

City of
FLAGSTAFF

UTILITY RATE ADJUSTMENTS

ASSESSMENT OF THE NEED

July 14, 2015

BRAD HILL, RG & RYAN ROBERTS, PE

Outline

Why the need to consider adjustment in Rates

- **Council Policy**
- **Purpose, Objective & Questions**
- **Utilities steps towards fiscal stewardship & efficiencies that have been implemented**

- **Assessment of Utilities infrastructure today**
- **Recommendations on repairs/replacements over next 10-years**
- **Prop 406 – Road Repair & Street Safety**

CITY COUNCIL POLICY

City Council adopted Water Policies

A1, A2 & A3 Enterprise Funding & Rate Design

Require a **formal rate study** to be conducted
every three years

to determine cost-of-service for
water & sewer services

PURPOSE

Carefully **analyze** and **develop rates** that are sufficient to **fund** the **O**peration, **M**aintenance and **R**eplacement of **essential** utility infrastructure while maintaining a commitment to **affordability** and **transparency**.

OBJECTIVE

Ensure the City can **responsibly invest** in the infrastructure needed to provide **round-the-clock, safe** and **reliable** utility services to ensure the **public's health** and **economic vitality** of our community today and into the future.

Achieve Council Goals

Goal #2 – Ensure Flagstaff has a long-term water supply for current and future needs

Goal #3 – Provide Sustainable and equitable public facilities, services and infrastructure systems in an efficient and effective manner to serve all population areas and demographics

Goal #7 – Address key issues and processes related to the implementation of the Regional Plan

Goal #11 – Ensure that we are as prepared as possible for extreme weather events

UPCOMING POLICY QUESTIONS

- What is our infrastructure investment strategy?
- Do our rates encourage water conservation?
- Who will pay for growth?
- Will reclaimed water continue to be subsidized by water?
- Other?

CLEAR & CONCISE

One of the **hardest** thing to do as staff is to **ask** the Community & City Council **for more \$\$**

Staff needs to be **clear & concise** in **quantifying the need** for additional resources and we must **demonstrate fiscal responsibility**



FISCAL STEWARDSHIP & EFFICIENCIES



Utilities Efficiency Initiatives

- **Conducting Master Plans & Condition Assessments**
 - Accurately demonstrate the problem with confidence
 - Strategically spend Utilities limited dollars
- **Starting to implement Energy efficiency within Operations**
 - Solar Panels, replacement of Blowers & Pumps
- **Eliminated 10 positions at beginning of Great Recession**
 - Rebuilding Division staff methodically
- **Leak Detection Surveys**
 - Completed >200 miles of distribution system
 - Better understand our Lost & Unaccounted For water



Energy Efficiency Initiatives

- Solar now makes up ~ 30% Wildcat Hill / ~ 27% of Rio WRP electrical needs



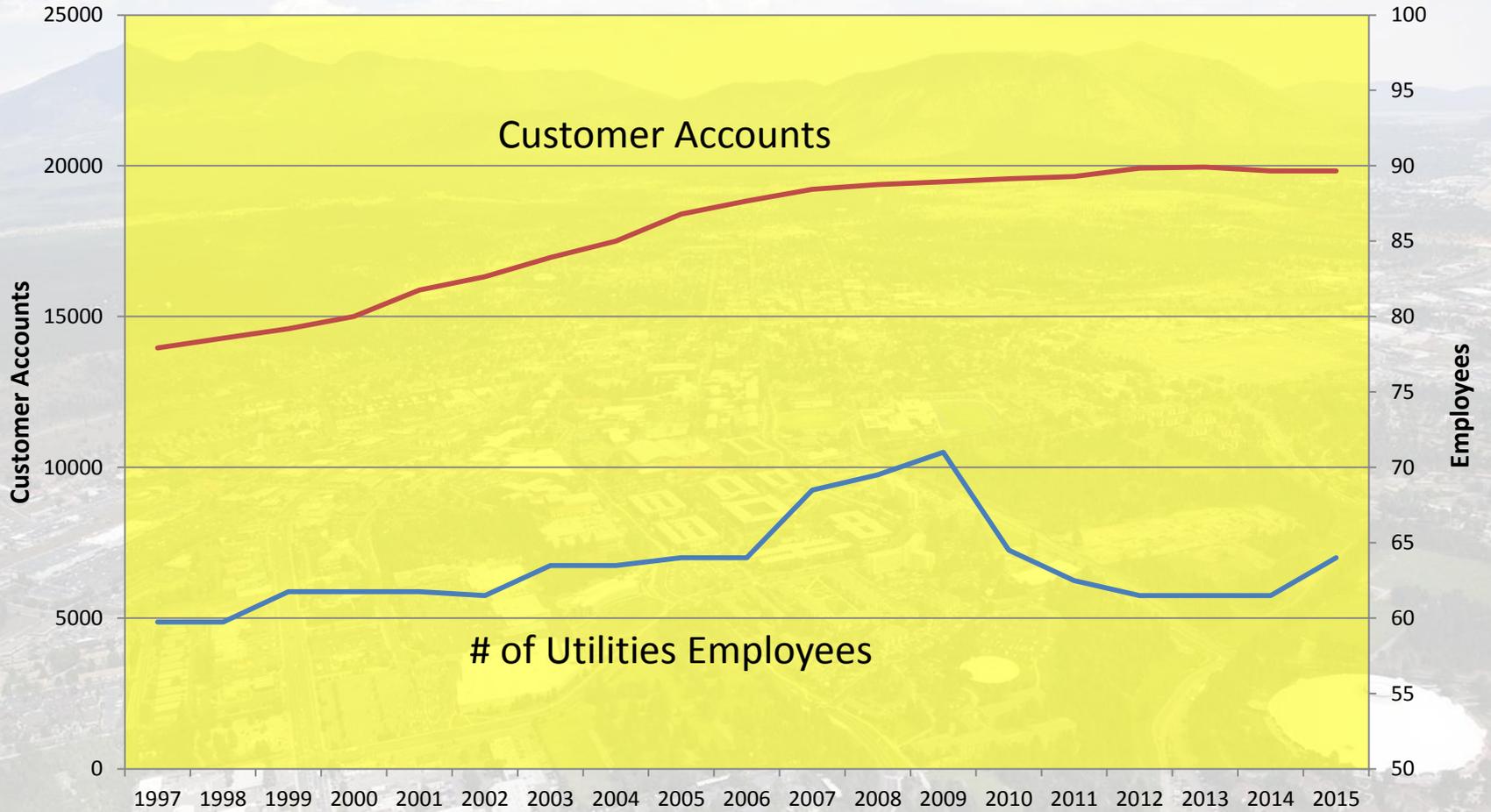
February 2015 Report – Utilities saved ~\$206,300 last year not including loan payment

- Conducted Energy Efficiency Audits – replacement with more efficient blowers & pumps (est ~\$20,000/month)

Rio WRP Blower - 1993



Staffing Reductions





INFRASTRUCTURE ASSESSMENT



Infrastructure Assessment - Statewide

EVERY DAY EVERY CITIZEN USES INFRASTRUCTURE

2015

REPORT CARD FOR Arizona's Infrastructure

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

www.infrastructurereportcard.org/arizona

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2015

REPORT CARD FOR Arizona's Infrastructure

ARIZONA'S INFRASTRUCTURE G.P.A. **C**

Infrastructure is all of the systems built to make our lives better and our economy more efficient. Roads, water pipes, dams, railways and much more make up the modern infrastructure you use every day.

Generations of Arizonans built today's expansive infrastructure, and our leaders are responsible for keeping it working for us today and keeping up with a growing population that uses more

ROADS	D+
DRINKING WATER	C-
DAMS	C-
WASTEWATER	C
LEVEES	C-

Northern Arizona's Locally Owned Newspaper

FBN

Flagstaff Business News

Also serving Sedona, Williams and Winslow | www.flagstaffbusinessnews.com

SPECIAL HEALTHCARE SECTION INSIDE

Inside:

- Twin Arrows Aims for Growth p.3
- Forester Searching for Resilient Pine Genes p.4
- Community Profile: Kevin Henrie Keeps Northland Clean p.8



Engineers Grade Arizona's Dams, Bridges, Transportation, Water Systems: C GPA

Report Card Assigns a B to Bridges and a D+ to Roads

By Bonnie Stevens, FBN

Whether we are heading our toady, driving to work or taking a flight, Arizonans rely on the state's infrastructure every day. However, the Arizona Section of the American Society of Civil Engineers (ASCE) says Arizona's bridges, dams, transportation and water systems are suffering from age,

weather and increased use. One of the biggest challenges, the group says, is a lack of funding to keep up with maintenance and future demands of a growing state.

After a two-year assessment, the ASCE Arizona Section is delivering the Report Card for Arizona's Infrastructure, listing grades in nine categories. Mark Lamer, P.E., an ASCE member and civil engineering professor at Northern Arizona University, says many of the grades are low Cs and could easily become Ds if the necessary steps toward maintenance and improvement are not taken.

"Infrastructure is the foundation of our economy," said Lamer. "Currently, our conditions are pretty good, certainly better than the national average, but it won't be long before we'll need to address these issues to continue to thrive in a state and enjoy the quality of life that we want for ourselves and future generations."

Bridges: B
Arizona has more than 8,000 bridges and overall, they have been given a B. Brent Berchers, (Continued on page 23)

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REAL PROPERTIES

State of our Infrastructure - Flagstaff

Master Planning

- Policies-Council
- Water Resources
- Water System-NCS Engineers
- Sewer System-Brown & Caldwell
- SCADA-SW Automation

Infrastructure Assessment

- Hire Professional Experts
- Identify capital needs

Rate Study

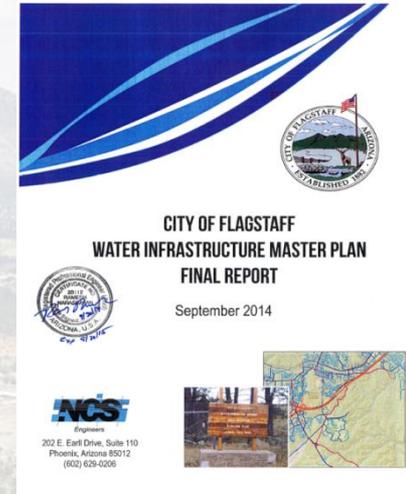
- Financial Experts
- Cost of Service
- Fair and equitable



10-Year Infrastructure Assessment Flagstaff Water System



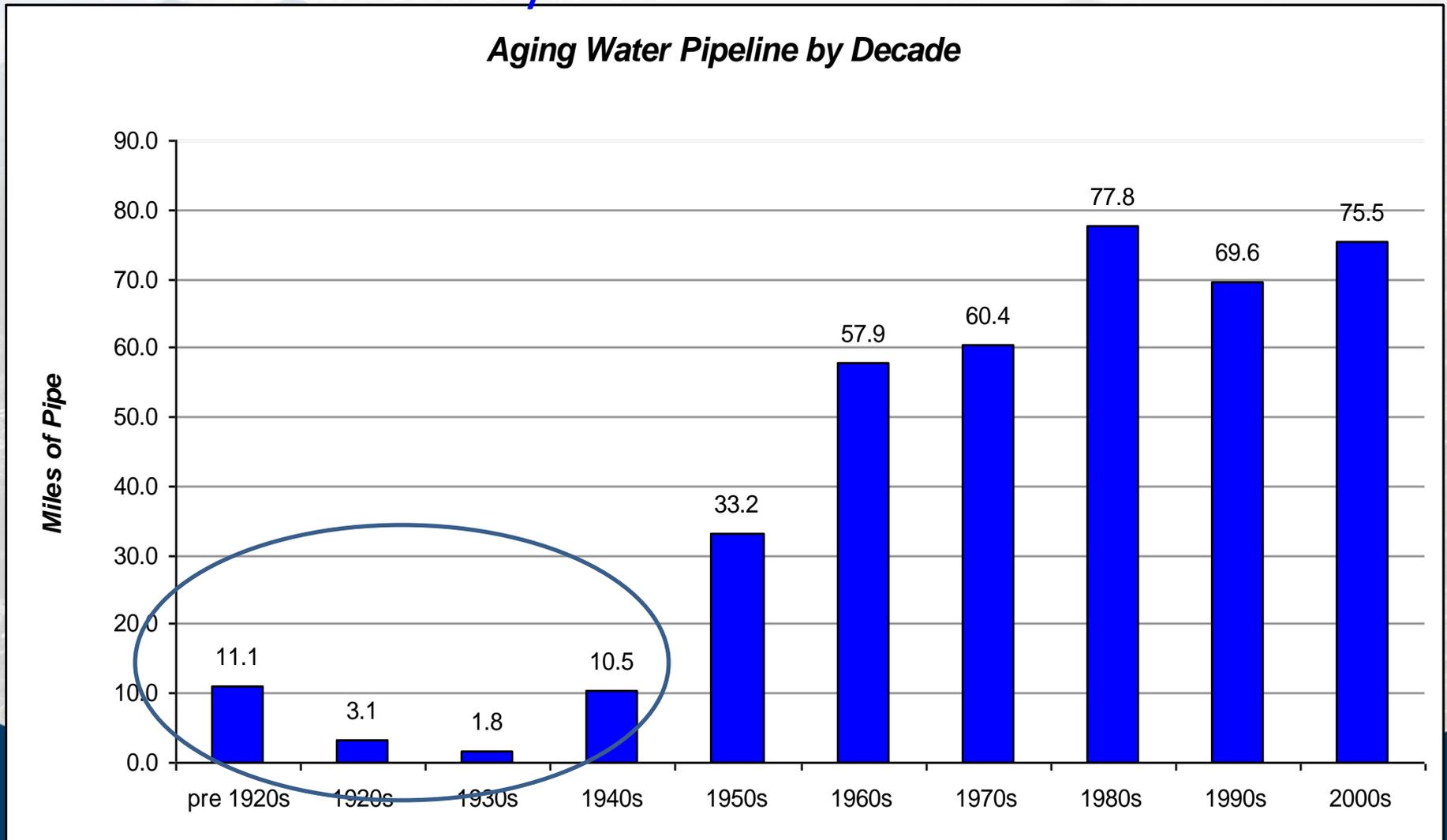
\$94M
\$23M RGR
Total \$117M



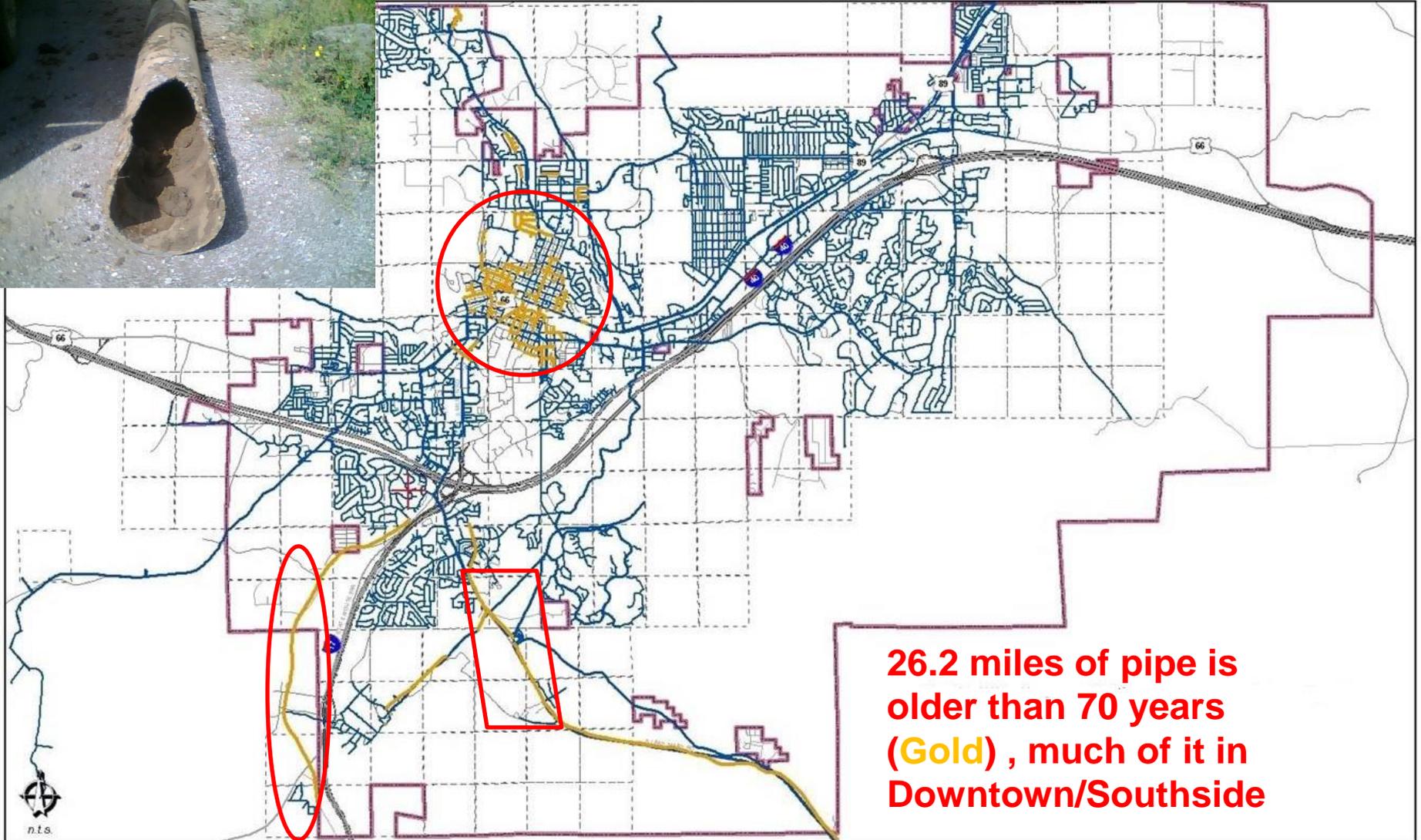
NCS Engineering – Recommendation
~ \$11.7M/year over next 10 – years
Staff *reduced* engineer’s recommendation
to \$9.35M/year

Aging Water Infrastructure Flagstaff Water System

~26.5 Miles over 70 yrs old



Aging Water Infrastructure Flagstaff Water System



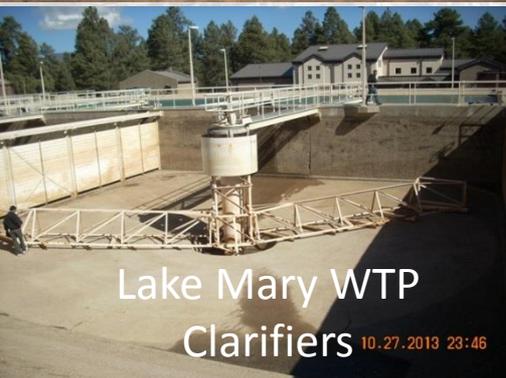
26.2 miles of pipe is older than 70 years (Gold), much of it in Downtown/Southside

10-Year Infrastructure Recommendations Flagstaff Water System

- Water meter replacements (\$480k/yr)
Lost & Unaccounted for water
- Water reservoir rehabilitation (\$470k/yr)
- Transmission line (\$ 527k/yr)
- Lake Mary WTP sedimentary basin & sludge lagoons maintenance (\$630k/yr)
- Red Gap planning and design (\$1.3M/yr)
- Additional water supply wells (\$1.5M/yr)
drought protection, growth
- Waterline replacement (\$3.4M/yr)



New Local Wells



Lake Mary WTP
Clarifiers 10.27.2013 23:46



10-Year Infrastructure Assessment Flagstaff Wastewater System



Manholes
\$4.5M



Interceptors
\$11.6M

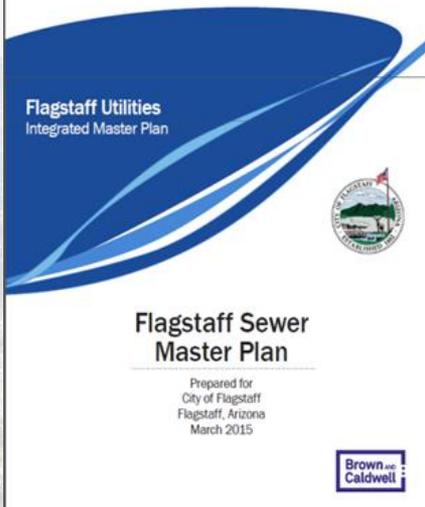
\$59.7M Total



Sewer Mains
\$21.7M



Treatment
\$21.9M



Brown & Caldwell Engineering – Recommendation

~ \$5.9M/year over next 10 – years

Staff *reduced* engineer's recommendation
to \$4.3M/year

10-Year Infrastructure Assessment Wastewater Plants Improvements



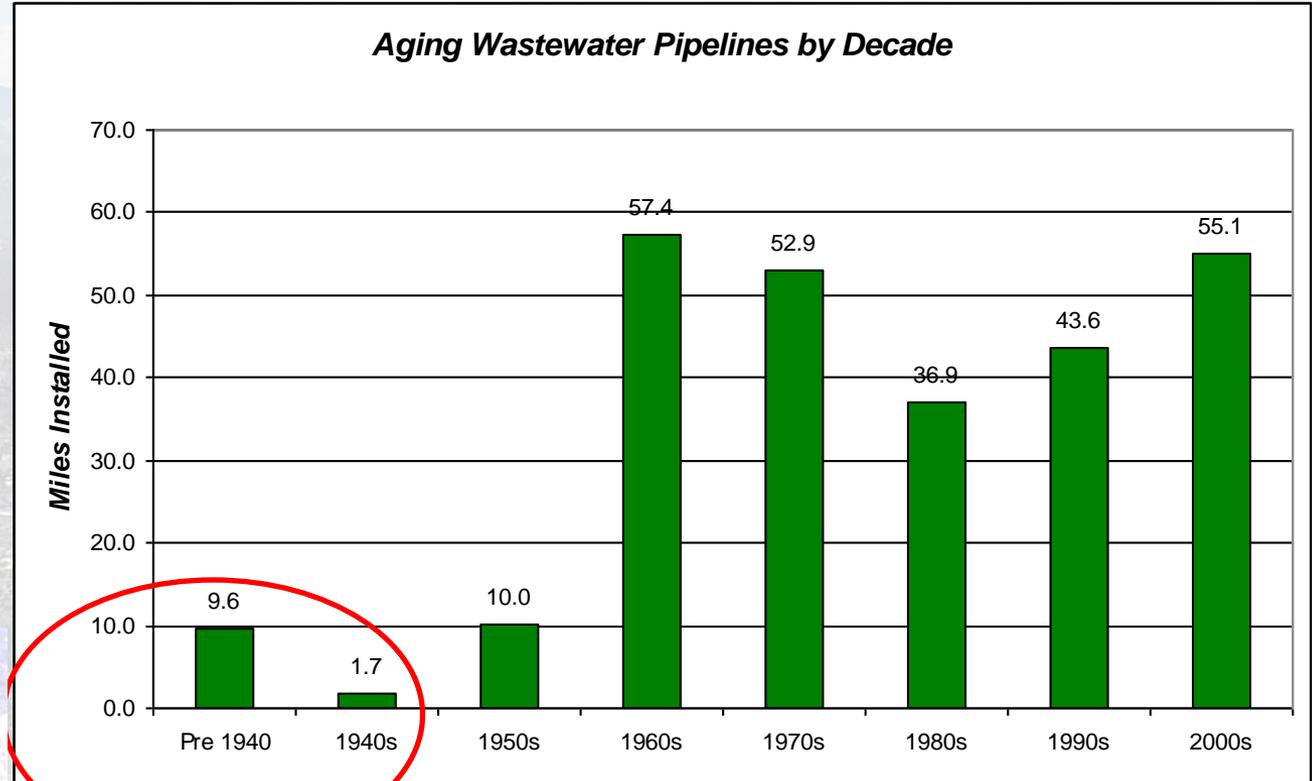
Digester – Solids Handling
Wildcat Hill

Rio WRP Blower and Pump
Replacements-Energy
Efficiency

Aging Sewer Infrastructure Flagstaff Sewer System



7,800 manholes: 914 recommended to be replaced or rehabilitated (\$450k/yr)



~11 Miles of sewer line is at the end of its useful life (\$1.4M per year)

10-Year Infrastructure Recommendations

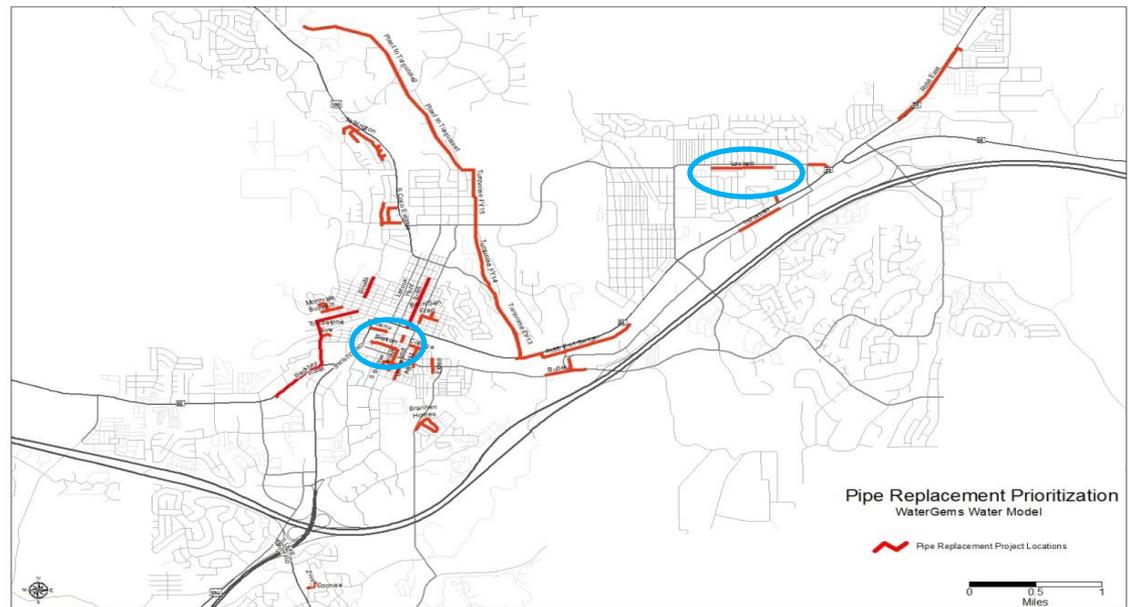
Prop 406 Road Repair and Street Safety is an ~\$20M investment in water & sewer infrastructure

However Prop 406 is driven by condition of street not the underlying water, sewer or stormwater utilities. Helps but does not solve all utility replacement needs

Prop 406 \neq Pipeline replacement priorities

Not all utility infrastructure is under a street

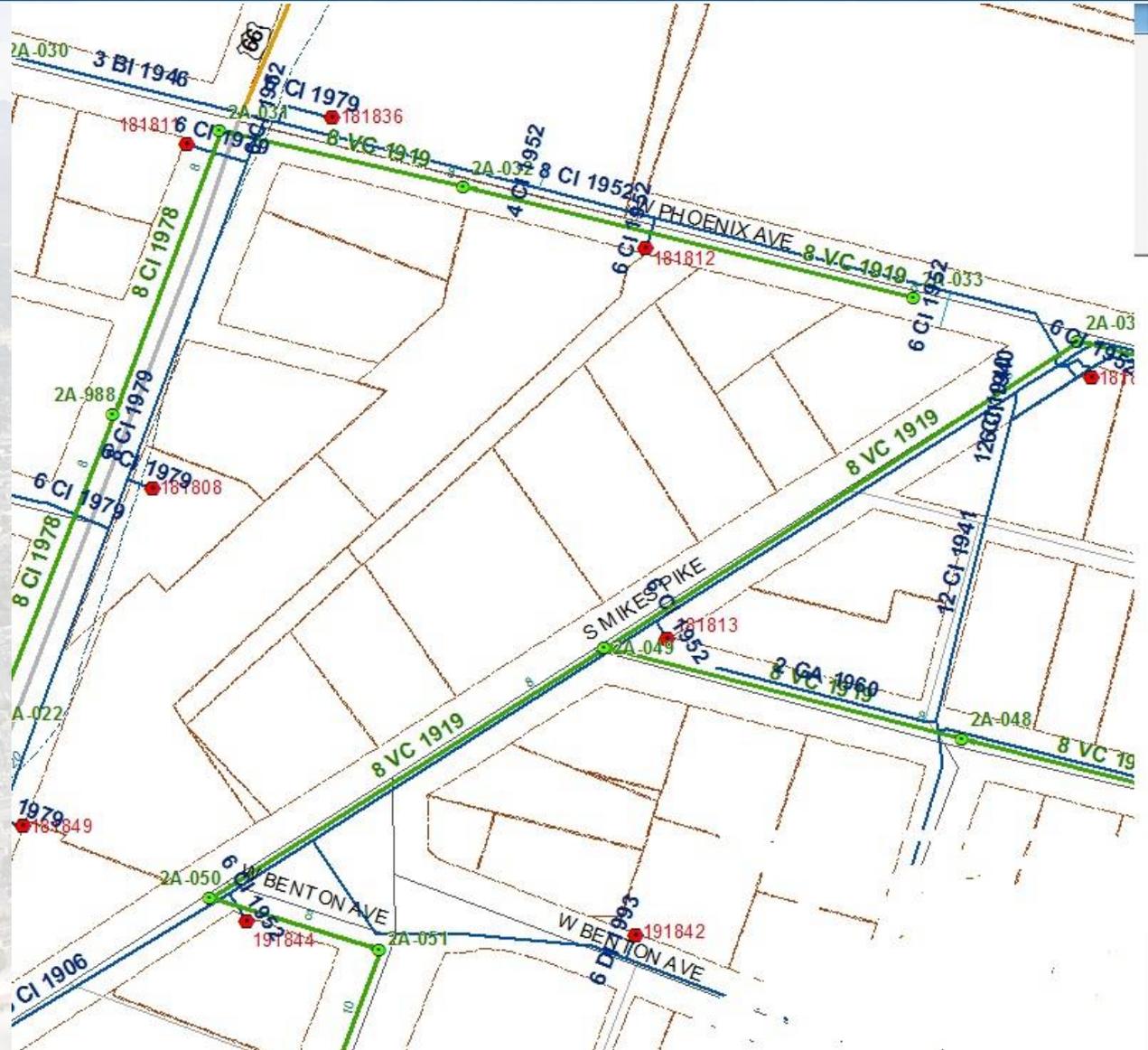
*RR&SS is replacing
3.5 miles of 26.5 miles of
waterlines needed to be
replaced in next 10 years*



Prop 406 Case Study

Mikes Pike-Southside

- Street OCI > 70
- Street to be Chip sealed
- 6 inch Cast iron water main-1906
- 8 inch VCP sewer Main-1919



Summary



1. *CIP in Rate Study supports CC Goals*
2. *Incremental Increase to existing CIP*
3. *Does not overlap Prop 406*
4. *Due Diligence by Staff to minimize financial impact to customers*

Next Steps

- Water Commission Reviews Willdan Report – July 16th
 - Consider the Options – vote on recommendations
- Willdan Report to be put on Utilities Website/City Clerk
- City Council will receive a hard copy
- Staff to begin Stakeholder Outreach
- Stormwater Utility at future date



QUESTIONS

