



**City of Boulder**  
**City Council Study Session**

**2015–2020**  
**Capital Improvement Program**

August 13, 2013

# CIP Video

# Agenda

- Introduction
- Financial Highlights
- Utilities Division
- Next Steps
- Council Discussion

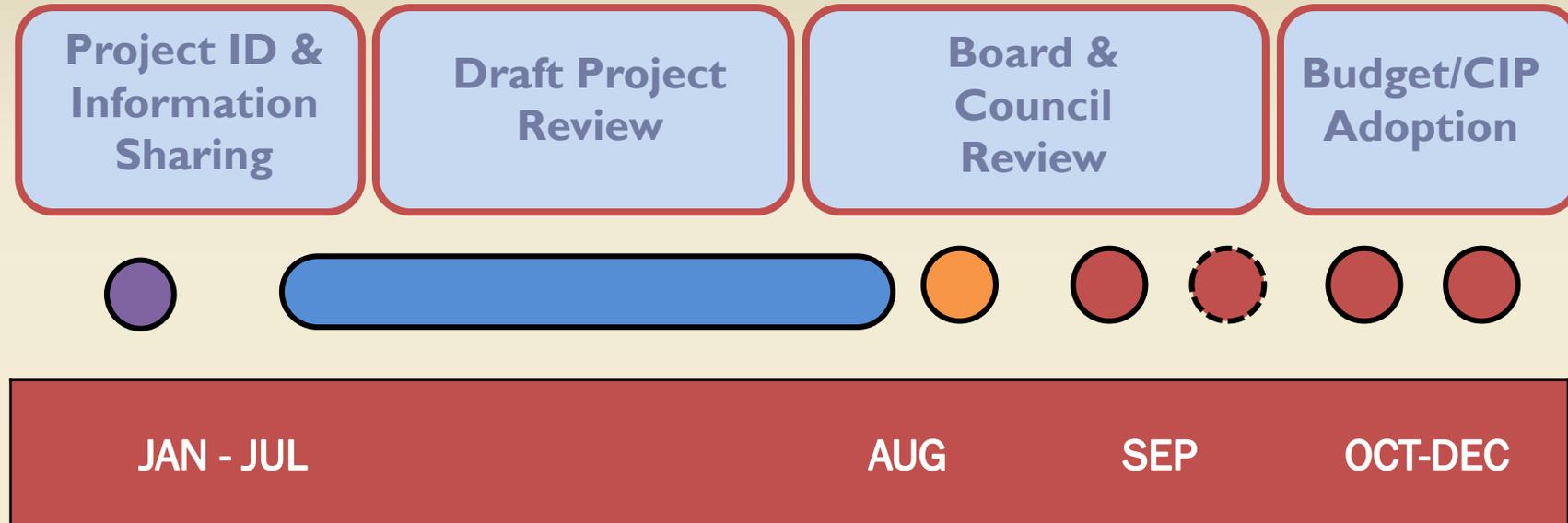
# Introduction

- The CIP is the city's guide to its investment in infrastructure and the community
- The CIP provides a detailed description of projects and project funding
- The funding plan for the first year of the 2015 – 2020 CIP represents the capital part of the 2015 overall budget

# Community Sustainability Framework



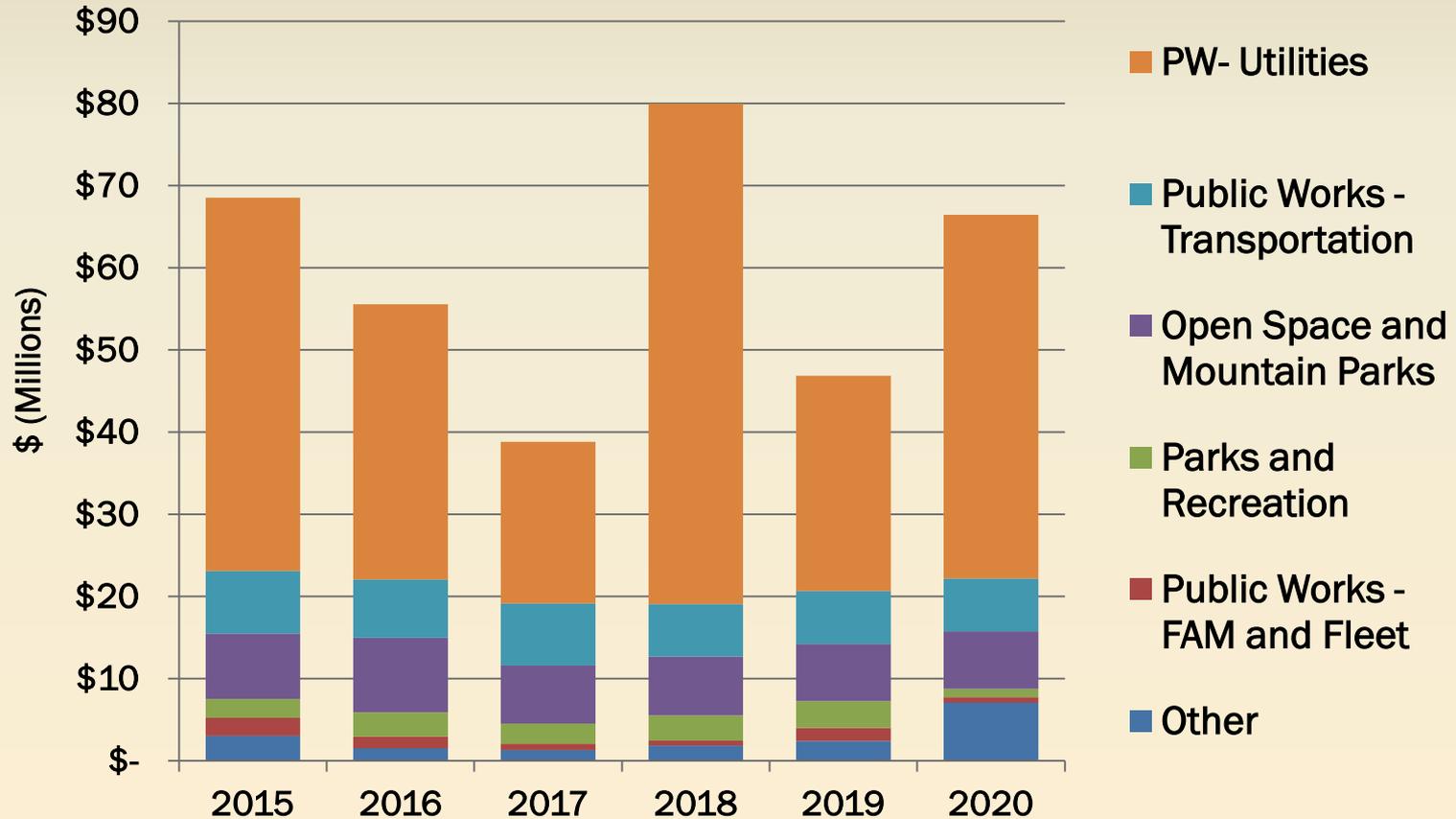
# Process - Boards



-  CIP Information Sharing Meeting
-  Submission and Review of Projects
-  Study Session, Capital Improvement Program (CIP)
-  Council Study Session and Public Hearings on Recommended Budget and its implementing ordinances

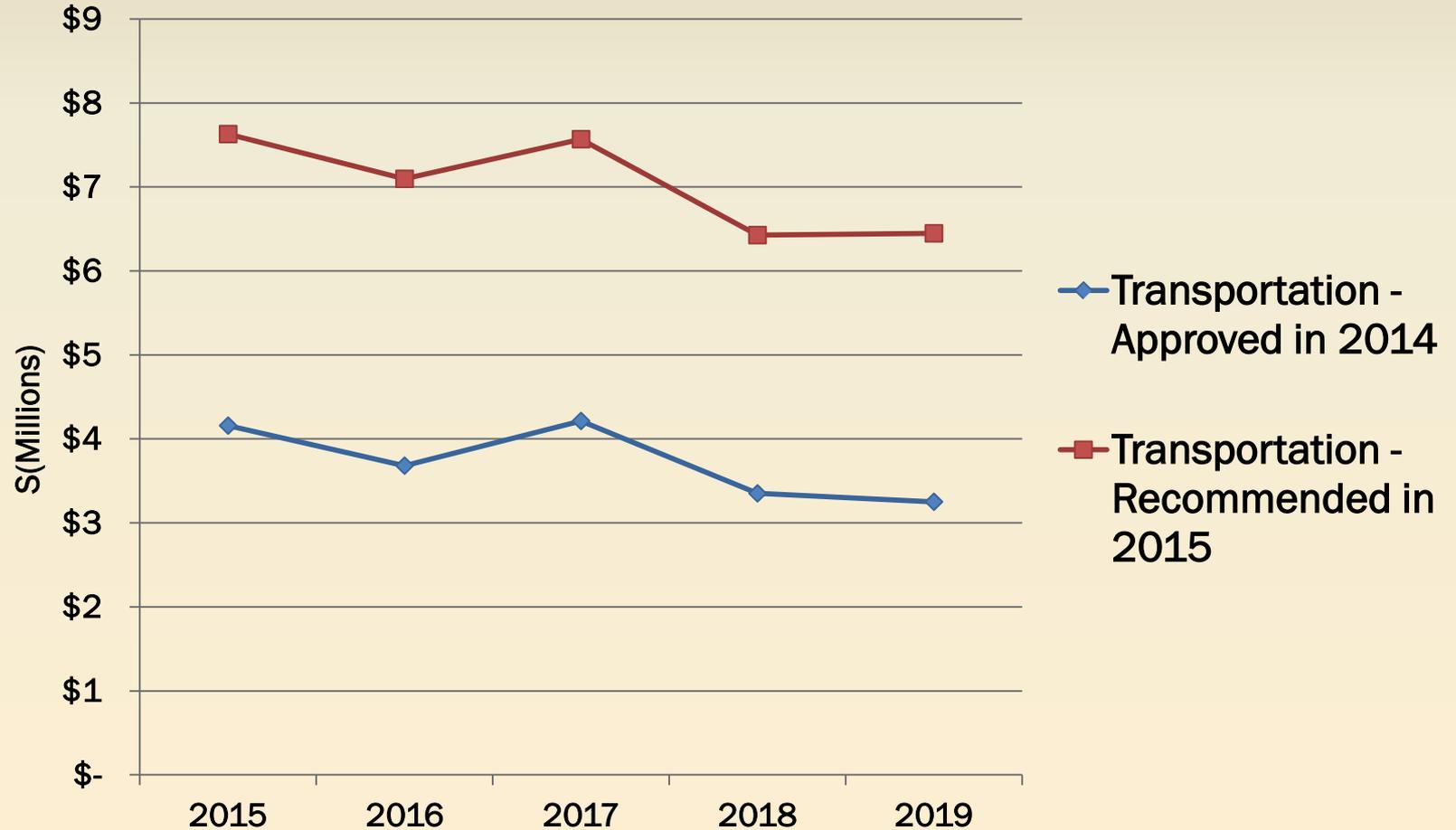
# CIP Funding

## 2015-2020 CIP Funding by Department



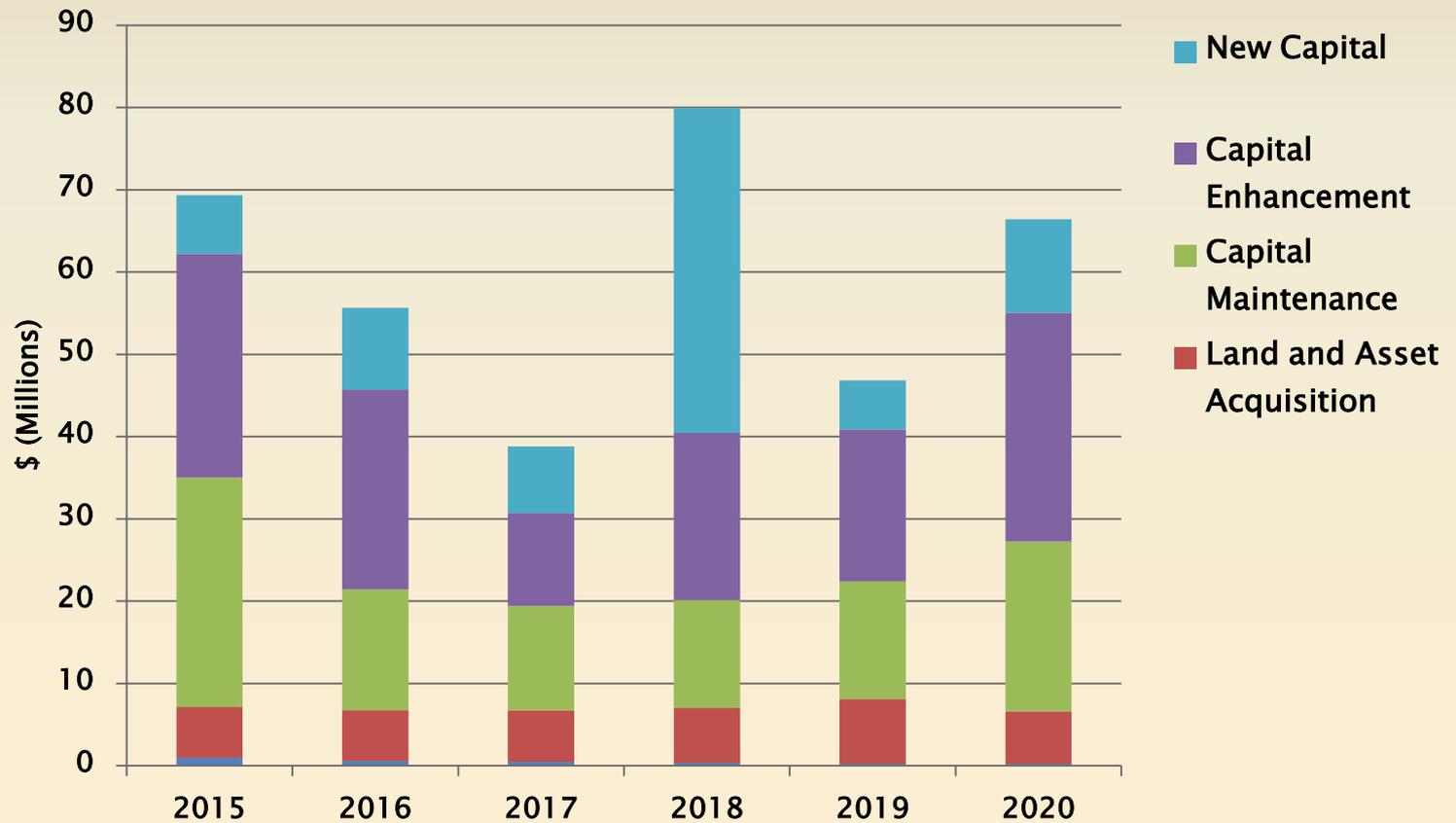
# CIP Funding

## Change in Transportation CIP Funding



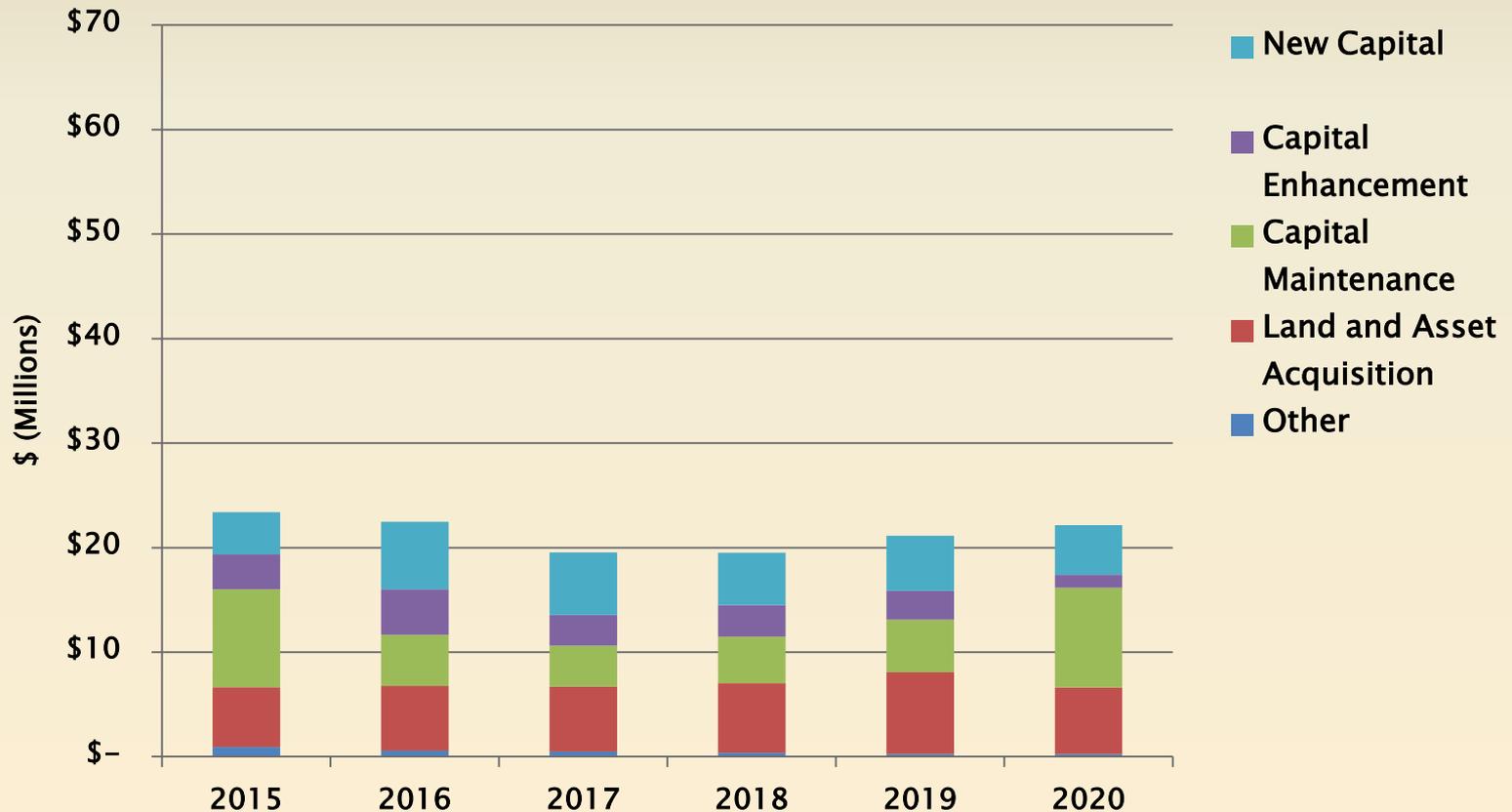
# CIP Funding by Project Categories

## 2015-2020 CIP Funding by Project Category



# CIP Funding by Project Categories

## 2015-2020 CIP Funding by Project Category without Utilities

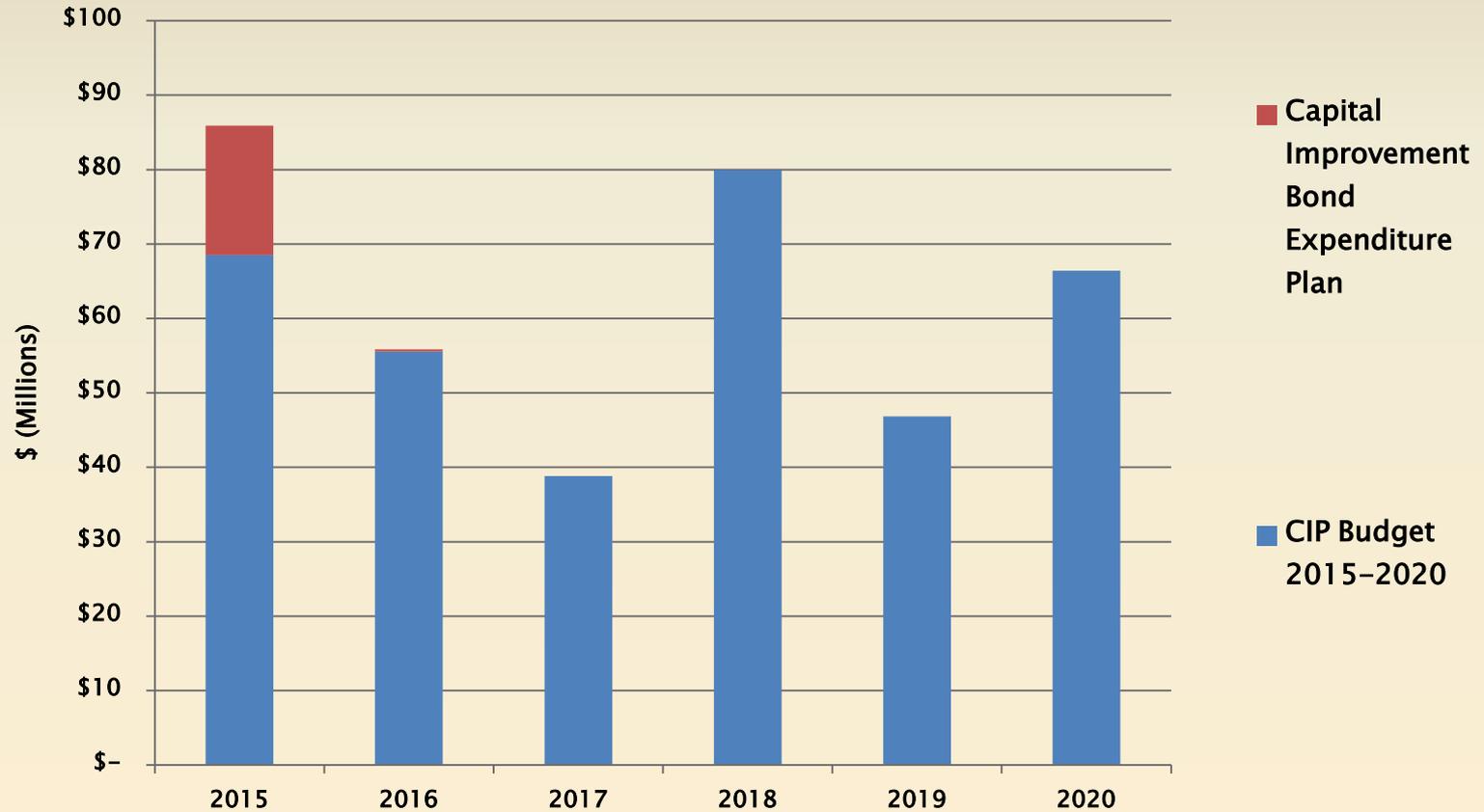


# Highlights - Capital Improvement Bond

- Over \$50 Million
  - 11% in Design & Planning
  - 23% are under construction
  - 66% complete
- 61% of total funding has been spent as of June 30, 2014
- Additional 23% encumbered as of June 30, 2014.

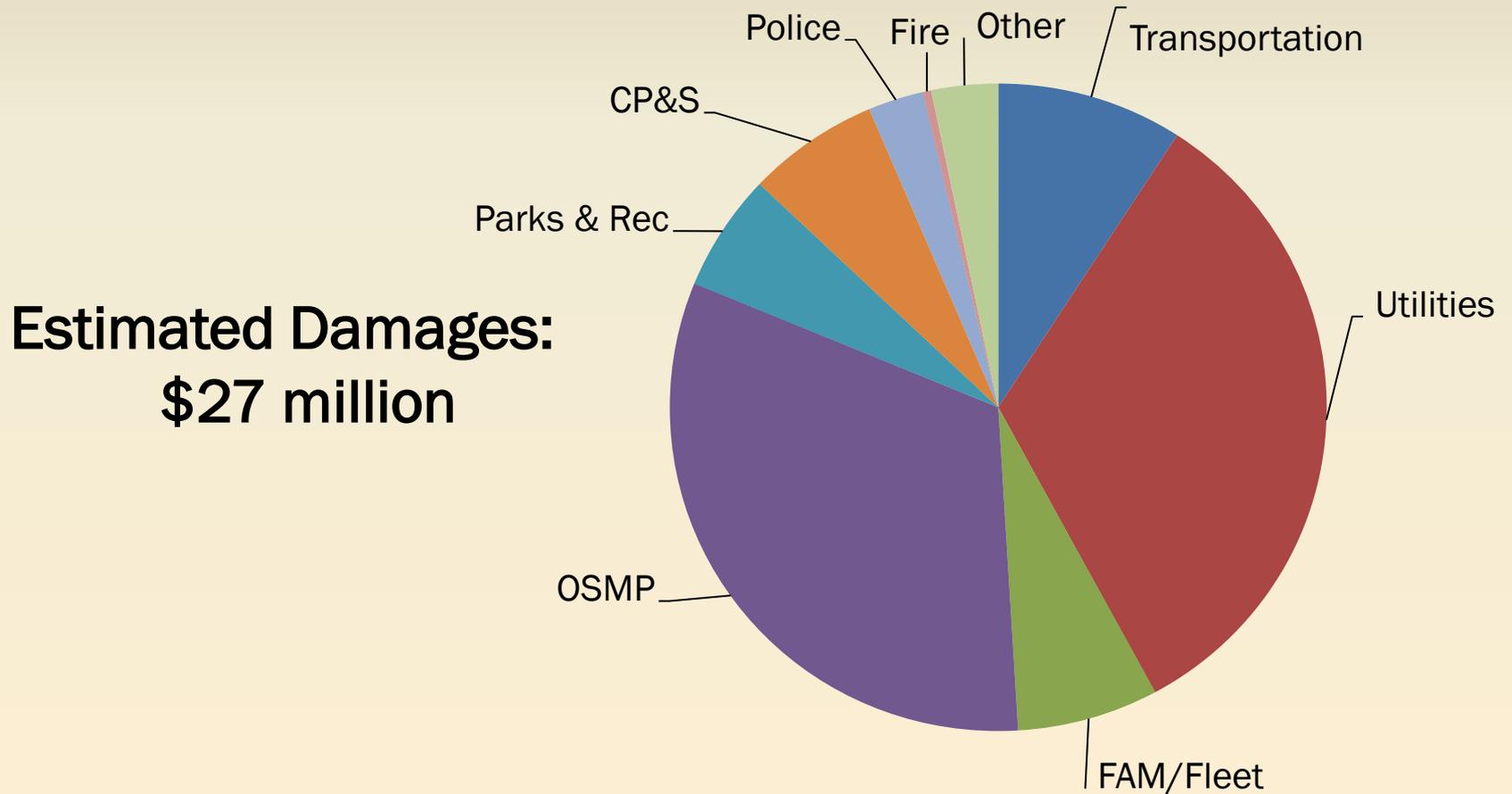


# 2011 Capital Improvement Bond



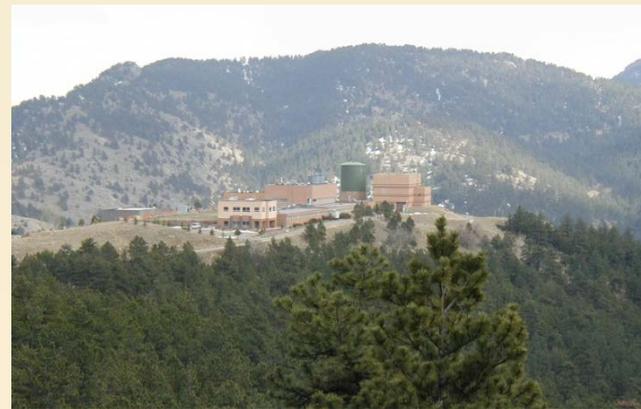
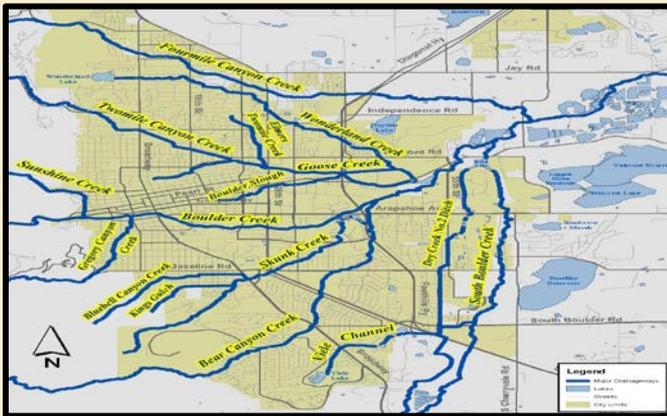
# Flood Impacts

Total Flood Damage and Response Costs by Department



# Utilities CIP

## Water, Wastewater, Stormwater & Flood Management

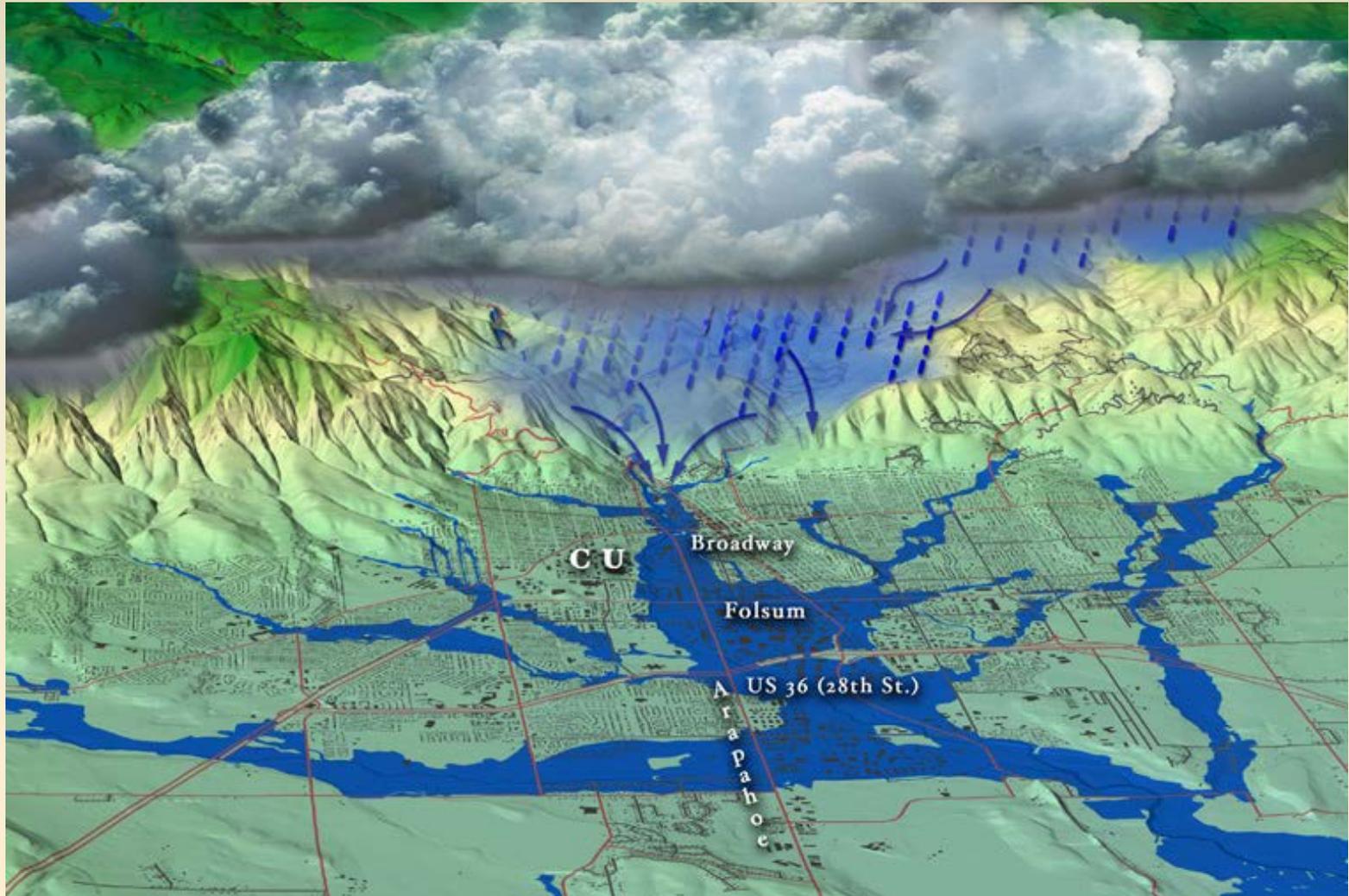


# Water Utility



Photos courtesy of Northern Water

# Stormwater & Flood Management Utility

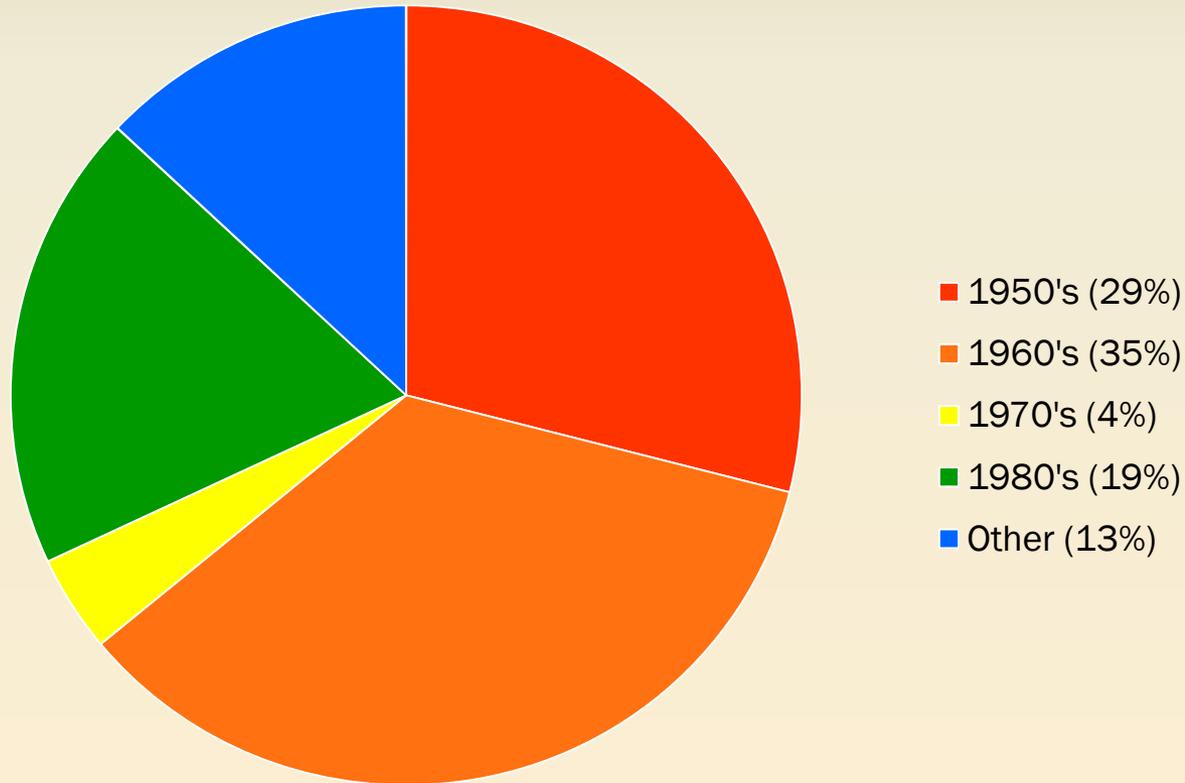


# Sept 2013 Flood Event

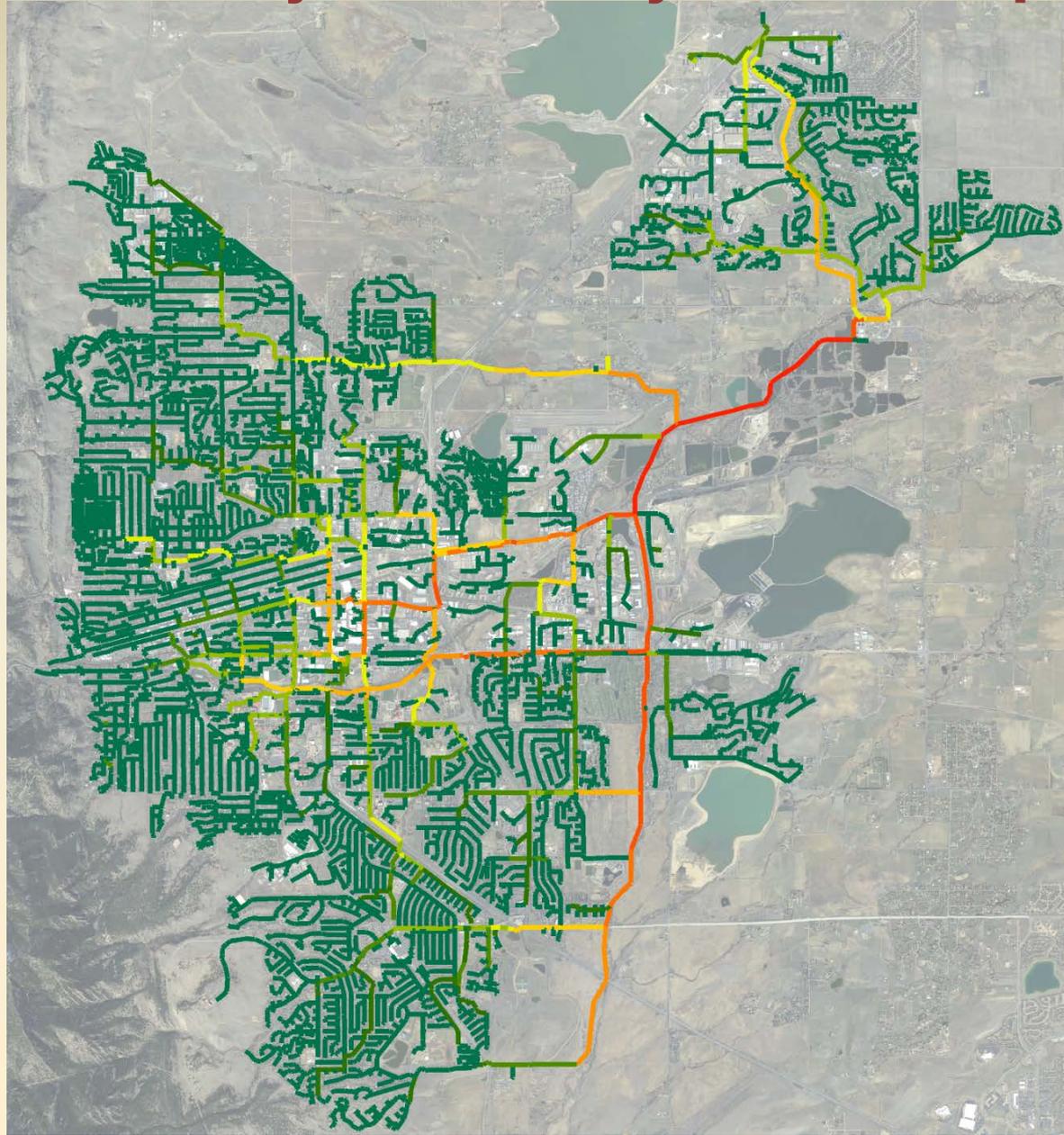


**Surcharged Sanitary Manhole**

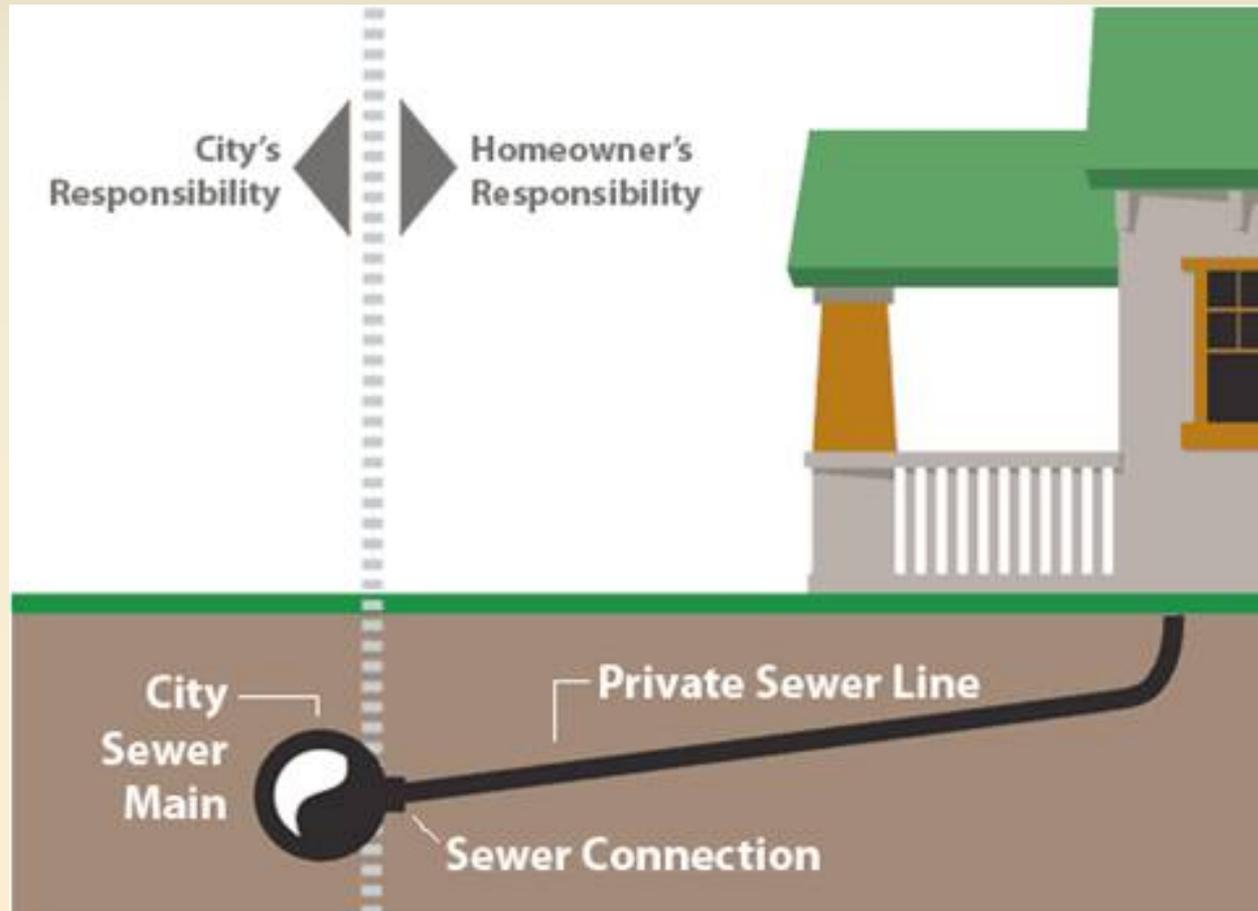
# Sanitary Sewer System Aging Infrastructure



# Sanitary Sewer System Map



# Sanitary Service for Typical Home



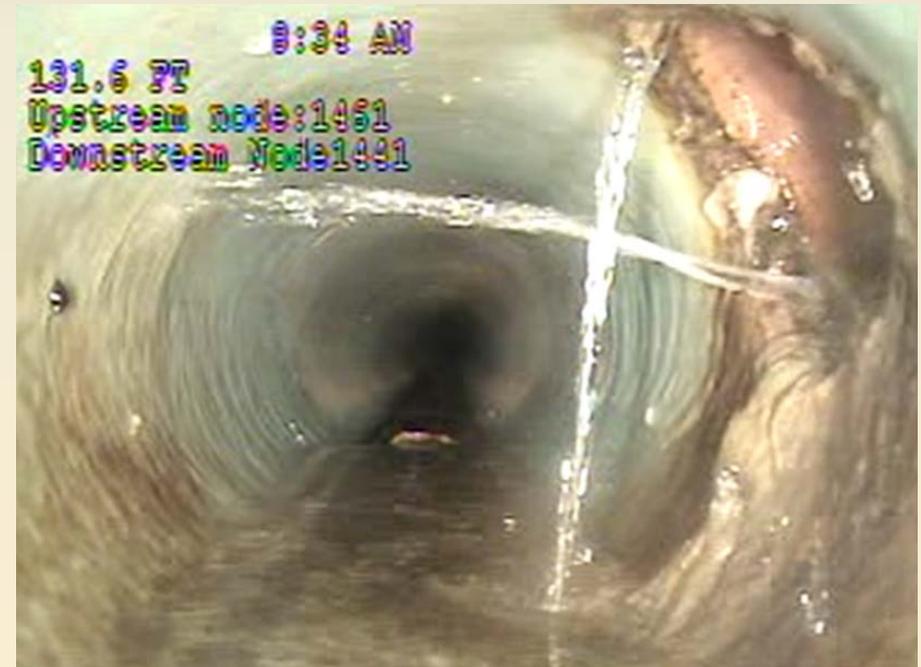
# Sanitary Sewer System CIP Priorities

- Condition Assessment Program
  - Evaluation
- Collection System Rehabilitation
  - Projects

# Condition Assessment Images



Broken & Collapsed Sewer



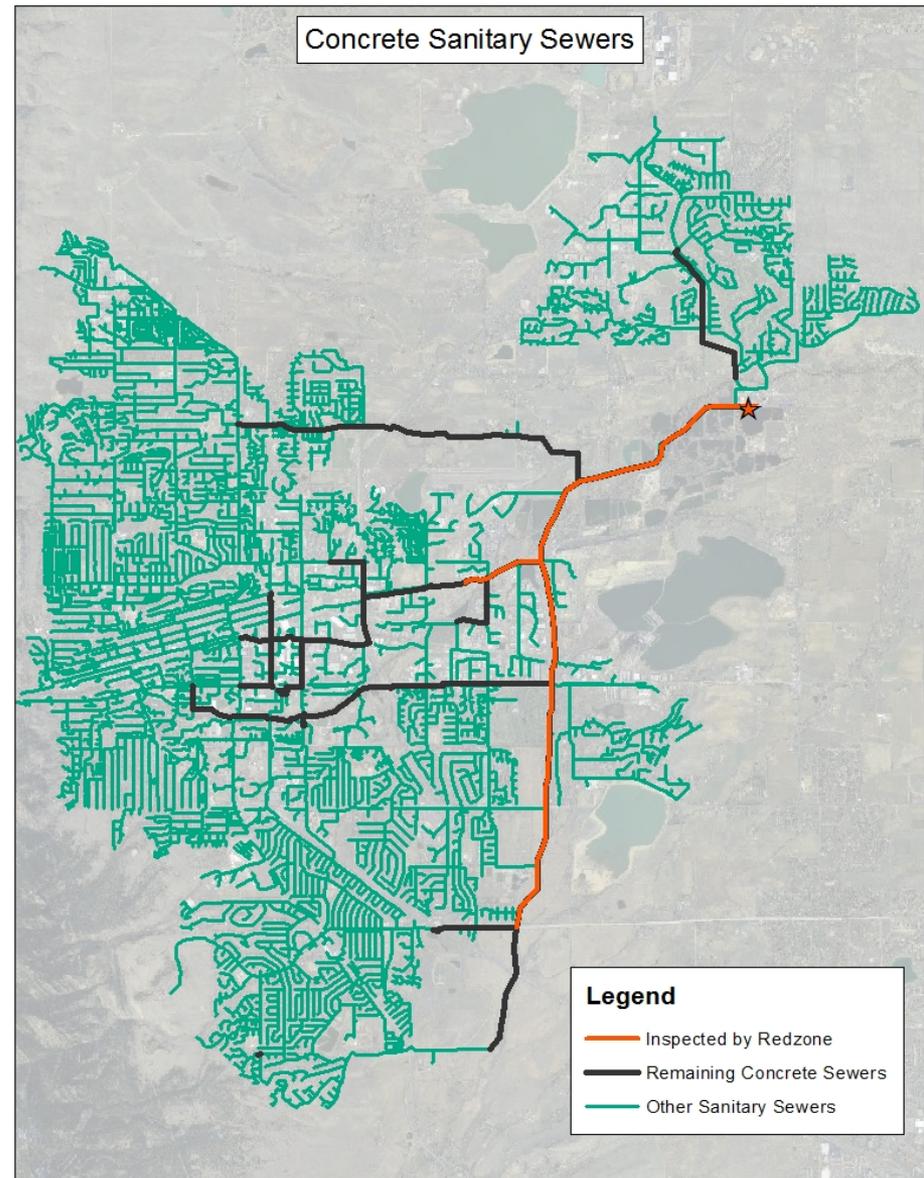
Infiltration at Service Connection

# 42-inch Diameter Sanitary Sewer Condition Assessment



# Large Diameter Concrete Sanitary Sewers

- Inspected
  - 31,000 ft
- Uninspected
  - 80,000 ft



# Condition Assessment Program

- Goal = Clean & Inspect complete system
  - Budget = \$780,000/year
  - Task = 360 miles of sewer
  - Timing = 4 years

# What is sewer lining?



Installation



Finished product

# Cured-in-Place-Pipe (CIPP)



Before

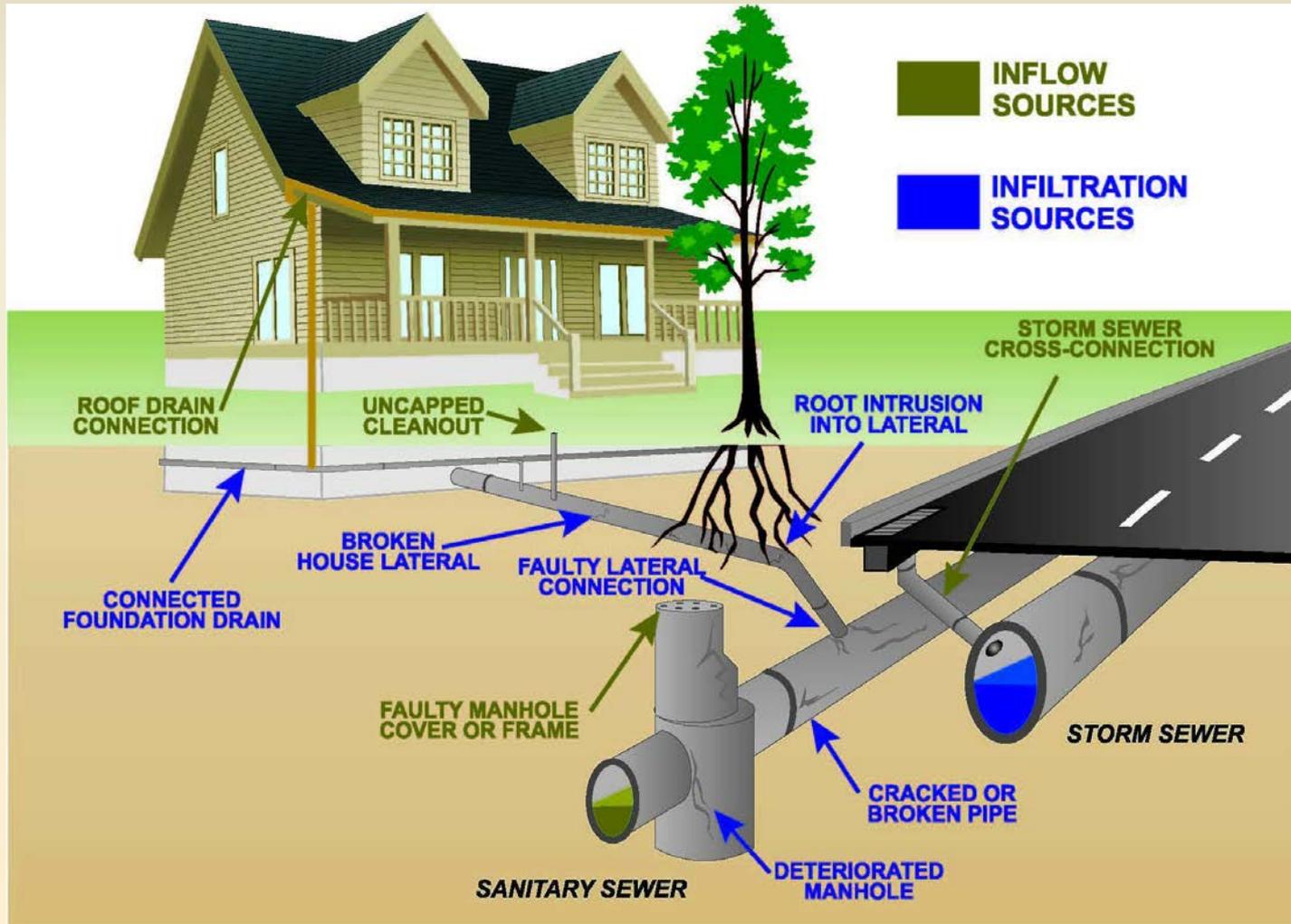


After

# Collection System Rehabilitation

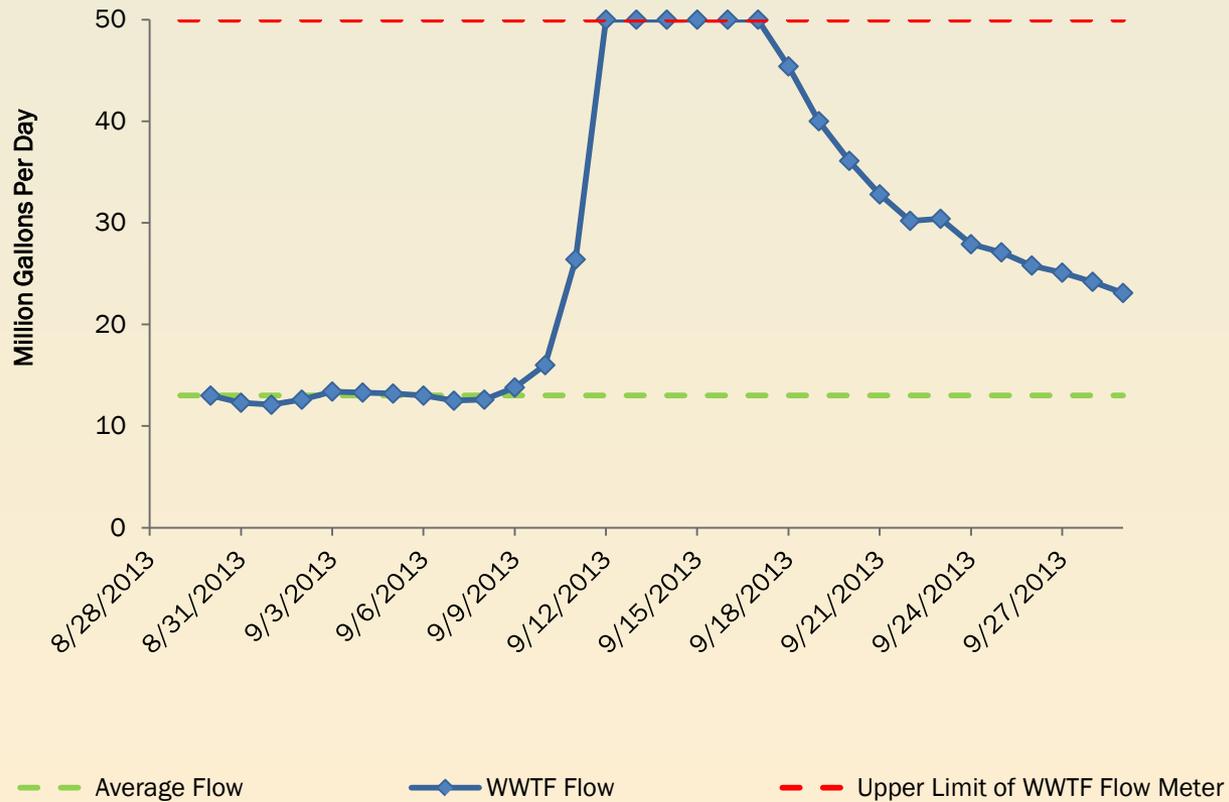
- Goal: Rehabilitate worst condition sewers
  - Total system pipe = 360 miles
    - Minus PVC pipe = 110 miles
    - Minus CIPP = 27 miles
  - Pipes to be lined = **223 miles**

# What is Inflow & Infiltration?



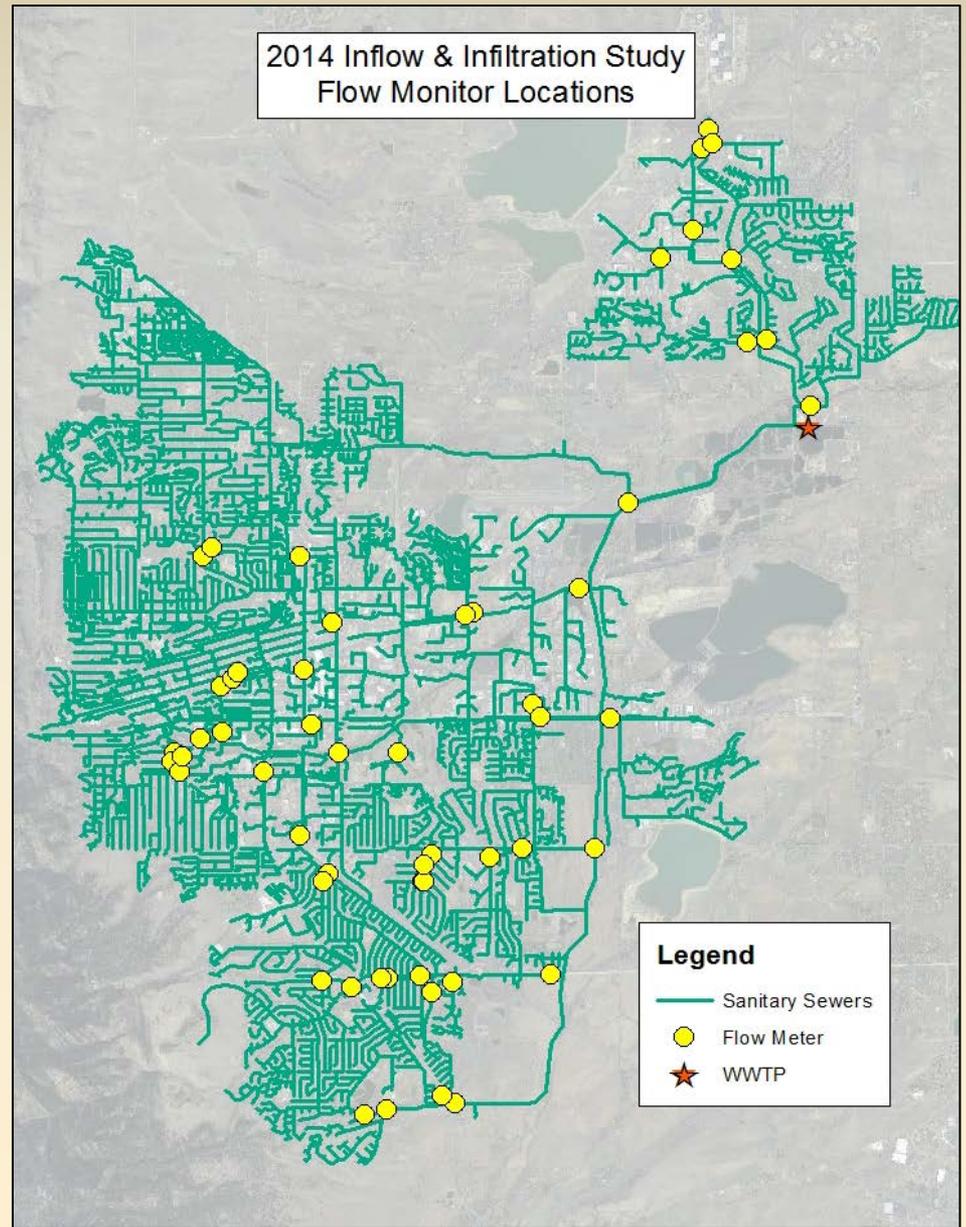
# Why is I&I a problem?

## WWTF Flow Sept. 2013 Flood Event

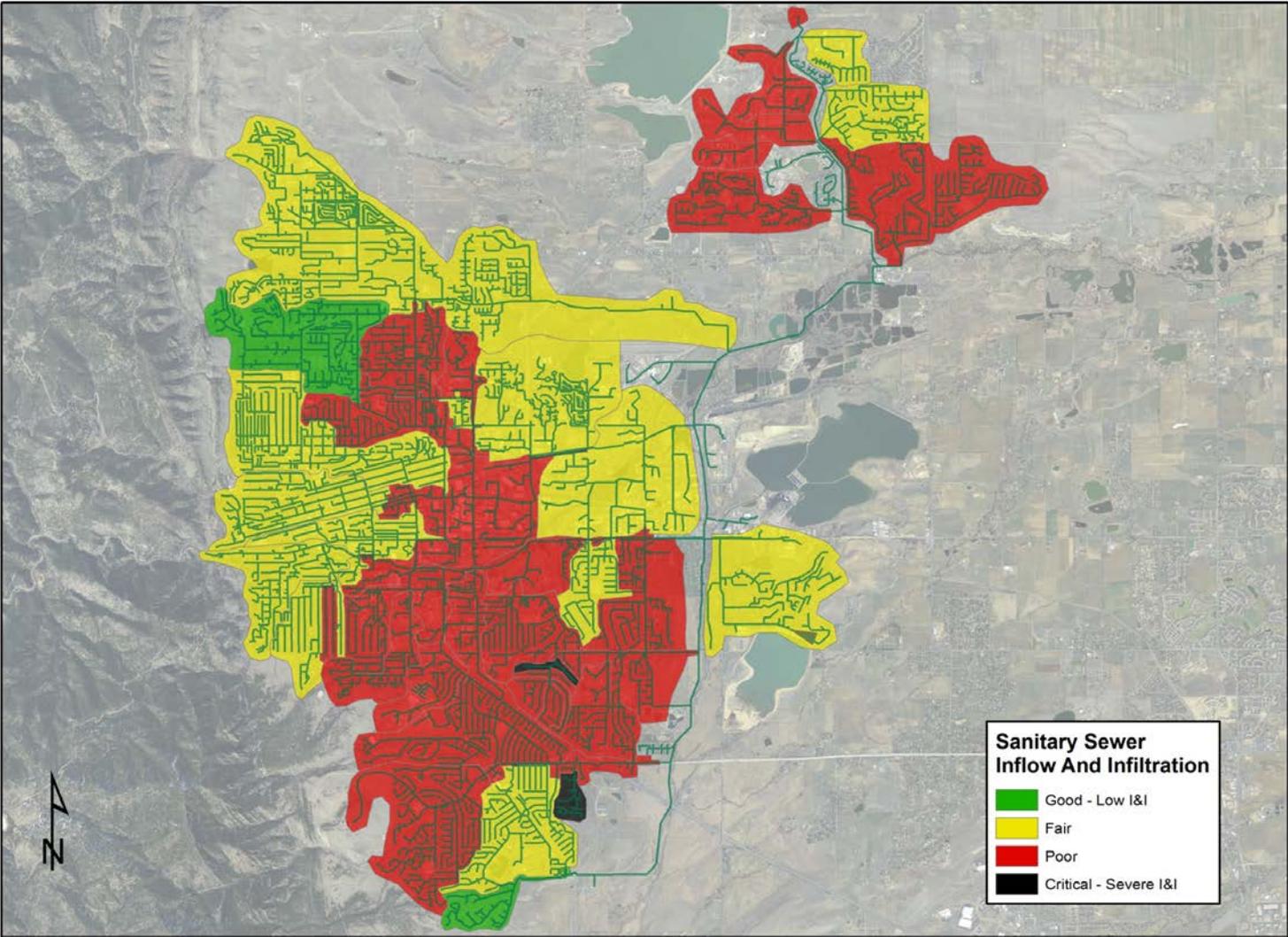


# 2014 I&I Study (completed)

54 flow monitors  
May - July



# I&I Evaluation – Preliminary Results



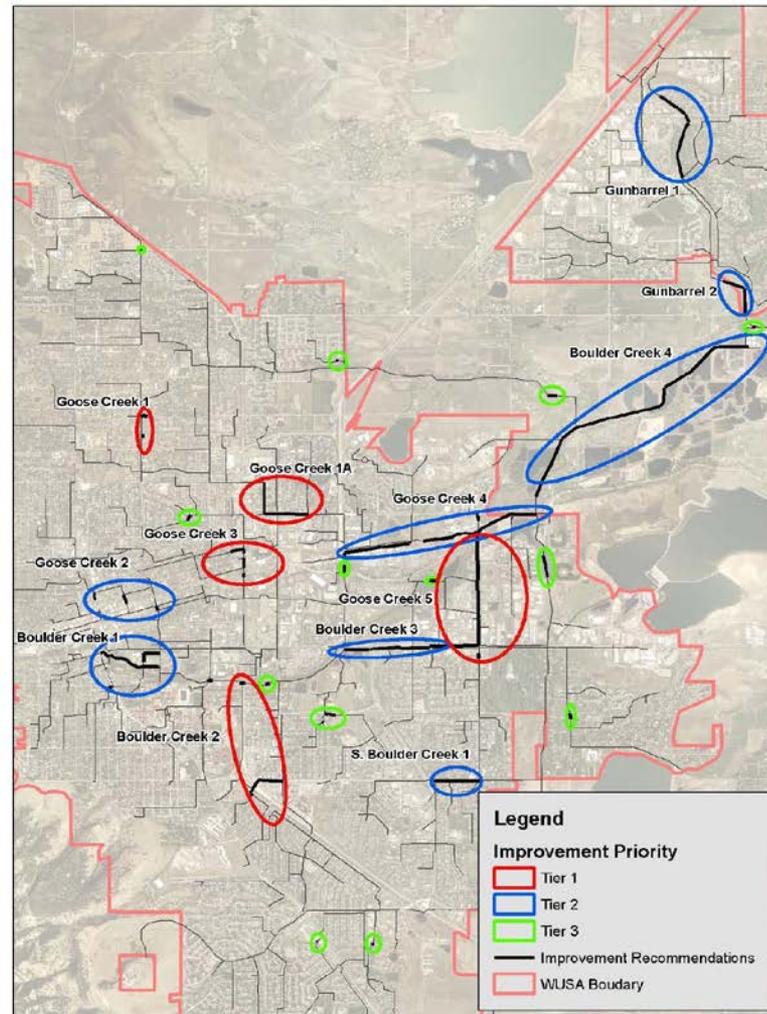
# 4. WWCSMP\* Projects

Tier 1 (4)

Tier 2 (8)

Tier 3 (13)

*\*Wastewater Collection  
System Master Plan*



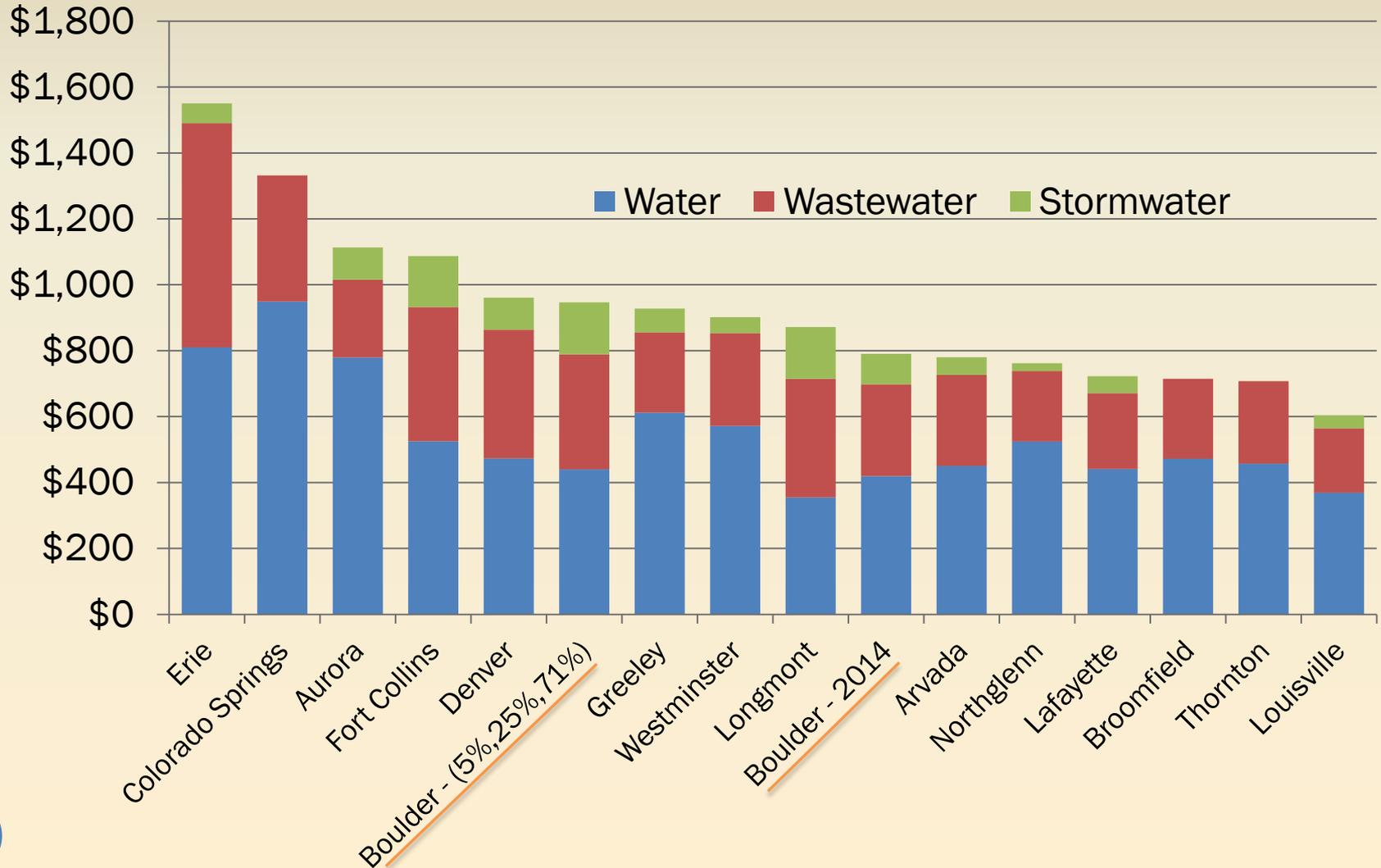
Recommended improvements were developed and prioritized into Tier 1, 2 and 3 categories.

# Wastewater Collection System CIP Summary

- Condition Assessment = 4 years
- Collection System Rehab
  - Lining program = 20-25 years
  - Large diameter pipe = 5 years
  - Capacity improvements = 5 years

# Rates

# Annual Residential Bill Comparison



# Single Family Residential Bill Impact

	<b>2014</b>	<b>2015</b>	<b>Monthly Change</b>	<b>% Change</b>
Water	\$34.95	\$36.69	\$1.74	5%
Wastewater	\$23.25	\$29.06	\$5.81	25%
Stormwater	\$7.69	\$13.15	\$5.46	71%
<b>Total</b>	<b>\$65.89</b>	<b>\$78.90</b>	<b>\$13.01</b>	<b>20%</b>

# Sample Commercial Accounts Bill Impacts

Customer	Total Monthly Bill 2014 Rates	Total Monthly Bill 2015 Rates	Estimated Monthly Bill Increase	Percent Change
Hotel	\$2,797	\$3,372	\$575	21%
Grocery Store	\$6,537	\$7,865	\$1,328	20%
Large Format Retailer	\$2,176	\$2,998	\$822	38%
Pearl Street Retail	\$96	\$117	\$21	22%
Industrial/Institutional	\$5,201	\$6,541	\$1,340	26%
Downtown Restaurant	\$270	\$325	\$55	20%
Downtown Restaurant/Brewery	\$628	\$744	\$116	18%

# Next Steps

- September 9 - Overall Budget Study Session
- September 23 - Budget Study Session (if needed)
- October Budget Hearings
  - Oct. 7 first reading
  - Oct. 21 second reading
- Council Adopts 2015 Budget, including CIP
- Regular Flood Updates to City Council

# Questions

- Does Council have any questions or feedback related to the Utilities Division Draft CIP?
- Does council have any questions or feedback on the 2015-2020 Draft CIP?