

2018 Lockwood Water & Sewer District Wastewater PER Update

Public Meeting No. 1
September 12, 2018

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Presented by:



Public Meeting No. 1

Objectives:

- Review recent sewer progress and success
- Purpose of the PER process and evaluation study
- Overview of preliminary work
- Ranking criteria for future sewer service
- Additional items to be addressed
- Public input and questions



Why Prepare a Preliminary Engineering Report (PER)?

- Develop tools for effective decision making
 - Project priorities
 - Project cost estimates
- Identify projects and costs for State and Federal grants and low interest loans (~3%)
- Address the needs of the community



Scope of PER

- **Assess Current Situation**
 - Existing System
 - Planning area and demographics
- **Assess Future Situation**
 - Population projections
 - Wastewater flow forecasts
- **Develop and Evaluate Alternatives**
 - An environmental review will be part of this but will be conducted in 2020
- **Develop Implementation Plan**
 - Preliminary layout of sewer system
 - Estimate project costs
 - Establish preliminary implementation schedule

Need for Project

- Lockwood was previously the largest un-sewered community in Montana
- 1998: Population was ~4,000
- Projected growth rate: 2.4%
- Major commercial growth was occurring near new Johnson Lane interchange
 - Flying J truck stop
 - 2 new banks
 - Fast food restaurants
 - Hotels wanted to build but reportedly were waiting for a sewer (Holiday Inn was built with septic)
 - Public input and questions



Need for Project

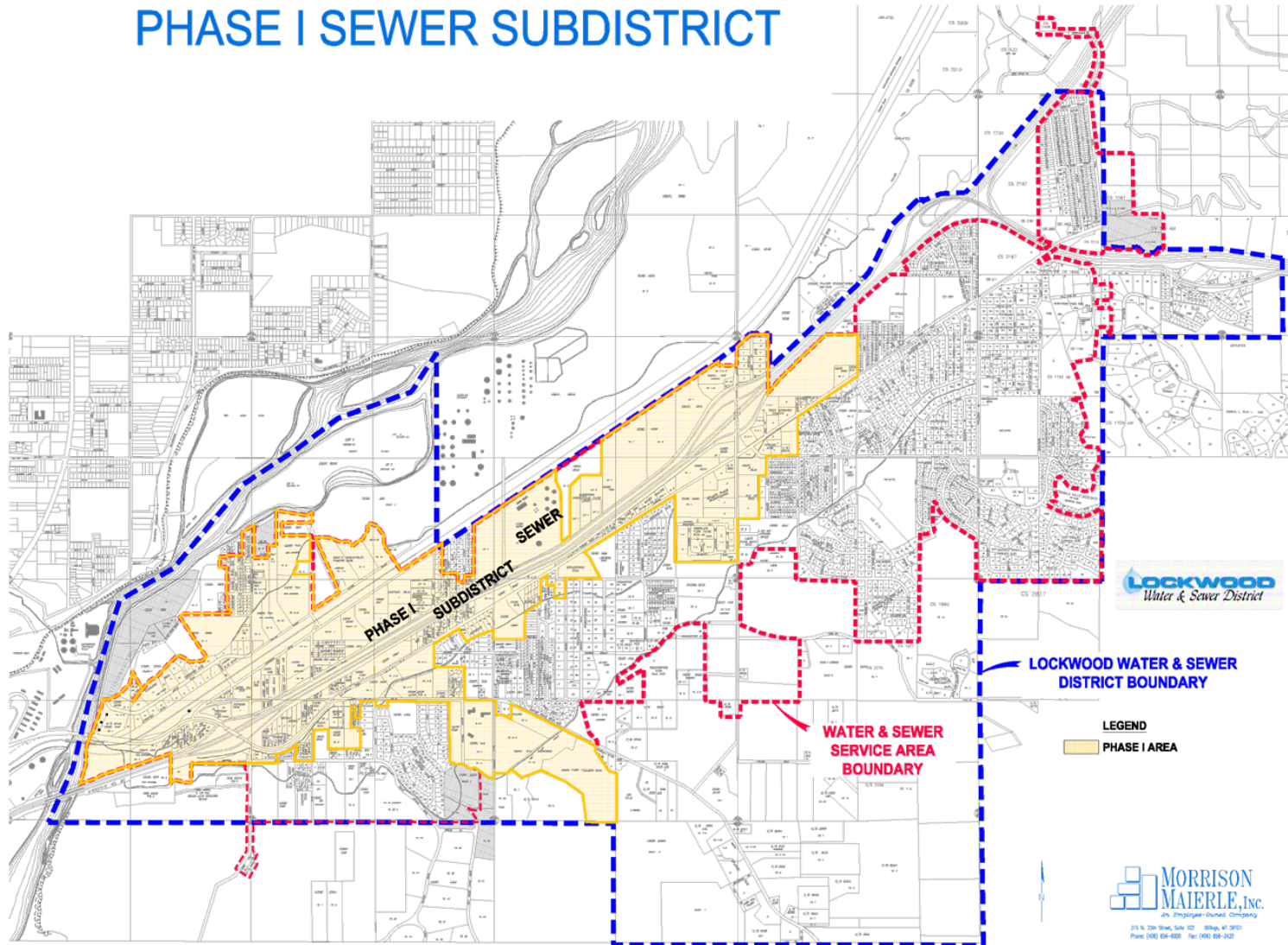
- 0.5 million gallons per day of wastewater generated and discharged through drainfields
- 25% drainfields had failed
- Non standard repairs being allowed
- Unsuitable soils and very small lots
- Drainfields are always a temporary solution
- Concern for groundwater contamination
- High nitrates

Agreement with City of Billings

- Treatment Options
 - Evaluated building own system or connection to City of Billings
 - Political considerations
 - Cross the Yellowstone
- March 2008 – Reached agreement with City of Billings to accept wastewater
- Complex agreement – LWSD tests flows, meters, pays Reserve Capacity Fee



PHASE I SEWER SUBDISTRICT



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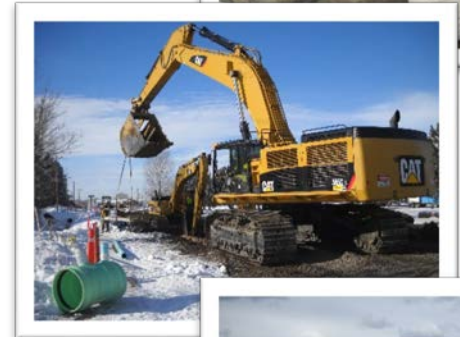
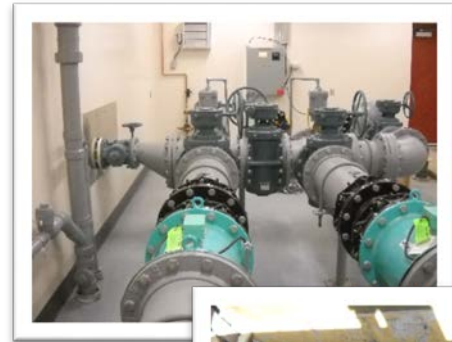
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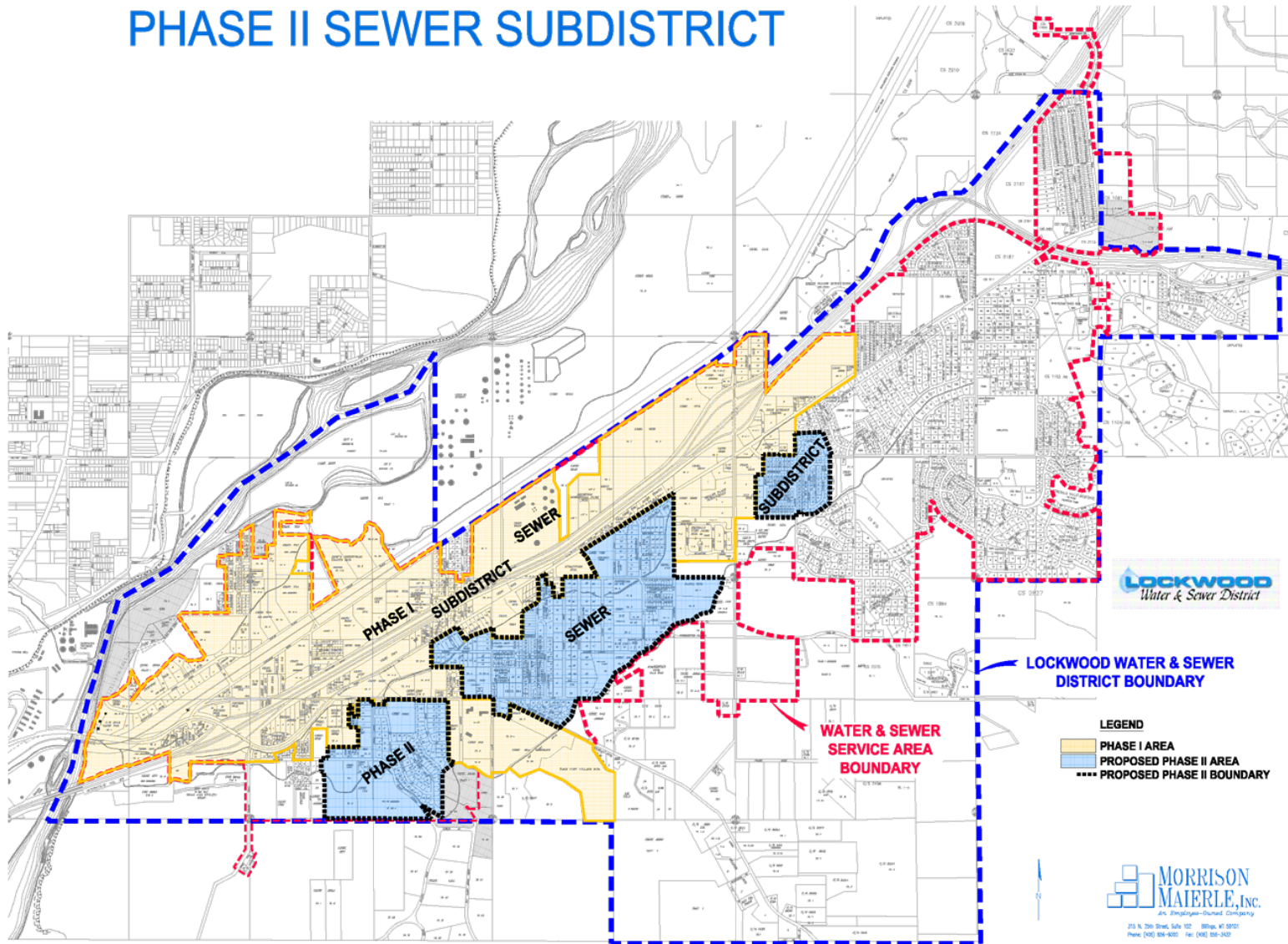


Phase 1 Finances

- **Projected:**
 - Total Cost \$20,704,600
 - GO Bond \$14,000,000 (*based on taxable value)
 - STAG Grant \$6,704,600
- **Actual:**
 - Total cost \$19,400,000
 - TSEP Grant \$500,000
 - ARRA Grant \$490,700
 - STAG Grant \$6,704,600
 - SRF Loan Forgiveness \$559,000
 - Final Bond ~ \$11.2 M
 - Savings on Bond Amount: ~\$2.8 M



PHASE II SEWER SUBDISTRICT



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Phase 2 Approval

- After GO Bond failed, LWSD did extensive public outreach
 - Postcards
 - 7 separate "Neighborhood Meetings"
 - Morrison Maierle & 3rd party consultant
- Determine why and who voted no (areas)
- Identify areas of strong support who needed sewer
- Goal: Utilize funding that was obtained
- Area was refined; now will serve ~ 640 properties. Originally included 1020.



Phase 2 Sewer Funding

- **GRANTS: \$2,740,380**
 - USDA-RD - \$1,890,380
 - TSEP - \$750,000
 - RRGL - \$100,000
- **LOANS: \$6,000,000**
 - USDA-RD - \$ 3,000,000, 2.75% for 40 years
 - SRF – \$3,000,000, 2.5% for 30 yrs
 - \$200,000 Loan Forgiveness
- **LWSD \$3,000 (and more for Water CIP and paving shares)**
- **Yellowstone Co. - \$785,555 (additional paving)**



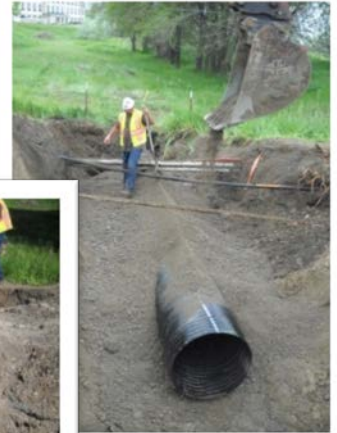
Phase 2 – Special Assessment Method

- Different than Phase 1 GO Bond
- Was based on input from public after the Phase 2 GO Bond failed
- Equal amount per each tax code – favored in neighborhood mtgs
- Assessment updated annually with additional new subdivisions within boundary
- Pre-payment of assessment allowed

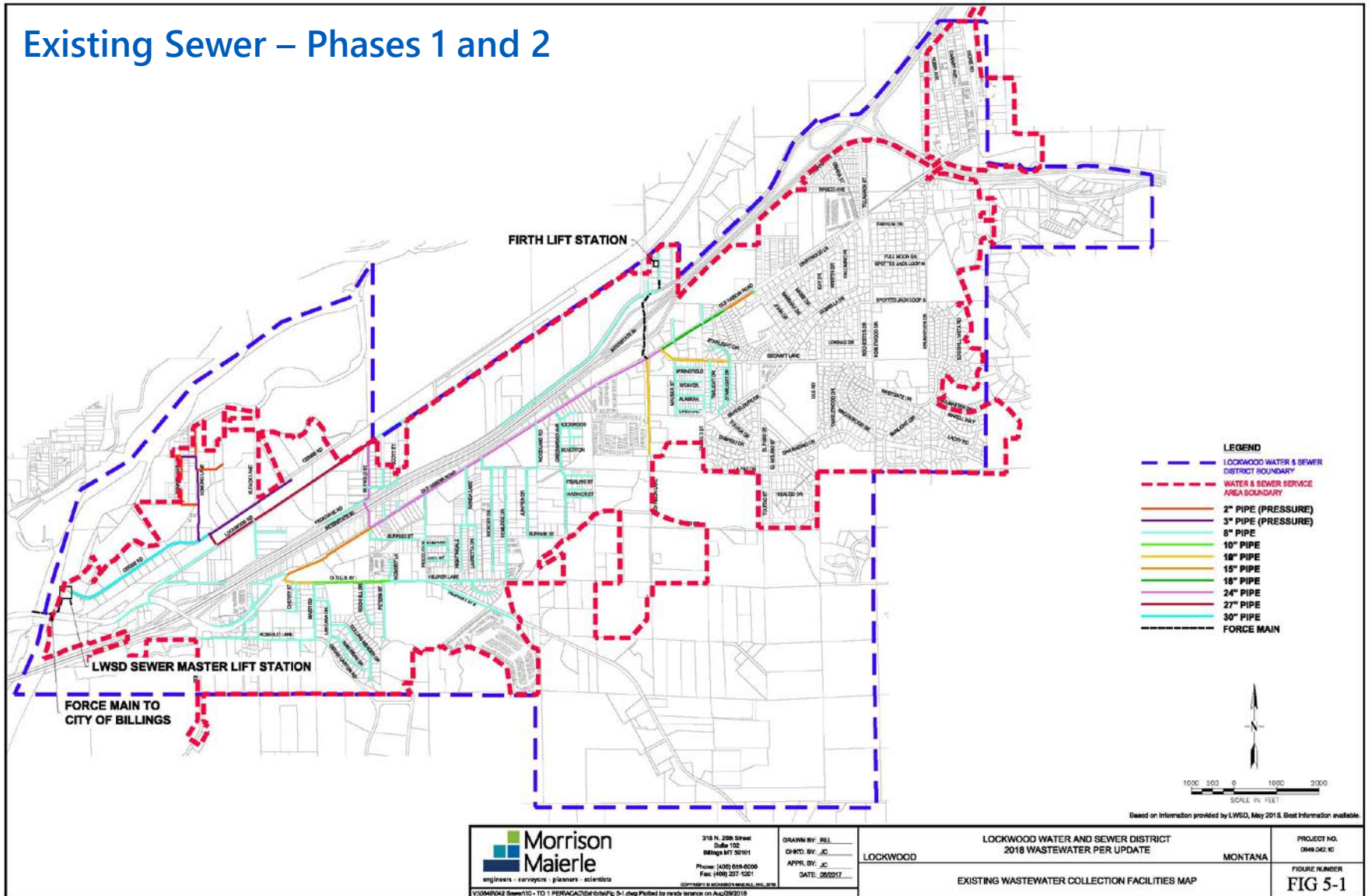


Maximizing Opportunities through Partnerships

- Coordination with Lockwood Water CIP
- MDU agree to move gas lines and use opportunity to upgrade
- Concrete lanes at Johnson Lane Intersection – Yellowstone Co.
- County culverts replaced – Yellowstone Co. supplied and contractor installed
- County and LWSD combined funds to pave various streets in poor condition



Existing Sewer – Phases 1 and 2



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Future Sewer Service Areas

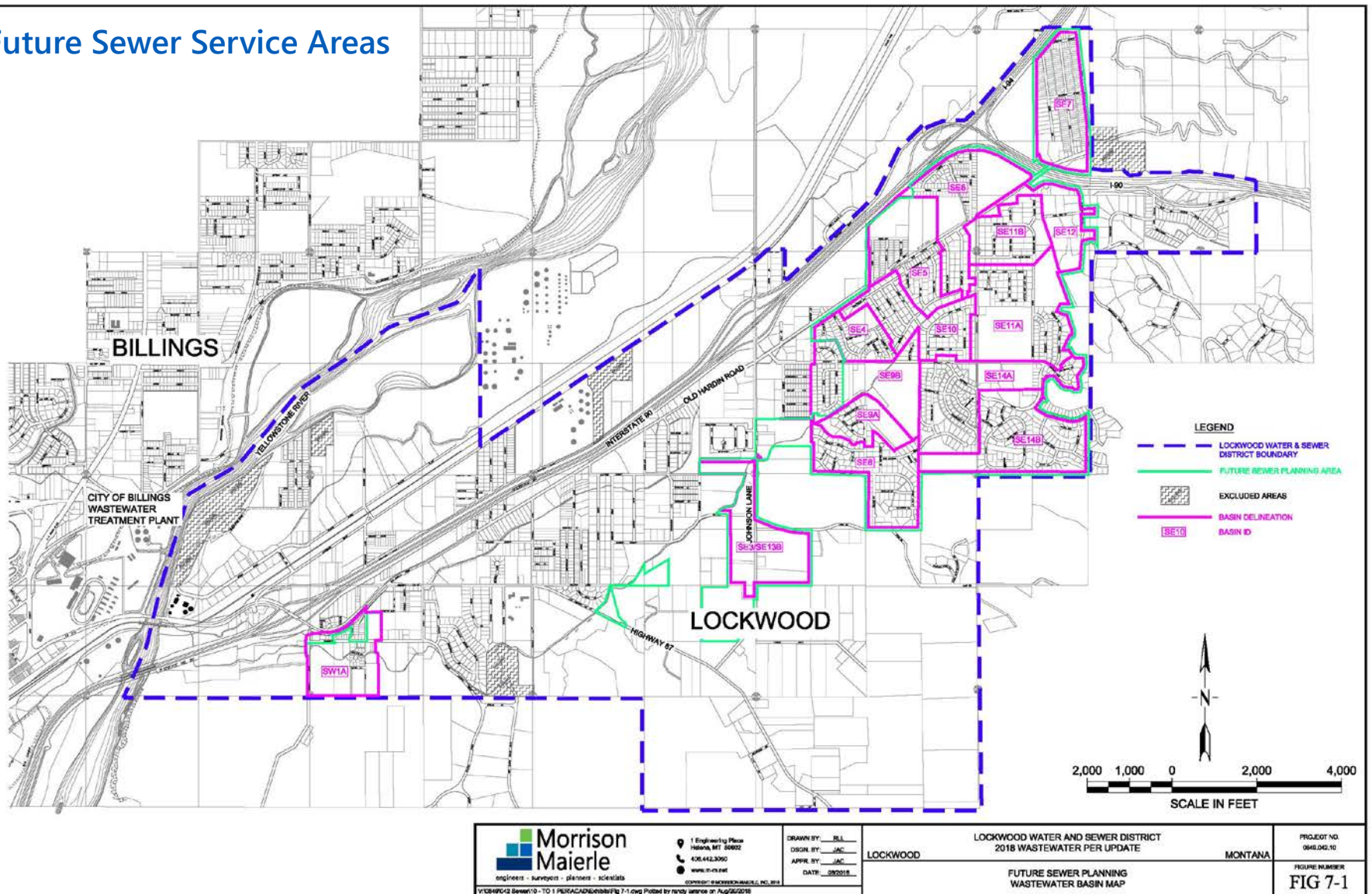
- Service Area Delineation
- Population and Wastewater Flows

Major contributors
Zoning
Residential
Future Growth



Waster-water Flows

Future Sewer Service Areas



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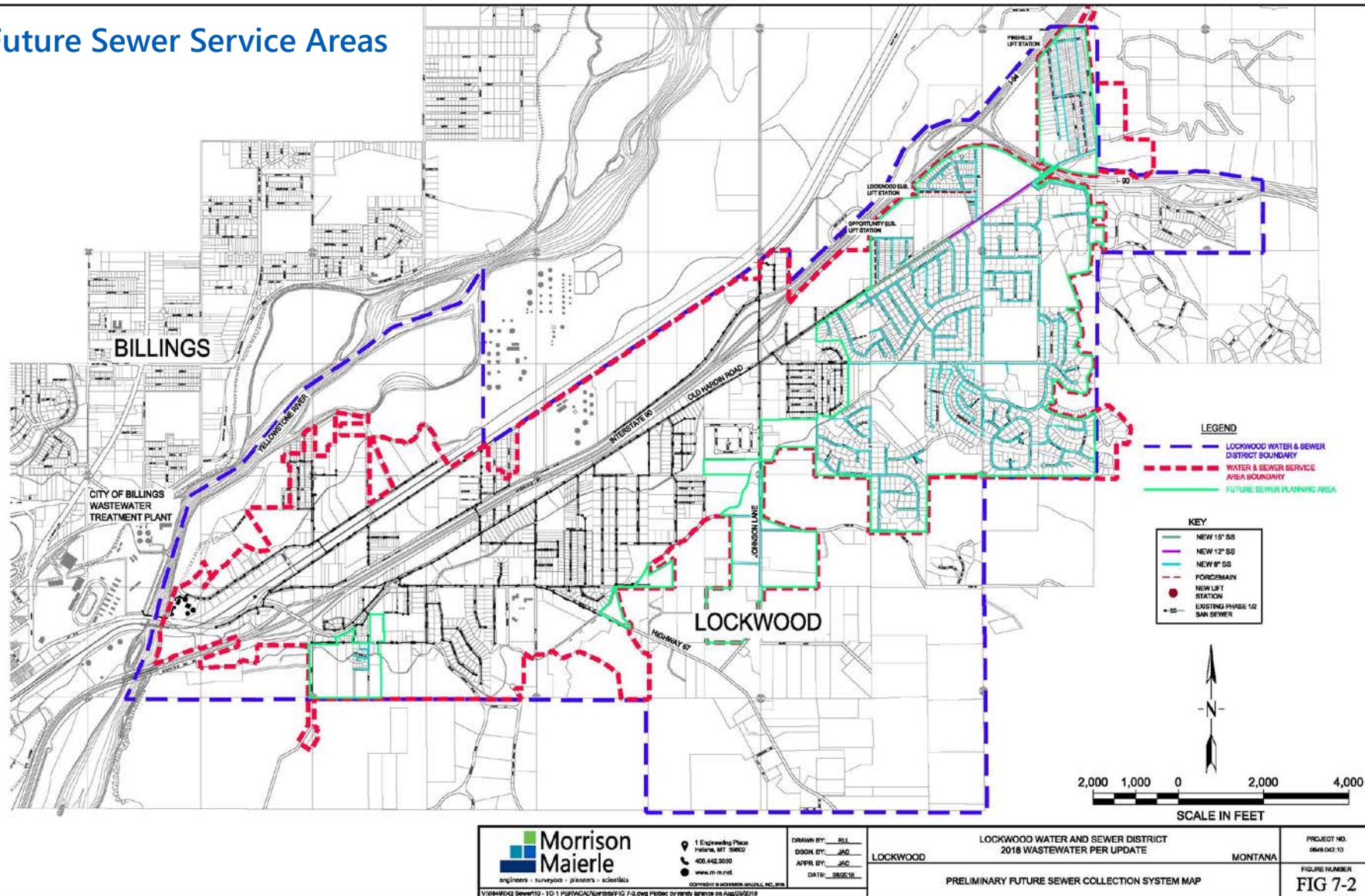
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engineers • surveyors • planners • scientists

Future Sewer Service Areas



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Potential Future Sewer Phasing

- Areas that are currently unsewered were studied as part of the Future Sewer Planning Area
- Each area was analyzed to develop a preliminary cost estimate

Prioritization Criteria

- Project Affordability (Cost/Lot)
- Constructability Phasing
- Drainfield Conditions / Soil Suitability
- Public Support
- Growth Potential / Economic Development (Cost/gpd)



Phase 3 Planning Area

- The areas that were ranked highest were identified and prioritized as the "Phase 3" Planning Area
- Lower ranked areas were identified as a future "Phase 4"
- A Phase 3 planning boundary was established to allow for cost estimating and alternative analysis regarding project implementation (1 project or 2)
- Actual boundary would need to be established through a legal process that allows for public input

Future Sewer Service Areas

LEGEND

- LOCKWOOD WATER & SEWER DISTRICT BOUNDARY
- WATER & SEWER SERVICE AREA BOUNDARY
- FUTURE SEWER PLANNING AREA
- CS 3-1 AND CS 3-2 PROJECT CS1
- FUTURE "PHASE 4"
- EXCLUDED AREAS
- BASIN DELINEATION
- BASIN ID

SCALE IN FEET

2,000 1,000 0 2,000 4,000

LOCKWOOD

LOCKWOOD WATER AND SEWER DISTRICT 2018 WASTEWATER PER UPDATE

PHASE 3 SEWER SUB DISTRICT ALTERNATIVE CS1 MAP - ONE PROJECT

MONTANA

FIG 7-4

Morrison Maierle

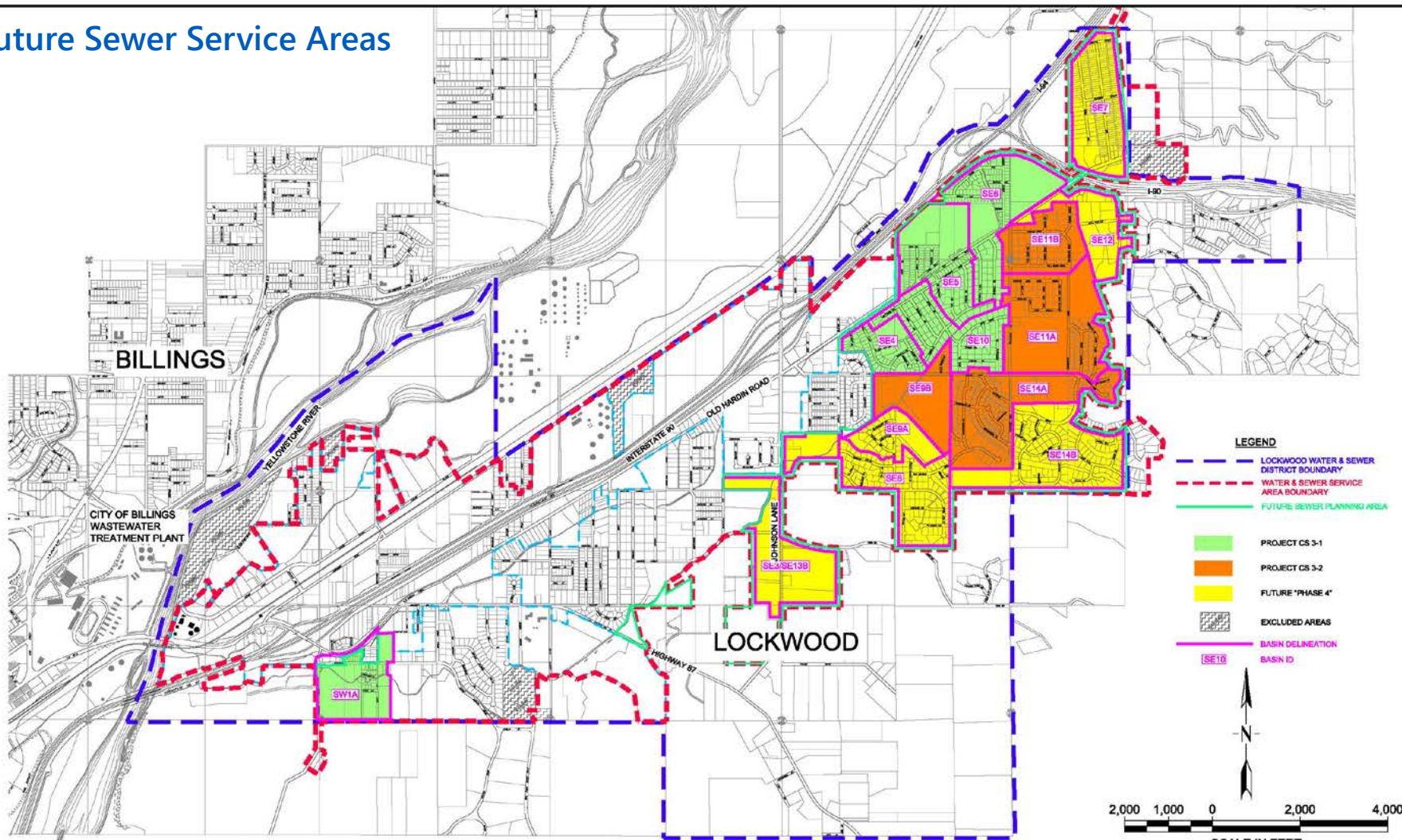
1 Engineering Place
Tulsa, MT 74102
405.442.3000
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DESIGNED BY: JAC
APPROVED BY: JAC
DATE: 06/01/18

PROJECT NO. 0848.042.10

FIGURE NUMBER

Future Sewer Service Areas



 <p>Morrison Maierle engineers • surveyors • planners • scientists</p> <p>1 Engineering Plaza Helena, MT 59602 406.442.3000 www.m-m.com</p> <p><small>COPYRIGHT © MORRISON MAIERLE, INC. 2018 VHSR04042 Sewer10 - TO 1 PERACADE/REVISION 3-Subj Printed by ready service on 8/28/2018</small></p>	<p>1 Engineering Plaza Helena, MT 59602 406.442.3000 www.m-m.com</p>	<p>DRAWN BY: JLL DESIGN BY: JAC APPROV BY: JAC DATE: 08/20/18</p>	<p>LOCKWOOD</p>	<p>LOCKWOOD WATER AND SEWER DISTRICT 2018 WASTEWATER PER UPDATE</p>	<p>MONTANA</p>	<p>PROJECT NO. 0448.042.10</p>
	<p>PHASE 3 SEWER SUB DISTRICT ALTERNATIVE CS2 - TWO PROJECTS</p>					<p>FIGURE NUMBER FIG 7-5</p>

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Funding Programs for Planning and Construction Activities

- Potential Funding Agencies

- Spring 2020 – Montana Dept of Commerce (TSEP)
- Spring 2020 – Montana Dept of Natural Resources and Conservation (RRGL)
- DNRC – SRF Loan Program
- Monitor for other infrastructure funding that may become available

There is Help for Low Income Households

- Help paying for construction cost for service line and septic tank abandonment:
- USDA-RD Grants and Loans are available for very low income households.
- LWSD got a CDBG grant to help pay for services in targeted low income areas

Where Do We Go From Here?

- Finalize project prioritization and future service areas – taking into account public feedback
- Begin process to establish Phase 3 Boundary
- Complete environmental review, funding strategy and hold second public meeting on PER in early 2020
- Finish Preliminary Engineering Report
- Submit grant applications – 2020
- Prepare for project implementation in 2021/2022



Thank You.



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