December 30, 2008

Greg Robertson
Missoula County
6089 Training Drive
Missoula, MT 59808

RE: Missoula Wye Sanitary Sewer RSID #8489
SRF #C302189-01
Missoula, Montana

Greg:

Enclosed is a copy of the Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) for the Missoula Wye Sanitary Sewer RSID #8489 improvements. Please print the FONSI letter in one publication of your local paper under legal advertising and return the proof of advertising to this office. You do not have to print this letter or the EA. We recommend that you advertise this as soon as possible to allow for a 30-day comment period. Please have the FONSI, EA and Preliminary Environmental Report (PER) available to the public at your office during the comment period. We have distributed these documents to the enclosed list of agencies.

If you have any questions, please do not hesitate to contact me at (406) 444-5323.

Sincerely,

Jerry Paddock, P.E.
Environmental Engineer
Technical and Financial Assistance Bureau
Phone: (406) 444-5323 Fax: (406) 444-6836

Encl.

cc: Jon Gass, P.E., WGM Group, Inc, Missoula

December 30, 2008

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the proposed action below:

Project	Missoula Wye Sanitary Sewer RSID #8489
Location	Missoula, Montana
Project Number	C302189-01
Total Cost	$13,177,000

From the September 2008 Missoula Wye Sewer Preliminary Engineering Report, Missoula County has identified the need to extend the City of Missoula's wastewater collection system to serve the Missoula Wye area. The existing residences and businesses have individual drainfields. A 1994 Cumulative Effect/Carrying Capacity Study and the 1999 Missoula Wastewater Treatment Facility Plan indicate that untreated wastewater from septic system constitutes a major source of pollution to the Clark Fork and Bitterroot Rivers, and poses a threat to the quality of water in the Missoula aquifer. In order to comply with the Federal and State regulations for surface water quality, the City of Missoula and County of Missoula entered into a Voluntary Nutrient Reduction Program. This program, adopted by the City-County Health Board, City Council, and Board of County Commissioners, includes a reduction goal for Missoula area ground water loading from septic systems. The goal is to connect 50% of the 7,000 existing septic systems within the Missoula urban area to public sewers by 2008, and hold the septic systems to no more than 3,500 in the future.

Water tests in several wells in the Missoula Wye area have found nitrate levels over 10 mg/L, which exceeds the maximum allowable level that can be used for drinking water. The Missoula Valley Aquifer was designated as a "sole source aquifer" by the US EPA in 1988 and it appears that partially treated wastewater from on-site wastewater disposal systems in the Wye area are polluting the aquifer. The Wye area is expected to see much more development in the future and the extension of the city sewer to the area will help meet the goal to limit the number of septic systems in the Missoula urban area. The ultimate goal of the project is the protection of the Missoula Valley Aquifer and the Clark Fork River. The wastewater will receive enhanced treatment in the Missoula wastewater treatment facility, which includes phosphorous and nitrogen removal, and disinfection before it is discharged to the Clark Fork River.

To reduce nutrient loads to the Missoula aquifer, the PER recommended extending the City of Missoula's sanitary sewer collection system to the Missoula Wye area to serve the residents and commercial lots. The proposed project will consist of over 70,000 linear feet of gravity mains, ranging in size from 8-inches to 21-inches in diameter; over 250 manholes; three lift stations; over 17,000 linear feet of force main ranging in size from 4-inches to 12-inches in diameter; and associated appurtenances.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or

endangered species, and historical sites will not be adversely impacted as a result of the proposed project. No significant long-term environmental impacts were identified. An environmental assessment (EA), which describes the project and analyzes the impacts in more detail, is available for public scrutiny on the Department of Environmental Quality website: www.deq.mt.gov or at the following locations:

Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-09011
jpaddock@mt.gov

Missoula County
6089 Training Drive
Missoula, MT 59808

Comments on the EA may be submitted to the Department of Environmental Quality at the above address. After evaluating substantive comments received, the department will revise the environmental assessment or determine if an environmental impact statement is necessary. If no substantive comments are received during the comment period, or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant, the agency will make a final decision. No administrative action will be taken on the project for at least 30 calendar days after release of the Finding of No Significant Impact.

Sincerely,

_____
Todd Teegarden, Bureau Chief
Technical and Financial Assistance Bureau

MISSOULA COUNTY
MISSOULA WYE SANITARY SEWER RSID #8489

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Name of Project:	Missoula Wye Sanitary Sewer RSID #8489
Applicant:	Missoula County
Address:	6089 Training Drive Missoula, MT 59808

B. CONTACT PERSON

Name:	Greg Robertson, Director of Public Works
Address:	6089 Training Drive Missoula, MT 59808
Telephone:	(406) 523-4818

C. ABSTRACT

Missoula County, through the September 2008 Missoula Wye Sewer Preliminary Engineering Report (PER) prepared by WGM Group has identified the need to extend the City of Missoula's collection system into an area typically referred to as the Missoula Wye area. The Wye area is not currently served by a regional sewer system. The existing residences and businesses in the area have individual drainfields. A 1994 Cumulative Effect/Carrying Capacity Study and the 1999 Missoula Wastewater Treatment Facility Plan indicate that untreated wastewater from septic system constitutes a major source of pollution to the Clark Fork and Bitterroot Rivers, and poses a threat to the quality of water in the Missoula aquifer. In order to comply with the Federal and State regulations for surface water quality, the City of Missoula and County of Missoula entered into a Voluntary Nutrient Reduction Program. This program, adopted by the City-County Health Board, City Council, and Board of County Commissioners, includes a reduction goal for Missoula area groundwater loading from septic systems. The goal is to connect 50% of the 7,000 existing septic systems within the Missoula urban area to public sewers by 2008, and hold the septic systems to no more than 3,500 in the future. Water tests in several wells in the Wye area have found nitrate levels over 10 mg/L, which exceeds the maximum allowable level that can be used for drinking water. The Missoula Valley Aquifer was designated as a "sole source aquifer" by the US EPA in 1988 and it appears that partially treated wastewater from on-site wastewater disposal systems in the Wye area are polluting the aquifer. The Wye area is expected to see much more development in the future and the extension of the city sewer to the area will help meet the goal to limit the number of septic systems in the Missoula urban area. The ultimate goal is the protection of the Missoula Valley Aquifer and the Clark Fork River.

In July 2004, landowners within the Wye area submitted a petition to the Missoula County Commissioners requesting Missoula County create a Rural Special Improvement District (RSID) for providing wastewater service to the Wye area. In response to the RSID petition, the need to protect the environment (groundwater), and the need to protect the

health and welfare of the Missoula valley residents, the County decided to have WGM Group prepare a planning document to evaluate several sanitary sewer extension alternatives, including costs, to serve the area with the City of Missoula's public sewer system.

The total proposed project will consist of over 70,000 linear feet of gravity mains, ranging in size from 8-inches to 21-inches in diameter; over 250 manholes; three lift stations; over 17,000 linear feet of force main ranging in size from 4-inches to 12-inches in diameter; two boring under Interstate 90, numerous crossing pipes under US Highway 10, and associated appurtenances. Service lines and connections are not included in this project. The first phase of construction has been completed and was paid for by the developers. These costs will be reimbursed back to the developers when the Phase 2 improvements are being constructed.

Cost for the total proposed improvements (Phase 1 and 2) is estimated to be $13,177,000, including engineering, administration, and construction costs. A loan will be obtained from the Montana State Revolving loan program for $10,390,000 and will be paid back through revenues received from the RSID 8489 members over a 20-year period.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species and historical sites are not expected to be adversely impacted as a result of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, and growth were also assessed. No significant long-term environmental impacts were identified.

Under the Montana Water Pollution Control State Revolving Fund Act, the DEQ may loan money to municipalities for construction of public sewage systems.

The project will be constructed using standard construction methods and to minimize or eliminate pollutants during construction, best management practices will be implemented. A Stormwater Discharge General Permit and a construction-dewatering permit from the DEQ may be required prior to construction. No permits are required from the State Revolving Fund (SRF) section of the DEQ for this project.

The DEQ, Technical & Financial Assistance Bureau, has prepared this Environmental Assessment (EA) to satisfy the requirements of the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA).

D. COMMENT PERIOD

Thirty (30) calendar days

II. PURPOSE OF AND NEED FOR ACTION

The Missoula Wye area is located about nine miles northwest of Missoula Montana and is generally located around the interchange of US Highway 93 and Interstate 90. See Figure 2 for the RSID area. The RSID #8489 (immediate) service area includes approximately 2,061 acres with approximately 1,836 homes. The planning area (area to be served by year 2045) could include approximately 7, 400 acres. The Wye area is not currently served by a regional sewer system and residences and businesses have individual drainfields. Figure 3 shows the wastewater planning and service areas.

Water tests in several wells in the Wye area have found nitrate levels over 10 mg/L, which exceeds the maximum allowable level that can be used for drinking water. The Missoula Valley Aquifer is designated as a "sole source aquifer" by the US EPA in 1988 and it serves as the drinking water supply to the Missoula County residents. Based on water quality testing, it appears that the on-site wastewater disposal systems in the Wye area are contributing to the pollution of the aquifer. Additionally, the Wye area is expected to see much more development in the future. The Wye area is within the current service area as adopted in the 1999 Wastewater Facilities Plan for the City of Missoula. In order to comply with the Federal and State regulations for surface water quality, the City of Missoula and County of Missoula entered into a Voluntary Nutrient Reduction Program. This program, adopted by the City-County Health Board, City Council, and Board of County Commissioners, includes a reduction goal for Missoula area groundwater loading from septic systems. The goal is to connect 50% of the 7,000 existing septic systems within the Missoula urban area to public sewers by 2008, and hold the septic systems to no more than 3,500 in the future. The ultimate goal is the protection of the Missoula Valley Aquifer and the Clark Fork and Bitterroot Rivers.

To reduce nutrient loads to the Missoula aquifer, the PER recommended extending the City of Missoula's sanitary sewer collection system to the Missoula Wye area to serve the residents and commercial lots. The proposed project will consist of over 70,000 linear feet of gravity mains, ranging in size from 8-inches to 21-inches in diameter; over 250 manholes; three lift stations; over 17,000 linear feet of force main ranging in size from 4-inches to 12-inches in diameter; and associated appurtenances. The wastewater will receive enhanced treatment in the Missoula wastewater treatment facility before it is discharged to the Clark Fork River. It should be noted that in the future, the Clark Fork TMDL and associated MPDES permit effluent limits may require upgrades to the City's secondary treatment system to provide additional removal of nutrients.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. ALTERNATIVES

Five alternatives for addressing the need to extend the City of Missoula's sanitary sewer collection system to serve the RSID/planning area were evaluated in the Preliminary Engineering Report (PER). Based on the 2045 planning area and growth in the RSID, over-sizing of the lift stations and some main line piping was included in the alternatives to provide capacity in the system for the future flows. As noted below, the proposed improvements would include over 70,000 feet of new collection system piping to enable the existing and future lots to connect to the City of Missoula's wastewater treatment system. The piping alignments in Alternatives 2 through 5 did not vary significantly between the alternatives. Therefore, pipe alignments were not considered alternatives.

1. Alternative 1 – No Action Alternative
2. Alternative 2 – Two Lift Stations - Waldo Lift Station at Location 1
3. Alternative 3 – Two Lift Stations - Waldo Lift Station at Location 2
4. Alternative 4 – Three Lift Stations with 12-Inch Diameter Force Main at Futurity
5. Alternative 5 – Three Lift Stations with Dual 10-Inch Diameter Force Mains at Futurity

1. NO ACTION ALTERNATIVE – The Wye area is currently not served by a regional sewer system and the no action alternative would involve not extending the City of Missoula's sanitary sewer collection system into the Missoula Wye area. The existing residences

and businesses in the Wye area have individual drainfields. A 1994 Cumulative Effect/Carrying Capacity Study and the 1999 Missoula Wastewater Treatment Facility Plan indicate that untreated wastewater from septic system constitutes a major source of pollution to the Clark Fork and Bitterroot Rivers, and poses a threat to the quality of water in the Missoula aquifer. The Missoula Valley Aquifer is designated as a "sole source aquifer" by the US EPA in 1988, which means that the aquifer is the sole source of drinking water for the Missoula County residents. Water tests in several wells in the Wye area have found nitrate levels over 10 mg/L, which exceeds the maximum allowable level that can be used for drinking water. It appears that partially treated wastewater from on-site wastewater disposal systems in the Wye area are polluting the aquifer.

The Clark Fork River is listed by the state of Montana as water quality impaired and identified on the state's Section 303(d) list. This designation requires that the state undertake water quality planning and management activities to restore water quality and relieve impacts on beneficial uses of the stream. The Clark Fork River is identified as one of the highest priority streams in the state for total maximum daily load to limit the addition of nutrients causing excess growth of nuisance algae. In order to comply with the Federal and State regulations for surface water quality, the City of Missoula and County of Missoula entered into a Voluntary Nutrient Reduction Program. This program, adopted by the City-County Health Board, City Council, and Board of County Commissioners, includes a reduction goal for Missoula area groundwater loading from septic systems. The goal is to connect 50% of the 7,000 existing septic systems within the Missoula urban area to public sewers by 2008, and hold the septic systems to no more than 3,500 in the future. Additionally, the Wye area is expected to see much more development in the future and with it the installation of more on-site septic systems , making achievement of this goal more difficult.

With the continued use of on-site septic systems there will be land use limitations and higher costs associated with wastewater discharges and disposal in the Missoula Wye area. Advanced on-site treatment systems may be required to help reduce the nitrogen discharged to the soil/aquifer. These advanced treatment systems will cost more to install and operate. Furthermore, in some areas of the Wye, the soils are not conducive to on-site septic systems due to the lack of groundwater movement, which may lead to lower home densities and urban sprawl.

Given these possible adverse impacts and conclusions, as well as expected growth in area, the no action alternative was not considered viable and was not evaluated further.

2. TWO LIFT STATIONS - WALDO LIFT STATION AT LOCATION 1 – This alternative includes one lift station along West Broadway near the BNSF Railroad (Futurity lift station), one lift station at Waldo Road near O'Keefe Creek (Waldo lift station), and 8,500 feet of 10-inch diameter force main, and 7,600 feet of 18-inch gravity piping to serve as the backbone of the collection system. Other major improvements would include over 70,000 feet of gravity mains, ranging in size from 8-inch to 21-inches in diameter, and over 250 manholes. With this alternative, most of the wastewater flow from the proposed service area would be to the Waldo lift station, which would then pump the wastewater to the Futurity lift station. Because of the large flow and high head (due to the long force main) required to pump the wastewater to the city gravity system, large pumps (125 HP motors and 740 gpm pumps) operating at approximately 40% efficiency, and high pressure piping would be required. These pumps are much larger than typically utilized in other Missoula lift stations. Because this alternative is practical in terms of cost,

environmental, and regulatory considerations, this alternative was further evaluated.

3. TWO LIFT STATIONS – WALDO LIFT STATION AT LOCATION 2 – This alternative is similar to alternative 2, but the Waldo lift station would be located west of Interstate 90 and along O'Keefe Creek. This location would be outside the Missoula Wastewater Facility's Service area. All flows from the northern Wye area would gravity flow under Interstate 90 to the Waldo lift station and then be pumped to the Maturity lift station. Compared to alternative 2, this alternative would require 2,300 feet of additional gravity main, two borings under Interstate 90, over-sizing of 4,600 feet of 8-inch main, and larger pumps due to the larger flow (from the north). Other major improvements would include over 70,000 feet of gravity mains, ranging in size from 8-inch to 21-inches in diameter, and over 250 manholes. Because this alternative is practical in terms of cost, environmental, and regulatory considerations, this alternative was further evaluated.

4. THREE LIFT STATIONS W/12-INCH DIAMETER FORCE MAIN AT FUTURITY – This alternative included the two lift stations considered in Alternative 2 and a third lift station located along Highway 93 near Mastad Drive (east of Highway 93). The Mastad lift station was proposed so the force main from the Waldo lift station would be shorter (5,150 feet instead of 7,600 feet), enabling 30 HP pumps to be installed in the Waldo lift station, which meets the City of Missoula's standard design for lift stations. Under this alternative, the Mastad lift station would require about 3,350 feet of 8-inch diameter force main and included a 12-inch force main from the proposed Futurity lift station. The Mastad lift station would require a 110 HP pumps to meet the 2045 build-out flow. The Waldo force main would be located along West Broadway and would transition into gravity flow at the Momont Development Park on Butler Creek Road. As with the other alternatives, other major improvements would include over 70,000 feet of gravity mains, ranging in size from 8-inch to 21-inches in diameter, and over 250 manholes. Because this alternative is practical in terms of cost, environmental, and regulatory considerations, this alternative was further evaluated.

5. THREE LIFT STATIONS W/DUAL 10-INCH DIAMETER FORCE MAINS AT FUTURITY – This alternative included the three lift stations considered in Alternative 4. However, this alternative considered using two 10-inch diameter force mains instead of a 12-inch force main from the Futurity Lift Station to the city outfall. Utilizing two force mains would reduce wastewater residence time in each force main in the initial flows (a high residence time creates septic conditions in the main) and would allow lower pumping head at build-out than the 12-inch pipe (Alternative 4). As with the other alternatives, other major improvements would include over 70,000 feet of gravity mains, ranging in size from 8-inch to 21-inches in diameter, and over 250 manholes. Because this alternative is practical in terms of cost, environmental, and regulatory considerations, this alternative was further evaluated.

B. SELECTED ALTERNATIVE

The practical alternatives were compared relative to one another based on the following criteria: cost, environmental and regulatory compliance, compatibility with existing facilities, constructability, energy savings, and ease of maintenance. Alternative 4, using three lift stations with a 12-inch diameter force main from the Futurity lift station to the proposed city outfall location was the recommended alternative. Alternative 4 also had the lowest present worth cost of the four alternatives. See Figure 2 for the layout of the proposed collection system.

C. COST COMPARISON

Costs for the proposed RSID improvements are estimated to be $13,176,538. Of this amount, the City of Missoula will contribute approximately $550,000 for over-sizing some facilities to meet future (2045) flows.

The present worth analysis is a method of comparing alternatives in present day dollars and can be used to determine the most cost-effective alternative. An interest rate of 6.0% over the 20-year planning period (Design Year 2027) was used in the analysis. Summaries of the present worth analyses of the feasible alternatives are provided in Table 1.

TABLE 1 - ECONOMIC EVALUATION OF COLLECTION SYSTEM ALTERNATIVES

Alterative	Lift Station Capital Cost	Gravity Main Capital Cost	Yearly O&M	**Total Present Worth**
2 – Two Lift Stations Loc. 1	$1,736,219	$6,945,055	$60,935	**$9,389,194**
3 – Two Lift Stations Loc. 2	$2,035,218	$6,954,055	$50,491	**$9,568,401**
4 – Three Lift Stations w/12” FM	$1,857,749	$6,954,055	$48,170	**$9,364,310**
5 – Three Lift Stations w/Dual 10” FM	$2,096,215	$6,954,055	$48,170	**$9,602,776**

The base operation and maintenance rates for wastewater residential users in the Wye service area are expected to be $11.50 per month. Based on the 252 current properties in the RSID, the monthly assessment per property will be $220.00. The financial impact of this project on the current property owners (when the project is complete) is shown in Table 2. However, a number of large undeveloped properties are undeveloped in the RSID service area and several are currently being developed or are expected to be platted in the near future. The County expects about 720 additional lots to be created in the near future in the Wye area. The addition of these lots would lower the monthly assessment to approximately $54 per month. The project affordability of this project is shown in Table 3 if the 720 lots are included in the assessment. Based on the EPA guidance for project affordability, the proposed project will result in a monthly cost per household that is 8.1% of the monthly median household income based on the current number of lots and 2.28% based on the known lots to be added to the RSID soon. Even if the known platted lots are included to the RSID, the project may impose a significant economic hardship on household income. Typically, wastewater rates that are 1% or less of the median household income are not expected to result in an economic hardship on the affected residents.

TABLE 2 PROJECT AFFORDABILITY	
Proposed monthly wastewater service rate and RSID assessment - **252 current RSID parcels**[1]	$11.50 + $220 = $232.50
Monthly median household income (mMHI)[2]	$2,871.00
User rate as a percentage of mMHI	8.1 %

TABLE 3 PROJECT AFFORDABILITY	
Proposed monthly wastewater service rate and RSID assessment - **972 parcels (includes 720 known new platted and current RSID parcels)**[1]	$11.50 + $54.01 = $65.51
Monthly median household income (mMHI)[2]	$2,871.00
User rate as a percentage of mMHI	2.28 %

1 March 19, 2008 Uniform Application for Montana Public Facility Projects, service rate includes debt service and O&M increase

2 Based on 2000 census data

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA

The Missoula Wye RSID #8489 service/planning area is located approximately nine miles northwest of Missoula, Montana in Missoula County. The Missoula Wye area is located at the intersection of US Highway 93 and Interstate 90. The service area and planning area boundaries are shown on Figure 3. The service area represents the area planned for immediate wastewater service and includes the RSID #8489 area. The planning area represents the ultimate service area boundary that can be served by future expansion.

The topography of the planning area is gently sloping with drainage swales sloping toward West Broadway, Highway 93 and O'Keefe Creek. The planning area varies in elevation from approximately 3100 to 3200 feet. The soils are silty clay loams, generally mapped as Grassvalley Soil, Unit 47 as taken from the NRCS logbooks. The geology is made up of Glacial Lake Missoula clays on top of a layer of silty sand, with some clay soils and deeper layers of sands and gravels.

The planning area includes residential homes, large vacant parcels, and commercial properties. The project is scheduled to begin in the early 2009 and the duration of the construction should be approximately 12 months.

B. FLOW PROJECTIONS

The projected flow within one year of project completion is expected to be 0.14 million gallons per day (mgd) and the 2045 flow is projected to be 1.45 mgd. To ensure the infrastructure is in place to meet future flows without replacing major facilities in the future, flow projections to the three proposed lift stations and proposed sewer mains were based on the planning area and not the RSID service area. Flow projections were based on population densities which were developed in the 1999 Missoula Wastewater Facility Plan and updated with known planning in the area. The City of Missoula's wastewater

treatment facility was recently upgraded and is now designed to treat an average daily flow of 12 million gallons per day. The current average daily flow is 8.5 million gallons per day. The remaining capacity at the treatment facility would include the flow from the Wye area, as adopted in the 1999 Wastewater Facilities Plan.

An assessment of the Wye area flows and loads on the non-degradation load limits in the Missoula wastewater treatment facility's discharge permit were also evaluated. Taking into account current treatment levels and adding the contribution from Wye area (assuming similar levels of treatment would be achieved) the BOD load is only at 9.8% of the permit load limit (PLL), TSS is at 17.2% of the PPL, TP is at 69.3% of the PLL, and TN is at 90.8% of the PLL. Therefore connecting Wye area to the sewer system should not result in any permit issues.

C. NATURAL FEATURES

The geology of the area is made up of Glacial Lake Missoula clays over sand and gravel. In the planning area, there is a thick sequence of the Lake Missoula clay on top of a layer of silty sand, with some clay soils and deeper layers of sands and gravels. Groundwater underlying the planning area generally flows toward the west to the Clark Fork River and toward the north to O'Keefe Creek. The elevation in the planning area varies from approximately 3100 to 3200 feet. The Clark Fork River is located approximately three miles south of the planning area. Water well logs indicate that the groundwater is generally about 90 to 100 feet below the surface in the southern portion of the planning area and 20 to 60 feet below the surface in the northern portion of the planning area. Groundwater was found at 6.5 to 8.5 feet below the ground surface during borings for the Waldo lift station (which is located in the northern portion of the planning area).

D. POPULATION

The PER indicated the 1999 population in the RSID area includes 822 residential people, 1,692 commercial people and includes 2, 061 acres of land. Not including the RSID population, the 1999 Planning area includes 1,203 residential people, 664 commercial people and includes 5,329 acres. The PER projected the 2045 RSID residential population would include 2,474 people and 5,743 commercial persons. Not including the RSID population, the 2045 planning area residential population would include 2,026 people, 2,356 commercial people, and included 5,329 acres. The 2045 planning area population is projected to include 13,164 residential people and 6,542 commercial people, for a total service population of 19,706 people in 2045. Figure 3 shows the RSID and planning areas.

E. MAPS

Figure 1 shows the location of the Missoula within the state of Montana and Figure 2 shows the Missoula Wye area with the proposed improvements. Figure 3 shows the Planning and Service Area for the Wye area.

V ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use – The Wye area includes residences and businesses which have individual wells and drainfields. Large drainfields serve the hotels, restaurants and other commercial establishments. The proposed extension of the city of Missoula's collection system into the Wye area is in agreement with the 1999 Missoula Wastewater Facilities Plan, which included the Wye

area and is also consistent with the objective and goals of the Missoula Growth Management Task Force. There may be an indirect beneficial impact to the extent that the project influences development patterns towards less rural sprawl and more concentrated urban development. No unique forest or agriculture lands exist within, or adjacent to the planning area.

2. Floodplain – Both LaValle Creek and O'Keefe Creek pass through portions of the planning area and include areas subject to flooding. LaValle Creek includes an area mapped as a Zone A floodplain and is subject to inundation by the 100-year floodplain. O'Keefe Creek includes an unmapped floodplain area. The Missoula County Floodplain program has concerns with sewer expansion into floodprone areas and feels that it is very important that expansion does not increase public health and safety risks by promoting development in the floodprone areas. During the design and construction stages of the project, coordination will occur with the Missoula County Floodplain Administrator to insure that the necessary floodplain requirements are met. No impact to either creek floodplain is expected because of the proposed improvements.

3. Wetlands – No wetlands will be impacted by the proposed improvements. However, there may be impacts to wetlands associated with growth around the community as the planning area develops. This impact would be an indirect result of the improvements and should be controlled by the County and/or City as the growth occurs. Before dredged or fill material can be discharged or placed into waters of the United States, including wetlands, a 404 permit must first be obtained from the U.S. Army Corps of Engineers. Before issuing this permit, any potential, impacts to wetlands will be addressed.

4. Cultural Resources – The extension of the collection systems should not impact historic or cultural resources. The State Historic Preservation Office (SHPO) reviewed the proposed project. According to their records, there have been a few previously recorded sites and few cultural resources done within the search area. SHPO stated that there was a low likelihood that cultural properties would be impacted by this project and as such, felt a cultural resource inventory is unwarranted at this time. However, should cultural materials be inadvertently discovered during this project, SHPO will be contacted and the site investigated. In addition, it is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures over fifty years old are to be altered, SHPO recommends that they be recorded and a determination of their eligibility be made.

5. Fish and Wildlife – The project is unlikely to have any impact to fish, wildlife, or habitat resources, nor will any known endangered species be affected. If there will be alterations to a stream bed or stream banks, the County will have to apply for a Stream Protection Act permit from the Montana Fish, Wildlife and Parks Department. The permit will address alterations and maintenance (if any) of the stream for the fish. Animal life will not be significantly affected by the proposed project. The project will not significantly affect any wildlife habitats. The proposed project has water quality benefits that may protect and reduce the risk of harm to fisheries and other animals.

6. Water Quality – Due to the close proximity of the Wye area to the Clark Fork River, there is concern over the negative impacts that the existing septic systems are having on the water quality of the Clark Fork River. Eliminating the use of the existing septic systems and construction/use of future septic systems will result in the reduction of pathogen and nutrient loadings to groundwater and ultimately to the Clark Fork River, improving water quality. By sending the effluent to the Missoula wastewater treatment facility, the effluent will receive enhanced treatment, which includes phosphorous and nitrogen removal, and disinfection. Water quality should improve due to the proposed project.

8. Air Quality – Short term negative impacts on air quality will occur during construction from heavy equipment in the form of dust and exhaust fumes. Proper construction practices will minimize this problem. Project specifications will require dust control.

9. Public Health – Public health and safety will greatly improve because an adequate sewer collection will be provided to the Wye area, reducing the potential to further pollute ground and surface waters. The project will eliminate the continued use of septic systems which may not be providing adequate treatment and when they fail will result in the surfacing of wastewater in residential areas. The collected wastewater will also receive a significantly higher level of treatment in the city of Missoula's wastewater treatment facility, which includes disinfection.

10. Energy – The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable, but will be a short-term commitment. Additional energy will be required to operate the pumps in the proposed lift stations. The impact of this additional energy consumption will be minimized as much as possible through the use of energy efficient pumps and motors.

11. Noise – Short-term impacts from excessive noise levels may occur during the construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances.

12. Sludge Disposal – The project will not create sludge. As property owners connect to the proposed collection system individual septic tanks will be abandoned. It is expected that the septic tanks will be pumped and abandoned by filling them with clean fill material. A licensed septic tank pumper will most likely be contracted to pump each tank. The septage will be disposed of in accordance with EPA's 503 regulations.

13. Growth – Improvements which include the wastewater collection system extension may result in secondary impacts that are associated with the growth of the community. These can include housing and commercial development, agricultural lands, solid waste, transportation and utilities. Construction of a central collection system may promote more dense development than currently exists. This project would allow the County/City to manage its growth in a proactive manner and promote urbanization within its service area.

14. Cumulative Effects – No significant adverse impacts are anticipated.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction related impacts (i.e., noise, dust, traffic disruption, etc.) will occur but should be minimized through proper construction management. Energy consumption during construction cannot be avoided.

VI PUBLIC PARTICIPATION

This public participation began on this project in 1997 when area landowners got together with City officials to discuss the area's need. Again in 2000, after the completion of the 1999 Facilities Facility Plan meetings were held with the City and County administrators, both in support of the project. In October 2004, all area landowners received a copy of the petition to create the Rural Special Improvement District (RSID) with a letter explaining the project and requesting signatures. On December 21, 2004 a petition to create the Wye Area Sewer Project was submitted to the County Commissioners with a request that funding assistance be pursued. On

January 30, 2008 at a regularly scheduled County Commission meeting, the County held a public hearing and created RSID 8489. During the public hearing, two people spoke in favor of the project and no one spoke against the RSID.

VII REFERENCE DOCUMENTS

The following documents have been utilized in the environmental review of this project and are considered to be part of the project file:

1. Final Preliminary Engineering Report, Missoula County Wye Area Sanitary Sewer RSID #8489, prepared for the Missoula County by WGM Group, Inc, Missoula, Montana, April, 12, 2007,
2. Final Preliminary Engineering Report, Missoula County Wye Area Sanitary Sewer RSID #8489, prepared for the Missoula County by WGM Group, Inc, Missoula, Montana, September 26, 2008,
3. Missoula Wastewater Facility Plan Update April 1999; prepared for the City of Missoula, by Brown and Caldwell and Associated Firms,
4. Uniform Application Form for Montana Public Facility Projects for Missoula County Missoula Wye Sanitary Sewer RSID #8489; March 19, 2008.

VIII. AGENCIES CONSULTED

The following agencies have been contacted in regard to the PER, which determined the basis for the proposed collection system project:

1. The Montana Department of Fish Wildlife and Parks (FWP) reviewed the proposed project and advised that the county would need to apply for a Steam Protection Act permit if there will be alteration to a stream bed or its banks. FWP did not find any other issues that would impact fish, wildlife, or recreation.

2. The U. S. Fish and Wildlife Service (FWS) reviewed the proposed project and determined that this project is unlikely to have to any significant adverse effects upon fish, wildlife, or habitat resources under the purview of the U.S. Fish and Wildlife Service.

3. The Montana State Historic Preservation Office (SHPO) reviewed the proposed project. According to their records, there have been a few previously recorded sites and a few cultural resource inventories done within the designated search locales. SHPO stated that as long as there will be no disturbance or alteration to structures over fifty years of age they feel that there is a low likelihood that cultural properties would be impacted and, as such, felt a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or cultural materials be inadvertently discovered during the project, SHPO must be contacted and the site investigated.

4. The U.S. Army Corps of Engineers (COE) reviewed the proposed project and responded that if construction activities includes the discharge of fill material, either permanently or temporarily into waters of the United State and lakes or ponds connected to the tributary system, and wetlands adjacent to these waters, then a Department of Army Section 404 permit may be required. The COE recommended directionally boring under larger perennial streams or streams inhabited by species of special concern. If open cut trenching is proposed, they recommended construction during low flow periods or when the stream is dry. If wetland delineation is necessary, they must comply with the 1987

Corps Wetland Delineation Manual. No mapped wetlands are located in the proposed construction area and therefore no impacts wetlands are expected.

5. Department of Natural Resources and Conservation (DNRC) was contacted and asked for comments regarding the proposed project. Both LaValle Creek and O'Keefe Creek pass through portions of the planning area and include areas subject to flooding. LaValle Creek includes an area mapped as a Zone A floodplain and is subject to inundation by the 100-year floodplain. O'Keefe Creek includes an unmapped floodplain area. The Missoula County Floodplain program has concerns with sewer expansion into floodprone areas and feels that it is very important that expansion does not increase public health and safety risks by promoting development in the floodprone areas. During the design and construction stages of the project, coordination will occur with the Missoula County Floodplain Administrator to insure that the necessary floodplain requirements are met.

6. National Heritage Program (NHP) reviewed the project and their search on plants and animal species of special concern in the vicinity of the Wye Area included eight species. These include the Gray Wolf, Swainson's Hawk, Grasshopper Sparrow, Bald Eagle, Western Skink, Peregrine Falcon, Bobolink, and Westslope Cutthroat Trout. As discussed above, the FWP and FWS determined there would be no adverse impact to fish, wildlife or habitat because of the project.

Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

Rationale for Recommendation: Through this EA, the MDEQ has verified none of the adverse impacts of the proposed RSID #8489 sanitary sewer extension are significant; therefore an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609 and 17.4.610. This EA is the appropriate level of analysis because none of the adverse effects of the impacts are significant. A Finding of No Significant Impact (FONSI) will be issued and legally advertised in the local newspaper and distributed to a list of interested agencies. Comments regarding the project will be received for 30 days before final approval is granted.

EA Prepared By:

_____ _____
Jerry Paddock P.E. Date

Approved By:

_____ _____
Mike Abrahamson P.E. Date

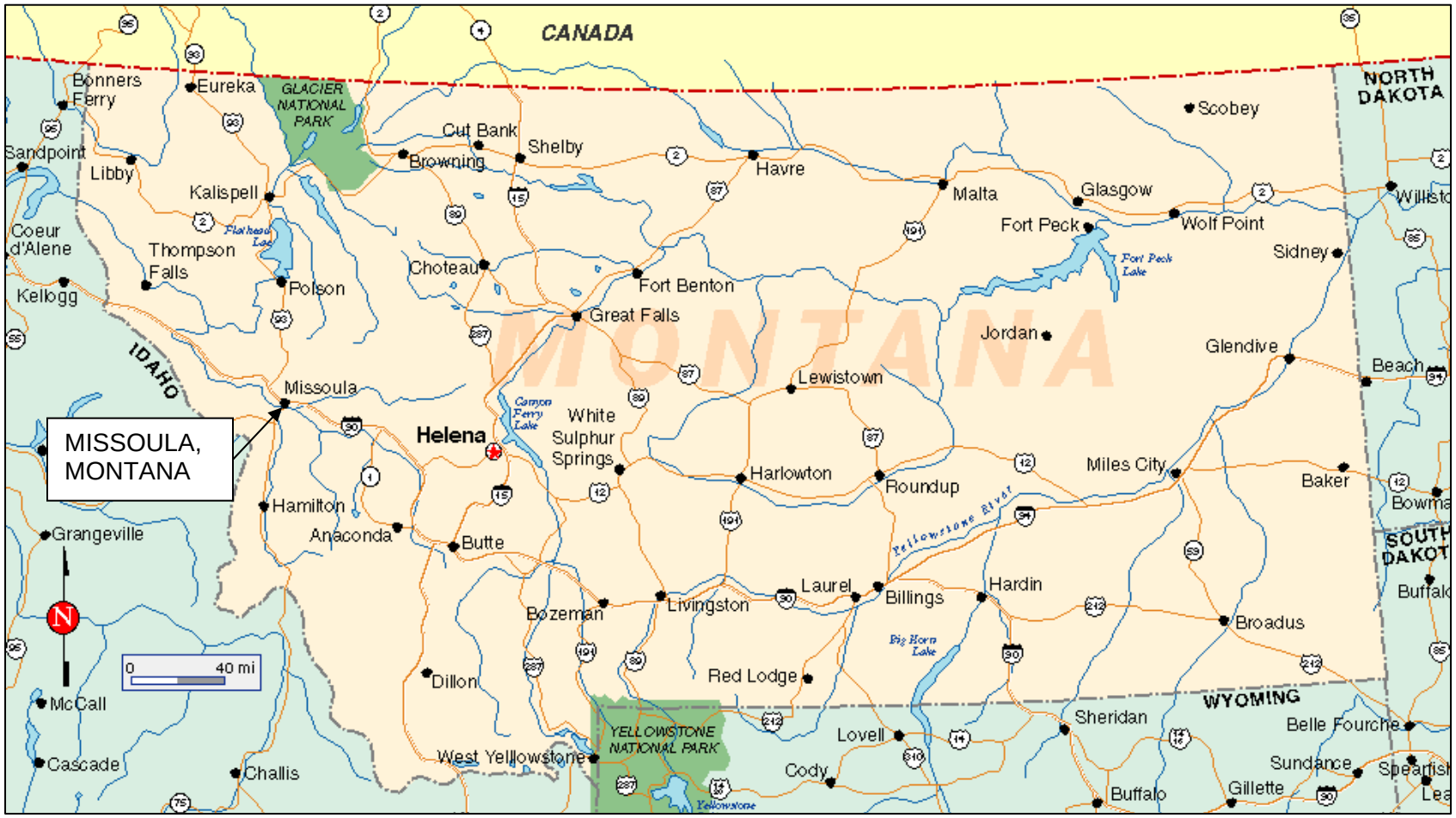

FIGURE 1
LOCATION MAP

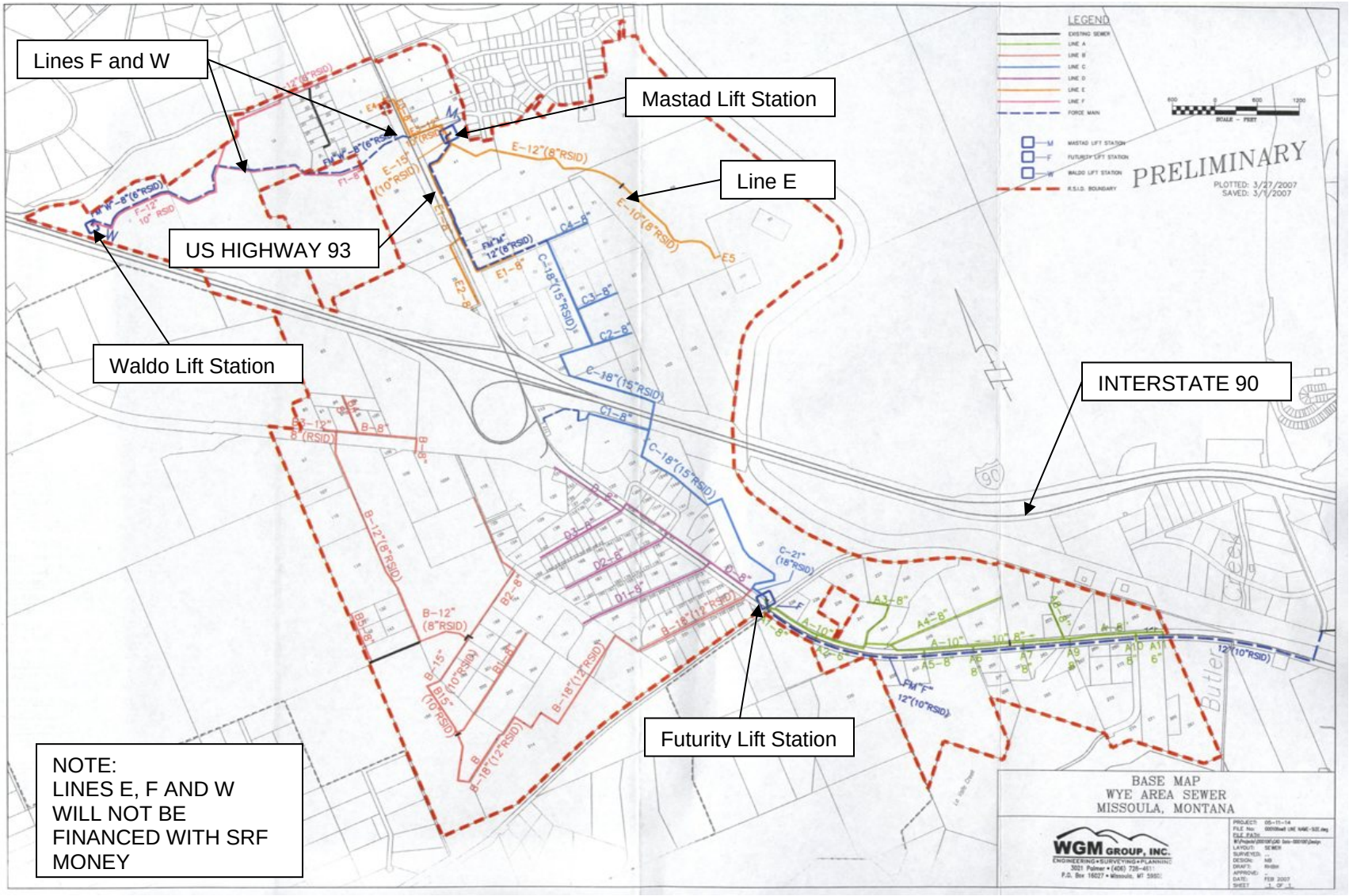

FIGURE 2
PROPOSED IMPROVEMENTS

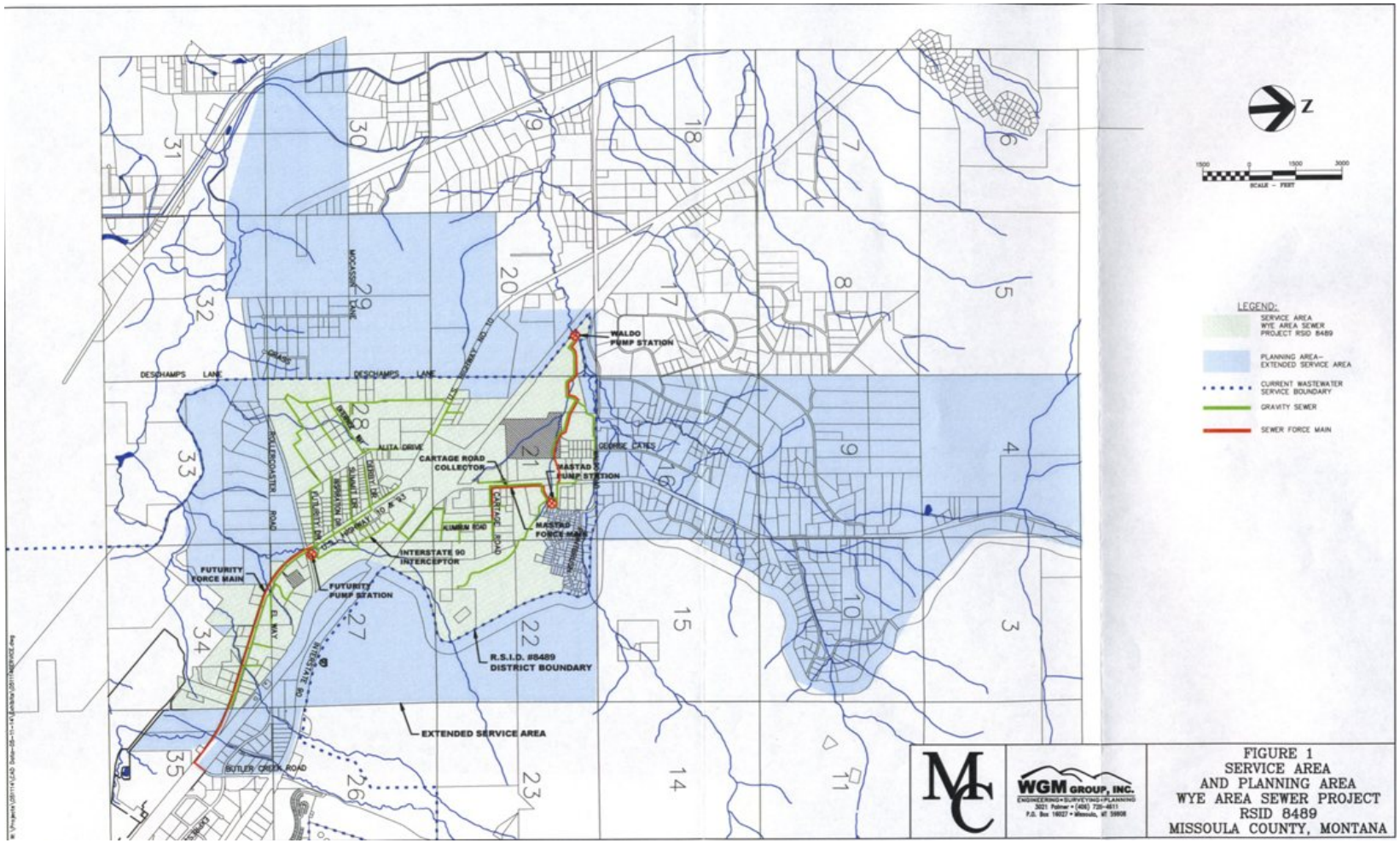

FIGURE 3
PLANNING AND SERVICE AREAS