FY 2015 WATER SYSTEM IMPROVEMENT PROJECTS

DRIGGS, IDAHO

ENVIRONMENTAL INFORMATION DOCUMENT

FINAL DRAFT

MAY 2014

AQUA ENGINEERING

CITY OF DRIGGS FY 2015 WATER SYSTEM IMPROVEMENT PROJECTS – ENVIRONMENTAL INFORMATION DOCUMENT EXECUTIVE SUMMARY

This Environmental Information Document (EID) was developed for three (3) water improvement projects shown in the City of Driggs Water System Facility Plan Update 2013. The outline for this document followed IDEQ's Form 5-B Outline and Checklist for Environmental Information Documents (EIDs) shown in Appendix B. The purpose and need of the projects is summarized below:

5th Street Water Loop Pipeline Project

Purpose: The main portion of the water system is reliant on a 12-inch transmission waterline which is currently not up to City standards. The 12-inch transmission waterline does not allow redundancy and fire looping within the middle and lower pressure zones. This project would create redundancy by creating a fire loop with the middle and lower pressure zones.

Need: This project would create redundancy and create additional capacity in the system during high demand events.

12-inch Transmission Water Pipeline Replacement Project

Purpose: The 12-inch transmission waterline is not up to current City standards. The City has also discovered that the line is shallow buried in places with as little as 3 feet of cover. The City's current standard requires 6 feet minimum of cover for waterlines. This project would replace the old 12-inch transmission waterline to current City standards.

Need: This project would replace the main transmission line into the City with a new line up to City standards thus lessening the potential for failure and decreasing maintenance costs.

Tank Well Pump House and Chlorine Treatment Project

Purpose: The City's existing tank well currently pumps into the 0.3 MG water storage tank. The City's main tank, the 1.0 MG water storage tank, currently is supplied by one (1) well source and one (1) spring source. During low flow periods of the spring the sole supply to the 1.0 MG tank is dependent on one (1) well. The purpose of this project is to bring the tank well up to current City standards; create an additional source for the 1.0 MG tank; and boost pressures in the pressure zones between the 0.3 MG tank and 1.0 MG tank.

Need: This project will bring the tank well up to current City standards; create an additional source for the 1.0 MG tank; and boost pressures in the pressure zones between the 0.3 MG tank and 1.0 MG tank.

Each project was evaluated with a no action alternative and it was shown that the projects were required in order to meet State and City standards.

The three (3) projects were submitted to various agencies for review of environmental impacts. Table E1 shows a list of the agencies that were submitted to for review, if a response was provided, and if mitigation was required.

Table E1: Agencies Consulted

Agency	Contact	Response	Mitigation Required
Eastern Idaho Public Health District	Kellye Eager	Y	Y
Idaho Department of Environmental Quality - Idaho Falls	Rensay Owen	Y	Y
Idaho Department of Environmental Quality - Idaho Falls	William Teuscher, PE	Y	N
Idaho Department of Water Resources	Keri K. Smith-Sigman, CFM	Y	N
Idaho State Department of Agriculture	Gary Bahr	Y	N
Idaho State Historical Society	Ethan Morton	Y	N
Shoshone-Bannock Tribes	Romelia Martinez	Y	Y
Shoshone-Paiute Tribe	Ted Howard	N	N
US Army Corps of Engineers	James Joyner	Y	Y
US EPA - Idaho Office	Cyndi Grafe	Y	N
US Fish and and Wildlife Service - Eastern Idaho Field Office	David Kampwerth	Y	N

Source: Table 11 in Section 4

Mitigation can be summarized below:

1. Construction BMPs will be implemented to migiate impacts to air/water quality and prevent hazardous waste spills to comply with IDEPA regulations. BMPs will be identified in each projects construction documents (i.e. drawings and project manual). BMPs will be the responsibility for the Contractor to furnish, install, and maintain. Typical BMPs include the following:

    - Dust Control – Using water to wet project areas

- Removal of materials and disposed of responsibility to a landfill
- Construction Site Entrances
- Concrete Wash Out Areas
- Straw Wattles
- Inlet Protection for Storm Drains
- Storm Water Pollution Prevention Plan (SWPPP) in conjunction with a Erosion Control Plan – If one of these projects disturbs more than one acre a SWPPP is required and an Notice of Intent (NOI) must be issued with the State.

2. These projects will be constructed below the streams and ditches. Thus, will not impact the channel within the high level water marks of the existing unnamed streams and unnamed irrigation ditches. This will be accomplished by either boring and jacking steel casing under these areas or hammering in a steel casing. Construction within the high level water marks will require a Nationwide Permit 12 issued by USACE.

3. The projects will not require an archaeological survey of the existing project locations as they will be constructed in areas that have been previously disturbed. Construction documents will require language that, if artifacts or remains are uncovered, a stop work order will be issued and both the State Historical Preservation Office (SHPO) and Tribes will be contacted. SHPO was concerned with two existing pipelines located in the 12-inch Transmission Waterline Replacement Project right-of-way. The following additional note will be added to the construction documents:

   > "If any historical, clay/wood or other pipelines are found during the construction of the project the Contractor shall take photos and submit these photos to the Idaho State Historical Preservation Office for their archives."

   The Shoshone-Bannock Tribe also requested the following inadvertent clause be incorporated into the Stop Work Order Plan.

   "In the event of an inadvertent discovery (cultural resources and/or human remains) the Tribes HeTO requests a Stop Work Order of construction activities and immediate notification to the Tribes HeTO. Construction shall cease until proper treatment of cultural resources and/or human remains is achieved. The Tribes HeTO also requests any current archeological surveys of APE."

4. The Eastern Idaho Public Health District recommended any water outages involving food establishments be coordinated with the impacted facility and the local Health District office in Driggs, Idaho. A note will be incorporated into the construction documents.

The items listed above do not require immediate action. They will be implemented at the time of the project design and construction. Prior to construction of the three projects listed in this EID, procedures, project plans, and construction documents will be prepared and submitted for IDEQ review. Based on the response from agencies and the mitigation required, a finding of no significant impact (FONSI) has been determined for the three (3) culinary water projects.

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SECTION 1 - PROJECT IDENTIFICATION

A. Utility City of Driggs, Idaho

Owner Contacts:
City of Driggs
P.O. Box 48
60 South Main Street
Driggs, Idaho 83422

Jared Gunderson – Public Works Director
Email: pwdriggs@ida.net
Phone: 208-354-8228

Mayor Hyrum Johnson
Email: cidriggs@ida.net
Phone: 208-354-2362

Engineer Contacts:
AQUA Engineering, Inc.
533 West 2600 South, Suite 275
Bountiful, Utah 84010
(801) 299-1327

Robert J. Rousselle, P.E. – EID Author
Email: robertr@aquaeng.com

Darin Hawkes, P.E. – Project Manager
Email: darinh@aquaeng.com

B. Grant Identifying No.: DWG-138-2013-5

C. Estimated Project Costs and Funding Sources

Table 1: Estimated Project Costs and Funding Sources

Project	Project Cost Estimate	City Contribution		Other Funding	
		Water Fund Reserves	Revenue Bond [3]	DEQ SRF LOAN FY15	Loan Terms
5th Street Water Loop Pipeline Project [1]	$278,087.13	$100,087.13	$ -	$178,000.00	20 years at 2.75%
12-inch Transmission Water Pipeline Replacement Project [2]	$660,529.60	$ -	$660,529.60	N/A	
Tank Well Pump House and Chlorine Treatment Project [2]	$382,587.06	$ -	$382,587.06	N/A	
Total	**$1,321,203.79**	**$100,087.13**	**$1,043,116.66**	**$178,000.00**	

[1] 2014 Construction Year Cost

[2] 2015 Construction Year Cost

[3] Interest Rate of 3.6% for a 20-year bond will be used based on OMB Circular A-94 for calendar year 2014. (Apdx. G)

Note: At preparation of this EID the 5th Street Water Loop Pipeline project was listed on DEQ's FY15 fundable project list and the City was in the process of applying for a loan through DEQ. The other two projects will apply for loans through DEQ but for purposes of this analysis are anticipated to be funded through revenue bonds.

These project costs were estimated in the City of Driggs Water System Facility Plan (WSFP) Update 2013 and are shown in Appendix A. The City would be responsible for paying back approximately $1,832,369.20 in principal and interest on these loans and revenue bonds. Below is a summary of the estimated total principal and interest payments for each project.

Table 2: Estimated Principal and Interest Payments on Projects

Project	Project Cost Estimate	Loan/ Revenue Bond Payments		
		Total Principal Payments	Total Interest Payments	Total Payments
5th Street Water Loop Pipeline Project [1]	$278,087.13	$201,560.00	$63,175.88	$264,735.88
12-inch Transmission Water Pipeline Replacement Project [2]	$660,529.60	$693,740.19	$291,360.29	$985,100.48
Tank Well Pump House and Chlorine Treatment Project [2]	$382,587.06	$410,238.80	$172,294.03	$582,532.84
Total	**$1,321,203.79**	**$1,305,539.00**	**$526,830.20**	**$1,832,369.20**

[1] 2014 Construction Year Cost. $178,000.00 of project funded by DEQ SRF Loan. Remaining amount will be funded with Water Fund reserves.

[2] 2015 Construction Year Cost. Funded by Revenue Bond.

[3] Interest Rate of 3.6% for a 20-year bond will be used based on OMB Circular A-94 for calendar year 2014. Interest Rate for DEQ SRF loan is 2.75% for 20 years.

D. User Rates

The City of Driggs adopted Resolution #221-07 on February 20, 2007 which established water rates. The monthly rates within City limits were updated on January 1, 2013 by Resolution #281-12, Table 3 lists the current water rates and fees. Connections outside the corporate limits of the City are charged 1.5 times the in-City rates.

Table 3: Current Water Rates

Line Size	Water Gallon Allowance (Summer) 05/01 – 10/31	Water Gallon Allowance (Winter) 11/01 – 04/30	Monthly Base Water Rate ($)	ERUs based on Line Size
0.75-inch (Residential)	10,000	20,000	$ 27.00	1.0
0.75-inch (Commercial)	10,000	20,000	$ 27.00	1.0
1.0-inch (Residential)	10,000	20,000	$ 27.00	1.0
1.0-inch (Commercial)	10,000	20,000	$ 27.00	1.0
1.5-inch	25,000	35,000	$ 67.50	2.5
2.0-inch	45,000	55,000	$ 121.50	4.5
3.0-inch	65,000	75,000	$ 175.50	6.5
4.0-inch	80,000	90,000	$ 215.99	8.0
6.0-inch	120,000	130,000	$ 323.99	12.0

Note: 10,000 extra Water gallons are allowed in the winter to help users prevent frozen pipes.
Source: City of Driggs Resolution No. 281-12.

In addition to the water rates listed above, the City charges an excess monthly water consumption fee of $1.00 per 1,000 gallons in excess of base allowance. Extra water taps are billed and served at the same rate and allowance as similarly sized water connections. Extra taps will not be billed during months in which no water flow is measured through respective meters. Fire hyrant water is billed at 1.5 times the 0.75-inch water base rate for every 10,000 gallons purchased. In addtion to water rates the City charges the following fees:

- Monthly Inactive Fee - $18.00 (When water is off at the meter)

- New User Deposit – New users shall pay the equivalent of two months service for respective water services.

- Water Service Turn-on Fee – An account that has been turned-off either by request or by failure to pay is still billed the monthly inactive water fee. To have the water meter turned on the account will be charged a fee of $65 plus the account holder will need to pay any outstanding balance in full.

- Connection Fees
    - New Account Hookup Fee – All new residences or commercial buildings within the City of Driggs, or which 300 feet of a readily accessible existing sewer line, shall be required to connect to the City's utility system except "accessory buildings" without plumbing. Accessory buildings may hook into City's services for a one-time fee of 1/3 of the existing cost of a residential hookup, plus acutal costs associated with the hookup. Any hookup to pre-existing water must either require full payment of hookup fees, or demonstrate that full fees have been previously paid, or pay 2/3 water hook-up fees existing at the time the conversion is requested. All hookup fees must be paid in full prior to approval of a building permit or commencement of service, whichever comes first. If a new structure is not within 300 feet of an existing line, a building permit will not be issued until the owner either negotiates with the City to extend water and/or sewer lines, or purchases a septic permit from the District 7 Health Department.

    - Water Connection Fee – New water users must also purchase an appropriately sized water meter and pay their plumber to install that meter. The size of the water line and meter are determined by the total Water Supply Fixture Units (WSFU) as detailed in the International Plumbing Code (IPC). A minimum water hookup fee of $ 1,785 is required and larger connections are based on Table 4. Water users outside the City limits of Driggs are charged 1.5 times the in-city rates.

Table 4: Current Water Connection Fees

Connection Line Size	Water Hookup Fee
1.0-inch	$ 1,785
1.5-inch	$ 4,095
2.0-inch	$ 7,350
2.5-inch	$ 9,240
3.0-inch	$ 16,590
3.5-inch	$ 22,995
4.0-inch	$ 29,505
6.0-inch	$ 66,465
8.0-inch	$ 117,600
10.0-inch	$ 184,695

Source: City of Driggs Resolution No. 281-12.

- Extension of Water Service
  - Fire Hyrant Damage Fee, each occurance - $ 3,000
  - Refundable Road Damage Deposite Fee Required - $ 2,000

- Bulk Usage Fees
  - $150 initial fee
  - $1.00 for every 1,000 gallons used

The funds for loan payback would be paid back from the revenue generated from the water user rates and connection fees paid by the City's water users. By completing a quick analysis of the yearly payments and projected growth, water base rates will need to increase by $6.40 per Equivalent Dwelling Unit (EDU) to pay for the loans and revenue bonds associated with these projects. One EDU is equal to a single family residence. Appendix H shows the calculations for this increase in water base rates. This is an increase in the average residential base rate of approximately 23.7% and an increase in the average commercial base rate of approximately 5.3%. This does not take into consideration connection fees, operating expenses, and other revenue and expense considerations that would be further analyzed prior to loan and bond approval. This analysis does demonstrate that in order to pay for these projects the City will be looking at an increase in its water base rates or an increase in its overage charge for water usage over the water allowance.

SECTION 2 - PROJECT PURPOSE AND NEED

The recently completed Water System Facility Plan Update titled, "Water System Facility Plan Update 2013" by AQUA Engineering identified twenty-six (26) future water improvement projects of which twenty-five (25) were recommended in the 20 year planning period. Of the twenty-five (25) projects three (3) projects were identified by the City as being higher priority. These three (3) projects along with their purpose and need are summarized below.

5th Street Water Loop Pipeline Project

Purpose: The main portion of the water system is reliant on a 12-inch transmission waterline which is currently not up to City standards. The 12-inch transmission waterline does not allow redundancy and fire looping within the middle and lower pressure zones. This project would create redundancy by creating a fire loop with the middle and lower pressure zones.

Need: This project would create redundancy and create additional capacity in the system during high demand events.

12-inch Transmission Water Pipeline Replacement Project

Purpose: The 12-inch transmission waterline is not up to current City standards. The City has also discovered that the line is shallow buried in places with as little as 3 feet of cover. The City's current standard requires 6 feet minimum of cover for waterlines. This project would replace the old 12-inch transmission waterline to current City standards.

Need: This project would replace the main transmission line into the City with a new line up to City standards thus lessening the potential for failure and decreasing maintenance costs.

Tank Well Pump House and Chlorine Treatment Project

Purpose: The City's existing tank well currently pumps into the 0.3 MG water storage tank. The City's main tank, the 1.0 MG water storage tank, currently is supplied by one (1) well source and one (1) spring source. During low flow periods of the spring the sole supply to the 1.0 MG tank is dependent on one (1) well. The purpose of this project is to bring the tank well up to current City standards; create an additional source for the 1.0 MG tank; and boost pressures in the pressure zones between the 0.3 MG tank and 1.0 MG tank.

Need: This project will bring the tank well up to current City standards; create an additional source for the 1.0 MG tank; and boost pressures in the pressure zones between the 0.3 MG tank and 1.0 MG tank.

2.1 Existing Culinary Water System

The City has eight (8) sources including seven (7) wells and one (1) spring, two (2) culinary water storage tanks, and a distribution system consisting of 2-inch to 14-inch water lines, see Figure 1 for a map of the existing culinary water system.

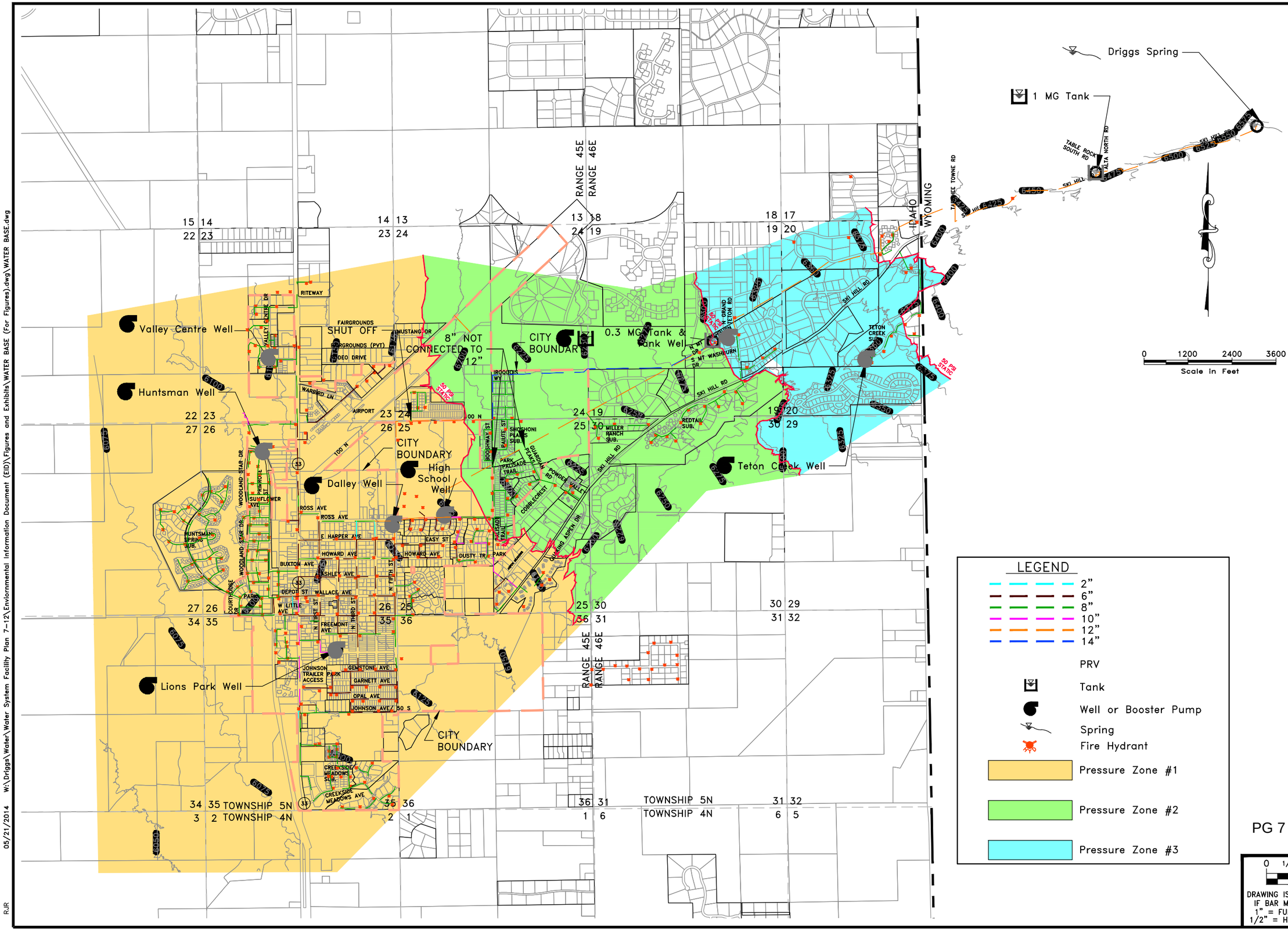
2.1.1 Sources

The City of Driggs currently has eight (8) sources which provide water to the City. The following table is a list of the City's culinary water sources.

Table 5: Existing Culinary Water Sources

Source	Location	Type	Casing, (inches)/ Depth (feet)	Pump Setting (feet below ground surface)	Equipped Capacity (gpm)	Water Right No.
Spring[1]	NE ¼ SW ¼ of Section 21, T44N, R118W W.B.L.&M.	Spring	N/A	N/A	1,122 gpm	11330 and 7265 E[4]
Teton Creek Well	NE ¼ SW ¼ of Section 20, T5N, R46E I.B.L.&M.	Well	12 / 134 & 10 / 97, Total Depth=300 feet	Unknown	510 gpm	22-07530
Tank Well	NW ¼ SE ¼ of Section 19, T5N, R46E I.B.L.&M.	Well	14 / 166 & 10 / 89, Total Depth=255 ft	180 feet	500 gpm	22-07529
High School Well	SW ¼ NW ¼ of Section 25, T5N, R45E I.B.L.&M.	Well	14 / 130 & 10 / 60, Total Depth=190 ft	126 feet	1,100 to 1,350 gpm	22-07790
Dalley Well[2]	NE ¼ SE ¼ of Section 26, T5N, R45E I.B.L.&M.	Well	Unknown	150 feet	400 gpm	22-2132
Valley Centre Well	NE ¼ SW ¼ of Section 23, T5N, R45E I.B.L.&M.	Well	16 / 240, Total Depth=240 ft	60 feet	500 gpm	22-7814
Huntsman Well[3]	NE ¼ NW ¼ of Section 26, T5N, R45E I.B.L.&M.	Well	10 / 244 & 10 / 43, Total Depth=275 ft	225 feet	500 gpm	22-13589
Lions Park Well	NW ¼ NE ¼ of Section 35, T5N, R45E I.B.L.&M.	Well	16 / 362,12 / 204, & 10 / 155, Total Depth=505 ft	Unknown	560 gpm	22-07698
				Total	**5,192 to 5,442 gpm**	**N/A**

[1] The City's water right is for 2.5 cfs or 1,122 gpm; however the spring flow into the City line varies based on time of year and snowmelt.
[2] The Dalley Well was constructed before April 13, 1949 and a well log could not be located. It is believed that the Dalley Well taps the same aquifer as the High School Well.
[3] The Huntsman Well is capable of pumping up to 950 gpm.
[4] The Spring water rights are located in Wyoming.
Source: City of Driggs Water System Facility Plan Update 2013



NO.	DATE	DESIGN	DRAWN	CHECKED
0	05/21/2014	RJR	RJR	RJR

REVISIONS

DRIGGS, IDAHO

FY 2015 WATER SYSTEM IMPROVEMENT PROJECTS
ENVIRONMENTAL INFORMATION DOCUMENT
EXISTING WATER SYSTEM MAP

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

PG 7

0 1/2 1
DRAWING IS TO SCALE
IF BAR MEASURES:
1” = FULL SCALE
1/2” = HALF SCALE

FIGURE
1

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RJR

2.1.2 Storage

The City of Driggs currently has two (2) storage tanks which provide drinking water and fire suppression storage for the City. Each storage tank is supplied by the sources shown in Table 6. The existing tanks are currently configured as shown in Figure 2.

Table 6: Existing Culinary Water Storage

Tank	Diameter / Dimensions (feet)	Depth (feet)	Primary Supply Source(s)	Equipped Capacity (Million Gallons)
1 MG Buried Concrete Tank (Circ.)	110.0	16.0	Teton Creek Well and City Spring	1.0
0.3 MG Buried Concrete Tank (Circ.)	60.0	14.0	City Spring, Teton Creek, Tank, High School, Dalley, Valley Centre, Huntsman, Lions Park Well	0.3
Total	**N/A**	**N/A**	**N/A**	**1.3**

Source: City of Driggs Water System Facility Plan Update 2013

2.1.3 Distribution

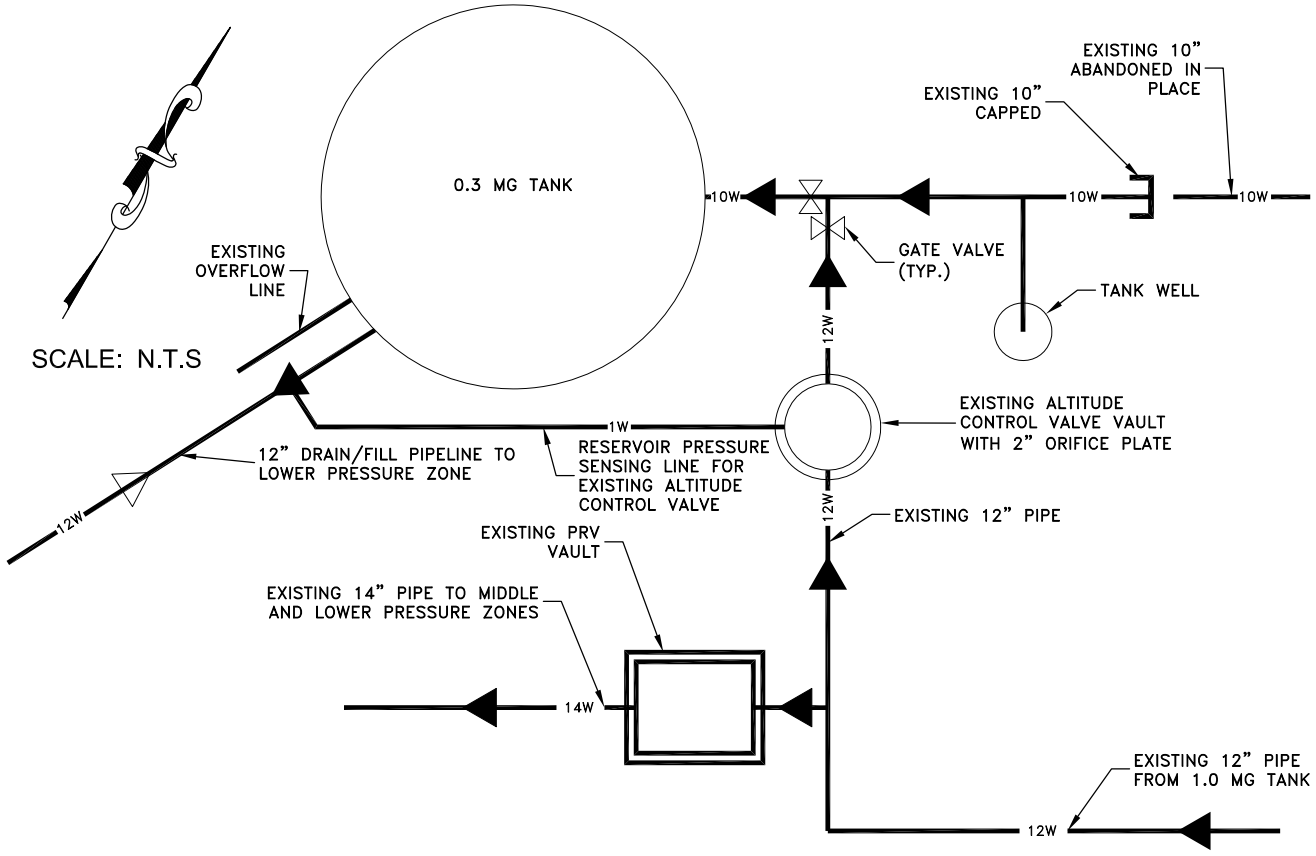
As mentioned previously, existing locations of the sources, tanks, and distribution system layout are shown in Figure 1. The majority of the City's current distribution system within the City boundary meets the City's required level of service. The distribution system as shown in Figure 1 consists of main lines ranging from 2-inches to 14-inches.

2.1.4 Pressure Reducing Valves

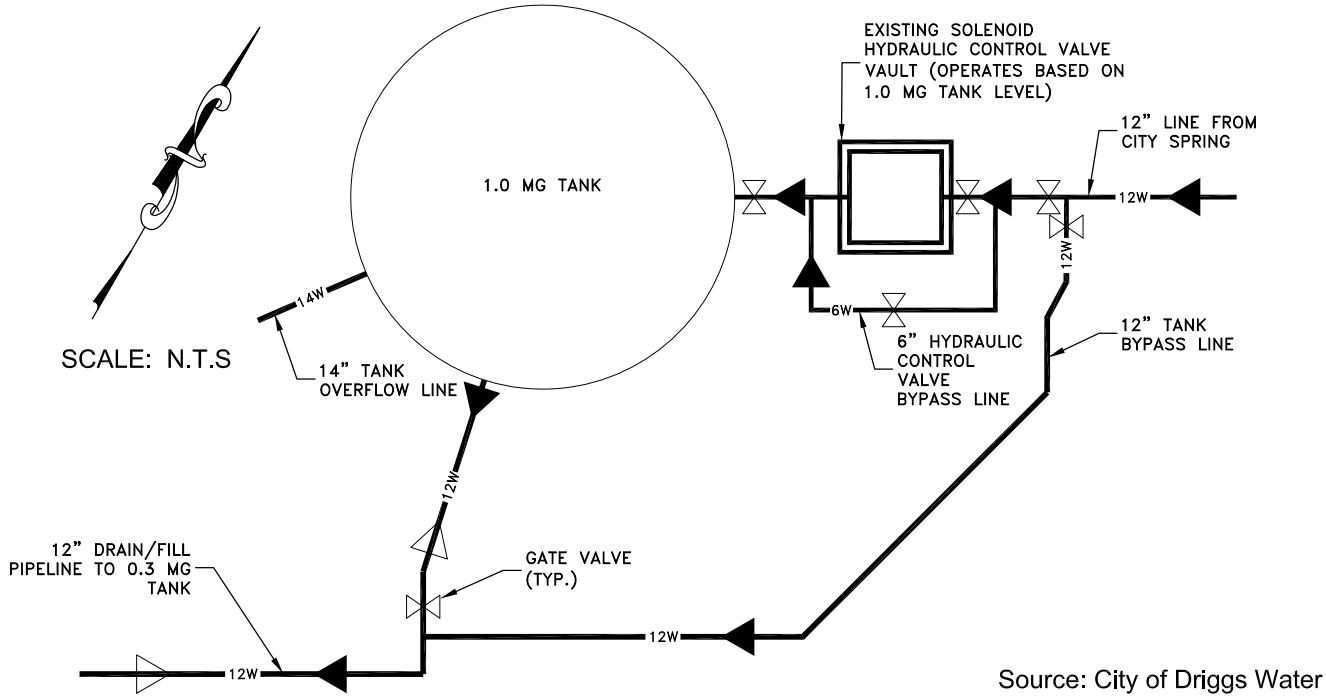
The City currently has three (3) pressure reducing valves (PRV). One PRV is off of the 14-inch line adjacent to the 0.3 MG Tank; another PRV is off the (14-inch) line downstream from the PRV next to the 0.3 MG Tank; and the remaining PRV is located just upstream of the Redtail subdivision by Ski Hill Road as shown on Figure 1. These PRVs help maintain static pressure below 100 psi in the water system.

2.1.4.1 Telemetry

The City uses remote telemetry to control and monitor a portion of its existing water wells. Currently, only the Tank, Lions Park, High School, and Dalley Well are set to run off the well level in the 0.3 MG Tank. The remaining wells run off pressure in the system. The spring flows into a diversion box and into the distribution system. The spring total flow and flow into the distribution system are monitored by two (2) flow meters. The spring flow that is not used in the distribution system backs up in the diversion box and flows into an overflow which flows into Teton Creek.



EXISTING 0.3 MG TANK PIPING SCHEMATIC



EXISTING 1.0 MG TANK PIPING SCHEMATIC

Source: City of Driggs Water System Facility Plan Update 2013

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CITY OF DRIGGS
FY 2015 WATER SYSTEM IMPROVEMENT PROJECTS
ENVIRONMENTAL INFORMATION DOCUMENT
Existing - 0.3 MG AND 1.0 MG Tank Piping Schematic
Figure 2, Page 9

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The City has recently installed a level transducer in the 1.0 MG tank to run a solenoid hydraulic control valve on the spring line. This valve will be normally open and will close when the tank is full.

The current telemetry/controls for the water system are currently not operational and are operated by the City manually. The City has plans to update the telemetry/controls in the near future.

2.1.5 Treatment

The City currently has chlorine equipment and treatment at the Spring, Huntsman Well, High School Well, and Teton Creek Well. The existing chlorine treatment at the well sites does not meet the State's required 30 minute contact time (58.01.08 Idaho Rules for Public Drinking Water Systems – Section 300 Filtration and Disinfection). Even though the chlorine treatment does not meet the required contact time for the well sites it does aid in maintaining a chlorine residual level throughout the system. The City has plans to update their remaining wells for chlorine treatment.

2.1.6 Reliability and Emergency Operation

The existing water system will become more automated and reliable with telemetry and control upgrades. During emergency operation, the City currently has two (2) sources, Huntsman Well and City Spring, which will operate during power outages or emergency conditions. The City Spring is gravity feed; therefore, power generation is not required. Huntsman Well has a backup generator with enough fuel supply to run for 24 hours. The City anticipates constructing an additional backup generator for at least an additional water source.

2.2 Design Criteria

The recently completed Water System Facility Plan established the design criteria for the City's water system. Below is a summary of the water system design criteria.

Design Parameters

- Average Day Demand = 413 gpd/ERU or 0.29 gpm/ERU
- Max Day Demand = 1,532 gpd/ERU or 1.06 gpm/ERU
- Peak Hour Demand Peaking Factor = 1.6
- Peak Hour Demand = 102.11 gph/ERU or 1.70 gpm/ERU
- Fire Flow = Minimum 1,500 gpm for 2 hours throughout system based on one- and two-family dwellings having a fire flow calculation area that does not exceed 8,200 square feet based on typical residential construction type. (IFC 2009 – B105.1) Per a phone conversation between AQUA Engineering and Earl Jiles, Teton County Fire Marshall, on

March 4, 2013 he indicated 1,000 gpm for 2 hours should be the minimum fire flow provided throughout the system for the water model and that buildings that require more fire flow will be reviewed on an individual basis.

Note: The numbers shown above include irrigation demands for residential and commercial/industrial as the City does not have a separate irrigation system for residential and commercial users.

Distribution System – Summary of Requirements (IDAPA 58.01.08.552.01.b)

- Maintain minimum pressure of 20 psi throughout distribution system during maximum day demand conditions, including fire flow.
- Maintain a minimum of 40 psi throughout distribution system during peak hour demand conditions.
- Static pressure within the distribution system shall be maintained below 100 psi and should ordinarily keep static pressure below 80 psi. Pressures above 100 psi shall be controlled by pressure reducing devices installed in the distribution main.
- During a power outage, the water system shall be able to meet the operating pressure requirements of 20 psi for a minimum of eight (8) hours at average day demand plus fire flow where provided. A minimum of eight (8) hours of fuel storage shall be located on site unless an equivalent plan is authorized by the Department. (IDAPA 58.01.08.501.07)

Sources

Peak hour demand is used to determine future source requirements as summarized in the Table 7.

Table 7: Source Requirement

Source Requirement	gpm/ERU
Peak Hour Demand	1.70

Storage Facilities

3,000 gpm for 3 hours plus the Average Daily Demand is used to determine storage capacity requirements. This storage requirement is summarized in Table 8.

Table 8: Storage Requirement

Item	Requirement
Avg. Daily Demand	413 gpd/ERU
plus Fire Storage	3,000 gpm for 3 hours (540,000 gallons)

Design Criteria

The design criteria for the proposed projects consist of the City of Driggs Public Works Standards and Technical Specifications which can be obtained from the City. Other design criteria are specified in Idaho State Code, Federal Law, and general engineering practice. More specific standards and design parameters are pipe conforming to the American Society for Testing and Materials (ASTM) and American Water Works Association (AWWA) standards; water system testing; fire protection capacity; conformity with Federal and State water pollution control standards; economic service practicability; and conformity with Federal and State drinking water standards.

SECTION 3 - RECOMMENDED SYSTEM IMPROVEMENTS

This section is a summary of the improvement alternatives and recommendations made for each in the planning study. The alternatives listed are not related to environmental impacts and are provided for project reference only. A discussion of these alternatives can be found in the WSFP in Section 6. The many projects in the WSFP required projects to be grouped into distribution, source, storage, telemetry, and environmental sustainability projects. The three (3) projects in this inventory fall into the distribution and source group. This section can be summarized under the following sub-sections: 3.1 Outline of Improvement Alternatives Considered, 3.2 Project Alternatives and Selected Improvements, 3.3 Project Design Approach, 3.4 Project Alternatives and Selected Priority Improvements, 3.5 Summary of Priority Improvements, 3.6 Summary of Future Improvements, and 3.7 Capital Improvement Plan.

3.1 Outline of Improvement Alternatives Considered

The outline of alternatives for each project below is discussed in the following sections. Because each project was required to meet current State or City standards there was only the no action alternative and the project itself. Below is a list of each water improvement project along with the alternatives for each project.

Distribution System

5th Street Water Loop Pipeline Project

a. No Action
b. Install 2,700 linear feet of 12-inch waterline connection lower and middle pressure zones

12-inch Transmission Water Pipeline Replacement Project

a. No Action
b. Install 9,132 linear feet of 12-inch transmission waterline in existing right-of-way

Source

Tank Well Pump House and Chlorine Treatment Project

a. No Action
b. Construct a new pump house; re-equip the well to supply the 1.0 MG tank; and install chlorine treatment in the pump house.

3.2 Project Alternatives and Selected Improvements

The only project alternatives for the projects listed in this document are the no action alternatives. The Distribution projects in the WSFP were grouped together when alternatives were analyzed. The 5th Street

Water Loop Pipeline Project creates redundancy by allowing fire looping, adds additional capacity to serve the lower pressure zones, and creates another supply for lower pressure zones in City in the event that the 12-inch Transmission Water Pipeline requires repair. The 12-inch Transmission Water Pipeline Replacement Project is not up to current City standards as it is shallow buried and requires replacement. If these projects were not constructed, under the no action alternative, then the City would not be able to keep up with future demand and the system would not have redundancy in the event the 12-inch Transmission Water Pipeline would require repair. The Tank Well Pump House and Chlorine Treatment Project will bring the tank well up to current City standards; create an additional source for the 1.0 MG tank; and boost pressures in the pressure zones between the 0.3 MG tank and 1.0 MG tank closer to State standards. If the no action alternative was chosen connections in the upper pressure zones would not have enough pressure to meet State standards if there was a fire in the lower pressure zones. The City would also be relying on one source, Teton Creek Well, to supply the 1 MG Tank when the tanks other source, Driggs Spring, has low flow. It was determined that the no action alternative was unacceptable for each project as if none of the projects were constructed the City could not meet State standards or be able to meet future water system demands.

3.3 Project Design Approach

Each project will be designed to current ASTM standards, AWWA standards, City Public Works Standards and Technical Specifications, and State Standards as mentioned in section 2.2. The 5th Street Water Loop Pipeline Project will be designed in accordance with these standards. The 12-inch Transmission Water Pipeline Replacement Project will also be designed to meet the standards referenced above while also providing steel casings under existing water channel crossings to the existing channels and not construct within the high water marks. Construction of the 12-inch Transmission Water Pipeline Replacement Project would need to be constructed in phases to maintain service to the Miller Ranch subdivision. The Tank Well Pump House and Chlorine Treatment Project would be constructed to bring the existing well up to current City standards, provide chlorine treatment, and re-equip the well with a larger pump so it can supply the 1.0 MG Tank.

3.4 Project Alternatives and Selected Priority Improvements

The no action alternative was ruled out for each project so there are not any other alternatives. The 5th Street Water Loop Pipeline Project will need to be constructed prior to the 12-inch Transmission Water Pipeline Replacement Project so the lower pressure zone can be supplied with water during replacement of the transmission water pipeline. The tank well is currently running well and improvements have been made upstream of the 1.0 MG tank to use the City spring to its fullest potential. However, the lack of redundant supply to the 1.0 MG tank during low spring flows and a potential maintenance situation on the Teton Creek

Well makes providing another source for the 1.0 MG tank a priority that would fall right after the 5th Street Water Loop Pipeline and 12-inch Transmission Water Pipeline Replacement Project.

3.5 Summary of Priority Improvements

The water system improvements were summarized with anticipated construction years in the WSFP. Since this EID only analyzes three of the projects from the plan they can be summarizes in the project priority order shown in Table 9.

Table 9: Project Priority

Priority	Project
1	5th Street Water Loop Pipeline Project
2	12-inch Transmission Water Pipeline Replacement Project
3	Tank Well Pump House and Chlorine Treatment Project

3.6 Summary of Future Culinary Water Capital Improvement Projects

The timing of the projects listed in the EID will be driven by available funding. The City would anticipates constructing these projects within the next few years as they are listed as priority projects in the overall water projects list shown in the WSFP. Below is a summary of future projects listed in the WSFP.

Table 10: Future Culinary Water Projects

Project Name and Description	Type *	Estimated Cost	Project Need	Construction Year	Construction Year Price [1]
Water System Telemetry/SCADA Upgrades	T	$318,500.00	This project is required so the City's water system telemetry can be operational again. Note: The Spring upgrades have been completed ($23,000.00) listed in the cost estimate.	2013-2017	$338,477.90
1 MG Tank Altitude Valve Replacement Project	D	$104,750.00	This project replaces an existing altitude valve and allows the spring to flow correctly into the tank.	2013	$104,750.00
5th Street Water Loop Pipeline Project	D	$269,987.50	This project provides system redundancy and a fire loop. This project also allows the 1.0 MG tank to flow into the lower pressure zone during high demand.	2014	$278,087.13
0.3 MG Tank Altitude Valve and Orifice Replacement Project	D	$104,750.00	This project replaces and existing altitude valve and orifice.	2014	$107,892.50

Table 10: Future Culinary Water Projects					
Project Name and Description	**Type ***	**Estimated Cost**	**Project Need**	**Construction Year**	**Construction Year Price [1]**
0.3 MG Tank Security Fence Project	ST	$36,625.00	This project is required so the City protect the tank and tank well source from potential contaminants.	2014	$37,723.75
12-inch Transmission Water Pipeline Replacement Project	D	$622,612.50	This project will replace the existing 12-inch waterline between the 0.3 MG Tank and High School Well to match current City standards as the existing line is shallow.	2014	$641,290.88
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2014-2018	$381,463.29
Tank Well Pump House and Chlorine Treatment Project	S	$307,500.00	This project updates the existing Tank Well to current City Standards; provides chlorine treatment at the well site; and provides a point of connection for the trailer mounted generator. It also re-equips the well so it can pump up to the 1.0 MG Tank.	2014	$316,725.00
1.0 MG Tank Overflow Line Meter Project	ST	$14,375.00	This project is required so the City can measure any overflow from the Tank.	2017	$16,179.19
Depot Street Alley 2-inch Waterline Replacement Project	D	$56,468.75	This project replaces an existing undersized 2-inch waterline.	2017	$63,556.08
Teton Creek Resort Booster Pump and Waterline Loop Project	D	$220,980.00	This project will increase pressures for the residents in the area during high demands.	2017	$248,714.94
3rd Street and 4th Street 2-inch Waterline Replacement Project	D	$138,000.00	This project replaces an existing undersized 2-inch waterline.	2018	$159,979.82
Subtotal		**2,543,336.88**			**$2,694,840.46**
1.5 MG Water Tank Project	ST	$1,610,625.00	This project is required to provide enough storage capacity to meet future demands.	2019	$1,923,170.48
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2019-2023	$442,220.50
High School Well Generator Project	S	$180,750.00	This project would provide an additional emergency water source.	2020	$222,299.70

Table 10: Future Culinary Water Projects					
Project Name and Description	**Type ***	**Estimated Cost**	**Project Need**	**Construction Year**	**Construction Year Price [1]**
Teton Creek Well Manual Transfer Switch Project	S	$5,625.00	This project would provide a point of connection for the trailer mounted generator.	2020	$6,918.04
Trailer Mount Generator Purchase	S	$51,750.00	This purchase will allow the City to power the wells that do not have permanent generators.	2020	$63,645.97
Lions Park Well Pump House and Chlorine Treatment Project	S	$170,000.00	This project updates the existing Lions Park Well to current City Standards; provides chlorine treatment at the well site; ; and provides a point of connection for the trailer mounted generator	2021	$215,350.91
Dalley Well Pump House and Chlorine Treatment Project	S	$170,000.00	This project updates the existing Dalley Well to current City Standards; provides chlorine treatment at the well site; and provides a point of connection for the trailer mounted generator.	2021	$215,350.91
5th Street 6-inch Waterline Replacement Project	D	$343,955.00	This project upgrades and existing 6-inch line to a 10-inch line to feed the City's commercial area.	2022	$448,783.26
Creekside Meadows Water Loop Water Project	D	$108,250.00	This project will provide redundancy and a fire loop for the Creekside Subdivision.	2023	$145,478.95
Valley Centre Well Chlorine Treatment Project	S	$21,812.50	This project provides chlorine treatment at the well site and provides a point of connection for the trailer mounted generator	2023	$29,314.18
Ski Hill Road and Miller Ranch Water Loop Pipeline Project	D	$237,875.00	This project provides system redundancy and a fire loop.	2023	$319,684.11
Subtotal		**3,249,430.63**			**$4,032,217.01**
Little Avenue 6-inch Waterline Replacement Project	D	$440,530.00	This project upgrades and existing 6-inch line to a 10-inch line to feed the City's commercial area.	2024	$609,796.55
Highway 33 6-inch Waterline Replacement Project (over 10 Years)	D	$756,953.75	This project upgrades an existing 6-inch line to a 10-inch line for the City's commercial area. This project will be constructed in phases.	2024-2028	$1,112,583.58
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2024-2028	$512,654.76

Table 10: Future Culinary Water Projects					
Project Name and Description	**Type ***	**Estimated Cost**	**Project Need**	**Construction Year**	**Construction Year Price [1]**
Subtotal		**$1,546,271.88**			**$2,235,034.89**
Highway 33 6-inch Waterline Replacement Project (over 10 Years)	D	$756,953.75	This project upgrades an existing 6-inch line to an 10-inch line for the City's commercial area. This project will be constructed in phases.	2029-2033	$1,289,789.30
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2029-2033	$594,307.37
Rodeo Drive Water Loop Pipeline Project	D	$160,750.00	This project provides system redundancy and a fire loop.	2033	$290,332.38
Subtotal		**$1,266,491.88**			**$2,174,429.05**
20-year Project Total		**$8,605,531.25**			**$11,136,521.42**
Water Pipeline Hydroelectric Project	D	$90,000.00	This project provides an alternative energy source for the City.	Only if Feasible	N/A

* D=Distribution ST=Storage S=Source
[1] The construction year price for projects which are split over 5 years is the total construction year price from each year's adjusted construction year price for the project.
Source: Table 24 in Section 7 of the City of Driggs Water System Facility Plan Update 2013

Additional Environmental Information Documents or an addendum to this document will be required to complete the environmental evaluation of the projects listed in Table 10 which will seek project funding from State and Federal agencies.

3.7 Capital Improvement Plan

The Water System Facility Plan outlines priority improvements for the City's culinary water system. The estimated costs are listed in the WSFP and are shown in Table 10. This EID includes three of the projects on the list, which were slated to begin construction this year. A majority of these estimated construction year dates in the WSFP are predicated on available project funding.

SECTION 4 - AGENCIES CONSULTED

The Environmental Information Document process included many different agencies. The conclusions presented in this document were gathered from these consulted agencies. Table 11 lists the agencies that were contacted for comment. The table summarizes the response to the projects which are covered in this EID. Appendix C and F contain copies of the letters sent to these agencies; the agencies responses; and the mailing list provided to AQUA by IDEQ at the beginning of the EID process.

Table 11: Agencies Consulted

Agency	Contact	Response	Mitigation Required
Eastern Idaho Public Health District	Kellye Eager	Y	Y
Idaho Department of Environmental Quality - Idaho Falls	Rensay Owen	Y	Y
Idaho Department of Environmental Quality - Idaho Falls	William Teuscher, PE	Y	N
Idaho Department of Water Resources	Keri K. Smith-Sigman, CFM	Y	N
Idaho State Department of Agriculture	Gary Bahr	Y	N
Idaho State Historical Society	Ethan Morton	Y	N
Shoshone-Bannock Tribes	Romelia Martinez	Y	Y
Shoshone-Paiute Tribe	Ted Howard	N	N
US Army Corps of Engineers	James Joyner	Y	Y
US EPA - Idaho Office	Cyndi Grafe	Y	N
US Fish and and Wildlife Service - Eastern Idaho Field Office	David Kampwerth	Y	N

SECTION 5 - AFFECTED ENVIRONMENT

5.1 Project Boundaries

The three (3) projects listed in this EID are located within the City's existing water system with portions of the project outside City limits. The proposed project planning boundary and area of potential effects are shown in Appendix A-1. This area includes potential areas which are not currently served by the City's water system but could be served in the future. A conceptual project map is provided for each project to show its boundaries in Appendix A. The boundaries for each project are generally described below:

- 5th Street Water Loop Pipeline Project (Appendix A-2): This project is located within the existing 5th Street right-of-way.
- 12-inch Transmission Water Pipeline Replacement Project (Appendix A-3): This project is located next to the existing 12-inch transmission water pipeline easement which runs between the existing 0.3 MG water storage tank and the existing High School Well.
- Tank Well Pump House and Chlorine Treatment Project (Appendix A-4): This project is located off North Mount Washburn Drive on property owned by the City of Driggs.

5.2 Soil, Geology, Topography & Climate

The City of Driggs, Idaho is located in Teton County approximately 73 miles northeast of Idaho Falls at an elevation of 6,200 feet and is located between the Teton mountain range and Big Hole mountains. The City of Driggs and most of Teton Valley is built upon Quaternary basin-filled alluvium (Qd). The alluvium contains boulder to silty distal alluvial fan deposits of Pleistocene to Pliocene age, and alluvial valley-fill and terrace deposits of Pinedale age. Alluvial deposits, by reviewing well logs, are anywhere from 500 feet thick closer to the center of town to 200 feet thick east of town by the 0.3 MG Tank. The Cache Creek Thrust fault runs north / south on the east end of the City according to the Geologic Map of the Driggs Quadrangle, Bonneville and Teton Counties, Idaho, and Teton County, Wyoming by the USGS.

The soils found in the Driggs area consist of sandy and silt loams suitable for growing crops. Agriculture plays an important part in the economy of the region. Farmland will not be affected in the planning study as the projects will either be constructed in existing road right-of-way, existing utility easements, and on existing City property. The 12-inch Transmission Water Pipeline Replacement Project will cross existing farmland using an existing easement. Since this project is located underground there will not be any affect on farmland.

According to the Western Regional Climate Center, precipitation for the City of Driggs averages 16.01 inches per year, of which about 8.64 inches (54%) falls from April to September. Annual snowfall averages 65.1 inches and the average growing season is approximately 88 days.

5.3 Regionalization

The proposed projects do not include regionalization with neighboring communities. The culinary water system does have a service area that is currently beyond the City limits which includes, but is not limited to: the Redtail subdivision, portions of the Huntsman Springs subdivision, Teton Creek subdivision, Miller Ranch subdivision, and a few single family homes. The closest towns adjacent to Driggs are Tetonia located 8.4 miles northwest and Victor located 8.3 miles south. Because of distance between each town, regionalization of the culinary water systems is not economical at this time.

5.4 Population

The 2010 U.S. Census recorded the city population at 1,660. Based upon a 4.0% growth rate the current (Year 2013) population should be approximately 1,867. This document will use the 2010 Census population of 1,660 for all future projections as established in the WSFP.

In 2010, AQUA Engineering prepared a Facility Plan Addendum for the "Teton Valley Regional Water Reclamation Facility Upgrade" derived a 2.0% and 4.0% growth rate based on more recent estimates from City planners and current building activity in the area. The Teton Valley Regional Water Reclamation Facility was designed using the 4.0% growth rate; therefore, the 4.0% growth rate will be used for this document. A plan period of 20 years was used to determine future municipal culinary water infrastructure needs. The following graph (Figure 3) tracks the projected population growth over this period. This graph illustrates that a 4% growth rate matches up well with census data from 1990 through 2010.

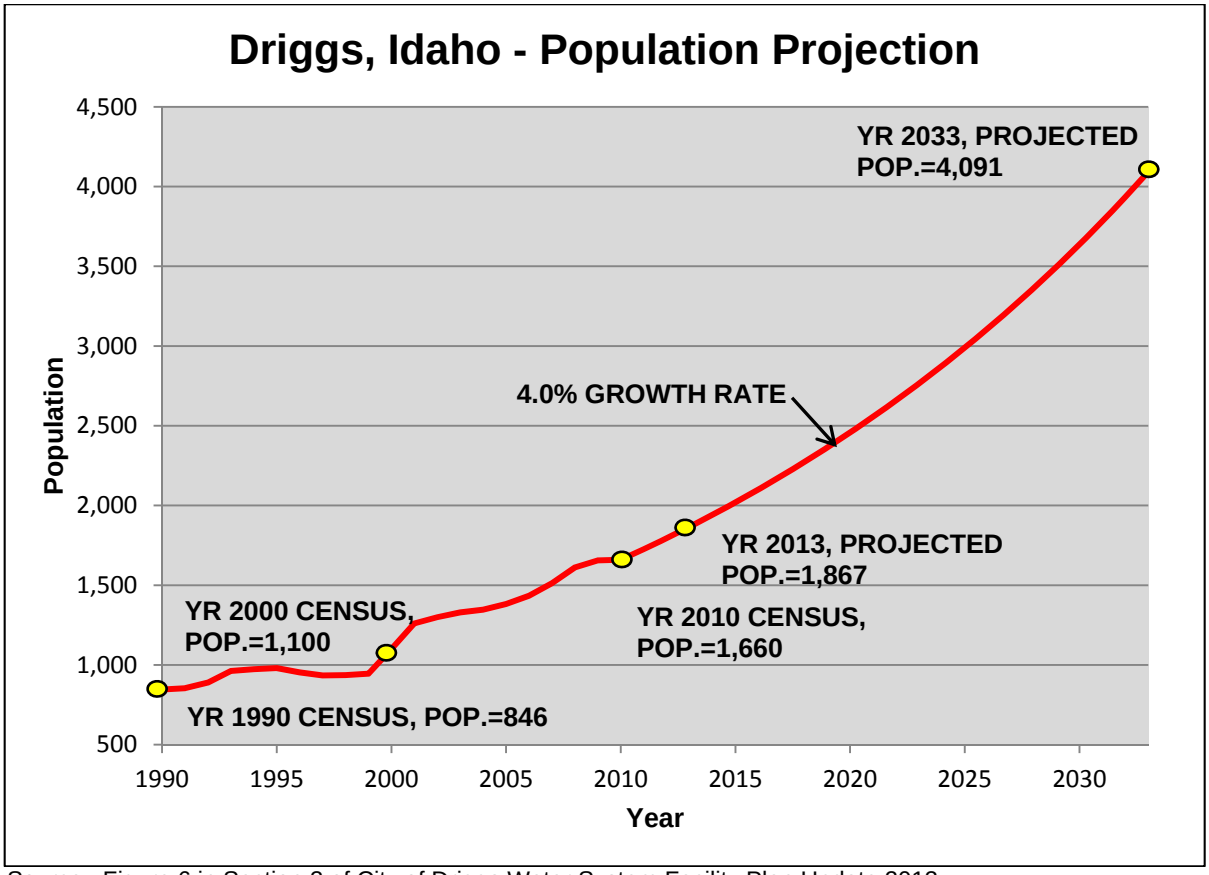
This population growth projects to 3,199 Equivalent Residential Units (ERUs) in year 2033. An ERU compromises 2.1 persons on average and represents a single family dwelling unit with known utility requirements. Calculations were completed in the WSFP to determine that one typical commercial connection is equal to 3.1 ERUs. This equates to the projected future ERUs summarized in Table 12.

Table 12: Projected Future ERUs

	Year	2013 (Current Year)		2018		2023		2028		2033	
	Projected Pop.	1,867		2,272		2,764		3,363		4,091	
Service Conn. Type	Growth Rate (%)	Conn	ERUs	Conn	ERUs	Conn	ERUs	Conn	ERUs	Conn	ERUs
Residential	4.00%	866	866	1,054	1,054	1,282	1,282	1,560	1,560	1,898	1,898
Comm./Ind.	4.00%	194	603	236	722	287	878	349	1,068	425	1,301
Totals		**1,060**	**1,469**	**1,290**	**1,776**	**1,569**	**2,160**	**1,909**	**2,628**	**2,323**	**3,199**
Increase From 2013		N/A	N/A	230	307	509	691	849	1,159	1,263	1,730

Source: Table 12 in Section 3 of the City of Driggs Water System Facility Plan Update 2013

Figure 3: Projected Population Projection



Source: Figure 6 in Section 3 of City of Driggs Water System Facility Plan Update 2013

5.5 Economic & Social Profile

The City of Driggs is the county seat of Teton County. Historically the City and surrounding areas economy was based on agriculture and ranching. While the City still relies on these industries they have also expanded to commercial businesses relying on summer and winter tourism generated by the many recreational opportunities in the valley and mountains surrounding the area. The City has some smaller industrial businesses including a Vodka plant. The improvements to the culinary water system from these culinary water projects will only benefit the City's economy. The following is a summary of the general demographic information for the City of Driggs from the 2010 Census and 2012 American Community Survey:

- Male population = 854 (51.40 %)
- Median age = 30.6
- Population over 65 = 117 (7.05 %)
- Hispanic or Latino population = 525 (31.60 %)
- Unemployed = 5.4%
- Median Household Income (MHI) = $ 42,500.00

5.6 Land Use

The City's land use consists mainly of single and multi-family residential with commercial and some light industrial, see Figure 4. The City does not anticipate the land use to change. Commercial and Industrial development will continue to occur along Ski Hill Road and Highway 33 with the remaining land use classified under single and multi-family residential.

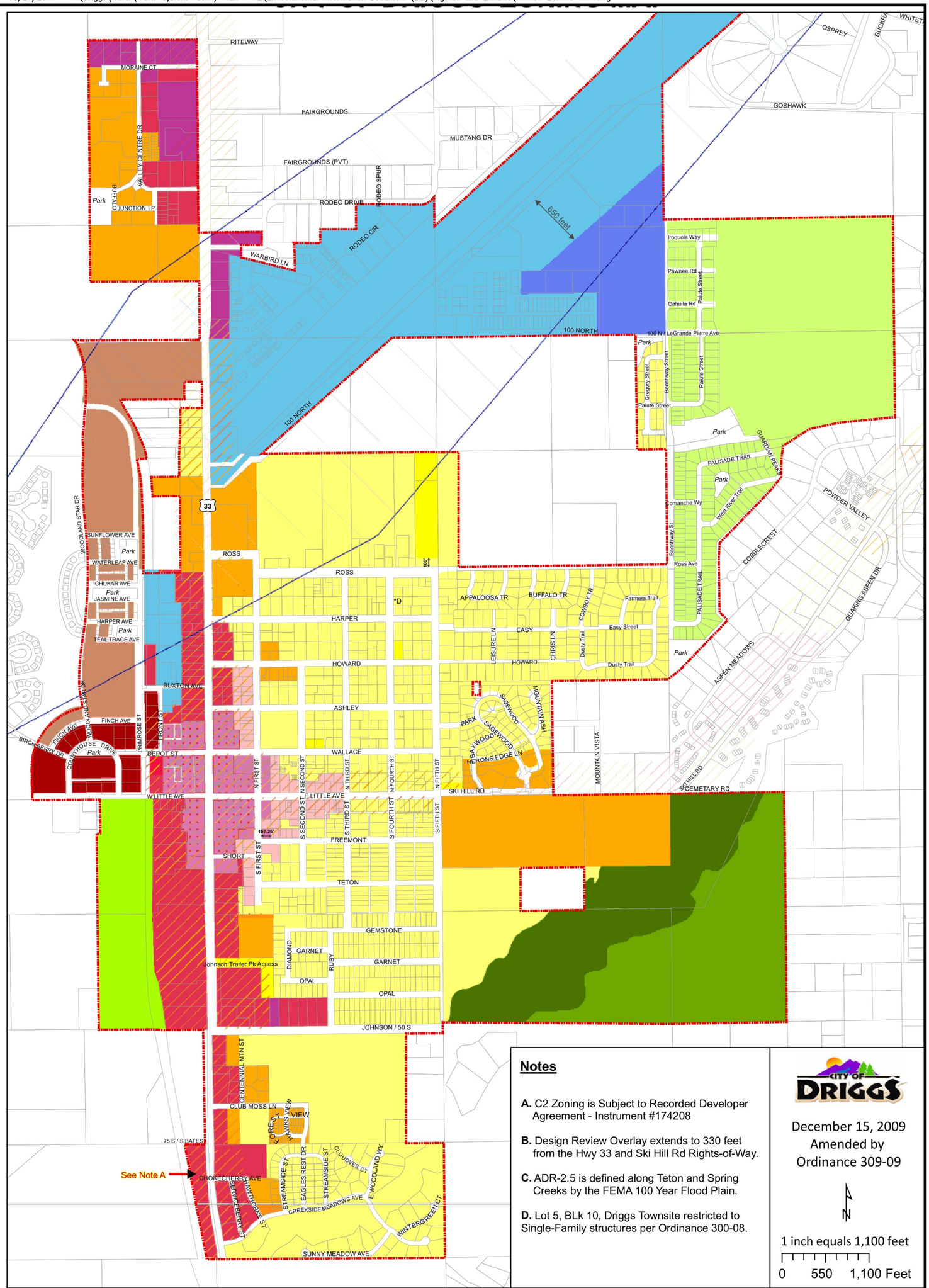
5.7 Flood Plains

Teton Creek runs southwest along the southern portion of the City limits. Because of the close proximity of the creek to the City there is a potential for flooding during late spring/ early summer snowmelt. The majority of the City is located within an un-shaded zone X or areas determined to be outside the 500-year floodplain. Areas of the City located directly adjacent to Teton Creek do fall within different floodplain zones. The majority of the City's water infrastructure is located within an un-shaded zone X. The portions of the water system that are located in floodplains are susceptible to minimal damage due to flooding as the water structures are buried or have been designed to drain after a flood event has transpired. The three (3) projects listed in this EID fall within the un-shaded zone X or areas determined to be outside the 500-year floodplain. Therefore, there will be no environmental impacts due to the construction of the proposed projects. Flood Insurance Rate Maps (FIRMs) for the project area can be found in Appendix D. Correspondence with the Idaho State Floodplain Coordinator can be found in Appendix F.

5.8 Wetlands & Protected Waters

The three (3) water projects identified in this document are outside of wetlands. The closest wetlands are adjacent to Teton Creek as shown on the US Fish and Wildlife Service National Wetlands Inventory Map which was included with correspondence from the US Army Corps of Engineers (USACE). This map and correspondence with the USACE can be located in Appendix F. Correspondence with the USACE does mention that portions of these projects may impact unnamed streams and unnamed irrigation ditches, which appear to flow from/to Teton Creek/ Woods Creek waters of the U.S., including wetlands. James Joyner with USACE stated that a Nationwide Permit 12 would need to be submitted only if construction took place within the high water marks for these protected waters. Steel casings either jack and bored or hammered under these unnamed streams and unnamed irrigation ditches is anticipated. This will keep construction outside of high water marks of protected waters and also allow construction and maintenance of the water improvement projects without surface disturbance of these streams and irrigation ditches. The proposed system improvements are not anticipated to impact any wetlands or protected waters of the United States or the State of Idaho.

RJR 05/21/2014 W:\Driggs\Water\Water System Facility Plan 7-12\Environmental Information Document (EID)\Figures and Exhibits\IMPACT-ZONING-MAP.dwg



Notes

A. C2 Zoning is Subject to Recorded Developer Agreement - Instrument #174208

B. Design Review Overlay extends to 330 feet from the Hwy 33 and Ski Hill Rd Rights-of-Way.

C. ADR-2.5 is defined along Teton and Spring Creeks by the FEMA 100 Year Flood Plain.

D. Lot 5, BLk 10, Driggs Townsite restricted to Single-Family structures per Ordinance 300-08.

CITY OF DRIGGS

December 15, 2009
Amended by
Ordinance 309-09

N

1 inch equals 1,100 feet

0 550 1,100 Feet

- City Limits
- Design Review Overlay
- CBD Parking Overlay
- Airport Overlay
- ADR-2.5 (2.5 Acre Avg Density Res)
- ADR-1.0 (1.0 Acre Avg Density Res)
- ADR-0.5 (0.5 Acre Avg Density Res)
- A-0.5 Agricultural (0.5 Acre Min. Lot Size)
- R-1 Single & Two-Family Residential
- R-2 Combined Residential
- R-3 Multiple-Family Residential
- MUR Mixed Use Residential
- C-1 Neighborhood Commercial
- C-2 Downtown Commercial
- C-3 Service & Hwy Commercial
- MUC Mixed Use Commercial
- CBD Central Business District
- MUE Mixed Use Employment
- M-1 Light Industrial

Data Sources: Teton County, ID; and City of Driggs
Disclaimer: Data contains spatial inaccuracies and is for zoning reference only; The City of Driggs shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Source: City of Driggs

FIGURE 4, PAGE 24

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE

0 1/2 1

FIGURE 4

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

DRIGGS, IDAHO

FY 2015 WATER SYSTEM IMPROVEMENT PROJECTS
ENVIRONMENTAL INFORMATION DOCUMENT
ZONING MAP

NO.	DATE	DESIGN	DRAWN	CHECKED
0	05/21/2014	RJR	RJR	RJR

REVISIONS

5.9 Wild & Scenic Rivers

The project area is not in the vicinity of any waterways designated "Wild and Scenic" according to the National Wild and Scenic Rivers System website. The closest wild or scenic river is the Snake River Headwaters located on the east side of the Teton Mountain Range in Wyoming. No wild or scenic rivers will be impacted by the proposed system improvements.

5.10 Cultural Resources

Maps of the projects in Appendix A show the proposed improvements remaining within existing easements, City owned property, and road right-of-ways. These projects are located in areas that have already been disturbed. The Idaho State Historic Preservation Office (ISHPO) identified the 12-inch Transmission Waterline Replacement Project located next to a historic water pipeline constructed in the 1930s and a 4-inch wood/clay water pipeline that was constructed in 1913. If during installation either of these lines are encountered ISHPO would appreciate a few photos could be taken and submitted to their office for archival documentation. The Shoshone-Bannock Tribe in their response stated that these projects are located within inherent ancestral lands of the Shoshone and Bannock people and requested the following inadvertent clause be incorporated into the Stop Work Order Plan.

> "In the event of an inadvertent discovery (cultural resources and/or human remains) the Tribes HeTO requests a Stop Work Order of construction activities and immediate notification to the Tribes HeTO. Construction shall cease until proper treatment of cultural resources and/or human remains is achieved. The Tribes HeTO also requests any current archeological surveys of APE."

These notes will be incorporated into the each projects drawings, project manual, and emphasized in the pre-construction meeting with the project contractors. AQUA Engineering was not aware of any current archeological surveys and provided this repose to the Shoshone-Bannock Tribe through IDEQ. Copies of these agencies correspondence letters are included in Appendix F. Because the proposed projects will be constructed within exiting easements, City owned property, and road right-of-ways that have been previously disturbed, the proposed improvements are not anticipated to disturb or adversely affect local cultural resources.

5.11 Flora/ Fauna

The Eastern Idaho Field Office of the US Fish and Wildlife Office (USFWS) was consulted and they determined the following threatened and endangered species are found within Teton County:

- Canada Lynx (threatened)
- Grizzly Bear (threatened)

- North American Wolverine (candidate)
- Whitebark Pine (candidate)

The USFWS has not identified any issues that indicate that consultation under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.; (Act)), is needed for this project. Copies of agency correspondence with the USFWS are included in Appendix F.

5.12 Recreation & Open Spaces

These projects will not eliminate or modify any existing parks, open space, or areas of scenic recreational value.

5.13 Agricultural Lands

No prime agricultural lands inside or outside of the City limits will be altered for construction of these projects. Prime agricultural lands are shown in Appendix D. The 12-inch Transmission Pipeline Replacement project will temporarily disturb an alfalfa field located east of the high school during construction but will not have any lasting effects. The Idaho State Department of Agriculture (ISDA) was consulted on these projects and did not have any comments or questions related to these projects (Appendix F).

5.14 Air Quality & Noise

There are no restrictions on these projects at their locations. Construction for these projects will be limited to typical business hours to cut down on noise. There will be after hour construction required to make connections to existing water lines to limit disturbance to existing water customers. The City will coordinate with water customers when these connections are made.

Per consultation with IDEQ, the construction of these projects must control fugitive dust during all phases of the project as required under Idaho law. Construction debris and other wastes are strictly prohibited from open burning and need to be properly accumulated and disposed in a licensed landfill. Refer to Appendix F for correspondence. Temporary construction dust and noise from construction is anticipated, but no significant increases in noise or orders are anticipated from implementation of the improvements. Equipment for the upgrades to the Tank Well will be enclosed in a building reducing the amount of noise levels.

5.15 Energy Consumption

Additional Energy consumption is anticipated with the upgrades to the Teton Creek well; however, the replacement of the 12-inch Water Transmission line to the 0.3 MG tank should decrease headloss from the

other water systems wells pumping up to the tank. This pipeline replacement should slightly reduce pumping costs for the other wells. It is anticipated that the new Teton Creek Well will include a Variable Frequency Drive (VFD) which will allow the City to turn input power down at the pump to meet the demands required while also saving energy. The City will also continue to operate the culinary water system efficiently to not use more energy or pump more water than is demanded.

5.16 Sole Source Aquifer

The City of Driggs is located in the Source Area of the Eastern Snake River Plain Sole Source Aquifer (ESRSSA) but is not located in the Aquifer Area. A map of the ESRPSSA is included in Appendix D. It is anticipated that these improvements will not have any effect on this sole source aquifer as the Tank Well will be re-equipped with a larger pump to handle a higher Total Dynamic Head (TDH) but will supply the same amount of flow to the 1.0 MG tank as it is currently supplying to the 0.3 MG Tank.

5.17 Water Quality

IDEQ was consulted on water quality. IDEQ found that the improvements have no significant impact on wastewater, water supply, surface water, storm water and air quality in general. Refer to Appendix F for this correspondence. Best Management Practices (BMPs) will be implemented during and after construction to control erosion for storm water runoff. Construction BMPs will include, but not be limited to: construction site entrances, concrete wash out areas, straw wattles, and inlet protection. Post-construction BMPs will include, but not be limited to: straw wattles and re-vegetation.

5.18 Public Health

The Eastern Idaho Public Health District was consulted to review these water projects. The Department was concerned that construction may impact several schools and other food establishments in Driggs. They recommend any water outages involving food establishments be coordinated with the impacted facility and the local Health District office in Driggs, Idaho. The Health Department also mentioned that the City of Driggs should also review the plans for flushing and sanitizing the new water system, before it goes back in service. The Idaho Office of the U.S. Environmental Protection Agency (EPA) also reviewed the plans and did not have any specific comment regarding the project. They did recommend reviewing the agency's Planning for Sustainability: A Handbook for Water and Wastewater Utilities document. The City has incorporated some of the sustainable infrastructure opportunities from this document into its water system and will continue to look for more opportunities to do so. Refer to Appendix F for a copy of this correspondence.

There are no anticipated public health issues associated with implementation of the proposed improvements. However, construction of these projects will be phased to try and eliminate any disturbance

of water service to existing customers. In the event of connections to existing waterlines, final connections will be made during non-peak water usage (i.e. during the night) to limit disturbance to water users. Affected water users will also be notified prior to temporarily shutting off water service. Waterlines and the Tank Well will be flushed and sanitized per State Law before placing back into service.

5.19 Solid Waste/ Sludge Management

There will be no affect on solid waste or sludge management with the implementation of the proposed improvements.

SECTION 6 - ENVIRONMENTAL IMPACT MITIGATION MEASURES

Agencies were contacted to obtain comments on potential environmental impacts. The request letter for agency review of the projects that was sent out to each agency is located in Appendix C. The letter and maps shown in Appendix A and C are the standard forms send out to the agencies. Based on the response from these agencies the following mitigation measures should be taken during the construction process:

1. Construction BMPs will be implemented to migiate impacts to air/water quality and prevent hazardous waste spills to comply with IDEPA regulations. BMPs will be identified in each projects construction documents (i.e. drawings and project manual). BMPs will be the responsibility for the Contractor to furnish, install, and maintain. Typical BMPs include the following:

    - Dust Control – Using water to wet project areas
    - Removal of materials and disposed of responsibility to a landfill
    - Construction Site Entrances
    - Concrete Wash Out Areas
    - Straw Wattles
    - Inlet Protection for Storm Drains
    - Storm Water Pollution Prevention Plan (SWPPP) in conjunction with an Erosion Control Plan – If one of these projects disturbs more than one acre a SWPPP is required and an Notice of Intent (NOI) must be issued with the State.

2. These projects will be constructed below the streams and ditches. Thus, will not impact the channel within the high level water marks of the existing unnamed streams and unnamed irrigation ditches. This will be accomplished by either boring and jacking steel casing under these areas or hammering in a steel casing. Construction within the high level water marks will require a Nationwide Permit 12 issued by USACE.

3. The projects will not require an archaeological survey of the existing project locations as they will be constructed in areas that have been previously disturbed. Construction documents will require language that, if artifacts or remains are uncovered, a stop work order will be issued and both the State Historical Preservation Office (SHPO) and Tribes will be contacted. SHPO was concerned with two existing pipelines located in the 12-inch Transmission Waterline Replacement Project right-of-way. The following additional note will be added to the construction documents:

"If any historical, clay/wood or other pipelines are found during the construction of the project the Contractor shall take photos and submit these photos to the Idaho State Historical Preservation Office for their archives."

The Shoshone-Bannock Tribe also requested the following inadvertent clause be incorporated into the Stop Work Order Plan.

"In the event of an inadvertent discovery (cultural resources and/or human remains) the Tribes HeTO requests a Stop Work Order of construction activities and immediate notification to the Tribes HeTO. Construction shall cease until proper treatment of cultural resources and/or human remains is achieved. The Tribes HeTO also requests any current archeological surveys of APE."

4. The Eastern Idaho Public Health District recommended any water outages involving food establishments be coordinated with the impacted facility and the local Health District office in Driggs, Idaho. A note will be incorporated into the construction documents.

The items listed above do not require immediate action. They will be implemented at the time of the project design and construction. Prior to construction of the three projects listed in this EID, procedures, project plans, and construction documents will be prepared and submitted for IDEQ review. Based on the response from agencies and the mitigation required, a finding of no significant impact (FONSI) has been determined for the three (3) culinary water projects.

SECTION 7 - PUBLIC PARTICIPATION

On February 4, 2014 the Work Order was approved by the City of Driggs City Council to commence with the preparation of an Environmental Information Document. Refer to Appendix E for public participation information. At the same meeting the Water System Facility Plan Update was discussed. The City mentioned a few items in the WSFP that required corrections. The public hearing was opened and the mayor noted that no written public comments were received for the WSFP. The WSFP was adopted with the requested changes. The requested changes along with updates showing this public participation and the findings of this EID will be incorporated into the Final WSFP before submitting to the State for final review and approval.

The EID will go through a concurrent review by the State and City. The City will issue a notice that the document is available for public viewing, for a minimum 2 weeks, and receive public comment. Once the public viewing and comment period is over the EID will go to the City Council to listen to public comments and consider approval of the EID. This approved EID will be submitted to the State for final approval. The public participation portion of the EID will be updated with each review.

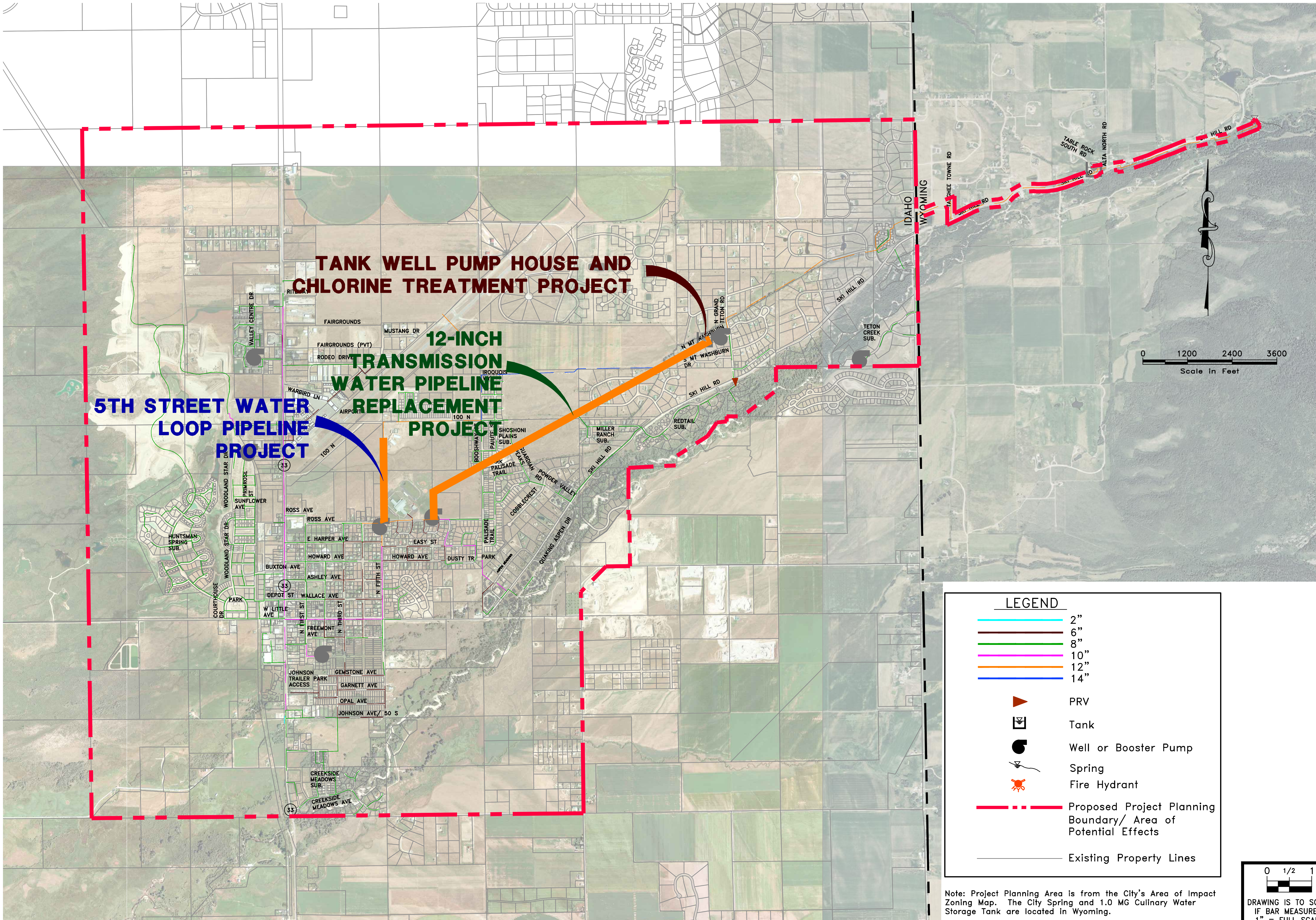
SECTION 8 - REFERENCE DOCUMENTS AND RESOURCES

In addition to correspondence with interested agencies and individuals, the following significant documents and websites were utilized in providing information for this Environmental Information Document:

1. City of Driggs Water System Facility Plan. Sunrise Engineering, dated 2002.
2. City of Driggs Water Improvement Project 2003 – O&M Manual. Sunrise Engineering, dated 2003.
3. U.S. Census Bureau and 2012 American Community Survey. http://www.census.gov
4. Idaho Administrative Code, Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08), Idaho Department of Environmental Quality
5. City of Driggs – Public Works Standards and Technical Specifications. 2010.
6. City of Driggs Zoning Map. City of Driggs, Idaho dated December 15, 2009.
7. Form 5-B Outline and Checklist for Environmental Information Documents (EIDs). Idaho Department of Environmental Quality – Drinking Water State Revolving Fund.
8. Google Earth. http://www.google.com/earth/index
9. Western Regional Climate Center. http://www.wrcc.dri.edu
10. USA National Wild and Scenic Rivers. http://www.rivers.gov/idaho.php

APPENDIX A

PROJECT MAPS AND PROJECT COST ESTIMATES



Note: Project Planning Area is from the City's Area of Impact Zoning Map. The City Spring and 1.0 MG Culinary Water Storage Tank are located in Wyoming.

0 1/2 1
DRAWING IS TO SCALE IF BAR MEASURES:
1" = FULL SCALE
1/2" = HALF SCALE

NO.	DATE	DESIGN	DRAWN	CHECKED
0	02/06/2014	RJR	RJR	RJR

REVISIONS

DRIGGS, IDAHO

FY 2015 WATER IMPROVEMENT PROJECTS

PROPOSED PROJECT PLANNING AREA MAP

AQUA ENGINEERING
533 W. 2600 S., SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

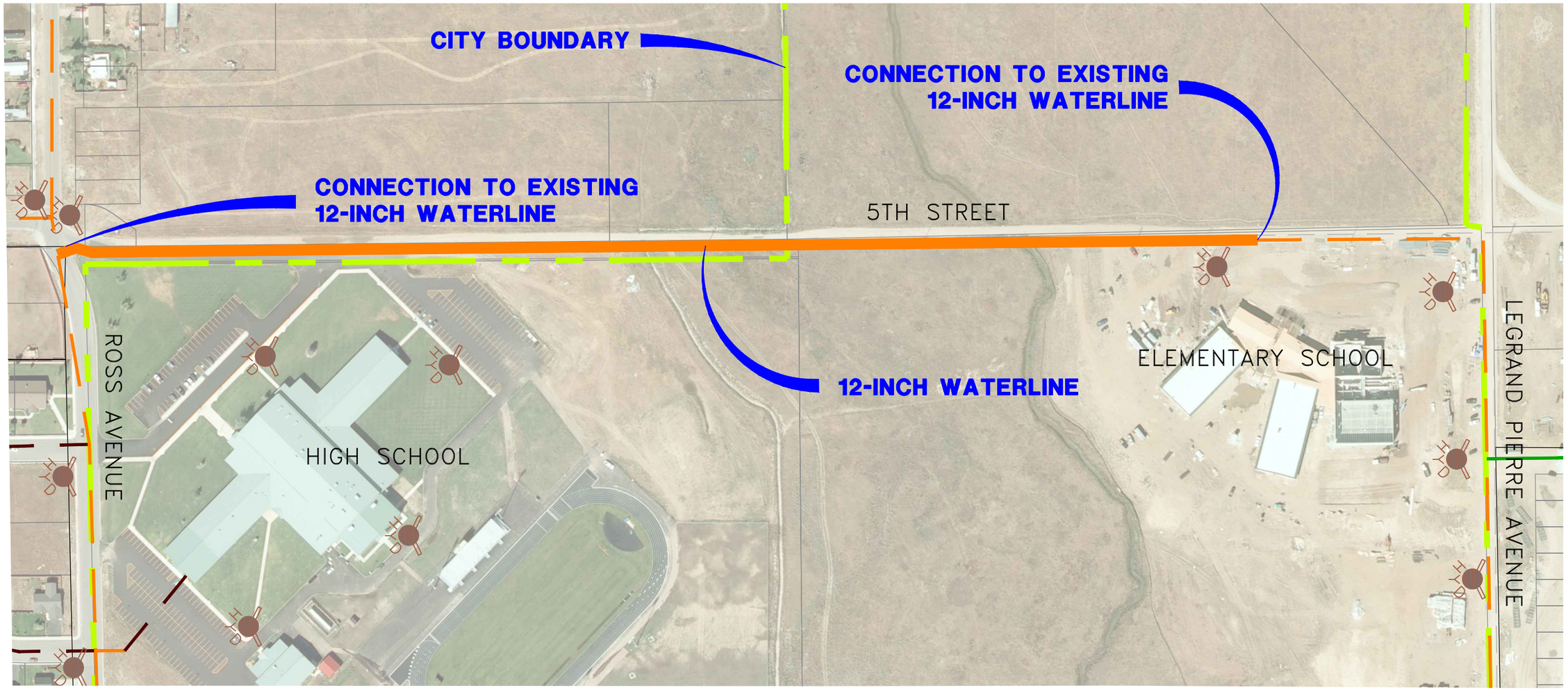
APPENDIX

A-1

W:\Driggs\Water\Water System Facility Plan 7-12\Environmental Information Document (EID)\Figures and Exhibits\WATER SYSTEM MAP WITH PROJECTS.dwg

02/06/2014

RJR



0 100 200 300
Scale in Feet

LEGEND

- 2”
- 6”
- 8”
- 10”
- 12”
- 14”
- PRV
- Tank
- Well or Booster Pump
- Spring
- Fire Hydrant
- City Boundary
- Existing Property Lines

NO.	DATE	DESIGN	DRAWN	CHECKED
0	02/06/2014	RJR	RJR	RJR

REVISIONS

DRIGGS, IDAHO

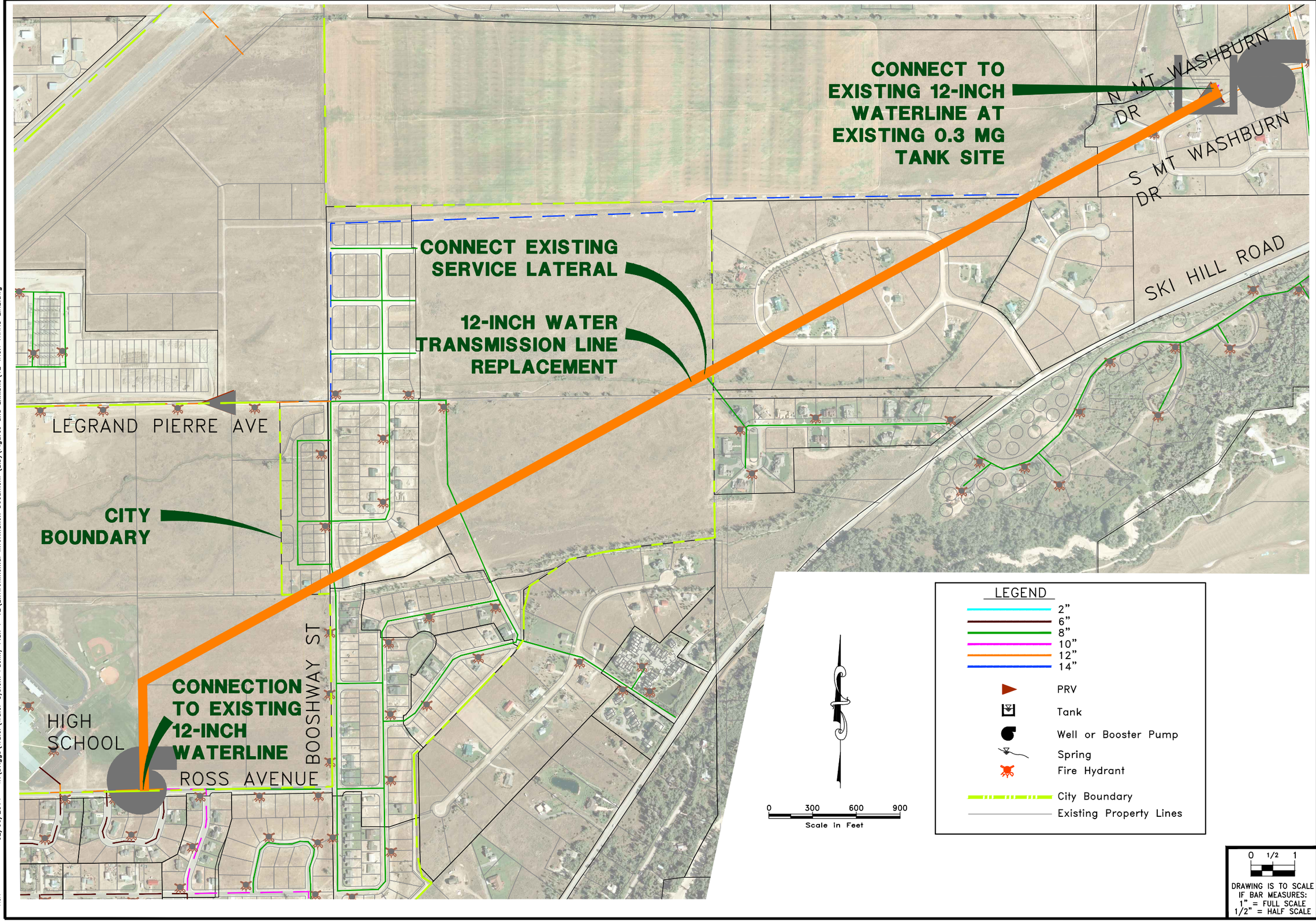
FY 2015 WATER IMPROVEMENT PROJECTS
5TH STREET WATER LOOP PIPELINE PROJECT
CONCEPTUAL PROJECT MAP

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

0 1/2 1
DRAWING IS TO SCALE
IF BAR MEASURES:
1” = FULL SCALE
1/2” = HALF SCALE

APPENDIX
A-2

RJR 02/06/2014 W:\Driggs\Water\Water System Facility Plan 7-12\Environmental Information Document (EID)\Figures and Exhibits\5TH ST WATER LOOP EX.dwg



NO.	DATE	DESIGN	DRAWN	CHECKED
0	02/06/2014	RJR	RJR	RJR

REVISIONS

DRIGGS, IDAHO

FY 2015 WATER IMPROVEMENT PROJECTS

12-INCH TRANSMISSION WATER PIPELINE REPLACEMENT PROJECT

CONCEPTUAL PROJECT MAP

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

0 1/2 1

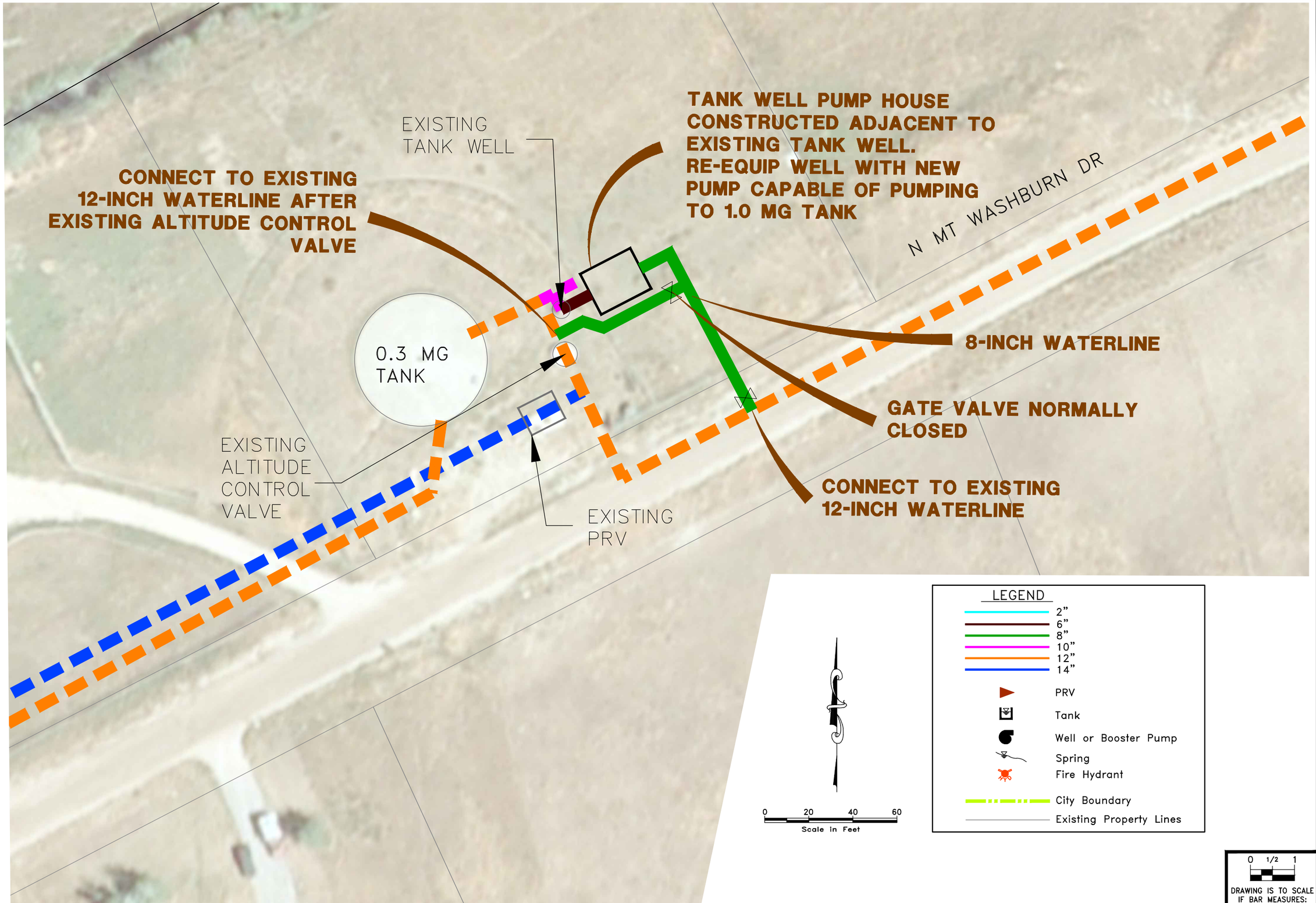
DRAWING IS TO SCALE IF BAR MEASURES: 1” = FULL SCALE 1/2” = HALF SCALE

APPENDIX

A-3

02/06/2014 W:\Driggs\Water\Water System Facility Plan 7-12\Environmental Information Document (EID)\Figures and Exhibits\12-INCH TRANS LINE.dwg

RJR



NO.	DATE	DESIGN	DRAWN	CHECKED
0	02/06/2014	R.JR	R.JR	R.JR

REVISIONS

DRIGGS, IDAHO

FY 2015 WATER IMPROVEMENT PROJECTS

TANK WELL PUMP HOUSE AND CHLORINE TREATMENT PROJECT

CONCEPTUAL PROJECT MAP

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

0 1/2 1

DRAWING IS TO SCALE
IF BAR MEASURES:
1” = FULL SCALE
1/2” = HALF SCALE

APPENDIX

A-4

02/06/2014 W:\Driggs\Water\Water System Facility Plan 7-12\Environmental Information Document (EID)\Figures and Exhibits\TANK WELL PH-FUTURE.dwg

RJR

CLIENT: City of Driggs
PROJECT: 5th Street Water Loop Pipeline Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 26-Dec-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 15,000.00	$ 15,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	700	$ 2.50	$ 1,750.00
3	Furnish and Install 12-inch DIP Water Main	LF	2,700	$ 60.00	$ 162,000.00
4	Connect to 12-inch Water Main in Street	EA	2	$ 3,500.00	$ 7,000.00
5	Furnish and Install 12-inch FL Tee and 3 - 12-inch FL x MJ Gate Valves at intersections	EA	2	$ 4,250.00	$ 8,500.00
6	Furnish and Install 12-inch Isolation Gate Valve	EA	1	$ 1,200.00	$ 1,200.00
7	Pavement Restoration	SF	2,680	$ 3.00	$ 8,040.00
8	Revegetation	LS	1	$ 5,000.00	$ 5,000.00
9	Flush & Pressure Test	LS	1	$ 5,000.00	$ 5,000.00
10	Traffic Control	LS	1	$ 2,500.00	$ 2,500.00
				Construction Subtotal	**$ 215,990.00**
				Construction Contingency (15%)	$ 32,398.50
				Engineering and Construction Management (10%)	$ 21,599.00
				PROJECT TOTAL	**$ 269,987.50**
				2014 CONSTRUCTION YEAR COST [1]	**$ 278,087.13**

[1] Construction Year Cost = 2013 Cost Estimate x (1 + Inflation Rate) $^{(\text{Construction Year - 2013})}$, Inflation Rate Used=3.0%

CLIENT: City of Driggs
PROJECT: 12-inch Transmission Water Pipeline Replacement Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 26-Dec-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 25,000.00	$ 25,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	1,000	$ 2.50	$ 2,500.00
3	Furnish and Install 12-inch HDPE Water Main	LF	9,132	$ 40.62	$ 370,940.00
4	Furnish and Install 24-inch Steel Casing at Three Channel Crossings (Approximately 40 LF Total) by Hammering in Casing	LS	1	$ 40,000.00	$ 40,000.00
5	Provide new Piping and connections from Tank to PRV	LS	1	$ 15,000.00	$ 15,000.00
6	Furnish and Install 12-inch FL Tee and 3 - 12-inch FL x MJ Gate Valves at intersections	EA	3	$ 4,250.00	$ 12,750.00
7	Furnish and Install 12-inch Isolation Gate Valve	EA	2	$ 1,200.00	$ 2,400.00
8	Pavement Restoration	SF	4,000	$ 3.00	$ 12,000.00
9	Revegetation	LS	1	$ 5,000.00	$ 5,000.00
10	Flush & Pressure Test	LS	1	$ 10,000.00	$ 10,000.00
11	Traffic Control	LS	1	$ 2,500.00	$ 2,500.00
				Construction Subtotal	**$ 498,090.00**
				Construction Contingency (15%)	$ 74,713.50
				Engineering and Construction Management (10%)	$ 49,809.00
				PROJECT TOTAL	**$ 622,612.50**
				2015 CONSTRUCTION YEAR COST [1]	**$ 660,529.60**

[1] Construction Year Cost = 2013 Cost Estimate x (1 + Inflation Rate) $^{(\text{Construction Year - 2013})}$, Inflation Rate Used=3.0%

CLIENT: City of Driggs
PROJECT: Tank Well Pump House and Chlorine Treatment Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 26-Dec-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 7,000.00	$ 7,000.00
2	Site Work including Finish Grading and Modification of Existing Site Piping	LS	1	$ 10,000.00	$ 10,000.00
3	Pump House Structure (226 SF)	LS	1	$ 50,000.00	$ 50,000.00
4	Pump House Piping, Mechanical, and HVAC Pump House Piping, Mechanical, and HVAC including New Meter,Hydraulic Pump Control Vavle, and Re-route of Well Piping	LS	1	$ 60,000.00	$ 60,000.00
5	Furnish and Install Chlorine Treatment Equipment	LS	1	$ 12,500.00	$ 12,500.00
6	Pump House Electrical and SCADA	LS	1	$ 50,000.00	$ 50,000.00
7	Re-equip well with larger pump	LS	1	$ 55,000.00	$ 55,000.00
8	Brush, Bail, and Video Well	LS	1	$ 10,000.00	$ 10,000.00
9	Manual Transfer Switch	LS	1	$ 4,000.00	$ 4,000.00
10	Solar Panels and Electrical	LS	1	$ 30,000.00	$ 30,000.00
				Construction Subtotal	**$ 288,500.00**
				Construction Contingency (15%)	$ 43,275.00
				Engineering and Construction Management (10%)	$ 28,850.00
				PROJECT TOTAL	**$ 360,625.00**
				2015 CONSTRUCTION YEAR COST [1]	**$ 382,587.06**

[1] Construction Year Cost = 2013 Cost Estimate x (1 + Inflation Rate) $^{(\text{Construction Year - 2013})}$, Inflation Rate Used=3.0%

APPENDIX B

FORM 5-B OUTLINE AND CHECKLIST FOR ENVIRONMENTAL INFORAMTION DOCUMENTS (EIDs)

Form 5-B
Outline and Checklist for Environmental Information Documents (EIDs)

Applicant/Borrower and DEQ Grant or Loan #

Environmental Reviewer

Date

Y=yes N=no N/A=not applicable

A. COVER SHEET

1. Is the project properly identified with the applicant's name and address? ○ Y ○ N

2. Is the project contact person named on the cover sheet, along with their address and phone number and email address? Please provide the name and contact information for the environmental review contact if different from project contact person. ○ Y ○ N

3. Is it clear what the project will cost and how it will be funded? ○ Y ○ N

4. Is the environmental information document (EID) or environmental assessment a stand-alone document, a separate chapter in the engineering report or facility plan, or an appendix in the engineering report or facility plan? ○ Y ○ N

A recommended format for showing the costs and funding follows:

Estimated Construction Costs:

Transmission and distribution system

Treatment

Storage

Source

Total estimated cost

Funding:

DEQ share

Other share

Total funding

5. Does the cover sheet provide information about the estimated user costs of the project? ○Y ○N

The recommended format for item A.5 follows:

A.	Current Average Monthly User Charge per EDU	$
B.	Change in Operation & Maintenance Monthly Charge per EDU	$
C.	Change in Debt Service Monthly Charge per EDU	$
D.	Future Average Monthly User Charge per EDU (A+B+C)	$

6. Does the cover sheet provide a one-paragraph abstract of the EID? ○Y ○N

B. PURPOSE AND NEED FOR THE PROPOSED PROJECT

Does the document provide a clear discussion of the need for the proposed facility relative to public health, water quality problems, and other concerns with particular emphasis on the severity and extent of the problem(s)? Describe sources of information used to assess the need. ○Y ○N

C. ALTERNATIVES INCLUDING THE PROPOSED ACTION

1. Does the document briefly describe all alternatives studied in the planning document, including the No Action alternative? ○Y ○N

2. Does the document discuss the low-cost alternative? ○Y ○N

3. Does the document comparatively analyze the alternatives with respect to relevant environmental impacts, costs to mitigate environmental impacts, and capital and operating costs? ○Y ○N

4. Does the document discuss the apparent best alternative in detail, including the following: ○Y ○N

a) Treatment and distribution ○Y ○N

b) Location of proposed new facility, or footprint of project components (if other than a new facility) ○Y ○N

c) Environmental impacts (See Section D. Affected Environment) ○Y ○N

d) Notes and Discussion:

5. If the selected alternative is not the most cost-effective one, does the document provide a justification for this? ○Y ○N ○N/A

D. AFFECTED ENVIRONMENT

The purpose of this section is to verify that the selected alternative is environmentally sound and verify that any adverse environmental impacts are avoided, minimized, or mitigated. To validate the selection of the preferred alternative, it is important at this point to identify the major human-made and natural features of the environment that will be affected by the proposed project. Direct, indirect, short-term, long-term, and cumulative impacts must be considered. This information is one part of the information that will be used to determine whether a full environmental impact statement (EIS) will be required.

1. Is a description and map of the proposed project planning area included in the facility planning document or EID (if stand alone document)? ○ Y ○ N

   Do the description and map take into account the following criteria?

   a) A description of the proposed project planning area boundaries ○ Y ○ N

   b) Key topographic and geographic features of the area ○ Y ○ N

   c) The population distribution ○ Y ○ N

   d) Industrial and commercial features of the proposed project planning area ○ Y ○ N

2. Has a map of the proposed project planning area been provided that includes all pertinent details? ○ Y ○ N

3. Has the area of potential effects (APE), if different from the proposed project planning area, been identified? ○ Y ○ N

   a) Once the APE has been identified, have the direct, indirect, short-term, long-term, and cumulative effects related to the proposed project been characterized? ○ Y ○ N

   b) Has a map of the APE been included? ○ Y ○ N

4. Describe the following major features of the proposed project.

   a) The length, diameter, and type of material for distribution lines

   b) The number, size, depth, and location of wells and related equipment and structures

   c) Storage facilities, pumping stations, and fire flow requirements

   d) The location and type of treatment facilities

e) Any other facets of the planned construction

f) If relevant, explain how the drinking water project fits into a regional plan

g) The schedule of construction

5. Are flow projections and their sources described for existing and projected (20-year minimum) for treatment and drinking water flows (40 year minimum for distribution)? ○ Y ○ N

a) Is an evaluation of operation and maintenance changes resulting from system improvements included? ○ Y ○ N

b) Is the contribution of flow to residential, commercial, and industrial sources characterized, including conservation measures (e.g., metering)? ○ Y ○ N

c) Have any related problems been identified? If yes, describe below. ○ Y ○ N

6. Have all environmental features affected by the proposed project been characterized and mitigation of any resulting environmental impacts discussed in the planning document? ○ Y ○ N

NOTE: Section D.6 of the EID constitutes the heart of the environmental review for the selected alternative of any drinking water construction project. This information will be most important in determining whether a full environmental impact statement (EIS) will be required.

Has each of the following major human-made and natural features and related relevant questions for each feature been included? The list of major human-made and natural features should be considered for each proposed project.

NOTE: These questions should be answered as appropriate, and additional information provided when necessary. Much of the information provided in Section D of the EID can be referenced when completing Section F. Alternatively, the applicant may wish to combine Sections D and F of the EID outline into one section in the final document.

a) Physical aspects (topography, geology, and soils)

(1) Are there physical conditions (e.g., steep slopes, shrink-swell soils, etc.) that might be adversely affected by or might adversely affect construction of the facilities? ○ Y ○ N

(2) Are there similar physical conditions in the planning area that might make development unsuitable? ○ Y ○ N

(3) Are there any unusual or unique geological features that might be affected? ○ Y ○ N

(4) Are there any hazardous areas (e.g., slides, faults) that might affect construction or development? ○ Y ○ N

(5) Discussion

b) Climate

(1) Are there any unusual or special meteorological constraints in the planning area that might result in an air quality problem (e.g. may be an issue for certain types of treatment systems with emission considerations)? ○ Y ○ N

(2) Are there any unusual or special meteorological constraints in the planning area that affect the feasibility of the proposed alternative? ○ Y ○ N

(3) Discussion

c) Population

(1) Are the growth rates excessive because of:

(a) exceeding by 25% the 20-year population growth rate expectations for the state (Idaho Division of Financial Management), and ○ Y ○ N

(b) having a change of greater than 500 estimated residential units over the life of the project? ○ Y ○ N

(2) Do the plans call for sufficient extra capacity? ○ Y ○ N ○ N/A

(3) Discussion

d) Economics and social profile

(1) Does documentation exist that suggests that the local populace can afford to build the project? ○ Y ○ N

(2) Will certain landowners benefit substantially from the development of land due to distribution line routing or domestic drinking water treatment plant (DWTP) location and size? ○ Y ○ N ○ Unknown

(3) Will the facilities adversely affect land values? ○Y ○N

(4) Environmental justice (Executive Order No. 12898):

i) Will any low-income or minority groups be adversely affected by the proposed project? ○Y ○N

ii) Are any benefits from this project going to accrue in a non-discriminatory manner? ○Y ○N

(5) Discussion

e) Land use

(1) Is the location of the DWTP or other facilities incompatible with local land use plans? ○Y ○N

(2) Will inhabited areas be adversely impacted by the project site? ○Y ○N

(3) Will new development that is stimulated by a new drinking water facility have adverse effects on older, existing land uses (e.g., agriculture, forest land, etc.)? ○Y ○N

(4) Will this project contribute to changes in land use in association with recreation, mining, or other large industrial or energy development? ○Y ○N

(5) Discussion

*f) Floodplain development (no floodway construction is allowed)

(1) Has the community determined if any part of the planned drinking water project will be located within the a 100-year floodplain? (Attach maps used to arrive at decision.) ○Y ○N

(2) If some part of the planned drinking water facility will be located within a 100-year floodplain, and no practicable alternative to this exists, has the community indicated that measures will be included in the design of the facilities to minimize or avoid adverse effects to the floodplain? ○Y ○N

(3) Will the facility be able to fully function and operate during a 100-year flood event? ○Y ○N

(4) If a 100-year floodplain will be impacted by the proposed project, has the applicant indicated how the public will be notified of this and how public input will be considered? ○Y ○N ○N/A

(5) If the project or some part of it will be in a 100-year floodplain is the borrower currently participating in the National Flood Insurance Program? ○ Y ○ N

(6) Discussion

*g) Wetlands

(1) Is any portion of the project planning area located within wetlands as defined and mapped by the U.S. Fish and Wildlife Service or as determined through site visits by the U.S. Army Corps of Engineers (COE), the Soil Conservation Service, or a qualified private consultant? ○ Y ○ N

(2) If part of the proposed project will be located in or will affect wetlands, as determined by maps and/or site investigations, will a 404 dredge and fill permit be required from the COE? (Attach maps, site investigations or correspondence used to reach decision.) ○ Y ○ N

(3) Have alternatives to keeping the project outside the identified wetlands been proposed in the EID or engineering report/facility plan? ○ Y ○ N

(4) If part of the proposed project will be located in an identified wetland, and no practicable alternative exists, has a wetlands assessment of measures to minimize or mitigate adverse affects been made? ○ Y ○ N

(5) If a Wetland Delineation Report has been prepared for the proposed project site, did the COE concur with DEQ findings on the Wetland Delineation Report? ○ Y ○ N

(6) Discussion

h) Wild and scenic rivers

(1) Does the planning area contain a designated or proposed wild and scenic river? ○ Y ○ N

(2) Discussion

*i) Cultural resources

(1) Has the State of Idaho historic preservation officer (SHPO) and/or the tribal historic preservation officer (THPO) been consulted to determine if there are any properties (historic, architectural or, archaeological) in the planning area which are listed, or eligible for listing, on the National Register of Historic Places? ○ Y ○ N

NOTE: Contact the appropriate THPO, as the lead authority for the Coeur d'Alene Tribe of Idaho and the Nez Perce tribal lands of Idaho. Contact the SHPO as the lead authority for all other tribal lands in Idaho.

(2) Has SHPO or THPO requested a site survey to determine the presence or absence of cultural resources in the proposed project area? ○ Y ○ N

(3) If cultural resources have been identified in the project area, will the project have direct or indirect adverse impacts on any listed or eligible property? ○ Y ○ N

(4) Has the community developed mitigation measures to avoid or reduce adverse impacts to cultural resources identified in the proposed project area? ○ Y ○ N ○ N/A

(5) Discussion

*j) Flora and fauna

(1) Has a current U.S. Fish and Wildlife Service threatened and endangered species list specific to the proposed project site been provided? ○ Y ○ N

(2) Are there any designated threatened or endangered species or critical habitats in the proposed project planning area? ○ Y ○ N

(3) If listed species or habitats are present, has a biological assessment been prepared by a qualified expert for designated threatened or endangered species? ○ Y ○ N ○ N/A

(4) Will the project have direct or indirect adverse impacts on any such designated species or habitats? ○ Y ○ N

(5) Will the project have direct or indirect adverse impacts on other fish and wildlife, or their habitats, including migratory routes, wintering, or calving areas? ○ Y ○ N

(6) Does the planning area include a sensitive habitat area designated by a local, state, or federal wildlife agency? ○ Y ○ N

(7) If a Biological Assessment (BA) has been prepared for threatened or endangered species, did the applicable agency/agencies (U.S. Fish and Wildlife Service or National Marine Fisheries Service) concur with DEQ findings on the BA, if necessary? ○ Y ○ N

(8) Discussion

k) Recreation and open space

(1) Will the project eliminate or modify recreational open space, parks, or areas of recognized scenic or recreational value? ○ Y ○ N

(2) Is it feasible to combine the project with parks, bicycle paths, hiking trails, waterway access, and other recreational uses? ○ Y ○ N

(3) Discussion

*l) Agricultural lands

(1) Does the planning area contain any important farmlands (prime, unique, statewide importance, local importance, etc.) as defined by the U.S. Department of Agriculure? ○ Y ○ N

(2) If yes, will the project directly or indirectly encourage the irreversible conversion of environmentally significant agricultural lands to uses that result in the loss of these lands as an environmental or essential food production resource? ○ Y ○ N ○ N/A

(3) Discussion

*m) Air quality

(1) Will there be any direct air emissions from the project (as from construction equipment) that will not meet federal and state emission standards contained in the air quality state implementation plan (SIP)? ○ Y ○ N

(2) Is the project service area located in an area without an approved or conditionally approved SIP? ○ Y ○ N

(3) Does the project violate national ambient air quality standards in an attainment or unclassified area? ○ Y ○ N

(4) Will the facilities cause odor or noise nuisance problems? ○ Y ○ N

(5) Discussion

n) Energy

(1) Are there additional cost-effective measures to reduce energy or water consumption or increase energy recovery which could be included in the project? ○Y ○N

(2) Have air quality issues of energy recovery been addressed? ○Y ○N ○N/A

(3) Discussion

o) Regionalization

(1) Are there jurisdictional disputes or controversy over the project? ○Y ○N

(2) Have intermunicipal agreements been signed? ○Y ○N ○N/A

(3) Have intermunicipal agreements been discussed with surrounding communities? ○Y ○N ○N/A

(4) Discussion

p) Water Quality

(1) Will the project adversely affect the quality or quantity of a ground water source? ○Y ○N

(2) Does the project adversely affect a sole-source aquifer, stream flow source area or recharge area? ○Y ○N

(3) Will the project adversely affect water rights? ○Y ○N

(4) Will the project adversely affect a source water area for a public drinking water system? ○Y ○N

(5) Will project construction and development served by the project result in nonpoint water quality problems (sedimentation, urban storm water, etc.)? ○Y ○N

(6) Discussion

E. MAPS, CHARTS, AND TABLES

1. Do the maps, charts, and other graphic materials used in the EID help the reader clearly discern project features? ○Y ○N
2. Are all graphs, charts, tables, and other graphics clearly labeled and referenced properly in the text of the EID? ○Y ○N

F. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

1. Are the direct, indirect, short-term, long-term, and cumulative impacts of the project upon human-made and natural features clearly identified (refer to Section D of this form)? ○ Y ○ N

2. Are additional potential or existing impacts that are worthy of discussion in the EID noted? ○ Y ○ N ○ N/A

3. Are there obvious areas of impact that have not been considered in this evaluation? List them below. ○ Y ○ N ○ N/A

4. Have unavoidable adverse impacts that cannot be fully mitigated been listed and discussed? ○ Y ○ N ○ N/A

G. MEANS TO MITIGATE ADVERSE ENVIRONMENTAL IMPACTS

1. Have mitigation measures been clearly listed for direct, indirect, short-term, long-term, and cumulative impacts? ○ Y ○ N ○ N/A

2. Have means of achieving mitigation measures been given? ○ Y ○ N ○ N/A

   a) The means to achieve the mitigation measures must identify and establish all the following:

   (1) The mitigation measures identified for implementation are enforceable, and

   (2) Verification that parties committing to mitigation measures has the authority and ability to fulfill the commitments, and

   (3) Appropriate monitoring is conducted during implementation of the mitigation measures

H. PUBLIC PARTICIPATION

1. During the planning process if the environmental review process has determined that something other than a categorical exclusion (with no support documentation) is appropriate, has the public been given at least 14 days to review and comment on the alternatives under consideration for the proposed project and commensurate environmental impacts of each alternative? This is to ensure that environmental information is available before decisions are made and actions are taken. The comment period begins with the date the public notice is published. The notice need not be published more than once, unless the project is highly controversial. If the project is deemed controversial, then the public notice will be tailored to suit the circumstance. Include a coy of the public notice in the EID. ○ Y ○ N

2. Have dates and meeting locations for all public hearings and meetings concerning the engineering report or facility plan and EID been described in the EID? Include copies of the meeting minutes of when an alternative was selected. ○Y ○N

3. Have all substantive issues raised by the public in meetings, hearings, and by correspondence been described in the EID? Include copies of public comments received. ○Y ○N ○N/A

4. Have substantive public concerns been addressed in the engineering report or facility plan and final environmental document? ○Y ○N ○N/A

5. Have significant substantive comments received from state and federal agencies been described and considered in the engineering report or facility plan and final environmental document? Include copies of state and federal agency comments received. ○Y ○N ○N/A

I. REFERENCES CONSULTED

Is there a list of all reference documents consulted in preparation of the EID? ○Y ○N

J. AGENCIES CONSULTED

1. Is there a list of all agencies and agency experts or individuals consulted during the preparation of the EID? ○Y ○N

2. Does the list of consulted agencies include dates the agency response was received or dates consultation was attempted? (Include correspondence such as emails on attempted consultations.) ○Y ○N

K. MAILING LIST

1. Has a mailing list been included in the EID? ○Y ○N

2. Does the mailing list include the names and addresses of all attendees of public meetings, affected local residents, relevant environmental groups, DEQ and local officials, and agencies that were consulted or who were provided information regarding the proposed project? ○Y ○N

NOTE: Asterisk items are not required for projects identified as Tier II. Please see Form 5C for discussion of Tier II.

APPENDIX C

AGENCY CORRESPONDENCE

Agency Contacts for DEQ Grant and Loan Environmental Reviews - Idaho Falls Region

as of June 2013

Name	Representing	Environmental Resource Associated with Contact Agency	Address	City	State	Zip	Phone / E-Mail	Email	Mode of Consultation
James Joyner	US Army Corps of Engineers	Wetlands, 404 Permits, Flood plains	900 N. Skyline Dr., Suite A	Idaho Falls	ID	83402-1718	208-522-1676	James.M.Joyner@usace.army.mil	email
Willie Teuscher	Idaho Falls Department of Environmental Quality	Water Quality	900 N. Skyline, Suite B	Idaho Falls	ID	83402	208-528-2650	willie.teuscher@deq.idaho.gov	
Ed Hagan, Ground Water Manager	Department of Environmental Quality, State Office	**If expansion or new activity that could create a new potential contamination source. If proposing new drinking water well. (see ground water checklist)**	1410 N. Hilton	Boise	ID	83706		Ed.Hagan@deq.idaho.gov	email or hard copy only
Rensay Owen	Idaho Falls Department of Environmental Quality	Air Quality	900 N. Skyline, Suite B	Idaho Falls	ID	83402	208-528-2650	rensay.owen@deq.idaho.gov	
Ethan Morton, SHPO	Idaho State Historical Society	Historic and archaeological sites and sensitive areas	210 Main Street	Boise	ID	83702	208-334-3847 x. 107	Ethan.Morton@ishs.idaho.gov	email
Susan Eastman, Hydrogeologist	EPA Region 10, Office of Environmental Assessment (OEA-095)	For any project located over a Sole Source Aquifer or Streamflow Source Area	1200 6th Avenue, OWW 136	Seattle	WA	98101	206-553-6249	Eastman.Susan@epamail.epa.gov	
James Werntz	U.S. EPA, Idaho Operations Office	Water Quality, Air Quality	950 W. Bannock Street, Ste. 900	Boise	ID	83702	208-378-5746	Werntz.James@epamail.epa.gov	
Patrick Kelly, State NFIP Contact	Idaho Dept. of Water Resources	Floodplain management, maps, general program assistance	322 East Front Street PO Box 83720	Boise	ID	83720-0098	208-287-4928	Patrick.Kelly@idwr.idaho.gov	
Gary Bahr	Idaho Department of Agriculture	Important Farmland	P.O. Box 790	Boise	ID	83701	208-332-8500	Gary.Bahr@agri.idaho.gov	email
Kellye Eager, Environmental Health Director	District 7 Health Department	Solid Waste	254 "E" Street	Idaho Falls	ID	83402	208-523-5382		hard copy consultation
Steve Schmidt	Idaho Dept. of Fish and Game, Upper Snake Region (if project is located in Butte, Jefferson, Madison, Teton, Fremont, Clark, Lemhi, Custer, Bingham Counties)	Biological resources, non game plant and animal species	4279 Commerce Circle	Idaho Falls	ID	83401	208-525-7290		hard copy consultation
Hal Swenson	USDA-NRCS-served by Soil Conservation Districts	Prime Agricultural & Rangelands, Soil Surveys for Wetlands & Floodplain assistance	9173 West Barnes Dr., Ste. C	Boise	ID	83709	208-378-5728	http://www.id.nrcs.usda.gov/technical/soils/index.html	ftp://ftp-fc.sc.egov.usda.gov/ID/contact/idaho_directory_010713.pdf
Kurt Houston	Department of Lands	Land use	P.O. Box 83720	Boise	ID	83720-0050	208-334-0200	khouston@idl.idaho.gov	
Dennis Dunn	Idaho Dept. of Water Resources, Eastern Region	**ONLY IF decommissioning or drilling new drinking water well**	900 N. Skyline Dr., Suite A	Idaho Falls	ID	83402	208-525-7161	dennis.dunn@idwr.idaho.gov	hard copy consultation or email
Julie Neff, Rural Development Specialist	USDA-RD	**If funding is being requested from USDA-RD.**	725 Jensen Grove Dr., Suite I	Blackfoot	ID	83221	208-785-5840	Julie.Neff@id.usda.gov	email
Dennis Porter, State Program Manager	Idaho Dept of Commerce	**If funding is being requested for a Idaho Community Development Block Grant**	P.O. Box 83720	Boise	ID	83720-0093	208-334-2470	Dennis.Porter@commerce.idaho.gov	hard copy consultation or email
DEQ will consult with Tribes and agencies below									

Agency Contacts for DEQ Grant and Loan Environmental Reviews - Idaho Falls Region

as of June 2013

Name	Representing	Environmental Resource Associated with Contact Agency	Address	City	State	Zip	Phone / E-Mail	Email	Mode of Consultation
Brian Kelly, State Supervisor, Snake River Fish and Wildlife Office	US Fish and Wildlife Service	Threatened, Endangered Species, other wildlife and flora	1387 South Vinnell Way, Room 368	Boise	ID	83709	208-378-5256		hard copy consultation
Carolyn Boyer Smith, Cultural Resources Coordinator	Shoshone-Bannock Tribes	Historic and archaelogical and sensitive religious sites in any county in Pocatello Region	P.O. Box 306	Fort Hall	ID	83203	208-478-3707		
Ted Howard, Cultural Resources Program	Shoshone-Paiute Tribe	Historic and archaelogical and sensitive religious sites in any county in Pocatello Region	P.O. Box 219	Owyhee	NV	89832	775-757-3161 ext 243 or 208-759-3100	howard.ted@shopai.org	
Bill Lind	NOAA - National Marine Fisheries Service	Bill should be consulted if the project will be taking place in salmon/steelhead locations and/or critical habitat. Also any project within Custer and Lemhi county where Essential Fish Habitat for salmon has been identified.	10095 W. Emerald Street	Boise	ID	83704	208-378-5696		
If the Corps during consultation indicates there are non-jurisdictional wetlands in the area then consult with the following individuals.									
Tracy DeGering	U.S. EPA, Idaho Operations Office	Courtesy consultation for proposed construction projects within non-jurisdictional wetlands.	950 W. Bannock Street, Ste. 900	Boise	ID	83702	208-378-5756	DeGering.Tracy@epamail.epa.gov	email
Tom Bassista	Dept of Fish and Game, Upper Snake Region	Courtesy consultation for proposed construction projects within nonjurisdictional wetlands as it relates to migratory birds	4279 Commerce Circle	Idaho Falls	ID	83401	208-5257290	Tom.Bassista@idfg.idaho.gov	

[Insert Date]

[Insert Address]

RE: City of Driggs FY 2015 Water Improvement Projects – Request for Comments for Preparation of an Environmental Information Document

Dear Mr./Ms. [Insert Recipient]:

The City of Driggs is preparing a facility planning document to identify and make necessary improvements to their drinking water system that are cost effective and environmentally sound. The facility plan for this project is being funded 50% by a Department of Environmental Quality (DEQ) planning grant which requires compliance with the Rules for Administration of Planning Grants for Drinking Water Facilities, IDAPA 58.01.22. The purpose of this letter is to request your review and response regarding any environmental impacts that your agency may identify for these proposed projects pursuant to the Idaho Department of Environmental Quality's State Environmental Review Process, which mirrors the National Environmental Policy Act.

The proposed water improvement projects are the 5th Street Water Loop Pipeline Project; 12-inch Transmission Water Pipeline Replacement Project; and the Tank Well Pump House and Chlorine Treatment Project. Each project consists of the following:

5th Street Water Loop Pipeline Project (Figure 2)

- Installation of approximately 2,700 linear feet of new 12-inch water line in 5th Street by the elementary school to the existing 12-inch water line in Ross Avenue by the high school.
- This project will be completed in existing road right-of-way.

12-inch Transmission Water Pipeline Replacement Project (Figure 3)

- Installation of approximately 9,132 linear feet of new 12-inch transmission water line alongside an existing 12-inch transmission water line.
- The line begins at the high school well near the intersection of Ross Avenue and Buffalo Trail and ends at the City's existing property where the 0.3 MG Tank and Tank Well are located approximately 650 feet southwest of the intersection of Targhee Ranch Drive and North Mount Washburn Drive.
- This project will be completed in the existing 12-inch transmission water line right-of-way.

Tank Well Pump House and Chlorine Treatment Project (Figure 4)

- Installation of a new pump house, chlorine treatment, and re-equipping the existing Tank Well.
- The project is located approximately 650 feet southwest of the intersection of Targhee Ranch Drive and North Mount Washburn Drive.
- The project will be completed on the City's existing property.

The projects are being proposed to repair the following deficiencies in the water system.

5th Street Water Loop Pipeline Project

- This project will provide redundancy and provides additional capacity in the water system during high demand events.

12-inch Transmission Water Pipeline Replacement Project

- This project replaces the existing 12-inch transmission waterline that is not up to current City standards and is shallow buried in places.

Tank Well Pump House and Chlorine Treatment Project

- This project brings the existing tank well up to current City standards and provides treatment of the well water.
- This project also re-equips the well to provide an additional source for the existing 1.0 MG tank and increase pressure during high demand events in the upper water system pressure zones.

Enclosed are maps of the proposed projects planning area that depict the proposed project improvements and area of potential effect for all construction activities.

We request that you advise us of any comments that you may have regarding this project within 30 days, so the City of Driggs can proceed with the completion of the Environmental Information Document.

If you have any questions concerning this proposed project or if you need any further information, please feel free to contact Robert Rousselle with AQUA Engineering, Inc. at 533 West 2600 South - Suite 275, in Bountiful, Utah 84010, (801) 299-1327 at your convenience.

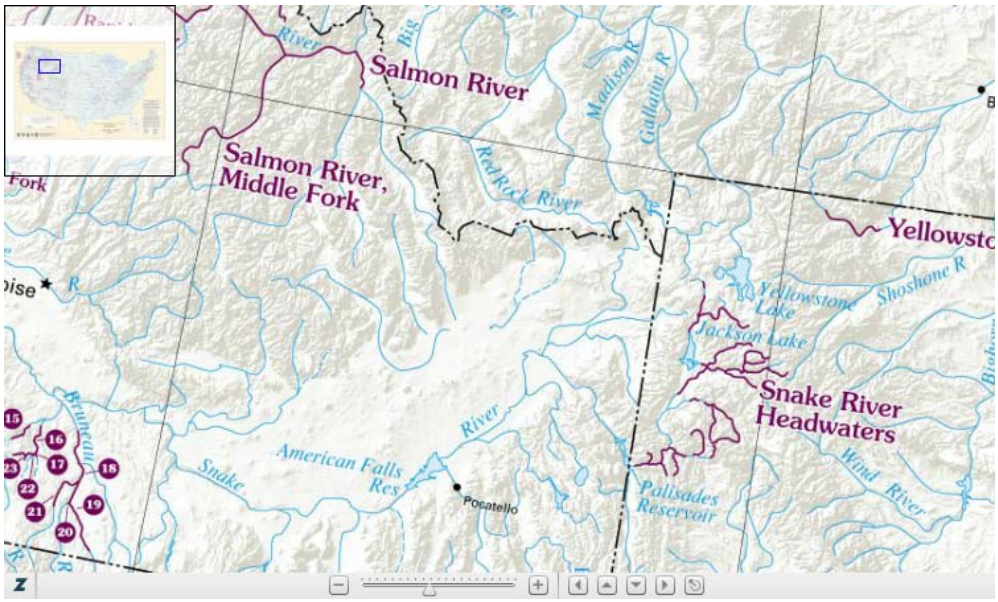
Sincerely,

Robert Rousselle, P.E.
AQUA Engineering

Encl: maps

APPENDIX D

ENVIRONMENTAL MAPS & REFERENCES



Continental United States Alaska

Designated Rivers

About WSR Act
State Listings
Profile Pages

National System

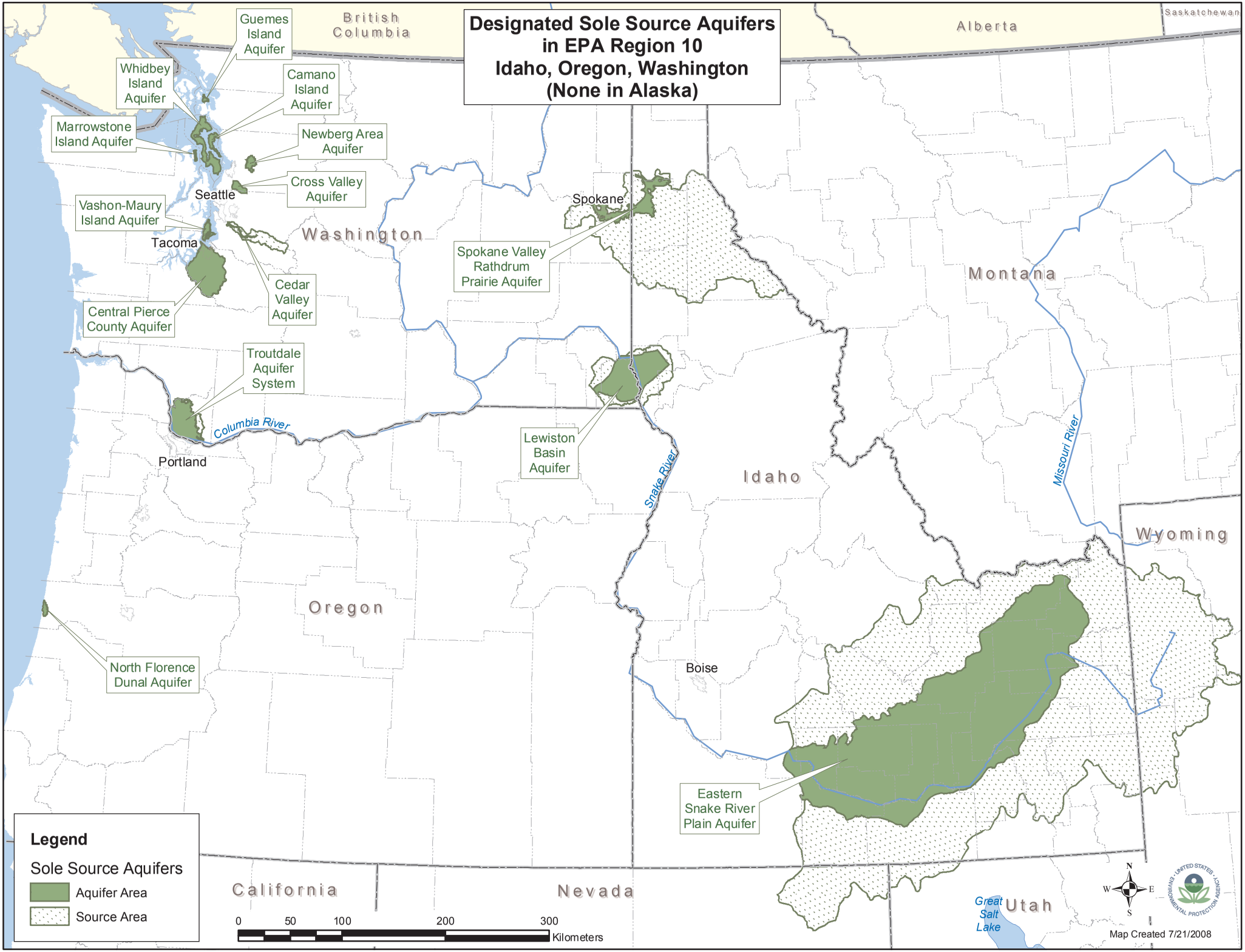
WSR Table
Study Rivers
Stewardship
WSR Act Legislation

River Management

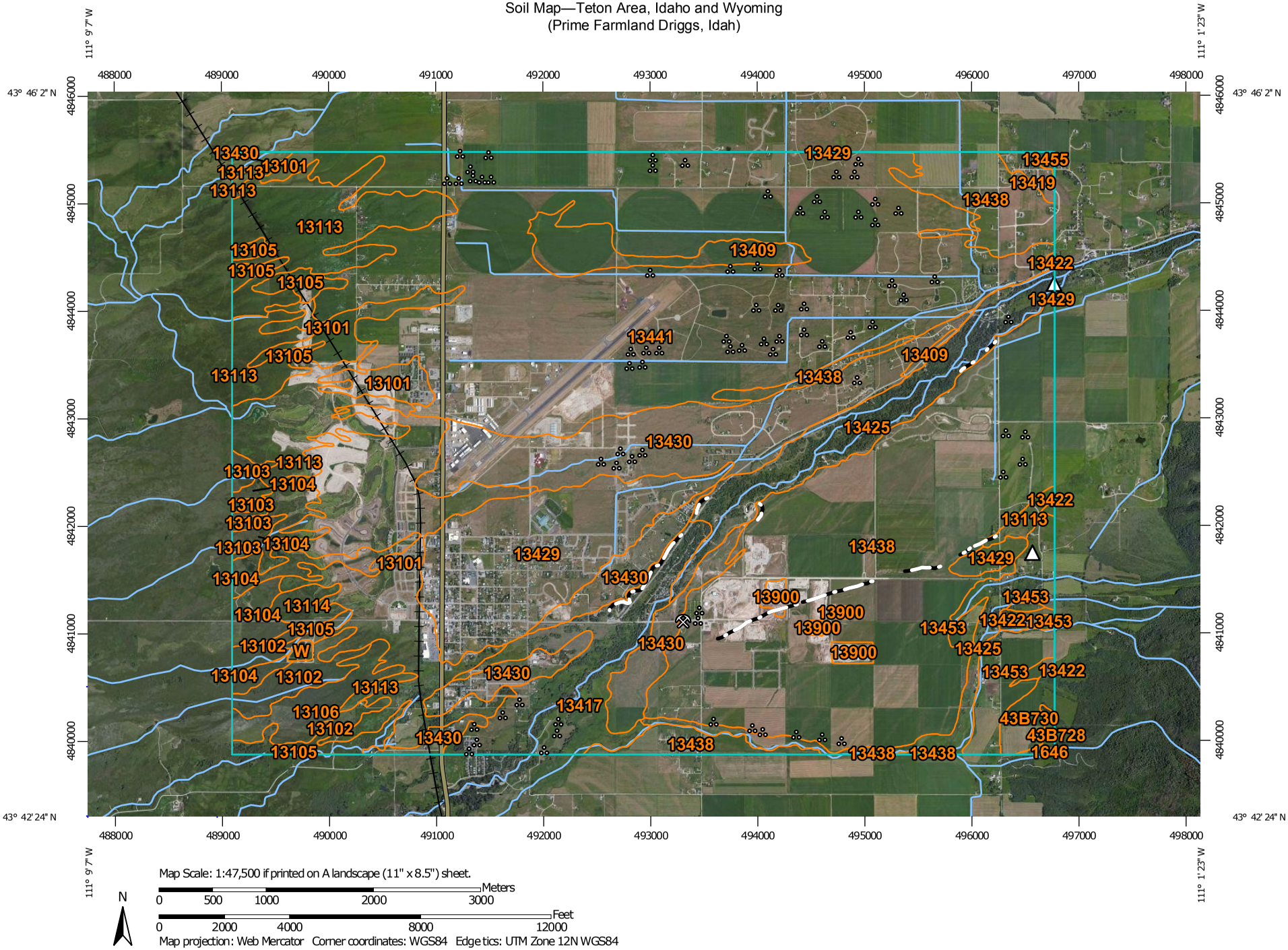
Council
Agencies
Management Plans
GIS Mapping

Resources

Q & A Search
Bibliography
Publications
GIS Mapping
Logo & Sign Standards
Display


Designated Sole Source Aquifers
in EPA Region 10
Idaho, Oregon, Washington
(None in Alaska)
Guemes Island Aquifer
Whidbey Island Aquifer
Camano Island Aquifer
Marrowstone Island Aquifer
Newberg Area Aquifer
Cross Valley Aquifer
Seattle
Vashon-Maury Island Aquifer
Tacoma
Central Pierce County Aquifer
Cedar Valley Aquifer
Troutdale Aquifer System
Portland
Columbia River
Spokane
Spokane Valley Rathdrum Prairie Aquifer
Lewiston Basin Aquifer
Snake River
Missouri River
North Florence Dunal Aquifer
Boise
Eastern Snake River Plain Aquifer
British Columbia
Alberta
Saskatchewan
Washington
Oregon
Idaho
Montana
Wyoming
California
Nevada
Utah
Great Salt Lake
Legend
Sole Source Aquifers
Aquifer Area
Source Area
0 50 100 200 300
Kilometers
N
W
E
S
Map Created 7/21/2008

Soil Map—Teton Area, Idaho and Wyoming
(Prime Farmland Driggs, Idah)



Map Scale: 1:47,500 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 2000 4000 8000 12000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Teton Area, Idaho and Wyoming
Survey Area Data: Version 2, Dec 9, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 20, 2011—Aug 19, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Teton Area, Idaho and Wyoming (ID650)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
43B728	Greys-Dranyon complex, 12 to 30 percent slopes	9.1	0.1%
43B730	Greys-Dranyon complex, 2 to 12 percent slopes	59.6	0.6%
1646	Huckridge-Koffgo-Edgway complex, 15 to 50 percent slopes	1.6	0.0%
13101	Redfish-Foxcreek complex, 0 to 2 percent slopes	922.7	8.6%
13102	Furniss-Boquet complex, 0 to 1 percent slopes	200.6	1.9%
13103	Tepete mucky peat, 0 to 1 percent slopes	36.5	0.3%
13104	Zohner-Tepete complex, 0 to 2 percent slopes	125.3	1.2%
13105	Zohner-Zohner, frequently flooded complex, 0 to 2 percent slopes	177.4	1.7%
13106	Zundell silty clay loam, 0 to 1 percent slopes	121.6	1.1%
13113	Foxcreek mucky peat, 0 to 2 percent slopes	737.9	6.9%
13114	Zufelt-Foxcreek complex, 0 to 2 percent slopes	47.3	0.4%
13409	Snyderville gravelly loam, 0 to 4 percent slopes	167.9	1.6%
13417	Badgerton-Arimo complex, 0 to 2 percent slopes	413.6	3.9%
13419	Alpine-Kucera complex, 0 to 4 percent slopes	28.0	0.3%
13422	Alpine gravelly loam, 4 to 12 percent slopes	31.3	0.3%
13423	Alpine-Badgerton complex, 8 to 20 percent slopes	3.2	0.0%
13425	Badgerton-Alpine complex, 2 to 8 percent slopes	574.4	5.4%
13429	Alpine gravelly loam, 0 to 2 percent slopes	643.4	6.0%
13430	Alpine-St. Anthony complex, 0 to 2 percent slopes	965.6	9.0%
13438	Altaby-Alpine complex, 0 to 4 percent slopes	2,262.7	21.2%
13441	Alpine-Driggs complex, 0 to 2 percent slopes	2,933.0	27.5%

Teton Area, Idaho and Wyoming (ID650)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
13453	Bustle silt loam, 1 to 6 percent slopes	159.0	1.5%
13455	Kucera-Lostine complex, 0 to 4 percent slopes	7.1	0.1%
13900	Pits	44.4	0.4%
W	Water	8.6	0.1%
Totals for Area of Interest		**10,681.5**	**100.0%**

Prime and other Important Farmlands

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

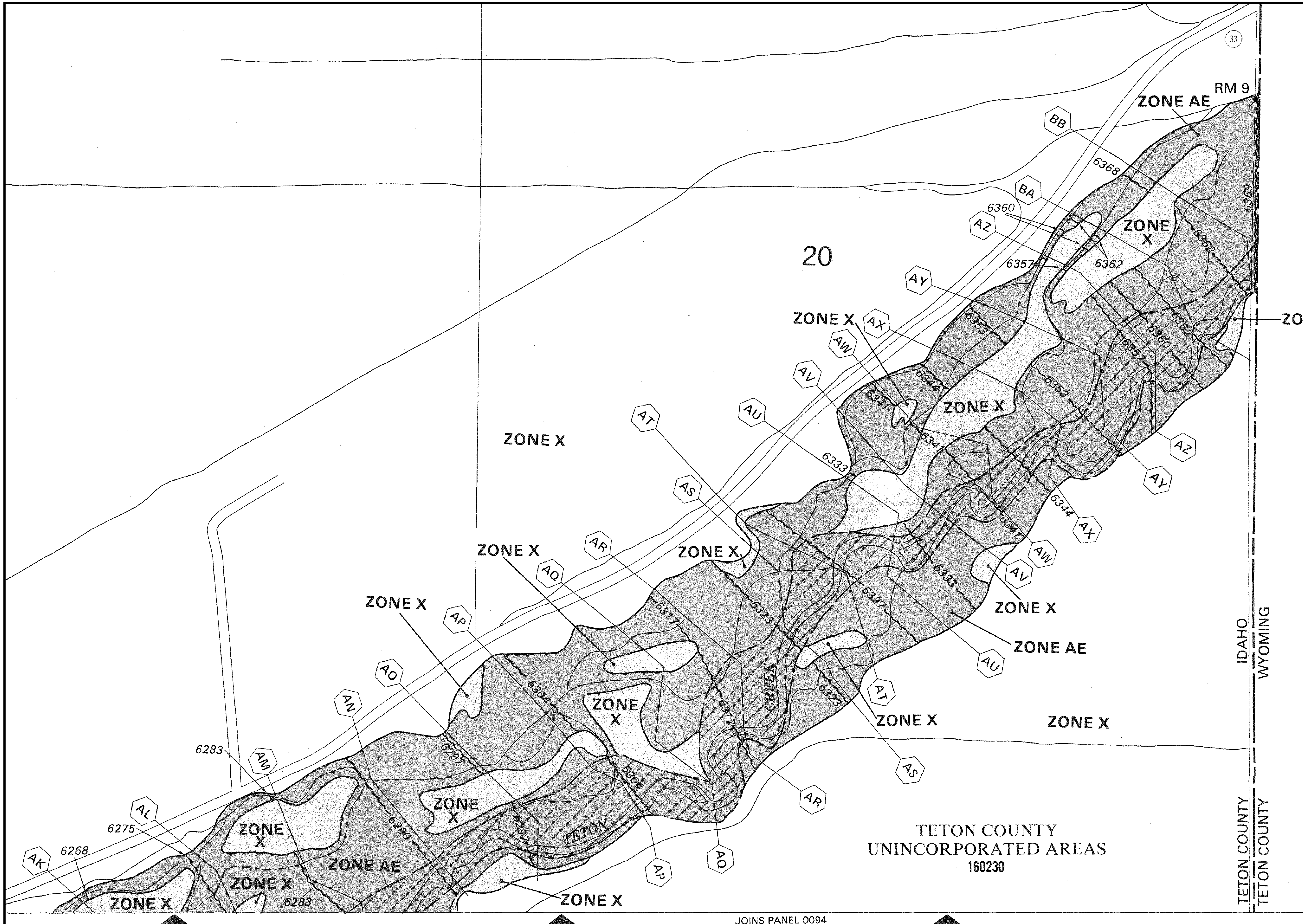
Report—Prime and other Important Farmlands

Prime and other Important Farmlands–Teton Area, Idaho and Wyoming		
Map Symbol	**Map Unit Name**	**Farmland Classification**
43B728	Greys-Dranyon complex, 12 to 30 percent slopes	Not prime farmland
43B730	Greys-Dranyon complex, 2 to 12 percent slopes	Not prime farmland
1646	Huckridge-Koffgo-Edgway complex, 15 to 50 percent slopes	Not prime farmland
13101	Redfish-Foxcreek complex, 0 to 2 percent slopes	Not prime farmland
13102	Furniss-Boquet complex, 0 to 1 percent slopes	Not prime farmland
13103	Tepete mucky peat, 0 to 1 percent slopes	Not prime farmland
13104	Zohner-Tepete complex, 0 to 2 percent slopes	Not prime farmland
13105	Zohner-Zohner, frequently flooded complex, 0 to 2 percent slopes	Not prime farmland
13106	Zundell silty clay loam, 0 to 1 percent slopes	Not prime farmland
13113	Foxcreek mucky peat, 0 to 2 percent slopes	Not prime farmland
13114	Zufelt-Foxcreek complex, 0 to 2 percent slopes	Not prime farmland
13409	Snyderville gravelly loam, 0 to 4 percent slopes	Prime farmland if irrigated
13417	Badgerton-Arimo complex, 0 to 2 percent slopes	Not prime farmland
13419	Alpine-Kucera complex, 0 to 4 percent slopes	Prime farmland if irrigated
13422	Alpine gravelly loam, 4 to 12 percent slopes	Prime farmland if irrigated
13423	Alpine-Badgerton complex, 8 to 20 percent slopes	Not prime farmland
13425	Badgerton-Alpine complex, 2 to 8 percent slopes	Not prime farmland
13429	Alpine gravelly loam, 0 to 2 percent slopes	Prime farmland if irrigated
13430	Alpine-St. Anthony complex, 0 to 2 percent slopes	Prime farmland if irrigated
13438	Altaby-Alpine complex, 0 to 4 percent slopes	Prime farmland if irrigated
13441	Alpine-Driggs complex, 0 to 2 percent slopes	Not prime farmland
13453	Bustle silt loam, 1 to 6 percent slopes	Not prime farmland
13455	Kucera-Lostine complex, 0 to 4 percent slopes	Prime farmland if irrigated

Prime and other Important Farmlands–Teton Area, Idaho and Wyoming		
Map Symbol	**Map Unit Name**	**Farmland Classification**
13900	Pits	Not prime farmland
W	Water	Not prime farmland

Data Source Information

Soil Survey Area: Teton Area, Idaho and Wyoming
Survey Area Data: Version 2, Dec 9, 2013



APPROXIMATE SCALE IN FEET

500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

TETON COUNTY,
IDAHO AND
INCORPORATED AREAS

PANEL 92 OF 175

PANEL LOCATION

CONTAINS:

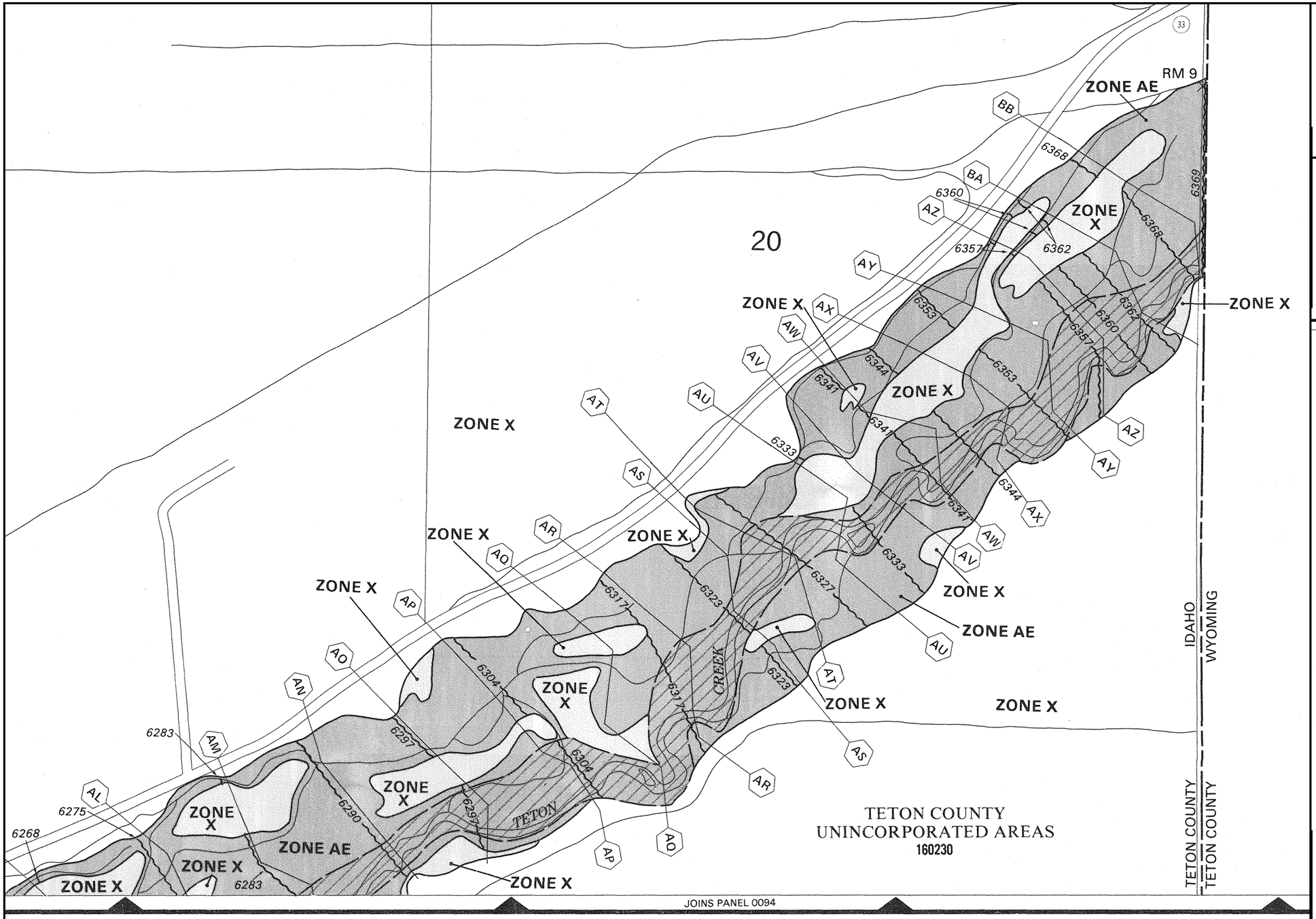
COMMUNITY	NUMBER	PANEL	SUFFIX
UNINCORPORATED AREAS	160230	0092	C

MAP NUMBER
16081C0092 C

EFFECTIVE DATE:
AUGUST 4, 1988

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



N

APPROXIMATE SCALE IN FEET

500 0 500

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** No base flood elevations determined.
- **ZONE AE** Base flood elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- **ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside 500-year flood plain.
- **ZONE D** Areas in which flood hazards are undetermined.

- Flood Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet*
- D — D — Cross Section Line
- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*
- $RM7_X$ — Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

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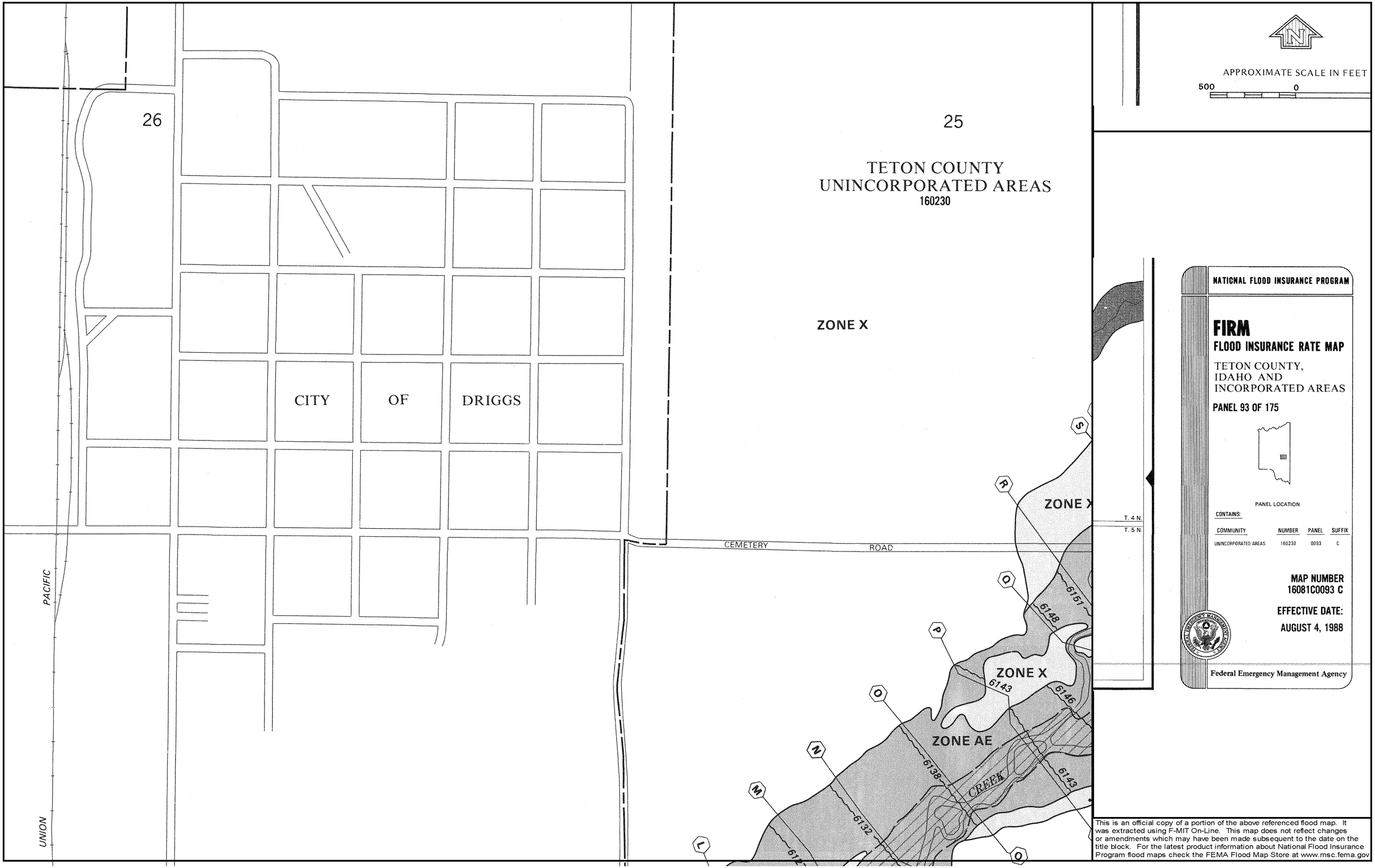

TETON COUNTY
UNINCORPORATED AREAS
160230

ZONE X

APPROXIMATE SCALE IN FEET
500 0

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
TETON COUNTY,
IDAHO AND
INCORPORATED AREAS
PANEL 93 OF 175

PANEL LOCATION

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
UNINCORPORATED AREAS	160230	0093	C

MAP NUMBER
16081C0093 C

EFFECTIVE DATE:
AUGUST 4, 1988

Federal Emergency Management Agency

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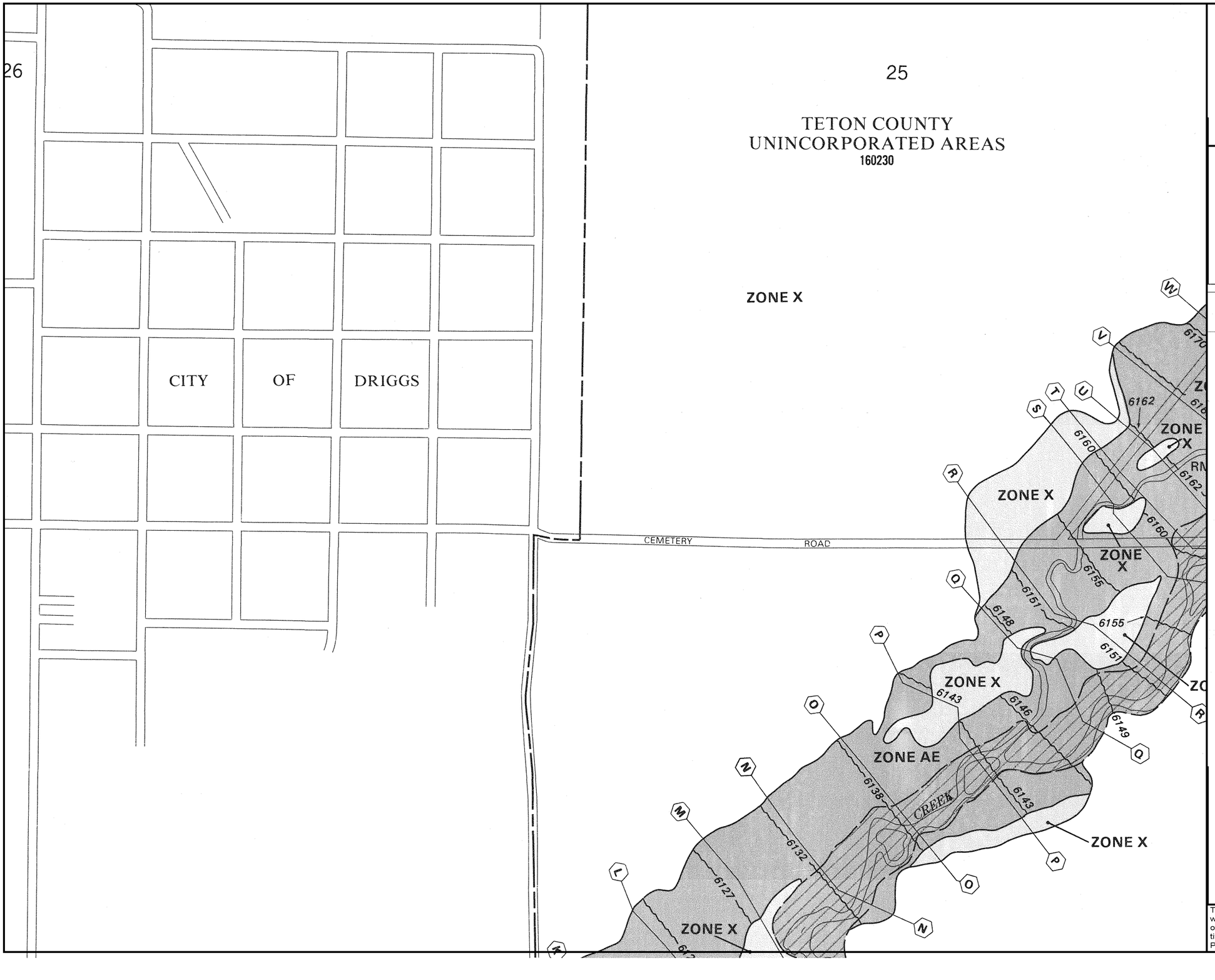
25

TETON COUNTY
UNINCORPORATED AREAS
160230

ZONE X



APPROXIMATE SCALE IN FEET

500 0

LEGEND

SPECIAL FLOOD HAZARD AREAS INUDATED BY 100-YEAR FLOOD

- **ZONE A** — No base flood elevations determined.
- **ZONE AE** — Base flood elevations determined.
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
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FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

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- 513 — Base Flood Elevation Line; Elevation in Feet*
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- (EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*
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APPENDIX E

PUBLIC PARTICIPATION

CITY OF DRIGGS
COUNCIL MINUTES
February 4, 2014

Pursuant to adjournment of the City Council meeting held January 21, 2014, and to the call of the Mayor, the Driggs City Council met on February 4, 2014 at 7:15 p.m. Present: Council President Jones; Council Members Christensen, Dye, & Mossman; Mayor Johnson. Also present: City Attorney Zollinger, Community Development Director Self, Public Works Director Gunderson, and Deputy City Clerk Lenz. Jones led in the *Pledge of Allegiance.*

Approval of Minutes

- January 21, 2014: **Mossman moved to approve the January 21, 2014 minutes as corrected. Dye seconded.** Motion carried.

Approval of Claims

- **Dye moved to approve Claims dated January 22-February 4, 2014 as presented. Jones seconded.** Motion carried.

Public Hearing: Water System Facility Plan Update

- Mayor Johnson noted a title correction on the agenda from 'wastewater system facility plan' to 'water system facility plan.' The corrected agenda was emailed, and posted, after the error was found
- Darin Hawkes, Assistant City Engineer from Aqua Engineering, gave a brief overview of the plan. Questions from the Council were answered with a correction requested to Table E3 (repeated in Chapter 7) and a request to include the existing 'old versus new' water user map to accompany the written discussion on page 27

7:37 p.m. The public hearing was opened.

- Johnson noted that no written comments were received. Public comment on the Water System Facility Study was requested:
  - For = None
  - Neutral = None
  - Against = None

7:38 p.m. The public hearing was closed.

- **Jones moved to adopt the Water System Facility Plan from Aqua Engineering with requested changes included. Christensen seconded.** Motion carried.

Environmental Information Document – Work Order Approval for Aqua Engineering

- Darin Hawkes, Aqua Engineering, explained the need for an Environmental Information Document (EID) before funding can be sought from the Idaho Department of Environmental Quality (IDEQ) for projects listed in the Water System Facility Plan (WSFP). Hawkes outlined the State's funding process: (1) submit a letter of intent (LOI) to IDEQ – done 1/2/2014 for the first three project chosen from the WSFP: 5th (not 6th) Street water loop, 12-inch water line replacement, and tank well pump house and chlorine treatment (2) Submit an EID (good indefinitely) for projects; (3) IDEQ approves/denies project funding application; (4) IDEQ appropriates funds for approved projects

- Once an EID is submitted and approved by the State, the final grant payment for the WSFP from FY 2013 should be remitted by IDEQ
- **Mossman moved to approve the 2014 Water System Projects – Environmental Information Document with Aqua Engineering as corrected at a cost not to exceed $4,000.00. Dye seconded.** Motion carried.

Zollinger Construction Spring Line Change Order – Aqua Engineering

- Darin Hawkes requested approval of Zollinger Construction's change order request on the 1 Million Gallon Tank Valve Replacement project. The change order is to cover additional "worse case" costs associated with locating and removing blockage of the spring pipeline. The change order does not include any cost for asphalt patching which would be an additional $50/sq ft should patching be necessary.
- Stephen Zollinger let it be known that he had no interest in or close relationship to the company in question.
- **Jones moved to approve Zollinger Construction's 1 MG Tank Valve Replacement Change Order #1 in an amount not to exceed $13,200.00. Dye seconded.** Motion carried.

Room Rental Discussion – Church in the Tetons – Karlin Bilcher

- Mayor Johnson prefaced the discussion by noting that no action would be taken by Council on this issue as the matter can be handled administratively per City Attorney Zollinger
- Karlin Bilcher, pastor, addressed the Council. He spoke of the Church of the Teton's use of the foyer/hallway(s) for Sunday school during services. He requested a formalized partnership [written agreement] with the City for continued use of the foyer/hallway space – preferably at no charge.
- Tina Dean, director of Seniors West of the Tetons, spoke to the Council about the exceptional relationship between Seniors West and its renter, Church in the Tetons. She stated the Seniors' Board of Directors is willing to reduce the Church's monthly rent by $50 to keep the relationship intact
- Bilcher and Johnson will meet to work out an agreement between the Church and the City.

Community Center Lease: Teton Rock Gym - Brady Johnston (tabled from 1/21/14)

- The requested correction has been made to Section 1.3 and Attorney Zollinger has reviewed the contract
- **Dye moved to authorize execution of the lease of 1,024 sq ft in the North half of the Driggs Community Center to the Teton Valley Recreation Association as proposed for the Teton Rock Gym with the two staff recommendations included:** editing of the Rock Gym Operations Manual to state that there will be adequate staffing, one or more trained individuals, based on the level of use of the facility and the posting of signs prohibiting unauthorized entry into the facility in English and Spanish**. Jones seconded.** Motion carried.

Jviation Contract – Consideration of Amendment #1 (tabled from 1/21/14)

- Page 5 Assumptions #3 was corrected to read: The CITY will provide written notice to the CONSULTANT if the CITY approves any ~~or the amount of~~ monetary settlement authority for the acquisition agent <u>to</u> use in negotiations.

- **Mossman moved to approve and authorize the execution of Amendment #1 between Jviation and the City of Driggs for Reed Memorial Airport land acquisition AIP project 3-16-0012-013 with the correction listed above. Christensen seconded.** Motion carried.

Approval of Animal Control Committee Changes

- **Christensen moved to approve three new volunteer members on the City's Animal Control Committee: Molly Absolon (Victor Councilmember), Kathy Spitzer (Teton County Prosecutor), and Aska Shiratori-Langman (animal welfare advocate). Dye seconded.** Motion carried.
- Existing committee members are: Ralph Mossman (City of Driggs), Tony Liford (Teton County Sheriff), Summer Winger (Teton Valley veterinarian), and Julie Gow (member-at-large)

Resolution 291-14 Support for ITD Technical Assistance Grants

- Community Development Director Self read the resolution verbatim. He went on to explain that the "wayfinding plan" would be developed to determine existing signage, to identify destinations and users, and to assess the regulatory requirements for placing signage in the Idaho Transportation Department's (ITD) right of way. The South Main Complete Street Project will develop a conceptual design for extending curb, gutter and sidewalk from approximately Wells Fargo Bank to Johnson Avenue.
- **Mossman moved to approve Resolution 291-14 ITD Technical Assistance Grant as read. Jones seconded.** Motion carried.

Teton Geotourism Center "Final Voice" Exhibit Contract – Studio Tectonics

- The contract has been approved by the Geotourism PAC. DURA will reimburse the $5,000 contract cost to the City.
- **Jones moved to authorize execution of the Teton Geotourism "final voice" contract for $5,000.00 with Studio Tectonics. Christensen seconded.** Motion carried.

Staff Reports

Public Works Director Gunderson and Community Development Director Self reviewed their respective staff reports with the Council.

Mayor's Business: Hyrum Johnson

- Reported that the outdoor retailer's show he attended with Brian McDermot in Salt Lake City was "very, very productive"
- He and Council member Mossman attended the AIC Legislative Day in Boise on January 30, 2014. Informative with one main lesson learned: complaints of the "great state of ADA" are not appropriate because southeast Idahoans do not make enough noise with their legislators
    - Attorney Zollinger noted that he had a "very interesting" conversation (pros and cons) with Sandpoint Idaho's attorney at the AIC conference should the Council decide to revisit gender discrimination

9:05 p.m. Adjournment

With no further business, **Jones moved to adjourn. Dye seconded.** Motion carried.

_____ _____

Hyrum Johnson, Mayor Attest: Carol Lenz, Deputy City Clerk

Dated this _____ Day of _____, 2014.

APPENDIX F

EID REVIEW CORRESPONDENCE

www.history.idaho.gov

Idaho • State Historical SOCIETY

C.L. "Butch" Otter
Governor of Idaho

Janet Gallimore
Executive Director

Administration
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 334-2682
Fax: (208) 334-2774

Membership and Fund Development
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 514-2310
Fax: (208) 334-2774

Historical Museum and Education Programs
610 North Julia Davis Drive
Boise, Idaho 83702-7695
Office: (208) 334-2120
Fax: (208) 334-4059

State Historic Preservation Office and Historic Sites
Archeological Survey of Idaho
210 Main Street
Boise, Idaho 83702-7264
Office: (208) 334-3861
Fax: (208) 334-2775

Statewide Sites:
• Franklin Historic Site
• Pierce Courthouse
• Rock Creek Station and
• Stricker Homesite

Old Penitentiary
2445 Old Penitentiary Road
Boise, Idaho 83712-8254
Office: (208) 334-2844
Fax: (208) 334-3225

Idaho State Archives
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 334-2620
Fax: (208) 334-2626

North Idaho Office
112 West 4th Street, Suite #7
Moscow, Idaho 83843
Office: (208) 882-1540
Fax: (208) 882-1763

February 18, 2014

Robert Rousselle, P.E.
AQUA Engineering
533 West 2600 South, Suite 275
Bountiful, Utah 84010

RE: City of Driggs FY 2015 Water Improvement Projects (Idaho SHPO REV 2014-435)

Dear Mr. Rousselle,

Thank you for your informational letter and project materials regarding the proposed project. We have reviewed the undertaking and recommend that it will have No Effect on historic properties (36 CFR 800.4). We would like to point out that the planned 12-inch transmission water pipeline is going to be installed next to a historic water pipeline that was constructed in the 1930s as part of the Works Progress Administration (10TN66). The 1930s pipeline itself is also within the alignment of an older 4 inch wood/clay water pipeline that was constructed and buried in 1913. If during the installation of the new pipeline the remains of either of these pipelines are encountered we would appreciate it a few photos could be taken and submitted to our office for archival documentation.

We appreciate your consulting with our office. If you have any questions feel free to contact me at 208-334-3861 x107 or ethan.morton@ishs.idaho.gov.

Sincerely,

Ethan Morton
Archaeologist, Idaho State Historic Preservation Office

Historical Society is an Equal Opportunity Employer.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Curt Fransen, Director

February 19, 2014

Certified Mail No: 7012 3050 0001 2126 2752

Ted Howard, Director
Cultural Resources Program
Shoshone Paiute Tribe
P.O. Box 219
Owyhee, Nevada 89832

RE: City of Driggs Drinking Water Improvement Project – Request for Comments for Preparation of an Environmental Information Document

Dear Mr. Howard:

The City of Driggs is preparing a facility planning document to identify and make necessary improvements to their drinking water system that are cost effective and environmentally sound. The facility plan for this project is being funded 50% by a Department of Environmental Quality (DEQ) planning grant which requires compliance with the Rules for Administration of Planning Grants for Drinking Water Facilities, IDAPA 58.01.22. The City of Driggs is also seeking funding for construction of the proposed project through the Drinking Water State Revolving Loan Fund. The purpose of this letter is to request your review and response regarding any historic and cultural resource impacts that the Shoshone-Paiute Tribe may identify for this proposed project pursuant to the Idaho Department of Environmental Quality's State Environmental Review Process, which mirrors the National Environmental Policy Act.

The proposed project is located in Teton County and consists of the following:

- Installation of approximately 2,700 lineal feet of new 12-inch water line on 5th Street by the elementary school to the existing 12-inch line on Ross Avenue near the high school. Work will take place on the existing road right of way.

- Installation of approximately 9,132 lineal feet of new 12-inch transmission water line near the intersection of Ross Avenue and Buffalo Trail and ends at the city's existing property where the 300,000 million gallon tank is located. Work will be completed along an existing 12-inch transmission water line right-of-way.

- Installation of a new pump house, chlorine treatment, and re-equipping the exiting tank well. The project is located southwest of the intersection of Targhee Ranch Drive and North Mount Washburn Drive. Improvements will occur on city property.

Printed on Recycled Paper

The project is being proposed to provide additional capacity, redundancy, water treatment and overall compliance with the city standards and the Idaho drinking water rules. Enclosed are maps of the proposed project planning area that depict the proposed project improvements and area of potential effect for all construction activities.

We request that you advise us of any comments that you may have regarding this project within 30 days, so the City of Driggs can proceed with the completion of the Environmental Information Document.

If you have any questions concerning this proposed project or if you need any further information, please feel free to contact Ester Ceja at 208-373-0585 or via email at Ester.Ceja@deq.idaho.gov at your convenience.

Sincerely,

Ester Ceja
Sr. Water Quality Analyst

EC:dls

Encl: maps

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
BOISE REGULATORY OFFICE
10095 WEST EMERALD STREET
BOISE, IDAHO 83704-9754

REPLY TO
ATTENTION OF

April 21, 2014

Regulatory Division

SUBJECT: NWW-2014-00082, City of Driggs, Water Improvements

Mr. Robert Rousselle, P.E.
AQUA Engineering, Inc
533 West 2600 South, Suite 275
Bountiful, Utah 84010

Dear Mr. Rousselle:

This letter is in response to your February, 12, 2014, request for our scoping comments on the proposed City of Driggs, Water Improvements. Thank you for providing the Corps of Engineers the opportunity to provide comments.

The site is located within Sections 19 & 25 of Township 5 North, Range 45 & 46, near latitude 43.733551° N and longitude -111.100701° W, in Teton County, Driggs, Idaho. The project has been assigned Department of Army (DA) File # NWW-2014-00082, which should be referred to in all future correspondence.

According to the information provided, the proposed project consists of multiple phases of water improvements in the City of Driggs. The proposed improvements are to the 5th Street Water Loop Pipeline Project; 12-inch Transmission Water Pipeline Replacement Project (approx. Buffalo Trail Road to North Mount Washburn Drive); and the Tank Well Pump House and Chlorine Treatment Project. We realize that projects at the scoping level are less detailed than projects that are being reviewed for a Department of Army (DA) permit. Our scoping comments at this time are limited to the review of the information provided. **This letter is informational in nature and does not constitute a DA authorization to discharge dredge or fill material into a waters of the U.S, including wetlands.**

AUTHORITY

The DA has regulatory jurisdiction over waters of the United States (U.S.), including wetlands, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). Section 404 of the Clean Water Act requires DA authorization be obtained prior to discharging dredged or fill material into waters of the U.S., which includes most perennial and intermittent rivers and streams, natural and man-made lakes and ponds, irrigation and drainage canals and ditches that are tributaries to other waters, and wetlands.

Based on our initial review of the information furnished and available to our office, it appears the City of Driggs, Water Improvements may impact unnamed streams and unnamed irrigation ditches, which appear to flow from/to Teton Creek/Woods Creek water of the U.S., including wetlands. Per *Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526 (Ninth Cir., 2001),* the court held that ditches and drains that are capable of carrying pollutants to navigable waters are jurisdictional as tributaries under the Clean Water Act. If these projects will result in the discharge of dredge or fill material into a water of the U.S., a DA permit will be required.

APPLICATION PACKET

Finally, the importance of a complete application packet, including the required drawings / sketches cannot be overemphasized. For assistance in this area we have included our Joint Permits for Application, our Instruction Guide, and sample drawings for reference. We encourage the applicant to work with our Idaho Falls office to ensure that your plans are of acceptable quality for a Pre-Construction Notification or Public Notice.

PRELIMINARY JURISDICTIONAL DETERMINATION

Attached to this verification are two copies of the Preliminary Jurisdictional Determination (PJD) form showing that waters of the United States may be located within the project area. **Please have the applicant sign both copies and return one to the Corps at the address in the letterhead above.** The other copy is for their records.

The Preliminary Jurisdictional Determination is a non-binding action and shall remain in effect, unless a request for an Approved Jurisdictional Determination or new information supporting a revision is provided to this office. Please note that since this jurisdictional determination is preliminary, it is subject to change and therefore is not an appealable action under the Corps of Engineers Administrative Appeal Procedures (33 CFR 331). Enclosed you will find a *Notification of Administrative Appeal Options and Process and Request for Appeal* (RFA) *Form* for further clarification.

Additional information regarding the Corps Regulatory program is available online at http://www.nww.usace.army.mil/BusinessWithUs/RegulatoryDivision.aspx. We encourage the applicant to work with our office to ensure that their project receives a timely review.

Please contact James Joyner by telephone at (208) 522-1676, by mail at the Idaho Falls Regulatory Office, 900 N. Skyline Drive, Suite A, Idaho Falls, Idaho 83402-1718, or via email at james.m.joyner@usace.army.mil if you have any questions or need additional information.

Sincerely,

Casey Forest
Project Manager
Regulatory Division

Enclosures:
February 12, 2014, Request for Comments Letter
April 14, 2014, Preliminary Jurisdictional Determination/Map
Request for Appeals Form
Joint Application for Permit
Instruction Guide
Sample Drawings

Printed on Recycled Paper

U.S. Fish and Wildlife Service

National Wetlands Inventory

NWW-2014-00082

Apr 14, 2014

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

City of Driggs, Water Improvement Projects

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

I. BACKGROUND INFORMATION

A. Report Completion Date of Preliminary Jurisdictional Determination (p-JD): April 14, 2014

B. Name & Address of Person Requesting p-JD:

City of Driggs
P.O. Box 48
Driggs, ID 83422-0048

Robert Rouselle, P.E. (801) 299-1327
533 W 2600, Suite 275
Bountiful, Utah 84010

C. District Office: CENWW-RD-BOI

File Name: City of Driggs, Water Improvements

File Number: NWW-2014-00082

D. Project Location(s) and Background Information:

State: Idaho County/Parish/Borough: Teton City: Driggs

Center Coordinates of Site (Lat/Long in Degree Decimal Format):

Latitude: 43 ° 44 ′ 1 ″ North Longitude: -111 ° 6 ′ 3 ″ West

Universal Transverse Mercator: 12: 491880, 48472291

Name of Nearest Waterbody(s): Unnamed Irrigation

Identify Amount of Waters in Review Area (estimated):

Non-Wetland Waters: Linear feet Width (ft) and/or Acres

Cowardin Class: R4Cx: Riverine, Intermittent, Seasonal, Excavated

Stream Flow: Intermitent

Wetlands: 0.000 acres

Cowardin Class: NA

Section 10: Name of All Water Bodies on Site, identified as Section 10 Water:

Tidal: N/A

Non-Tidal: None

E. Review Performed for Site Evaluation: Check all that Apply

☒ Office Determination Date (Desk): 4/14/2014

☐ Field Determination Date(s):

1. *The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site. The permit applicant or other affected person/party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD)*

for the site, as described above. Nevertheless, the permit applicant or other affected person/party who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. *In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "Pre-Construction Notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following:*

   (a) The permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters;

   (b) That the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions;

   (c) That the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization;

   (d) That the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary;

   (e) That undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable;

   (f) Accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and

   (g) Whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable.

3. *Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein) or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.*

II. SUPPORTING DATA: Data Reviewed for Preliminary JD

This preliminary JD finds that there *may be* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Check all boxes below that apply: The checked information should be included in the administrative file. Provide detailed reference sources for each checked box.

- [x] Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:

  Maps, submitted with request for information letter dated February 25 to includ: Figure 1 - project boundaries; Figure 2 - 5th Street Water Loop Project; Figure 3 - 12" Transmission Water Pipeline Replacement; Figure 4 - Tank Well Pump House & Chlorine Treatment Project.

- [ ] Data sheets prepared/submitted by or on behalf of the applicant/consultant

  - [ ] Office concurs with Data Sheets/Delineation Report.
  - [ ] Office does not concur with Data Sheets/Delineation Report.

- [ ] Data Sheets prepared by the Corps:
- [ ] Corps Navigable Waters' Study:
- [ ] U.S. Geological Survey Hydrologic Atlas:
  - [ ] USGS NHD data
  - [ ] USGS 8 and 12 digit HUC maps
- [x] U.S. Geological Survey map(s): Cite scale & Quad Name: 1:24; Driggs - ID: 43111-F1
- [ ] USDA Natural Resources Conservation Service Soil Survey, Citation:
- [x] National Wetlands Inventory Map(s): Cite name: USFWS, NWI Map April 14, 2014
- [ ] State/Local Wetland Inventory Map(s):
- [ ] FEMA/FIRM maps:
- [ ] 100-year Floodplain Elevation is:
  National Geodetic Vertical Datum of 1929
- [x] Photographs:
  - [x] Aerial, Name & Date: Google Earth April 14, 2014
  - [x] Other, Name & Date: ORMII data base as of 4/14/2014
- [x] Previous determination(s):

NWW-2008-00866, December 19, 2008

Include File No. and Date of Response Letter:

☒ Other Information, Please Specify:

The unnamed streams and unnamed irrigation ditches flow from/to Teton Creek/Woods Creek. Teton Creek/Woods Creek flows flow to the Teton River. The Teton River is a tributary of the Henry's Fork of the Snake River, a traditional navigable water (TNW). The Snake River flows to the Columbia River, also a TNW.

Therefore, the unnamed stream/irrigation ditches are connected via surface water to the Snake River and maybe considered waters of the United States and may be subject to section 404 of the Clean Water Act.

This constitutes a preliminary jurisdictional determination (p-JD) and is useful for the planning of your project. An approved JD is not necessary in order for the Corps to process a 404 permit application.

Admin File No: NWW-2014-00082

IMPORTANT NOTE: *The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.*

Casey Lund

Signature of Regulatory Project Manager
REQUIRED

4/15/2014
Date

Signature of person requesting Preliminary JD
REQUIRED (unless obtaining signature is impracticable)

4/23/2014
Date

The SHOSHONE-BANNOCK TRIBES

PHONE: (208) 236-1086
FAX: (208) 478-3707
EMAIL: csmith@sbtribes.com
lbill@sbtribes.com
romartinez@sbtribes.com

CULTURAL RESOURCES
HERITAGE TRIBAL OFFICE (HETO)
P.O. BOX 306
FORT HALL, IDAHO 83203

March 25, 2014

Ester Ceja
Sr. Water Quality Analyst
STATE OF IDAHO/DEQ
1410 North Hilton
Boise, ID 83706

RE: Proposed City of Driggs Drinking Water Improvement Project

Dear Ms. Ceja:

The Shoshone-Bannock Tribes (Tribes) Heritage Tribal Office (HeTO) appreciates the opportunity to comment on the proposed City of Driggs Drinking Water Improvement Project.

The proposed project located in the City of Driggs, Teton County, Idaho is within inherent ancestral lands of the Shoshone and Bannock people, and continues to hold important cultural properties, traditional hunting, fishing and gathering activities still practiced today by members of the Shoshone-Bannock Tribes.

According to the information provided, the proposed project will consist of the construction of the following: installation of approximately 2,700 lineal feet of new 12-inch waterline on an existing road ROW, installation of approximately 9,132 lineal feet of new 12-inch transmission water line which would be completed along an existing ROW and the installation of a new pump house, chlorine treatment, and re-equipping the exiting tank well. The construction of the proposed project will consist of ground disturbing activities; therefore, the Tribes HeTO requests the following inadvertent clause incorporated into the Stop Work Order Plan.

In the event of an inadvertent discovery (cultural resources and/or human remains) the Tribes HeTO requests a Stop Work Order of construction activities and immediate notification to the Tribes HeTO. Construction shall cease until proper treatment of cultural resources and/or human remains is achieved. The Tribes HeTO also requests any current archaeological surveys of the APE.

The purpose of this letter is to provide technical input and not intended as formal government-to-government consultation. Should there be any questions or concerns please feel free to contact me at phone: (208) 236-1084/ e-mail: romartinez@sbtribes.com; or Carolyn Smith (Cultural Resource Coordinator) at: (208) 236-1086/ email: csmith@sbtribes.com

Sincerely,

Romelia Martinez

Romelia Martinez
Cultural Resource Technician II
Shoshone-Bannock Tribes

CC: FILE- Proposed City of Driggs Drinking Water Improvement Project/DEQ-ID

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

900 North Skyline Drive, Suite B • Idaho Falls, ID 83402 • (208) 528-2650

C. L. "Butch" Otter, Governor
Curt Fransen, Director

February 13, 2014

Robert Rouselle, P.E.
Aqua Engineering
533 W 2600 S Suite 275
Bountiful, UT 84010

Subject: Air Quality Impact Review for City of Driggs, Idaho Public Drinking Water System Improvement Project

Dear Mr. Rouselle,

The Idaho Department of Environmental Quality (DEQ) has reviewed the information submitted regarding a construction project for City of Driggs, Idaho Public Drinking Water System Improvement Project with respect to potential *Air Quality* impacts in the region. DEQ appreciates your efforts to apprise our agency of the planned project activity.

Please be advised that the control of fugitive dust during all phases of the project is required under Idaho law. This can be accomplished by covering loads, excavations and piles of excavated material, or the application of dust suppressants, such as water, in quantities sufficient to prevent dirt and dust becoming airborne. Additionally, construction debris and other wastes are strictly prohibited from open burning and need to be properly accumulated and disposed in a licensed landfill. These aspects can present minor to significant problems within the region and are closely monitored and strictly enforced.

If you have further questions concerning this or other matters in our region, please call me at (208) 528-2650.

Respectfully,

Rensay Owen – Idaho Falls Regional Air, Waste and Remediation Manager
Idaho Falls Regional Office

RDO

City of Driggs Water Improvement Projects

@ 2:30 PM ON APRIL 29, 2014 Robert Rousselle call to James Joyner with US Army Corp Idaho Falls office #208-522-1676

- I asked James if we did a jack and bore or a horizontal directional drill under the drainage channels if we would have to submit a Nationwide Permit 12 to the Corp.
- James said that a permit is only required for construction within the high water marks of protected water. A jack and bore or a horizontal directional drill would not impact the channel and would not require a permit.

ON APRIL 23, 2014 during a previous phone conversation between Robert Rousselle and James Joyner, James said a Nationwide Permit 12 would be required for any of these water projects impacting drainages or channels. The permit takes approximately 60 days to review.

Robert Rousselle

From: Sigman, Keri
Sent: Tuesday, March 11, 2014 1:50 PM
To: robertr@aquaeng.com
Subject: FW: City of Driggs FY2015 Water Improvement Projects

Good afternoon. Thank you for following up with me regarding this water improvement project for the City of Driggs. As part of your environmental review, by comparing your "Proposed Project Planning Area Map" and the Flood Insurance Rate Maps (FIRM) for the City of Driggs, I have found that the proposed development is not located within any mapped special flood hazard areas (SFHA). The affected community panel numbers are 16081C0092C, 16081C0094C, and 16081C0093C of the FIRM, but all development appears outside in the Zone X, which is unregulated. So long as the development stays outside of the mapped SFHA, IDWR has no comments in regards to environmental concerns related to the National Flood Insurance Program.

Thank you for this opportunity to comment.

Sincerely,

Keri K. Smith-Sigman, CFM
Idaho State Floodplain Coordinator
t. 208-287-4928
c. 208-830-4174
keri.sigman@idwr.idaho.gov
http://www.idwr.idaho.gov/WaterManagement/FloodPlainMgmt/default.htm

City of Driggs FY 2015 Water Improvement Projects

@ 1:45 PM on 3/11/2013 Robert call to Kellye Eager w/ District 7 Health Department #1-208-523-5382

- Received on February 26, 2014. Kellye will check with the local contact but they will have till March 28, 2014 (30 days) to provide comments.

@ 1:30 pm on 3/11/2013 Robert call to James Joyner with U.S. Army Corp #1-208-522-1676

- Left message on James voicemail

@10:45 am on 3/17/2013 Robert received call from James w/ US Army Corp

- James will be providing a comment in a couple of weeks (~ 3/31/2014). our review is in the middle of his stack.

@ 1:35 PM on 3/11/2013 Robert call to Keri Sigman with Idaho Department of Water Resources #1-208-287-4928

- Keri was going to send me an email stating that the projects are outside of the floodplain and will not have any effect on the floodplain.

EASTERN IDAHO
Public Health
DISTRICT

ENVIRONMENTAL HEALTH DIVISION

1250 Hollipark Drive
Idaho Falls, Idaho 83401
208.523.5382
fax 208.528.0857
www.idaho.gov/phd7

Promoting the Health of People & Their Environment

March 24, 2014

Robert Rousselle
AQUA Engineering
533 West 2600 South, Suite 275
Bountiful, UT 84010

RE: ENVIRONMENTAL REVIEW RESPONSE
City of Driggs Water Improvement Projects

Dear Mr. Rousselle:

This letter is in regards to your February 12, 2014, Environmental Review Water Improvement Projects letter for the City of Driggs. Our response is declared below.

This Department has comments regarding the proposed installation of new water transfer lines, and the installation of a new pump house and treatment facility. This construction may impact several schools, and other food establishments in Driggs, with one or multiple water outages. If this is the case, we recommend that any water outages involving food establishments be coordinated with the impacted facility and our local Health District office in Driggs, Idaho. The City of Driggs should also review the plans for flushing and sanitizing the new water system, before it goes in service.

Thank you for the opportunity to respond. Please call if you have questions. The number is (208) 523-5382.

Sincerely,

Kellye Eager
Environmental Health Director

CC: Mike Dronen, EIPHD- Teton County

STATE OF IDAHO

C. L. "BUTCH" OTTER
GOVERNOR
CELIA R. GOULD
DIRECTOR

February 24, 2014

Robert Rousselle
AQUA Engineering
533 W 2600 S, Suite 275
Bountiful, UT 84010

Dear Robert Rousselle:

Thank you for inquiring with the Idaho State Department of Agriculture (ISDA) with regards to your work with the City of Driggs Water Improvement Project. The public works project being proposed will be an important project for the citizens of that area.

We have reviewed the planning documents provided to us. Your documents appear to be professional and informative. At this time we do not have comments or questions related to this project.

Thank you for contacting our agency. Feel free to contact us in the future (main number - 208-332-8500, my number - 208-332-8597).

Sincerely,

Gary Bahr

Gary Bahr

Water Quality Programs

PC: Water Program File

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

900 North Skyline Drive, Suite B • Idaho Falls, ID 83402 • (208) 528-2650

C. L. "Butch" Otter, Governor
Curt A. Fransen, Director

March 7, 2014

Robert Rousselle, P.E.
Aqua Engineering
533 W. 2600 W. Suite 275
Bountiful, UT 84010

Re: City of Driggs Drinking Water Improvement Project Environmental Review.

Dear Mr. Rousselle,

After review of the proposed project DEQ finds that the proposed drinking water improvement project will have no significant impact on wastewater, water supply, surface water, storm water and air quality in general. To help protect water quality during construction the contractor will need to implement the Best Management Practices (BMPs) for storm water runoff.

If you need additional information or have any questions please call.

Sincerely,

William Teuscher PE
Water Quality Engineer
DEQ-IFRO

Robert Rousselle

From: Grafe, Cyndi
Sent: Wednesday, February 26, 2014 3:59 PM
To: robertr@aquaeng.com
Cc: Werntz, James
Subject: FW: City of Driggs - Request for Comments for Preparation of an Environmental Document
Attachments: FY 2015 Water Improvement Projects - Figures.pdf; FY 2015 Water Improvement Projects - US EPA140212 _signed_ .pdf; EPA-s-Planning-for-Sustainability-Handbook.pdf

Dear Robert,

Thank you for requesting comments regarding the City of Driggs Water System Improvement Project. After checking with my colleagues, the R10 Idaho Operations Office staff does not have any specific comment regarding the project.

We do, however, offer the following more general comment and information for your consideration. As you may know, EPA has been encouraging sustainable water infrastructure solutions from design and construction through operation and maintenance. In particular, we encourage communities and engineering firms to review the *Planning for Sustainability: A Handbook for Water and Wastewater Utilities*.

This document provides helpful information for water and wastewater systems to use cost effective, environmentally sound, and sustainable approaches. The handbook includes alternative analysis during the facility planning process and an approach to consistently develop broader assessment criteria to incorporate a community's sustainability goals.

Perhaps you are already using these types of sustainable approaches. But, just in case, I have attached the handbook for your reference so that you may consider sustainable infrastructure opportunities for this planning effort as well as your other engineering projects. Additionally, more information and resources regarding sustainable infrastructure can be found at http://water.epa.gov/infrastructure/sustain/ .

Please feel free to contact me with any questions. With best regards,
Cyndi

Cyndi Grafe
U.S. EPA, Idaho Office
950 W. Bannock Street
Boise, ID 83702
phone: (208) 378-5771, fax: (208) 378-5744

Follow @EPAnorthwest on Twitter! https://twitter.com/EPAnorthwest

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From: Robert Rousselle [mailto:robertr@aquaeng.com]
Sent: Wednesday, February 12, 2014 11:51 AM
To: Werntz, James
Subject: City of Driggs - Request for Comments for Preparation of an Environmental Document

Dear James Werntz,

The City of Driggs is preparing a facility planning document to identify and make necessary improvements to their drinking water system that are cost effective and environmentally sound. The facility plan for this project is being funded 50% by a Department of Environmental Quality (DEQ) planning grant which requires compliance with the Rules for Administration of Planning Grants for Drinking Water Facilities, IDAPA 58.01.22. The purpose of this letter is to request your review and response regarding any environmental impacts that your agency may identify for these proposed projects pursuant to the Idaho Department of Environmental Quality's State Environmental Review Process, which mirrors the National Environmental Policy Act. The hardcopy of this letter is being sent to you via certified mail. If you have any questions feel free to call.

ROBERT ROUSSELLE, P.E. - PROJECT ENGINEER
Construction Documents Technologist
LEED Accredited Professional
AQUA ENGINEERING
CELL (801) 865-4844 DIRECT (801) 683-3733
robertr@aquaeng.com www.aquaeng.com
533 W 2600 S Suite 275 Bountiful, UT 84010

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MEMO

TO: ROBERT ROUSSELLE, AQUA ENGINEERS
FROM: ESTER CEJA – DEQ GRANT AND LOAN PROGRAM
SUBJECT: CITY OF DRIGGS – DRINKING WATER IMPROVEMENT PROJECT - THREATENED/ENDANGERED SPECIES AND ESSENTIAL FISH HABITAT
DATE: MARCH 10, 2014

The City of Driggs drinking water improvement project includes the following:

- Installation of approximately 2,700 lineal feet of new 12-inch water line on 5th Street by the elementary school to the existing 12-inch line on Ross Avenue near the high school
- Installation of approximately 9,132 lineal feet of new 12-inch transmission water line near the intersection of Ross Avenue and Buffalo Trail and ends at the city's existing property where the 300,000 million gallon tank is located. Work will be completd along an existing 12-inch transmission water line right-of-way
- Installation of a new pump house, chlorine treatment, and re-equipping the existing trank well. The project is located southwest of the intersection of Targhee Ranch Drive and North Mount Washburn Drive. Improvements will occur on city property.

The U.S. Fish and Wildlife threatened and endangered species list revised date of 10/23/2013 was used for determining endangered, threatened, and proposed species within Teto County. The USFWS was consulted and provided a response (2/27/14). The following species are listed within Teton County:

1. **Canada Lynx** (threatened) - Canadian Lynx reside in boreal forest landscapes and provide one or more of the following beneficial habitat elements including snowshoe hares for prey, abundant, large, woody debris piles that are used as dens, and winter snow conditions that are generally deep and fluffy for an extended period of time. The proposed project planning area does not include suitable habitat for the species. The proposed drinking water improvements will have "NO EFFECT" on Canadian Lynx.

2. **Grizzly Bear** (threatened) - Grizzly bears are found in Alaska, in Canada and the northwestern United States including Idaho, Montana, Washington, and Wyoming. In Idaho they can be found in the Selkirk Mountains range and the Yellowstone area in southeastern Idaho. The proposed project improvements will be occurring in the city which consists of residential non-forested development. Grizzly bear reside in the forest outside of Driggs, particularly the eastern and northeastern mountain ranges. The proposed project will have "NO EFFECT" on grizzly bear.

3. **North American Wolverine** (candidate) - The North American Wolverine is a proposed species which does not exist in the proposed project planning area. The proposed project will have a "NO EFFECT" on the wolverine species. Wolverines distribution is restricted to high elevation, deep persistent, and reliable spring snow cover (April 15 to May 14) is the best overall predictor of wolverine occurrence in the contiguous U.S. (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0FA). The proposed improvement is in a residential developed area surrounded by farmland.

4. **Whitebark Pine** (candidate) – The Whitebark pine is a 5 needle conifer species. The species occurs from approximately 2,950 at its northern limit in British Columbia up to 12,000 in the Sierra Nevada. The Whitebark Pine is typically found at or slightly lower than alpine timberline in the upper montane zone. In the U.S. it is primarily found on public lands. The species is typically found in cold, windy, moist high elevation or high latitude sites in Western North America. The proposed improvements will have "NO EFFECT" on the candidate species as whitebark pine is not present within the project area.

Essential Fish Habitat

The City of Driggs drinking water improvement project is not located within Essential Fish Habitat (EFH) for Salmon as identified in the attached EFH map. Therefore there will be "NO EFFECT" on EFH.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Eastern Idaho Field Office
4425 Burley Dr., Suite A
Chubbuck, Idaho 83202
Telephone (208) 237-6975
http://IdahoES.fws.gov

RECEIVED BY
FEB 27 2014
IDAHO DEPT. OF ENVIRONMENTAL QUALITY

FEB 25 2014

Ester Ceja
Idaho Department of
Environmental Quality
1410 North Hilton
Boise, Idaho 83706

Subject: Proposed City of Driggs Drinking Water Improvement Project in Teton County, Idaho.
Species Request 2014-TA-0206

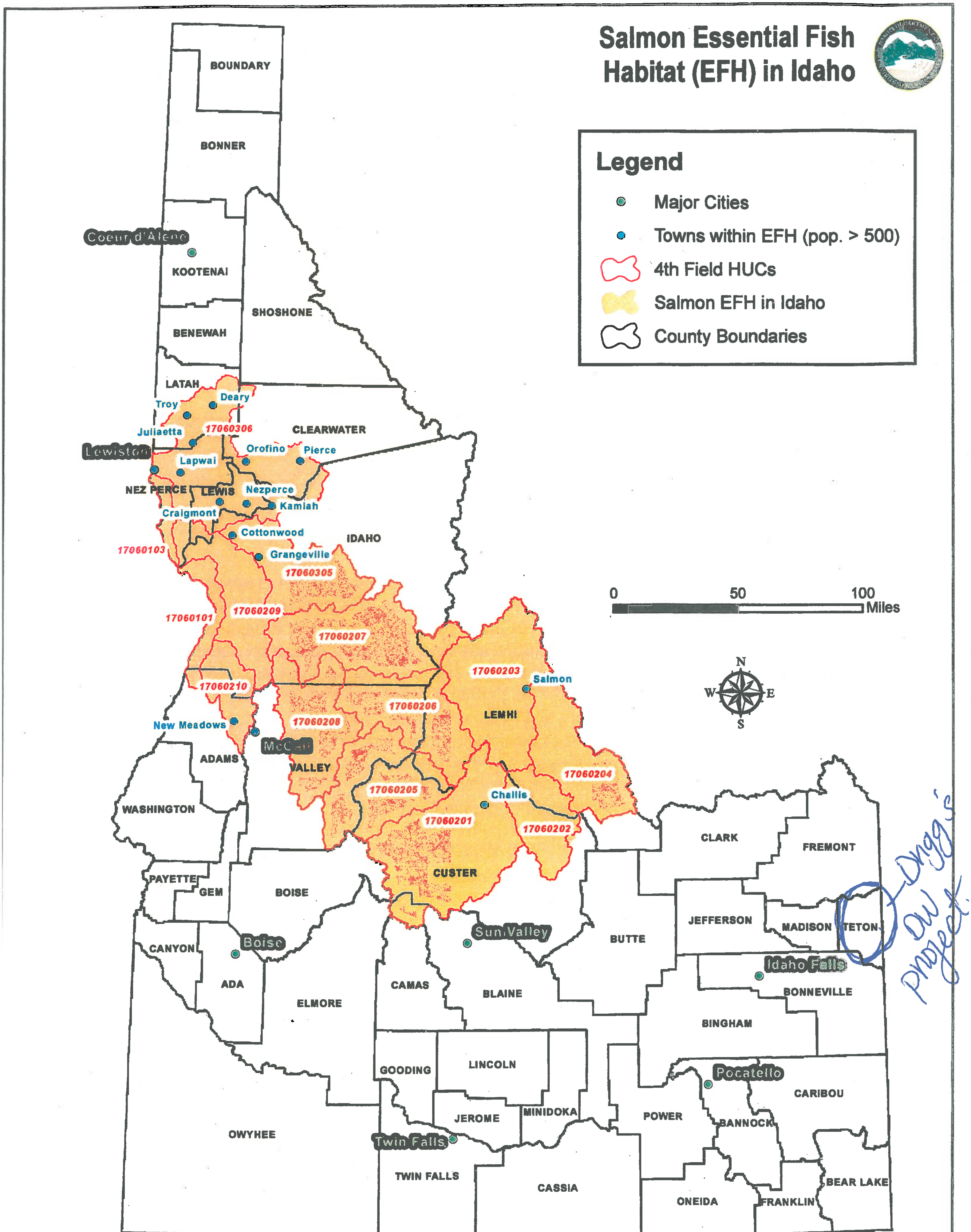
Dear Ms. Ceja:

The U.S. Fish and Wildlife Service (Service) is writing in response to your request for information about the potential impacts to endangered, threatened, proposed, and/or candidate species from the proposed City of Driggs Water Improvement Project in Teton County, Idaho. The Service has not identified any issues that indicate that consultation under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.; (Act)), is needed for this project. This finding is based on our understanding of the nature of the project, local conditions, and/or current information indicating that no listed species are present. If you determine otherwise or require further assistance, please contact Nisa Marks (Nisa_Marks@fws.gov) of this office at (208)237-6975 ext. 121.

Thank you for your interest in endangered species conservation.

Sincerely,

David Kampwerth
Field Supervisor



Salmon Essential Fish Habitat (EFH) in Idaho
Legend
Major Cities
Towns within EFH (pop. > 500)
4th Field HUCs
Salmon EFH in Idaho
County Boundaries
0
50
100
Miles
N
S
E
W
BOUNDARY
BONNER
KOOTENAI
Coeur d'Alene
SHOSHONE
BENEWAH
LATAH
Troy
Deary
Juliaetta
17060306
CLEARWATER
Lewiston
Orofino
Pierce
Lapwai
NEZ PERCE
LEWIS
Nezperce
Kamiah
Craigmont
Cottonwood
IDAHO
17060103
Grangeville
17060305
17060101
17060209
17060207
17060203
Salmon
17060210
17060206
LEMHI
New Meadows
17060208
McCall
ADAMS
VALLEY
17060204
Challis
17060205
WASHINGTON
17060201
17060202
CLARK
FREMONT
CUSTER
PAYETTE
GEM
BOISE
JEFFERSON
MADISON
TETON
Sun Valley
BUTTE
CANYON
Boise
Idaho Falls
ADA
CAMAS
BLAINE
BONNEVILLE
ELMORE
BINGHAM
GOODING
LINCOLN
Pocatello
CARIBOU
MINIDOKA
JEROME
POWER
BANNOCK
OWYHEE
Twin Falls
TWIN FALLS
CASSIA
BEAR LAKE
ONEIDA
FRANKLIN
Driggs DW project.

This information is for general reference only. Visit http://ecos.fws.gov/ipac/ to obtain an official list for purposes of Endangered Species Act Section 7 Consultation. Revised 10/23/2013.

U.S. Fish and Wildlife Service • Idaho Fish and Wildlife Office

LISTED, CANDIDATE, AND PROPOSED SPECIES & DESIGNATED AND PROPOSED CRITICAL HABITAT IN IDAHO

	Herps	Birds		Mammals						Fish		Mollusks				Plants							
Common Name	Columbia Spotted Frog (Great Basin Population)	Greater Sage-Grouse	Yellow-Billed Cuckoo	Canada Lynx	Grizzly Bear	Northern Idaho Ground Squirrel	Selkirk Mountains Woodland Caribou	Southern Idaho Ground Squirrel	North American Wolverine	Bull Trout	Kootenai River White Sturgeon	Banbury Springs Lanx	Bliss Rapids Snail	Bruneau Hot Springsnail	Snake River Physa	Goose Creek Milkvetch	MacFarlane's Four-O'Clock	Packard's Milkvetch	Slickspot Peppergrass	Spalding's Catchfly	Ute Ladies'-Tresses	Water Howellia	Whitebark Pine
Scientific Name	*Rana luteiventris*	*Centrocercus urophasianus*	*Coccyzus americanus*	*Lynx canadensis*	*Ursus arctos horribilis*	*Spermophilus brunneus brunneus*	*Rangifer tarandus caribou*	*Spermophilus brunneus endemicus*	*Gulo gulo luscus*	*Salvelinus confluentus*	*Acipenser transmontanus*	*Lanx* sp.	*Taylorconcha serpenticola*	*Pyrgulopsis bruneauensis*	*Haitia (Physa) natricina*	*Astragalus anserinus*	*Mirabilis macfarlanei*	*Astragalus cusickii var. parkardiae*	*Lepidium papilliferum*	*Silene spaldingii*	*Spiranthes diluvialis*	*Howellia aquatilis*	*Pinus albicaulis*
Gooding		C										E	T		E								
Idaho				T					P	T-DCH							T			T			C
Jefferson		C	P	T					P												T		
Jerome		C											T		E								
Kootenai			P	T					P	T-DCH										T		T	
Latah				T					P											T		T	
Lemhi		C	P	T					P	T-DCH													C
Lewis										T-DCH										T			
Lincoln		C	P																				
Madison		C	P	T					P												T		
Minidoka		C	P												E								
Nez Perce				T						T-DCH										T			
Oneida		C																					
Owyhee	C	C	P							T-DCH				E	E				P-PCH				
Payette		C						C		T					E			C	P-PCH				
Power		C	P																				
Shoshone				T					P	T-DCH										T		T	C
Teton				T	T				P														C
Twin Falls	C	C											T		E								
Valley				T		T			P	T-DCH													C
Washington		C				T		C	P	T-DCH					E								C

Table Key: C = Candidate Species P= Proposed Species T=Threatened Species E=Endangered Species PCH= Proposed Critical Habitat DCH=Designated Critical Habitat

This information is for general reference only. Visit http://ecos.fws.gov/ipac/ to obtain an official list for purposes of Endangered Species Act Section 7 Consultation. Revised 10/23/2013.

U.S. Fish and Wildlife Service • Idaho Fish and Wildlife Office

LISTED, CANDIDATE, AND PROPOSED SPECIES & DESIGNATED AND PROPOSED CRITICAL HABITAT IN IDAHO

	Herps	Birds		Mammals						Fish		Mollusks				Plants							
Common Name	**Columbia Spotted Frog (Great Basin Population)**	**Greater Sage-Grouse**	**Yellow-Billed Cuckoo**	**Canada Lynx**	**Grizzly Bear**	**Northern Idaho Ground Squirrel**	**Selkirk Mountains Woodland Caribou**	**Southern Idaho Ground Squirrel**	**North American Wolverine**	**Bull Trout**	**Kootenai River White Sturgeon**	**Banbury Springs Lanx**	**Bliss Rapids Snail**	**Bruneau Hot Springsnail**	**Snake River Physa**	**Goose Creek Milkvetch**	**MacFarlane's Four-O'Clock**	**Packard's Milkvetch**	**Slickspot Peppergrass**	**Spalding's Catchfly**	**Ute Ladies'-Tresses**	**Water Howellia**	**Whitebark Pine**
Scientific Name	*Rana luteiventris*	*Centrocercus urophasianus*	*Coccyzus americanus*	*Lynx canadensis*	*Ursus arctos horribilis*	*Spermophilus brunneus brunneus*	*Rangifer tarandus caribou*	*Spermophilus brunneus endemicus*	*Gulo gulo luscus*	*Salvelinus confluentus*	*Acipenser transmontanus*	*Lanx* sp.	*Taylorconcha serpenticola*	*Pyrgulopsis bruneauensis*	*Haitia (Physa) natricina*	*Astragalus anserinus*	*Mirabilis macfarlanei*	*Astragalus cusickii var. parkardiae*	*Lepidium papilliferum*	*Silene spaldingii*	*Spiranthes diluvialis*	*Howellia aquatilis*	*Pinus albicaulis*
Ada		C	P							T					E				P-PCH				
Adams		C		T		T		C	P	T-DCH													C
Bannock		C	P						P														
Bear Lake		C		T					P														
Benewah				T					P	T-DCH										T		T	
Bingham		C	P						P												T		
Blaine		C	P	T					P	T-DCH													C
Boise			P	T					P	T-DCH													C
Bonner				T	T		E		P	T-DCH													C
Bonneville		C	P	T	T				P												T		C
Boundary				T-DCH	T		E-DCH		P	T-DCH	E-DCH												C
Butte		C		T					P	T-DCH													C
Camas		C	P	T					P	T-DCH													C
Canyon															E				P-PCH				
Caribou		C		T					P														
Cassia		C	P												E	C							
Clark		C	P	T	T				P														C
Clearwater				T					P	T-DCH													C
Custer		C	P	T					P	T-DCH													C
Elmore		C	P	T					P	T-DCH			T		E				P-PCH				C
Franklin		C		T					P														
Fremont		C	P	T	T				P												T		C
Gem		C						C	P	T-DCH									P-PCH				C

Table Key: C = Candidate Species P= Proposed Species T=Threatened Species E=Endangered Species PCH= Proposed Critical Habitat DCH=Designated Critical Habitat

APPENDIX G

OMB CIRCULAR A-94 APPENDIX C

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DIRECTOR

February 7, 2014

M-14-05

MEMORANDUM FOR THE HEADS OF DEPARTMENTS AND AGENCIES

FROM: Sylvia M. Burwell
Director

SUBJECT: 2014 Discount Rates for OMB Circular No. A-94

On October 29, 1992, OMB issued a revision to OMB Circular No. A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs." The revision established new discount rate guidelines for use in benefit-cost and other types of economic analysis.

The revised Circular specifies certain discount rates that will be updated annually when the interest rate and inflation assumptions in the Budget are changed. These discount rates are found in Appendix C of the revised Circular. The attachment to this memorandum is an update of Appendix C. It provides discount rates that will be in effect for the calendar year 2014.

The rates presented in Appendix C do not apply to regulatory analysis or benefit-cost analysis of public investment. They are to be used for lease-purchase and cost-effectiveness analysis, as specified in the Circular.

Attachment

APPENDIX C
(Revised December 2013)

DISCOUNT RATES FOR COST-EFFECTIVENESS, LEASE PURCHASE, AND RELATED ANALYSES

Effective Dates. This appendix is updated annually. This version of the appendix is valid for calendar year 2014. A copy of the updated appendix can be obtained in electronic form through the OMB home page at http://www.whitehouse.gov/omb/circulars_a094/a94_appx-c/. The text of the Circular is found at http://www.whitehouse.gov/omb/circulars_a094/, and a table of past years' rates is located at http://www.whitehouse.gov/sites/default/files/omb/assets/a94/dischist.pdf. Updates of the appendix are also available upon request from OMB's Office of Economic Policy (202-395-3316).

Nominal Discount Rates. A forecast of nominal or market interest rates for calendar year 2014 based on the economic assumptions for the 2015 Budget is presented below. These nominal rates are to be used for discounting nominal flows, which are often encountered in lease-purchase analysis.

Nominal Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	20-Year	30-Year
1.0	1.9	2.5	3.0	3.6	3.9

Real Discount Rates. A forecast of real interest rates from which the inflation premium has been removed and based on the economic assumptions from the 2015 Budget is presented below. These real rates are to be used for discounting constant-dollar flows, as is often required in cost-effectiveness analysis.

Real Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	20-Year	30-Year
-0.7	0.0	0.5	1.0	1.6	1.9

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.

APPENDIX H

WATER PROJECT FINANCING CALCULATIONS

5th Street Water Loop Pipeline Project

Revenue Loan Payment Calculations

Fiscal Year	Loan Amount Issued toward Project	Beginning Loan Balance	Total Yearly Payment	Loan Interest Payment	Loan Principal Payment	Ending Loan Balance	Loan Year
2014	$ 178,000.00	$ 201,560.00	$ -	$ -	$ -	$ 201,560.00	0
2015	$ -	$ 201,560.00	$ (13,236.79)	$ (5,542.90)	$ (7,693.89)	$ 193,866.11	1
2016	$ -	$ 193,866.11	$ (13,236.79)	$ (5,331.32)	$ (7,905.48)	$ 185,960.63	2
2017	$ -	$ 185,960.63	$ (13,236.79)	$ (5,113.92)	$ (8,122.88)	$ 177,837.75	3
2018	$ -	$ 177,837.75	$ (13,236.79)	$ (4,890.54)	$ (8,346.26)	$ 169,491.50	4
2019	$ -	$ 169,491.50	$ (13,236.79)	$ (4,661.02)	$ (8,575.78)	$ 160,915.72	5
2020	$ -	$ 160,915.72	$ (13,236.79)	$ (4,425.18)	$ (8,811.61)	$ 152,104.11	6
2021	$ -	$ 152,104.11	$ (13,236.79)	$ (4,182.86)	$ (9,053.93)	$ 143,050.18	7
2022	$ -	$ 143,050.18	$ (13,236.79)	$ (3,933.88)	$ (9,302.91)	$ 133,747.26	8
2023	$ -	$ 133,747.26	$ (13,236.79)	$ (3,678.05)	$ (9,558.74)	$ 124,188.52	9
2024	$ -	$ 124,188.52	$ (13,236.79)	$ (3,415.18)	$ (9,821.61)	$ 114,366.91	10
2025	$ -	$ 114,366.91	$ (13,236.79)	$ (3,145.09)	$ (10,091.70)	$ 104,275.20	11
2026	$ -	$ 104,275.20	$ (13,236.79)	$ (2,867.57)	$ (10,369.23)	$ 93,905.98	12
2027	$ -	$ 93,905.98	$ (13,236.79)	$ (2,582.41)	$ (10,654.38)	$ 83,251.60	13
2028	$ -	$ 83,251.60	$ (13,236.79)	$ (2,289.42)	$ (10,947.38)	$ 72,304.22	14
2029	$ -	$ 72,304.22	$ (13,236.79)	$ (1,988.37)	$ (11,248.43)	$ 61,055.80	15
2030	$ -	$ 61,055.80	$ (13,236.79)	$ (1,679.03)	$ (11,557.76)	$ 49,498.04	16
2031	$ -	$ 49,498.04	$ (13,236.79)	$ (1,361.20)	$ (11,875.60)	$ 37,622.44	17
2032	$ -	$ 37,622.44	$ (13,236.79)	$ (1,034.62)	$ (12,202.18)	$ 25,420.26	18
2033	$ -	$ 25,420.26	$ (13,236.79)	$ (699.06)	$ (12,537.74)	$ 12,882.52	19
2034	$ -	$ 12,882.52	$ (13,236.79)	$ (354.27)	$ (12,882.52)	$ 0.00	20
		Totals	**$ (264,735.88)**	**$ (63,175.88)**	**$ (201,560.00)**		

Series 2015 Revenue Loan Total Project Costs= $ 178,000.00
Cost of Insurance (1.5%)= $ 2,670.00
Surety Policy= $ 20,000

Interest Rate= 2.75% (DEQ SRF FY15 Loan)
Loan Insurance (0.5%)= $ 890.00
Present Value Interest Rate= 2.75% (DEQ SRF FY15 Loan)

Par Amount including COI= Total Project Costs + (Total Project Costs x 1.5% Cost of Insurance) + (Total Project Costs x 0.5% Loan Insurance) + ($20,000 for Surety Policy)

Par Amount including COI= $ 201,560.00
Interest Expense (2.75% Interest Rate, 20 Years)= $ (63,175.88)
Project Proceeds= $ 178,000.00
Debt Service Cost= Par Amount including COI + Interest Expense
Debt Service Cost= $ 264,735.88

Loan Issue	Par Amount	Proceeds	Net Debt Service
Series 2014 DEQ SRF Loan	$ 201,560.00	$ 178,000.00	$ 264,735.88

12-inch Transmission Water Pipeline Replacement Project

Revenue Bond Payment Calculations							
Fiscal Year	**Bond Amount Issued toward Project**	**Beginning Bond Balance**	**Total Yearly Payment**	**Bond Interest Payment**	**Bond Principal Payment**	**Ending Bond Balance**	**Bond Year**
2015	$ 660,529.60	$ 693,740.19	$ -	$ -	$ -	$ 693,740.19	0
2016	$ -	$ 693,740.19	$ (49,255.02)	$ (24,974.65)	$ (24,280.38)	$ 669,459.82	1
2017	$ -	$ 669,459.82	$ (49,255.02)	$ (24,100.55)	$ (25,154.47)	$ 644,305.35	2
2018	$ -	$ 644,305.35	$ (49,255.02)	$ (23,194.99)	$ (26,060.03)	$ 618,245.31	3
2019	$ -	$ 618,245.31	$ (49,255.02)	$ (22,256.83)	$ (26,998.19)	$ 591,247.12	4
2020	$ -	$ 591,247.12	$ (49,255.02)	$ (21,284.90)	$ (27,970.13)	$ 563,276.99	5
2021	$ -	$ 563,276.99	$ (49,255.02)	$ (20,277.97)	$ (28,977.05)	$ 534,299.94	6
2022	$ -	$ 534,299.94	$ (49,255.02)	$ (19,234.80)	$ (30,020.23)	$ 504,279.72	7
2023	$ -	$ 504,279.72	$ (49,255.02)	$ (18,154.07)	$ (31,100.95)	$ 473,178.76	8
2024	$ -	$ 473,178.76	$ (49,255.02)	$ (17,034.44)	$ (32,220.59)	$ 440,958.17	9
2025	$ -	$ 440,958.17	$ (49,255.02)	$ (15,874.49)	$ (33,380.53)	$ 407,577.64	10
2026	$ -	$ 407,577.64	$ (49,255.02)	$ (14,672.80)	$ (34,582.23)	$ 372,995.41	11
2027	$ -	$ 372,995.41	$ (49,255.02)	$ (13,427.83)	$ (35,827.19)	$ 337,168.22	12
2028	$ -	$ 337,168.22	$ (49,255.02)	$ (12,138.06)	$ (37,116.97)	$ 300,051.26	13
2029	$ -	$ 300,051.26	$ (49,255.02)	$ (10,801.85)	$ (38,453.18)	$ 261,598.08	14
2030	$ -	$ 261,598.08	$ (49,255.02)	$ (9,417.53)	$ (39,837.49)	$ 221,760.58	15
2031	$ -	$ 221,760.58	$ (49,255.02)	$ (7,983.38)	$ (41,271.64)	$ 180,488.94	16
2032	$ -	$ 180,488.94	$ (49,255.02)	$ (6,497.60)	$ (42,757.42)	$ 137,731.52	17
2033	$ -	$ 137,731.52	$ (49,255.02)	$ (4,958.33)	$ (44,296.69)	$ 93,434.83	18
2034	$ -	$ 93,434.83	$ (49,255.02)	$ (3,363.65)	$ (45,891.37)	$ 47,543.46	19
2035	$ -	$ 47,543.46	$ (49,255.02)	$ (1,711.56)	$ (47,543.46)	$ 0.00	20
		Totals	**$ (985,100.48)**	**$ (291,360.29)**	**$ (693,740.19)**		

Series 2015 Revenue Bond Total Project Costs= $ 660,529.60
Cost of Insurance (1.5%)= $ 9,907.94
Surety Policy= $ 20,000

Interest Rate= 3.60% (OMB Circular A-94 Appex. C)
Bond Insurance (0.5%)= $ 3,302.65
Present Value Interest Rate= 3.60% (OMB Circular A-94 Appex. C)

Par Amount including COI= Total Project Costs + (Total Project Costs x 1.5% Cost of Insurance) + (Total Project Costs x 0.5% Bond Insurance) + ($20,000 for Surety Policy)

Par Amount including COI= $ 693,740.19
Interest Expense (3.6% Interest Rate, 20 Years)= $ (291,360.29)
Project Proceeds= $ 660,529.60
Debt Service Cost= Par Amount including COI + Interest Expense
Debt Service Cost= $ 985,100.48

Bond Issue	Par Amount	Proceeds	Net Debt Service
Series 2015 Revenue Bonds	$ 693,740.19	$ 660,529.60	$ 985,100.48

Tank Well Pump House and Chlorine Treatment Project

Revenue Bond Payment Calculations							
Fiscal Year	**Bond Amount Issued toward Project**	**Beginning Bond Balance**	**Total Yearly Payment**	**Bond Interest Payment**	**Bond Principal Payment**	**Ending Bond Balance**	**Bond Year**
2015	$ 382,587.06	$ 410,238.80	$ -	$ -	$ -	$ 410,238.80	0
2016	$ -	$ 410,238.80	$ (29,126.64)	$ (14,768.60)	$ (14,358.04)	$ 395,880.76	1
2017	$ -	$ 395,880.76	$ (29,126.64)	$ (14,251.71)	$ (14,874.93)	$ 381,005.82	2
2018	$ -	$ 381,005.82	$ (29,126.64)	$ (13,716.21)	$ (15,410.43)	$ 365,595.39	3
2019	$ -	$ 365,595.39	$ (29,126.64)	$ (13,161.43)	$ (15,965.21)	$ 349,630.18	4
2020	$ -	$ 349,630.18	$ (29,126.64)	$ (12,586.69)	$ (16,539.96)	$ 333,090.23	5
2021	$ -	$ 333,090.23	$ (29,126.64)	$ (11,991.25)	$ (17,135.39)	$ 315,954.84	6
2022	$ -	$ 315,954.84	$ (29,126.64)	$ (11,374.37)	$ (17,752.27)	$ 298,202.57	7
2023	$ -	$ 298,202.57	$ (29,126.64)	$ (10,735.29)	$ (18,391.35)	$ 279,811.22	8
2024	$ -	$ 279,811.22	$ (29,126.64)	$ (10,073.20)	$ (19,053.44)	$ 260,757.78	9
2025	$ -	$ 260,757.78	$ (29,126.64)	$ (9,387.28)	$ (19,739.36)	$ 241,018.42	10
2026	$ -	$ 241,018.42	$ (29,126.64)	$ (8,676.66)	$ (20,449.98)	$ 220,568.44	11
2027	$ -	$ 220,568.44	$ (29,126.64)	$ (7,940.46)	$ (21,186.18)	$ 199,382.26	12
2028	$ -	$ 199,382.26	$ (29,126.64)	$ (7,177.76)	$ (21,948.88)	$ 177,433.38	13
2029	$ -	$ 177,433.38	$ (29,126.64)	$ (6,387.60)	$ (22,739.04)	$ 154,694.34	14
2030	$ -	$ 154,694.34	$ (29,126.64)	$ (5,569.00)	$ (23,557.65)	$ 131,136.70	15
2031	$ -	$ 131,136.70	$ (29,126.64)	$ (4,720.92)	$ (24,405.72)	$ 106,730.98	16
2032	$ -	$ 106,730.98	$ (29,126.64)	$ (3,842.32)	$ (25,284.33)	$ 81,446.65	17
2033	$ -	$ 81,446.65	$ (29,126.64)	$ (2,932.08)	$ (26,194.56)	$ 55,252.09	18
2034	$ -	$ 55,252.09	$ (29,126.64)	$ (1,989.08)	$ (27,137.57)	$ 28,114.52	19
2035	$ -	$ 28,114.52	$ (29,126.64)	$ (1,012.12)	$ (28,114.52)	$ 0.00	20
		Totals	**$ (582,532.84)**	**$ (172,294.03)**	**$ (410,238.80)**		

Series 2015 Revenue Bond Total Project Costs= $ 382,587.06
Cost of Insurance (1.5%)= $ 5,738.81
Surety Policy= $ 20,000

Interest Rate= 3.60% (OMB Circular A-94 Appex. C)
Bond Insurance (0.5%)= $ 1,912.94
Present Value Interest Rate= 3.60% (OMB Circular A-94 Appex. C)

Par Amount including COI= Total Project Costs + (Total Project Costs x 1.5% Cost of Insurance) + (Total Project Costs x 0.5% Bond Insurance) + ($20,000 for Surety Policy)

Par Amount including COI= $ 410,238.80
Interest Expense (3.6% Interest Rate, 20 Years)= $ (172,294.03)
Project Proceeds= $ 382,587.06
Debt Service Cost= Par Amount including COI + Interest Expense
Debt Service Cost= $ 582,532.84

Bond Issue	Par Amount	Proceeds	Net Debt Service
Series 2015 Revenue Bonds	$ 410,238.80	$ 382,587.06	$ 582,532.84

	5th Street Water Loop Pipeline Project		12-inch Water Transmission Pipeline Replacement Project		Tank Well Pump House and Chlorine Treatment Project		Total			EDUs		Water Rates				
Year	Interest Payment	Principal Payment	Interest Payment	Principal Payment	Interest Payment	Principal Payment	Interest Payment	Principal Payment	Total Payment	Residential	Commercial	Increase in Water Base Rates per EDU (Total Yearly Payment / Total EDUs x 12 months)	Avg. Residential Base Rate	Avg. Commercial Base Rate	Percentage Increase in Residential Base Rate	Percentage Increase in Commercial Base Rate
2014	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	901	202	$ -	$ 27.00	$ 121.50	0.00%	0.00%
2015	$ (5,542.90)	$ (7,693.89)	$ -	$ -	$ -	$ -	$ (5,542.90)	$ (7,693.89)	$ (13,236.79)	937	210	$ 0.96	$ 27.00	$ 121.50	3.56%	0.79%
2016	$ (5,331.32)	$ (7,905.48)	$ (24,974.65)	$ (24,280.38)	$ (14,768.60)	$ (14,358.04)	$ (45,074.56)	$ (46,543.90)	$ (91,618.46)	975	218	$ 6.40	$ 27.00	$ 121.50	23.70%	5.27%
2017	$ (5,113.92)	$ (8,122.88)	$ (24,100.55)	$ (25,154.47)	$ (14,251.71)	$ (14,874.93)	$ (43,466.18)	$ (48,152.28)	$ (91,618.46)	1,014	227	$ 6.15	$ 27.00	$ 121.50	22.79%	5.06%
2018	$ (4,890.54)	$ (8,346.26)	$ (23,194.99)	$ (26,060.03)	$ (13,716.21)	$ (15,410.43)	$ (41,801.74)	$ (49,816.72)	$ (91,618.46)	1,054	236	$ 5.92	$ 27.00	$ 121.50	21.91%	4.87%
2019	$ (4,661.02)	$ (8,575.78)	$ (22,256.83)	$ (26,998.19)	$ (13,161.43)	$ (15,965.21)	$ (40,079.28)	$ (51,539.18)	$ (91,618.46)	1,096	246	$ 5.69	$ 27.00	$ 121.50	21.07%	4.68%
2020	$ (4,425.18)	$ (8,811.61)	$ (21,284.90)	$ (27,970.13)	$ (12,586.69)	$ (16,539.96)	$ (38,296.77)	$ (53,321.69)	$ (91,618.46)	1,140	256	$ 5.47	$ 27.00	$ 121.50	20.26%	4.50%
2021	$ (4,182.86)	$ (9,053.93)	$ (20,277.97)	$ (28,977.05)	$ (11,991.25)	$ (17,135.39)	$ (36,452.08)	$ (55,166.38)	$ (91,618.46)	1,186	266	$ 5.26	$ 27.00	$ 121.50	19.48%	4.33%
2022	$ (3,933.88)	$ (9,302.91)	$ (19,234.80)	$ (30,020.23)	$ (11,374.37)	$ (17,752.27)	$ (34,543.05)	$ (57,075.41)	$ (91,618.46)	1,233	276	$ 5.06	$ 27.00	$ 121.50	18.73%	4.16%
2023	$ (3,678.05)	$ (9,558.74)	$ (18,154.07)	$ (31,100.95)	$ (10,735.29)	$ (18,391.35)	$ (32,567.41)	$ (59,051.05)	$ (91,618.46)	1,282	288	$ 4.86	$ 27.00	$ 121.50	18.01%	4.00%
2024	$ (3,415.18)	$ (9,821.61)	$ (17,034.44)	$ (32,220.59)	$ (10,073.20)	$ (19,053.44)	$ (30,522.82)	$ (61,095.64)	$ (91,618.46)	1,334	299	$ 4.68	$ 27.00	$ 121.50	17.32%	3.85%
2025	$ (3,145.09)	$ (10,091.70)	$ (15,874.49)	$ (33,380.53)	$ (9,387.28)	$ (19,739.36)	$ (28,406.86)	$ (63,211.60)	$ (91,618.46)	1,387	311	$ 4.50	$ 27.00	$ 121.50	16.65%	3.70%
2026	$ (2,867.57)	$ (10,369.23)	$ (14,672.80)	$ (34,582.23)	$ (8,676.66)	$ (20,449.98)	$ (26,217.03)	$ (65,401.43)	$ (91,618.46)	1,443	323	$ 4.32	$ 27.00	$ 121.50	16.01%	3.56%
2027	$ (2,582.41)	$ (10,654.38)	$ (13,427.83)	$ (35,827.19)	$ (7,940.46)	$ (21,186.18)	$ (23,950.71)	$ (67,667.75)	$ (91,618.46)	1,500	336	$ 4.16	$ 27.00	$ 121.50	15.40%	3.42%
2028	$ (2,289.42)	$ (10,947.38)	$ (12,138.06)	$ (37,116.97)	$ (7,177.76)	$ (21,948.88)	$ (21,605.24)	$ (70,013.22)	$ (91,618.46)	1,560	350	$ 4.00	$ 27.00	$ 121.50	14.80%	3.29%
2029	$ (1,988.37)	$ (11,248.43)	$ (10,801.85)	$ (38,453.18)	$ (6,387.60)	$ (22,739.04)	$ (19,177.81)	$ (72,440.65)	$ (91,618.46)	1,623	364	$ 3.84	$ 27.00	$ 121.50	14.24%	3.16%
2030	$ (1,679.03)	$ (11,557.76)	$ (9,417.53)	$ (39,837.49)	$ (5,569.00)	$ (23,557.65)	$ (16,665.56)	$ (74,952.90)	$ (91,618.46)	1,688	378	$ 3.70	$ 27.00	$ 121.50	13.69%	3.04%
2031	$ (1,361.20)	$ (11,875.60)	$ (7,983.38)	$ (41,271.64)	$ (4,720.92)	$ (24,405.72)	$ (14,065.50)	$ (77,552.96)	$ (91,618.46)	1,755	393	$ 3.55	$ 27.00	$ 121.50	13.16%	2.92%
2032	$ (1,034.62)	$ (12,202.18)	$ (6,497.60)	$ (42,757.42)	$ (3,842.32)	$ (25,284.33)	$ (11,374.53)	$ (80,243.93)	$ (91,618.46)	1,825	409	$ 3.42	$ 27.00	$ 121.50	12.66%	2.81%
2033	$ (699.06)	$ (12,537.74)	$ (4,958.33)	$ (44,296.69)	$ (2,932.08)	$ (26,194.56)	$ (8,589.47)	$ (83,028.99)	$ (91,618.46)	1,898	426	$ 3.29	$ 27.00	$ 121.50	12.17%	2.70%
2034	$ (354.27)	$ (12,882.52)	$ (3,363.65)	$ (45,891.37)	$ (1,989.08)	$ (27,137.57)	$ (5,707.00)	$ (85,911.46)	$ (91,618.46)	1,974	443	$ 3.16	$ 27.00	$ 121.50	11.70%	2.60%
2035	$ -	$ -	$ (1,711.56)	$ (47,543.46)	$ (1,012.12)	$ (28,114.52)	$ (2,723.69)	$ (75,657.98)	$ (78,381.67)	2,053	461	$ 2.60	$ 27.00	$ 121.50	9.62%	2.14%
Total	**$ (63,175.88)**	**$ (201,560.00)**	**$ (291,360.29)**	**$ (693,740.19)**	**$ (172,294.03)**	**$ (410,238.80)**	**$ (526,830.20)**	**$ (1,305,539.00)**	**$ (1,832,369.20)**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Note: This analysis does not take into account operating expenses such as operation and maintenance associated with these project and does not include an increase in the charge for water use above the water allowance. This table is only meant to a percentage increase with just repayment of the loan and bonds associated with these projects.

Max increase in base water user rate per EDU	**$**	**6.40**