



STAFF REPORT

Report To: Board of Supervisors **Meeting Date:** August 6, 2020

Staff Contact: Darren Schulz, Public Works Director

Agenda Title: For Possible Action: Discussion and possible action regarding initiation of the process to change stormwater rates for the stormwater utility. (Darren Schulz, DSchulz@Carson.org; and Andy Hummel, AHummel@Carson.org)

Staff Summary: On February 7, 2019, the Board of Supervisors approved a contract with Farr West Engineering to do an update of the stormwater rate and rate structure. The objective of the Stormwater Rate Update Study was to review the financial position of the respective fund; to incorporate current and projected operating, maintenance, and capital improvement plan costs; to determine revenue requirements to meet the projected revenue requirements; and to develop new rate structures to improve equity between the system users. The consultant will present the results and recommendations of the study. After consideration of the rate study, the Board of Supervisors may direct staff to proceed with the rate change process.

Agenda Action: Formal Action / Motion **Time Requested:** 30 minutes

Proposed Motion

I move to direct staff to initiate the process of changing rates and rate structure for the stormwater utility.

Board's Strategic Goal

Sustainable Infrastructure

Previous Action

On February 7, 2019, the Board of Supervisors approved a contract with Farr West Engineering to do an update of the stormwater rate and rate structure. Rate structure options were presented to the Utility Finance Oversight Committee (UFOC) on August 5, 2019, with direction to proceed to a public meeting on October 2, 2019. Based on the feedback received, the rate structure options were systematically refined during presentations to the UFOC on November 4, 2019, January 1, 2020, and May 20, 2020. At the May 20, 2020 meeting the UFOC recommended proceeding to the Board of Supervisors with the results and recommendations.

Background/Issues & Analysis

Stormwater rates are currently applied against each parcel of developed real property based on the zoning classification of the property. In 2017, an initial increase of 30 percent was implemented, with direction given to perform a study to review the rate structure and program needs. On February 7, 2019, Farr West Engineering was awarded a contract to evaluate and update the rate structure created in the 2017 rate study effort. Farr West Engineering is an expert in conducting utility rate studies and provides these services to multiple clients in the region. The study includes reviewing and analyzing current rate and customer class data, operational and maintenance costs, projected Capital Improvement Plan (CIP) expenditures, projected rate of increases for the

various rate structure methodologies proposed, and current policy objectives to update the City's current rate structure.

The current stormwater rates generate approximately \$1.8 million in annual revenue to support minimal operating & maintenance, debt service, and minimal capital improvements. An additional revenue need of \$1.4 million has been identified to support operating & maintenance and capital improvements city-wide. Several alternative rate structures have been developed by Farr West Engineering to address inequities in the current rate structure, each with different administrative and rate impacts. These rate structures have been reviewed and evaluated by the UFOC through an interactive process.

The rate structures evaluated included maintaining the current structure and raising the rates; modifying the existing rate structure by adding parcel size categories; setting a custom rate for each parcel based on impervious area of the parcel; and establishing grouped impervious area rates into which parcels would be placed.

The UFOC is recommending the following:

- 1 - Implement a new rate structure based on grouped impervious area of parcels
- 2 - Phase in the new stormwater rates over a 4-year period
- 3 - Implement a stormwater credit system to provide a credit for submitting an inspection report of a customer's on-site stormwater facilities
- 4 - Index stormwater rates to the CPI beginning July 1, 2024 after phase-in
- 5 - Provide \$10,000 of funding annually to the Utility Rate Payer Assistance Program
- 6 - Conduct rate refreshes every 5 years to ensure rates are meeting the operating and capital needs of the stormwater utility

If staff is directed to proceed with the process of changing the rate and rate structure for the stormwater utility, the next steps will be to prepare an ordinance with the changes to the rates and rate structure by revising Carson City Municipal Code Title 12.17, to prepare a Business Impact Statement process, and to bring the proposed ordinance and business impact statement before the Board of Supervisors at future meetings.

Applicable Statute, Code, Policy, Rule or Regulation

N/A

Financial Information

Is there a fiscal impact? Yes

If yes, account name/number: Stormwater Utility Fund - 5053702

Is it currently budgeted? No

Explanation of Fiscal Impact: The fiscal impact will depend on how the Board would like to proceed.

Alternatives

The Board may direct staff to proceed with other options.

Attachments:

[BOS 8-6-20 \(1\).pdf](#)

Board Action Taken:

Motion: _____	1) _____	Aye/Nay
	2) _____	_____

(Vote Recorded By)

Stormwater Utility Rate Adjustments

Board of Supervisors Meeting
August 6, 2020



Storm Water Program Adopted and Required Elements

National Flood Insurance Program (NFIP)

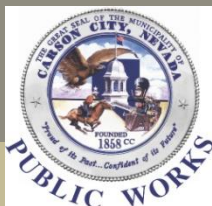
- FEMA program – adopt and enforce floodplain management regulations
 - Reduced rate insurance to property owners
 - Reduced damages to infrastructure, economic disruption and losses
 - Enhanced public safety
 - Qualify for disaster assistance

Community Rating System (CRS)

- FEMA program – further reduced rate insurance to property owners
 - Exceed NFIP requirements
- Qualify for other Federal assistance programs

Municipal Separate Storm Sewer Systems (MS4).

- Permit issued by NDEP
 - Reduce discharge of pollutants
 - Protect water quality



Stormwater Program Elements



Storm Water Quality

- MS4 permit requirements (Federal & State laws)
- 7 Best Management Practices with multiple activities

Floodplain Management

- NFIP / CRS (Federal requirements)
- 10 minimum requirements – 16 activities

Debt Service

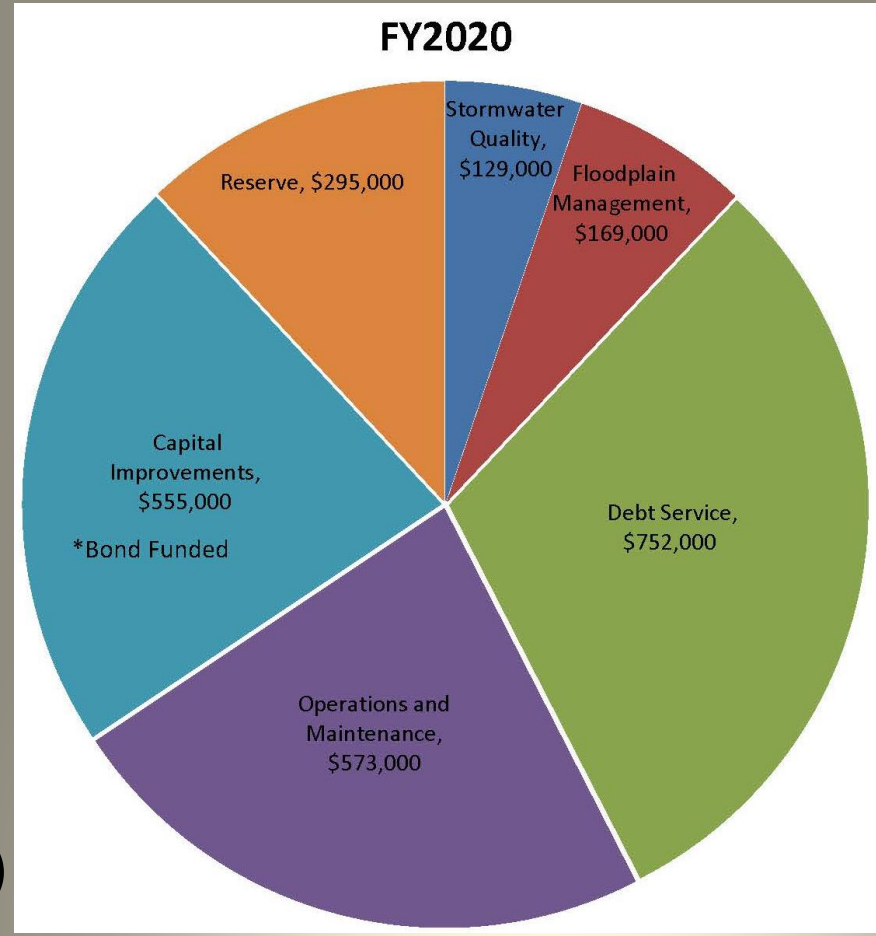
- Bonds

Operations & Maintenance

- Salary, benefits (2.3FTE)
- Services & supplies
- Includes equipment

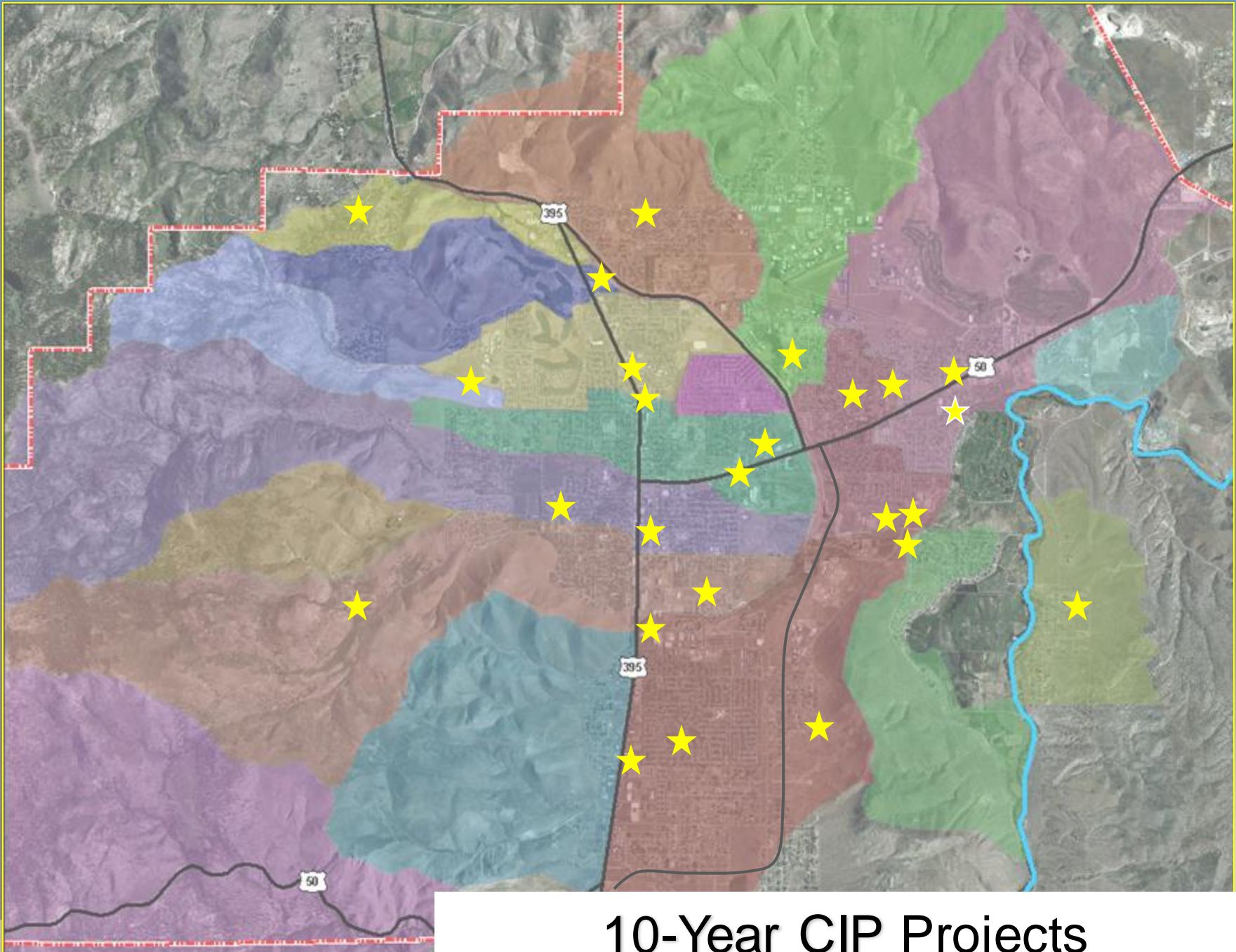
Capital Improvements

- System improvements (new and upgrades)
- Culverts, detention basins, ditches, etc.



Updated 10-year CIP FY 2021 – FY2030

Project Name	Estimated Expense
Kings Canyon Channel Maintenance Project (Roop to Saliman)	\$ 100,000
Minor SD Improvements (City Wide)	\$ 3,302,000
Nye/N. Carson Steet Channel Berms	\$ 85,000
Flood Emergency Equipment	\$ 800,000
West Area Access and SD Improvements	\$ 100,000
SD Fleet	\$ 1,259,000
Lower Kings Canyon Channel Restoration Project	\$ 400,000
Lower Goni Wash SD Improvements	\$ 115,000
Airport Road SD Improvements (HWY 50 to Sherman)	\$ 350,000
Rand Avenue SD Improvements (William to Rand Ct)	\$ 200,000
Vicee Watershed Access Management	\$ 150,000
Carmine Street SD Improvements (N. Lompa to Bunch Way)	\$ 600,000
Panamint & Merrimac SD Improvements	\$ 150,000
Sean Drive SD Improvements (Baker to Gillis Way)	\$ 120,000
Carson Street SD Improvements (N. Carson Street to Nye)	\$ 450,000
Empire System SD Improvements (Gordon Street to Morgan Mill)	\$ 1,100,000
Voltaire Canyon Channel and System Improvements - Phase 1	\$ 1,000,000
Voltaire Canyon Channel and System Improvements - Phase 2	\$ 1,500,000
Subarea F - A & B Drainage Basins and System	\$ 2,500,000
Goni Wash - Drainage/basins Channels & System	\$ 5,000,000
Sutro Area Drainage System Improvements	\$ 500,000
South Edmonds curb and drainage system	\$ 2,500,000
Downtown System Replacement & Rehabilitation	\$ 1,200,000
Ash Canyon Land Purchase & Basin Improvements	\$ 500,000
	\$ 23,981,000



10-Year CIP Projects

Basis for Revenue Requirement & Rate Increase

Existing Rate Plan

- ~\$1.8M annually
- Supports “moderate program”
- Very limited capital improvements
- Not a self-sustaining enterprise fund

Proposed Rate Plan

- ~\$1.4M additional after phase in
- Supports “improved program”
- Supports 10-yr CIP and operations
- Supports city-wide improvements
- Self-sustaining enterprise fund

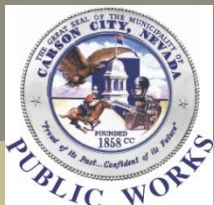
Rate Structure



Carson City Municipal Code:
Chapter 12.07 -Storm Water Service Charges

12.17.020 - Rate policy.

It shall be the policy of the City that the rate structure to be applied in establishing the amount of service charges assessed against each parcel of developed real property within the boundaries of the city shall be based upon the amount of majority of the zoning classification assigned to each parcel of property as defined by Title 18 of the Carson City Municipal Code.



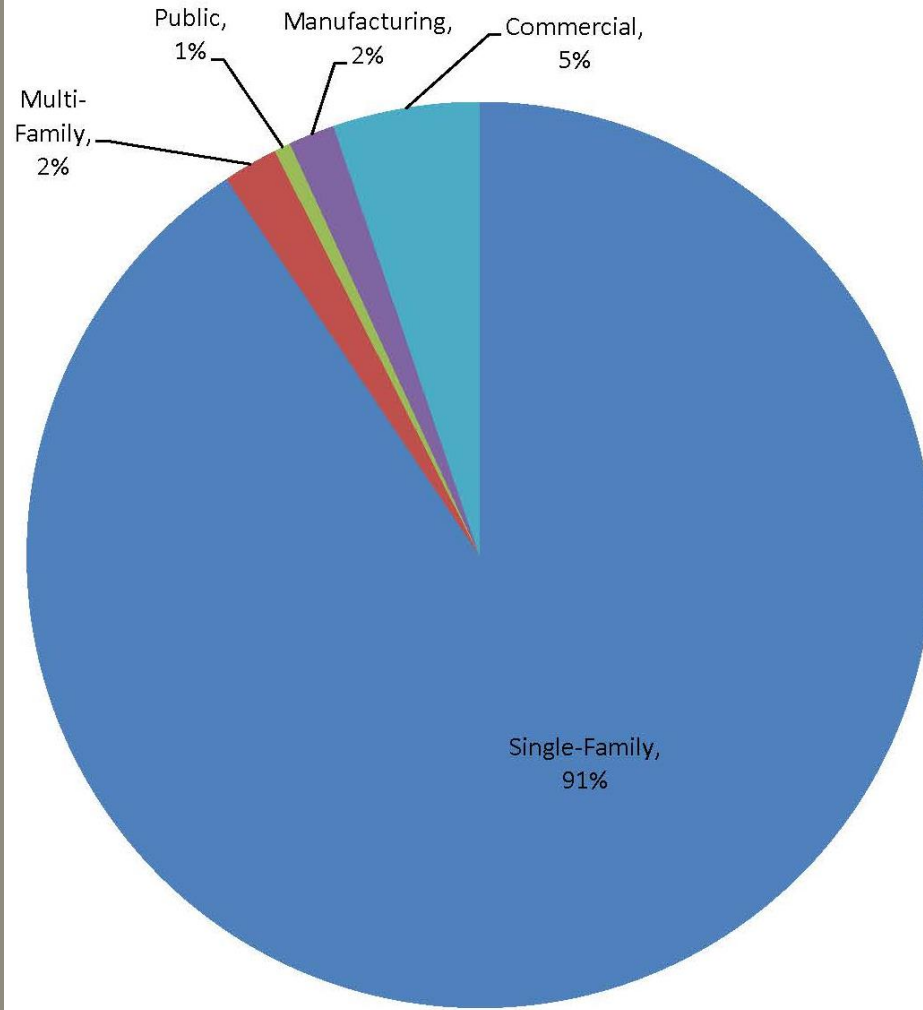
Existing Rates

Existing Rate Structure

Customer Class	Monthly Rate
Single Family Property	\$5.69
Multifamily Property	\$29.33
Public Property	\$32.03
Manufacturing Property	\$38.19
Commercial Property	\$40.96

Rate Payers

Customer Distribution



Stormwater Utility Rates

Inequities in Existing Rate Structure:

Multifamily

Residential Office

Small vs. Large Commercial

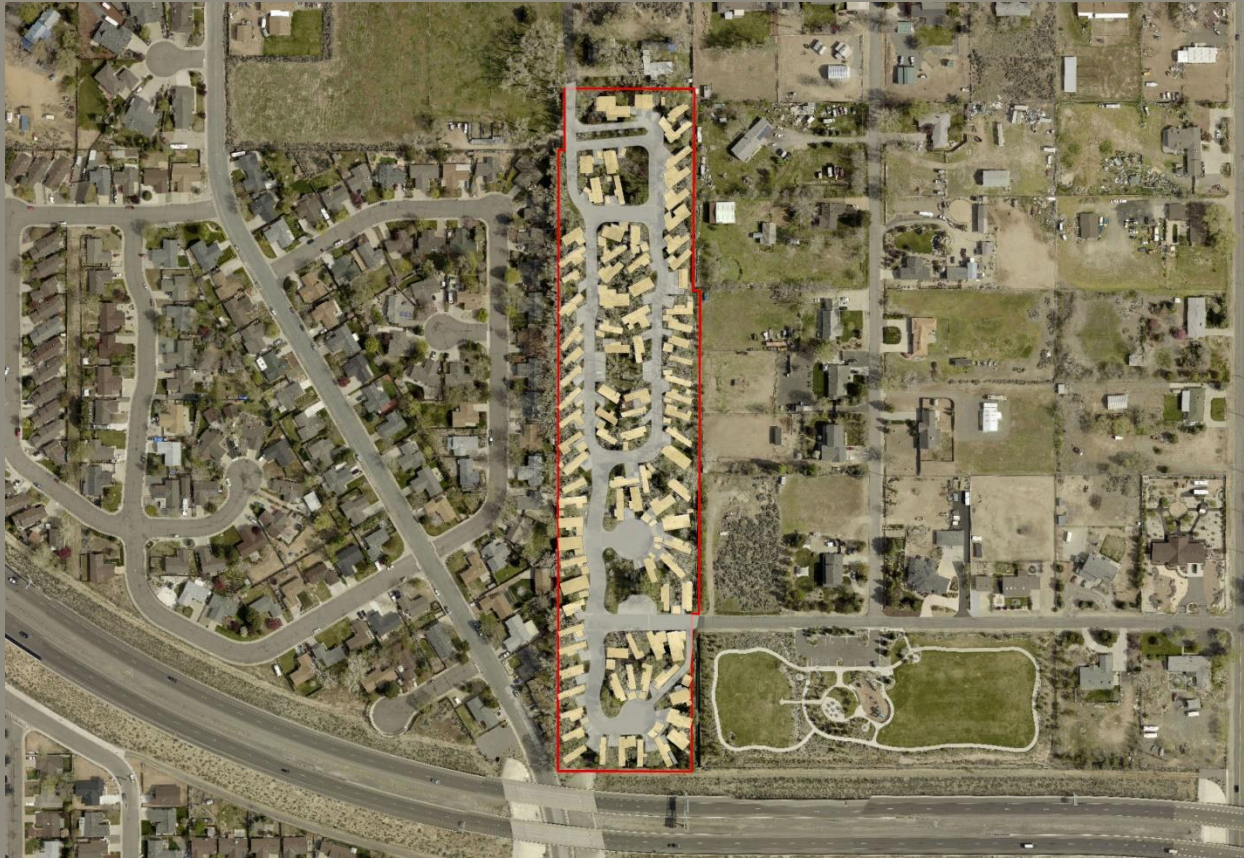
Multiple Parcel Commercial

Multifamily



3 units, 0.5 Acres, 6,745 SF Impervious Area

Multifamily



MHP, 89 units, 10 acres, 233,436 SF impervious area

Multifamily



Apartment Complex, 176 units, 7 Acres, 232,705 SF Impervious Area

Commercial



Downtown Mixed Use, 0.06 Acres, 2,717 SF Impervious Area

Commercial



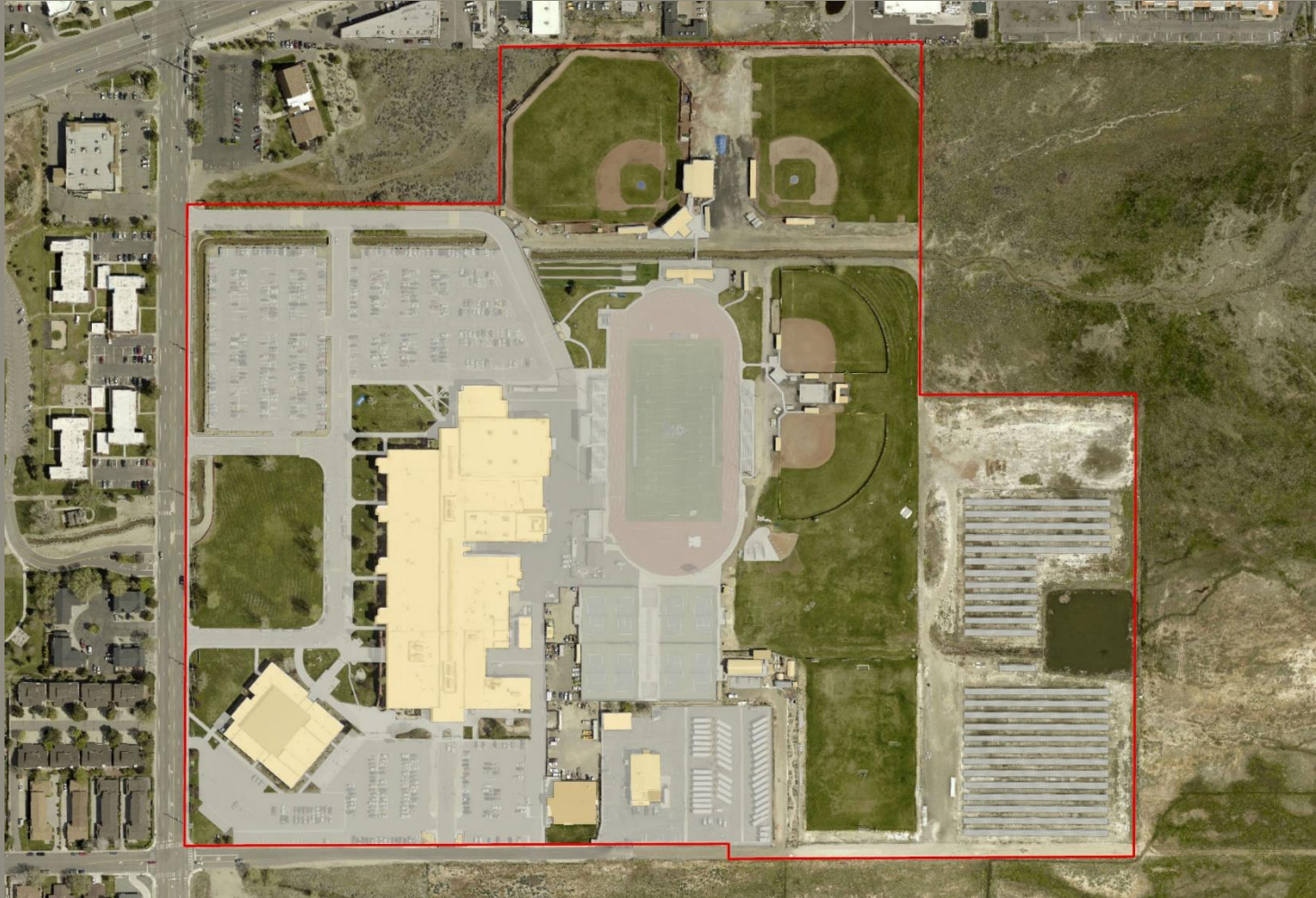
Residential Office, 1.22 Acres, 11,265 SF Impervious Area

Commercial



Light Industrial, 20 Acres, 778,523 SF Impervious Area

Public



School, 65 Acres, 308,453 SF Impervious Area

Rate Methodologies Considered

1. Keep the existing rate structure
2. Modify existing rate structure – Method 1
3. Modify existing rate structure – Method 2
4. Impervious Area Method
5. Grouped Impervious Area Method

Keep Existing Structure

Existing Rate Structure Increased by 64%

Customer Class	Ex. Monthly Rate	Proposed Monthly Rate
Single Family Property	\$5.69	\$9.34
Multifamily Property	\$29.33	\$48.13
Public Property	\$32.03	\$52.56
Manufacturing Property	\$38.19	\$62.67
Commercial Property	\$40.96	\$67.22

Needed revenue is \$3,181,000 per year. Accounting for growth, this is a 64% increase.

Modify Existing Structure – Method 1

Example Structure: Method 1

Customer Class	Small Parcel	Medium Parcel	Large Parcel
Single Family Property	\$5.69	\$9.00	\$13.50
Multifamily Property	\$29.33	\$48.00	\$72.00
Public Property	\$32.03	\$53.00	\$79.50
Manufacturing Property	\$38.19	\$63.00	\$94.50
Commercial Property	\$40.96	\$67.00	\$100.50

- Distribution by parcel size: Small, Medium, Large.
- Example: Medium size parcels pay existing rate, small size parcels pay 50% less, large parcels pay 50% more.
- Keep same customer classes

*This is a concept. More analysis is needed to determine what constitutes a small, medium and large parcel size and the appropriate monthly fees.

Modify Existing Rate Structure – Method 2

Example Structure: Method 2

Customer Class	Billing Method	Minimum Rate	Maximum Rate
Single Family Property	Flat	\$9.34	N/A
Multifamily Property	By Unit @ 50% of SFR, Capped	\$9.34	2X Max Commercial
Ag/Open/Public Property	Flat	\$52.56	N/A
Manufacturing Property	Tiered by parcel size	\$38.19	\$94.50
Commercial Property	Tiered by parcel size	\$9.34	\$100.50

- Change billing method by Customer Class.
- Example: minimum Commercial Property would be converted home business

*This is a concept. More analysis is needed to determine tiers and monthly fees.

Impervious Area Approach

Class	Zone Code	Acreage	Imp. Area	Current Bill	Proposed Bill	+/-
Commercial	DT-MU	0.06	2,717	\$40.96	\$3.62	(\$37.34)
Multifamily	MFA	0.14	3,576	\$29.33	\$4.77	(\$24.56)
Commercial	RO	0.17	4,195	\$40.96	\$5.59	(\$35.37)
Commercial	RC	0.14	6,106	\$40.96	\$8.14	(\$32.82)
Multifamily	MH12	1.05	6,746	\$29.33	\$8.99	(\$20.34)
Commercial	RO	1.22	11,265	\$40.96	\$15.02	(\$25.94)
Commercial	SF6	0.94	40,007	\$40.96	\$53.34	\$12.38
Commercial	RC	1.93	70,649	\$40.96	\$94.20	\$53.24
Commercial	GC	9.69	116,712	\$40.96	\$155.62	\$114.66
Commercial	RC	18.84	164,939	\$40.96	\$219.92	\$178.96
Multifamily	MFA	7.15	232,705	\$29.33	\$310.27	\$280.94
Multifamily	MHP	9.91	233,436	\$29.33	\$311.25	\$281.92
Commercial	LI	19.59	778,523	\$40.96	\$1,038.03	\$997.07
Public	P	65.43	1,308,454	\$32.03	\$1,744.61	\$1,712.58
			Residential:	\$5.69	\$4.80	(\$0.89)

*These are estimated monthly bills

\$3,181,000 budget, divided by 200,000,000 SF of impervious area = \$0.016 per SF/yr.
Divide by 12 to calculate monthly bill.

Residential rate is based on average impervious area of 3,600 SF.

Grouped Impervious Area Approach

Customer Class	Monthly Rate
Single Family Property	\$5.69
Multifamily Property	\$29.33
Public Property	\$32.03
Manufacturing Property	\$38.19
Commercial Property	\$40.96

Proposed Rate Structure – Grouped Impervious Area

Customer Class	Monthly Rate	Approx. # of Customers	Approximate Annual Revenue
Single Family Property	\$9.34	15,372	\$1,715,515
Small NR (Less than 0.25 Acre)	\$30.00	604	\$224,688
Medium NR (0.25 to 1 Acre)	\$60.00	707	\$526,008
Large NR (1 to 5 Acres)	\$120.00	168	\$249,984
Very Large NR (Over 5 Acres)	\$240.00	178	\$529,728

NR is property NOT single family residential non-residential

Total: \$3,245,923

Phase-in Rate Adjustment Approach

Existing Rate Structure

Customer Class	Monthly Rate
Single Family Property	\$5.69
Multifamily Property	\$29.33
Public Property	\$32.03
Manufacturing Property	\$38.19
Commercial Property	\$40.96

Proposed Rate Structure – Grouped Imp. Area

Customer Class	Jan. 1, 2021	Jan. 1, 2022	Jan. 1, 2023	Jan. 1, 2024
Single Family Property	\$7.52	\$9.34		
Small NR (Less than 0.25 Acre)	\$30.00	-	-	-
Medium NR (0.25 to 1 Acre)	\$45.00	\$60.00	-	-
Large NR (1 to 5 Acres)	\$60.00	\$90.00	\$120.00	-
Very Large NR (Over 5 Acres)	\$60.00	\$120.00	\$180.00	\$240.00

New Stormwater Credit Concept

1. Credit concept based on documented inspection and maintenance of the stormwater detention facilities. Here are the basic concepts:
 - a. Customer must apply for the credit.
 - b. On an annual basis, the customer must document that they have inspected and maintained their on-site detention and conveyance facilities and that they are in good working order.
 - c. They would submit a brief report with photos, information on repairs and improvements, etc.
 - d. This will save the utility time and money by reducing their inspection workload and will ensure proper operation of stormwater facilities. Inspections are a requirement of the stormwater permit.
 - e. Credit would be one month of billing annually.

UFOC Recommendations

- Approve the Grouped Impervious Rate Method
- Approve the stormwater rate phase-in approach
- Approve the stormwater credit system approach
- Index stormwater rates to CPI beginning July 1, 2024 (after Phase-in)
- Consider providing \$10,000 of funding per each enterprise fund towards the Utility Rate Payer Assistance Program (URAP)
- Conduct rate refreshes every 5 years to ensure that rates are meeting the operating and capital needs of the stormwater utility

Questions?