

WASTEWATER SYSTEM IMPROVEMENTS

CITY OF THOMPSON FALLS
PUBLIC MEETING

January 7, 2019

Craig Pozega, PE (GWE)
Carrie Gardner, PE (GWE)



SANDERS COUNTY & DEQ

Shawn Sorenson, RS

- Sanders County Sanitarian

Emily Gillespie, PE

- Montana Department of Environmental Quality

PROJECT NEED

- **Large portion of City served by private septic systems**
 - Approximately 560 residences & 3 schools
- **Lot size limitations prevent replacement**

PROJECT NEED

- **Growth**
 - Limited to no residential and commercial growth
- **County may be unable to issue permits**
- **Increased Costs with time**
- **Long-Term Solution**

GREAT WEST ENGINEERING

Craig Pozega, PE

- Great West Engineering

Carrie Gardner, PE

- Great West Engineering

PROJECT NEED

➤ Existing Collection System

- Replace Sections of Aging Pipe
- Reduce Inflow & Infiltration

➤ Lift Stations & Force Mains

- Replace Force Main to Treatment Site

➤ Treatment

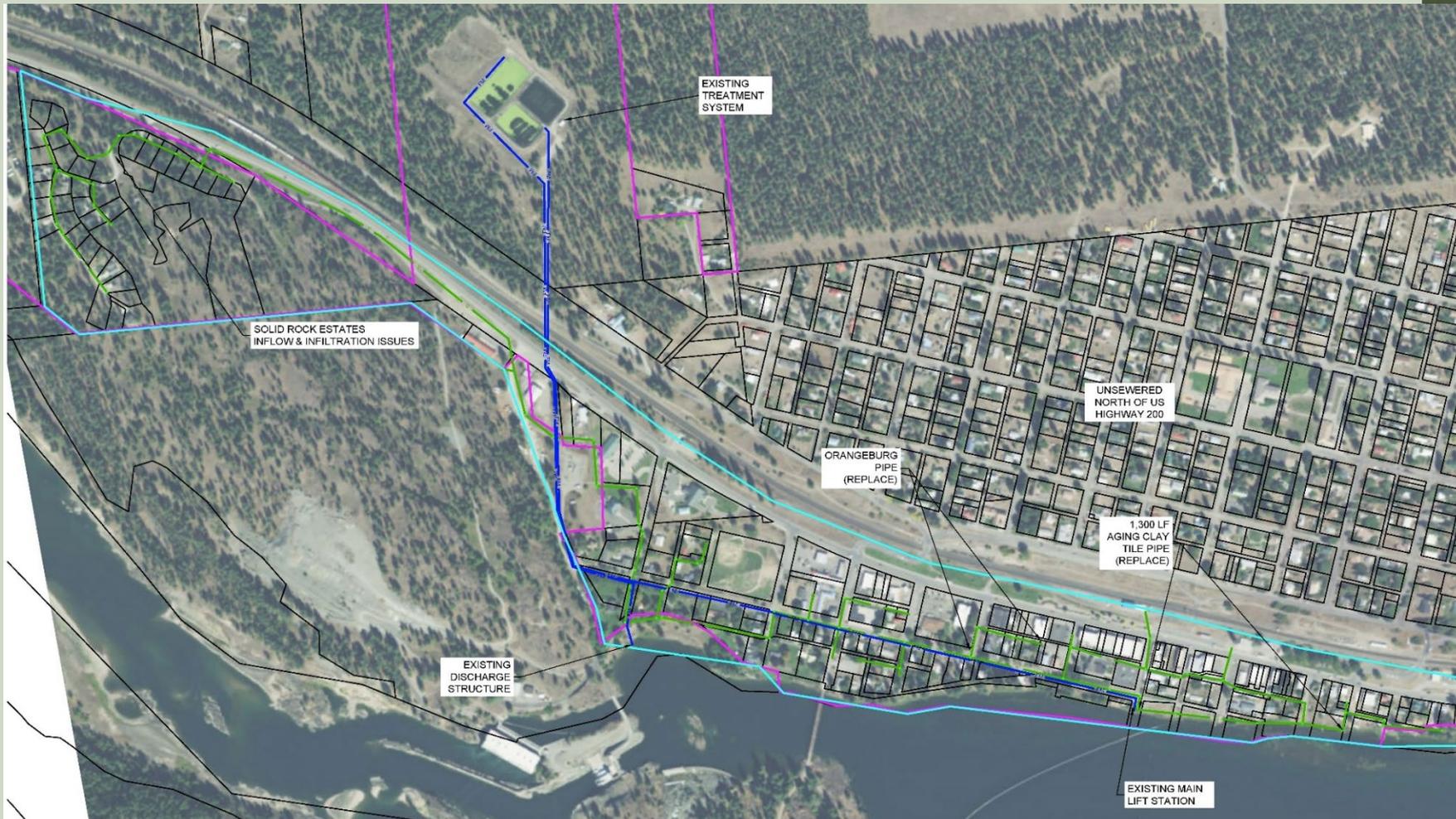
- Headworks
- Sludge
- Improvements for Planning Period Flow
- Disinfection

PROJECT OVERVIEW

- **Existing Collection System Improvements**
- **Expand Collection System**
- **Treatment System Improvements**

PROJECT OVERVIEW

➤ Existing Collection System Improvements



TREATMENT

SITE CHARACTERISTICS
 WINTER AIR TEMPERATURE = -9.5° C
 ELEVATION: 2550 FT AMSL
 ATMOSPHERIC PRESSURE: 13.4 PSIG

INFLUENT CHARACTERISTICS
 CBOD₅ = 260 MG/L
 TSS = 300 MG/L
 NH₃ = 30.5 MG/L

EFFLUENT LIMITS
 CBOD₅ = 10 MG/L
 TSS = 10 MG/L
 NH₃ = 3.0 MG/L



DESIGN FLOW = 0.181 MGD

NOTES: DESIGN BASED ON INIMUM INFLUENT TEMPERATURE OF 10° C

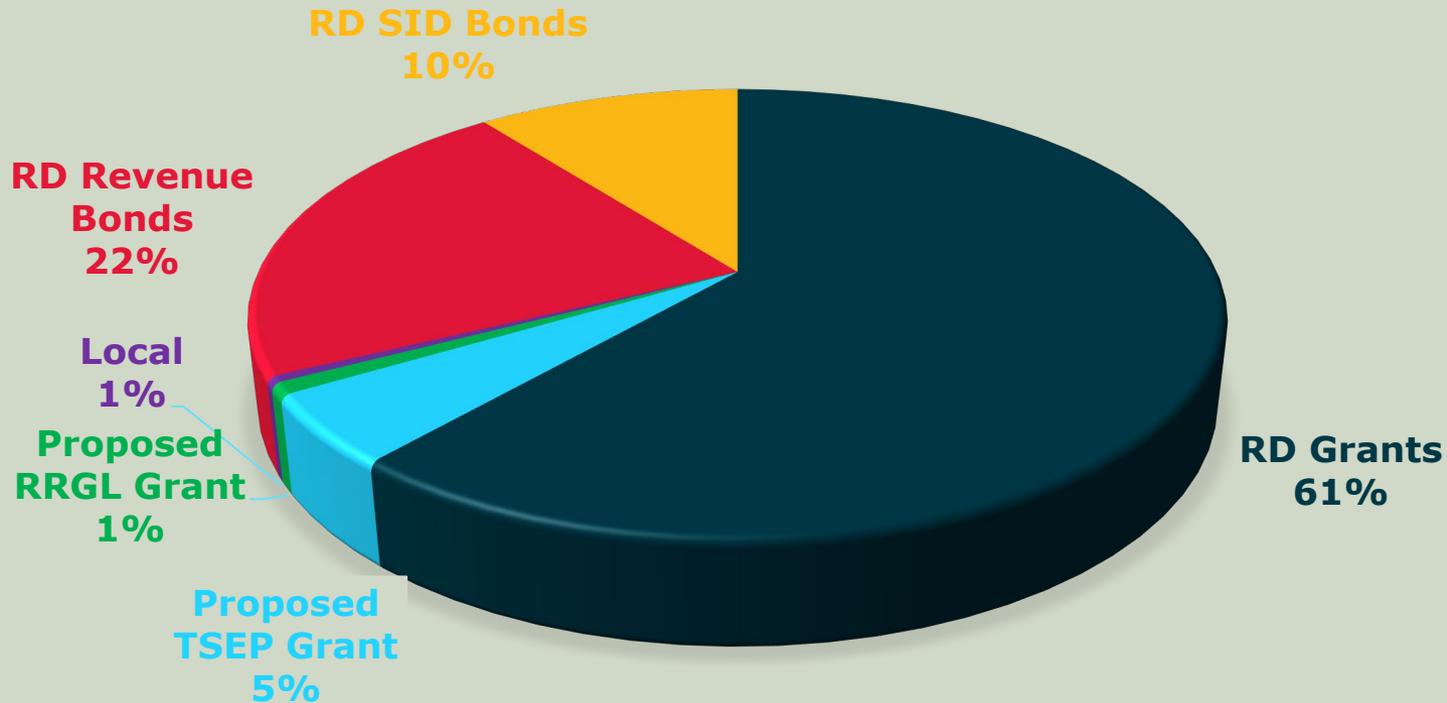
SCHEDULE

➤ ***Based on RD Funding Schedule Requirements**

Project Implementation Schedule for Phase 1 & 2 from RD LOC	
Action	Date
Begin Design	February 2019
Design Basis Report/Cost Est. to the City	August 2019
Submit Design Plans & Specifications to MDEQ	August 2019
MDEQ Review & Approval	October 2019
Advertise for Bids	November 2019
Start Construction (Phase 1)	April 2020
Start Construction (Phase 2 - Treatment)	September 2020
Complete Phase 1 Construction	October 2020
Start Construction (Phase 2 – Collection)	April 2021
Complete Construction (Phase 2)	December 2021

PROJECT FUNDING PACKAGE

AMOUNT



TSEP – Treasure State Endowment Program

DNRC /RRGL – Department of Natural Resources and Conservation

CDBG – Community Development Block Grant

SRF – State Revolving Fund

RD – U.S. Department of Agriculture Rural Development

PROJECT FUNDING PACKAGE

FUNDING PACKAGE AS OF JANUARY 2019

Funding Source	Amount
RD Grants	\$9,182,000
Proposed TSEP Grant	\$750,000
Proposed RRGL Grant	\$125,000
RD Revenue Bonds (40 yr term)	\$3,274,000
RD SID Bonds (20 yr term)	\$1,558,000

ADDITIONAL FUNDING BEING PURSUED

- **City is currently working on other grant funding programs**
 - RD individual Grant/Loan for SID portion of project.
 - City & RD will assist property owners in application process
 - Proposed CDBG Grant of \$450,000 (not currently used in project budget)
 - WRDA Grant
 - City sent letters to congressional delegates regarding project & requested funding assistance

BOND COUNCIL

Bob Murdo

- Jackson, Murdo & Grant, P.C.

Nathan Bilyeu

- Jackson, Murdo & Grant, P.C.

ESTIMATED SEWER RATE

➤ **Base Rate:**

- Current Residential \$40/mo./residential
- Current Commercial \$45/mo./comm. + \$4.10/1000 gallons after the first 2,000 gallons

➤ **Est. Increase to Base Rate:**

- \$25/mo. for residential & commercial

➤ **Estimated SID**

- Assumed 334 parcels (equal amount per parcel)
- Total principal assessed against ea. = \$4,665
 - Estimated annual assessment = \$308 for 20 years

*Phase 3 & 4 are not part of this project and will not be assessed with this project.

Estimated Sewer Rate without grant funding
\$157.00/mo./residential

QUESTIONS?