



# STAFF REPORT

**Report To:** Board of Supervisors

**Meeting Date:** May 4, 2017

**Staff Contact:** Darren Schulz, Public Works Director

**Agenda Title:** For Possible Action: To direct staff to complete a Business Impact Statement and bring forth the changes to the municipal code to facilitate the Utility Finance Oversight Committee's proposed storm water rate plan (Darren Schulz, dschulz@carson.org).

**Staff Summary:** The Board of Supervisors will be presented with a storm water management program overview, a proposed 10-year capital improvement plan and a monthly rate structure recommended to fund the program. If fully implemented, the proposed rate plan would generate approximately \$1.8 million dollars each year in additional revenue that would support capital and operating expenses through a pay-as-you-go system that does not rely of debt financing. The Utility Finance Oversight Committee (Committee) met on March 28, 2017 to review a proposed storm water rate increase and to make recommendations to the Board of Supervisors. The Committee unanimously recommended a rate increase in the amount of 25% the first year, 35% the second year, and 35% the third year, effective FY2018, to support an improved citywide storm water program and to further the Committee's objective of meeting the goals of the financial policies.

**Agenda Action:** Formal Action/Motion

**Time Requested:** 45 minutes

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## **Proposed Motion**

Move to direct staff to complete a Business Impact Statement and bring forth the changes to the municipal code to facilitate the Utility Finance Oversight Committee's proposed storm water rate plan.

## **Board's Strategic Goal**

Sustainable Infrastructure

## **Previous Action**

None

## **Background/Issues & Analysis**

N/A

## **Applicable Statute, Code, Policy, Rule or Regulation**

N/A

## **Financial Information**

Is there a fiscal impact?  Yes  No

If yes, account name/number: Stormwater Drainage / Fund 505

Is it currently budgeted?  Yes  No

Explanation of Fiscal Impact:

The proposed increases would generate approximately \$350,000 additional revenue in FY 18, \$960,000 additional revenue in FY19 and \$1,800,000 in FY20 and each fiscal year there after.

**Recommended Monthly Rates**

Classification	Current	FY18	FY19	FY20
Single Family	\$ 4.38	\$ 5.48	\$ 7.40	\$ 9.99
Multi-family	\$ 22.56	\$ 28.20	\$ 38.07	\$ 51.39
Public Property	\$ 24.64	\$ 30.80	\$ 41.58	\$ 56.13
Manufacturing	\$ 29.38	\$ 36.73	\$ 49.59	\$ 66.95
Commercial	\$ 31.51	\$ 39.39	\$ 53.18	\$ 71.79

**Alternatives**

Do not accept or direct staff to examine other alternatives.

**Board Action Taken:**

Motion: \_\_\_\_\_

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_

Aye/Nay

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Vote Recorded By)

# CARSON CITY



## STORM WATER MANAGEMENT PROGRAM

May 4, 2017

Program Overview  
and  
Rate Proposal

**David Bruketta**  
Utility Manager

**Darren Schulz, PE**  
Director of Public Works

**Robb Fellows, PE**  
Stormwater Engineer





# Outline

- Current Program
  - Timeline
  - Service Area
  - Components of the program
  - Expenditures by program
  
- Proposed Program
  - Strategic objectives
  - Typical program costs
  - Proposed Capital Improvement Plans
  - Proposed rates
  - Summary





# History





# 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

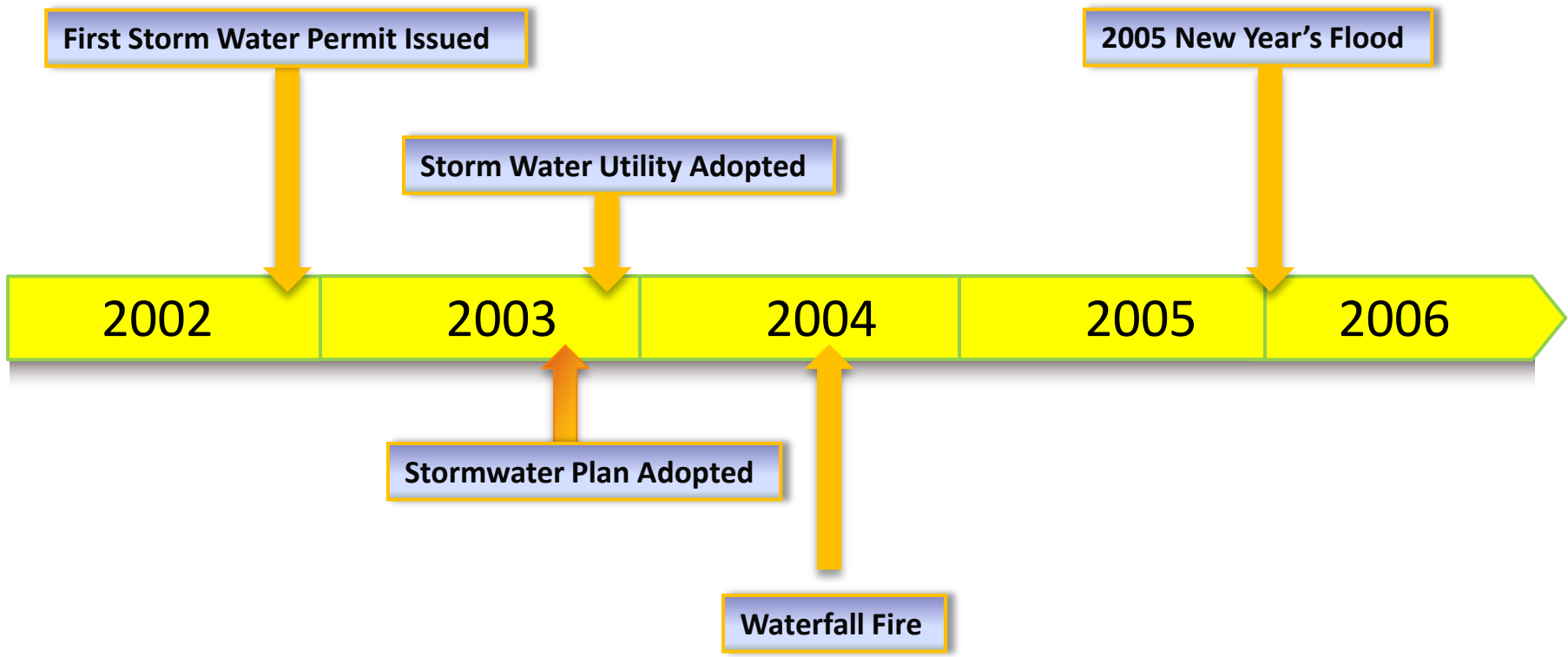
### Community Rating System (CRS)

- 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







Combs Canyon Basins Completed

Flood Damage Recovery Completed

Carson River Watershed Regional  
Floodplain Management Plan

FEMA Review of CRS

2007

2008

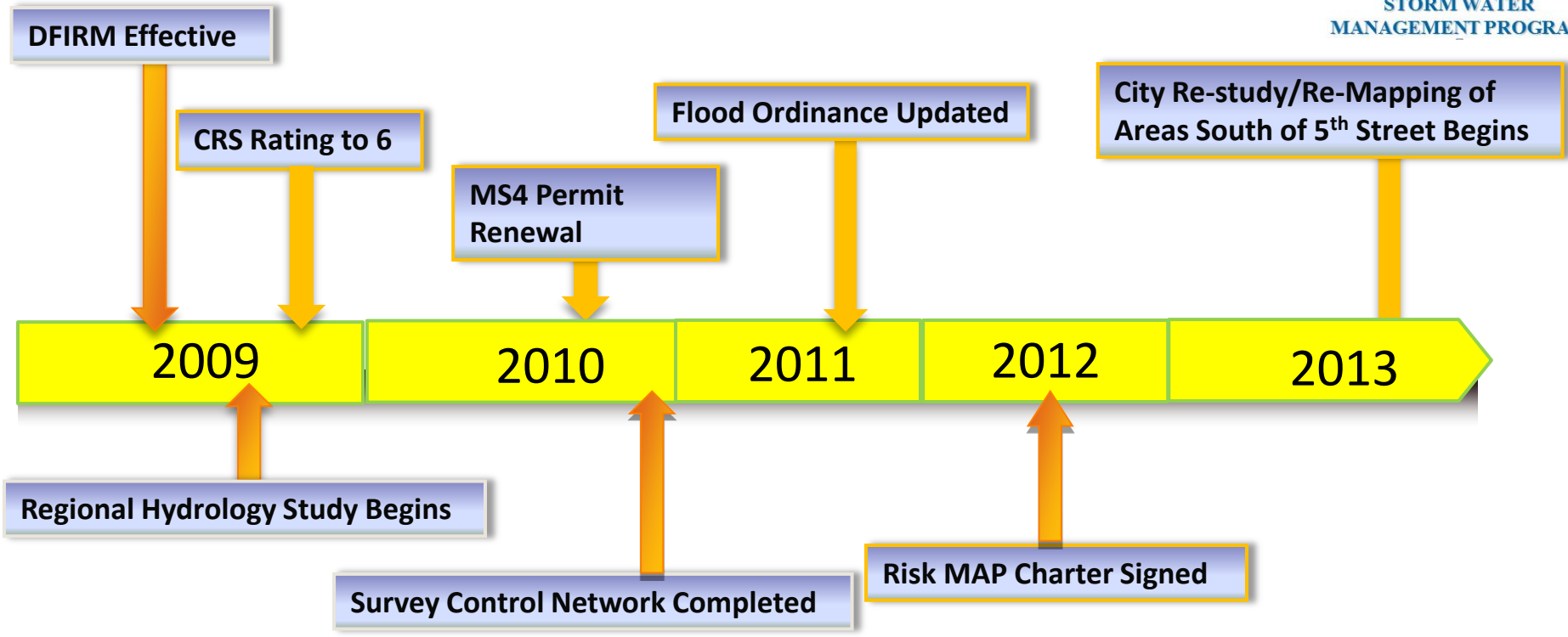
Eagle Creek Basins Completed

FEMA Re-Study/Re-Mapping of Vice,  
Ash, and Kings Watersheds Begins

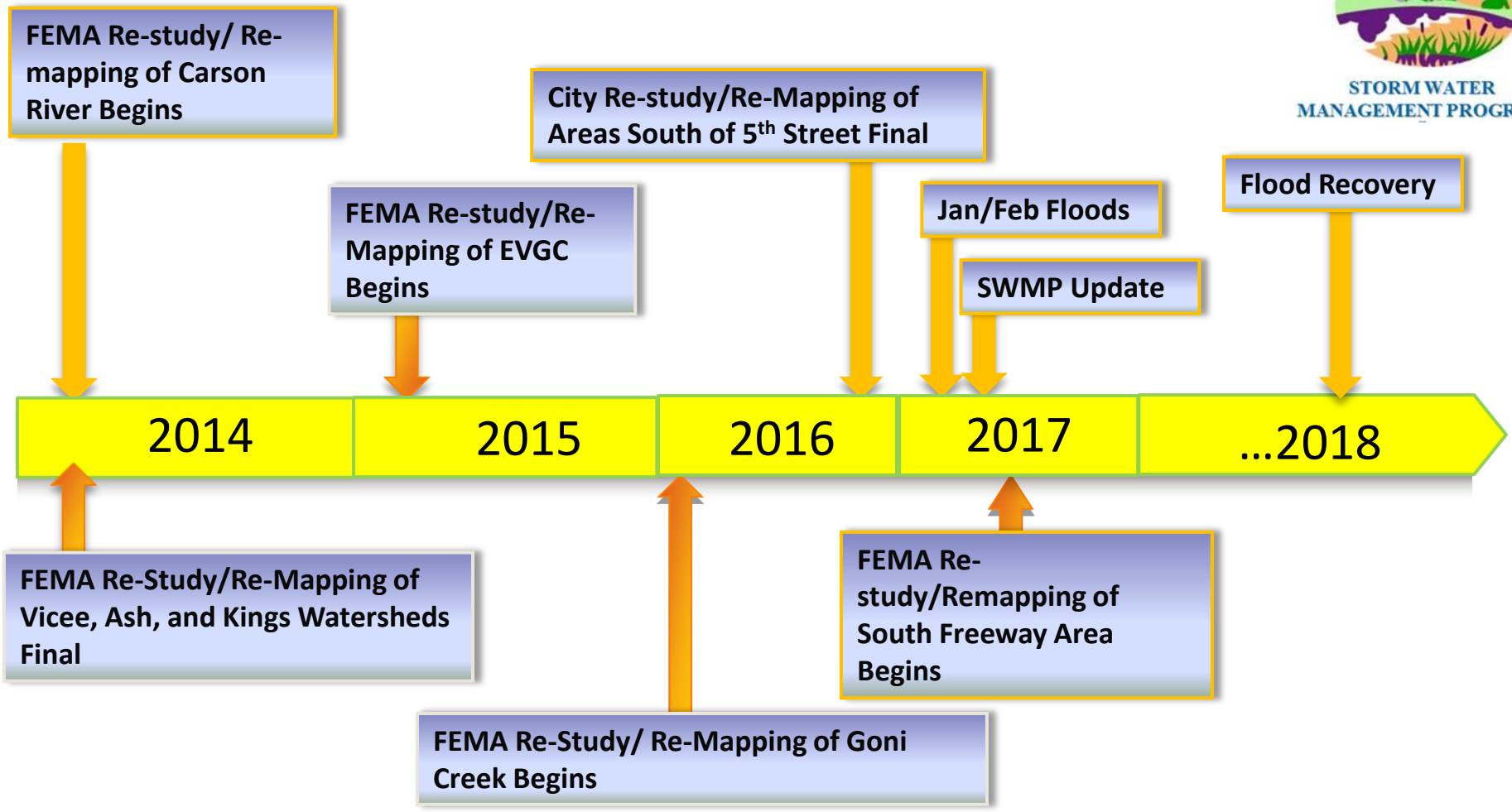


FEMA: Federal Emergency Management Agency  
CRS: Community Rating System

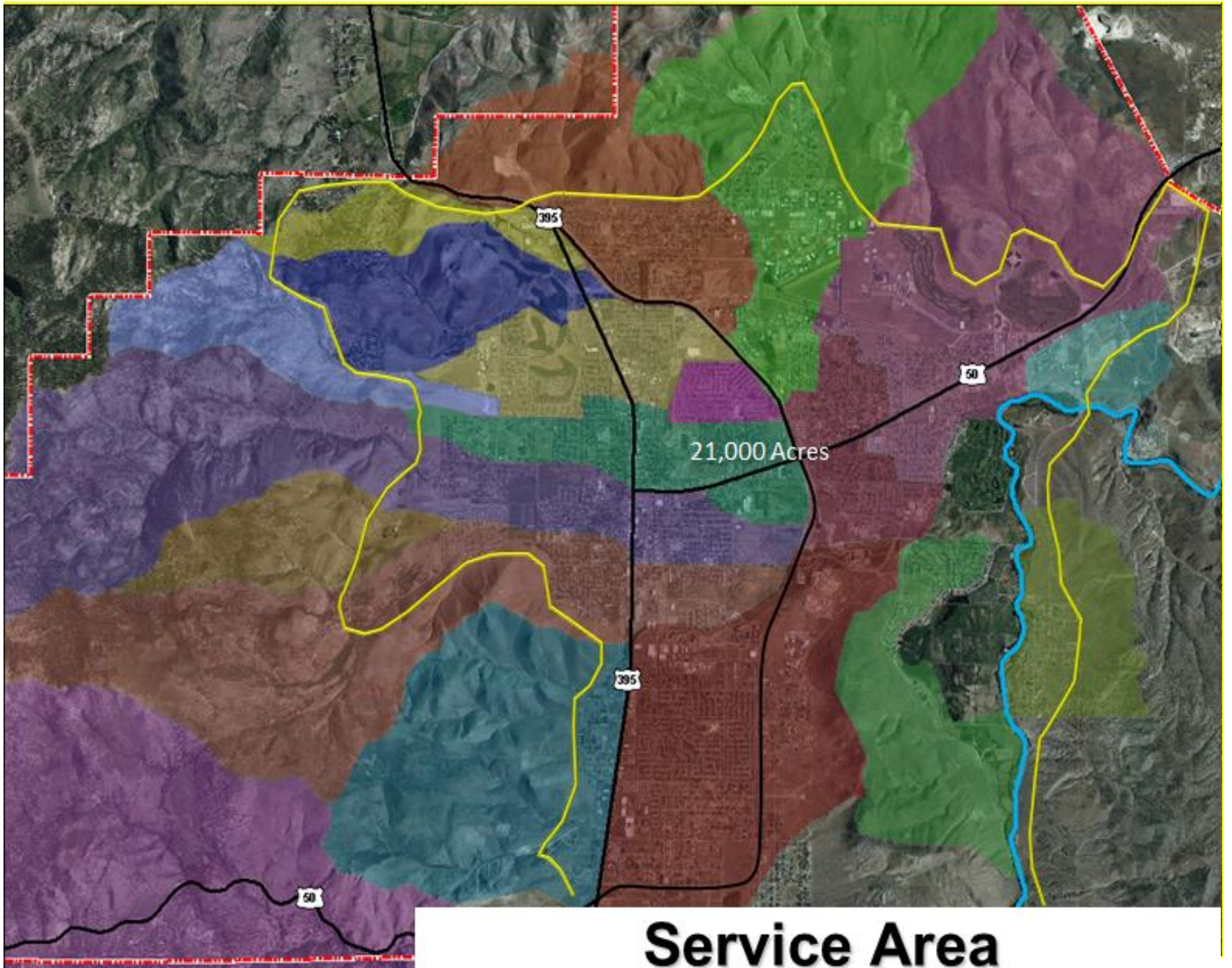




**DFIRM:** Digital Flood Insurance Rate Map    **MS4:** Municipal Separate Storm Sewer System  
**FIRMs:** Flood Insurance Rate Maps  
**Risk MAP:** Risk Mapping, Assessment and Planning



**DFIRM:** Digital Flood Insurance Rate Map    **EVGC:** Eagle Valley Golf Course  
**FIRMs:** Flood Insurance Rate Maps        **SWMP:** Storm Water Management Program  
**Risk MAP:** Risk Mapping, Assessment and Planning    **LID:** Low Impact Development



**Service Area**

# Management Program Components



## 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

## Capital Improvements

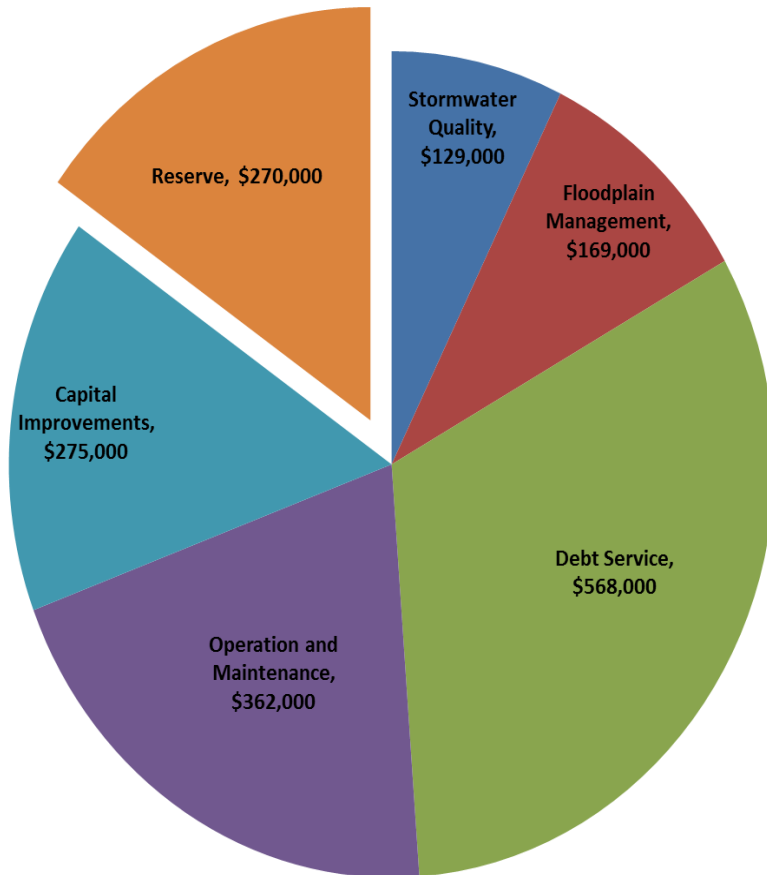
- System improvements (new and upgrades)
- Culverts, detention basins, ditches, etc.



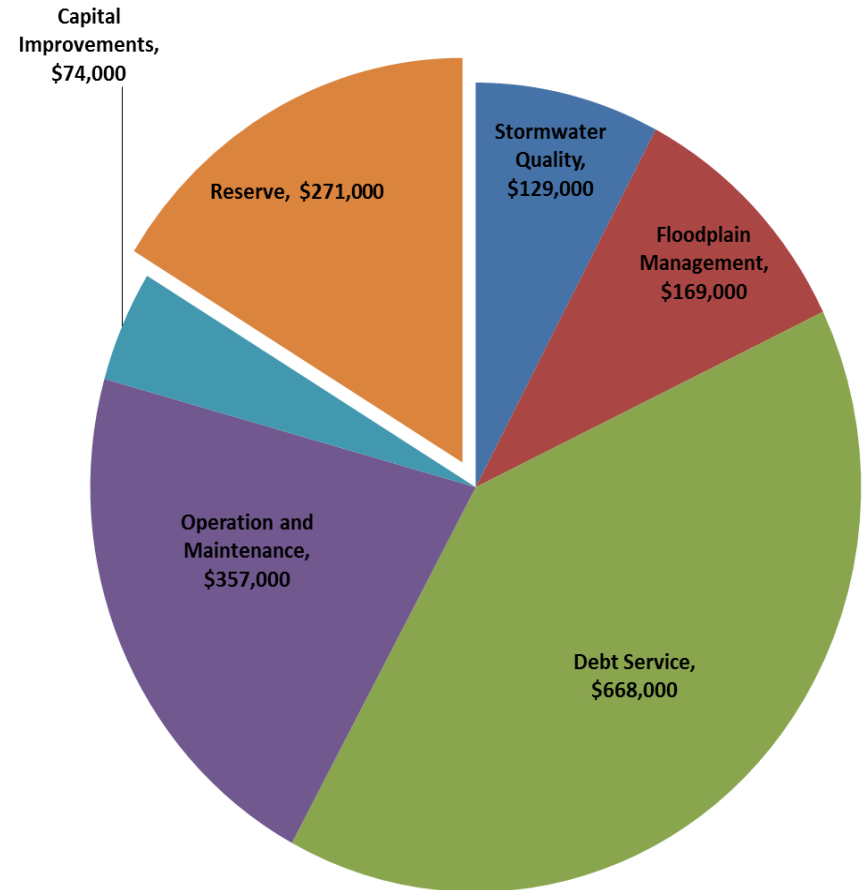


# Estimated Expenditures Without Rate Increase

FY2017

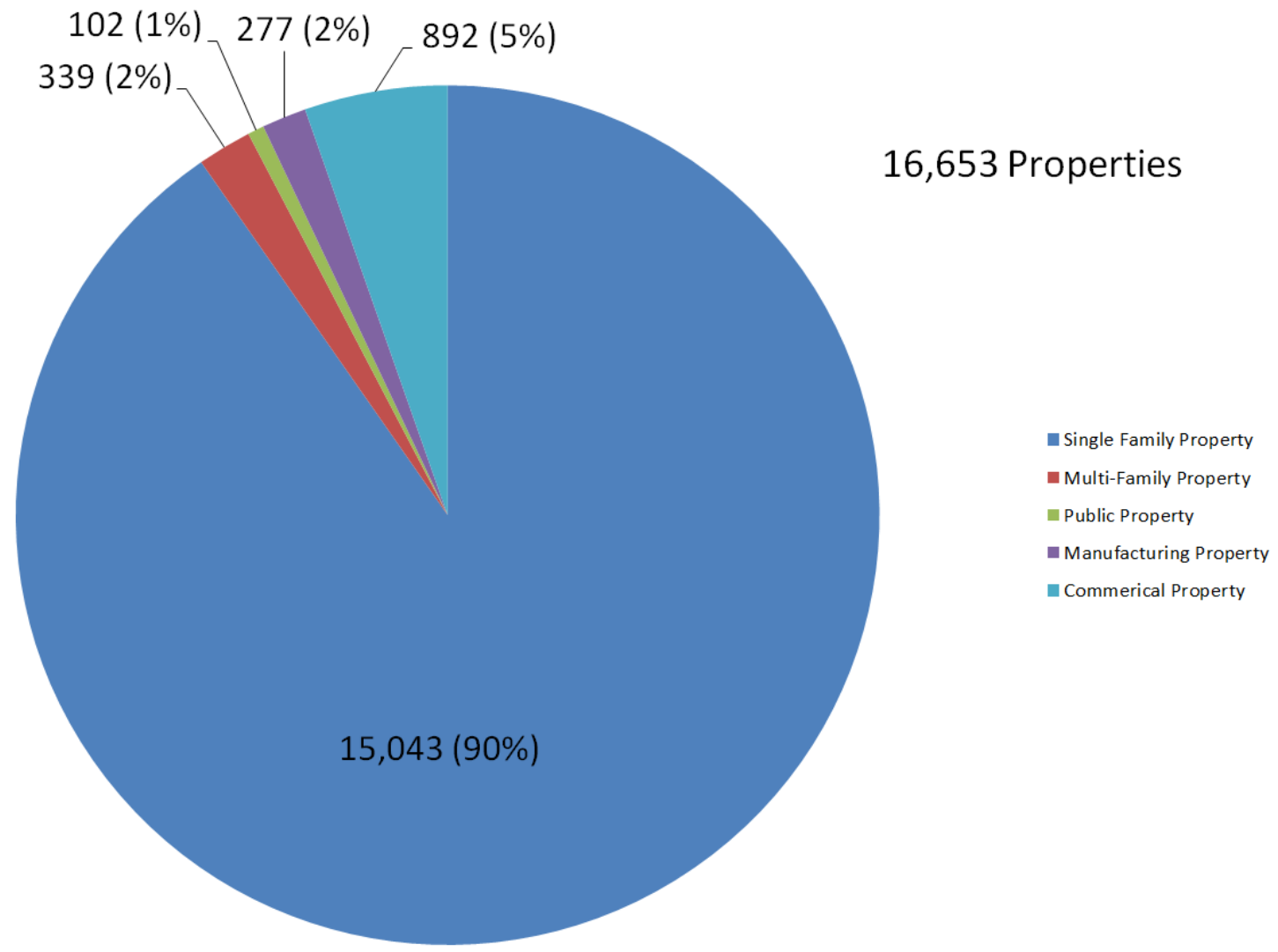


Proposed FY 2018 without Rate Increase





# Number of Properties by Classification

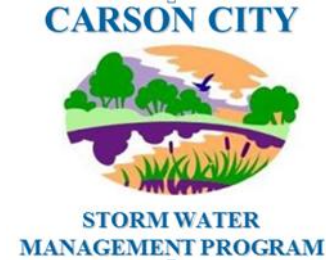




# Rate Review



# Why



OUR STRATEGIC PLAN

## Strategic Goals

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### Economic Development

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*Cultivate a vibrant, diverse, and dynamic economy that attracts and retains businesses and a skilled workforce.*

### Efficient Government

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*Provide our community with efficient services in a transparent and financially responsible manner.*

### Organizational Culture

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*Foster innovation, productivity, and professional growth through a cohesive, ethical, and positive work environment.*

### Quality of Life and Community

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*Promote educational, cultural, and recreational opportunities that contribute to the health and well-being of our community.*

### Safety

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*Ensure a safe community through proactive and responsive protection of life and property.*

### Sustainable Infrastructure

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*Develop and maintain a sustainable public infrastructure to meet the current and future needs of our community.*

STRATEGIC DIRECTION

## Sustainable Infrastructure

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*Develop and maintain a sustainable public infrastructure to meet the current and future needs of our community.*

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### OBJECTIVES & STRATEGIES

#### Maximize City Asset Life and Utility

- Manage the City's assets and capital investments in a way that maximizes their productivity and value.
- Create an executable funding plan for City capital, including equipment, facilities, fleet, infrastructure, and other City assets.

#### Meet Community Infrastructure Needs

- Seek to maintain the street system at the established level of service (LOS).
- Encourage growth within existing urban boundaries and infill in existing developed areas to prevent "sprawl" and higher infrastructure maintenance costs.
- Ensure a safe and adequate infrastructure that meets current and future community needs.
- Construct, staff, and equip one new fire station to serve the north and west portions of Carson City as soon as economically feasible.
- Provide a conveyance and drainage system to maintain a controlled flow of storm water and clean potable water and treatment of wastewater, including required maintenance and replacement of equipment and facilities.





# Typical Cost of Storm Water Management Programs

(\$/acre)

Beginning (\$27/acre)  
2004

Current (\$64/acre)

Proposed (\$150/acre)

Incidental  
\$15-\$30

Minimum  
\$30-\$60

Moderate  
\$60-\$100

Improved  
\$100-\$150

Advanced  
\$150 +

- Regulations
- Reactive maintenance

- Add:
- Maintenance
  - Inspection
  - Staff
  - Erosion control

- Add:
- Maintenance
  - Levels of service
  - Inspection
  - Planning
  - Minor capital
  - Capability upgrades

- Add:
- System maintenance
  - Master planning
  - Regional treatment
  - Water quality
  - Data collection
  - Planning
  - Program control

- Add:
- Advanced system maintenance
  - Quality facilities
  - Advanced flood control
  - Advanced levels of service for maintenance
  - Aesthetics
  - Public programs

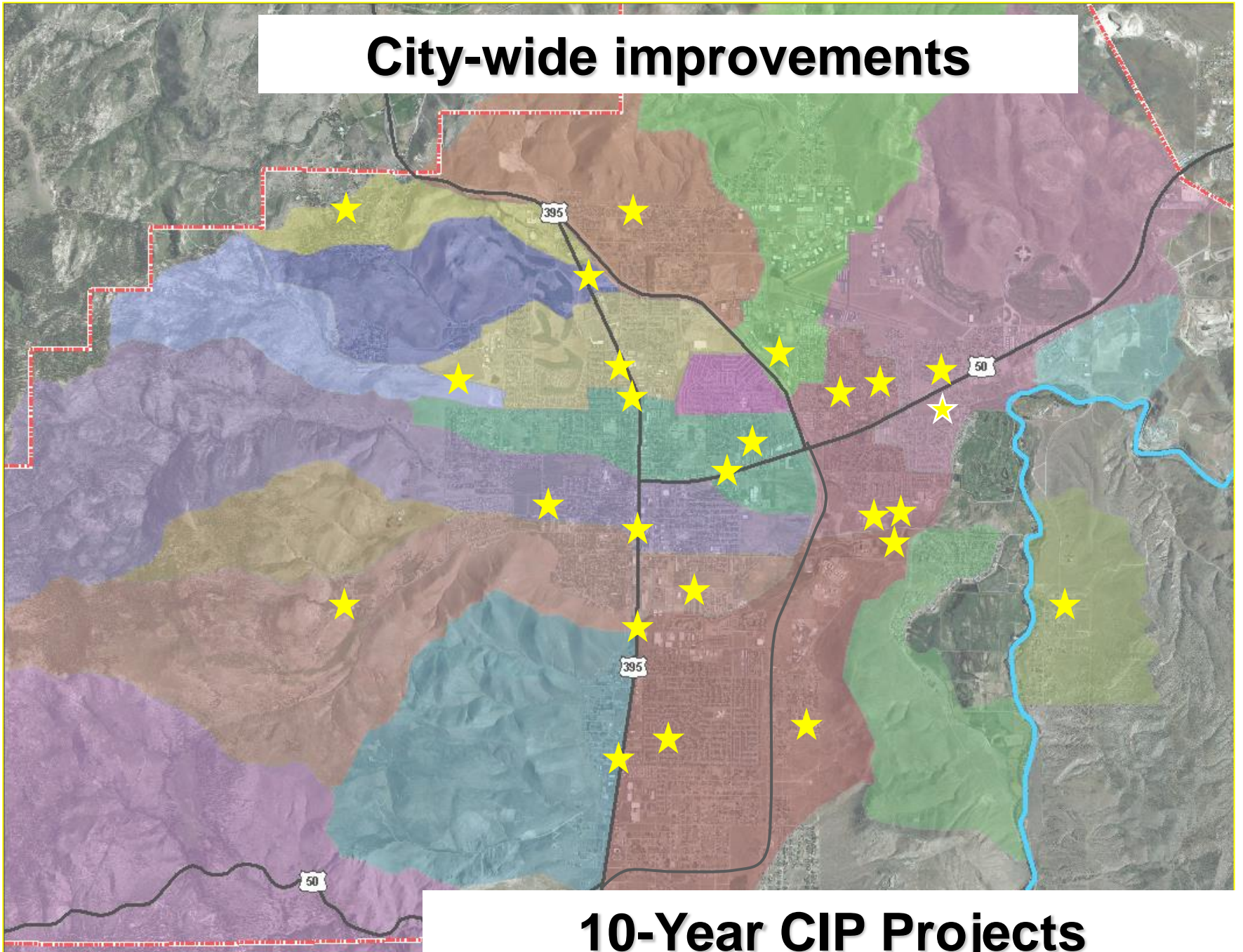


# 10 year Capital Improvement Plan (with proposed rate increase)

	Project Name	Estimated Expense
1	Lakeview SD Improvements	\$ 250,000
2	Kings Canyon Channel Maintenance Project (Roop to Saliman)	110,000
3	Kings Canyon Road Culvert Upgrade (at Creek Crossing)	90,000
4	Carson Street SD Improvements (Fairview to Clearview)	450,000
5	Carson Street SD Improvements (5th to Stewart)	2,000,000
6	Minor SD Improvements	500,000
7	Nye/N. Carson Steet Channel Berms	85,000
8	Flood Emergency Equipment	450,000
9	Anderson Ranch Access and SD Improvements	100,000
10	SD Fleet	1,089,000
11	Lower Kings Canyon Channel Restoration Project	400,000
12	Lower Goni Wash SD Improvements	115,000
13	Airport Road SD Improvements (HWY 50 to Sherman)	350,000
14	Rand Avenue SD Improvements (William to Rand Ct)	200,000
15	Vicee Watershed Access Management	150,000
16	Carson Street SD Improvements (Stewart to Rhodes)	950,000
17	Carmine Street SD Improvements (N. Lompa to Bunch Way)	600,000
18	Panamint & Merrimac SD Improvements	150,000
19	Sean Drive SD Improvements (Baker to Gillis Way)	120,000
20	Carson Street SD Improvements (N. Carson Street to Nye)	450,000
21	Empire System SD Improvements (Gordon Street to Morgan Mill)	1,100,000
	<b>Totals</b>	<b>\$ 9,709,000</b>

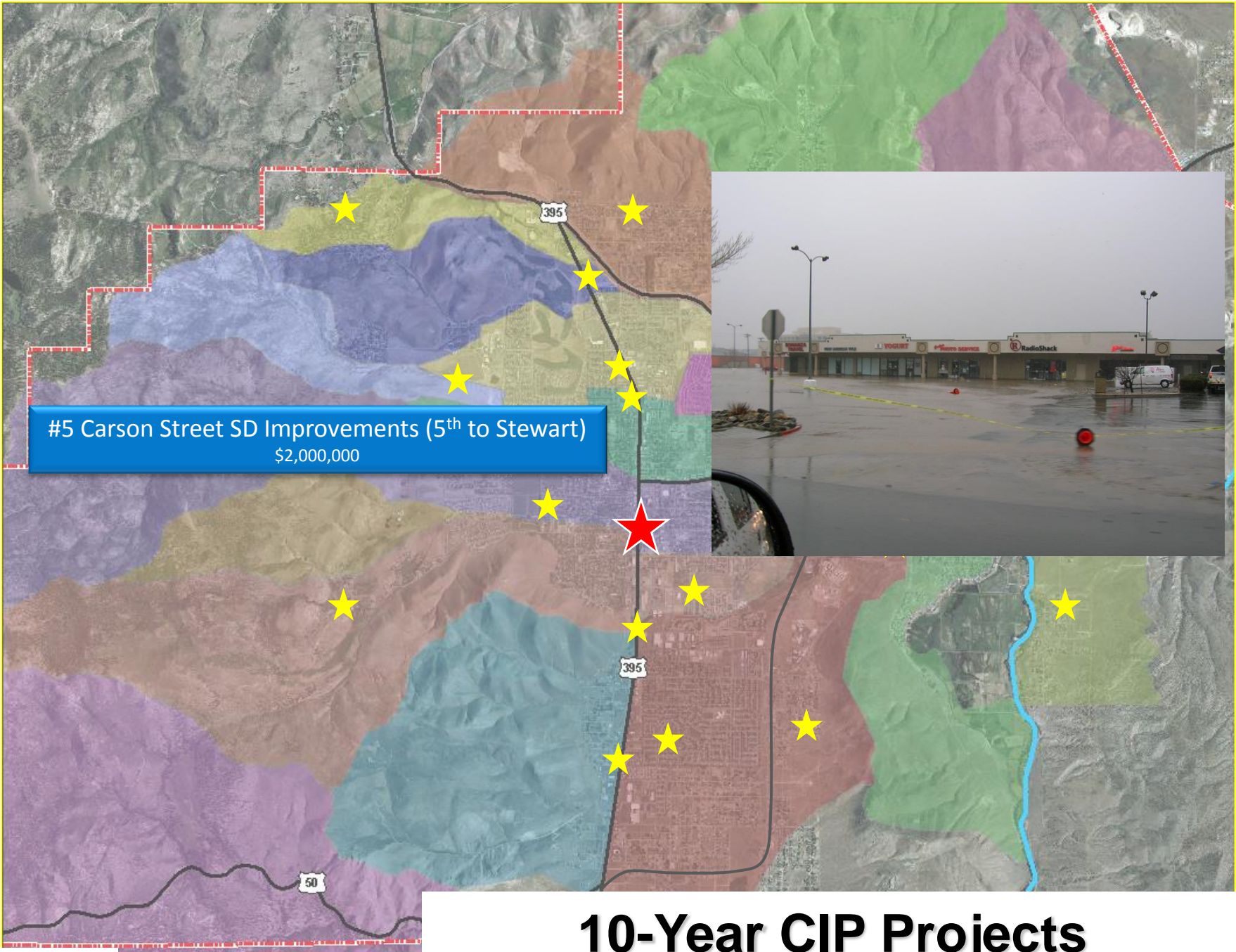
SD = Storm Drain

# City-wide improvements



**10-Year CIP Projects**

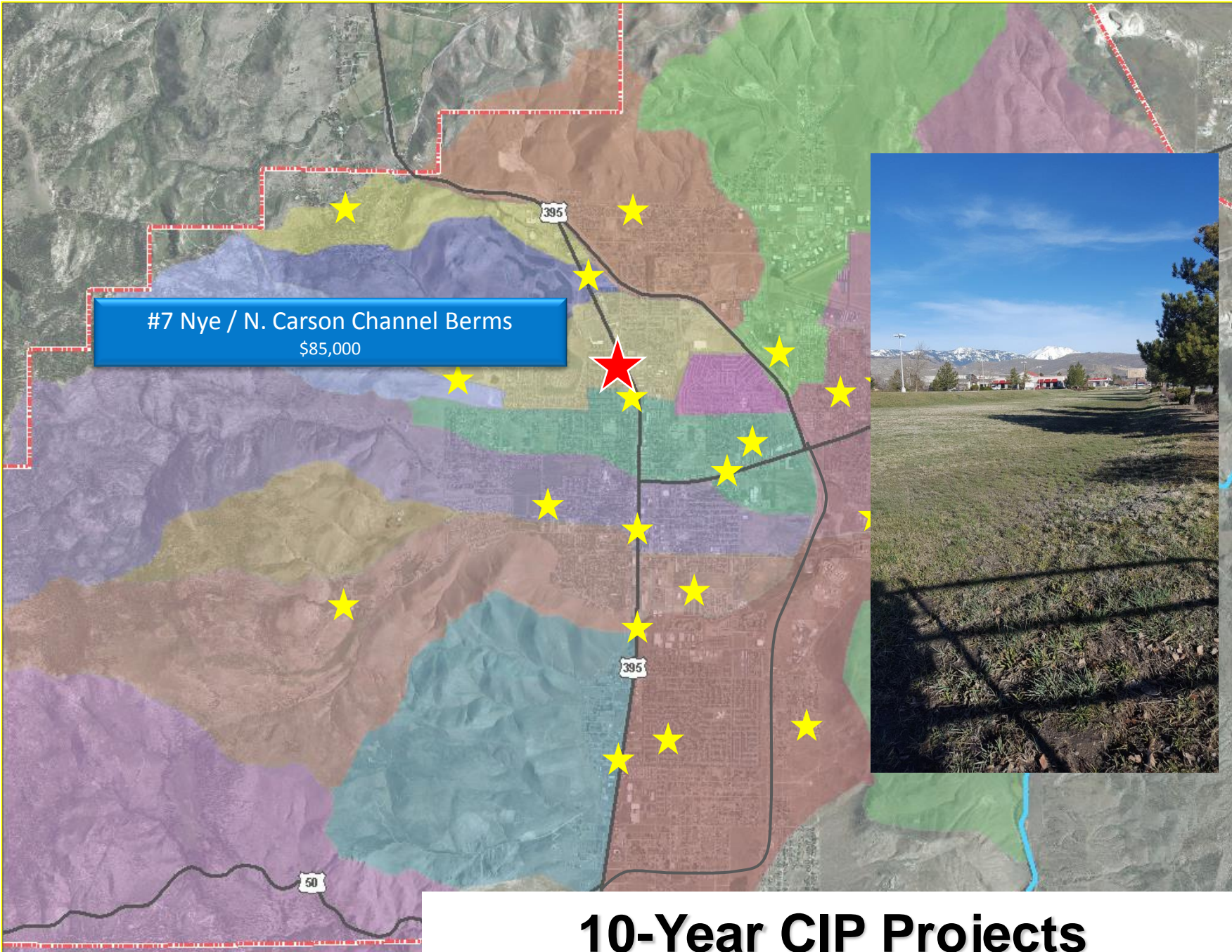




#5 Carson Street SD Improvements (5<sup>th</sup> to Stewart)  
\$2,000,000

# 10-Year CIP Projects

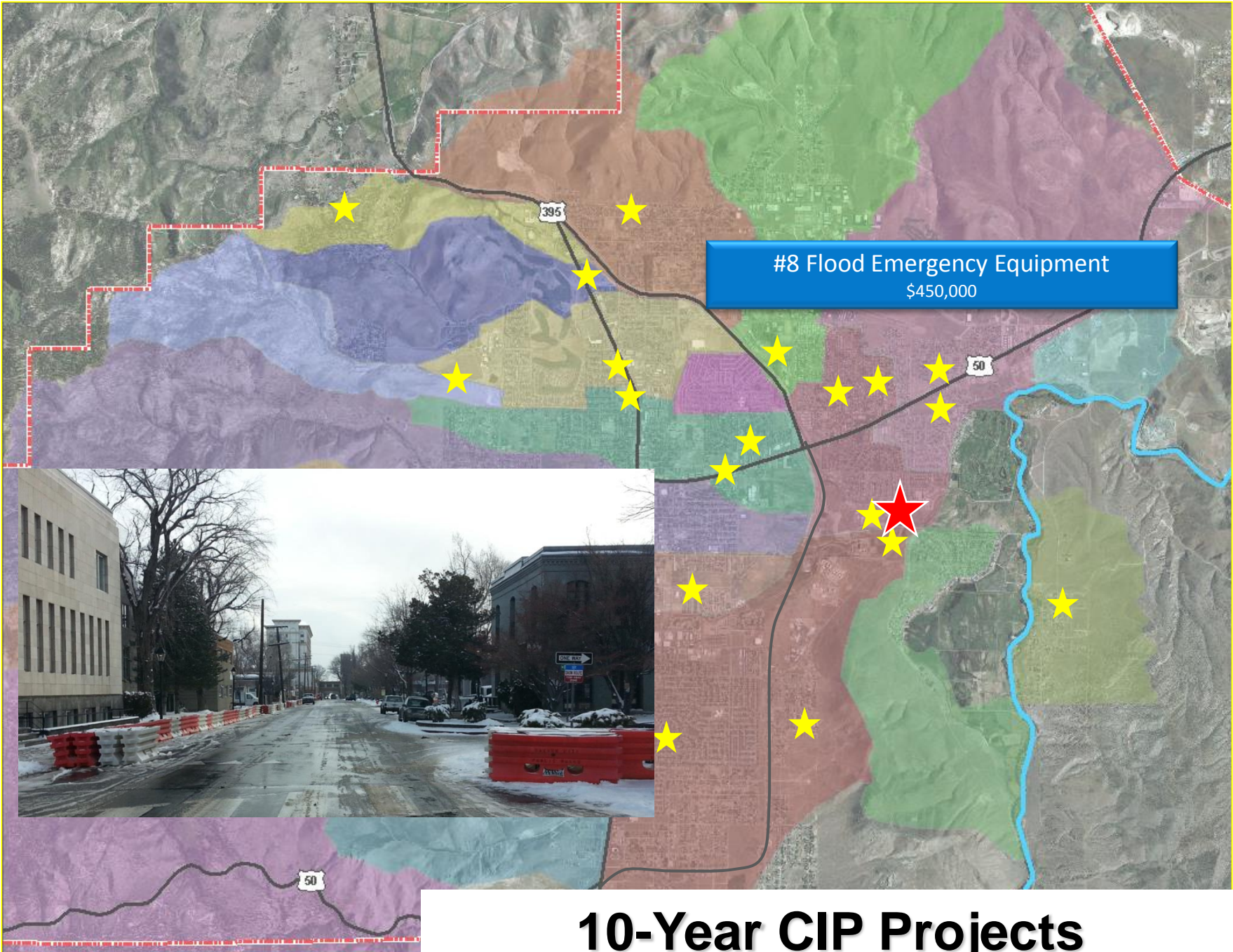




#7 Nye / N. Carson Channel Berms  
\$85,000

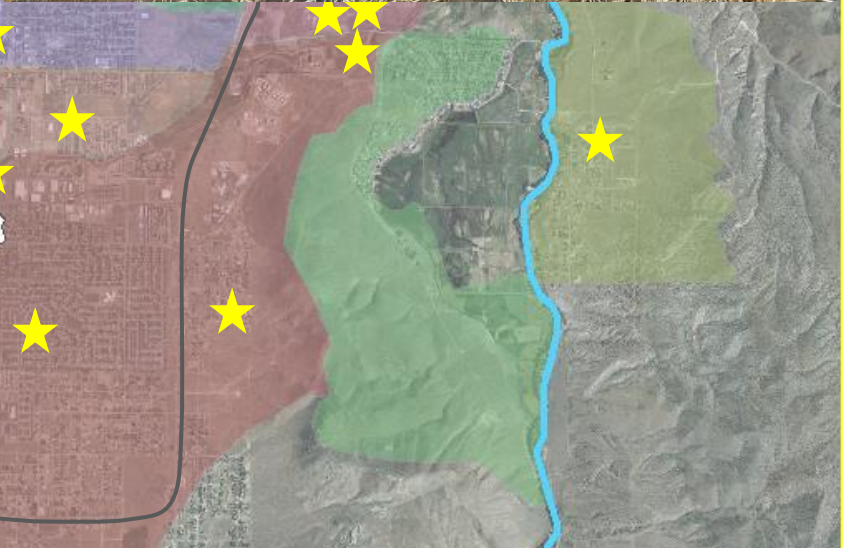
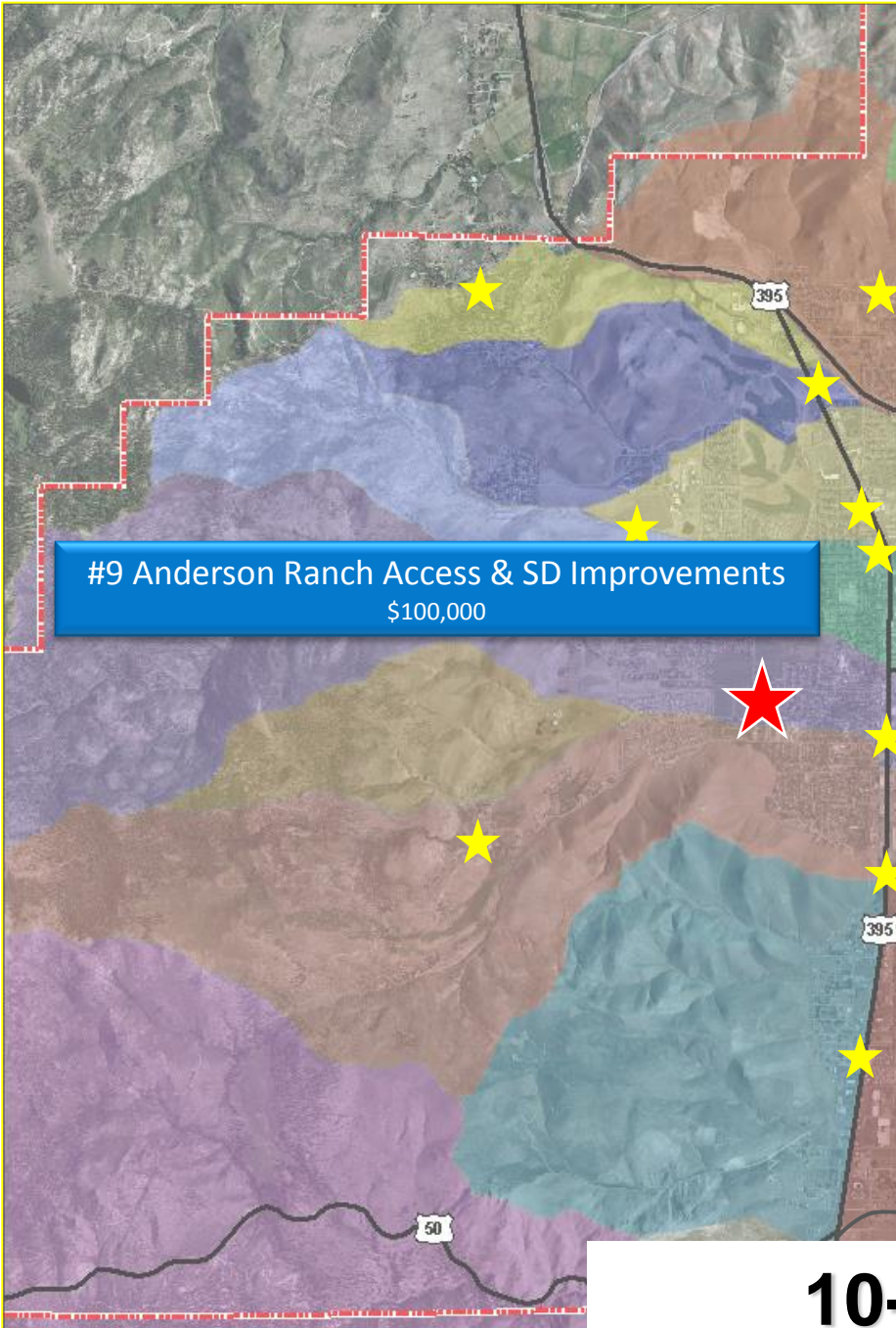
# 10-Year CIP Projects





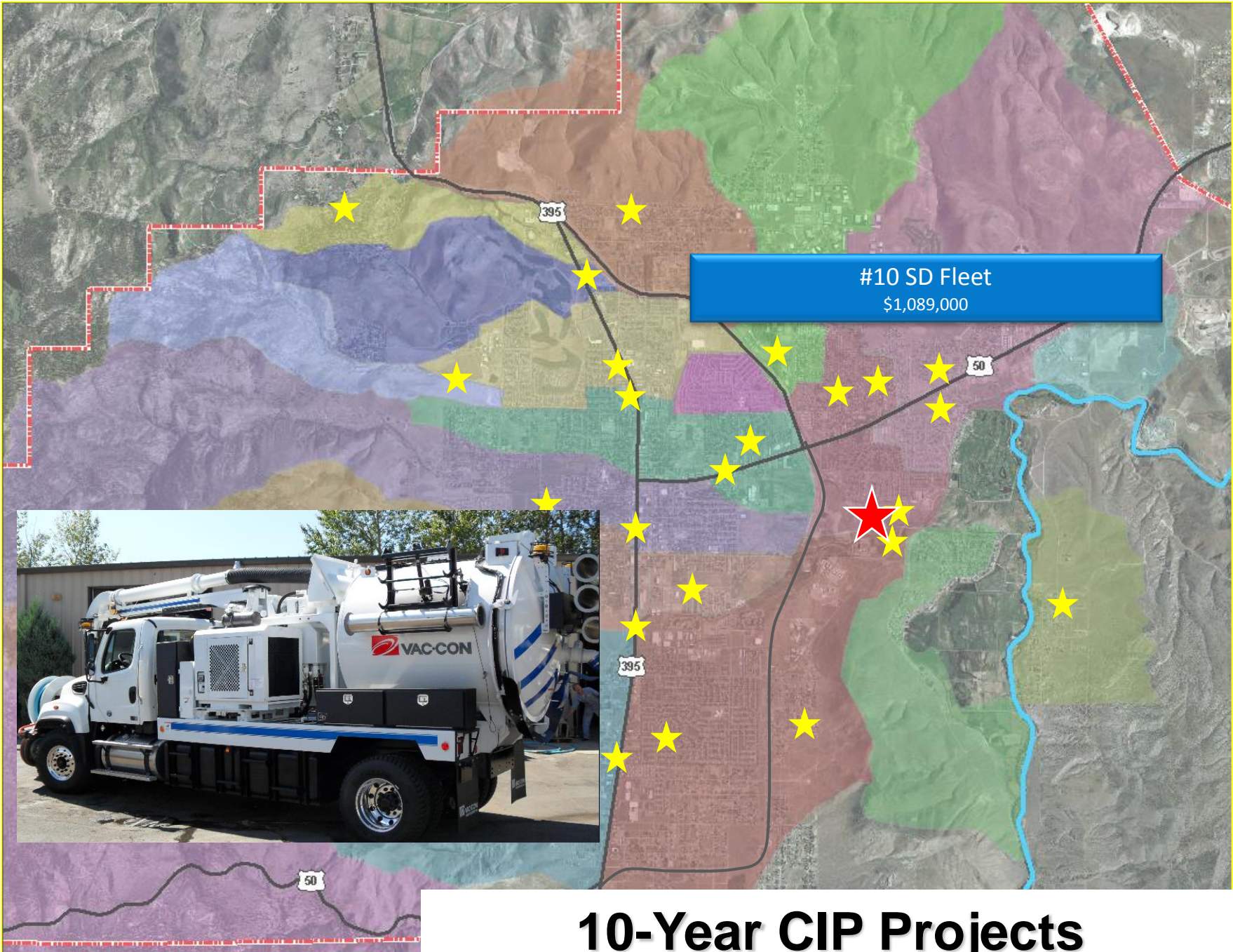
# 10-Year CIP Projects





# 10-Year CIP Projects

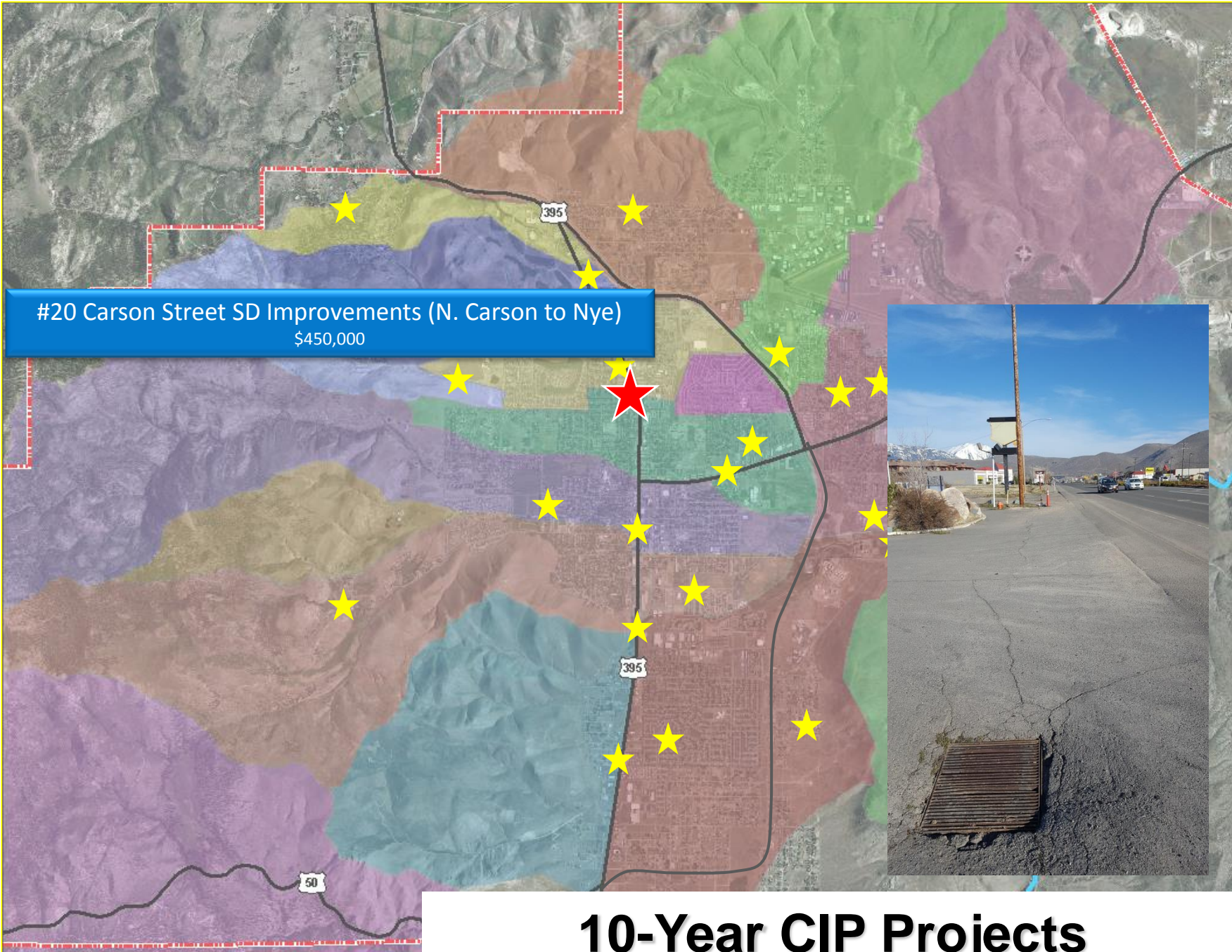




#10 SD Fleet  
\$1,089,000

# 10-Year CIP Projects





#20 Carson Street SD Improvements (N. Carson to Nye)  
\$450,000



# 10-Year CIP Projects



# Proposed Rates

	Monthly Rates			
		Recommended		
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Single Family	\$ 4.38	\$ 5.48	\$ 7.40	\$ 9.99
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FY: Fiscal Year  
Fiscal Year: July 1 – June 30



# Estimated Annual Revenue by fiscal year

	<b>FY17 (base yr)</b>	<b>FY18</b>	<b>FY19</b>	<b>FY20</b>
Annual revenue	\$ 1,396,316	\$ 1,745,395	\$ 2,356,283	\$ 3,180,982
Annual revenue increase (comp to FY17)		\$ 349,079	\$ 959,967	\$ 1,784,666
Available to Operating (20%)		\$ 69,816	\$ 191,993	\$ 356,933
Available to Capital (80%)		\$ 279,263	\$ 767,974	\$ 1,427,733



## Summary of Proposed Rate Plan

### Existing Rate Plan

- ~\$1.4M annually
- Supports “moderate program”
- No capital improvements
- Not a self sustaining enterprise fund

### Proposed Rate Plan

- ~\$1.8M additional after phase in
- Supports “improved program”
- Supports 10 yr CIP and operations
- Supports city wide improvements
- Pay-as-you-go plan – doesn’t rely on bonds







# QUESTIONS ?

