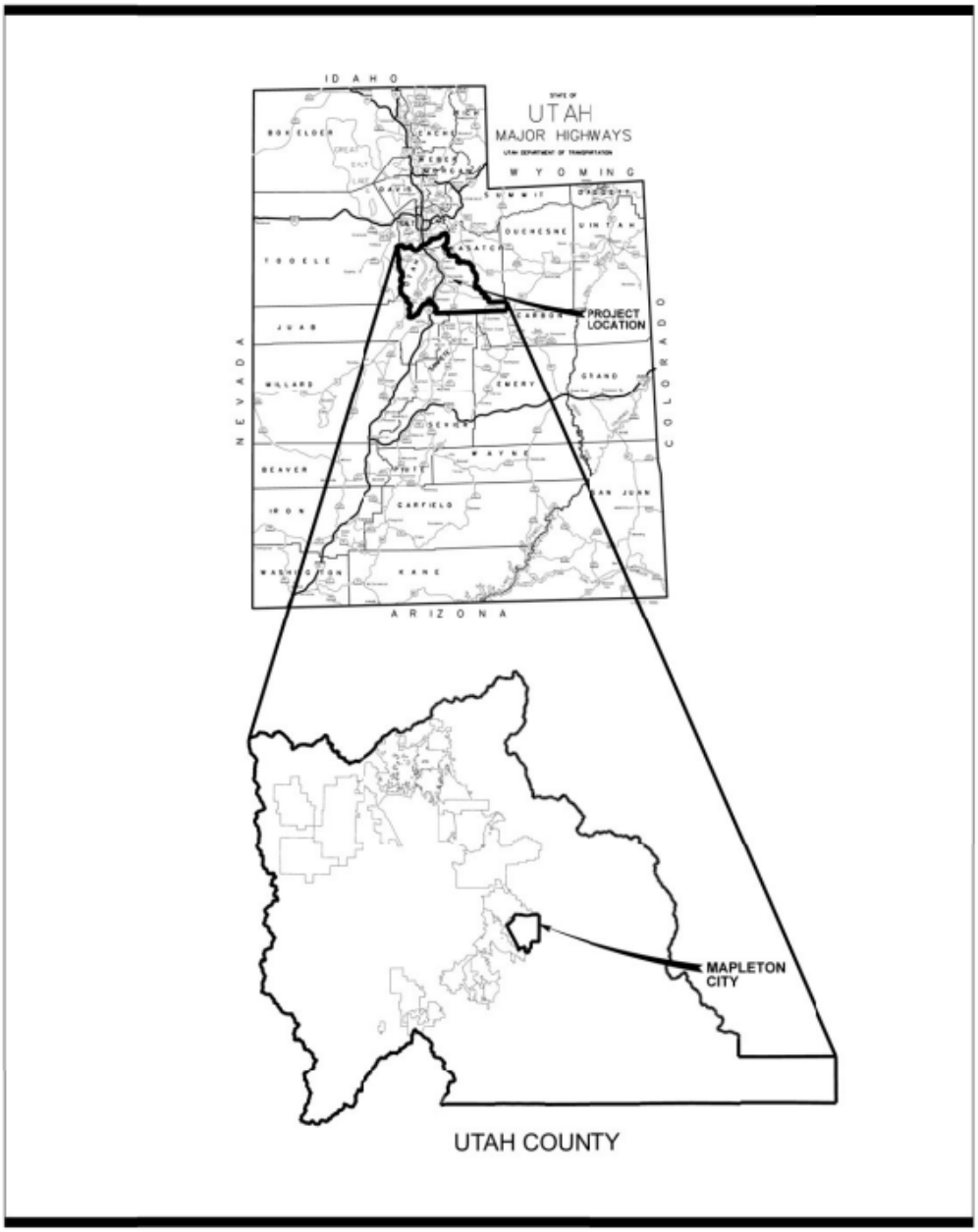
Mapleton City operates a culinary water system that serves all of its service area, and an expanding secondary water system that currently serves about half of its service area. Water conservation is of great importance to the City as it experiences significant growth that puts pressure on the current infrastructure. However, even with current fast-paced development, the City has been successful in its ability to meet the water needs of its residents, all of whom live within the City boundaries.

The Mapleton City Water Conservation Plan has been prepared to meet the requirements of Utah Water Conservation Plan Act of 1998 amended in 2004 with Utah Administrative Code 73-10-32, which requires implementation of conservation goals and plans to reduce the overall per capita consumption of water within the City's supply and delivery service area. The plan must be updated every five years. To avoid redundancy, this plan has been amended to also act as the Water Use and Preservation Element of the General Plan as required by Utah Code section 10-9a-403. As outlined in this plan, Mapleton City is committed to a program of efficient and careful use of water in order to be a good steward of the resources which are available to the City and its residents.

II. Water System Overview

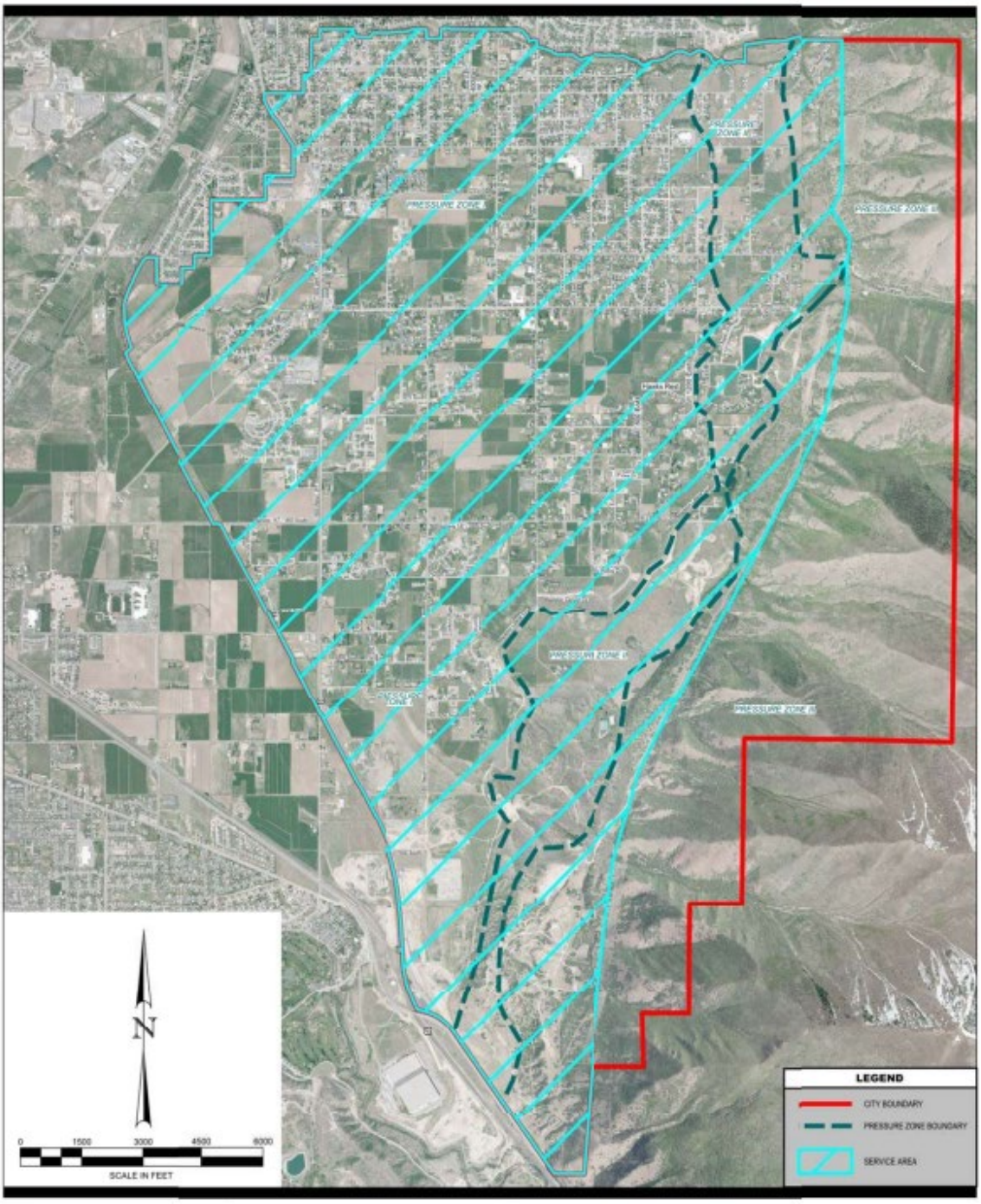
Mapleton City is located on a foothill bench southeast of Springville City in Utah County, Utah. The City currently comprises 8,462 acres, with the potential to reach approximately 8,610 acres through future annexations. It is bounded by Springville City on the north, Maple Mountain on the east, Spanish Fork City on the south and

west, with the Union Pacific Railroad Tracks forming the western boundary. Figure 1 presents a location map for Mapleton City.



MAPLETON
UTAH

Figure 1
Mapleton City Water Conservation Plan
Location Map



MAPLETON
UTAH

Figure 2

Mapleton City Water Conservation Plan
Service Area

Mapleton Town became Mapleton City Corporation through incorporation as a third-class city on April 16, 1948. For much of the period since that time, the City has experienced relatively steady growth. However, a sanitary sewer collection system was constructed beginning in 1996, and since then the City has experienced more rapid growth. The estimated population has grown by ±25% in the last 3 years alone. By the end of 2022, there were 3,655 culinary water connections within the existing Mapleton City service area. The City culinary water service area is shown on Figure 2.

The culinary water distribution system includes ±500,000 lineal feet of pipe ranging in size from 4-inches in older City areas to 20-inches near the mouth of Maple Canyon. The City has more than 10,800,000 gallons of storage in five existing tanks spread across the system, primarily in Maple Canyon and along the foothills. Culinary water has been provided from springs in Maple Canyon and four wells within the City limits.

In the mid-1990s, groundwater contamination from the Ensign Bickford property southeast of the City forced the disconnection of City Well No. 1 to prevent its use in the culinary system. Since 1998, the well has been pumped continuously in an effort to clean the water bearing aquifer. In order to make beneficial use of the water pumped from this well, a pressurized irrigation system was installed to serve the northwest portion of the City. In 2011, the distribution system was expanded and a storage pond and pump station were constructed. By the end of 2022, there were 1,821 active connections to the pressurized irrigation system that do not require outdoor irrigation from the City's culinary water system. There is also extensive "dry" mains that the City is working to connect to the active lines, that will provide pressurized irrigation to an additional ±1,500 connections.

The pressurized irrigation system includes ±400,000 feet of distribution pipe ranging in size from 4-inches to 30-inches, a 109 acre-foot storage pond and a pump station to boost water from the pond to acceptable pressures for the system. Source water for the pressurized irrigation system comes from City Well No. 1, two smaller wells. and irrigation water rights delivered through the Mapleton Irrigation District and the Central Utah Water Conservancy District (CUWCD) Mapleton Lateral Canal.

Table 1 summarizes the total existing water system connections and water usage during the 2020 calendar year separated by culinary and secondary water systems.

MAPLETON
UTAH

Table 1
Summary of Water System Connections and Usage
2022 Calendar Year

Type of Connection	Culinary Water Connections	Culinary Water Used (gallons)	P.I. Water Connections	P.I. Water Used (gallons)
Residential/Domestic	3,571	632,270,688	1,805	432,832,446
Commercial	53	23,692,064	9	5,046,561
Institutional/Churches	25	28,011,987	7	28,185,066
Agriculture	4	333,736	0	0
City Owned	1	15,500	0	0
Other	1	125,463	0	0
Total	**3,655**	**684,449,438**	**1,411**	**466,064,073**

III. Existing Water Sources and Supply

Mapleton City obtains culinary water from springs and wells. The most reliable culinary water sources are the City's four wells. The current water sources with the reliable capacity of each source is outlined in Table 2. Flows from the springs have historically varied widely from year to year, until they were contaminated and turned out of the culinary system and into the existing canyon channel a few years ago. Mapleton City is finalizing a plan to rehabilitate the springs, but they are not included in the computations for existing source capacity.

Table 2 also shows the water sources used in the secondary water (pressurized irrigation) system. Those sources include three wells that are pumped continuously to clean the water bearing aquifer as discussed previously. In addition to the wells, Mapleton City has acquired shares of stock in the Mapleton Irrigation Company, the East Bench Irrigation Company, the East Jordan Irrigation Company and the Utah and Salt Lake Canal Company, as well as Strawberry Project Water shares. The irrigation water corresponding to those water shares is currently being used in the pressurized irrigation system and is delivered to the Mapleton storage pond by the Central Utah Water Conservancy District (CUWCD) through the Mapleton Lateral Canal. The City has also been allocated irrigation water from the Utah Lake

Drainage Basin Water Delivery System (ULS), but has currently deferred use. Therefore, ULS water is also not included in the existing source capacity.

Table 2
Mapleton City
Water Sources, Supply and Capacity

Source	Use	2020 Water Supplied (acre-feet)	2020 Water Supplied (gpm)	Reliable Capacity (gpm)
Mapleton Springs	Culinary	722.57	448	None(1)
Carnesecca Well	Culinary	424.79	263	1,000
Seal Well	Culinary	593.46	368	1,650
Westwood Well	Culinary	758.36	470	1,800
Crowd Canyon Well	Culinary	405.81	252	1,750
City Well No. 1	P.I.	318.07(4)	387(5)	1,000
Orton Well	P.I.			250
Whiting Well	P.I.			50(2)
Mapleton Lateral Canal	P.I.	1,611.00	1,960(5)	10,100(3)

(1) Water from Mapleton Springs is used to supplement other sources as the capacity varies from year to year based upon climate.
(2) Whiting well not available at all times.
(3) Mapleton Irrigation is allocated up to 45% of the estimated 50 cfs capacity. Water is ordered and delivered from CUWCD based upon need.
(4) Combined total of all wells less water discharged to Hobble Creek.
(5) Gallons per minute for P.I. based upon 186 calendar days.

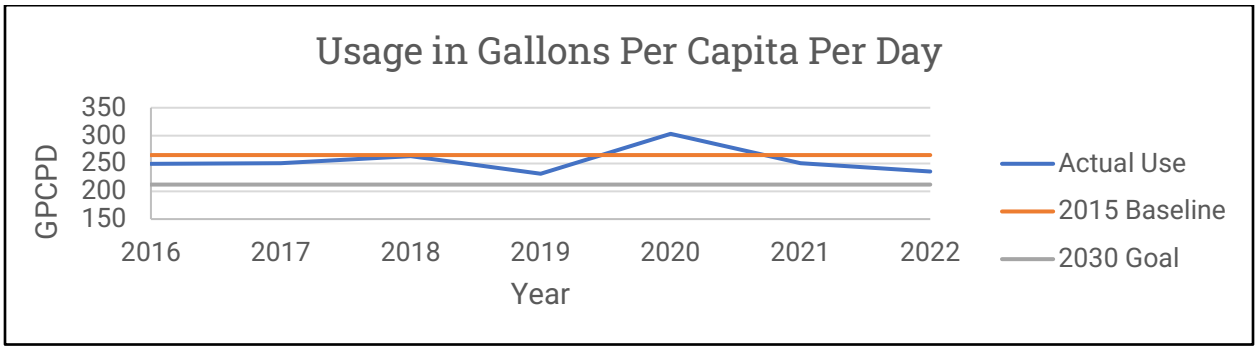
IV. Water Usage

Mapleton City's active secondary water system, which is primarily located in the north and central areas of the City, operates from approximately April through October to meet the outdoor irrigation needs for those residents who have it available to them. The remaining residents irrigate from the City's culinary water system. Water usage has been summarized from 2005 to 2022 and is presented in Table 3. The daily gallons per capita usage is also shown on the subsequent graphic.

MAPLETON
UTAH

Table 3
Mapleton City
Summary of Water Use in Acre-Feet

Year	Residential/ Domestic	Commercial	Industrial	Institutional	Pressure Irrigation	Total
2005	1,308.81	6.46	0	5.09	552.78	1,873.14
2006	1,672.27	9.37	0	67.16	643.75	2,392.55
2007	618.50	0.8	0	13.61	729.65	1,362.56
2008	1,877.32	5.19	0	69.17	685.59	2,637.27
2009	2,807.69	5.44	0	116.10	675.30	3,604.53
2010	1,566.88	4.46	0	32.34	595.99	2,199.67
2011	1,667.67	4.81	0	47.62	529.23	2,249.33
2012	1,409.24	31.58	0	422.27	839.17	2,702.26
2013	1,971.10	5.99	0	56.00	740.44	2,773.53
2014	1,770.62	3.90	0	36.87	783.20	2,594.59
2015	1,638.68	4.13	0	17.57	812.71	2,473.09
2016	1,795.17	4.75	0	17.57	974.76	2,792.25
2017	1,665.55	95.50	1.25	100.83	1,053.54	2,916.67
2018	1,738.04	86.91	1.15	142.34	1,184.54	3,152.98
2019	1,609.80	95.74	0.89	79.28	1,066.18	2,851.89
2020	2,155.00	95.70	1.00	111.20	1,542.10	3,905.00
2021	1,986.95	77.78	0.90	80.84	1,332.43	3478.88
2022	1,940.75	72.71	1.02	86.01	1,430.30	3,530.80



It may be observed from the graph that, with the exception of the 2020 calendar year, per capita water usage in Mapleton City has been below the 2015 baseline. It should be noted that the per capita usage for 2020 can in some measure be attributed to the Covid-19 pandemic as more people were in their homes rather than being away during the day. During the 2020 calendar year, the City has also been flushing waterlines as a maintenance effort to improve flow and water quality. That water is also included in the above summary. Since 2020, the per capita water usage has trended downward. It is anticipated that this trend will continue as the City grows and as water conservation efforts are implemented.

The usage shown in the figure includes water supplied to all types of connections, such as residential, commercial, industrial, institutional, agriculture and secondary. Table 4 shows the amount of per capita use by type of connection for the year 2022.

Table 4
Mapleton City
Per Capita Water Use (2022)

Type of Connection	Indoor (Winter Use) (gpcd)	Culinary Outdoor (gpcd)	Pressurized Irrigation (gpcd)	Total (gpcd)
Residential/Domestic	50.4	77.9	87.8	216.1
Commercial	2.5	2.3	1.0	5.8
Institutional/Churches	0.7	5.0	5.7	11.4
Agriculture	0.1	0	0	0.1
City Owned	0	0	0	0
Other	0	0	0.0	0.0
Total	**53.6**	**85.3**	**94.6**	**233.5**

V. Water Measurement

With the exception of City-owned buildings and parks, all water connections, both culinary and pressurized irrigation, within Mapleton City are metered. City parks and building connections are not metered. The City uses electronic meters that are read on a monthly basis, even through the winter months for those on the culinary system. Several of the City parks use electronic observation for water conservation, but the usage is not included in the reported meter measurements.

Over the past several years, the City switched to electronic meters, which has made reading of the meters easier and more economical. The meters on the pressurized irrigation system have all been installed in the past 12 years, so they are also relatively new. Meters are replaced by City crews whenever necessary or when anomalies are observed.

By City ordinance, new developments are required to provide water rights for future use as a condition of approval. This will ensure that the City will have an adequate supply of water into the future.

There are no known sources of leakage within the City distribution system. Maintenance to the system is performed on a daily basis. When leaks are identified, they are immediately repaired to conserve water and maintain high water quality. Beginning in the year 2020, the City started an ongoing flushing program to remove sediment from the existing distribution lines. Water used in this program is not metered and is included in the percentage of loss from the system. The average loss over the past five years is estimated at 15%.

VI. Land Use Ordinance

The primary goal identified in the Mapleton City Land Use Element of the General Plan is to preserve and enhance Mapleton's rural atmosphere and agricultural history through careful planning and the preservation of open space. Large lots, agricultural fields and natural open space are important components to Mapleton's character. It is important to note that land use decisions have significant impacts on the use of water. Agricultural uses typically are the least efficient users of water followed by low-density residential development. The City desires to balance water conservation with maintaining its rural character.

Utah Code requires the City to review the land use ordinance (zoning code) and include recommendations for changes to any ordinance that promotes the inefficient use of water as part of the adoption of the Water Use and Preservation Element. State code also requires recommendations for low water use landscaping standards.

Mapleton City's land use ordinance is found in Title 18 of the Municipal Code (MCC) and the landscape ordinances are found in sections 18.90 and 18.92. In promoting water efficiency, Section 18.92.060 states the following:

> *"A sustainable or water-wise landscape allows for a beautiful healthy landscape using the minimal supplemental irrigation water as possible. Water-wise landscape takes into consideration appropriate plant selection, planning and design, soils, practical turf area, efficient irrigation, mulches and maintenance."*

Below is a summary of the current landscaping requirements:

Residential:

- Front yards shall include landscaping;
- Sod is allowed but not mandated;
- Xeriscape designs are encouraged provided at least 30% of the landscaped area includes plant material; and
- Rear yard landscaping is not mandatory.

Commercial/Industrial:

- Requires 20% of project sites to be landscaped;
- Requires parking lots to include trees;
- Requires that no more than 60% of landscape area may be in sod; and
- Recommends water-wise plantings and irrigation systems.

Planter Strips

- Planter strips must be at least six feet wide;

- Street trees are required;
- Sod is allowed but not mandatory;
- Xeriscape designs are encouraged provided that 30% of the planter strip contains plant materials.

In addition to the landscape standards cited above, the City has also prepared a homeowner landscape guide entitled "*Water-wise Park Strip – Design Guide*" to assist in water wise landscaping choices (see appendix).

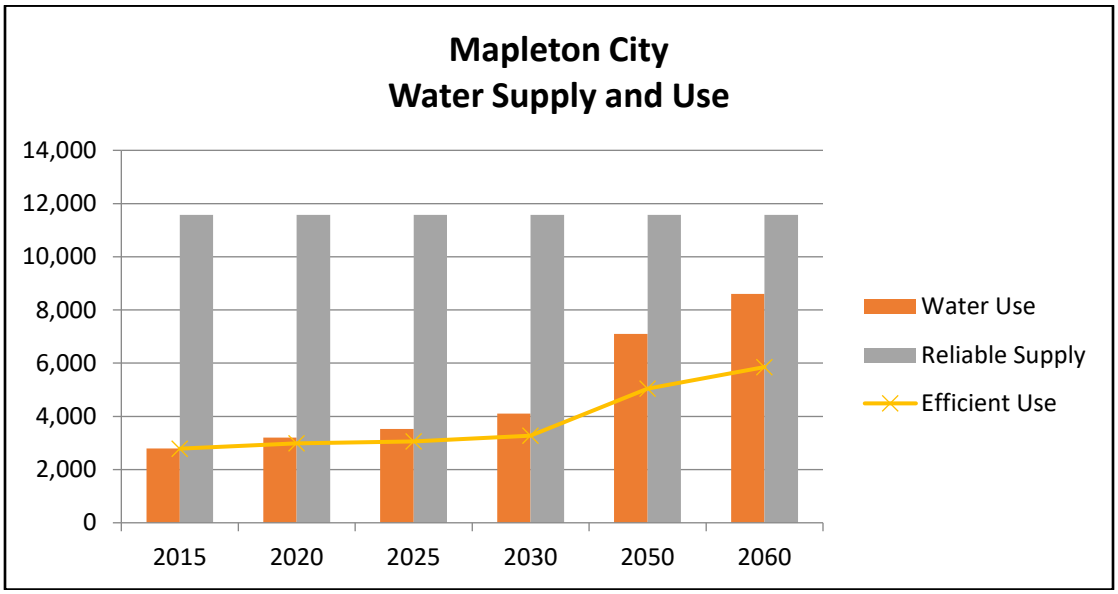
VII. Water Conservation Goals

In 2019, the State of Utah established regional M&I water conservation goals for nine regions throughout the State[1]. Mapleton City is part of the Provo River region, which includes Utah, Wasatch and Juab Counties. The new regional goals replaced the Governor's statewide goal to conserve "25% by 2025." The document includes goals for each of the nine regions as well as timelines to accomplish the goals

The goal for the Provo River conservation region is to reduce gallons per capita per day water usage by 20% from the 2015 baseline value by the year 2030. In developing its conservation goals, Mapleton City has used a baseline usage value of 265 gallons per capita per day and has applied the 20% conservation reduction by 2030. Thus, the City's conservation goal is to reduce usage to 212 gallons per capita per day. The 2040 future projection, although not a specific goal, would add another 7 percent reduction to reduce usage to 193 gallons per capita per day.

The below graphic compares the City's reliable supply through 2060, water usage based upon estimates in increased population with 2015 as a baseline, and efficient use through implementation of the conservation goals outlined above. It is anticipated that by 2060, Mapleton City will have essentially been built out to its final land use and population capacity. As the conservation goal is achieved, Mapleton City will save approximately 820 acre-feet of water per year by 2030 as compared to the baseline condition.

[1] Utah's Regional M&I Water Conservation Goals, Utah Division of Water Resources, November 2019.



VIII. Tiered Water Rate Structure

Mapleton City has adopted a tiered water rate structure for both culinary and pressurized irrigation water. The rate structure is presented in Table 5.

TABLE 5
Mapleton City Water Rate Schedule

TABLE A	Culinary Water Rates for users w/out PI Access					
Base	$ 30.00	3/4 inch & 1 inch Meters				
	Rate per 1000 gal	Rate per Gallon	Gallons From	Gallons To	$ Dollar Min $	$ Dollar Max $
1st Tier	$ 1.25	0.001250	-	8,000	1.25	10.00
2nd Tier	$ 1.50	0.001500	8,001	100,000	11.50	138.00
3rd Tier	$ 1.75	0.001750	100,001	200,000	139.75	175.00
4th Tier	$ 2.25	0.002250	200,001	300,000	177.25	225.00
5th Tier	$ 2.75	0.002750	300,001	100,000,000	227.75	274,175.00
6th Tier	$ 3.25	0.003250	100,000,001	+	274,178.25	+

MAPLETON
UTAH

TABLE B **Culinary Water Rates for users with PI Access**

Base	$ 15.00	3/4 inch & 1 inch Meters				
	Rate per 1000 gal	Rate per Gallon	Gallons From	Gallons To	$ Dollar Min $	$ Dollar Max $
1st Tier	$ 1.25	$ 0.001250	-	8,000	1.25	10.00
2nd Tier	$ 2.75	$ 0.002750	8,001	100,000	12.75	253.00
3rd Tier	$ 3.75	$ 0.003750	100,001	200,000	256.75	375.00
4th Tier	$ 4.75	$ 0.004750	200,001	300,000	379.75	475.00
5th Tier	$ 5.75	$ 0.005750	300,001	100,000,000	480.75	573,274.99
6th Tier	$ 6.75	$ 0.006750	100,000,001	+	573,281.74	+

TABLE C **Pressurized Irrigation Rates for users with PI Access**

Base	$ 15.00	3/4 inch & 1 inch Meters				
	Rate per 1000 gal	Rate per Gallon	Gallons From	Gallons To	$ Dollar Min $	$ Dollar Max $
1st Tier	$ 1.00	$ 0.001000	-	8,000	1.00	8.00
2nd Tier	$ 1.25	$ 0.001250	8,001	100,000	9.25	115.00
3rd Tier	$ 1.50	$ 0.001500	100,001	200,000	116.50	150.00
4th Tier	$ 2.00	$ 0.002000	200,001	300,000	152.00	200.00
5th Tier	$ 2.50	$ 0.002500	300,001	100,000,000	202.50	249,250.00
6th Tier	$ 3.00	$ 0.003000	100,000,001	+	249,253.00	+

TABLE D **Culinary Water Rates for users with PI Access that DO NOT Use it**

Base	$ 30.00	3/4 inch & 1 inch Meters				
	Rate per 1000 gal	Rate per Gallon	Gallons From	Gallons To	$ Dollar Min $	$ Dollar Max $
1st Tier	$ 1.25	$ 0.001250	-	8,000	1.25	10.00
2nd Tier	$ 2.75	$ 0.002750	8,001	100,000	12.75	253.00
3rd Tier	$ 3.75	$ 0.003750	100,001	200,000	256.75	375.00
4th Tier	$ 4.75	$ 0.004750	200,001	300,000	379.75	475.00
5th Tier	$ 5.75	$ 0.005750	300,001	100,000,000	480.75	573,274.99
6th Tier	$ 6.75	$ 0.006750	100,000,001	+	573,281.74	+

It may be observed that Mapleton City's rate structure encourages connection to the pressurized irrigation system when it is available in order to reduce usage of high-quality culinary water. The rate structure also economically encourages conservation through lower rates for lower usage.

IX~~VIII~~. Conservation Practices

As outlined in Section VI of this plan, Mapleton City has established a goal of 20% reduction in water usage by the year 2030 from the 2015 baseline. Achieving the goal will require implementing the existing and proposed conservation measures to educate and encourage water conservation by Mapleton City, the Nebo School District and all residents within the water service area. Conservation programs are overseen by the Public Works Director and the Public Works Operations Manager. The contacts for these individuals are shown in the following table.

Name	Position	Phone Number	Email Address
Rob Hunter, P.E.	Public Works Director	801-806-9154	rhunter@mapleton.org
Brad Roundy	Public Works Operations Manager	801-806-9156	broundy@mapleton.org

Existing Conservation Measures

Over the past several years, Mapleton City has developed and implemented the following conservation measures. The impacts of the identified conservation measures have not been quantified in the past, so their effectiveness is unknown at this time.

Public Education:

Mapleton City includes suggestions for efficient use of water resources several time each year as part of the monthly City newsletter. The City's website is also set up to include a Water Conservation Page (see proposed conservation measures below).

Replacement Program for Old Pipelines:

The Mapleton City Water Resources Master Plan, last adopted in 2018, is currently in the process of being updated. The Master Plan will include identifying waterlines to be replaced based upon being undersized or a history of leaking or breaks. The annual City Public Works budget includes costs to replace old and undersized waterlines in accordance with the City's long-range plans to improve the water system.

Water Meters:
All culinary and secondary water connections, with the exception of some City-owned properties, are currently metered. Electronic meters were installed in the secondary water system with improvements and expansion over the past 10 years. The culinary water system has also been upgraded to include electronic meters over the past several years. Therefore, all meters within the system are relatively new, and the City has it in their planning and budgeting to quickly replace faulty electronic meters.

Smart Controllers:
Smart irrigation controllers have been installed in several Mapleton City Park irrigation systems that allow modifications to the irrigation schedule to be made remotely. City staff can change irrigation in response to changes in weather so that an appropriate amount of water is applied.

Utility Rate Structure:
The City's current rate structure, included in Section VII, encourages residents to switch from the culinary water system to the lower quality secondary water system when it becomes available to their property. The tiered levels of the structure economically penalize those who choose to use large quantities of water, thus encouraging conservation.

Proposed Conservation Measures

Mapleton City intends to continue the conservation efforts outlined above. Furthermore, the City proposes the following additional conservation measures to be implemented over the next five years:

~~**Finalize this Water Conservation Plan (adopted Aug 2023):**~~
~~This water conservation plan has been prepared and will be publicly noticed and adopted at a Mapleton City Council Meeting.~~

Create a Water Conservation Page on City Website:
A Mapleton City Water Conservation page will be created as part of the existing City website. Links have already been created on Mapleton City Public Work's Drinking Water and Pressurized Irrigation web pages. The Water Conservation page will include a PDF version of this Water Conservation Plan, information on City initiatives, links to other helpful conservation websites, suggestions for water wise

landscape materials, and an appeal for City residents to implement water conservation measures. This web page is currently being prepared by City staff and will be on the City's website by the end of 2023.

Create a Water Conservation Committee:

The proposed committee will consist of the Public Works Director, Public Works Operations Manager, Parks Director, at least one elected official, and other city staff and local residents. It will meet at least twice a year to help research, coordinate, create and implement public education and information campaigns and water conservation programs and incentives. This committee will also review the implementation plan, as specified below. This committee will be created and have their first meeting by March 31, 2024.

Encourage Water-Wise Landscaping :

Mapleton City will prepare flyers identifying water-wise landscape materials and methods. Mapleton City Public Works, Community Development, and Parks staff will be consulted in the development of these flyers. The information will be available at the City's main office and Public Works building, and will also be made available to residents at various City activities and functions. A water conservation booth will be set up at appropriate community events to provide education and materials to residents. These flyers will be prepared by City staff by June 30, 2024.

The City will also continue to promote the "Water-wise Park Strip – Design Guide" to assist property owners with landscaping ideas (see Appendix).

Include Water Conservation Information with Building Permits:

A packet will be prepared and included with building permit application forms that encourage the use of high water efficiency appliances, fixtures and water-wise irrigation and landscaping for all new construction and remodels. Mapleton City Public Works, Community Development, and Parks staff will be consulted in the development of this information packet. These packets will be prepared by City staff by December 31, 2024.

Rebates for Irrigation Equipment and Fixtures:

The City will investigate the potential to provide rebates to residents for implementation of water-wise irrigation equipment and low water use fixtures. Initial discussions and information gathering will include the City Administration, Finance Department, Public Works Department, Community Development

Department, and Parks Department. The findings and any associated recommendations will then be presented to the City Council by December 31, 2025.

Meter Water for all City Properties:
Water meters will be installed at all City properties, including parks, City buildings and other facilities that use water. Mapleton City Public Works will be in charge of installing the meters. Information gathered from the meters will be used to determine what additional water efficient practices may be required at City properties. Meters will be added to all City properties by December 31, 2025.

Create a Local Water Wise Garden:
Mapleton City will plan and construct a water-wise garden within the City that demonstrates the use of appropriate local water wise plants. Residents will be able visit the garden and learn about the types of plants that do well and conserve water in our climate. The garden can become a key educational focal point for individuals and families within the community. The Public Works Department will meet with City Administration and the Parks Department to determine the best location for the garden. Upon completion, the City web page and informational flyers will be updated to highlight the garden. This garden will be completed and open to the public by December 31, 2027.

Consider Participating in, and Promoting the Utah Water Savers Incentive Programs
The Utah Water Savers organization offers the following statewide fixture rebates and landscape incentives to help conserve water:

1. **Landscape Incentive**: Water Savers provides financial incentives for the removal of grass and replacing it with water wise landscaping. In order for residents to participate, the City must adopt the model landscape ordinance.
2. **Smart Controller**: Water Savers provides rebates for residents that purchase and install a WaterSense-labeled smart controller that adjusts irrigation based on local weather.
3. **Toilet Replacement**: Water Savers provides rebates for replacing old toilets with a WaterSense-labeled toilet.

Mapleton City will review the model landscape ordinance and determine if it is appropriate to adopt to make the landscape incentive available to its residents. The City will also promote the smart controller and toilet replacement programs.

Consider Water Conservation when Reviewing and Updating the Land Use Ordinance and General Plan.
As the City reviews amendments to the land use ordinance and the general plan, it will consider the amendments' impact on water use when applicable.

Evaluation and Implementation

Mapleton City is committed to ensuring the stated measures are implemented with the stated goal of reducing water use by 20% by 2030. The Public Works Director and Operations Manager will prepare yearly water conservation credit reports that summarize that year's water use, how that compares to the goal and where water use is trending, the implementation status of conservation measures, and conservation-related plans for the following year.

The Water Conservation Committee will meet at least twice a year to review the implementation status of conservation measures and the ongoing trends in the City's water use. Based on how those trends compare to the goal of reducing water use by 20% by 2030, the Committee will evaluate the need to move up implementation timelines, revise proposed conservation measures, or add new proposed conservation measures and timelines.

IX Water Conservation Plan Adoption

In accordance with the Utah Code Section 73-10-32(2)(a), the Mapleton City Council shall devote part of at least one regular meeting every five years for discussion and adoption of the City's Water Conservation Plan. Minutes of the meeting shall be included as an appendix to the plan. The discussion shall take place in a regular public meeting which provides access to the media and will permit public comment on the Plan. The meeting will serve to increase awareness of the plan and encourage public involvement in its implementation, resulting in a more effective water conservation effort.

Appendix

Copy of Public Notice

Resolution for Adoption by Mapleton City Council

Water-Wise Park Strip – Design Guide

MAPLETON
UTAH

SMALL TOWN. BIG HEART.

PUBLIC NOTICE

Notice is hereby given of a Public Hearing to be held during the regular meeting of the Mapleton City Council, Wednesday, August 16, 2023, at 6:00 pm in the City Council Chambers, Mapleton City Building, 125 West Community Center Way (400 N), Mapleton, Utah for the purpose of considering:

The Mapleton City Council will consider adoption of the 2023 Mapleton City Water Conservation Plan at the City Council Meeting on August 16, 2023. Per Utah Code, entities that provide water service must maintain a Water Conservation Plan, updated at least every 5 years. The Water Conservation Plan contains information on historic water use and trends, available water sources, goals for conservation, and proposed implementation measures to reach the conservation goal. The proposed Water Conservation Plan can be reviewed on Mapleton City Public Works' Water Conservation web page at https://mapleton.org/departments/public_works/drinking_water/water_conservation.php. Public comment may be made in person at the Mapleton City Council Meeting on August 16, 2023 @ 6pm in the Mapleton City Council Chambers (125 West 400 North, Mapleton, UT 84664).

Camille Brown, Recorder

Posted at the below locations on June 14, 2023, 2023: Utah Public Notice website and at www.mapleton.org.

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during these hearing should notify Camille Brown at Mapleton City, 125 West Community Center Way (400 N.), Mapleton, UT 84664, or by phone, (801) 806-9106, giving her at least 24 hours notice. Signature on this document certifies that this Public Notice was posted on July 31, 2023.

Camille Brown

From: support@utah.gov
Sent: Monday, July 31, 2023 2:25 PM
To: Camille Brown
Subject: Public Notice for City Council

Utah Public Notice

City Council

Public Notice

Notice Date & Time: 7/31/23 2:24 PM

Description/Agenda:

PUBLIC NOTICE

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The Mapleton City Council will consider adoption of the 2023 Mapleton City Water Conservation Plan at the City Council Meeting on August 16, 2023. Per Utah Code, entities that provide water service must maintain a Water Conservation Plan, updated at least every 5 years. The Water Conservation Plan contains information on historic water use and trends, available water sources, goals for conservation, and proposed implementation measures to reach the conservation goal. The proposed Water Conservation Plan can be reviewed on Mapleton City Public Works' Water Conservation web page at https://mapleton.org/departments/public_works/drinking_water/water_conservation.php. Public comment may be made in person at the Mapleton City Council Meeting on August 16, 2023 @ 6pm in the Mapleton City Council Chambers (125 West 400 North, Mapleton, UT 84664).

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Notice of Special Accommodations:

In compliance with the Americans with Disabilities Act, the City will make reasonable accommodations to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Recorder at 801-806-9106 at least three working days prior to the meeting.

Notice of Electronic or telephone participation:

NA

Other information:

Location:

125 West 400 North, Mapleton, 84664

Contact information:

Camille Brown , cbrown@mapleton.org, 8018069106

RESOLUTION NO. 2023-28

A RESOLUTION ADOPTING TO ADOPT THE 2023 MAPLETON CITY WATER CONSERVATION PLAN

WHEREAS, Mapleton City is committed to conserving water as the population grows and increases demand on existing water sources; and

WHEREAS, cities providing water service are required to implement a Water Conservation Plan and update the Plan at least every 5 years; and

WHEREAS, this Water Conservation Plan includes goals, existing and proposed measures, and implementation strategies to conserve water; and

NOW THEREFORE, BE IT RESOLVED by the City Council of Mapleton, Utah, that: the City adopts the 2023 Mapleton City Water Conservation Plan.

This resolution adopted this 16th day of August 2023, by the City Council of Mapleton City, Utah.

Dallas Hakes
Mayor

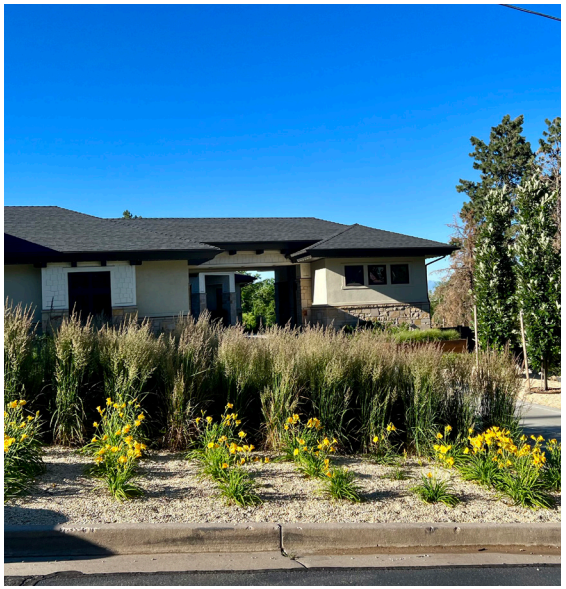
ATTEST:

Camille Brown
City Recorder

MAPLETON CITY CORPORATION
UTAH COUNTY-STATE OF UTAH

MAPLETON
UTAH

Water-wise Park Strip - Design Guide



Water Conservation in Park Strips:

Park strips are an important design feature in Mapleton City for several reasons. Park strips generally include street trees, which provide shade, beauty, and help to calm traffic. Park strips create a buffer between the sidewalk and the roadway, making a safer pedestrian experience. Park strips also provide an area for snow (storage) during the winter months as roads are plowed and sidewalks shoveled.

Traditionally, park strips have included turf grass as the primary landscape feature. As water conservation becomes increasingly important, Mapleton City is encouraging property owners to consider drought tolerant options, which will save water and reduce utility costs to property owners.

According to Utah Water Savers, a statewide conservation rebate program "Removing lawn from your park strip will save an estimated 5,000 - 8,000 gallons of water each year - and you can get cash for it." Property owners that replace the turf grass in their park strips with drought tolerant alternatives can receive up to $1.25 per square foot through the Flip Your Strip program.

How to use this guide:

This guide provides five landscape design options for park strips. Each option includes specific trees, shrubs, perennials, ornamental grasses, and ground cover that can easily be obtained from local nurseries. While the guide is meant primarily for park strips, it can also be used for other landscapes.

To use the guide:

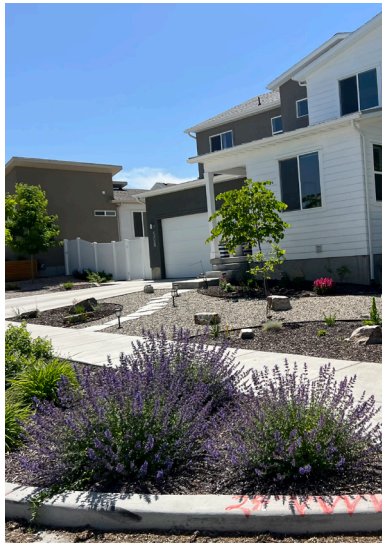
1. Measure your park strip dimensions and draw them on a graph paper.
2. Select a style and plants that best meet your intent.
3. Draw out a basic concept using the recommended plants (or other water conservation plants).
4. Start the Flip Your Strip program (optional), see page 10 of this document. Get approval from the Flip Your Strip program.
5. Begin construction of your water conservation landscape project! Be sure to follow the City's ordinances, call 811 for utilities, follow Flip Your Strip requirements (optional), and best practices for irrigation and weed management.

This guide identifies the adopted landscape requirements of Mapleton City and the additional requirements if a property owner is wanting to qualify for the Flip your Strip program (see page 10).

Guide prepared by:
Jake Young, AICP, PLA - Citi Design

Utah Water-wise Examples

MAPLETON
UTAH

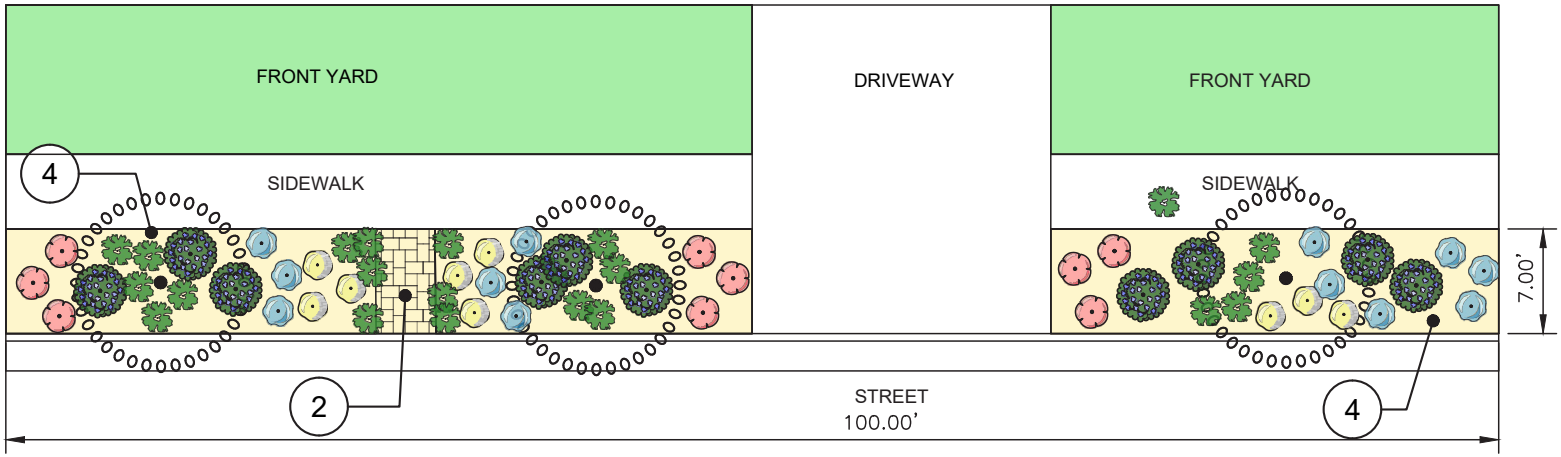


Utah Water-wise Examples

MAPLETON
UTAH

Water-wise Park Strip - Design Guide

Mediterranean Style



PLANT TYPES

COLUMNAR DECIDUOUS TREE	-	3
SMALL SHRUB	-	10
PERENNIAL (A)	-	9
PERENNIAL (B)	-	9
PERENNIAL (C)	-	12
GROUND COVER	-	21

NOTES

SYMBOL	DESCRIPTION
2	OPTIONAL PAVER PATH (ALIGN WITH FRONT DOOR)
4	GROUND MUST BE COVERED WITH 3-4" DEEP OF WOOD MULCH, COMPOST, OR SMALL ROCKS/GRAVEL. IF PLANTS/GROUNDCOVER COVER 100% OF GROUND THEN MULCH AND ROCK ARE NOT NEEDED.

PLANT SUGGESTIONS (OPTIONS)

Trees

Armstrong Red Maple, columnar - *Acer rubrum 'Armstrong'*
Slender Silhouette Sweetgum - *Liquidambar styraciflua 'Slender Silhouette'*
Skinny Genes® Oak - *Quercus x bimundorum 'JFS-KW2QX' PP 24442*
Palisade® American Hornbeam - *Carpinus caroliniana 'CCSQU'*

Shrubs

Hidcote Blue English Lavender - *Lavandula angustifolia 'Hidcote Blue'*
Mediterranean Pink Winter Heath - *Erica x darleyensis 'Mediterranean Pink'*
Mini Blue Lavender - *Lavandula angustifolia 'Mini Blue'*

Perennials

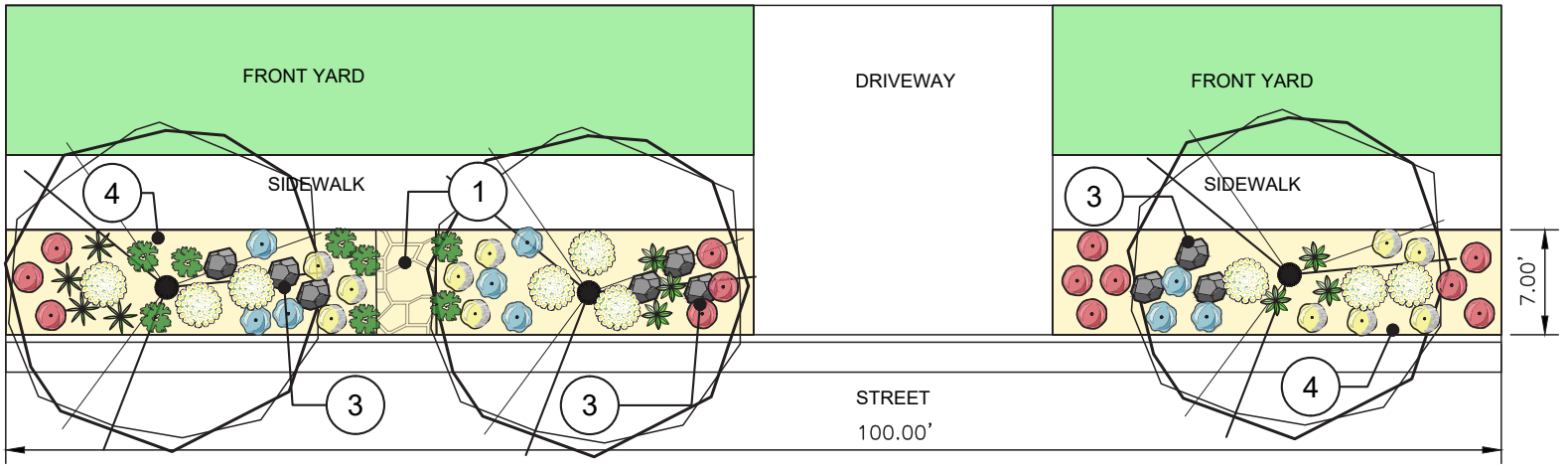
Hardy Geranium, Cranesbill - *Geranium 'Dragon Heart'*
Meadow or Woodland Sage - *Salvia nemorosa 'Caradonna'*
Tickseed - *Coreopsis grandiflora 'Baby Sun'*
Sonoran Sunset Hummingbird Mint - *Agastache cana 'Sinning'*
Walkers Low Catmint - *Nepeta x faassenii 'Waikers Low'*

Ground Covers

Pink Ice Plant - Delosperma 'Delmara® Pink'
Tricolor Ice Plan - Delosperma 'P001S' Fire Spinner®
Red Creeping Thyme - *Thymus Praecox 'Coccineus'*

Water-wise Park Strip - Design Guide

Great Basin (Desert) Style



PLANT TYPES

MEDIUM SIZE TREE	-	3
PERENNIAL (B)	-	11
PERENNIAL (C)	-	9
GROUND COVER	-	8
SMALL DESERT SHRUB	-	9
PERENNIAL (D)	-	13

NOTES

1. OPTIONAL FLAGSTONE PATH (ALIGN WITH FRONT DOOR)
3. OPTIONAL BOULDERS. SUGGESTED TO PLANT IN GROUPS OF 2-3 (MAKING PLANTING POCKETS). FOR SAFETY NO TALLER THAN 24" AND PLACED 18" FROM EDGE OF SIDEWALK AND CURB.
4. GROUND MUST BE COVERED WITH 3-4" DEEP OF WOOD MULCH, COMPOST, OR SMALL ROCKS/GRAVEL. IF PLANTS/GROUNDCOVER COVER 100% OF GROUND THEN MULCH AND ROCK ARE NOT NEEDED.

PLANT SUGGESTIONS (OPTIONS)

Trees

Sensation Box Elder/Maple - *Acer negundo 'Sensation'*
Big Tooth Maple - *Acer grandidentatum*

Shrubs/Succulents

Big Sagebrush - *Artemisia tridentata*
Rubber Rabbitbrush - *Chrysothamnus nauseosus*
Gro-Low Sumac - *Rhus aromatica 'Gro-Low'*
Brakelights Red Yucca - *Hesperaloe parviflora 'Perpa'*

Perennials

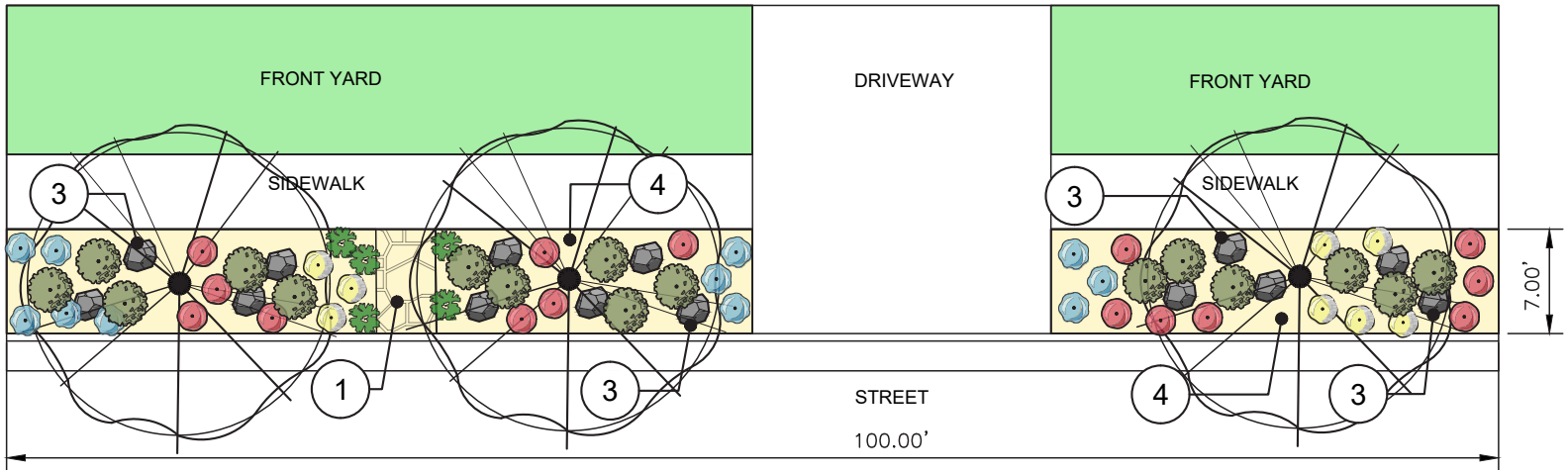
Carpet Fire Chalice - *Zauschneria garrettii 'Orange Carpet'*
Moonshine Yarrow - *Achillea millefolium 'Moonshine'*
Sonoran Sunset Hummingbird Mint - *Agastache cana 'Sinning'*
Walkers Low Catmint - *Nepeta x faassenii 'Waikers Low'*
Firecracker Penstemon - *Penstemon eatonii*
Baby Cole Blanket Flower - *Gaillardia aristata 'Baby Cole'*
Pikes Peak Purple Penstemon - *Penstemon x mexicali 'Pikes Peak Purple'*
Red Rocks Penstemon - *Penstemon x mexicali 'Red Rocks'*

Ground Covers

Calgary Carpet Juniper - *Juniperus sabina 'Calgary Carpet'*
Blue Star Juniper - *Juniperus squamata 'Blue Star'*
Blue Chip Creeping Juniper - *Juniperus horizontalis 'Blue Chip'*

Water-wise Park Strip - Design Guide

Mountain Style



PLANT TYPES

MEDIUM MOUNTAIN TREE	-	3
PERENNIAL (B)	-	8
PERENNIAL (C)	-	11
GROUND COVER	-	5
PERENNIAL (D)	-	15
SMALL MOUNTAIN SHRUB	-	16

NOTES

1. OPTIONAL FLAGSTONE PATH (ALIGN WITH FRONT DOOR)
3. OPTIONAL BOULDERS. SUGGESTED TO PLANT IN GROUPS OF 2-3 (MAKING PLANTING POCKETS). FOR SAFETY NO TALLER THAN 24" AND PLACED 18" FROM EDGE OF SIDEWALK AND CURB.
4. GROUND MUST BE COVERED WITH 3-4" DEEP OF WOOD MULCH, COMPOST, OR SMALL ROCKS/GRAVEL. IF PLANTS/GROUNDCOVER COVER 100% OF GROUND THEN MULCH AND ROCK ARE NOT NEEDED.

PLANT SUGGESTIONS (OPTIONS)

Trees

Big Tooth Maple - *Acer grandidentatum*
Flame Amur Maple - *Acer ginnala 'Flame'*
Paperbark Maple - *Acer griseum*
Norwegian Sunset® Maple - *Acer truncatum x A. platanoides 'Keithsform'*

Shrubs

Alpine Currant - Ribes alpinium
Gro-Low Sumac - Rhus aromatica 'Gro-Low'
Compact Oregon Grape - *Mahonia aquifolium 'Compacta'*
Sherwood Compact Mugo Pine - *Pinus mugo 'Sherwood Compact'*

Perennials

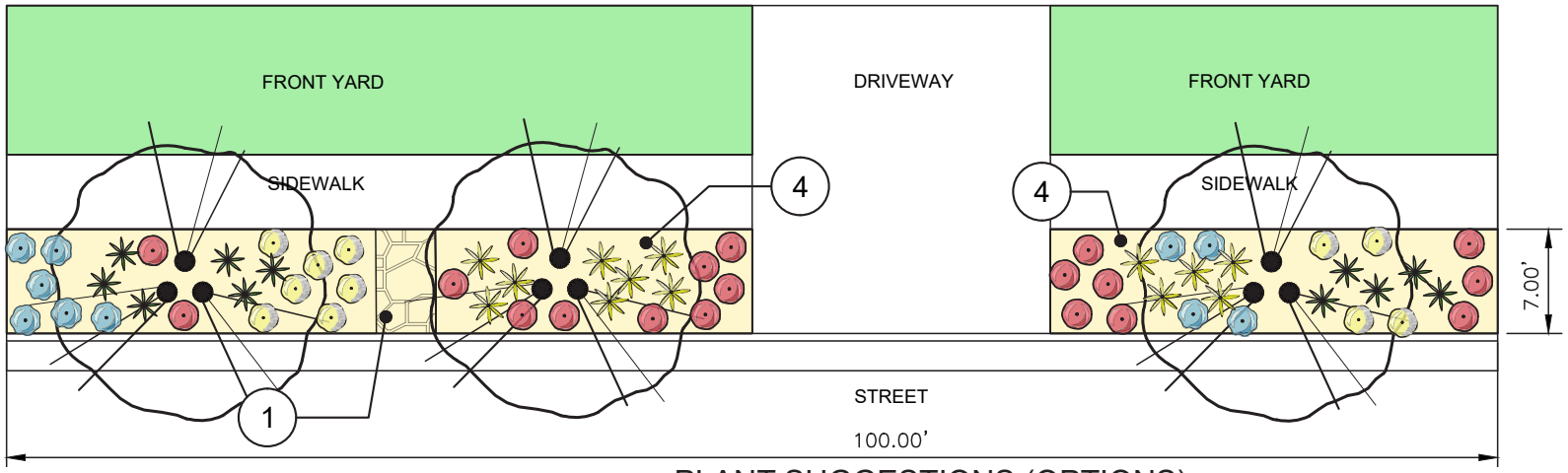
Hardy Geranium, Cranesbill - *Geranium 'Dragon Heart'*
Firecracker Penstemon - *Penstemon eatonii*
Pikes Peak Purple Penstemon - *Penstemon x mexicali 'Pikes Peak Purple'*
Red Rocks Penstemon - *Penstemon x mexicali 'Red Rocks'*
Rocky Mountain Columbine - *Aquilegia caerulea*

Ground Covers

Pink Ice Plant - Delosperma 'Delmara® Pink'
Tricolor Ice Plan - Delosperma 'P001S' Fire Spinner®
Compact Oregon Grape *Mahonia aquifolium 'Compacta'*
Turkish Speedwell - *Veronica liwanensis*

Water-wise Park Strip - Design Guide

Meadow Style



PLANT TYPES

MEDIUM MEADOW TREE	-	3
PERENNIAL (B)	-	11
PERENNIAL (C)	-	10
PERENNIAL (D)	-	19
ORNAMENTAL GRASS (A)	-	11
ORNAMENTAL GRASS (B)	-	13

NOTES

1. OPTIONAL FLAGSTONE PATH (ALIGN WITH FRONT DOOR)
4. GROUND MUST BE COVERED WITH 3-4" DEEP OF WOOD MULCH, COMPOST, OR SMALL ROCKS/GRAVEL. IF PLANTS/GROUNDCOVER COVER 100% OF GROUND THEN MULCH AND ROCK ARE NOT NEEDED.

PLANT SUGGESTIONS (OPTIONS)

Trees

Bur Oak - *Quercus macrocarpa*
Skyline Honeylocust - *Gleditsia triacanthos f. inermis 'Skyline'*

Perennials

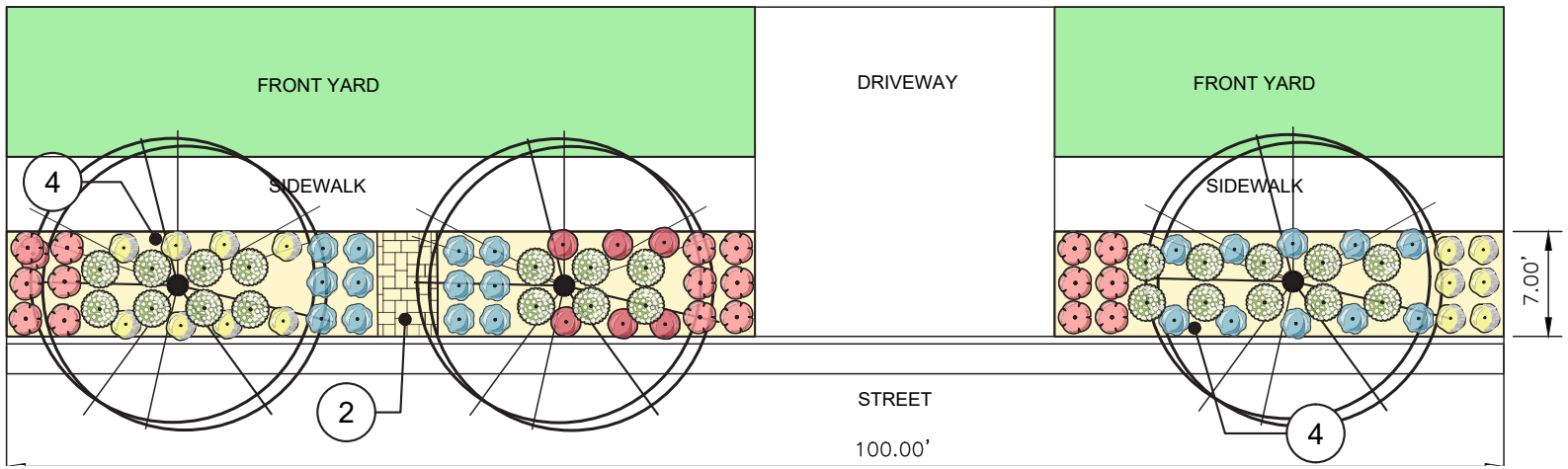
Hardy Geranium, Cranesbill - *Geranium 'Dragon Heart'*
Meadow or Woodland Sage - *Salvia nemorosa 'Caradonna'*
Tickseed - *Coreopsis grandiflora 'Baby Sun'*
Sonoran Sunset Hummingbird Mint - *Agastache cana 'Sinning'*
Walkers Low Catmint - *Nepeta x faassenii 'Waikers Low'*
East Friesland Meadow Sage - *Salvia nemorosa 'East Friesland'*
May Night Meadow Sage - *Salvia nemorosa 'May Night'*
Wild Berry Coneflower - *Echinacea purpurea 'PowWow Wild Berry'*
Moonbeam (Tickseed) - *Coreopsis verticillata*

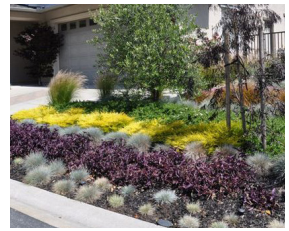
Ornamental Grasses

Blue Oat Grass - *Helictotrichon sempervirens*
Little Bluestem - *Schizachyrium scoparium*
Karley Rose - *Pennisetum orientale*
Blonde Ambition Blue Grama Grass - *Bouteloua gracilis 'Blonde Ambition*

Water-wise Park Strip - Design Guide

Modern Garden Style





PLANT TYPES

FORMAL GARDEN MEDIUM TREE	-	3
PERENNIAL (A)	-	19
PERENNIAL (B)	-	14
PERENNIAL (C)	-	22
PERENNIAL (D)	-	6
SMALL FORMAL SHRUB	-	24

NOTES

2 OPTIONAL PAVER PATH (ALIGN WITH FRONT DOOR)

4 GROUND MUST BE COVERED WITH 3-4" DEEP OF WOOD MULCH, COMPOST, OR SMALL ROCKS/GRAVEL. IF PLANTS/GROUNDCOVER COVER 100% OF GROUND THEN MULCH AND ROCK ARE NOT NEEDED.

PLANT SUGGESTIONS (OPTIONS)

Trees

Golden Raintree **-** *Koelreuteria paniculata*
Fairmount Ginkgo - *Ginkgo biloba 'Fairmount'*
Armstrong Red Maple, columnar - *Acer rubrum 'Armstrong'*
Slender Silhouette Sweetgum - *Liquidambar styraciflua 'Slender Silhouette'*
Skinny Genes® Oak - *Quercus x bimundorum 'JFS-KW2QX' PP 24442*
Palisade® American Hornbeam - *Carpinus caroliniana 'CCSQU'*

Shrubs or Ornamental Grasses

Dark Knight Bluebeard - *Caryopteris x clandonensis 'Dark Knight'*
Hidcote Blue English Lavender - *Lavandula angustifolia 'Hidcote Blue'*
Blue Oat Grass - *Helictotrichon sempervirens*
Lo & Behold® Blue Chip Jr. Butterfly Bush - *Buddleja x 'Blue Chip Jr.'*
Flutterby Petite® Tutti Fruitti Pink Butterfly Bush - *Buddleja x 'Podaras13'*
Munstead Lavender - *Lavandula angustifolia 'Munstead'*

Perennials

Hardy Geranium, Cranesbill - *Geranium 'Dragon Heart'*
Meadow or Woodland Sage - *Salvia nemorosa 'Caradonna'*
Tickseed - *Coreopsis grandiflora 'Baby Sun'*
Sonoran Sunset Hummingbird Mint - *Agastache cana 'Sinning'*
Walkers Low Catmint - *Nepeta x faassenii 'Waikers Low'*
Stella De Oro Daylily Hemerocallis 'Stella de Oro'

Mapleton City Landscape Ordinances:

City ordinance - Thirty percent (30%) or more of the parkway surface must be covered with vegetation, not including required street trees, within three (3) years of planting or when planting has reached maturity, whichever comes first. Water conserving plants shall constitute at least eighty percent (80%) of all plants used. With the exception of trees, no planting material shall exceed 36 inches in height at maturity.

Parkways 4 feet in width or more in width shall include trees. Such trees shall be spaced not more than thirty feet (30') apart and shall have a minimum caliper size of one inch (1").

Flip Your Strip Program:

These requirements are applicable for the Flip Your Strip Program.
"General Requirements:
• Park strips must be currently landscaped with living, well-maintained lawn. If lawn has been killed or removed prior to a pre-conversion site visit, you are not eligible for this program.
• Applicant must be in good standing with a participating water provider. Unpaid water bills will disqualify applicants from the Flip Your Strip program.
• Applicants must be participating voluntarily. Projects required by governmental codes or policy are not eligible for this program.
• Projects should remove all lawn from the park strip and replace it with water-efficient landscaping.
• Projects that replace lawn with artificial turf are not eligible.
• Rebate checks will be made payable to the property owner.

Planting Requirements:
• Perennial plants must cover at least 50% of the converted park strip at maturity.
• Trees will not be considered in density calculations.
• Plants may not exceed 24 inches in height at maturity. Taller plants block views, impede safety, and can interfere with city maintenance.
• Completed projects must be covered with 3-4 inches of gravel, bark, or compost mulch. Groundcover plants can qualify as mulch if 100% plant density is achieved at maturity. If landscape fabric is used (not recommended), it must be permeable to water and air. Concrete areas do not qualify for a square foot rebate, but pavers, bricks, stone, and other permeable materials are permitted.

Irrigation Requirements:
• Completed park strips must be irrigated with low-volume drip systems. Drip systems must include filter and pressure regulators visible for inspection:
• Drip emitters must be rated at 5 gallons per hour or less.
• Bubblers, micro-spray emitters and soaker hoses are not allowed.
• Drip emitters and spray heads must be on separate zones."
Source: https://utahwatersavers.com/Program/2/flip-your-strip#eligibility

Best practices for maintenance and water conservation:

In addition to the City's landscape ordinance and Flip Your Strip Program the following recommendations will assist with landscape maintenance.

• Weed fabric - is encouraged to be used under gravel or rock planting areas. For mulch planting areas with shrubs and ornamental grasses weed fabric is also recommended. In planting areas with ground cover plants or bulbs weed fabric is not recommended. Weed fabric used should be woven, rated to 15-20 years, and 5 ounce weight. Quality weed fabric is generally purchased at specialty stores such as nurseries, garden, farm, or irrigation (not big box hardware).

Around Shrubs and Plants: Weeding maintanence beneath shrubs and plants can be time consuming, hard work and difficult. Bushes and small shrubs that are weed free are healthier plants and require less plant bed maintenance. Landscape fabric stops weeds without chemicals while allowing moisture and nutrients to pass through. Installing the fabric properly doesn't disturb the existing bushes or take a significant time investment, but it does provide an optimum weed barrier that can conserve water by design.

https://www.dewittcompany.com/wp-content/uploads/2021/07/Landscape-fabric-installation-guide2.pdf

• Wood mulch - 4" of small to medium size wood mulch helps keep moisture in the ground and decreases weeds (but definitely doesn't prevent them).

• Decorative rock - can be attractive and doesn't need replenishment, however the rock does add heat to the plants. It is recommended that rock sizes be one inch (1") or smaller (for safety and beauty) and be installed at 3-4 inches deep (over weed fabric).

• Weed management - water-wise, xeric, or drought tolerant landscapes require ongoing maintenance just like turf grass (mowing). Weekly/monthly weed management is necessarily just like mowing, however with proper planning, installation, and routine maintenance it can be minimized.

• Drip irrigation - it is recommended that plants have a minimum of two emitters per plant (more for larger plants), if one emitter is clogged the other emitter should still provide water. It is easy to see when a sprinkler head is broken or not working properly by its spray, however drip irrigation requires close inspection to identify issues. Irrigation drip systems should receive a spring inspection and regularly inspections to identify emitters not working properly.

Resources:

Localscapes program
https://localscapes.com/

Flip Your Strip
https://utahwatersavers.com/Program/2/flip-your-strip

Conservation Garden Park
https://conservationgardenpark.org/

Water-wise Plants (USU list)
https://extension.usu.edu/cwel/files/Utah_House_Plant_List_v2_4p.pdf

https://extension.usu.edu/cwel/water-wise-plants

Native plant list
https://plantnative.org/rpl-ut.htm

Tree selection resource
https://treebrowser.org/

Lehi Water-wise Landscape Guidelines
https://www.lehi-ut.gov/wp-content/uploads/2020/02/Xeriscape-Guidelines-Smaller-Size.pdf

Sandy Water-wise Landscapes
https://sandy.utah.gov/413/Water-wise-Landscapes

Red Butte Gardens
https://redbuttegarden.org/plan-your-garden-visit/online-classes-virtual-resources/garden-journal/waterwise-gardening-tips/

Call 811 before digging:

Source: https://www.bluestakes.org/