BRUNEAU WATER AND
SEWER DISTRICT

Environmental Information Document
(EID)

December 2015

Project No. 60-12-022

J·U·B ENGINEERS, INC.

Prepared by
J-U-B ENGINEERS, INC.
115 Northstar Ave.
Twin Falls, ID 83301

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ENVIRONMENTAL INFORMATION DOCUMENT

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BRUNEAU WATER AND SEWER DISTRICT
ENVIRONMENTAL INFORMATION DOCUMENT
J-U-B PROJECT NO. 60-12-022
DECEMBER 2015
IDEQ FACILITY PLANNING GRANT
PROJECT NUMBER – WWG 354-2012-10

Project Applicant: Bruneau Water and Sewer District
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Project Abstract:

The Bruneau Water and Sewer District owns and operates a wastewater collection and treatment system that serves the area in and around the District boundaries. Sanitary flows from the community and discharge from the community's new water treatment plant have filled the community's existing wastewater treatment lagoon. As a result, this has required land application to prevent overflow of the lagoon. The District is uncertain of the capacity of the existing lagoon and the slow-rate land application site's ability to handle the additional flows from the water treatment plant. There is a second lagoon at the waste treatment location that is no longer in use. The District received a Wastewater Reuse Permit from IDEQ in 2009; however, they do not have sufficient effluent to grow a crop as required in the permit. The current lagoon, with the slow-rate application site, restricts the District to little or no growth. The existing lagoon is aging and there is no backup should any leaks or problems develop. The District needed to determine their options to bring the system into full compliance with their permits, and to allow for population growth within the service area. The District authorized J-U-B ENGINEERS, Inc. (J-U-B) to develop a Wastewater Facilities Plan to investigate potential improvement alternatives for the treatment facilities. Ten alternatives were outlined, and estimated costs were determined for each one. The alternative identified as 4a was chosen as the preferred alternative. Construction of the Alternative 4a improvements include:

- Separation of the domestic wastewater and Water Treatment Plant (WTP) discharge by constructing a WTP discharge pipeline from the WTP to the Wastewater Treatment Plant.
- Reconstruction of the north lagoon into two lagoons, one for domestic wastewater and one for WTP discharge.
- Total containment of domestic wastewater with evaporative disposal.
- Land application of the WTP discharge utilizing the existing irrigation pump station.

The construction of the items included in this alternative are all located at the existing wastewater treatment site or within previously disturbed areas between the wastewater treatment and water treatment sites and are expected to have no significant environmental impacts. This Environmental Information Document (EID) includes a summary of the findings from the Facilities Plan and provides additional information relative to how the recommended improvements may affect the environment and cultural resources.

The District may elect to complete the improvements in phases as funding becomes available and as the facility upgrades are deemed necessary. The initial phase would likely include reconstruction of the north lagoon including bank repair and re-lining to provide additional storage volume and evaporation capacity for the combined domestic wastewater and WTP discharge. Subsequent phases would allow for segregation and land application of the WTP discharge and reconstruction of the south lagoon with an underdrain and new liner.

Estimated Costs and Monthly User Rates:

The Wastewater System Facilities Plan provided a cost estimate of the recommended alternative construction to remedy the current wastewater treatment needs and provide additional capacity for future growth. The construction costs are all included within the DEQ EID Checklist category of Secondary Treatment. Typical funding scenarios were outlined to provide the financing to complete the project. There may be other project financing combinations that should be explored by the District. These scenarios are simply used to illustrate possible monthly user rates depending on the funding source and whether grant funds are obtained to help pay for the improvements. Table 1 summarizes the results of the user charge rate analysis for the various financing alternatives.

Table 1 Project Funding Summary

Cost/Funding Item	Funding Scenario A (USDA-RD Loan with No Grants)	Funding Scenario B (DEQ-SRF Loan with No Grants)	Funding Scenario C (USDA-RD Loan with Grants)	Funding Scenario D (USDA-RD Loan with some Grants)
COSTS				
Capital Costs				
Capital Cost from Section 5 (in 2015 dollars)	$2,197,503	$2,197,503	$2,197,503	$2,197,503
Davis-Bacon Prevailing Wage Compliance (@ 7.5%)	$0	$164,813	$0	$0
American Iron & Steel Compliance (@ 5.0%)	$0	$109,875	$0	$0
Inflation for 2017 Year of Construction (@ 2.7% annual)	$120,267	$135,301	$120,267	$120,267
Total Capital Costs(1)	$2,317,770	$2,607,491	$2,317,770	$2,317,770
O&M Costs				
Current Total Monthly O&M(2)	$1,530	$1,530	$1,530	$1,530
Current Total Annual O&M	$18,360	$18,360	$18,360	$18,360
Change in Monthly O&M (increase)	$939	$939	$939	$939
Change in Annual O&M (increase)	$11,269	$11,269	$11,269	$11,269
Future Annual O&M	$29,629	$29,629	$29,629	$29,629
Future Monthly O&M	$2,469	$2,469	$2,469	$2,469
FUNDING				
Grant Funding				
Idaho Dept of Commerce Block Grant	$0	$0	$450,000	$450,000
USDA-RD Grant	$0	$0	$1,042,996	$1,042,996
DEQ Principal Forgiveness	$0	$0	$0	$0
Other Grant			$551,947	
Loan Funding				
New DEQ Loan Amount	$0	$2,607,491	$0	$0
New USDA-RD Loan Amount	$2,317,770	$0	$272,826	$824,773
New Other Loan Amount	$0	$0	$0	$0
City Capital Funds (cash)	$0	$0	$0	$0
Total Funding	$2,317,770	$2,607,491	$2,317,769	$2,317,769
Monthly Debt Service Costs				
Existing Debt Payment	$0	$0	$0	$0
New DEQ Loan Payment(3)	$0	$9,372	$0	$0
New USDA-RD Loan Payment(3)	$7,956	$0	$936	$2,831
New Other Loan Payment(3)	$0	$0	$0	$0
Total Future Debt Service	$7,956	$9,372	$936	$2,831
Change in Debt Service (increase)	$7,956	$9,372	$936	$2,831
Loan Reserve (@10% of loan)	$796	$937	$94	$283
Monthly Total Costs				
Total	$11,220	$12,778	$3,499	$5,583
Impact to Rates				
Total System EDU's	83	83	83	83
Current Average Monthly User Charge per EDU	$17.00	$17.00	$17.00	$17.00
Increase in O&M Monthly Charge per EDU	$11.31	$11.31	$11.31	$11.31
Increase in Debt Service Monthly Charge per EDU	$95.85	$112.91	$11.28	$34.11
Future Average Monthly User Charge per EDU(4)	$135.18	$153.95	$42.16	$67.27

Footnotes:

(1) Capital costs are in 2017 dollars and must be adjusted for inflation for actual year of construction.

(2) For a breakdown of O&M costs which include short-lived asset reserves, see Table 5-12.

(3) Assumes a loan interest rate of 2.70% with 40 year term for USDA-RD loan and 1.75% with 30 year term for DEQ-SRF loan.

(4) Based on the updated estimate of monthly total cost (a rate study should be considered to fully address system costs)

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

CHAPTER 1: INTRODUCTION

1.0 INTRODUCTION

1.1 PURPOSE AND NEED OF PROJECT

The Bruneau Water and Sewer District owns and operates a wastewater collection and treatment system that serves the area in and around the District's boundaries. The existing Treatment System consists of only one treatment and storage lagoon since the second (north) lagoon was abandoned in 1992. The District is not able to entertain proposals for residential and/or commercial developments in the area that are interested in connecting to the District's wastewater facilities.

Furthermore, the Bruneau Water and Sewer District has recently become aware of the need to evaluate the existing sewer treatment system. Sanitary flows from the community and effluent from the community's new water treatment plant have filled the community's existing wastewater treatment lagoon, requiring land application to prevent overflow of the lagoon. The District is uncertain of the capacity of the existing lagoons and slow-rate land application site to handle the additional flows from the water treatment plant.

The existing lagoon is 30 years old and there is no backup should any leaks or problems develop. The District needs to determine their options to bring the system in full compliance with their permits and to allow for population growth within the service area.

The current operation of the wastewater treatment facility has two areas of environmental concern. With only one operational treatment and storage lagoon, effluent will discharge to the surrounding area should a leak or failure occur. The land application operation is unable to be operated as it permitted. In order to provide enough water to grow a crop, the effluent will have to be applied to a small area and the phosphorus loading will be excessive. If the effluent is spread out over a large enough reuse area to not exceed the phosphorus loading rate, there will be insufficient water to grow a crop. Therefore, no crop will be removed and the nutrients will build up on the application site and could result in excessive nutrient buildup. The recommended construction alternative will provide a second treatment and storage lagoon and discontinue the land application of effluent. This will eliminate the environmental concerns associated with the current operations. The new construction will all occur on the existing wastewater treatment site and will have no significant environmental impact and will require no mitigation measures.

As a result of the existing system's limitations, the District authorized J-U-B ENGINEERS, Inc. (J-U-B) to develop a Wastewater Facilities Plan to investigate potential improvement alternatives for the treatment facilities and collection system. This Environmental Information Document (EID) includes a summary of the findings from the following documents:

- Bruneau Water and Sewer District: Wastewater Facilities Plan (J-U-B, 2015).

The EID provides additional information relative to how the selected alternative may affect the environment and cultural resources.

1.2 DESCRIPTION OF EXISTING FACILITIES

1.2.1 Wastewater Collection System

As shown in Figure 1-1, the District's existing wastewater collection system consists primarily of 8 inch gravity sewer lines. The 8 inch PVC lines were originally installed in 1980. Table 1-1 summarizes the approximate length of the various types of lines found in the existing collection system.

Table 1-1. Existing Collection System Pipe Summary

Pipe Diameter (inches)	Pipe Type	Length		Percent of Total (%)
		Lineal Feet (LF)	Miles (Mi)	
8	PVC	12,640	2.39	100

The collection system includes approximately 35 manholes most of which are precast concrete and were installed at the same time as the original sewer lines.

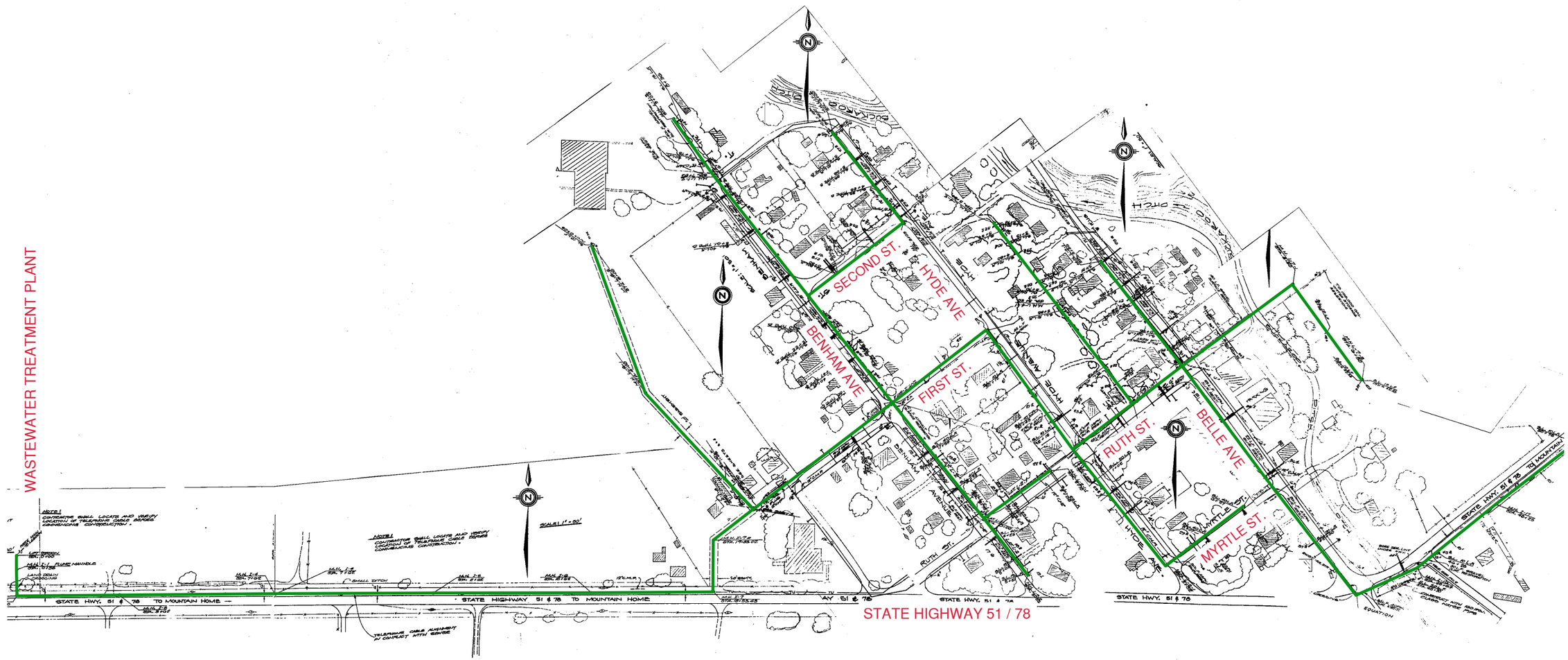
1.2.2 Wastewater Treatment Overview

The District's wastewater treatment facilities were originally constructed in 1980. The system originally included a 5.66 acre lagoon located north of the one that is currently in operation. Shallow groundwater resulting from agricultural irrigation on the surrounding farm ground caused the north bank of this lagoon to fail and the liner to be compromised. The north lagoon was abandoned in 1992 when the land application system was constructed. The existing treatment system consists of one treatment lagoon, an irrigation pump station with chlorination equipment and a land application site. The treatment facility is located 0.4 miles west of Bruneau on the North side of Highway 51 within Section 24 of Township 6 South, Range 5 East. Figure 1-2 shows a site layout of the treatment facilities. Design parameters for the treatment facilities are summarized in Table 1-2. The following sections provide a brief description of the existing wastewater treatment facilities based on discussions with the District, measurement of the flow and a review of historical drawings. The wastewater flow is comprised of two components: normal residential and commercial wastewater and discharge from the District's potable water treatment plant (WTP). The WTP discharge dumps into the wastewater collection system near the Buckaroo Ditch crossing on Ruth Street (See Figure 1-1).

Table 1-2. Wastewater Treatment Facilities Design Parameters

Design Parameter	Units	Value
South Lagoon[a]		
Volume	million gallons	4.2
Water Surface Area	acres	5.54
Design Water Depth	feet	3.8
North Lagoon (Abandoned)[a]		
Water Surface Area	acres	6.55

a. From the 1992 Bruneau Water and Sewer District Wastewater Treatment Plant Modifications Drawings of Record.



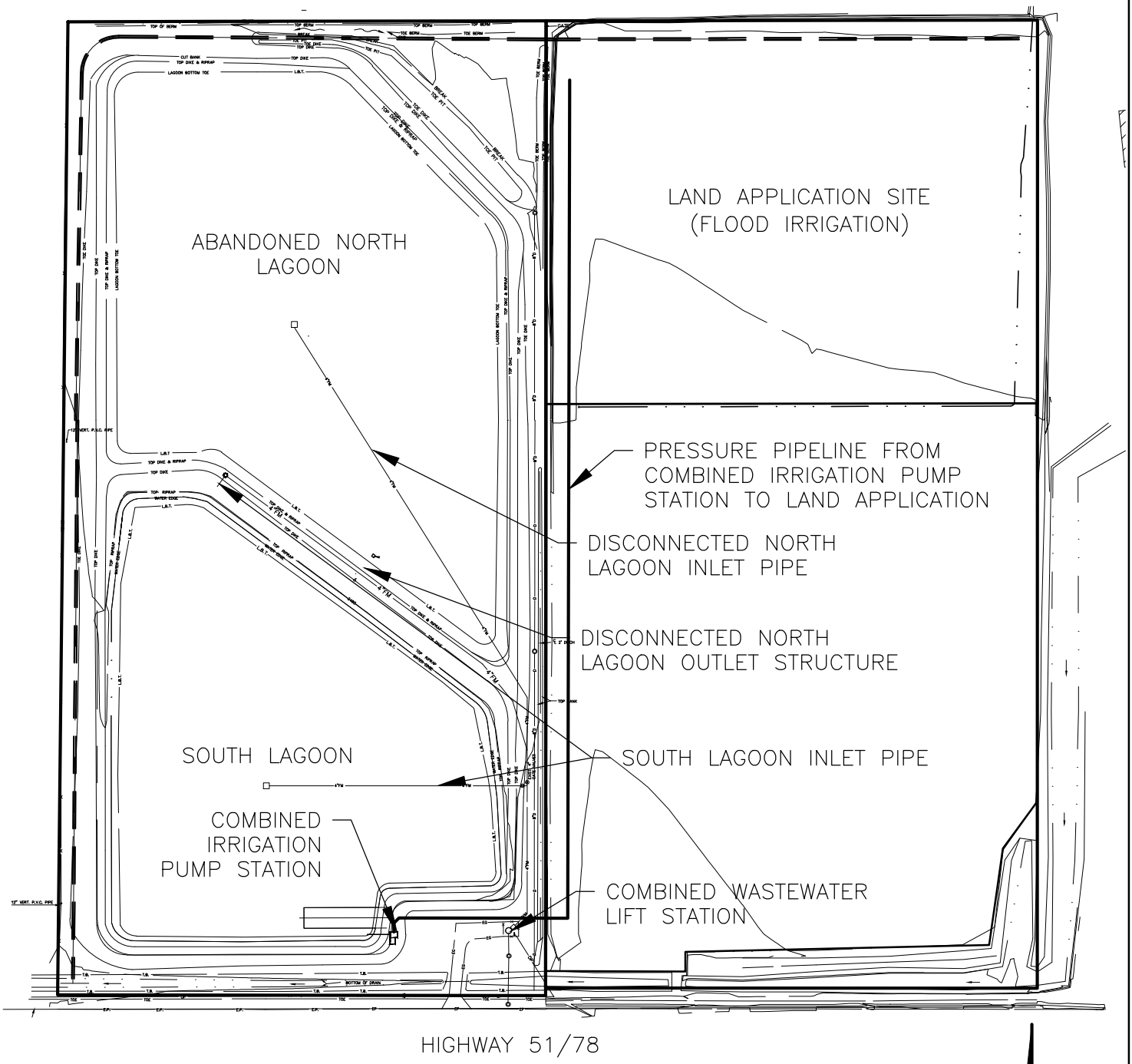
Plot Date:12/14/2015 3:08 PM Plotted By: Jordan Parker
Date Created:3/19/2014:\TWNFILES\PUBLIC\PROJECTS\JUB\60-12-022 BRUNEAU-WASTE_WATER_SYSTEM_MASTER_PLAN_AND_EID\CAD\SHEET\EID\FIGURE 1-1.DWG

LAST UPDATED: 1/12/2015	
PLOT DATE: 12/14/2015	
FILE: FIGURE 1-1	

J-U-B ENGINEERS, INC.

WASTEWATER SYSTEM IMPROVEMENTS EID
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 1-1
EXISTING COLLECTION SYSTEM



Plot Date:12/15/2015 8:24 AM Plotted By: Jordan Parker
Date Created:3/19/2014 \\TWINFILES\PUBLIC\PROJECTS\JUB\60-12-022-BRUNEAU-WASTE_WATER_SYSTEM_MASTER_PLAN_AND_EID\CADSHEET\EID\FIGURE 1-2.DWG

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NO.	REVISION DESCRIPTION	BY	APR.	DATE

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WASTEWATER SYSTEM IMPROVEMENTS EID
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 1-2
EXISTING WASTEWATER TREATMENT SYSTEM

SHEET 1

1.2.3 Treatment Plant

Wastewater enters the plant through an 8 inch gravity sewer line to a duplex pump lift station. The lift station pumps the flows to the lagoon through a 4 inch pressure main that empties either near the middle of the lagoon or near the northwest corner. The wastewater is treated in one lagoon and is then discharged to a land application site through an irrigation pump station located at the south edge of the lagoon. The land application area is located east of the lagoon site.

1.2.4 Wastewater Reuse Permit

The District is authorized to discharge their effluent to the land application site under IDEQ Municipal Wastewater Reuse Permit No. LA-000129-02 (see Appendix A). The effective date of the permit extends for a period of five years from July 11, 2009 to July 11, 2014. IDEQ provides regulatory oversight of the permit and operation of the system.

1.3 FLOW AND LOAD CONDITIONS

Wastewater flows generated in Bruneau consist primarily of residential wastes, with smaller commercial contributions and the discharge from the potable water treatment plant. Table 1-3 summarizes the current and projected influent flows for the 20-year planning period from 2013 through 2033. Table 1-4 summarizes the current and projected influent waste loads for the 20-year planning period using a 0.5% population growth rate. Additional information regarding flows and loads can be found in the Facilities Plan.

Table 1-3. Influent Flow Conditions

Parameter	Unit	Current (2013)	Future (2033)
Annual Average Day Wastewater Flow	Gpd	20,422	22,498
Average Day WTP Discharge[1]	Gpd	30,165	33,330
Total Average Day	Gpd	50,588	55,828
Peak Hour Wastewater Flow	Gpd	81,689	89,992
Peak Hour WTP Discharge	Gpd	156,000	156,000
Total Peak Hour	Gpd	237,689	245,992
Average Day Per Capita Wastewater Flow[2]	Gpcd	98	98
Average Day Per Capita WTP Discharge	Gpcd	144	145
Total Average Day Per Capita	Gpcd	241	243
Total Annual Volume of Wastewater Flow	MGal	7.45	8.21
Total Annual Volume of WTP Discharge	MGal	18.46	12.13
Total Annual Volume	MGal	25.41	20.38

1 WTP varies seasonally and is difficult to predict. Estimated range for current flows is 11,700 to 30,165 gpd. Upper end of range used for alternative comparison to be conservative.
2 Based on an estimated sewer population of 210 in 2013 and 230 in 2033 (see Chapter 3).

Table 1-4. Influent Loading Conditions

Constituent	Year	Domestic Sewage Average Day Load (lbs/d)	WTP Average Day Load (lbs/d)	Total Ave. Day Load (lbs/d)
BOD	2013	47	0	47
	2033	51.6	0	51.6
TSS	2013	47	0	47
	2033	51.6	0	51.6
TKN	2013	7.7	0	7.7
	2033	8.4	0	8.4
Nitrate- N	2013	0.34	0	0.34
	2033	0.38	0	0.38
Total-Phosphorus	2013	1.53	0	1.53
	2033	1.69	0	1.69

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

CHAPTER 2: IMPROVEMENT ALTERNATIVES

2.0 IMPROVEMENT ALTERNATIVES

2.1 WASTEWATER COLLECTION SYSTEM IMPROVEMENTS

As discussed in Chapter 4 of the Facilities Plan, the District reports that the collection system lines are in relatively good condition with no significant cracks and breaks, erosion and/or corrosion of the pipe surface, solids build-up, roots, and sags or bellies in the lines. The District also reports that the existing manholes are in relatively good condition without significant cracks or corrosion on the surface. It is also recommended that the District clean and video inspect the collection system lines regularly and provide maintenance according to the video results.

2.2 WASTEWATER TREATMENT FACILITY IMPROVEMENT ALTERNATIVES

The following sections summarize all of the improvement alternatives considered in greater detail in the Facilities Plan.

2.2.1 Alternative 1: No Action Alternative

For this alternative, the District would not implement any improvements to the wastewater treatment facilities. This option is not recommended due to the following:

- The phosphorus content of the treated effluent requires spreading it out over 4.6 acres. The effluent available is only sufficient to provide enough water to grow a crop on 2.9 acres. Therefore, treated effluent volume is insufficient to provide sufficient irrigation water to grow a harvestable crop. The District cannot operate the slow rate land application system in compliance with their Wastewater Reuse Permit without supplemental irrigation water which is not available. The non-compliance situation will likely continue in the future unless supplemental irrigation water is applied. This may result in fines or other penalties.

- The available land application area is insufficient to allow the use of the existing sprinkler system with the setbacks required in the Wastewater Reuse Permit even if the water treatment plant discharge is eliminated from the treatment plant inflow. If the water treatment plant inflow is included, the land application area is not sufficient based on the allowable phosphorus loading.

- The treatment facility has only one operating lagoon which is not in compliance with IDAPA 58.01.16.493.08. Two lagoons are required for the existing average daily flow and three lagoons will be required within the 20 year growth period after the influent exceeds 50,000 gpd.

- The existing lagoon does not provide sufficient storage for the non-growing season. The lagoon volume necessary for the estimated current influent flow is 5.62 Mgal. The operational volume of the existing lagoon is 4.2 Mgal.

- Effluent quality from the lagoon will most likely continue to worsen in the future as the treatment facilities are overloaded.

- Future residential, commercial and industrial growth may be restricted unless the improvements are implemented. This may result in a loss of businesses and reduced property values.

- The land application system is designed to utilize sprinkler irrigation. The available land application area beyond the statutory setbacks is 1.66 acres for sprinkler irrigation. The available land application area for gravity (flood) irrigation is 5.66 acres.

- Effluent testing is required during land application of the treated effluent.

2.2.2 Alternative 2: Regional Treatment

Wastewater from the Bruneau District could potentially be combined with wastewater from one or more surrounding communities at a centralized location for regional treatment. Communities located near Bruneau that may potentially be involved in regional treatment include the City of Mountain Home (20 miles) and City of Grandview (19 miles). Each of these communities has existing treatment facilities.

Wastewater from one or more of the communities could be pumped to one of the existing treatment plants or to a new regional treatment plant. This would likely require large pump stations and transmission lines from the participating communities to the regional treatment plant, resulting in extensive capital costs and increased operation and maintenance requirements.

The existing treatment facilities within the surrounding communities are generally adequate to handle their own loads and would more than likely require extensive upgrades to accommodate the loads from other communities. As such, the surrounding communities may not favor regional treatment. It is also often challenging to develop user agreements between communities for regional treatment. Additionally, it will be more cost effective for the Bruneau Water and Sewer District to upgrade their own treatment facilities rather than implement upgrades at a neighboring treatment plant or to construct a new regional treatment plant.

There may also be administrative difficulties associated with a regional treatment plant, such as effluent ownership, equitable sharing of costs, and the desired quality of the effluent. Due to concerns regarding participation by neighboring communities and cost-effectiveness, this alternative is not recommended.

2.2.3 Alternative 3a: Upgrade Existing Lagoons and Slow-Rate Land Application with Separate WTP Discharge Land Application

Alternative 3a – Reinstate a portion of the north lagoon, upgrade south lagoon and upgrade land application system without discharge from the Water Treatment Plant (WTP) included in the treatment and land application. Construct a separate WTP discharge pipeline, storage lagoon and land application system:

The following sections outline the required improvements to the existing treatment lagoons and land application system. The resulting reclaimed wastewater would be suitable for Class C uses.

- A portion of the north lagoon would be reinstated to provide a second wastewater lagoon. The total lagoon volume required in 2033 without the WTP discharge and continuing to utilize the land application system is 1.64 Mgal. This volume is based on a lagoon surface area of 5.54 acres and a land application area of 1.50 acres. The recommended improvements to reinstate a portion of the north lagoon are to remove the existing liner, construct an underdrain system to prevent groundwater buildup under the liner, construct a new north bank, install a new liner

and reconnect the transfer structures and pipelines that were disconnected in 1992. The volume of the reinstated north lagoon should be at least 1.64 Mgal. With an operating depth of 2.5 feet, the surface area required is 2.06 acres.

- A different portion of the north lagoon would be reinstated to provide a storage lagoon for the WTP discharge. The WTP discharge would be delivered to the lagoon by a new gravity pipeline. The total lagoon volume required in 2033 for the water treatment plant discharge is 4.4 Mgal. This volume is based on a lagoon surface area of 2.70 acres and a land application area of 6.0 acres. The recommended improvements to reinstate a portion of the north lagoon are to remove the existing liner, construct an underdrain system to prevent groundwater buildup under the liner, construct a new north bank, install a new liner and construct a new transfer structure, irrigation pump station and land application sprinkler system.

- The upgrade of the south lagoon includes removal of the existing liner, construction of an underdrain system and installation of a new liner.

- The barb wire fence that surrounds the existing property is sufficient to keep domestic livestock off the property. However, deer are often found on the property. The existing liner has a soil cover and rock rip-rap along the bank slopes that protect it from damage. The proposed new liner will be an uncovered HDPE liner that is susceptible to damage from deer hoofs. The liner surface is also slick, so animals that enter the lagoon will have difficulty getting out of it. An eight foot high “deer proof” fence will be installed around the lagoons to provide a barrier to deer and other large animals that could damage the liner.

- Supplemental canal water may be required to grow a healthy crop since phosphorus is the limiting factor that controls the land area requirements. Irrigation water in the Bruneau area is provided from the Buckhorn Ditch which is diverted from the Bruneau River. There are no storage reservoirs along the Bruneau River, so water is limited to normal flows which can be quite low in mid to late summer when the irrigation demand is the highest.

The advantages of Alternative 3a are:

- Land application of the treated effluent allows the lagoons to have a lower total volume.
- The wastewater and WTP discharges remain separated.
- There are no setback requirements for the WTP discharge water land application.
- Separate land application of the WTP discharge requires a smaller land application area for the wastewater reuse.
- No additional treatment and/or disposal property is required.

The disadvantages of Alternative 3a are:

- The high groundwater in the area of the wastewater treatment facility will need to be mitigated and will require monitoring in order to maintain the integrity of the lagoon liners.
- Additional irrigation water will be required to grow a harvestable crop for nutrient removal.
- The land application area for the treated wastewater reuse is 1.50 acres which is difficult to plant, maintain, and harvest with the farm equipment used today.

- Effluent testing is required during land application of the treated effluent as it is in the no action alternative and Alternatives 3b, 5a and 5b.

2.2.4 Alternative 3b: Upgrade Existing Lagoons and Slow-Rate Land Application with WTP discharge included.

Alternative 3b – Reinstate a portion of the north lagoon, upgrade south lagoon and upgrade land application system with discharge from the water treatment plant included in the treatment and land application:

The following sections outline the required improvements to the existing treatment lagoons and land application system. The resulting reclaimed wastewater would be suitable for Class C uses.

- The north lagoon would be reinstated and divided to provide two additional lagoons. The total lagoon volume required in 2033 with the water treatment plant discharge and continuing to utilize the land application system is 6.35 Mgal. This volume is based on a lagoon surface area of 6.78 acres and a land application area of 4.3 acres. The recommended improvements to reinstate and divide the north lagoon are to remove the existing liner, construct an underdrain system to prevent groundwater buildup under the liner, construct a new bank through the middle to divide the lagoon, reconstruct the north bank, install a new liner and reconnect the transfer structures and pipelines that were disconnected in 1992. The volume of the reinstated and divided north lagoon will be at least 5.29 Mgal. With an operating depth of 2.5 feet, the surface area will be 6.49 acres.

- The upgrade of the south lagoon includes removal of the existing liner, construction of an underdrain system and installation of a new liner.

- The barb wire fence that surrounds the existing property is sufficient to keep domestic livestock off the property. However, deer are often found on the property. The existing liner has a soil cover and rock rip-rap along the bank slopes that protect it from damage. The proposed new liner will be an uncovered HDPE liner that is susceptible to damage from deer hoofs. The liner surface is also slick, so animals that enter the lagoon will have difficulty getting out of it. An eight foot high “deer proof” fence will be installed around the lagoons to provide a barrier to deer and other large animals that could damage the liner.

- Supplemental canal water may be required to grow a healthy crop since phosphorus is the limiting factor that controls the land area requirements. Irrigation water in the Bruneau area is provided from the Buckhorn Ditch which is diverted from the Bruneau River. There are no storage reservoirs along the Bruneau River, so water is limited to normal flows which can be quite low in mid to late summer when the irrigation demand is the highest.

The advantages of Alternative 3b are:

- Land application of the treated effluent allows the lagoons to have a lower total volume.

The disadvantages of Alternative 3b are:

- The high groundwater in the area of the wastewater treatment facility will need to be mitigated and will require monitoring in order to maintain the integrity of the lagoon liners.

- Additional irrigation water will be required to grow a harvestable crop for nutrient removal.
- A total of 4.3 acres of useable land application area is required. An additional 2.64 acres (including setbacks) of land application property will need to be purchased or leased.

2.2.5 Alternative 4a: Reinstate a Portion of the North Lagoon and Upgrade the South Lagoon to Provide Sufficient Storage to Operate as an Evaporative System with Separate WTP Discharge Land Application.

Alternative 4a – Reinstate a portion of the north lagoon and upgrade the south lagoon to provide sufficient storage to operate as an evaporative system without discharge from the water treatment plant included in the treatment and land application. Construct a separate WTP discharge pipeline, storage lagoon and land application system:

The following sections outline the required improvements to the existing treatment lagoons. There would be no effluent discharge with this alternative

- A portion of the north lagoon would be reinstated to provide a second lagoon with sufficient surface area to provide a total containment evaporative lagoon system for the domestic wastewater. The total lagoon volume required in 2033 without the water treatment plant discharge is 3.85 Mgal with a minimum surface area of 9.2 acres. The recommended improvements to reinstate a portion of the north lagoon are to remove the existing liner, construct an underdrain system to prevent groundwater buildup under the liner, construct a new north bank, install a new liner and reconnect the transfer structures and pipelines that were disconnected in 1992. The surface area of the reinstated north lagoon should be at least 4.0 acres. With an operating depth of 2.5 feet, the lagoon volume would be 3.26 Mgal.

- A different portion of the north lagoon would be reinstated to provide a storage lagoon for the WTP discharge. The WTP discharge would be delivered to the lagoon by a new gravity pipeline. The total lagoon volume required in 2033 for the water treatment plant discharge is 4.4 Mgal. This volume is based on a lagoon surface area of 2.70 acres and a land application area of 6.0 acres. The recommended improvements to reinstate a portion of the north lagoon are to remove the existing liner, construct an underdrain system to prevent groundwater buildup under the liner, reconstruct the north bank of the north lagoon, install a new liner and construct a new transfer structure, irrigation pump station and land application sprinkler system.

- The upgrade of the south lagoon includes removal of the existing liner, construction of an underdrain system and installation of a new liner.

- An eight foot high “deer proof” fence will be installed around the lagoons to provide a barrier to deer and other large animals that could damage the liner.

The advantages of Alternative 4a are:

- Separation of the WTP discharges allows the evaporative lagoons for the effluent to have less volume and surface area.
- Land application of the WTP discharges allows the lagoons to have a lower total volume.
- The wastewater and WTP discharges remain separated.
- Treated wastewater effluent is disposed of through evapotranspiration and will not require testing.

- There are no setback requirements for the WTP discharge water land application.
- No additional treatment and/or disposal property is required.

The disadvantages of Alternative 4a are:

- The high groundwater in the area of the wastewater treatment facility will need to be mitigated and will require monitoring in order to maintain the integrity of the lagoon liners.

2.2.6 Alternative 4b: Reinstate the North Lagoon, Upgrade the South Lagoon and Construct Additional Lagoons to Provide Sufficient Storage to Operate as an Evaporative System With Influent From the Water Treatment Plant:

The following sections outline the required improvements to the existing treatment lagoons. There would be no effluent discharge with this alternative.

- The north lagoon would be reinstated to provide a second lagoon to increase the storage volume and surface area towards providing a total containment evaporative lagoon system. The total lagoon volume required in 2033 with the water treatment plant discharge is 9.57 Mgal with a minimum surface area of 22.80 acres. The recommended improvements to the north lagoon are to remove the existing liner, construct an underdrain system to prevent groundwater buildup under the liner, reconstruct the north bank, install a new liner and reconnect the transfer structures and pipelines that were disconnected in 1992. The surface area of the reinstated north lagoon will be 7.0 acres. With an operating depth of 2.5 feet, the lagoon volume would be 5.70 Mgal. The south lagoon has a surface area of 5.54 acres and a volume of 4.20 Mgal for a total surface area with both lagoons of 12.54 acres and a total volume of 9.9 Mgal. Therefore, new lagoons with a minimum surface area of 10.26 acres will be necessary to provide sufficient surface area for a total containment evaporative solution.

- The recommended construction of the new lagoons includes excavation/embankment to shape the new lagoon(s), construction of an underdrain system to prevent groundwater buildup under the liner, installation of a new liner and construction of transfer structures and pipelines to supply effluent to the new lagoons. The surface area of the new lagoons will be 10.26 acres. With an operating depth of 2.5 feet, the lagoon volume would be 8.36 Mgal. The upgrade of the south lagoon includes removal of the existing liner, construction of an underdrain system and installation of a new liner.

- The upgrade of the south lagoon includes removal of the existing liner, construction of an underdrain system and installation of a new liner.

- An eight foot high “deer proof” fence will be installed around the lagoons to provide a barrier to deer and other large animals that could damage the liner.

The advantages of Alternative 4b are:

- Treated wastewater effluent and WTP disposal is disposed of through evapotranspiration and will not require testing.

The disadvantages of Alternative 4b are:

- The high groundwater in the area of the wastewater treatment facility will need to be mitigated and will require monitoring in order to maintain the integrity of the lagoon liners.

2.2.7 Alternative 5a: Construct a New Two Lagoon Facility at a Location Without Shallow Groundwater with a Land Application System:

The following sections outline the required improvements to construct new treatment lagoons and a slow rate land application system at a new location where shallow groundwater does not intrude beneath the lagoons. The WTP discharge would not be included in the sewer effluent. Supplemental irrigation water will be very difficult to obtain at this site; therefore, the land application irrigation period will be from April to June with corresponding reduction in the crop yield.

- Purchase of new property would be required at a new location where shallow groundwater does not intrude beneath the lagoons. Most of the area that is lower than the Buckaroo Ditch has shallow groundwater at least a portion of the year and would not be suitable for construction of a new treatment plant. The area immediately north and east of the ditch is too steep for economical construction of sewer lagoons. There is property located approximately 3/8 mile north of the District boundaries that is owned by the U.S. Bureau of Land Management that is relatively flat, should not have shallow groundwater, appears to have adequate soil depth and is isolated from residences. Approximately 39 acres would be required for this alternative with a 300 foot setback from the property line to the land application area and 200 foot setback to the lagoons. The BLM no longer leases property for the use of wastewater treatment and disposal, so the property would have to be purchased following Federal property procurement requirements. Privately owned ground that has suitable topographic features is located beyond the BLM property and will require additional piping and pump capacity.

- The total lagoon volume required in 2033 without the WTP discharge is 3.19 Mgal with a minimum surface area of 1.85 acres. The recommended construction of the new lagoons includes excavation / embankment to shape the new lagoons, installation of a new liner and construction of transfer structures and pipelines to supply effluent to the new lagoon. The maximum operating depth of the lagoons will be 5 feet. The total depth of the lagoons will be 8 feet to allow 1 foot for sludge accumulation and 2 feet of freeboard.

- The construction of a new lift station and a pressure sewer to the new site. The lift station would be located near Highway 51/78 below the last sewer service connection. The lift station would require duplex 10 horsepower pumps to deliver 80 gallons a minute to the treatment plant through a 6800 linear feet 4” pressure main. The elevation difference from the lift station to the new treatment plant is estimated to be 175 feet.

- The existing water treatment discharge could be delivered to the existing sewer treatment system to be stored and land applied using the south lagoon or evaporated using both lagoons. The maximum flow from the treatment plant is approximately 215 gpm which could be transported with a 4 inch diameter pipe. The pipe will connect to the existing discharge near the Buckaroo Ditch and will gravity flow to the existing treatment plant lagoons. The pipe could be installed inside the existing 8 inch sewer along State Highway 51/78 to save cost of excavation and backfill. The lift station at the existing lagoons could be bypassed since the new pipeline would have sufficient elevation at the beginning to gravity flow into the lagoons.

- The construction of a chlorine contact chamber an irrigation pump station and sprinkler irrigation system. The irrigation pumping rate is estimated to be 87 gpm to apply 2.34 Mgal over a 25 day period. A volume of 1800 gallons will be required for the chlorine contact chamber for a 30 minute contact time. This contact time can be accomplished by running the pumped effluent through 450 linear feet of 12 inch pipe prior to delivery to the land application site.

- An eight foot high "deer proof" fence will be installed around the lagoons to provide a barrier to deer and other large animals that could damage the liner.

The advantages of Alternative 5a are:

- Land application of the treated effluent allows the lagoons to have a lower total volume.
- The existing facilities continue to be used for the water treatment plant storage and disposal.
- No groundwater collection and disposal is required at either site.

The disadvantages of Alternative 5a are:

- Additional irrigation water will be required to grow a harvestable crop for nutrient removal.
- A total of 39 acres of treatment and land application area is required and would need to be purchased.
- The head requirements of the new lift station are much higher; therefore the cost to operate and maintain it are higher.

2.2.8 Alternative 5b: Construct a New Three Lagoon Facility at a Location Without Shallow Groundwater with a Land Application System:

The following sections outline the required improvements to construct three new treatment lagoons and a slow rate land application system at a new location where shallow groundwater does not intrude beneath the lagoons. The water treatment plant discharge would not be included in the sewer effluent. Supplemental irrigation water will be very difficult to obtain at this site; therefore, the land application irrigation period will be from April to June with corresponding reduction in the crop yield.

- Purchase of new property would be required at a new location where there is shallow groundwater does not intrude beneath the lagoons. Most of the area that is lower than the Buckaroo Ditch has shallow groundwater at least a portion of the year and would not be suitable for construction of a new treatment plant. The area immediately north and east of the ditch is too steep for economical construction of sewer lagoons. There is property located approximately 3/8 mile north of the District boundaries that is owned by the U.S. Bureau of Land Management that is relatively flat, should not have shallow groundwater, appears to have adequate soil depth and is isolated from residences. Approximately 64 acres would be required for this alternative to accommodate the 300 foot setback from the property line to the land application site and the 200 foot setback from the property line to the lagoons.

- The total lagoon volume required in 2033 with the water treatment plant discharge is 7.33 Mgal with a minimum surface area of 4.24 acres. The recommended construction of the new lagoons includes excavation/embankment to shape the new lagoons, installation of a new liner and construction of transfer structures and pipelines to supply effluent to the new lagoon. The

maximum operating depth of the lagoons will be 8.42 feet. The total depth of the lagoons will be 11.42 feet to allow 1 foot for sludge accumulation and 2 feet of freeboard.

- The construction of a new lift station and a pressure sewer to the new site. The lift station would be located near Highway 51/78 below the last sewer service connection. The lift station would require duplex 20 horsepower pumps to deliver 190 gallons a minute to the treatment plant through a 6800 linear feet 6 inch pressure main. The elevation difference from the lift station to the new treatment plant is estimated to be 175 feet.

- The construction of a chlorine contact chamber an irrigation pump station and sprinkler irrigation system. The irrigation pumping rate is estimated to be 199 gpm to apply 5.38 Mgal over a 25 day period. A volume of 5,970 gallons will be required for the chlorine contact chamber for a 30 minute contact time. This contact time can be accomplished by running the pumped effluent through 254 linear feet of 24 inch pipe prior to delivery to the land application site.
- An eight foot high "deer proof" fence will be installed around the lagoons to provide a barrier to deer and other large animals that could damage the liner.

The advantages of Alternative 5b are:

- Land application of the treated effluent allows the lagoons to have a lower total volume.
- No groundwater collection and disposal is required at the new site.

The disadvantages of Alternative 5b are:

- Additional irrigation water will be required to grow a harvestable crop for nutrient removal.
- A total of 64 acres of treatment and land application area is required and would need to be purchased.
- The head requirements of the new lift station are much higher; therefore the cost to operate and maintain it are higher.

2.2.9 Alternative 6a: Construct a New Two Lagoon Total Containment Facility at a Location Without Shallow Groundwater:

The following sections outline the required improvements to construct new lift station and two total containment treatment lagoons at a new location where shallow groundwater does not intrude beneath the lagoons. The water treatment plant discharge would not be included in the sewer effluent:

- Purchase of new property would be required at a new location where there is shallow groundwater does not intrude beneath the lagoons. Most of the area that is lower than the Buckaroo Ditch has shallow groundwater at least a portion of the year and would not be suitable for construction of a new treatment plant. The area immediately north and east of the ditch is too steep for economical construction of sewer lagoons. There is property located approximately 3/8 mile north of the District boundaries that is owned by the U.S. Bureau of Land Management that is relatively flat, should not have shallow groundwater, appears to have adequate soil depth and is isolated from residences. Approximately 24 acres would be required for this alternative to accommodate the 200 foot setback from the property line to the lagoons

- The total lagoon volume required in 2033 without the water treatment plant discharge is 3.86 Mgal with a minimum surface area of 9.50 acres. The recommended construction of the new lagoons includes excavation/embankment to shape the new lagoons, installation of a new liner and construction of transfer structures and pipelines to supply effluent to the new lagoon. The maximum operating depth of the lagoons will be 3.80 feet. The total depth of the lagoons will be 6.80 feet to allow 1 foot for sludge accumulation and 2 feet of freeboard.

- The construction of a new lift station and a pressure sewer to the new site. The lift station would be located near Highway 51/78 below the last sewer service connection. The lift station would require duplex 10 horsepower pumps to deliver 80 gallons a minute to the treatment plant through a 6800 linear feet 4 inch pressure main. The elevation difference from the lift station to the new treatment plant is estimated to be 175 feet.

- The existing water treatment discharge could be delivered to the existing sewer treatment system to be stored and land applied using the south lagoon or evaporated using both lagoons. The maximum flow from the treatment plant is approximately 215 gpm which could be transported with a 4 inch diameter pipe. The pipe would connect to the existing discharge near the Buckaroo Ditch and gravity flow to the existing treatment plant lagoons. The pipe could be installed inside the existing 8 inch sewer along State Highway 51/78 to save cost of excavation and backfill. The lift station at the existing lagoons could be bypassed since the new pipeline would have sufficient elevation at the beginning to gravity flow into the lagoons.

The advantages of Alternative 6a are:

- Land application of the WTP discharges allows the lagoons to have a lower total volume.
- The wastewater and WTP discharges remain separated.
- Treated wastewater effluent is disposed of through evapotranspiration and will not require testing.
- There are no setback requirements for the WTP discharge water land application.
- No groundwater collection and disposal is required at the new site.

The disadvantages of Alternative 6a are:

- A total of 23 acres of treatment land area is required and would need to be purchased.
- The head requirements of the new lift station are much higher; therefore the cost to operate and maintain it are higher.

2.2.10 Alternative 6b: Construct a New Three Total Containment Lagoon Facility at a Location Without Shallow Groundwater:

The following sections outline the required improvements to construct a new lift station and three new treatment lagoons at a new location where shallow groundwater does not intrude beneath the lagoons. The water treatment plant discharge would be included in the sewer effluent:

- Purchase of new property would be required at a new location where there is shallow groundwater does not intrude beneath the lagoons. Most of the area that is lower than the Buckaroo Ditch has shallow groundwater at least a portion of the year and would not be suitable

for construction of a new treatment plant. The area immediately north and east of the ditch is too steep for economical construction of sewer lagoons. There is property located approximately 3/8 mile north of the District boundaries that is owned by the U.S. Bureau of Land Management that is relatively flat, should not have shallow groundwater, appears to have adequate soil depth and is isolated from residences. Approximately 63 acres would be required for this alternative to accommodate the 200 foot setback from the property line to the lagoons

- The total lagoon volume required in 2033 with the water treatment plant discharge is 9.57 Mgal with a minimum surface area of 22.8 acres. The recommended construction of the new lagoons includes excavation/embankment to shape the new lagoons, installation of a new liner and construction of transfer structures and pipelines to supply effluent to the new lagoon. The maximum operating depth of the lagoons will be 5.58 feet. The total depth of the lagoons will be 8.58 feet to allow 1 foot for sludge accumulation and 2 feet of freeboard.

- The construction of a new lift station and a pressure sewer to the new site. The lift station would be located near Highway 51/78 below the last sewer service connection. The lift station will require duplex 20 horsepower pumps to deliver 190 gallons a minute peak hourly flow to the treatment plant through a 6800 linear feet 6 inch pressure main. The elevation difference from the lift station to the new treatment plant is estimated to be 175 feet.

The advantages of Alternative 6b are:

- Land application of the WTP discharges allows the lagoons to have a lower total volume.
- Treated wastewater effluent is disposed of through evapotranspiration and will not require testing.
- No groundwater collection and disposal is required at the new site.

The disadvantages of Alternative 6b are:

- A total of 63 acres of treatment land area is required and would need to be purchased.
- The head requirements of the new lift station are much higher; therefore the cost to operate and maintain it are higher.

2.3 COST SUMMARY OF ALTERNATIVES

An opinion of the probable capital, annual operation and maintenance, and life-cycle costs in 2013 dollars for improvement Alternatives 3, 4, 5, and 6 is shown in Table 2-1. For the life-cycle costs, the inflation rate was assumed to be equal to the interest rate over the 20-year planning period. All costs are shown in millions of dollars

Table 2-1. Cost Summary of Improvement Alternatives

	ALTERNATIVE*							
Parameter	3a	3b	4a	4b	5a	5b	6a	6b
Water Treatment Plant Discharge Included in Influent	No	Yes	No	Yes	No	Yes	No	Yes
Amount of Additional Property Required (acres)	0	0	0	0	0	0	0	0
Total Project Capital Costs (Million)	$2.13	$2.45	$2.20	$3.68	$1.96	$2.60	$2.08	$4.44
Annualized Capital Costs	$108,615	$124,924	$112,115	$187,552	$100,069	$132,526	$105,936	$226,644
Annual Operation and Maintenance	$45,491	$45,821	$29,629	$28,256	$46,952	$50,010	$29,567	$33,136
Total Annual Cost - First Year	$154,106	$170,745	$141,744	$215,808	$147,022	$182,535	$135,503	$259,780
Capital Cost Present Worth (Million)	$1.62	$1.86	$1.67	$2.79	$1.49	$1.97	$1.58	$3.37
Operation and Maintenance Present Worth (Million)	$0.91	$0.92	$0.59	$0.57	$0.94	$1.00	$0.59	$0.66
Total Present Worth (Million)	$2.53	$2.77	$2.26	$3.36	$2.43	$2.97	$2.17	$4.03

*3a Land Application At Current Site With Water Treatment Plant Discharge Land Applied Separately
3b Land Application At Current Site With Water Treatment Plant Discharge
4a Total Containment At Current Site With Water Treatment Plant Discharge Land Applied Separately
4b Total Containment At Current Site With Water Treatment Plant Discharge
5a Land Application At New Site With Water Treatment Plant Discharge to Existing Lagoons for Evaporation
5b Land Application At New Site With Water Treatment Plant Discharge
6a Total Containment At New Site With Water Treatment Plant Discharge to Existing Lagoons for Evaporation
6b Total Containment At New Site With Water Treatment Plant Discharge

As shown in Table 6-1, the three alternatives with the lowest total present worth are 4a, 5a, and 6a. Of these three alternatives, 4a is the only alternative that will not require the acquisition of additional property and all the associated risks and challenges associated with that issue.

2.4 CURSORY ENVIRONMENTAL SCREENING OF ALTERNATIVES

A preliminary environmental screening of each of the alternatives was performed and the findings are summarized in Table 2-2.

Table 2-2. Preliminary Environmental Screening of Alternatives

No Significant Impact	O
Positive Impact	P
Negative Impact	N

Parameter	Alternative									
	No Action	Regional	3 a	3 b	4 a	4 b	5 a	5 b	6 a	6 b
Topography, Geology, Soils	O	N	P	P	P	N	N	N	N	N
Climate	O	O	O	O	O	O	O	O	O	O
Population	N	O	O	O	O	O	O	O	O	O
Economics and Social Prof.	N	O	O	O	O	O	O	O	O	O
Land Use	N	N	N	N	P	N	N	N	N	N
Floodplain Development	O	O	O	O	O	O	O	O	O	O
Wetlands	O	O	O	O	O	O	O	O	O	O
Wild and Scenic Rivers	O	O	O	O	O	O	O	O	O	O
Cultural Resources	O	O	O	O	O	O	O	O	O	O
Flora and Fauna	N	N	P	P	O	O	N	N	N	N
Essential Fish Habitat	O	O	O	O	O	O	O	O	O	O
Recreation and Open Space	O	O	O	O	O	O	N	N	N	N
Agricultural Lands	N	O	P	N	P	N	O	O	O	O
Air Quality	O	O	O	O	O	O	O	O	O	O
Water quality, quantity	N	O	O	O	O	O	O	O	O	O
Public Health	N	O	O	O	O	O	O	O	O	O
Solid Waste / Sludge Man.	O	O	O	O	O	O	O	O	O	O
Energy	O	N	N	N	P	P	N	N	N	N
Reuse/land Application	N	P	P	P	P	P	P	P	P	P
Regionalization	O	N	O	O	O	O	O	O	O	O

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

CHAPTER 3: SELECTED ALTERNATIVE

3.0 SELECTED ALTERNATIVE

3.1 WASTEWATER COLLECTION SYSTEM IMPROVEMENTS

No improvements to the wastewater collection system are necessary as part of the selected improvement alternative.

3.2 WASTEWATER TREATMENT FACILITY IMPROVEMENTS

After discussion with the District, IDWR, IDEQ and presentation and review of the Wastewater System Master Plan including Table 6-1, Matrix of Upgrade Alternatives, the preferred alternative is 4a.

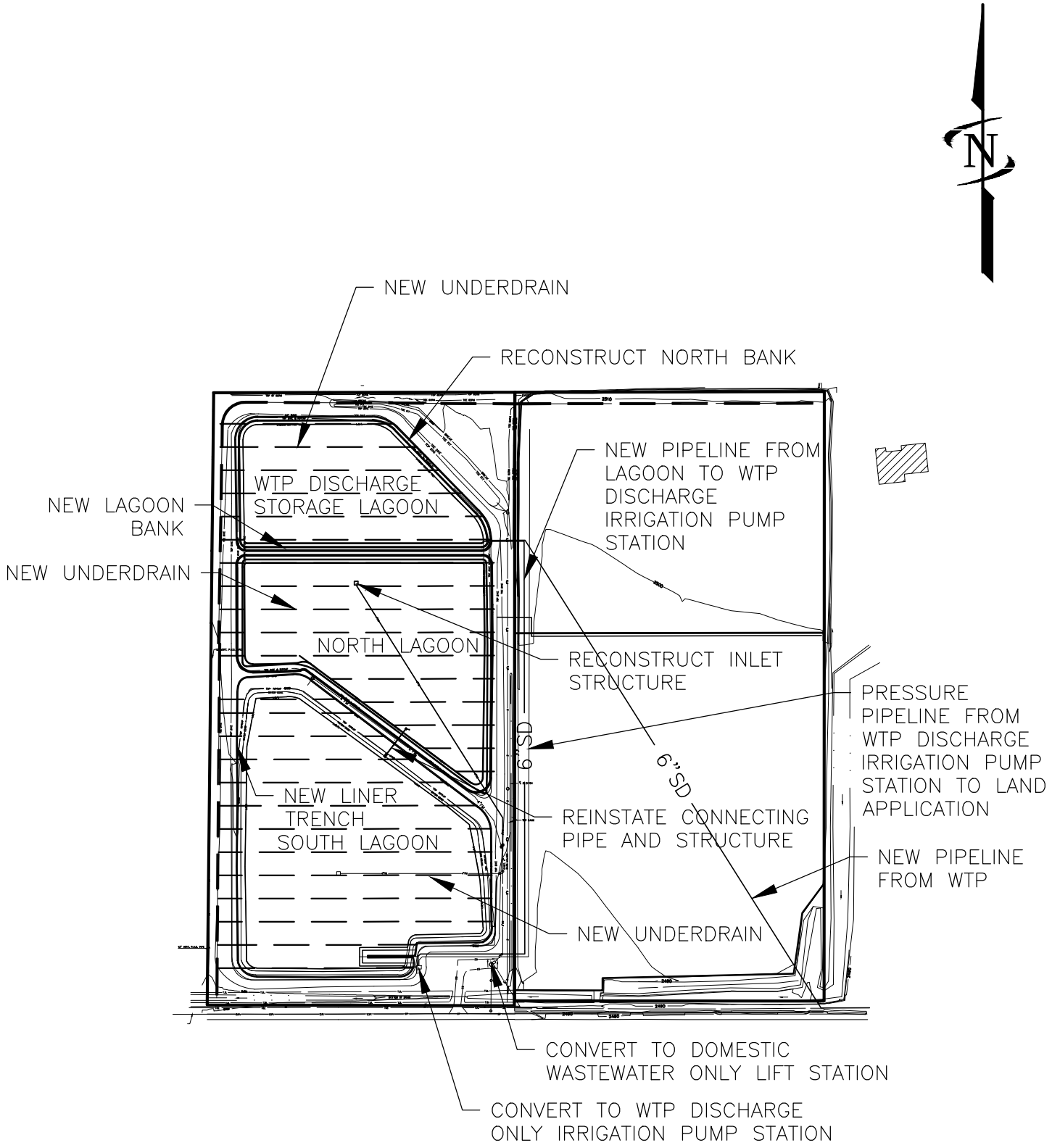
Construction of the Alternative 4a improvements includes:

- Separation of the Wastewater and Water Treatment Plant discharge.
- Reconstruction of the north lagoon in to two lagoons, one for wastewater and one for WTP discharge.
- Total containment of wastewater with evaporative disposal.
- Land application of the WTP discharge utilizing the existing irrigation pump station.

These improvements and their approximate locations are illustrated in Figure 3-1.

3.3 COST ESTIMATES

Overall capital and operation and maintenance costs were developed for the recommended improvements. **Table 3-1** summarizes the improvement construction items, quantities, and cost opinion. It is anticipated that all of this construction will occur in previously disturbed areas.



Plot Date:12/15/2015 10:38 AM Plotted By: Jordan Parker
Date Created:3/19/2014 \\TWINFILES\PUBLIC\PROJECTS\JUB\60-12-022-BRUNEAU-WASTE_WATER_SYSTEM_MASTER_PLAN_AND_EID\CAD\SHEET\EID\FIGURE 3-1.DWG

REUSE OF DRAWINGS
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NO.	REVISION DESCRIPTION	BY	APR.	DATE

FILE: FIGURE 3-1
JUB PROJ. #:60-12-022
DRAWN BY: RLH
DESIGN BY: RLH
CHECKED BY: KCK
LAST UPDATED: 12/14/2015

J-U-B ENGINEERS, INC.

WASTEWATER SYSTEM MASTER PLAN
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 3-1
ALTERNATIVE 4a SITE IMPROVEMENTS

SHEET
1

Table 3-1. Alternative 4A Total Containment Lagoons

Item	Est. Quan.	Unit	Unit Price	Total Price
Lagoon Headworks				
Install 8" PVC Gravity Main	0	LF	$28	$0
3 Inch Parshall Flume	0	EA	$5,000	$0
Ultrasonic Level Sensor & Receiver	0	LS	$4,000	$0
Coarse Bar Screen	0	EA	$12,000	$0
Concrete Channel	0	CY	$1,200	$0
Slide Valves	0	EA	$3,000	$0
Misc. Piping & Fittings	0	LS	$2,500	$0
				-
SUB-TOTAL				**$0**
Containment Lagoons				
Geotechnical Investigation	1	LS	$25,000.00	$25,000.00
Clearing & Grubbing		CY	$2.50	$0
Remove Existing Liner and Cover	9,403	CY	$0.50	$4,702
Excavation of Lagoon Site	0	CY	$2.50	$0
Lagoon Embankment Fill	3,614	CY	$3.50	$12,649
Road/Approach Fill	0	CY	$5.00	$0
Retention Berm	0	CY	$1.00	$0
Rock Excavation	0	CY	$16.00	$0
Top of Dike/Approach Aggregate Surfacing	859	CY	$25.00	$21,475
Exterior of Dike Aggregate Surfacing	161	CY	$30.00	$4,830
Transfer/Outlet Structures	2	EA	$6,000.00	$12,000
Design, Test, Manufacture, Deliver and Store HDPE Liner	521,898	SF	$0.45	$234,854
Install & Test HDPE Liner	521,898	SF	$0.35	$182,664
HDPE Liner Ladders (50' OC)	86	EA	$500.00	$43,000
HDPE Liner Air Vents (25' OC)	189	EA	$80.00	$15,120
Pipe Penetration	4	EA	$500.00	$2,000
Liner Anchor Trench & Earthwork	4,237	LF	$6.50	$27,541
Underdrain Pipe	10,226	LF	$14.00	$143,164
Underdrain Filter Fabric	81,808	SF	$0.30	$24,542
Underdrain Clean Drain Rock	1,382	CY	$20.00	$27,640
				-
SUB-TOTAL				**$781,181**
Water Treatment Discharge Storage and Land Application				
Remove Existing Liner and Cover	2,559	CY	$0.50	$1,280
Lagoon Embankment Fill	1,031	CY	$3.50	$3,609
Design, Test, Manufacture, Deliver and Store HDPE Liner	146,677	SF	$0.45	$66,005
Install & Test HDPE Liner	146,677	SF	$0.35	$51,337

	HDPE Liner Ladders (50' OC)	31	EA	$500	$15,500
	HDPE Liner Air Vents (25' OC)	66	EA	$80	$5,280
	Pipe Penetration	2	EA	$500	$1,000
	Liner Anchor Trench & Earthwork	1,506	LF	$6.50	$9,789
	Underdrain Pipe	2,934	LF	$14.00	$41,076
	Underdrain Filter Fabric	23,472	SF	$0.30	$7,042
	Underdrain Clean Drain Rock	397	CY	$20.00	$7,940
	Top of Dike/Approach Aggregate Surfacing	156	CY	$18	$2,808
	Transfer/Outlet Structures	1	EA	$15,000	$15,000
	6"Gravity / Pressure Main to Lagoon from WTP	3,942	LF	$25.00	$98,550
	Buckeroo Ditch Crossing (15" boring with rock)	20	LF	$1,000.00	$20,000
	Air/Vacuum Relief Valve	3	EA	$6,000	$18,000
	Type "C" Surface Repair	1,800	LF	$7	$12,600
	Type " E" Surface Repair	705	LF	$4	$2,820
	Type " P" Surface Repair	1,530	LF	$20	$30,600
	6" Gravity / Pressure Main Lagoon to Pump Station	1,230	LF	$25	$30,750
	Type "C" Surface Repair	252	LF	$7	$1,764
	Type " E" Surface Repair	978	LF	$4	$3,912
	Connect to Pump Station and Plug Existing Feed	1	LS	$2,000.00	$2,000
					-
	SUB-TOTAL				**$448,661**
Yard Piping					
	8" Gravity Piping - Headworks to Cell #2	0	LF	$28.00	$0
	8" Gravity Piping - Headworks to Cell #3	0	LF	$28.00	$0
	8" Gravity Piping - Cell #1 to Cell #2	0	LF	$28.00	$0
	8" Gravity Piping - Cell #2 to Cell #3	0	LF	$28.00	$0
	8" Gravity Piping - Cell #4 to Cell #3		LF	$28.00	$0
	8" Gravity Piping - Cell #3 to Lift Station		LF	$28.00	$0
	8" Gravity Piping - Cell #5 to Cell #2		LF	$28.00	$0
					-
	SUB-TOTAL				**$0**
Site Fencing					
	Site Fencing	0	LF	$5.00	$0
	Deer Proof Fence	3,400	LF	$20.00	$68,000
					-
	SUB-TOTAL				**$68,000**
Access Road					
	Gravel Access Road	0	SY	$6.00	$0
					-
	SUB-TOTAL				**$0**

Land					
	Land Acquisition	0.0	ACRES	$5,000	$0
					-
	SUB-TOTAL				**$0**
Lift Station					
	See Lift Station Tab Spreadsheet for Breakdown				
Water Treatment Discharge Pipeline to a New Site					
	Install 4" Pressure Main	0	LF	$18	$0
	Air/Vacuum Relief Valve	0	EA	$6,000	$0
	Type "C" Surface Repair	0	LF	$7	$0
	Type " E" Surface Repair	0	LF	$4	$0
	Type " P" Surface Repair	0	LF	$20	$0
	Installation Inside Existing 8" Sewer	0	LF	$20	$0
	Traffic Control	0	Days	$200	$0
					-
	SUB TOTAL				**$0**
				SUB-TOTAL CONST.COSTS	**$1,297,841**
	Contractor Mobilization / Demobilization (5.0%)				$64,892
	Contractor Admin, Ins, Bond (10%)				$129,784
	Contingencies (20%)				$259,568
	TOTAL CONST. COST - TOTAL CONTAINMENT LAGOONS *				**$1,752,086**

Does not include land acquisition, engineering and construction management, admin, legal, publications, Davis-Bacon wage compliance and American Iron and Steel Compliance costs. Costs are in 2015 dollars and must be adjusted for actual year of construction.

In addition to the construction costs outlined in **Table 3-1**, capital costs were included for:

- Land acquisition (none required for Alternative 4a)
- Engineering and construction management
- Administration (funding), legal, and publications

An opinion of the probable total capital costs including the above costs for the recommended Alternative 4a improvements in 2015 dollars is summarized in **Table 3-2**.

Table 3-2. Opinion of Probable Total Capital Costs

Lagoon Headworks	$0
Total Containment Lagoons	$781,181
Yard Piping	$0
Site Fencing	$68,000
Gravel Access Road	$0
Lift Station	$0
Water Treatment Discharge Storage and Piping	$448,661
Sub-Total Construction Costs	$1,297,841
Contractor Mob/Demob (5%)	$64,892
Contractor Bonding, Administration and Insurance (10%)	$129,784
Contingencies (20%)	$259,568
Total Construction Costs	**$1,752,085**
Land Acquisition	$0
Engineering & Const. Mngt. (20%)	$350,417
Admin, Legal, and Publications	$95,000
Total Project Capital Costs	**$2,197,503**

Note that **Table 3-2** does not include the following costs which are dependent on the funding source requirements and project timing – (These costs are addressed and included, where appropriate, in Table 1 of the Executive Summary.)

- Davis-Bacon Prevailing Wage Compliance
- American Iron and Steel Compliance
- Interim interest expense
- Inflation

An opinion of the probable total operation and maintenance costs for the recommended improvements is summarized in **Table 3-3**.

Table 3-3. Opinion of Probable Total Operation and Maintenance Costs

Labor/Administration	$16,380
Lift Station Power	$303
Irrigation Pump Station Power WTP	$1,741
Chemicals	$500
Lagoon Seepage Testing	$600
Sampling	$0
Professional Services	$1,000
Miscellaneous Equipment/Repairs	$3,000
Sub-Total Annual O&M Costs	$23,524
Contingencies (20%)	$4,705
Short Lived Asset Reserve	$1,400
Total Annual O&M Costs	**$29,629**

The annual cost of the system must include a reserve to provide funds to replace short lived assets as needed. A summary of the short lived assets and the annual reserve required is shown in **Table 3-4**.

Table 3-4. Short Lived Asset Reserve

	Replacement Cost	Service Life (years)	Remaining Life (years)	Cost per Year	Cost per Month
Lift Station Pumps	$10,000	10	0	$1,000	$83
Influent Flow Meter	$4,000	10	0	$400	$33
TOTAL SHORT-LIVED ASSET RESERVE				**$1,400**	**$117**

3.4 PHASED CONSTRUCTION OF THE RECOMMENDED ALTERNATIVE

The estimated capital cost for the entire project may be a financial burden to the limited number of users of the Bruneau Water and Sewer District wastewater system. An alternative to completing the construction in one big project is to complete smaller portions as the financing is available and the facility upgrades are deemed necessary. Possible phases for the recommended alternative include:

- **Phase 1:** Reconstruction of the north lagoon including bank repair and re-lining to provide additional storage volume and evaporation capacity for the combined domestic wastewater and WTP discharge.
- **Phase 2:** Construction of a pipeline from the WTP to allow segregation of the WTP discharge, dividing a portion of the north lagoon as necessary to create separate storage volume for WTP discharge, and modification of the existing irrigation pump station to land apply the WTP discharge.
- **Phase 3:** Construction of a new underdrain system and liner in the south lagoon.

Phase 1 is the immediate need of the District which includes the reconstruction of the north lagoon to provide additional storage and evaporation capacity and a second lagoon for redundancy. Until the combined wastewater and WTP discharge volume approaches the evaporative capacity of both lagoons, the system can operate with evaporative disposal. At that time, the Phase 2 improvements can be completed to separate the WTP discharge from the domestic wastewater and provide separate storage and irrigation facilities for the WTP discharge. (Also, an alternative disposal method for the WTP discharge may be available for consideration at that time that would be less expensive.) Although the seepage test on the south lagoon did not exceed allowable seepage rates when it was performed in 2011, the Phase 3 improvements may eventually be needed due to the effects of suspected groundwater intrusion under the liner. However, the construction of the new underdrain system beneath the north lagoon as part of Phase 1 may ease or eliminate that concern which would allow Phase 3 to be delayed until the south lagoon liner is past its functional life.

An opinion of the probable total capital costs for the recommended improvements is summarized in **Table 3-5**. **Table 3-5** has the same list of cost items not included as **Table 3-2.**

Table 3-5. Opinion of Probable Total Capital Costs – Phased Construction

Item	Construction Costs
PHASE 1	
North Wastewater Treatment and Storage Lagoon Reconstruction Costs	$547,484
Site Fencing	$68,000
Contractor Mob/Demob, Bonding, Admin and Insurance	$92,323
Construction Contingencies	$123,097
Total Construction Costs	**$830,930**
Engineering and Construction Management	$166,190
Grant Preparation/Writing	$5,000
Funding Administration	$40,000
Legal and Bonding	$7,500
Audits, Publications and Miscellaneous	$2,500

Interim Construction Financing	$15,000
TOTAL PROJECT CAPITAL COSTS – PHASE 1	**$1,067,093**
PHASE 2	
Water Treatment Discharge Storage and Land Application	$448,661
Contractor Mob/Demob, Bonding, Admin and Insurance	$67,299
Construction Contingencies	$89,732
Total Construction Costs	**$605,692**
Engineering and Construction Management	$121,140
Grant Preparation/Writing	$5,000
Funding Administration	$40,000
Legal and Bonding	$7,500
Audits, Publications and Miscellaneous	$2,500
Interim Construction Financing	$15,000
TOTAL PROJECT CAPITAL COSTS – PHASE 2	**$796,832**
PHASE 3	
South Wastewater Treatment and Storage Lagoon Reconstruction Costs	$431,169
Contractor Mob/Demob, Bonding, Admin and Insurance	$64,675
Construction Contingencies	$86,234
Total Construction Costs	**$582,079**
Engineering and Construction Management	$116,420
Grant Preparation/Writing	$5,000
Funding Administration	$40,000
Legal and Bonding	$7,500
Audits, Publications and Miscellaneous	$2,500
Interim Construction Financing	$15,000
TOTAL PROJECT CAPITAL COSTS – PHASE 3	**$768,499**

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

CHAPTER 4: AFFECTED ENVIRONMENT/ENVIRONMENTAL RESOURCES

4.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL RESOURCES

4.1 GENERAL LAND USE

Land use within the Planning Area is predominantly residential with smaller areas of commercial development. Residential areas are located throughout the Planning Area, while commercial areas are primarily located along State Highway 51/78. The Bruneau School holds classes for kindergarten through 6th grade and is within the Planning Area.

The area surrounding the City and Planning Area is predominantly used for agricultural purposes. The fertile soils combined with irrigation water from the Buckaroo Ditch allow for the production of a wide variety of crops, including small grains, corn, dry beans, sugar beets, potatoes, melons, irrigated pasture and alfalfa. The dry rangeland is used for sheep and cattle grazing.

4.1.1 Proposed Project Planning Area

The Bruneau Water and Sewer District is located in the northeastern corner of Owyhee County (Figure 4-1) in the south central portion of Idaho. The District falls in Section 24 of Township 6 South, Range 5 East. The District is situated along U.S. Highway 51 approximately 0.04 miles west of the town.

The Wastewater Facilities Plan and Environmental Information Document (EID) are based on an overall proposed project planning area (PPPA) which represents a geographical area and population that the District can reasonably be expected to serve within a 20-year planning period from 2012 to 2032. Sufficient land is included in the PPPA to accommodate the forecasted residential growth and to allow some flexibility for future development of the community. A number of factors were considered in delineating the geographical boundary of the overall PPPA, including recent development patterns, location of existing wastewater system facilities, expandability of the existing wastewater system, land use designations, topography of the area and discussions with District personnel regarding areas of anticipated growth. Figures 4-2a and 4-2b show the overall PPPA for the Bruneau Water and Sewer District.

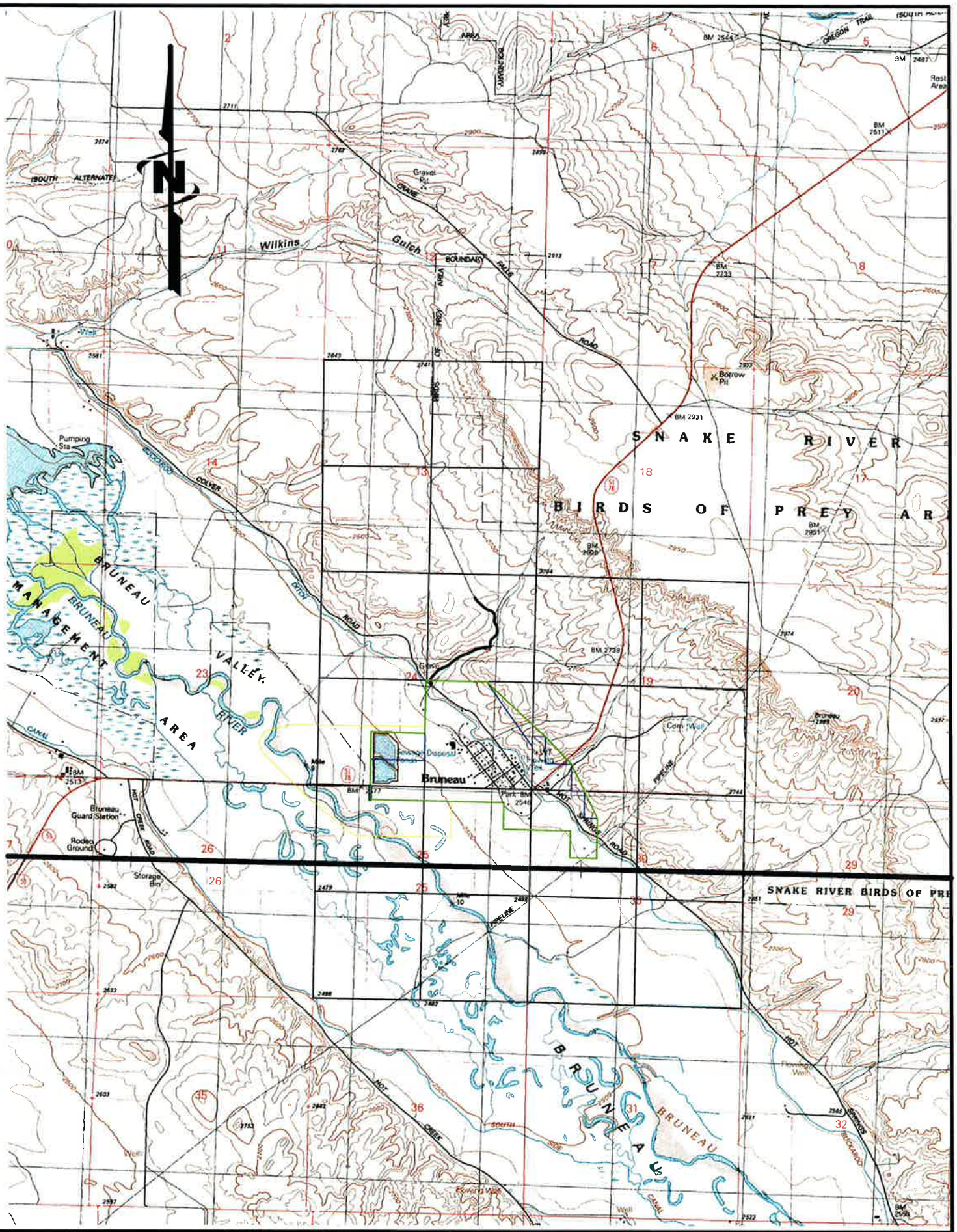

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FIGURE 4-1
VICINITY MAP

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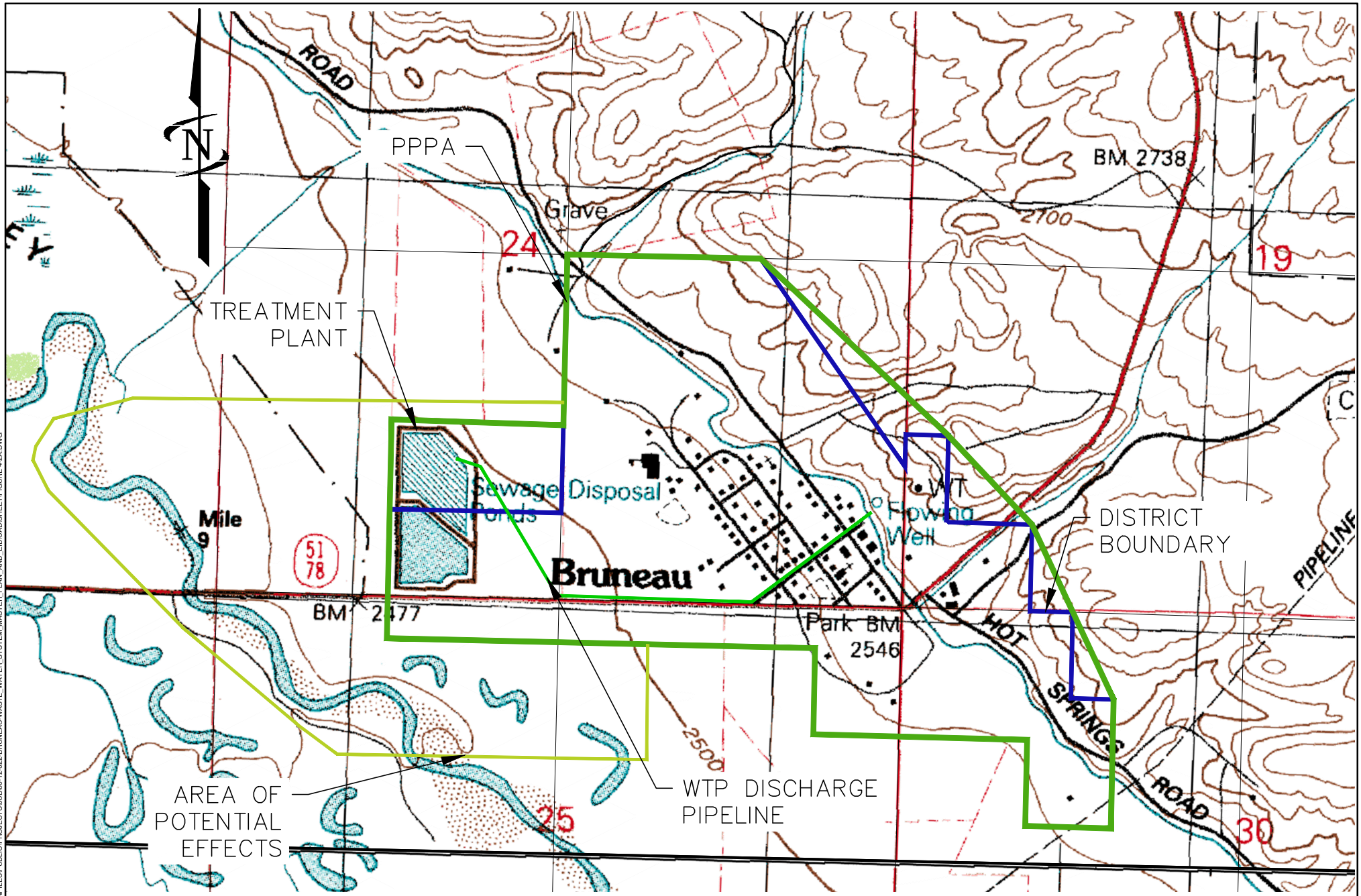

Plot Date:12/14/2015 4:47 PM Plotted By: Jordan Parker
Date Created:12/14/2015 \\TWINFILES\PUBLIC\PROJECTS\JUB60-12-022-BRUNEAU-WASTE_WATER_SYSTEM_MASTER_PLAN_AND_EIDCAD\SHEET\FIGURE 4-2A.DWG

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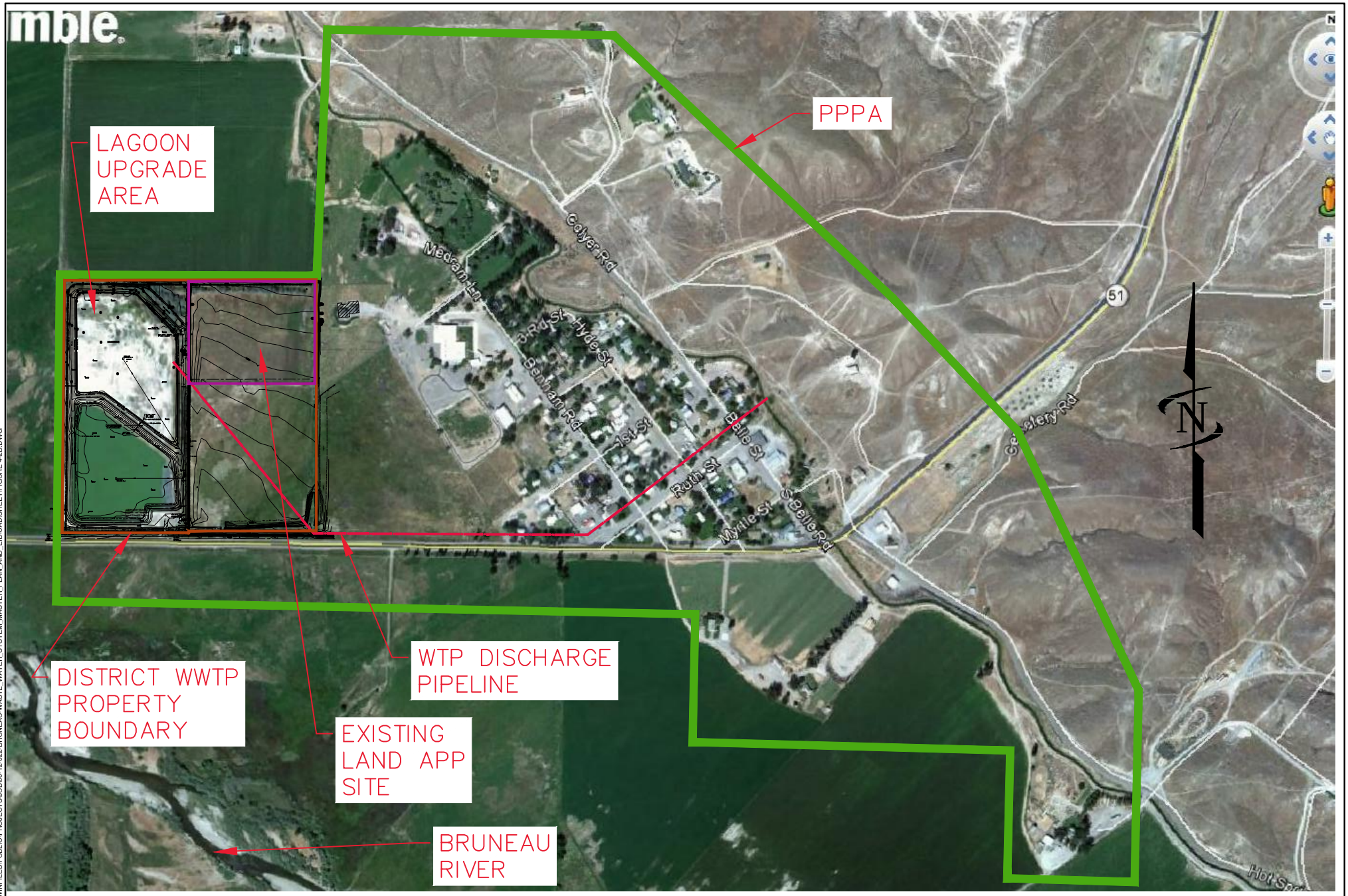
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 4-2a
PROPOSED PROJECT PLANNING AREA



Plot Date:12/14/2015 4:52 PM Plotted By: Jordan Parker
Date Created:12/14/2015 \\TWINFILES\PUBLIC\PROJECTS\JUB60-12-022-BRUNEAU-WASTE_WATER_SYSTEM_MASTER_PLAN_AND_EID\CAD\SHEET\FIGURE 4-2B.DWG

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PLOT DATE: 12/14/2015	
FILE: FIGURE 4-2B	

ENVIRONMENTAL INFORMATION DOCUMENT
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 4-2b
PROPOSED PROJECT PLANNING AREA (AERIAL)

4.1.2 Construction Areas

Figures 4-2a and 4-2b show the PPPA project improvements to the wastewater facilities will be constructed at the existing treatment plant site located west of the District on property that is currently owned by the District. The WTP Discharge pipeline will be located along the existing street and highway right-of-ways from the northeast edge of the District to the treatment plant site.

4.1.3 Area of Potential Effect

The area of potential effect (APE) is the same as the PPPA shown on Figures 4-2a and 4-2b and includes the wetlands located between the treatment plant and the Bruneau River. This current treatment facility operation could have a negative effect on this area if a leak or discharge from the treatment lagoon occurs. The proposed project will decrease the potential of leaks and discharge; therefore the potential effect on the wetland area will be positive.

4.2 PRIME FARMLAND

As defined by the 1978 EPA Policy to Protect Environmentally Significant Agricultural Lands, prime farmland has the "best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops and is available for these uses." According to the NRCS, soils within the Bruneau area are considered "prime or unique" farmland, if irrigated, and include Garbutt silt loam (65) (see Figure 4-3). The edge of the delineated Garbutt Soil area crosses the northeast corner of the treatment plant property but is not within the area of any new construction.

4.3 FLOOD PLAINS

An inquiry of the Federal Emergency Management Agency (FEMA) website completed to determine the existence of a floodplain in the Bruneau District area. FEMA has not mapped Owyhee County; therefore no floodplain map was available.

Keri Sigman the Idaho Flood Plain Coordinator with the Idaho Department of Water Resources (IDWR) was also consulted regarding potential flood plains in the project planning area. Besides the written information she provided, the Coordinator reported that "I am not aware of any other past floods for Bruneau." A copy of the consultation letter from the Department of Water Resources is included in Appendix D.

The wastewater treatment lagoons were constructed in the early 1980's. No flooding has occurred on the treatment plant site during the 30+ years of operation. Flooding in the area could occur with high flows in the Bruneau River. The top of the lowest lagoon dikes are 10 feet above the existing ground and the Bruneau River and adjacent wetlands are over ½ mile wide. Even a 500 year flood event will not reach an elevation that is higher than the top of the lagoon bank.

4.4 WETLANDS

The U.S. Fish and Wildlife Service (USFWS) provide wetlands mapping as part of their National Wetlands Inventory Program. Figure 4-4 shows the USFWS wetland map for the Bruneau area. As shown in the figure, there are two wetland areas in the Planning Area. One area is the north sewer lagoon that is not currently in use. The other area is in an irrigated field adjacent to the north boundary of the treatment plant land application area that is a result of surface irrigation and drainage in the area. The wetlands map provides only reconnaissance level information based on high elevation imagery and do not substitute for inspection by a qualified professional and consultation with the USACE. A summary of the

data limitations can be found at www. fws.gov/wetlands/Data/Limitations.html. Comment letters from the USACE are included in Appendix B and D.

In May 2014, Mr. Greg Martinez of the USACE sent an agency response letter regarding the proposed wastewater system improvements for the Bruneau Water and Sewer District. The letter mentioned the need for a DA permit if the new discharge pipeline is open-trenched across Buckeroo Ditch but did not address whether there would be impacts to the wetlands west of the existing lagoons. The area along the Bruneau River located south and west of the District is classified as freshwater emergent, freshwater forested/shrub and river wetland. The wetland located west of the lagoons begins at the edge of the District property. DEQ asked that an email confirmation be requested from USACE regarding those wetlands.

Impacts to the referenced wetlands are not anticipated. The proposed lagoon improvements will not encroach into the wetlands and will basically remain within the footprint of the existing lagoons. The proposed improvements called for an underdrain system to be installed under the lagoon liner to relieve water uplift pressure on the liner. An existing drain swale runs along the south edge of the property that drains to the river. The proposed drains under the lagoon liners will drain to this drainage swale near the southwest property corner. Based on the best topographical information that we currently have, the top of bank of that drain has an elevation of 2478 at the west property line. The finish floor elevation of the south (lowest) lagoon is 2484. Therefore, it appears that the drains under the liner will be higher than the adjacent wetlands located west of the lagoons and the proposed improvements will not alter the current hydrology of the swale and wetlands.

The email copy dated October 6, 2015 from Mr. Greg Martinez of USACE concurred with this assessment.

It should be noted that a field survey by a wetlands specialist is recommended during preliminary design to identify any impacts to wetlands that may not be identified on available maps, such as drainage ditches and “wet” areas in the field east of the lagoons where piping may be constructed.

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DESIGN BY: RLH
CHECKED BY: KGK
LAST UPDATED: 1/13/2015

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BRUNEAU WATER AND SEWER DISTRICT

FIGURE 4-3
NRCS SOILS MAP

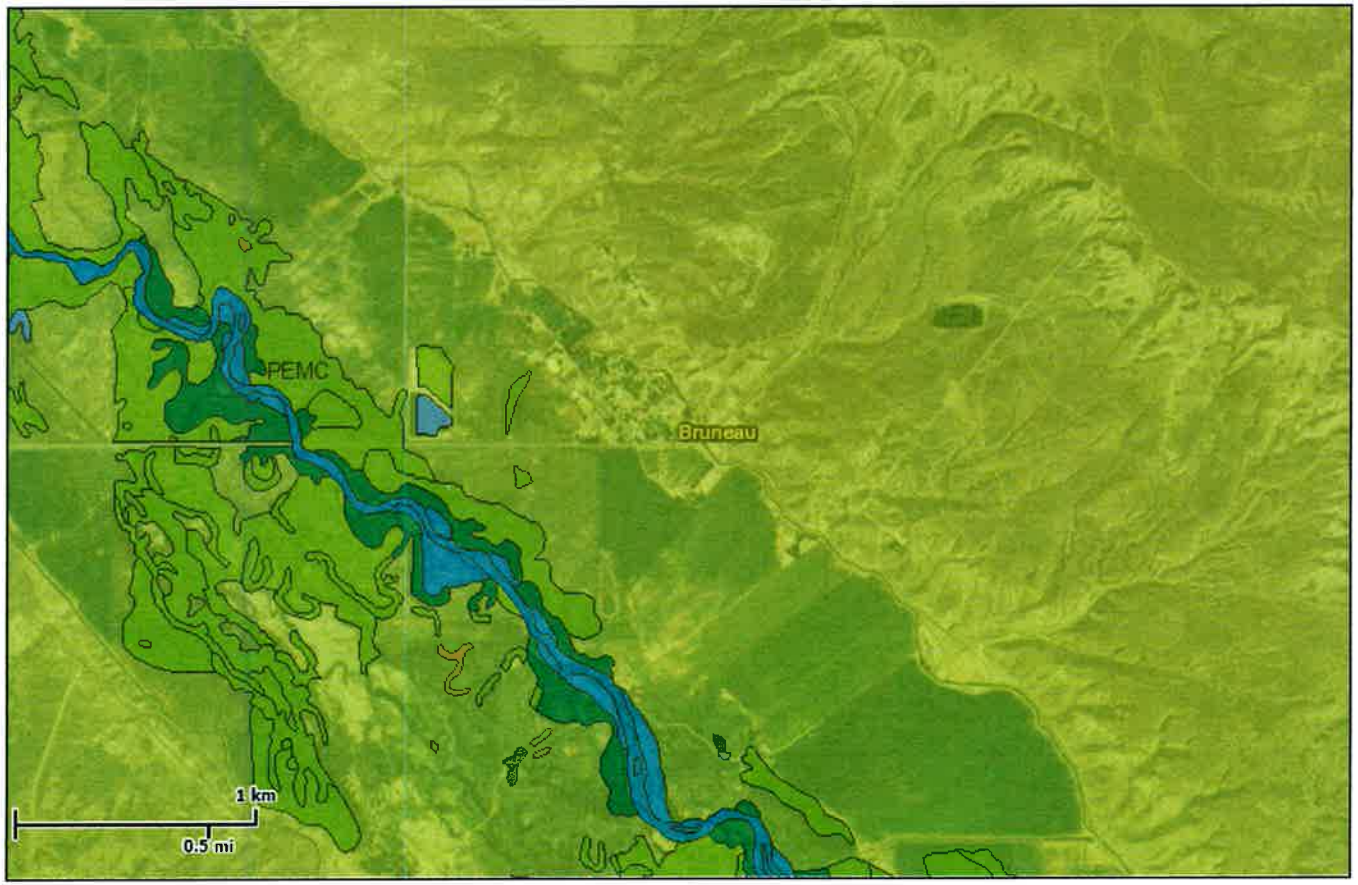
SHEET
1

U.S. Fish and Wildlife Service

National Wetlands Inventory

U.S. FISH AND WILDLIFE WETLANDS MAP

Aug 21, 2012



Wetlands

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

Status

- Digital
- Scan
- Non-Digital
- No Data

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:

Figure 4-4. USFWS Wetlands Inventory Map

4.5 CULTURAL RESOURCES: HISTORICAL AND NATIVE RESOURCES

The town site of Bruneau was created in the early 1880's during development of the north side irrigation system. The State Historic Preservation Office (SHPO) of the Idaho State Historical Society was consulted regarding cultural resources in Bruneau. IDEQ consulted with SHPO and their reply is included in Appendix D. One building is listed on the SHPO's National Register of Historic Places in Idaho for the Bruneau Planning Area which is the Bruneau Episcopal Church located off of Highway 51 and it would not be affected by the proposed project.

IDEQ consulted with the Native American tribes with historical ties to the Planning Area (i.e., Shoshone-Paiute Tribe, Shoshone-Bannock Tribe, etc.) regarding Native American cultural resources in the area. Ted Howard, Cultural Resources Director of the Shoshone-Paiute Tribes, requested that if anything is uncovered during construction of the project he should be notified. The correspondence with him is included in Appendix D.

4.6 BIOLOGICAL RESOURCES

Plants and animals in the Bruneau area are typical of those found in south central Idaho. Vegetation consists of a variety of trees, shrubs and grasses. Trees common to the area include evergreen, birch, maple, locust, poplar, russian olive and willows. The dominant vegetation in the area is sagebrush, fescue and wheatgrass.

Migratory wildlife, many of which are avian species, use the area seasonally. Common upland game birds in the area include pheasants, partridge, quail and sage grouse. Waterfowl such as geese and ducks are often found concentrated along the surface water bodies. Raptors such as hawks, eagles and owls are also found in the area.

Animals commonly found in the vicinity of the District include squirrels, rock chuck, fox, skunks and coyote. Big game habitat is found near the Planning Area within the undeveloped sagebrush rangeland. Deer, antelope, and a limited number of elk have been sighted in the area. Fish common to the area include trout, bass, perch, catfish and crappie.

Endangered species listed under the Endangered Species Act of 1973 for Owyhee County include the Columbia spotted frog, Greater Sage-Grouse, Yellow-billed cuckoo, Bull trout, Bruneau hot springsnail, Snake River physa snail and Slickspot peppergrass. Ester Ceja with IDEQ found that the proposed improvements would have "No Effect" on any of the listed species. Her correspondence is included in Appendix D. Michael May from IDEQ provided a listing update dated 08/14/2014 and a copy is included in Appendix D. Update correspondance and species listing from Mary Anna Peavey and Michael Stambulis of IDEQ in October 2015 are included in Appendix D.

Bob Kibler with the U.S. Fish and Wildlife Service provided comments in regards to protection of existing biological resources. He recommends that, "Extra care should be given to ensure that these structures are sized and reinforced adequately to provide for full effluent containment, resistance to seepage, protection from flood scour, and elevated adequately to preclude over-topping by flood waters". The proposed construction is sized in accordance with the projected District growth through the planning period. The proposed geotextile liners will provide protection against seepage. The existing height of the lowest lagoon berm is 10 feet above the natural ground and is adequate to prevent overtopping by flood waters.

4.7 WATER QUALITY

IDWR and IDEQ were consulted regarding water quality issues associated with the proposed project in Bruneau.

4.7.1 Surface and Groundwater Hydrology

The primary surface water body within the Bruneau Planning Area is the Buckaroo Ditch. This lateral runs from southeast to northwest through the boundary of the Planning Area. Water is provided to the Buckaroo Ditch from the Bruneau River from the diversion point located approximately 8 miles southeast of the District. The Bruneau River passes by the southwest corner of the District (see Figure 4-5).

According to Idaho Department of Water Resources publication "Groundwater Resources of Idaho" published in August 1981, the source of groundwater in Bruneau is the Bruneau - Grandview Aquifer. This aquifer holds water within sedimentary sequences of unconsolidated to consolidated clay, silt, sand and gravel, basalts of the Banbury and Bruneau Formations and, at depth, silicic volcanic. The system is recharged by drainage from the Owyhee Mountains to the south and direct infiltration of precipitation into the silicic volcanic, where exposed in the highlands.

All wells investigated in the report were finished in sedimentary aquifers. Levels of fluoride and dissolved lead in the groundwater were reported to occasionally exceed the primary drinking water standards, while dissolved solids, pH and dissolved iron were sometimes outside of the desired ranges of the secondary standards.

The proposed project will have no significant effect on the water quality of the aquifer. It will provide further protection from degradation should a failure of a portion of the existing treatment or liner system occur.

4.7.2 Aquifer Designation

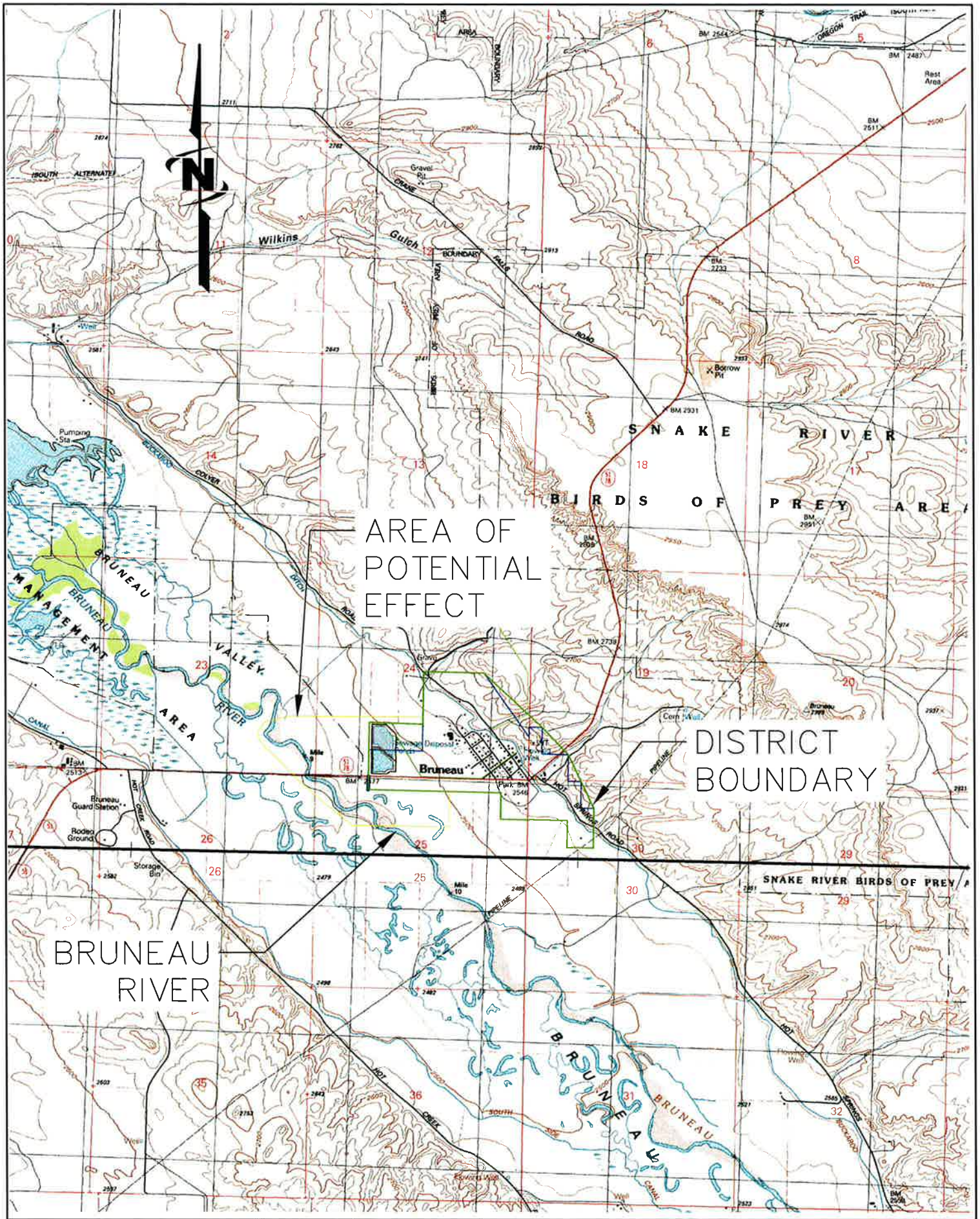
The aquifer underlying Bruneau is considered a "General Resource" aquifer by the State of Idaho (IDAPA 58.01.11.150.02).

> **State of Idaho Beneficial Use:** The State of Idaho seeks to maintain and protect the existing high quality of the state's groundwater and to prevent contamination of ground water from regulated and non-regulated sources (IDAPA 58.01.11). IDAPA 58.01.11 states General Resource aquifers will be protected by best management practices and best practical methods. The numerical standard for protection of the general resource aquifer is the EPA primary and secondary drinking water standards.

Susan Eastman with the U.S. EPA was consulted in regards to the designation of the aquifer as a Sole Source Aquifer. Her reply that is included in Appendix D states that "The aquifer you listed is not federally designated".

4.7.3 NPDES Permit Requirements

The Bruneau Water and Sewer District does not currently have a National Pollutant Discharge Elimination System (NPDES) permit and it will not be required after the project is complete.



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NO	REVISION DESCRIPTION	BY	APR	DATE

FILE: USGS
JUB PROJ. #: 60-12-022
DRAWN BY: RLH
DESIGN BY: RLH
CHECKED BY: ####
LAST UPDATED: 1/12/2015

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ENVIRONMENTAL INFORMATION DOCUMENT
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 4-5
USGS MAP

SHEET 1

4.8 SOCIO-ECONOMICS AND ENVIRONMENTAL JUSTICE

The area's economy is based primarily on the agricultural and service industries. Some of the businesses located within the Planning Area include restaurants, gas stations and convenience stores. An agricultural fertilizer and chemical dealer facility is located west of the Planning Area along Highway 78. The area also provides for various recreational opportunities that support the local economy, including boating, fishing, swimming, water-skiing, hunting, camping and hiking. The U.S. Census Bureau does not provide data for the District alone. The census data for the Bruneau CCD which is the Owyhee County sub-district the Sewer and Water District is located in should be representative of the District information. Table 4-1 summarizes a social profile for the Bruneau CCD.

According to the 2010 U.S. Census Bureau data, 20.1 percent of families in Bruneau were at or below the U.S. Health and Human Services poverty level of $18,310 for a family of 3 in 2010. Ethnic minority population data from the 2010 Census was reviewed, and approximately 31 percent of the population qualifies for this status.

The U.S. Census Bureau projected a median household income for Owyhee County of $33,626 in 2012.

Table 4-1. Social Profile[a]

Parameter	Value
Sex	
Male	335
Female	294
Total Population	629
Age	
Under 5 Years	63
5 to 9 Years	32
10 to 14 Years	40
15 to 19 Years	42
20 to 24 Years	31
25 to 34 Years	85
35 to 44 Years	67
45 to 54 Years	73
55 to 59 Years	51
60 to 64 Years	39
65 to 74 Years	69
75 to 84 Years	29
85 Years and Over	8
Median Age	37.6
Race	
Caucasian (white alone)	436
Hispanic or Latino	164
African-American	0
American Indian and Alaska Native alone	16
Some other race alone	5
Two or more races	8
Housing	
Total Housing Units	353
Occupied Housing Units	243
Vacant Housing Units	110
Home Owner Vacancy Rate (%)	0.0
Rental Vacancy Rate (%)	1.9
Average Household Size (People/Household)	2.41

a. Data from 2010 U.S. Census.

4.9 AIR QUALITY AND NOISE

The U.S. Environmental Protection Agency (EPA) has developed standards for monitoring and protecting air quality. IDEQ is responsible for implementing, monitoring and enforcing the air quality standards within Idaho. An area that exceeds air quality standards may be considered a "non-attainment area" (NAA) for a particular component, or total air quality. There are currently four NAAs in Idaho, the closest being the Northern Ada County and Portneuf Valley NAAs. As such, the project planning area is currently not located within a NAA. A copy of IDEQ's Administrative Boundaries for Areas with Sensitive Air Quality map is included in Appendix D.

Residents in Bruneau generally feel that air quality is excellent and cite this amenity as one of the area's quality of life factors. Bruneau is well removed from any major urbanized areas and there are very few sources of pollution in the immediate vicinity. Local automobile emissions, agricultural activities, and light commercial processing are the primary contributors to air quality degradation. Additionally, high levels of particulate matter may be experienced during certain weather events, or during certain times of the agricultural season due to farming practices.

The U.S. Department of Housing and Urban Development (HUD) has developed criteria to assess noise levels and degree of undesirability. For analytical purposes, HUD uses the day night sound level (DNL) system. The DNL describes the cumulative noise exposure from all events over a 24-hour period, weighted by the addition of 10 decibels for noise events occurring between 10 p.m. and 7 a.m. This provides a measurement of the overall noise climate of an area. Areas with a DNL below 65 decibels (dBA) are considered to be acceptable for residential land use. Within the Bruneau Planning Area, State Highway 51/78 is an area that may potentially be subject to a DNL assessment. Temporary construction noise will be generated during the project however the nearest residence is locate over 1000 feet from the site. A DNL will be necessary for those temporary noise levels.

4.10 TRANSPORTATION: TRAFFIC CHANGES, AIRPORT CLEARANCE, ACCIDENT ZONES

There is no public transportation in Bruneau. There is no airport and there are no airport clearance or accident zones.

4.11 PHYSICAL ASPECTS: TOPOGRAPHY, GEOLOGY, SOILS

The topography of the Bruneau Water and Sewer District planning area is depicted on the U.S. Geologic Survey (USGS) topographic map shown in Figure 4-5. As shown on the map, the planning area generally consists of relatively flat land with a gradual slope to the southwest with the base of the Bruneau Valley slope along the northeast boundary of the District. The ground surface elevation across the planning area ranges from approximately 2,480 to 2,675 feet above mean sea level.

The Bruneau Water and Sewer District is located within the Snake River Plain, a major late Cenozoic tectonic/volcanic plain that extends across southern Idaho for roughly 300 miles in a crescent shape. The plain is divided into two main sections identified as the Western and Eastern Snake River Plain that meet near Hagerman, Idaho. The Bruneau District Planning Area is located within the Western Snake River Plain.

According to Idaho State University, the Western Snake River Plain is a north-northwest trending 10-million year old basin bounded by normal faults. It is filled with thick sequences of basalt lava, sediments

of Lake Idaho, and stream deposits derived from the Idaho batholith to the north and the Owyhee Mountains to the south. The arms of the crescent shape of the Snake River Plain appear to have been strongly shaped by extension of the crust on the North American Plain during the past 17 million years. The rocks in Owyhee County are rhyolitic tuffs and ash flows of the Idavada Volcanic Group and fluvial and lacustrine sediments with interbedded basalt flows of the Idaho Group.

An NRCS soil survey map of the Bruneau area is shown in Figure 4-3. These soil types are primarily suitable for irrigated cropland and rangeland. Table 4-2 summarizes various characteristics of the predominant soil types in the area.

Table 4-2. Soil Characteristics

Soil Map Unit	Description	Slope	Depth Class	Drainage Class	Permeability	Available Water Capacity	Potential Rooting Depth	Runoff
11	Bram silt loam	1 - 2%	Very Deep	Somewhat Poorly Drained	Moderately Slow	Moderate	36 - 60 in.	Slow
52	Dors-Loray complex	0 - 4%	Very Deep	Well Drained	Moderately rapid	Low	60+ in.	Slow
65	Garbutt silt loam	0 - 4%	Very Deep	Well Drained	Moderate	High	60+ in.	Slow
99	Loray-Dors complex	8 - 20%	Very Deep	Excessively Drained	Moderately Rapid	Low	60+ in.	Medium
100	Mazuma fine sandy loam	0 - 4%	Very Deep	Well Drained	Moderately Rapid	Moderate	60+in.	Slow
164	Typic Torriorthents-Badlands Complex	20 -70%	Shallow to Deep	Well Drained	Slow	Low to High	10 - 60 in.	Rapid

4.12 CLIMATE

Bruneau has a semi-arid climate typical of southern Idaho. Table 4-3 summarizes historical temperature, precipitation, snowfall, and evaporation data for the Planning Area. Winter weather is characterized by alternating high and low pressure systems that bring associated inclement or clear conditions. January is historically the coldest month with an average temperature of approximately 28.0°F. Most of the annual precipitation falls as snow during the winter months. Summer weather is normally dry with warm to hot temperatures. July is historically the warmest month with an average temperature of approximately 73.4°F. The warm summer temperatures combine with low relative humidity to produce an annual evaporation rate of approximately 40 inches. The prevailing wind direction in the area is from the west to southwest, and the average wind speed is approximately 5 to 7 mph. Tornadoes and funnel clouds are rare, as are destructive force winds.

Table 4-3. Monthly Climatic Data

Month	Mean Temperature1 (°F)	Average Precipitation2 (in)	Average Snowfall1 (in)	Mean Evaporation2 (in)
January	34.2	0.87	1.7	0.00
February	39.2	0.57	0.7	0.00
March	47.4	0.74	0.3	0.00
April	53.9	0.84	0.0	5.24
May	61.8	0.85	0.0	6.34
June	69.7	0.84	0.0	6.48
July	77.2	0.18	0.0	6.82
August	75.7	0.23	0.0	5.96
September	65.8	0.42	0.0	4.56
October	54.4	0.54	0.0	3.73
November	42.3	0.87	0.4	0.73
December	33.4	0.74	0.74	0.00
Annual	**54.7**	**7.69**	**4.2**	**39.87**

1 Western Regional Climatic Center - monitoring station Bruneau (1981 – 2010) (www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?id1195).
2 Western Regional Climatic Center - monitoring station Parma (1922 – 2005) (www.wrcc.dri.edu/htmlfiles/westevap.final.html)
Modified by comparing ET rates for Parma and Bruneau (www.data.kimberly,uidaho,edu/ETIdaho) and applying evaporation pan coefficients for mean monthly temperatures.

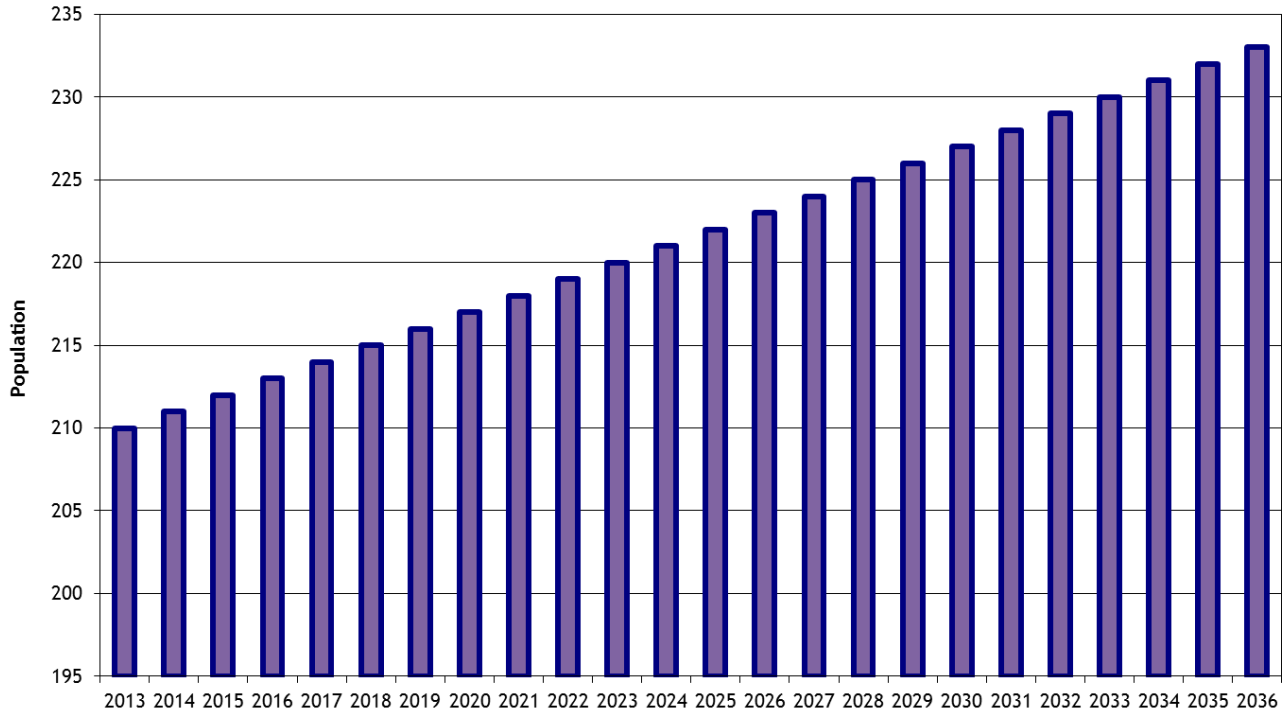
4.13 POPULATION GROWTH

Population projections were developed for the District over the 20-year planning period from 2012 through 2037. The most recent U.S. Census survey in 2010 estimated the population of Bruneau to be 210. Based on initial discussions with the District in 2012 at the commencement of the facilities planning process, the District reported that very little to no residential growth had occurred within the District limits since 2010. As such, they estimated the population in 2012 to still be approximately 210 people.

Population growth projections were estimated based on discussions with the District, historical growth trends, a review of current land use and development patterns in the area, and projections from Idaho Power's 2003 Idaho State and County Economic Forecast. Based on these sources, it is anticipated that future growth in the Bruneau Water and Sewer District will remain sluggish with a low annual growth rate of 0.50%. Section 3.3 of the Wastewater System Master Plan provides further information regarding the population projections.

Figure 4-6 summarizes the projected population to be serviced by the District. As shown in the figure, it is estimated that the population served by the wastewater facilities will increase to approximately 230 people over the planning period.

Figure 4-6. Projected Population Growth



4.14 WILD AND SCENIC RIVERS

The Wild and Scenic Rivers Act, as promulgated by Congress on October 2, 1968, states that "…certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values, shall be protected for the benefit and enjoyment of present and future generations." The Omnibus Public Lands Management Act designated 316 miles of southern Idaho waterways as Wild and Scenic Rivers. According to the www.rivers.gov website, 38.7 miles of the Bruneau River's 50-mile total length are designated as wild and 6 miles as recreational. The stretch of river that is designated Wild and Scenic runs from the downstream boundary of the Bruneau-Jarbridge Wilderness to the upstream confluence with the West Fork of the Bruneau River which is located over 6 miles upstream from the District.

None of the surface water bodies within the Bruneau Planning Area are currently classified as wild and/or scenic under this Act.

4.15 RECREATION AND OPEN SPACES

There are no State or Federal recreational open spaces, parks, or areas of recognized scenic or recreational value within the Project Area.

4.16 ENERGY AND ENERGY EFFICIENT DESIGNS

A majority of the population in the Planning Area consumes energy in the form of electricity, natural gas, propane, and/or fuel oil. A few residents may also use wood or pellet stoves for heating purposes. There are no known energy producing facilities within the Planning Area.
At this time, power providers have not been consulted regarding the incorporation of energy efficiency into the design.

Nearly all of the State of Idaho's power demand is supplied by hydroelectric power, which is a renewable energy source. There are no additional alternative energy sources that could be used for this project.

4.17 REGIONALIZATION

There are no jurisdictional disputes or controversies over the project or within the Project Area. Inter-municipal agreements have not been signed relating to this project.

4.18 HAZARDOUS MATERIALS

The existing and proposed new Wastewater Treatment facilities are intended to serve residential, institutional, commercial and industrial customers within the Bruneau Water and Sewer District. There are no explosives, flammable fuels or chemical containers within one mile of the physical structure.

4.19 COASTAL RESOURCES

There are no Coastal resources within the state of Idaho.

4.20 PUBLIC HEALTH

In general, the Bruneau Planning Area has minimal public health issues related to the wastewater system. However, as discussed later in the report, there are some potential public health and safety risks associated with the existing wastewater facilities.

BRUNEAU WATER AND SEWER DISTRICT

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CHAPTER 5: ENVIROMENTAL IMPACTS AND MITIGATION

5.0 ENVIRONMENTAL IMPACTS AND MITIGATION

5.1 GENERAL LAND USE

The planned improvements to the wastewater facilities are in accordance with the general land use plans for the Owyhee County. The improvements will be constructed at the existing wastewater treatment plant site on property and right-of-ways with existing easements for the Bruneau Water and Sewer District. Therefore, there will be no impacts to land not already used for wastewater facilities, and as such, no mitigation is necessary.

Trenching will occur to install site piping between the lagoons and from the potable water treatment plant to the treatment facilities. Care will be taken to avoid damage to utility lines, sewer lines, or other underground utilities. Coordination with utility companies will be required.

It is anticipated that impacts on agricultural lands, cultural resources, wetlands, plants or wildlife from the improvements will be minimal. If properly designed, operated and maintained, the selected improvements should have minimal impacts on the soil, groundwater, and surface water.

5.2 PRIME FARMLAND

The new discharge piping from the water treatment plant to the wastewater treatment plant will be through the area where the soils have been identified as suitable for prime farmland. However, the new pipeline will be along existing road right-of-ways. The work at the treatment plant site will be within the existing facility footprint. Therefore, the selected improvements would not result in any further impacts to "Prime Farmland," and would not require mitigation. Jeff Burwell, the State Conservationist for the USDA Natural Resources Conservation Service was consulted regarding the project. His letter that is included in Appendix D states "it does not appear that any new land is being acquired for this project. If that is the case, then no Farmland Conversion Impact Rating Form (AD-1006) will be required."

5.3 FLOOD PLAINS

FEMA has not identified flood plains within the project planning area. Keri Sigman the Idaho Flood Plain Coordinator with IDWR provided information regarding the history on flood events in Owyhee County. (See Appendix D) That history did not identify any specific flood damage in the Bruneau District area. She also stated that "I am not aware of any other past floods for Bruneau".

The top of the existing lowest lagoon dike is 10 feet above the existing ground and the Bruneau River and adjacent wetlands are over ½ mile wide. Even a 500 year flood event will not reach an elevation that is higher than the top of the lagoon bank. Therefore, construction of the selected improvements will not require any special measures to reduce the potential for flood damage. No mitigation measures are required.

5.4 WETLANDS

The U.S. Fish and Wildlife Service identified the existing north lagoon as a Freshwater Emergent wetland. The U.S. Army Corps of Engineers was consulted to determine if the project will occur within their jurisdictional wetlands and whether or not a 404 permit will be required. Comment letters from the

USACE are included in Appendix B and D. Their response was "Under Section 404 of the Clean Water Act, waste treatment ponds or lagoons are not considered to be a waters of the United States (33 CFR 328.3(a) (8))." If the water treatment plant discharge pipeline construction results in the discharge of dredged and/or fill material into the Buckaroo Ditch at the crossing, a 404 permit will be required.

Update correspondance from USACE in Appendix B and D indicates that also if fill encroaches into wetlands, a permit would be required. Also, work where the proposed underdrain ties into the existing swale may or may not require a permit pending USACE review of design drawings. Work on the underdrains within the existing lagoon foot prints would not require a permit.

It should be noted that a field survey by a wetlands specialist is recommended during preliminary design to identify any impacts to wetlands that may not be identified on available maps, such as drainage ditches and "wet" areas in the field east of the lagoons where piping may be constructed.

5.5 CULTURAL RESOURCES: HISTORICAL AND NATIVE RESOURCES

There would be no known direct or indirect impacts to the cultural resources or historic properties in the project planning area during construction of the proposed improvements. Historical buildings identified in the planning area are not located at the treatment plant site. Two Native American tribes were consulted about the proposed project and their responses are included in Appendix D. Ted Howard, Cultural Resources Director of the Shoshone-Paiute Tribes, noted that if any artifacts are uncovered during construction, they should be notified.

The correspondence from SHPO included in Appendix D found that no historic properties or archeological resources were identified or would be impacted in the project planning area.

Given this information, no mitigation is required because no direct impacts to cultural resources would occur from the proposed improvements.

5.6 BIOLOGICAL RESOURCES

Some disturbance to flora (vegetation) may occur. Flora impacts may be associated with the reconstruction of the north lagoon and piping from the potable water treatment plant to the existing wastewater facility site. Disturbances to vegetation will be mitigated by re-vegetating affected areas. Efforts will be undertaken to reconstruct, replant, and landscape disturbed areas to their former condition.

IDEQ consulted with the U.S. Fish and Wildlife Service (USFWS) and they noted that the Columbia Spotted frog, Greater Sage-Grouse, Yellow-Billed Cuckoo, Bull Trout, Bruneau Hot Springs snail, Snake River phyla snail and Slickspot peppergrass are the listed endangered, threatened, proposed, and/or candidate species and/or designated critical habitat. The correspondence included in Appendix D notes that the proposed improvements are on the existing wastewater site and will have "No Effect" on the endangered species. The project is not within the Essential Fish Habitat (EFH) for Salmon and will have "No Effect" on the EFH.

USFWS noted the lagoons should be sized and reinforced properly to prevent impacts from flood waters during spring flooding. Also, alternative upland sites should be considered in the future when growth occurs, and water conservation measures should be considered.

In general, the proposed improvement will have no known direct or indirect impacts to the threatened or endangered species, critical habitats, or other wildlife listed for Owyhee County. Therefore, no mitigation is required.

5.7 WATER QUALITY

No surface water impacts are anticipated. The District does not have NPDES permit and the improvements do not include a surface water discharge.

The proposed improvements are not expected to impact the aquifer. Design of the proposed improvements to the treatment facilities will be in accordance with IDAPA 58.01.11, and 58.01.16. Coordination with IDEQ regarding these regulations and the proposed approach to ensure aquifer quality is maintained will be part of the project's design effort.

The U.S. EPA was consulted regarding the findings regarding the impact of the project on the Sole Source Aquifer in the area. They responded that the Bruneau-Grandview Aquifer is not federally designated as a Sole Source Aquifer. Their response is included in Appendix D.

The Bruneau Water and Sewer District does not currently have a National Pollutant Discharge Elimination System (NPDES) permit and it will not be required after the project is complete. Permit coverage under the EPA's Construction General Permit (CGP) will be required during construction.

The proposed work at the treatment plant is not within "waters of the United States" and will not require an Army Corp of Engineers permit (404 Permit). The proposed water treatment plant discharge pipeline will require a 404 Permit if the crossing at the Buckaroo Ditch is open trenched.

In general, the proposed improvement will have no known direct or indirect impacts to the surface or groundwater quality and, therefore, no mitigation is required.

5.8 SOCIO-ECONOMICS AND ENVIRONMENTAL JUSTICE

It appears that no disadvantaged group will be adversely affected by the selected improvements the existing wastewater treatment facilities. In addition, it is not expected that any specific population segment will benefit from an improvement project. However, the community in general will reap some benefits by improvements to the wastewater facilities. As such, no mitigation measures are required.

5.9 AIR QUALITY AND NOISE

Air quality may be impacted by the improvements due to dust and exhaust emissions from construction equipment, which may produce minor increases in air pollution. Dust control will be minimized, when possible, by dampening roads with water or by other methods. The impacts of construction dust can be mitigated by ceasing activity during exceptionally windy conditions and by using watering equipment. Debris created by construction should not be burned but transported to a disposal area to avoid further air pollution.

The project will not create exceedances of any federal or state emission standards in the area and should not cause a violation of National Ambient Air Quality Standards (NAAQS). A copy of a map of the Administrative Boundaries for Areas with Sensitive Air Quality from IDEQ is included in Appendix D. The

Bruneau area is within an air quality attainment area and would not fall under the requirements of a State Implementation Plan (SIPP).

Noise in Bruneau is generally limited to normal traffic and agricultural activities in the area. Construction of the improvements will likely temporarily increase the noise levels at the existing wastewater treatment facility site. Heavy equipment and machinery will be used during construction, resulting in increased noise levels. However, construction activity will be limited to normal working hours to reduce the noise impacts on residential areas that are more than 1000 feet away. In addition, construction noise should be temporary and can be minimized by the use of well maintained equipment and mufflers.

IDEQ was consulted regarding air quality and noise and their findings are included in Appendix D.

5.10 TRANSPORTATION: TRAFFIC CHANGES, AIRPORT CLEARANCE, ACCIDENT ZONES

There is no public transportation or airports in Bruneau; therefore, there will be no impacts or mitigation measures required. Traffic patterns could be impacted on the streets and State Highway from the potable water treatment plant to the existing wastewater treatment facility. These impacts will be minimized, as necessary, by implementing a traffic control plan during construction. Traffic control may also result in a safety hazard, as traffic patterns are altered for construction purposes.

5.11 PHYSICAL ASPECTS: TOPOGRAPHY, GEOLOGY, SOILS

The selected improvements do not affect any of the physical aspects of the project area or the community of Bruneau. Therefore, no mitigation measures are required. The improvements to the existing treatment facility will be done at the site of the current treatment facilities. The selected improvements will be configured and designed to accommodate the physical aspects of the site.

5.12 CLIMATE

Climate conditions are not expected to result in a concentration of air pollutants leading to an identified air quality problem or violation of any NAAQS as a result of construction. There are no identified meteorological constraints that would affect the feasibility of the selected improvements. Therefore, no mitigation measures are planned.

5.13 POPULATION GROWTH

The project planning area typically has a stable year-round population and experiences little, if any, seasonal population fluctuations. The selected improvements will have no known negative impacts to population growth in Bruneau and no mitigation measures are planned.

If the selected improvements do not occur, population growth could be limited since portions of the treatment plant are currently at capacity. Public health could be negatively impacted if the improvements do not occur and more homes in an area build septic systems instead of discharging the effluent to the wastewater treatment facility.

5.14 WILD AND SCENIC RIVERS

No surface water sources within the Bruneau Water and Sewer District service area are classified as Wild and Scenic rivers. Therefore, there will be no impacts and no mitigation measures are planned.

5.15 RECREATION AND OPEN SPACES

There is no recreational open space, parks, or areas of recognized scenic or recreational value within the project planning area. Therefore, the selected improvements will not eliminate or modify any designated recreational open space, park, or area of recognized scenic or recreational value, and as such there are no planned mitigation measures. The Bureau of Land Management was consulted regarding the proposed project and its potential to affect BLM property and they did not respond.

5.16 ENERGY AND ENERGY EFFICIENT DESIGN

The primary energy-consuming component of the proposed wastewater improvements is the electrically powered wastewater lift station pumps. The District recently replaced the pumps to overcome the loss of efficiency caused by the normal pump wear. There is no energy recovery elements included in the selected improvements.

5.17 REGIONALIZATION

There are no jurisdictional disputes or controversies over the project or within the project planning area. Inter-municipal agreements have not been signed relating to this project. The improvements should not impact agreements or create jurisdictional disputes.

5.18 HAZARDOUS MATERIALS

The selected improvements are intended to serve residential, institutional, and commercial customers within the Bruneau Water and Sewer District. No explosives, flammable fuels, or chemical containers are expected to be used during construction. There may be minimal use of small quantities of chemicals at the wastewater treatment facility (e.g., sodium hypochlorite for effluent disinfection). These chemicals will be used within the treatment processes. Care will be taken to properly secure, use, and dispose of them.

5.19 COASTAL RESOURCES

There are no Coastal resources within the state of Idaho. Therefore, there will be no impacts from the improvements.

5.20 PUBLIC HEALTH

Open trenches, electrical utilities and heavy equipment may present health and safety hazards during construction. These hazards may be mitigated by educating project personnel about the applicable health and safety regulations, and establishing safe operating procedures.

BRUNEAU WATER AND SEWER DISTRICT

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CHAPTER 6: CORRESPONDENCE AND COORDINATION

6.0 CORRESPONDENCE AND COORDINATION

6.1 PUBLIC

A number of opportunities were provided to the public during the facilities planning process to receive information and to provide input about the selected wastewater system improvements. Input from the public was considered and incorporated in the Wastewater Facilities Plan and EID, as appropriate. Following is a summary of the public participation efforts by the District:

1. **District Board Meetings:**

    - Discussions relative to the Wastewater Facilities Plan were held at several District Board meetings.

2. **Public Hearings:**

    - One public meeting was held on February 11, 2014 at the Bruneau Public Library (7:00 P.M.) to present the results of the Wastewater Facilities Plan.

    - A second public meeting was held on July 23, 2015 at the Bruneau Public Library (7:00 P.M.) to present updated results of the Wastewater Facilities Plan.

Appendix C contains a summary of the available public participation information, including:

1. Advertisement of 2012 Request for Proposals for Engineering Services and Notice of Intent to File an Application with USDA Rural Development.

2. Information related to the February 11, 2014 public meeting for the Wastewater Facilities Plan, including the sign-in sheet.

3. Minutes from the February 11, 2014 Bruneau Water and Sewer District Board meeting showing the formal motion by the Board to select the recommended improvements.

4. Information related to the July 23, 2015 public meeting for the Wastewater Facilities Plan including the water billings insert advertisement.

5. Minutes from the July 23, 2015 Bruneau Water and Sewer District Board meeting showing the formal motion by the Board to select the preferred alternative based on the updated information.

6.2 AGENCY CONSULTATION

Numerous public agencies were sent a letter on March 20, 2014 requesting that they review the proposed project and provide a response regarding potential environmental impacts. The letter included a project description and a drawing of the proposed improvements. In some instances, subsequent letters were sent to the agencies to provide additional information. Copies of the letters sent to the

agencies and their response comments can be found in Appendix D. Table 6-1 provides a summary of the list of agencies consulted and their comments.

6.3 REFERENCES

City of Bruneau Wastewater Facilities Plan, JUB Engineers, November 2015.

Bruneau Water and Sewer District 1980 Proposed Collection and Treatment Facility Drawings.

Bruneau Water and Sewer District 1992 Wastewater Treatment Plant Modifications Record Drawings.

Federal Emergency Management Agency (FEMA), Map Service Center, Flood maps, <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>, accessed August 2012.

Guide for Preparing the Environmental Report for Water and Waste Projects, USDA Rural Development, December 1998 and revised March 2008.

Natural Resources Conservation Service, Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed May 2012

Outline and Checklist for Environmental Information Documents (Form J), IDEQ, undated.

U.S. Census Bureau, 2010.

U.S. Fish and Wildlife Service, National Wetlands Inventory, <http://www.fws.gov/wetlands/Data/mapper.html,> accessed August 2012.

Table 6-1. Agency Contact List and Summary of Key Comments

Agency	Date and method of approval[1]	Comments
Natural Resources Conservation Service	April 15, 2014 Letter	It does not appear any new land is being acquired for this project. No Farmland Conversion Impact Rating Form (AD-1006) will be required.
Idaho Department of Water Resources	April 23, 2014 Letter	Owyhee County and the City of Bruneau do not participate in the National Flood Insurance Program (NFIP). The development is not in the Special Flood Hazard Area
U. S. Fish and Wildlife Services	May 13, 2014 Letter	The Fish and Wildlife Service supports any actions that would ensure that untreated wastewater will not be entering the surface or groundwater of the Bruneau River Valley – Consider water conservation and new upland location for future projects.
U.S. Army Corp of Engineers	May 7, 2014 Letter	Project not in jurisdictional wetlands
U.S. Army Corp of Engineers	October 6, 2015	Connection of underdrain to swale may or may not require a nationwide permit 12 but need drawings to make final determination.
Idaho State Historical Society	April 9, 2014 Letter	No Historic Properties present/affected
Shoshone-Paiute Tribe	June 12, 2014 Email	During excavation there's no telling what might be discovered. If there is a discovery please notify my office as soon as possible.
Shoshone-Bannock Tribe	No Response	
U.S. Fish and Wildlife Service via Idaho Department of Environmental Quality	May 23, 2014 Email	USFS Response "No Effect"
Idaho Department of Fish & Game	May 12, 2014 Email	Any Improvements preventing failure of the old system would be beneficial to preventing future impacts t0 C.J. Strike WMA
Environmental Protection Agency: Office of Environmental Assessment	May 30, 2014 Email	Bruneau-Grandview Aquifer is not federally designated as Sole Source Aquifer.
Idaho Department of Environmental Quality	May 5, 2014 Letter	Project must meet IDAPA Rules
Environmental Protection Agency	Email	Notice of Intent under Construction General Permit will be required.
Southwest District Health	May 19, 2014 Email	No Comments

Idaho Department of Agriculture	April 14, 2014 Letter	No Comments
Idaho Department of Lands	May 16, 2014 Letter	No Impact to Endowment Lands
Idaho Department of Commerce	April 11, 2014 Letter	No Comments
NOAA	May 12, 2014 Email	No Comments

[1] See Appendix D for the original letter sent and those letters, emails and/or phone calls received from each agency in response.

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

APPENDIX A: WASTEWATER REUSE PERMIT NO. LA-000129-02

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

J.U.B. ENGINEERS
RECEIVED
JUN 15 2009
TWIN FALLS, IDAHO

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

June 11, 2009

CERTIFIED RETURN RECEIPT #70041350000283082421

Mr. Stacey Buckingham, President
Bruneau Water and Sewer District
P.O. Box 194
Bruneau, Idaho 83604

Subject: Bruneau Water and Sewer District
Final Wastewater Reuse Permit No. LA-000129-02 (Municipal Wastewater)

Dear Mr. Buckingham:

We are issuing the above referenced wastewater reuse permit to Bruneau Water and Sewer District. The enclosed document is your official copy of the permit and demonstrates that you are authorized to operate the wastewater reuse facility subject to certain specified requirements.

The public comment period for the draft permit closed on May 11, 2009. One comment was received from Bruneau Water and Sewer District. Attachment 1, enclosed with this letter, summarizes the change made in the final permit as a result of your comment on the draft permit.

Your permit is issued as of June 11, 2009 and **expires on June 11, 2014**. If you have any questions or need further information, please call Steve Ogle at (208) 373-0117.

Sincerely,

Pete Wagner, Administrator
Boise Regional Office

Enclosures: Final permit

c: Rex L. Harding, P.E., J-U-B Engineers, Inc., 115 Northstar Ave, Twin Falls, ID 83301 (w/enclosure)
Richard Huddleston, P.E., DEQ State Office
Mark Mason, P.E., DEQ Boise Office
Steve Ogle, P.E., DEQ Boise Office
Dawn Shepard, DEQ State Office/SO File LA-000129-02 (w/enclosure)
BRO File 17.1 (w/enclosure), Reading file

Attachment 1

Summary of Permit Changes

1. Page 8, Section F – Permit Limits and Conditions. Changed the Grazing Restriction to stipulate that a Grazing Management Plan must be approved by DEQ prior to conducting any grazing activities onsite.

Response to Comment from Bruneau Water and Sewer District

1. **Comment:** Bruneau Water and Sewer District (District) submitted a comment requesting that the Grazing Restriction in the draft permit, which prohibits any onsite grazing, be changed to allow for fall or spring grazing by a few horses and mules. The District noted that the animals to be utilized for this practice are not animals used for dairy or meat production and would not pose any direct risk to human food supplies. The District has also indicated that it is willing to conduct such activities in accordance with any requirements imposed by DEQ.

   Response: DEQ notes that the grazing prohibition imposed in the draft permit comes from Section 600.07.d of the *Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater* (IDAPA 58.01.17), which prohibits grazing of animals on land where Class D effluent is applied. Although the language in the rule does not make any distinction between animals that are or are not to be used for dairy or meat production, the current version of the *Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater*, which is incorporated into the rule as a reference material under IDAPA 58.01.17.008.01, appears to indicate that this is one of DEQ's primary concerns with grazing activities on land where municipal effluent is applied. Refer to the introduction to Section 6.4.3 of the guidance document:

   > "This section establishes program guidance on the practice of using treated municipal wastewater to irrigate sites grazed by animals used for dairy or meat production. The Idaho State Department of Agriculture (ISDA) and the Idaho Division of Environmental Quality (DEQ) jointly developed this guidance.
   >
   > In February 1990, DEQ established program guidance disallowing grazing on all land application sites using treated municipal wastewater. The primary reasons cited for this decision were 1) the potential public health risks and 2) the limited resources of the agency to reasonably insure compliance with grazing management plans.
   >
   > However, with subsequent EPA guidance (1992)—as well as regulations developed by neighboring states—indicating that grazing is acceptable under certain conditions, DEQ drafted a recommendation for grazing municipal sites and sought comments from ISDA and the District Health Departments. ISDA and DEQ formed a working committee to revise the draft guidance to address potential health risks to both humans and grazing animals. Table 6-3 presents the mutual recommendation of ISDA and DEQ, with the exception of an increase in waiting time for Class B wastewater to a 3 day minimum."

   DEQ notes that the use of horses or mules for such grazing activities does not appear to constitute the same level of risk to public health as the use of animals to be used for meat and dairy production. If there is no effluent application while the horses/mules are onsite, and the grazing activities are conducted properly (i.e., so as to avoid adverse impacts such as soil compaction and overgrazing), DEQ notes that an appropriate "waiting time" could be applied between the last effluent application and introduction of the animals onsite to minimize any potential public health risk. The District has indicated that they are willing to follow any waiting periods or other criteria imposed by the agency to allow the grazing activity.

   Moreover, DEQ acknowledges the District's need to utilize animals as a cost-effective way to remove crops from this site. The District does not have any water rights associated with the land-application site; consequently, the only source of irrigation water on this site will be treated effluent applied under the terms

of the wastewater reuse permit. The District currently anticipates that they will only utilize the land-application site for a limited period of time each year (i.e., to draw down the level of the lagoon in preparation for storage over the non-growing season), and will likely only have a single harvesting event as a result. The District would like to seed the field with pasture grass and use the horses/mules to harvest the grass. The animals will not be kept on the land-application site or allowed onsite for any purpose other than the grazing event, as they have a dedicated pasture in a nearby field and can easily be removed from the land-application site. DEQ notes that this concept appears to be allowed under the guidance document, as Section 6.4 states that "…well managed livestock grazing is an effective method for harvesting crops grown on wastewater land treatment sites…".

Therefore, the final permit has been modified so that the Grazing Restriction contained in Section F now requires that a Grazing Management Plan must be approved by DEQ prior to conducting any grazing activities onsite, and that, following DEQ approval, all grazing conducted onsite must be in accordance with the approved Grazing Management Plan. It must be noted that this allowance has been incorporated into the final permit at the request of the District, and that DEQ accepts no liabilities for any adverse or unintended consequences resulting from any grazing activities conducted by the District.

A. Permit Certificate

MUNICIPAL
WASTEWATER REUSE PERMIT
LA-000129-02

Bruneau Water and Sewer District LOCATED AT **P.O. Box 194, Bruneau, ID 83604** AND IN **Township 5E, Range 6S, Section 24** IS HEREBY AUTHORIZED TO CONSTRUCT, INSTALL, AND OPERATE A WASTEWATER REUSE SYSTEM IN ACCORDANCE WITH THE WASTEWATER REUSE RULES (IDAPA 58.01.17) AND THE WASTEWATER RULES (IDAPA 58.01.16), THE GROUND WATER QUALITY RULE (IDAPA 58.01.11), AND ACCOMPANYING PERMIT, APPENDICES, AND REFERENCE DOCUMENTS. THIS PERMIT IS EFFECTIVE FROM THE DATE OF SIGNATURE AND EXPIRES ON **June 11, 2014**.

Pete Wagner
Boise Regional Office Administrator
Idaho Department of Environmental Quality

6/11/09
Date

DEPARTMENT OF ENVIRONMENTAL QUALITY
Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239
(208) 373-0550

POSTING ON SITE RECOMMENDED

B. Permit Contents, Appendices, and Reference Documents

		Page
A.	Permit Certificate	1
B.	Permit Contents, Appendices and Attachments	2
C.	Abbreviations, Definitions	3
D.	Facility Information	5
E.	Compliance Schedule for Required Activities	6
F.	Permit Limits and Conditions	7
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H.	Standard Reporting Requirements	11
I.	Standard Permit Conditions: Procedures and Reporting	12
J.	Standard Permit Conditions: Modifications, Violation, and Revocation	14

Appendices

1. Environmental Monitoring Serial Numbers
2. Site Maps

References:

1. Plan of Operation (Operation and Maintenance Manual) – See CA-129-01
2. Seepage Testing Plan – See CA-129-02
3. Grazing Management Plan

The Sections, Appendices, and Reference Documents listed on this page are all elements of Wastewater Reuse Permit LA-000129-02 and are enforceable as such. This permit does not relieve Bruneau Water and Sewer District, hereafter referred to as the permittee, from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

C. Abbreviations, Definitions

Ac-in	Acre-inch. The volume of water or wastewater to cover 1 acre of land to a depth of 1 inch. Equal to 27,154 gallons.
BMP or BMPs	Best Management Practices
COD	Chemical Oxygen Demand
DEQ or the Department	Idaho Department of Environmental Quality
Director	Director of the Idaho Department of Environmental Quality, or the Directors Designee, i.e. Regional Administrator
ET	Evapotranspiration – Loss of water from the soil and vegetation by evaporation and by plant uptake (transpiration)
GS	Growing Season – March 15 through October 31 (231 days)
GW	Ground Water
GWQR	IDAPA 58.01.11 "Ground Water Quality Rule"
Guidance	Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater, DEQ.
HLRgs	Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to reuse hydraulic management units during the growing season. The HLRgs limit is specified in Section F. Permit Limits and Conditions.
HLR_{max}	Maximum Permitted Growing Season Hydraulic Loading Rate. Includes any combination of wastewater and supplemental irrigation water applied to reuse hydraulic management units during the growing season. The HLR_{max} limit is specified in Section F. Permit Limits and Conditions.
HMU	Hydraulic Management Unit (Serial Number designation is MU)
IWR	Irrigation Water Requirement – Any combination of wastewater and supplemental irrigation water applied at rates commensurate to the moisture requirements of the crop, and calculated monthly during the growing season (GS). Calculation methodology for the IWR can be found at the following website: http://www.kimberly.uidaho.edu/water/appndxet/index.shtml. The equation used to calculate the IWR at this website is: $IWR = (CU - P_e) / E_i$ CU is the monthly consumptive use for a given crop in a given climatic area. CU is synonymous with crop evapotranspiration P_e is the effective precipitation. CU minus Pe is synonymous with the net irrigation requirement (IR) E_i is the irrigation system efficiency. To obtain the gross irrigation water requirement (IWR), divide the IR by the irrigation system efficiency.
IDAPA	Idaho Administrative Procedures Act.
LG	Lagoon
lb/ac-day	Pounds (of constituent) per acre per day
MG	Million Gallons (1 MG = 36.827 acre-inches)
NVDS	Non-Volatile Dissolved Solids (= Total Dissolved Solids less Volatile Dissolved Solids)
O&M manual	Operation and Maintenance Manual, also referred to as the Plan of Operation

C. Abbreviations, Definitions

Reuse	The use of reclaimed wastewater for beneficial uses including, but not limited to, land treatment, irrigation, aquifer recharge, use in surface water features, toilet flushing in commercial buildings, dust control, and other uses.
SAR	Sodium Absorption Ratio
Soil AWC	Soil Available Water Holding Capacity - the water storage capability of a soil to a depth at which plant roots will utilize (typically 60 inches or root limiting layer)
SMU	Soil Monitoring Unit (Serial Number designation is SU)
SW	Surface Water
TDS	Total Dissolved Solids or Total Filterable Residue
TDIS	Total Dissolved Inorganic Solids – The summation of chemical concentration results in mg/L for the following common ions: calcium, magnesium, potassium, sodium, chloride, sulfate, and 0.6 times alkalinity (alkalinity expressed as calcium carbonate). Nitrate, Silica and fluoride shall be included if present in significant quantities (i.e. > 5 mg/L each).
TMDL	Total Maximum Daily Load – The sum of the individual waste-load allocations (WLA's) for point sources, Load Allocations (LA's) for non-point sources, and natural background. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. IDAPA 58.01.02 *Water Quality Standards and Wastewater Treatment Requirements*
Typical Crop Uptake	Typical Crop Uptake is defined as the median constituent crop uptake from the three (3) most recent years the crop has been grown. Typical Crop Uptake is determined for each hydraulic management unit. For new crops having less than three years of on-site crop uptake data, regional crop yield data and typical nutrient content values, or other values approved by DEQ may be used.
USGS	United States Geological Survey
WW	Wastewater applied to the reuse treatment site

D. Facility Information

Legal Name of Permittee	Bruneau Water and Sewer District
Type of Wastewater	Class D Municipal Wastewater
Method of Treatment	Facultative treatment/storage lagoon, chlorine disinfection, slow rate land application
Type of Facility	Public
Facility Location	0.4 miles west of Bruneau, on the north side of State Highway 51
Legal Location	Township 6S, Range 5E, Section 24
County	Owyhee
USGS Quad	Bruneau
Soils on Site	Sandy silts and Bram silt loam
Depth to Ground Water	<6 feet to seasonal high ground water (occurs during irrigation season). Depth to first water is ~56 feet. Depth to regional aquifer is >100 feet.
Beneficial Uses of Ground Water	Agriculture, domestic
Nearest Surface Water	Bruneau River, ~4000 feet from reuse site
Beneficial Uses of Surface Water	Agriculture, recreation, aquatic life
Responsible Official **Mailing Address** **Phone/Fax**	Stacey Buckingham, President Bruneau Water and Sewer District P.O. Box 194 Bruneau, Idaho 83604 (208) 845-2188 / (208) 845-2388
Facility Consultant **Mailing Address** **Phone/Fax**	Rex L. Harding, P.E. J-U-B Engineers, Inc. 115 Northstar Avenue Twin Falls, ID 83301 (208) 733-2414 / (208) 733-9455

E. Compliance Schedule for Required Activities

The Activities in the following table shall be completed on or before the Completion Date unless modified by DEQ in writing.

Compliance Activity Number **Completion Date**	**Compliance Activity Description**
CA-129-01 **Plan of Operation** Updated Plan of Operation, due one year after permit issuance	An updated Plan of Operation (Operation and Maintenance Manual or O&M Manual) for the wastewater reuse facilities, incorporating the requirements of this permit, shall be submitted to DEQ for review and approval. The O&M manual shall be designed for use as an operator guide for actual day-to-day operations to meet permit requirements and shall include daily sampling and monitoring requirements to insure proper operation of the wastewater treatment and reuse facilities. The Plan of Operation shall generally address or contain the information required by the latest revision of the Plan of Operation Checklist in the Reuse Program Guidance. Upon approval, the manual shall be incorporated by reference into this permit and shall be enforceable as a part of this permit.
CA-129-02 **Seepage Testing Plan** Plan due prior to conducting seepage test(s) Test results due one year after permit issuance	Submit a seepage testing plan that defines the approach and testing procedures to conduct seepage testing in accordance with methods approved by DEQ for the South Lagoon (i.e., Cell 1). Upon approval of the plan, conduct the seepage testing of the lagoon in accordance with the approved plan and submit test results to DEQ. The seepage performance standard is 0.25 inches per day. If a properly tested lagoon leaks more than 0.25 inches per day, the permittee shall either: a) Submit, for DEQ approval, a plan and schedule to either retest, repair, replace, or decommission structures not meeting this standard or b) Develop an assessment based on ground water sampling and analyses and/or modeling to determine the effect of the lagoon leakage on the local ground water. If actual or predicted impacts do not comply with IDAPA 58.01.11 as determined by DEQ, the permittee shall comply with a) above.
CA-129-03 **Permit Renewal Application** Six (6) months before expiration of this permit	Submit an application for permit renewal to DEQ.

F. Permit Limits and Conditions

The permittee is allowed to apply wastewater and treat it on a reuse site as prescribed in the tables below and in accordance with all other applicable permit conditions and schedules.

Category	Permit Limits and Conditions
Type of Wastewater	Class D Municipal Wastewater
Reporting Year for Annual Loading Rates	January 1 through December 31
Application Site Area	5.7 Acres
Application Season	March 15 through October 31 (Growing season only)
Wastewater Treatment and Reuse System Operation Requirements	The wastewater treatment facility and reuse systems shall be operated by personnel certified and licensed in the State of Idaho wastewater operator training program at the operator class level specified in IDAPA 58.01.16.203 of the Wastewater Rules, and properly trained to operate and maintain the system. Operation of the wastewater treatment system shall be monitored on a 24-hour basis for alarm conditions, including notification of the qualified operating personnel under alarm conditions.
Wastewater Treatment Effluent discharged to land application, Total Coliform Limit, CFU/100 mL	The median number of total coliform organisms shall not exceed 230 per 100 milliliters, and shall not exceed 2300 per 100 milliliters in any confirmed sample, as determined from the results of the last three (3) days for which analyses have been completed.
Hydraulic Loading Rate Requirement, per Growing Season NOTE: The hydraulic limit includes treated wastewater and any supplemental irrigation water applied onsite.	Growing Season (GS) Hydraulic Loading Rate shall be substantially equal to the Irrigation Water Requirement (IWR) throughout the growing season. The Irrigation Water Requirement (IWR) shall be estimated using data from the tables of the following University Of Idaho web site: http://www.kimberly.uidaho.edu /water/appndxet/index.shtml. The IWR is equal to the Mean IR data from these tables divided by the irrigation system efficiency.
Maximum COD Loading, seasonal average in pounds/ acre-day	50 pounds/acre-day seasonal average for growing season.
Maximum Nitrogen Loading Rate Limit, pounds/acre-year NOTE: includes all nitrogen sources including waste solids and supplemental fertilizers	150% of typical crop uptake (refer to definition in Section C of this permit)
Runoff Restrictions	No runoff of wastewater allowed

F. Permit Limits and Conditions

Category	Permit Limits and Conditions
Buffer Zone Requirements	• Sprinkler irrigation: 500 feet to inhabited dwellings and 300 feet to areas of public access • Flood irrigation: 300 feet to inhabited dwellings and 50 feet to areas of public access • 50 feet to irrigation ditches and canals • 100 feet to surface waters • 500 feet to private water supply wells • 1000 feet to public water supply wells
Fencing and Posting	Signs shall be posted every 500 feet designating the fields as wastewater reuse areas or equivalent. A three-wire pasture fence shall enclose the treatment facilities and land application site acreage.
Ground Water Quality Requirement	Wastewater reuse activities conducted by permittee shall not cause a violation of the *Ground Water Quality Rule*, IDAPA 58.01.11.
Allowable Crops	Crops grown for direct human consumption (those crops that are not processed prior to consumption) are not allowed.
Grazing Restriction	Grazing shall be conducted in accordance with a DEQ-approved Grazing Management Plan.
Waste Solids Removal	Submit a Waste Solids Management Plan to DEQ for review and approval, prior to removal of any waste solids from the treatment or reuse facilities. The Plan shall describe how waste solids generated at the facility will be handled and disposed of to meet the requirements of Section I, No. 5.
Odor Management	The wastewater treatment plant, reuse facilities, and other operations associated with the facility shall not create a public health hazard or nuisance conditions, including odors.
Construction Plans	Prior to construction or modification of any wastewater facilities associated with the reuse system or expansion, detailed plans and specifications shall be reviewed and approved by DEQ. Within 30 days of completion of construction, the permittee shall submit as-built plans to DEQ or submit a certification letter stating that all construction was done in substantial compliance with DEQ approved plans and specifications.
Supplemental Irrigation Water Protection	For systems with wastewater and fresh irrigation water or potable water interconnections, DEQ approved backflow prevention devices are required.

G. Monitoring Requirements

1. Appropriate analytical methods, as given in the *Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater*, or as approved by DEQ, shall be employed. A description of approved sample collection methods, appropriate analytical methods and companion QA/QC protocol shall be included in the Operation and Maintenance Manual, as required by Compliance Activity No. CA-129-01 in Section E of this permit.
2. The permittee shall monitor and measure parameters as stated in the Facility Monitoring Table in this section.
3. Samples shall be collected at times and locations that represent typical environmental and process parameters being monitored.
4. Monitoring locations are described in Appendix 1. Environmental Monitoring Serial Numbers.
5. Monitoring is required at the frequency shown in the table below if wastewater is applied anytime during the time period shown. Unless otherwise agreed in writing by the DEQ, data collected and submitted shall include, but not be limited to, the parameters and frequencies in the Facility Monitoring Table as follows.
6. Five (5) soil sample locations shall be selected for each management unit. Three (3) soil samples shall be collected at each sample location, one at 0-12 inches, one at 12-24 inches, and one at 24-36 inches. The soil samples collected at 0-12 inches from each sample location shall be composited. Similarly, all soil samples collected at 12-24 inches shall be composited and all soil samples collected at 24-36 inches shall be composited. This method will yield three samples for analysis, one for 0-12 inches, one for 12-24 inches and one for 24-36 inches for each soil management unit.
7. Annual reporting of monitoring requirements is described in Section H, Standard Reporting Requirements.

Facility Monitoring Table

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Daily (when land applying)	Prior to Land Application Site	Volume of wastewater land applied	Gallons/day and acre-inches/month applied to land application site
Daily (when land applying)	Prior to Land Application Site	Volume of supplemental irrigation water land applied	Gallons/day and acre-inches/month applied to land application site
Monthly (when land applying)	Prior to Land Application Site	Grab sample	Total Kjeldahl nitrogen, nitrate+nitrite-nitrogen, TDS, pH, COD, total phosphorus
Monthly (when land applying)	Prior to Land Application Site	Grab sample	Total coliform
Annually	Hydraulic management unit	Calculate Irrigation Water Requirement for crop grown onsite	Volume (acre-inches and total gallons) for each month for growing season
Annually	Hydraulic management unit	Acres used for reuse	Acres
Annually	Hydraulic management unit	Calculate annual hydraulic (i.e., wastewater and supplemental irrigation water) loading rate	Million gallons and inches/season

G. Monitoring Requirements

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Annually	Hydraulic management unit	COD loading calculation	COD applied in lbs/acre-day
Annually	Hydraulic management unit	Calculate and report total nitrogen and phosphorus loading calculation from wastewater and all other sources applied onsite	Nitrogen and phosphorus applied in lbs/acre-year
Annually	Hydraulic management unit	Crop Yield Calculation and Crop Type	Tons/acre, lbs/acre, or bushels/acre
Annually	Hydraulic management unit	Crop Nutrient Uptake from Crop Tissue Analysis or from standard tables for Crop Type and yield	Nitrogen and phosphorus uptake in lbs/acre-year
Last year of permit term, Fall of 2014	Soil monitoring unit	Composite soil sample	Electrical Conductivity, pH, nitrate-N, ammonium-N, plant available phosphorous
Last year of permit term, 2014	All flow measurement locations	Flow measurement calibration	Document the flow measurement calibration of all flow meters and pumps used directly or indirectly to measure all wastewater, tail water, flushing water, and supplemental irrigation water flows applied to each HMU

H. Standard Reporting Requirements

1. The permittee shall submit an Annual Wastewater Reuse Site Performance Report ("Annual Report") prepared by a competent environmental professional no later than January 31 of each year which shall cover the previous year (see section F for reuse reporting period). The Annual Report shall include results for monitoring required in Section G, status of compliance activities, and an interpretive discussion of monitoring data (ground water, vadose zone, hydraulic loading, wastewater etc.) with particular respect to environmental impacts by the facility.

2. The annual report shall contain the results of the required monitoring as described in Section G. Monitoring Requirements. If the permittee monitors any parameter more frequently than required by this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the annual report.

3. The annual report shall be submitted to the Engineering Manager at the following address:

   Boise Regional Office
   1445 N. Orchard
   Boise, ID 83706-2239
   (208) 373-0550

   A copy of the annual report shall also be mailed to:

   Richard Huddleston, P.E.
   Wastewater Program Manager
   1410 N. Hilton
   Boise, ID 83706
   208-373-0561

4. Notice of completion of any work described in Section E. Compliance Schedule for Required Activities shall be submitted to the Department within 30 days of activity completion. The status of all other work described in Section E shall be submitted with the Annual Report.

5. All laboratory reports containing the sample results for monitoring required by Section G. Monitoring Requirements of this permit shall be submitted with the Annual Report.

I. Standard Permit Conditions: Procedures and Reporting

1. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the permittee to comply with all conditions of the permit or the Wastewater Reuse Permit Regulations, in conformance with a DEQ approved, current Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. This Plan of Operations shall be updated as necessary to reflect current operations.

2. Wastewater(s) or recharge waters applied to the land surface must be restricted to the premises of the application site. Wastewater discharges to surface water that require a permit under the Clean Water Act must be authorized by the U.S. Environmental Protection Agency.

3. Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.16.600.03. In order to prevent public health hazards and nuisance conditions the permittee shall:

   a. Apply wastewater as evenly as practicable to the treatment area;
   b. Prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects; and
   c. Prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.

4. The permittee shall:

   a. Manage the wastewater reuse treatment site as an agronomic operation where vegetative cover is grown and harvested or grazed to utilize the nutrients and minerals in the wastewater, and,
   b. Not hydraulically overload any particular areas of the wastewater reuse treatment site.

5. All waste solids, including dredgings and sludges, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.

6. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit at least six months prior to the expiration date of the existing permit in accordance with the Wastewater Reuse Permit Regulations and include seepage tests on all lagoons per latest DEQ procedures.

7. The permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:

   a. Enter the permitted facility,
   b. Inspect any records that must be kept under the conditions of the permit.
   c. Inspect any facility, equipment, practice, or operation permitted or required by the permit.
   d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.

8. The permittee shall report to the Director under the circumstances and in the manner specified in this section:

   a. In writing thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process.
   b. In writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations.

I. Standard Permit Conditions: Procedures and Reporting

c. Orally within twenty-four (24) hours from the time the permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director (see below)

DEQ Regional Office: see Permit Certification Page
Emergency 24 Hour Number 1-800-632-8000

d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any non-compliance unless extended by the DEQ. This report shall contain:

   i. A description of the non-compliance and its cause;
   ii. The period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and
   iii. Steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.

e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report.

9. The permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit noncompliance.

10. The permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. Also address these control operations in an update to the Operations and Maintenance Manual.

J. Standard Permit Conditions: Modifications, Violations, and Revocations

1. The permittee shall furnish to the Director within reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these regulations.

2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.

3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in I. *Standard Reporting Requirements*, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.

4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.

5. Any person violating any provision of the Waste Water Reuse Permit Regulations, or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars ($10,000) or one thousand dollars ($1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor.

6. The Director may revoke a permit if the permittee violates any permit condition or the Wastewater Reuse Permit Regulations.

7. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within thirty-five (35) days of receipt of the notice by the permittee, unless within that time the permittee request an administrative hearing in writing to the Board of the Department of Environmental Quality pursuant to the Rules of Administrative Procedures contained in IDAPA 58.01.23.

8. If, pursuant to Idaho Code ɔ 67-5247, the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, a revocation hearing before the Board of the Department of Environmental Quality shall be provided. Such hearings shall be conducted in accordance with the Rules of Administrative Procedures contained in IDAPA 58.01.23..

9. The provisions of this permit are severable and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.

10. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted reuse facility from service, including any treatment, storage, or other facilities or equipment associated with the reuse site. Prior to commencing closure activities, the permittee shall: a) participate in a pre-site closure meeting with the DEQ; b) develop a site closure plan that identifies specific closure, site characterization, or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and c) submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.

Appendix 1
Environmental Monitoring Serial Numbers

HYDRAULIC MANAGEMENT UNITS

Serial Number	Description	Acres
HMU-012901	Land Application Site	5.7

WASTEWATER SAMPLING POINTS

Serial Number	Description
WW-012901	Prior to Land Application (Post-Disinfection)

SOIL MONITORING UNITS

Serial Number	Description	Associated HMU
SU-012901	Land Application Site	HMU-012901

LAGOONS

Serial Number	Description
LG-012901	South Lagoon (Cell No. 1)
LG-012902	North Lagoon (Cell No. 2) – No longer in use

Appendix 2
Site Map

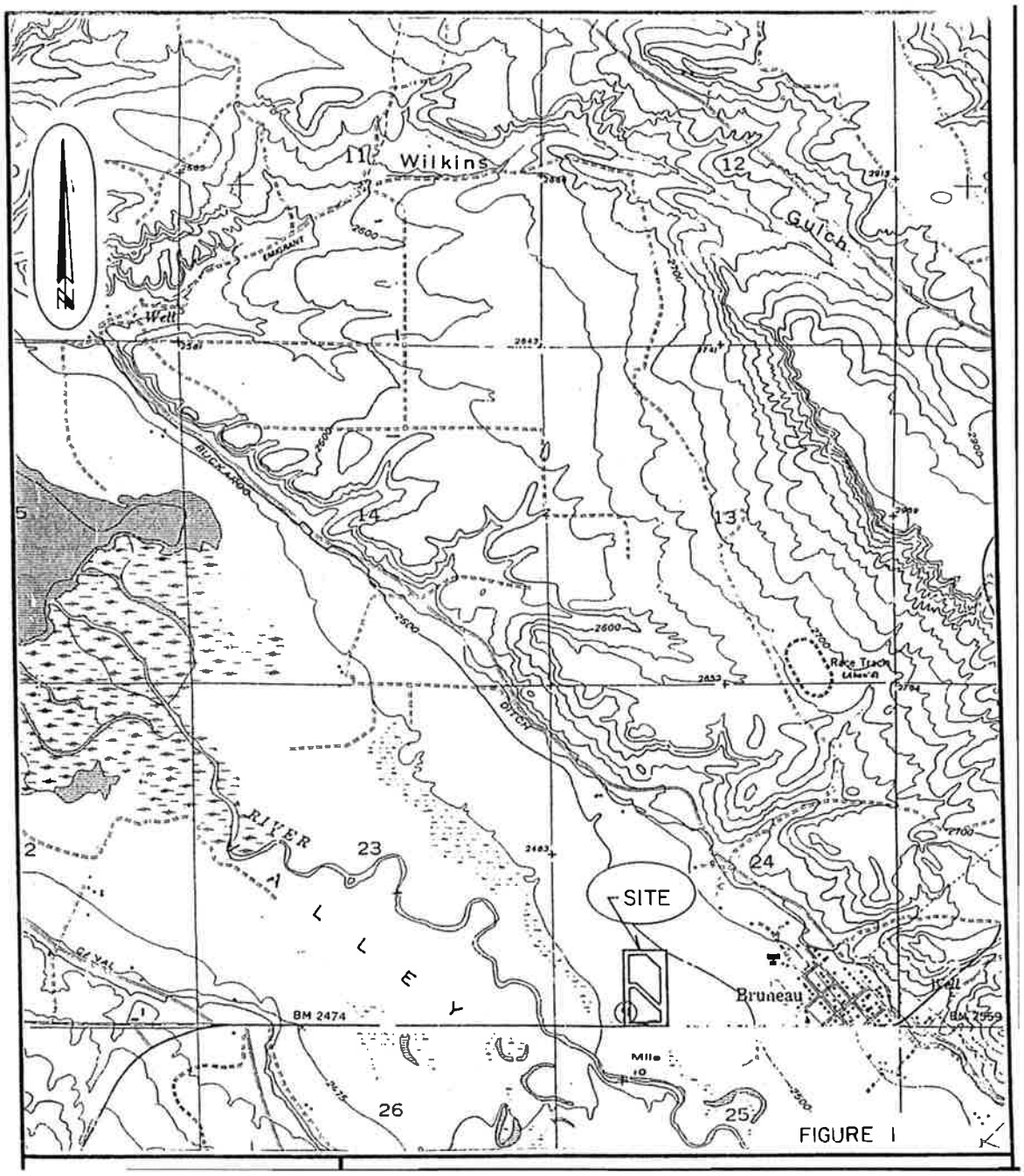


Figure A-1: Vicinity Map

Appendix 2
Site Map

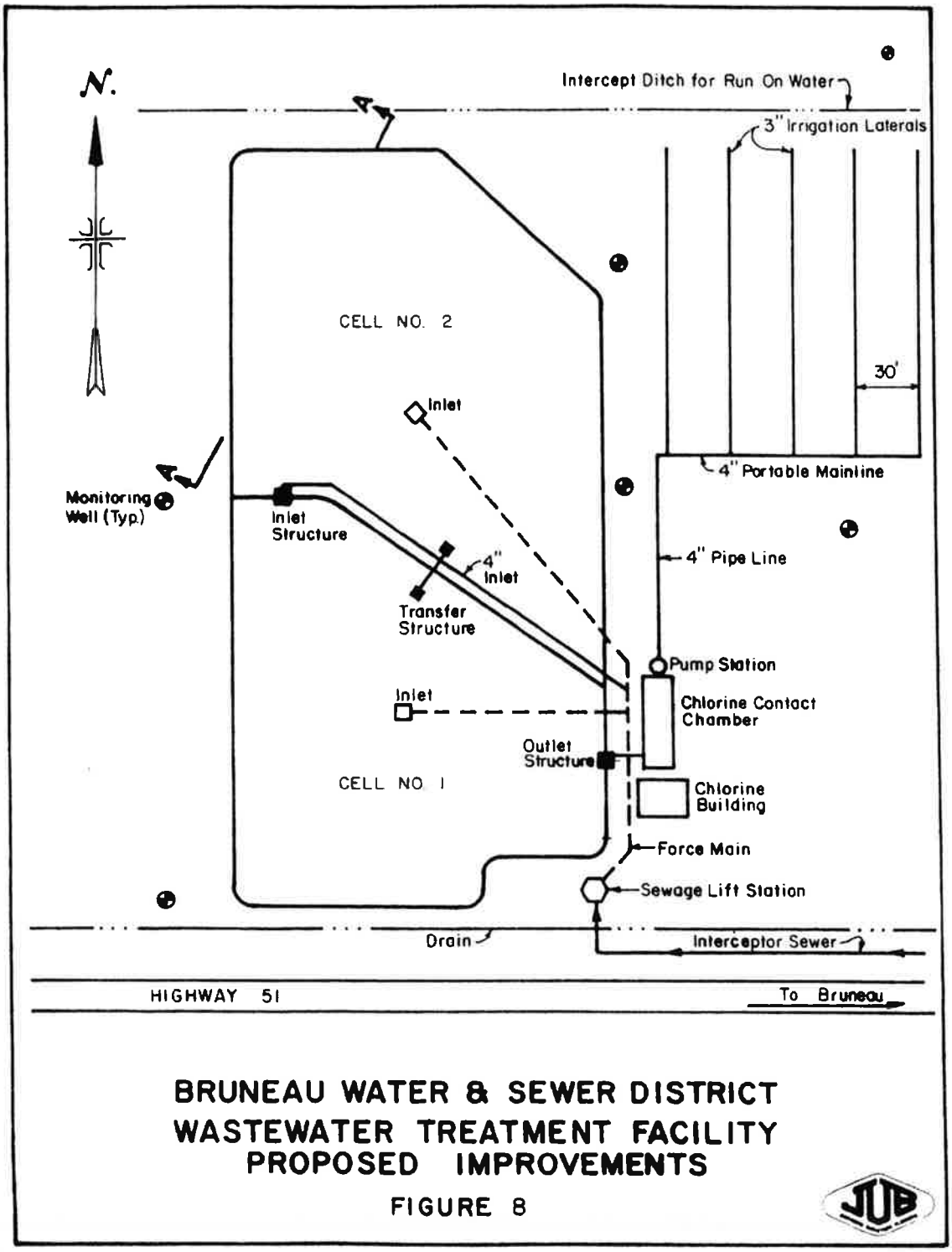


Figure A-2: Site Layout

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

APPENDIX B: WETLANDS ASSESSMENT

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
Choose one REGULATORY OFFICE
Choose one
Choose an item

REPLY TO
ATTENTION OF

May 7, 2014

J.U.B. ENGINEERS
RECEIVED

MAY 0 8 2014

TWIN FALLS, IDAHO

Regulatory Division

SUBJECT: NWW-2006-2100059

Mr. Rex L. Harding
J-U-B Engineers, Inc
115 Northstar Avenue
Twin Falls, Idaho 83301

Dear Mr. Harding:

We have received your letter dated March 31, 2014 requesting Department of Army (DA) comments on the proposed Bruneau Water and Sewer improvement project. The proposed project is located within Section 24 of Township 6 South, Range 5 East, near latitude 42° 88' 22" N and longitude -115° 79' 83" W, in Owyhee County, in Bruneau, Idaho. Your request has been assigned file number NWW-2006-2100059. Please refer to this file number for all future correspondence with our office regarding this project.

We have reviewed the information provided and have determined that the work associated with the reconstruction of the north lagoon and installation of a liner in the south lagoon does not require a Department of the Army (DA) permit. Under Section 404 of the Clean Water Act, waste treatment ponds or lagoons are not considered to be a waters of the United States (33 CFR Part 328.3(a) (8)).

The installation of a discharge pipeline from a facility on the east side of Buckaroo Ditch to the wastewater treatment plant would follow the previously disturbed Ruth Street alignment. Except for the crossing of the Buckaroo Ditch the pipeline route is uplands and does not require DA approval. The crossing of the Buckaroo Ditch would require DA approval if method of construction is open trench. If you bore the new line under the Buckaroo Ditch then a DA permit is not required.

AUTHORITY

DA permit authorization is necessary if you open trench the new discharge pipeline across Buckaroo Ditch because your project would result in the discharge of dredged and/or fill material into Buckaroo Ditch, a Waters of the United States. This authorization is outlined in Section 404 of the Clean Water Act (33 U.S.C. 1344).

We are interested in your thoughts and opinions concerning the quality of service you received from the Walla Walla District, Corps of Engineers Regulatory Division. Please visit us online at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey, which will be automatically submitted to us. Alternatively, you may call and request a paper copy of the survey, which you may complete and return to us by mail. For additional information about the Walla Walla Regulatory please visit us at http://www.nww.usace.army.mil/BusinessWithUs/RegulatoryDivision.aspx.

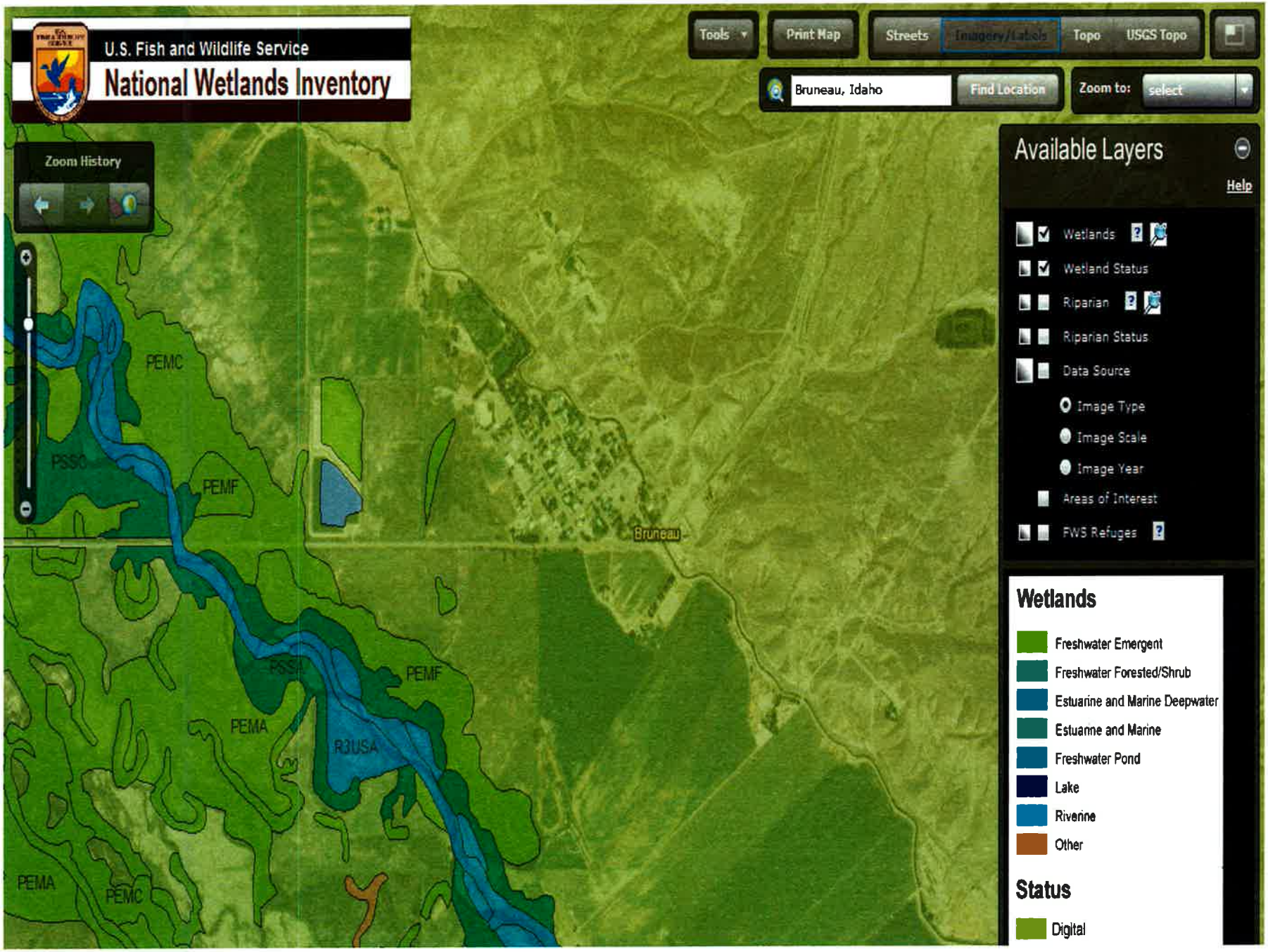
Thank you for this opportunity to provide comments early in the planning process for the proposed upgrade of the Bruneau Wastewater Treatment Facility. Please contact me by telephone at 208-345-2154, by mail at the address in the letterhead, or via email at greg.j.martinez@usace.army.mil if you have any questions or need additional information. For information purposes a copy of this letter is being sent to: Bruneau Water and Sewer District.

Sincerely,

Gregory J. Martinez
Project Manager, Regulatory Division

Enclosure:

Vicinity Map


U.S. Fish and Wildlife Service
National Wetlands Inventory
Tools
Print Map
Streets
Imagery/Labels
Topo
USGS Topo
Bruneau, Idaho
Find Location
Zoom to:
select
Zoom History
Available Layers
Help
Wetlands
Wetland Status
Riparian
Riparian Status
Data Source
Image Type
Image Scale
Image Year
Areas of Interest
FWS Refuges
Wetlands
Freshwater Emergent
Freshwater Forested/Shrub
Estuarine and Marine Deepwater
Estuarine and Marine
Freshwater Pond
Lake
Riverine
Other
Status
Digital
PEMC
PSSC
PEMF
PEMA
R3USA
Bruneau

Alan Giesbrecht

From: Alan Giesbrecht
Sent: Wednesday, October 7, 2015 1:27 PM
To: 'Martinez, Greg J NWW'
Subject: RE: NWW-2006-2100059: Bruneau EID (UNCLASSIFIED)

Thanks Greg.

ALAN GIESBRECHT, P.E.
J-U-B ENGINEERS, Inc.
p 208 232 1313 c 208 221 6764

-----Original Message-----
From: Martinez, Greg J NWW [mailto:Greg.J.Martinez@usace.army.mil]
Sent: Tuesday, October 6, 2015 8:02 AM
To: Alan Giesbrecht <ASG@JUB.com>
Subject: RE: NWW-2006-2100059: Bruneau EID (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Alan,

If work extends to the west and results in a temporary or permanent fill into wetlands then a permit from the Corps under the section 404 of the Clean Water Act would be required. Work within the existing lagoons to install an under drain would not require a permit. The point at which the under drain connects to the existing swale may or may not require a permit, without plans to review we cannot say, but if it does it would likely fall under a Nationwide permit 12.

Greg Martinez
Corps of Engineers
Boise Regulatory Office

-----Original Message-----
From: Alan Giesbrecht [mailto:ASG@JUB.com]
Sent: Monday, October 05, 2015 4:57 PM
To: Martinez, Greg J NWW
Subject: [EXTERNAL] NWW-2006-2100059: Bruneau EID

Dear Greg,

In May 2014, you sent an agency response letter to Rex Harding of J-U-B regarding proposed wastewater system improvements for the Bruneau Water and Sewer District. Attached is a copy of your letter response.

Since then, I have taken Rex's place in finishing the project and Environmental Information Document (EID). During DEQ's recent review of the EID in April 2015, DEQ noted that in your response letter, you mentioned the need for a DA permit if you open trench the new discharge pipeline across Buckeroo Ditch but did not address whether there would be impacts to the wetlands west of the existing lagoons. The area along the Bruneau River located south and west of the District is classified as freshwater emergent, freshwater forested/shrub and river wetland. The wetland located west of the lagoons begins at the edge of the District property. DEQ asked that we request an email confirmation from you regarding those wetlands.

We do not believe there will be impacts to the referenced wetlands. The proposed lagoon improvements will not encroach into the wetlands and will basically remain within the footprint of the existing lagoons. The proposed improvements called for an underdrain system to be installed under the lagoon liner to relieve water uplift pressure on the liner. An existing drain swale runs along the south edge of the property that drains to the river. The proposed drains under the lagoon liners will drain to this drainage swale near the southwest property corner. Based on the best topo information that we currently have, the top of bank of that drain has an elevation of 2478 at the west property line. The finish floor elevation of the south (lowest) lagoon is 2484. Therefore, it appears that the drains under the liner will be higher than the adjacent wetlands located west of the lagoons and the proposed improvements will not alter the current hydrology of the swale and wetlands.

If you concur with this assessment, please respond to this email so that we can provide documentation of your response to DEQ. We appreciate your help with this matter.

Thanks,

ALAN GIESBRECHT, P.E.

Area Manager

J-U-B ENGINEERS, Inc.

275 S. 5th Avenue, Suite 220, Pocatello, ID 83201

e asg@jub.com <mailto:asg@jub.com> w Blockedwww.jub.com <Blockedhttp://www.jub.com/>

p 208 232 1313 c 208 221 6764 f 208 232 3489

cid:image002.png@01D09A02.D8589340

This e-mail and any attachments involving J-U-B or a subsidiary business may contain information that is confidential and/or proprietary. Prior to use, you agree to the provisions found at edocs.jub.com. If you believe you received this email in error, please reply to that effect and then delete all copies.

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

APPENDIX C: PUBLIC PARTICIPATION INFORMATION

Publ

NOTICE OF INTENT TO FILE AN APPLICATION WITH USDA, RURAL DEVELOPMENT

The Bruneau Water & Sewer District intends to file an application with USDA – Rural Development for financial assistance for the following purpose: sewer system facility planning study.

Also, the public is invited to consult with USDA – Rural Development on any concerns regarding environmental resources that may be affected by the proposal. The address and phone number of the Rural Development office is:

USDA – Rural Development, ATTN: Carol Garrison, 2208 E. Chicago Street, Caldwell, Idaho 83605. 208-459-0761 x116

If any additional information is needed, the name, address and phone number of the contact for the Applicant is:

Bruneau Water & Sewer District, ATTN: Stacy Buckingham, PO Box 194, Bruneau, Idaho 83604. 208-845-2288

3/14/12

SYNOPSIS OF COMMISSIONER MINUTES FEBRUARY 21, 2012

Bills paid for the following funds: Current Expense $38,382, Road & Bridge $53,402, District Court $3,050, Probation $1,206, Museum $915, Charity $531, Revaluation $1,662, Solid Waste $7,003, Weed $388, 911 $2,330, Vessel $299.

Approved alcohol beverage license for Fisher's Saloon. Approved pay authorization for part-time court security for Bob McJunkin at $13.34 per hour. The complete minutes can be viewed at owyheecounty.net.

3/7/12

NOTICE OF TAX SALE

Pursuant to Idaho Code §31-808, and pursuant to the Order of Sale recorded with the Owyhee County Recorder on August 22, 2011, Owyhee County will offer for sale on Monday, March 12, 2012, at 10:00 A.M. in Courtroom 2 of the Owyhee County Courthouse, 20381 State Highway 78, Murphy, Idaho, the following property:

Tax 6 and the Adjacent ½ of Abandoned Railroad Row Section

REQUEST FOR PROPOSALS FOR ENGINEERING SERVICES

The Bruneau Water and Sewer District is requesting proposals from qualified consultants to provide an update to the Waste Water System Master Plan, and Environmental Information Document (EID), preliminary engineering, engineering design, and construction management services for an upgrade to the District's existing Waste Water System.

The Bruneau Water and Sewer District is applying for funding assistance from the Idaho Department of Environmental Quality to fund the update of the Master Plan and develop the EID.

Proposals must include:

1) Capability to Perform Project (25)
2) Relevant Project Experience (25)
3) Qualifications of Project Team (25)
4) Project Approach and Schedule (25)

The relative importance of each area is shown in parentheses.

A request for proposals may be obtained from the office of the Secretary of the Bruneau Water and Sewer District at (208) 845-2188.

Proposals are due in the office of the Secretary, Bruneau Water and Sewer District by 9:00 a.m. March 12, 2012.

Bruneau Water and Sewer District, PO Box 194, Bruneau, ID 83604

Stacey Buckingham, President

2/29;3/7/12

Charlotte Sherburn

By: Cindy Chaves, Deputy Clerk

2/15,22,29;3/7/12

NOTICE

The Idaho Unclaimed Property Program posts an updated list of Idaho Unclaimed Property owners on the internet once each month. This online list can be viewed at sto.idaho.gov (click on "Unclaimed Property"). Anyone without Internet access can view the list on computers at most public libraries. Unclaimed Property consists of abandoned

February 11, 2014

Ken Davis Book
Dally Morrison Book
Beckie Janousek - returned C DS
9 Dave C. visit
Kenneth Tindall paper
Kelli Buckingham visit
Tom Thomas Computer
Melly Parter ~~Capies~~ paper
George Parter Visit

WATERBOARD MEETING
Stacey Buckingham
6 Rex L Harding
Mayleen Harding
Denise M Stewart
Pat Welsh
Kelli Buckingh

Meeting Feb 11th 2014

February 12, 2014

Marie Robertson Audio return
Melissa Cameron Computer
Beckie Janousek Computer poster paper
Dally Morrison - Gattsch visit
10 Ken Davis Book
Liz Agg Library Bus
Cathy Sellman Book return
Kenneth Tindall Papers
Melly Parter Capies
George Parter Visit

Bruneau Water and Sewer
Board Meeting February 11, 2014

Present: Stacey Buckingham
Denise Stewart
Pat Welsh
Kelli Buckingham
Guest: Rex Harding (JUB Engineering)

Meeting was opened at 7:00pm

Rex Harding explained the alternatives that were addressed in the technically approved Master Plan, including the potential environmental impacts of each alternative. The funding options were discussed and the potential financial impact on the public.

Denise made a motion that alternative 4A would be the best option for the board, Pat 2nd all in favor, motion carried.

RO Membranes need to be changed. There are 16 membranes about $700.00 each these membranes need to be changed before summer.

The computer in the water treatment plant needs to be replaced. We need to purchase a new computer and software program.

Denise made a motion to purchase RO Membranes, computer, and software, Pat 2nd all in favor, motion carried.

Jay Black would like to hook up to city water putting a water meter in to water his livestock. Hook up fee would be a $1,000.00 with Jay paying for installation.

Pat made a motion to allow Jay to hook up to city water paying a $1000.00 for hook up fee and all installation, Denise 2nd, all in favor, motion carried.

Larry Esson was inquiring about hooking their subdivision to city water. More research needs to be done for the board to make a decision. The homeowners need to do the research and get back to the board. Decision is tabled until homeowner present findings to the board.

Skyline Construction needs to be paid in the amount of $1,040.00 for fixing the water line by teacher housing.

Pat made a motion to pay Skyline Construction $1,040.00 for fixing the water line Denise 2nd, all in favor, motion carried.

Customers that are behind on their water bills need to pay before the 15th of the month or their water will be turned off.
Pat made a motion to adjourn the meeting at 8:35 Denise 2nd, all in favor, motion carried.

July 1st, 2015

Contact:
Stacey Buckingham
Bruneau Water and Sewer District
(208) 845-2188

Public comment sought on 2013 Wastewater System Master Plan

BRUNEAU, ID – The public is invited to attend a public meeting on **Thursday, July 23rd, 2015,** to discuss the 2013 Wastewater System Master Plan .

The public meeting will be held at Bruneau Public LIbrary, 32073 Ruth Street, in Bruneau, at 7:00 p.m. The meeting will be an open-house format that allows individuals to review information and visit with district staff.

The purpose of this public meeting will be to review the improvement alternatives for the wastewater treatment system and determine the preferred alternative for design and construction.

If you are unable to attend, but would like to provide feedback on the Master Plan, public comment is being accepted until, July 22nd, 2015. For more information, or to provide comment, please contact Kelli Buckingham by phone at (208) 845-2188.

This is the Advertisement for July 23, 2015 sent out in July 1, 2015 water billings (per Kelli Buckingham, Bruneau Water and Sewer Secretary, 9/4/15)

Bruneau Water and Sewer
Special Board Meeting July 23rd, 2015

Present:	Stacey Buckingham	President
	Denise Stewart	Vice-President
	Pat Welsh	Member
	Wylee Aquiso	Member
	Justin Howard	Member
	Kelli Buckingham	Sec/Treasure

Stacey Buckingham opened the meeting at 7:10pm.

The Master Plan was in the Bruneau Public Library for public review. No written public feedback was given nor was verbal. No guests were present at the meeting.

Stacey explained the alternatives in the approved Master Plan with the board members again, including the potential environmental impacts of each alternative. The funding options were discussed and the potential financial impact on the public.

The board discussed the options and decided that the original vote on February 11th, 2014 for alternative 4A in the technically approved Master Plan is the best option for the board.

Denise made a motion, that the original vote on February 11th, 2014 for alternative 4A in the technically approved Master Plan would be the best option for the board, Pat 2nd all in favor, motion carried.

Wylee made a motion to adjourn the meeting at 8:15pm. Denise 2nd, all in favor, motion carried.

BRUNEAU WATER AND SEWER DISTRICT

ENVIRONMENTAL INFORMATION DOCUMENT

APPENDIX D: LOCAL, STATE, AND FEDERAL AGENCY CORRESPONDENCE

EID:

March 20, 2014

Name of Contact
Agency Name
Agency Address
City, State, Zip

RE: Brunueau Water and Sewer District Environmental Information Document (EID) Improvement Project – Request for Comments for Preparation of an Environmental Information Document

Dear Name of Contact:

The Bruneau Water and Sewer District is preparing a facility planning document to identify and make necessary improvements to their wastewater 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 Wastewater Treatment Facility Grants, IDAPA 58.01.04. The purpose of this letter is to request your review and response regarding any environmental impacts that your agency 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 consists of addressing concerns the District has regarding the condition and capacity of the existing wastewater infrastructure, including:

- Sanitary flows from the community and effluent from the community's new water treatment plant have filled the community's existing wastewater treatment lagoon, requiring land application to prevent overflow of the lagoon.
- The District is uncertain of the capacity of the existing lagoon and slow-rate land application site to handle the additional flows from the water treatment plant.
- There is a second lagoon at the waste treatment location that is no longer in use.
- The District received a Wastewater Reuse Permit from IDEQ in 2009; however, they do not have sufficient effluent to grow a crop as required in the permit.
- The current lagoon with the slow-rate application site restricts the District to little or no growth.
- The existing lagoon is aging and there is no backup should any leaks or problems develop.

The project is being proposed to address the District's concerns regarding the treatment system with highest priority given to upgrades necessary to meet regulatory requirements and to protect the health, safety, and welfare of the public and environment. The selected improvements will also provide the greatest benefit to the District in a cost-effective manner based on the needs of the community. A phased approach is used to minimize the initial capital costs and distribute the costs reasonably over time. Phasing of the improvements will also allow the District to implement them on an "as-needed" basis to meet future growth or as driven by regulatory requirements. Following is the phasing plan for the wastewater system improvements identified in the draft Wastewater Facilities Plan:

Phase 1 Improvements (Highest Priority)
Reconstruction of the portion of the north lagoon that is needed for waterwater treatment and disposal.

Phase 2 Improvements
Construction of a pipeline for the water treatment plant (WTP) discharge, reconstruction of the portion of the north lagoon necessary for WTP discharge storage and change the existing irrigation pump station to land apply the WTP discharge.

Phase 3 Improvements

Install a new liner in the south lagoon.

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

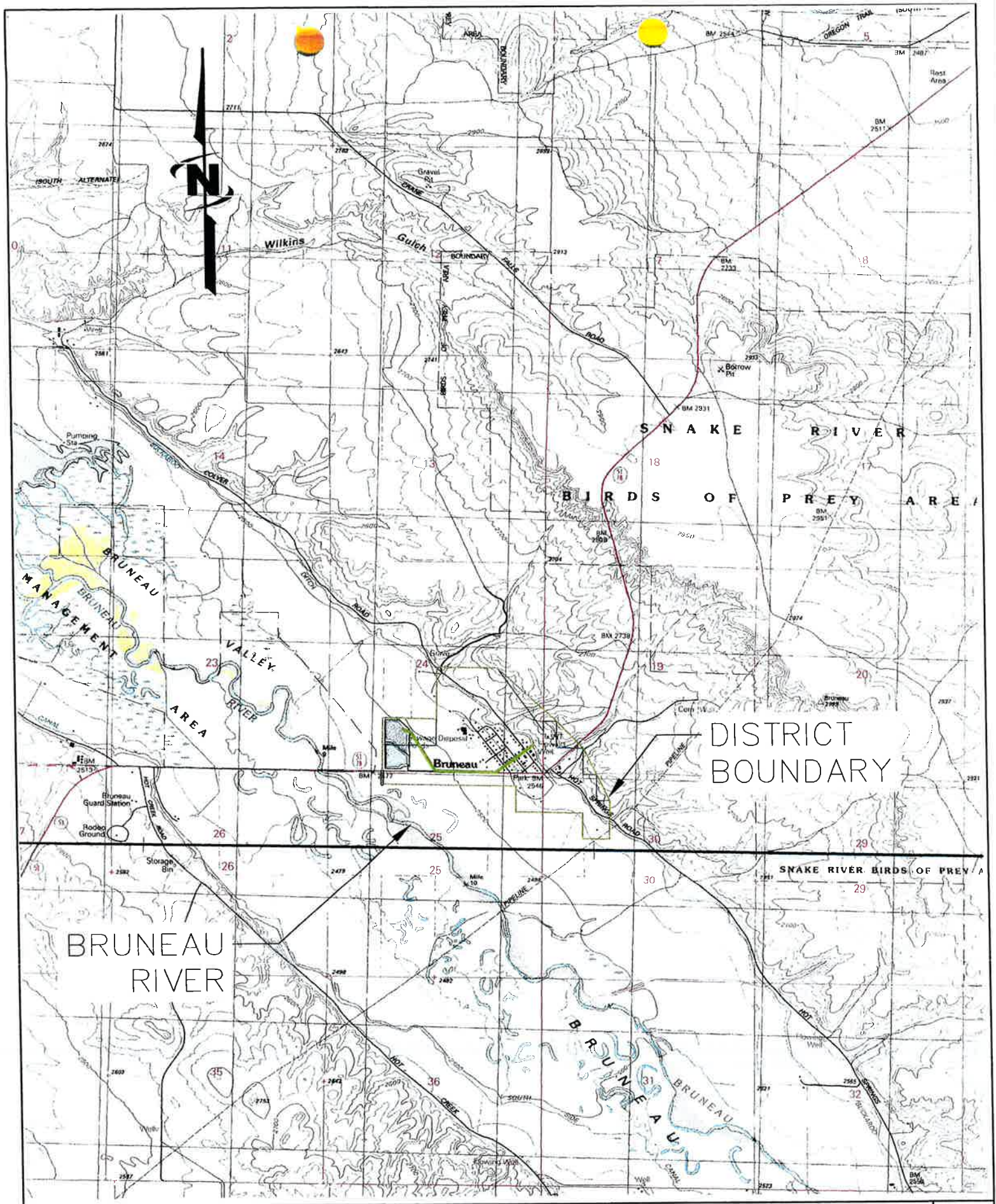
We request that you advise us of any comments that you may have regarding this project within 30 days, so the Burneau Water and Sewer District can proceed with the completion of the Environmental Information Document.

If you have any questions concerning this proposed project or if you need any further information, please feel free to contact me at 208-733-2414.

Sincerely,

Rex L. Harding, P.E.
J-U-B ENGINEERS, Inc.

Encl: Maps



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NO	REVISION DESCRIPTION	BY	APR	DATE

FILE: USGS
JUB PROJ. #: 60-12-022
DRAWN BY: RLH
DESIGN BY: RLH
CHECKED BY: ####
LAST UPDATED: 3/19/2014

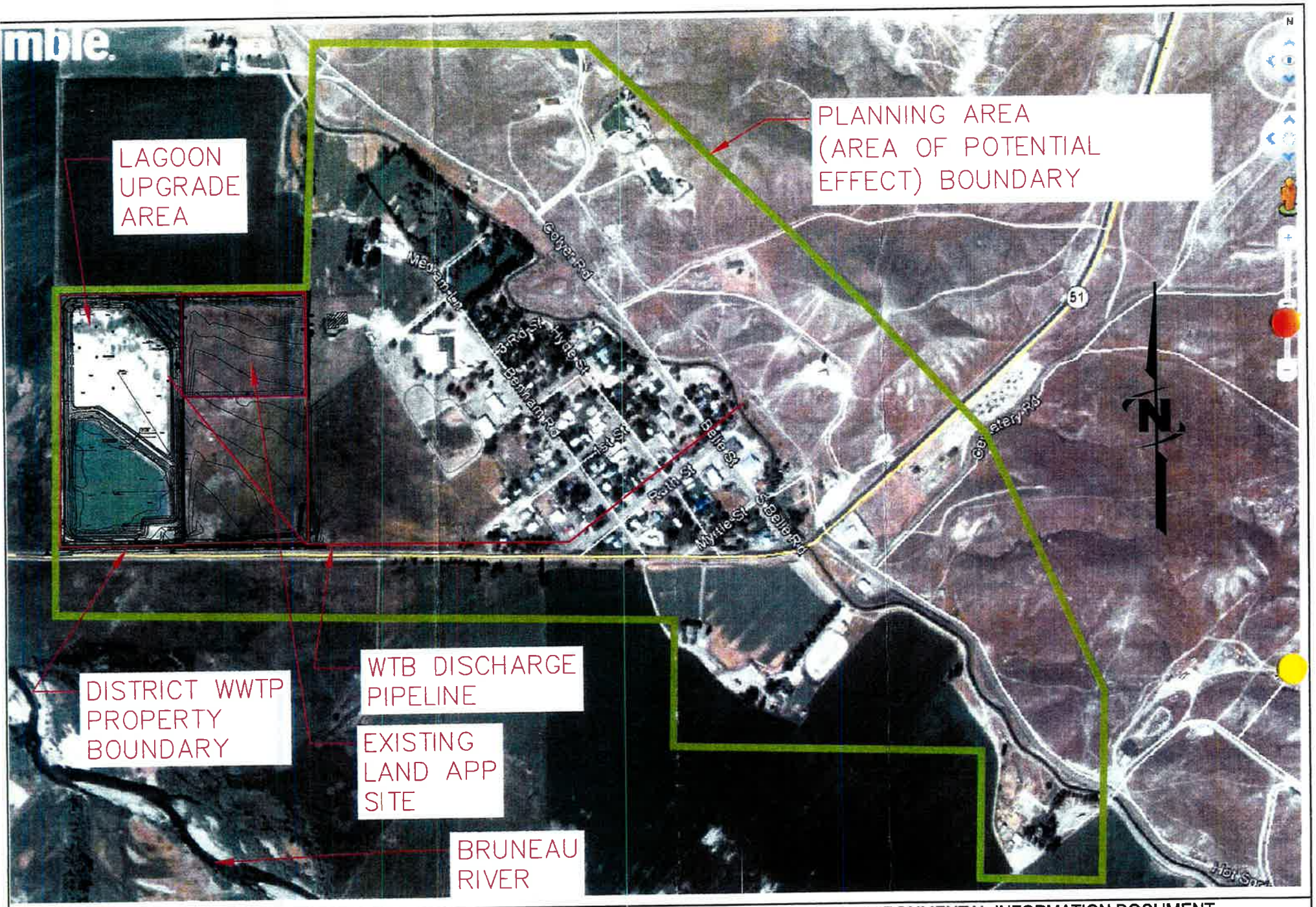
J-U-B ENGINEERS, INC.

ENVIRONMENTAL INFORMATION DOCUMENT
BRUNEAU WATER AND SEWER DISTRICT

S-24
T-6S
R-5E

FIGURE 4-5
USGS MAP

SHEET
1

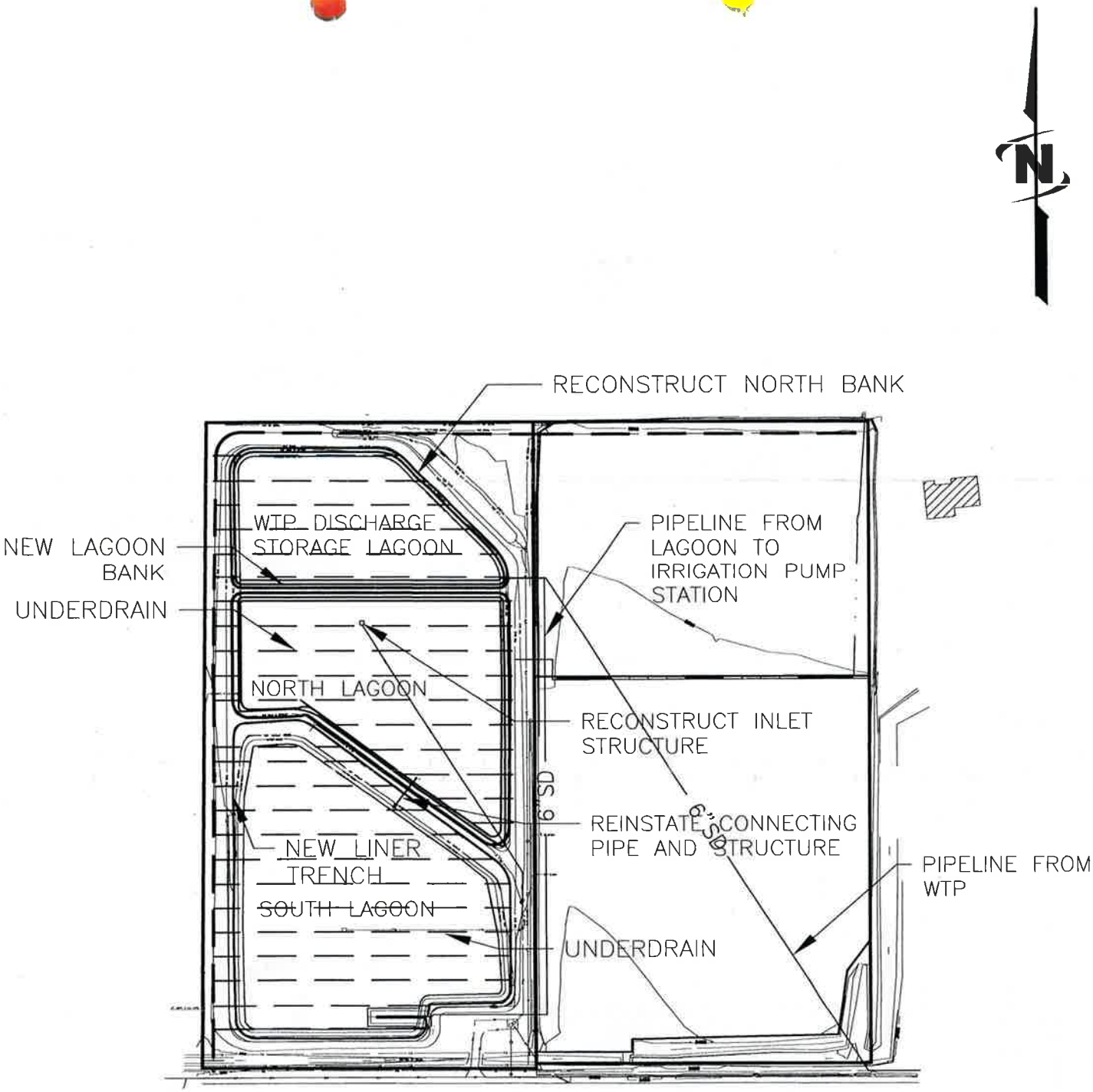


ENVIRONMENTAL INFORMATION DOCUMENT
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 4-2
PLANNING AREA

J-U-B ENGINEERS, INC.

LAST UPDATE 4/3/2014
PLOT DATE 4/3/2014
FILE AERIAL SITE



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NO	REVISION DESCRIPTION	BY	APR	DATE

FILE: FIGURE 5-4
JUB PROJ. #: 60-12-022
DRAWN BY: RLH
DESIGN BY: RLH
CHECKED BY: KCK
LAST UPDATED: 6/14/2013

J-U-B ENGINEERS, INC.

2013 WASTEWATER SYSTEM MASTER PLAN
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 5-4
ALTERNATIVE 4a SITE IMPROVEMENTS

SHEET
1

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
9173 W. Barnes Dr., Suite C
Boise, Idaho 83709
Phone: (208) 378-5700
Fax: (208) 378-5735

J.U.B. ENGINEERS
RECEIVED
APR 16 2014
TWIN FALLS, IDAHO

APR 15 2014

Rex Harding, P.E.
J-U-B Engineers
115 Northstar Avenue
Twin Falls, Idaho 83301

RE: City of Bruneau Water and Sewer District Environmental Information

Dear Mr. Harding:

The enclosed Soil Resource Report has been prepared in response to your letter requesting NRCS assistance in identifying issues related to the above referenced project during the environmental phase.

Soils in the project area are somewhat to very limited for Shallow Excavations due to depth to saturated layer, slope, unstable excavation walls and for dustiness. These limitations may affect project design, construction, and/or materials used.

If federal funding will be utilized to complete the project, the Farmland Protection Policy Act (FPPA), Public Law 97-98, 7 U.S.C. 4201 will apply. Some soils in the project area are classified as prime farmland or farmland of statewide importance. If any of these areas are converted to a permanent non-agricultural use, then a Farmland Conversion Impact Rating form (AD-1006) will need to be completed (a copy is attached). Soils that are designated as urban or are currently used for water storage are not considered prime or important farmlands. Urban land is defined as areas that contain 30 or more structures per 40 acres. For the purposes of the FPPA, zoning or city limit boundaries do not automatically exclude soils from being classified Important Farmlands. (7 CFR Ch. VI (1–1–03 Edition) NRCS encourages you to avoid converting prime or important farmland to other non-agricultural uses. Installation of new or replacement sewer line alone, does not constitute conversion Important Farmlands, as the disturbance is temporary. New sewage lagoons could potentially be considered conversion.

However, based on the project description, it does not appear that any new land is being acquired for this project. If that is the case, then no Farmland Conversion Impact Rating form (AD-1006) will be required.

Some soils in the project area exhibit wetness features and may support wetlands. NRCS encourages you to avoid impacts to wetlands from the project. If you have not already done so, you should contact the U.S. Army Corps of Engineers, Boise Field Office to determine the extent of wetlands in the project area under the jurisdiction of the Clean Water Act.

NRCS further encourages you to incorporate provisions for erosion, sediment, dust control, and runoff during project construction into the project design to protect soil, water, and air resources.

We appreciate the opportunity to assist you in planning this project. If you have questions or need further assistance, please contact Hal Swenson at 208-378-5728.

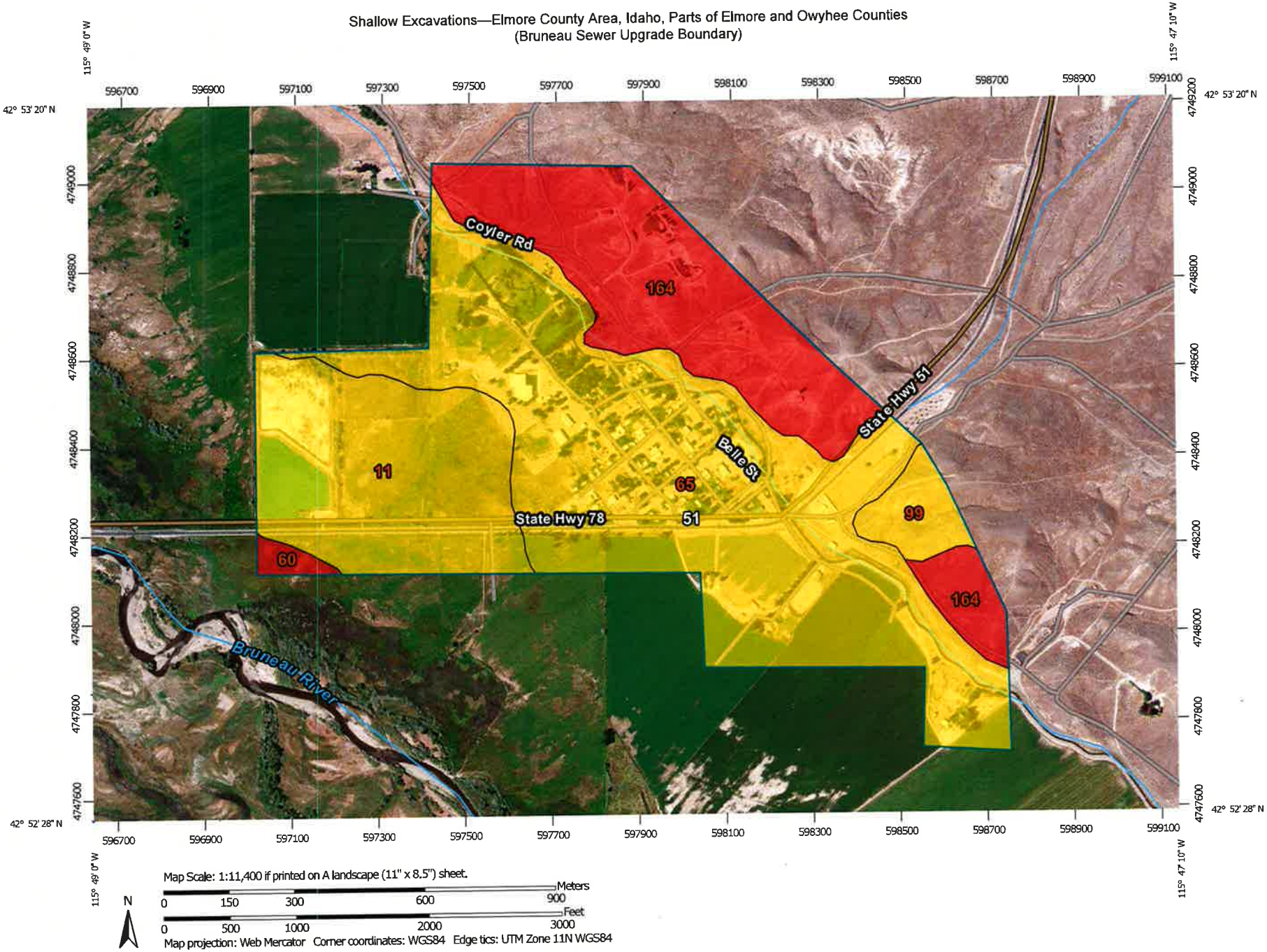
Sincerely,

Acting for

Jeff Burwell
State Conservationist

Enclosures
cc: w/o enclosures
Connie Tharp, District Conservationist, NRCS, Mt Home, ID
Bob Tribelhorn, ASTC, Field Operations - West, NRCS, Moscow, ID
Allyson Young, Resource Soil Scientist, NRCS, Moscow, ID.

Shallow Excavations—Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties
(Bruneau Sewer Upgrade Boundary)



Map Scale: 1:11,400 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines

- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points

- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

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.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties
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: Aug 21, 2011—Sep 14, 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.

Shallow Excavations

Shallow Excavations— Summary by Map Unit — Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties (ID685)						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres in AOI**	**Percent of AOI**
11	Bram silt loam, 0 to 2 percent slopes	Somewhat limited	Bram (85%)	Dusty (0.50)	63.8	20.7%
				Depth to saturated zone (0.35)		
				Unstable excavation walls (0.01)		
60	Fluvaquents, channeled	Very limited	Fluvaquents, channeled (80%)	Depth to saturated zone (1.00)	2.6	0.9%
				Flooding (0.60)		
				Dusty (0.04)		
				Unstable excavation walls (0.01)		
65	Garbutt silt loam, 0 to 4 percent slopes	Somewhat limited	Garbutt (80%)	Dusty (0.14)	160.1	52.0%
				Unstable excavation walls (0.01)		
99	Loray-Dors complex, 8 to 20 percent slopes	Somewhat limited	Loray (45%)	Slope (0.96)	9.7	3.1%
				Unstable excavation walls (0.56)		
			Dors (35%)	Slope (0.96)		
				Unstable excavation walls (0.14)		
				Dusty (0.06)		
164	Typic Torriorthents-Badland complex, 20 to 70 percent slopes	Very limited	Typic Torriorthents (45%)	Slope (1.00)	71.6	23.3%
				Unstable excavation walls (1.00)		
Totals for Area of Interest					**307.8**	**100.0%**

Shallow Excavations— Summary by Rating Value		
Rating	**Acres in AOI**	**Percent of AOI**
Somewhat limited	233.6	75.9%
Very limited	74.2	24.1%
Totals for Area of Interest	**307.8**	**100.0%**

Description

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

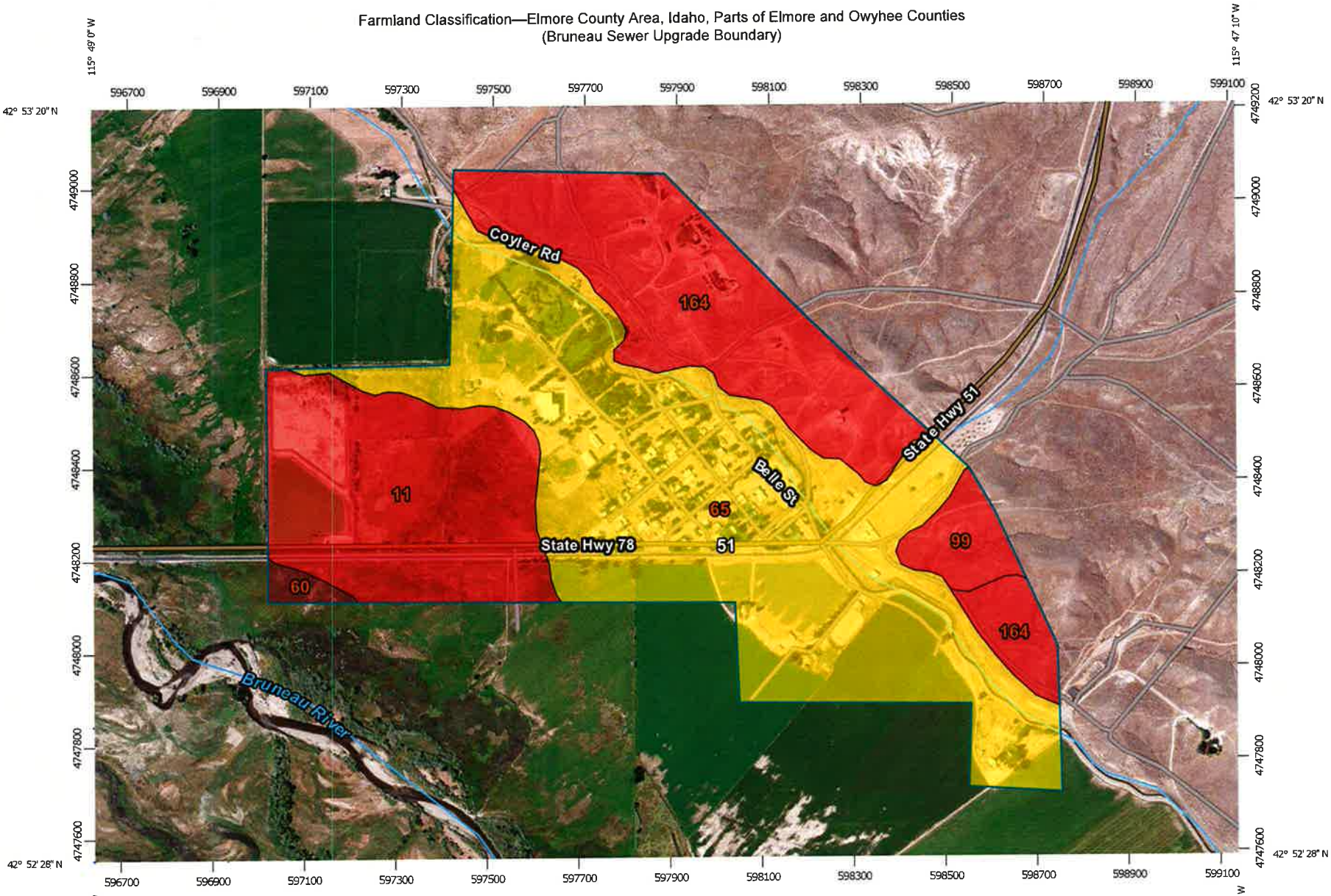
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Farmland Classification—Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties
(Bruneau Sewer Upgrade Boundary)



Map Scale: 1:11,400 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Water Features

MAP INFORMATION

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

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

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties
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: Aug 21, 2011—Sep 14, 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.

Farmland Classification

Farmland Classification— Summary by Map Unit — Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties (ID685)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
11	Bram silt loam, 0 to 2 percent slopes	Not prime farmland	63.8	20.7%
60	Fluvaquents, channeled	Prime farmland if irrigated and drained	2.6	0.9%
65	Garbutt silt loam, 0 to 4 percent slopes	Prime farmland if irrigated	160.1	52.0%
99	Loray-Dors complex, 8 to 20 percent slopes	Not prime farmland	9.7	3.1%
164	Typic Torriorthents-Badland complex, 20 to 70 percent slopes	Not prime farmland	71.6	23.3%
Totals for Area of Interest			**307.8**	**100.0%**

Description

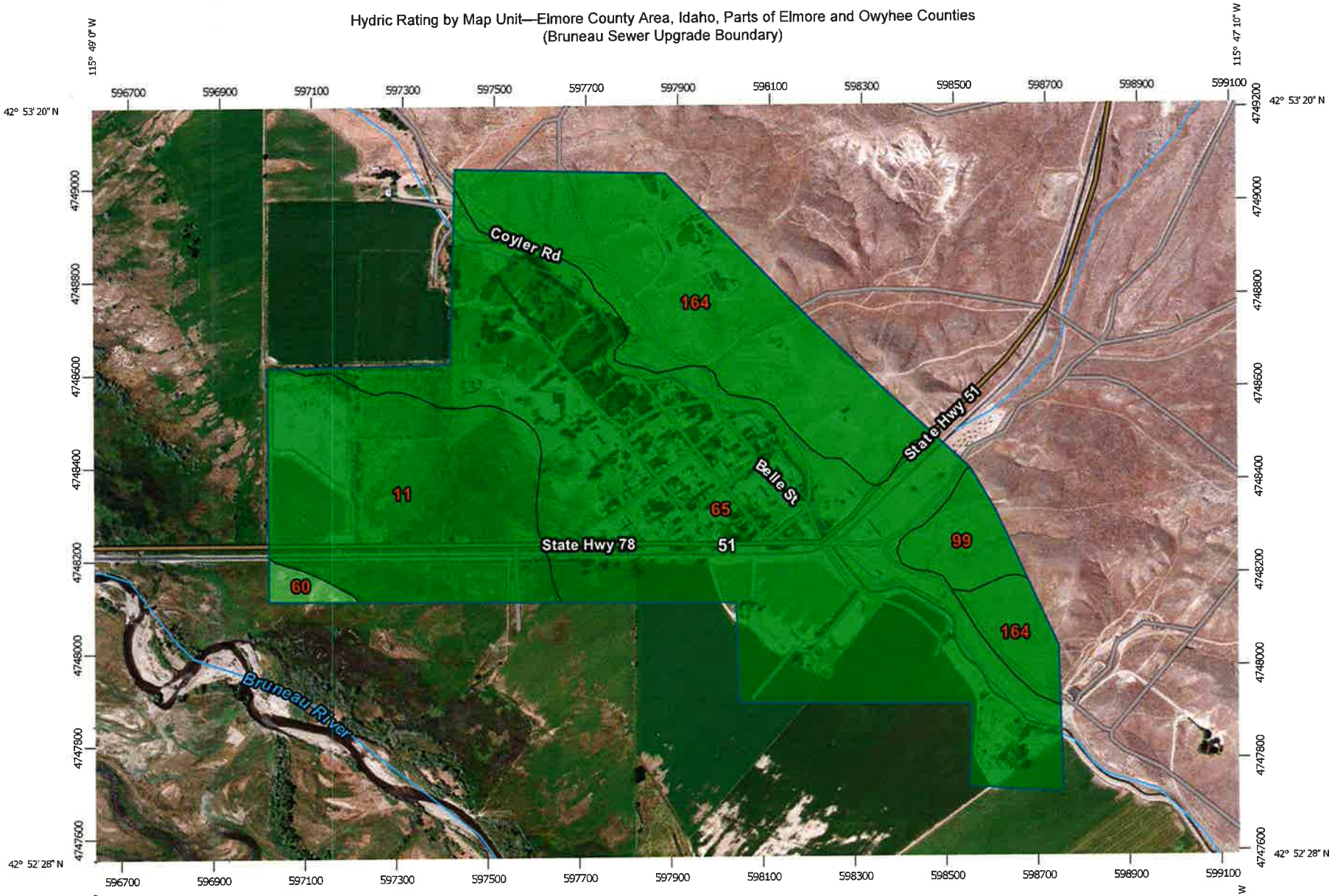
Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Hydric Rating by Map Unit—Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties
(Bruneau Sewer Upgrade Boundary)



Map Scale: 1:11,400 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Predominantly Hydric (66 to 99%)
- Partially hyrdic (33 to 65%)
- Predominatly nonhydric (1 to 32%)
- Nonhydric (0%)
- Not rated or not available

Soil Rating Lines

- Hydric (100%)
- Predominantly Hydric (66 to 99%)
- Partially hyrdic (33 to 65%)
- Predominatly nonhydric (1 to 32%)
- Nonhydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Predominantly Hydric (66 to 99%)
- Partially hyrdic (33 to 65%)
- Predominatly nonhydric (1 to 32%)
- Nonhydric (0%)
- Not rated or not available

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.

Warning: Soil Map may not be valid at this scale.

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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)

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

Soil Survey Area: Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties
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: Aug 21, 2011—Sep 14, 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.

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Elmore County Area, Idaho, Parts of Elmore and Owyhee Counties (ID685)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
11	Bram silt loam, 0 to 2 percent slopes	0	63.8	20.7%
60	Fluvaquents, channeled	4	2.6	0.9%
65	Garbutt silt loam, 0 to 4 percent slopes	0	160.1	52.0%
99	Loray-Dors complex, 8 to 20 percent slopes	0	9.7	3.1%
164	Typic Torriorthents-Badland complex, 20 to 70 percent slopes	0	71.6	23.3%
Totals for Area of Interest			**307.8**	**100.0%**

Description

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "hydric," "predominantly hydric," "partially hydric," "predominantly nonhydric," or "nonhydric" depending on the rating of its respective components and the percentage of each component within the map unit.

"Hydric" means that all components listed for a given map unit are rated as being hydric. "Predominantly hydric" means components that comprise 66 to 99 percent of the map unit are rated as hydric. "Partially hydric" means components that comprise 33 to 66 percent of the map unit are rated as hydric. "Predominantly nonhydric" means components that comprise up to 33 percent of the map unit are rated as hydric. "Nonhydric" means that none of the components are rated as hydric. The assumption here is that all components of the map unit are rated as hydric or nonhydric in the underlying database. A "Not rated or not available" map unit rating is displayed when none of the components within a map unit have been rated.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as being hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: *None Specified*

Tie-break Rule: Lower

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

Rex L. Harding, P.E.
J-U-B ENGINEERS, Inc.
115 Northstar Avenue
Twin Falls, ID 83301

April 23, 2014

RE: Bruneau Water and Sewer District Environmental Information Document (EID) improvement Project – Request for Comments for Preparation of an Environmental Information Document

Dear Rex,

Thank you for the opportunity to comment on the proposed Bruneau Water and Sewer improvement project. Neither Owyhee County, nor the City of Bruneau participate in the National Flood Insurance Program (NFIP) thus we do not have any comments regarding this review because our program is specifically related to meeting the minimum standards of the NFIP for participating communities.

Participating communities typically follow these minimum standards when development is in or near a flood prone area:

(1) Require within flood-prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of flood waters into the systems; and

(2) Require within flood-prone areas

(i) New and replacement sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters and

(ii) On-site waste disposal systems to be located to avoid impairment to them or contamination from them during flooding.

Although this development is not located in the Special Flood Hazard Area, it is near the Bruneau River and the flooding risks are unknown. Developing the proposed improvements in accordance with the minimum standards listed above may be of future benefit for this community.

I am available for any additional questions.

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

State of Idaho
DEPARTMENT OF WATER RESOURCES
Western Region • 2735 Airport Way • Boise, Idaho 83705-5082
Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

April 16, 2014

J.U.B. ENGINEERS
RECEIVED
APR 23 2014
TWIN FALLS, IDAHO

Rex Harding, P.E.
J-U-B ENGINEERS, INC.
115 Northstar Ave
Twin Falls, ID 83301

RE: Brunueau Water and Sewer District Environmental Information Document Improvement Project

Dear Mr. Harding:

In response to your March 31, 2014 letter, soliciting comments concerning the Brunueau Water and Sewer District Environmental Information Document Improvement Project. Idaho Department of Water Resources serves the citizens of Idaho by ensuring that water is conserved and available for sustainability of Idaho's ecosystem. If Brunueau Water and Sewer District Environmental Information Document Improvement Project will be utilizing additional water, surface and/or ground water, additional water rights will need to be acquired through the department permitting process. If the project will be utilizing water from different POD (Point of Diversion) as identified in existing water rights; you will need to amend those water rights. If the project intends to drill additional drinking water wells and monitoring wells you will be required to contract with a licensed Idaho well driller and conform to Department of Water Resources Well Construction Standards.

The Departments Statutes, rules and regulation can be accesses for you review on our web site at, http://www.idwr.idaho.gov/ . If you have any further questions feel free to contact me, Phone 208-334-2190 at your convenience.

Sincerely,

Sonny Hornbaker P.G.
Idaho Department of Water Resources
Western Region
2735 Airport Way
Boise, Idaho 83705-5082

Morgan Locke

From: Kibler, Bob <bob_kibler@fws.gov> ..for Michael carrier US Fish and Wildlife Service
Sent: Tuesday, May 13, 2014 3:56 PM
To: Morgan Locke
Subject: Re: Bruneau Sewer District EID

Greetings Morgan:

I have reviewed the proposed City of Bruneau Wastewater Treatment Facility upgrades, and am providing the following technical assistance comments and recommendations for your consideration via the State Environmental Review Process.

The Fish and Wildlife Service supports any actions that would ensure that untreated wastewater will not entering the surface or ground waters of the Bruneau River Valley. The Bruneau River, Floodplain, and C.J. Strike Reservoir receives significant use by migratory birds and other fish and wildlife species. These habitats are important for mitigating the loss of habitats and recreational opportunities impacted by inundation lands by the filling of the C.J. Strike Dam.

Because the City's lagoons are currently positioned within the floodplain (to take advantage of gravity feed of the effluent), these facilities are at greater risk of over-topping or breaching during spring flood events. Also, naturally high ground water levels of the floodplain enhance the risk of groundwater exposure to undesirable micro-organisms, chemicals, and nutrients percolating from the containment ponds. Extra care should be given to ensure that these structures are sized and reinforced adequately to provide for full effluent containment, resistance to seepage, protection from flood scour, and elevated adequately to preclude over-topping by flood waters.

As the City of Bruneau continues to grow, we would recommend that alternative upland sites be evaluated for their potential use for the future expansion of the wastewater treatment facilities. Also, we suggest that the City initiate programs to promote the installation of water conservation appliances in new homes and buildings to provide a means to reduce the per capita volume of gray and dark water that is produced and in need of treatment.

Thank you for the opportunity to provide these technical comments. To aid us in providing better recommendations for future actions, it would be helpful to us to know if any of these recommendations were deemed practical and were accepted into the project design. Please contact me if you have questions or require additional information.

On Tue, May 13, 2014 at 3:14 PM, Morgan Locke <mlocke@jub.com> wrote:

Bob,

Attached is a pdf of the original letter sent to Michael Carrier. Please let me know if I can help you with anything else. Thank you so much for your time.

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
Choose one REGULATORY OFFICE
Choose one
Choose an item

REPLY TO
ATTENTION OF

May 7, 2014

J.U.B. ENGINEERS
RECEIVED

MAY 0 8 2014

TWIN FALLS, IDAHO

Regulatory Division

SUBJECT: NWW-2006-2100059

Mr. Rex L. Harding
J-U-B Engineers, Inc
115 Northstar Avenue
Twin Falls, Idaho 83301

Dear Mr. Harding:

We have received your letter dated March 31, 2014 requesting Department of Army (DA) comments on the proposed Bruneau Water and Sewer improvement project. The proposed project is located within Section 24 of Township 6 South, Range 5 East, near latitude 42° 88' 22" N and longitude -115° 79' 83" W, in Owyhee County, in Bruneau, Idaho. Your request has been assigned file number NWW-2006-2100059. Please refer to this file number for all future correspondence with our office regarding this project.

We have reviewed the information provided and have determined that the work associated with the reconstruction of the north lagoon and installation of a liner in the south lagoon does not require a Department of the Army (DA) permit. Under Section 404 of the Clean Water Act, waste treatment ponds or lagoons are not considered to be a waters of the United States (33 CFR Part 328.3(a) (8)).

The installation of a discharge pipeline from a facility on the east side of Buckaroo Ditch to the wastewater treatment plant would follow the previously disturbed Ruth Street alignment. Except for the crossing of the Buckaroo Ditch the pipeline route is uplands and does not require DA approval. The crossing of the Buckaroo Ditch would require DA approval if method of construction is open trench. If you bore the new line under the Buckaroo Ditch then a DA permit is not required.

AUTHORITY

DA permit authorization is necessary if you open trench the new discharge pipeline across Buckaroo Ditch because your project would result in the discharge of dredged and/or fill material into Buckaroo Ditch, a Waters of the United States. This authorization is outlined in Section 404 of the Clean Water Act (33 U.S.C. 1344).

We are interested in your thoughts and opinions concerning the quality of service you received from the Walla Walla District, Corps of Engineers Regulatory Division. Please visit us online at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey, which will be automatically submitted to us. Alternatively, you may call and request a paper copy of the survey, which you may complete and return to us by mail. For additional information about the Walla Walla Regulatory please visit us at http://www.nww.usace.army.mil/BusinessWithUs/RegulatoryDivision.aspx.

Thank you for this opportunity to provide comments early in the planning process for the proposed upgrade of the Bruneau Wastewater Treatment Facility. Please contact me by telephone at 208-345-2154, by mail at the address in the letterhead, or via email at greg.j.martinez@usace.army.mil if you have any questions or need additional information. For information purposes a copy of this letter is being sent to: Bruneau Water and Sewer District.

Sincerely,

Gregory J. Martinez
Project Manager, Regulatory Division

Enclosure:

Vicinity Map

Alan Giesbrecht

From: Alan Giesbrecht
Sent: Wednesday, October 7, 2015 1:27 PM
To: 'Martinez, Greg J NWW'
Subject: RE: NWW-2006-2100059: Bruneau EID (UNCLASSIFIED)

Thanks Greg.

ALAN GIESBRECHT, P.E.
J-U-B ENGINEERS, Inc.
p 208 232 1313 c 208 221 6764

-----Original Message-----
From: Martinez, Greg J NWW [mailto:Greg.J.Martinez@usace.army.mil]
Sent: Tuesday, October 6, 2015 8:02 AM
To: Alan Giesbrecht <ASG@JUB.com>
Subject: RE: NWW-2006-2100059: Bruneau EID (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Alan,

If work extends to the west and results in a temporary or permanent fill into wetlands then a permit from the Corps under the section 404 of the Clean Water Act would be required. Work within the existing lagoons to install an under drain would not require a permit. The point at which the under drain connects to the existing swale may or may not require a permit, without plans to review we cannot say, but if it does it would likely fall under a Nationwide permit 12.

Greg Martinez
Corps of Engineers
Boise Regulatory Office

-----Original Message-----
From: Alan Giesbrecht [mailto:ASG@JUB.com]
Sent: Monday, October 05, 2015 4:57 PM
To: Martinez, Greg J NWW
Subject: [EXTERNAL] NWW-2006-2100059: Bruneau EID

Dear Greg,

In May 2014, you sent an agency response letter to Rex Harding of J-U-B regarding proposed wastewater system improvements for the Bruneau Water and Sewer District. Attached is a copy of your letter response.

Since then, I have taken Rex's place in finishing the project and Environmental Information Document (EID). During DEQ's recent review of the EID in April 2015, DEQ noted that in your response letter, you mentioned the need for a DA permit if you open trench the new discharge pipeline across Buckeroo Ditch but did not address whether there would be impacts to the wetlands west of the existing lagoons. The area along the Bruneau River located south and west of the District is classified as freshwater emergent, freshwater forested/shrub and river wetland. The wetland located west of the lagoons begins at the edge of the District property. DEQ asked that we request an email confirmation from you regarding those wetlands.

We do not believe there will be impacts to the referenced wetlands. The proposed lagoon improvements will not encroach into the wetlands and will basically remain within the footprint of the existing lagoons. The proposed improvements called for an underdrain system to be installed under the lagoon liner to relieve water uplift pressure on the liner. An existing drain swale runs along the south edge of the property that drains to the river. The proposed drains under the lagoon liners will drain to this drainage swale near the southwest property corner. Based on the best topo information that we currently have, the top of bank of that drain has an elevation of 2478 at the west property line. The finish floor elevation of the south (lowest) lagoon is 2484. Therefore, it appears that the drains under the liner will be higher than the adjacent wetlands located west of the lagoons and the proposed improvements will not alter the current hydrology of the swale and wetlands.

If you concur with this assessment, please respond to this email so that we can provide documentation of your response to DEQ. We appreciate your help with this matter.

Thanks,

ALAN GIESBRECHT, P.E.

Area Manager

J-U-B ENGINEERS, Inc.

275 S. 5th Avenue, Suite 220, Pocatello, ID 83201

e asg@jub.com <mailto:asg@jub.com> w Blockedwww.jub.com <Blockedhttp://www.jub.com/>

p 208 232 1313 c 208 221 6764 f 208 232 3489

cid:image002.png@01D09A02.D8589340

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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

TO: Rex L. Harding, P.E. J-U-B Engineers, Inc.
DATE: 4/9/2014
IDAHO SHPO REV#: 2014-618
PROJECT NAME: Bruneau Water and Sewer District Environmental Information Document Improvement Project
PROJECT NUMBER: NA
PROJECT LOCATION: S ½ Section 24 Township 6S, Range 5E, Boise Meridian, Owyhee County, Idaho

Step 1: Initiate the Section 106 Process (36 CFR 800.3)

☒		Establish Undertaking
☒		Notify Idaho SHPO (30 days to respond)
☒		Identify tribes and other consulting parties Include certified local governments if appropriate:
☒		Involve the Public
☐		No undertaking/potential to cause effects. (**Section 106 concluded**).
		Justification:
☒		Undertaking may affect *historic properties* (proceed to Step 2)
	☒	Idaho SHPO internal review
	☐	Recommend independent study by a qualified consultant: http://www.preservationidaho.org/resources/cultural-resources-consultants

Step 2: Identify Historic Properties (36 CFR 800.4)

☒		Determine Areas of Potential Effect (direct, indirect, and cumulative)
☒		Identify *historic properties* (archival research, reconnaissance, inventory)
	☐	
☒		Consult with Idaho SHPO
☒		No *historic properties* present/affected (**Section 106 concluded**).
		Justification: There are no known historic properties in the area of potential effect. Most of the undertaking is mostly within previously disturbed areas. If there are any historic properties in the undisturbed areas their surface manifestation (if any) is likely heavily obscured by vegetation.
☐		Potential Adverse Effects to *historic properties* (proceed to Step 3)

Step 3: Assess Adverse Effects (36 CFR 800.5)

☐	Apply Criteria of Adverse Effect (effects to historic properties)
☐	Consult with Idaho SHPO
☐	No *historic properties* adversely affected (**Section 106 concluded**)
	Justification:
☐	Adverse Effects to *historic properties* (proceed to Step 4)

Step 4: Resolve Adverse Effects (36 CFR 800.6)

☐	Notify Advisory Council on Historic Preservation
☐	Avoid, minimize, or mitigate adverse effects
☐	Consult with Idaho SHPO
☐	Final Memorandum of Agreement or Programmatic Agreement (**Section 106 concluded**)

Additional information on the Section 106 process can be found here: http://www.achp.gov/flowexplain.html

Thank You,

Ethan Morton, Archaeologist, Idaho State Historic Preservation Office

Historical Society is an Equal Opportunity Employer.

Rex Harding

From: Ester.Ceja@deq.idaho.gov
Sent: Thursday, June 12, 2014 2:13 PM
To: Rex Harding
Subject: FW: Bruneau Water and Sewer Wastewater Improvement Project

Rex,

Good afternoon. I received a response from the Shoshone Paiute Tribe regarding the Bruneau Project. Please incorporate the information in the body of the Bruneau EID.

Thank you,
Ester

From: Ted Howard [mailto:howard.ted@shopai.org]
Sent: Monday, June 09, 2014 11:37 AM
To: Ester Ceja
Subject: Bruneau Water and Sewer Wastewater Improvement Project

Dear Ms. Ceja,

Sorry for the late response. I know this area where the proposed project is. It's been farmed intensively over the years. The Bruneau area is where many of our people were when they were forcefully relocated to the Duck Valley Indian Reservation. During excavation there's no telling what might be discovered. If there is a discovery please notify my office as soon as possible, before there is any further disturbance.

Sincerely,

Ted Howard

Shoshone-Paiute Tribes

Cultural Resources Director

P.O. Box 219

Owyhee, Nevada 89832

Wk (208) 759-3100 ext. 1243

Fx (208) 759-3202

Cell (208) 871-7064

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recipient, you are hereby notified that any retention, dissemination, distribution, or copying of this communication is strictly prohibited. Please reply to the sender that you have received the message in error, and delete it. Thank you.

From: Ester Ceja
Sent: Friday, May 23, 2014 16:10
To: Rex Harding (RLH@JUB.com)
Subject: Bruneau WW EID Information

Rex,

I have attached a memo on the response from the US Fish and Wildlife Service. Please incorporate the listed species and the proposed no effect to species in the body of the EID. You will also need to incorporate a sentence into the body of the EID that states that the project will have no effect to Essential Fish Habitat as noted in the memo.

I did not receive any comments from the Burns Paiute, Shoshone Paiute, and the Shoshone-Bannock Tribes. The cultural resources section should include a sentence listing the tribes consulted and the fact that no comments were received by the tribes. You will need to include a copy of the Tribal consultation letters that were sent out by DEQ. You were cc'd on those, so you should have a copy.

Let me know if you have any questions.

Thanks,
Ester Ceja

MEMO

TO:	REX HARDING, JUB ENGINEERS
FROM:	ESTER CELA – DEQ GRANT AND LOAN PROGRAM
SUBJECT:	BRUNEAU WATER & SEWER DISTRICT – WASTEWATER IMPROVEMENT PROJECT - THREATENED/ENDANGERED SPECIES AND ESSENTIAL FISH HABITAT
DATE:	MAY 23, 2014

The Bruneau Water & Sewer District (District) is proposing wastewater improvement projects within the District. The phased improvements include the following:

Phase 1

- Construction of one of two lined lagoons in the lagoon upgrade area as identified on the attached map. The lagoon should be at least 4 acres and will include an underdrain system, a new north bank and connection with the existing transfer structures and pipelines.
- Construction of a "deer proof" fence around the wastewater lagoons.

Phase 2

- Construction of a second lined lagoon in the lagoon upgrade area as identified on the attached map. This will include a new transfer structure, a new irrigation pump station, and the installation of a new gravity pipeline to the existing reuse (land application site) immediately east of the lagoon area.

Phase 3

- Installation of a new liner at the south lagoon.

The U.S. Fish and Wildlife (USFWS) threatened and endangered species list revised date of 10/22/2013 was used for determining endangered, threatened, and proposed species within Owyhee County. The USFWS was consulted and a response was provided on May 19, 2014. The USFWS response identified concerns with the proposed lagoons within the floodplain and asked that the lagoon(s) be sized and reinforced properly to prevent impacts from flood waters during spring flooding. The agency also recommended that alternative upland sites be evaluated for potential use for future expansion of the wastewater treatment facilities and that the District consider water conservation measures. The agency's response is attached. The following species are listed within Owyhee County:

1. **Bruneau Hot Springsnail** (endangered) – The aquatic snail is endemic to Idaho. It occurs in thermal springs along an approximately 5 mile reach of the Bruneau River and in Hot Creek (U.S. Fish and Wildlife Service 2000b). It's likely the current population in Hot Creek is non-existent per (C. Myler, USFWS). The Bruneau Hot Springsnail inhabits small, geothermal spring runs and seeps, typically on basalt bedrock. Substrates usually comprise gravel and silt but individuals are also found on sand, mud, and algal film (Mladenka, 1992). The primary threat to this species is degradation of aquatic habitat associated with seeps and springs as a result of groundwater withdrawal for

agricultural purposes. The proposed project does not entail groundwater withdrawal and it is expected that the improvements will have "NO EFFECT" to the endangered species.

2. **Bull Trout** (threatened/designated critical habitat) –The species requires pristine cold fluvial habitat. Bull trout require complex forms of cover, including large woody debris, undercut banks, boulders, and pools (Fraley and Shephard 1989, pp.137-138; Watson and Hillman 1997, p.249). The proposed improvements will entail relining and construction of a previous wastewater lagoon site and therefore should have "NO EFFECT" to Bull Trout and its critical habitat.

3. **Columbia Spotted Frog (Great Basin Population)** (candidate) – The Great Basin Columbia Spotted Frog population in Idaho occurs in mid-elevations of the Owyhee uplands and in southern Twin Falls County. Spotted frogs live in spring seeps, meadows, marshes, ponds and streams, and other areas where there is abundant vegetation. They often migrate along riparian corridors between habitats used for spring breeding, summer foraging and winter hibernation. The Great Basin population has a light-colored stripe along the jaw and are light to dark brown or olive on their backs with varying numbers of irregular black spots. The species is highly aquatic, seldom found far from water. In southwestern Idaho, wetland habitat occupied by frog populations is generally associated with springs or small lowland and foothill streams. The loss of wetland and riparian habitats is a pervasive threat. The proposed improvements will entail relining and construction of a previous wastewater lagoon site and therefore should have "NO EFFECT" to the Columbia Spotted Frog.

4. **Greater Sage-Grouse** (candidate) - Grouse reside in Sagebrush Steppe environments. The proposed project improvements are not located in priority habitat for Sage Grouse. The proposed improvements will entail relining and construction of a previous wastewater lagoon site. The proposed project will have "NO EFFECT" on sage grouse.

5. **Slickspot Peppergrass** (proposed/proposed critical habitat) – Slickspot peppergrass is a tap-rooted, intricately-branched plant. Slickspot can have one of two life cycles, an annual or biennial form. Habitat consists of sagebrush-steepe environments. Slickspots are characterized by near-surface distribution of soluble sodium salts, thin vesicular surface crusts, and shallow well-developed argillic horizons or layers that are impermeable when wet. The proposed improvements will entail relining and construction of a previous wastewater lagoon site The proposed project will have a "NO EFFECT" on the Slickspot Peppergrass.

6. **Snake River Physa** (endangered) – The Snake River Physa is a freshwater mollusk found in the middle Snake River. It inhabits deep water on the margins of moderately swift rapids and riffles. Individuals have been found in relatively undisturbed areas with gravel, boulder, or cobble substrates and a low percentage of epiphytic algae or macrophytes (Frest 1999, USFWS 1995). The proposed improvements will have "NO EFFECT" on the species.

7. **Yellow-Billed Cuckoo** (proposed) - Western cuckoos breed in large blocks of riparian habitats, particularly woodlands with cottonwoods and willows. Generally local and uncommon in scattered drainages of the arid and semiarid portions of western Colorado,

western Wyoming, Idaho, Nevada and Utah. In southwestern Idaho, the yellow-billed cuckoo has been considered a rare, sometimes erratic, visitor and breeder in the Snake River Valley. There are no woodlands or riparian habitats at the proposed improvement locations. It's unlikely to encounter Yellow-Billed Cuckoo in the area. The proposed project will have "NO EFFECT" on the Cuckoo.

Essential Fish Habitat

The Bruneau Water & Sewer District wastewater improvement project is not located within Essential Fish Habitat (EFH) for Salmon as identified in the attached EFH map. The proposed project will have "NO EFFECT" on Essential Fish Habitat.

Ester Ceja

From: Kibler, Bob <bob_kibler@fws.gov>
Sent: Monday, May 19, 2014 1:06 PM
To: Ester Ceja
Subject: Re: Bruneau Wastewater Improvement Project - USFWS Consultation Request
Attachments: Bruneau_ WWTF Upgrades .pdf

Ester:

I have attached the comments that I sent last week to Morgan Locke of JUB Engineers, Inc. Also, given the co-location with the existing WWTF, I would not expect to find any impacts to ESA listed species.

Please contact me if you have questions or need additional information.

On Mon, May 19, 2014 at 12:16 PM, <Ester.Ceja@deq.idaho.gov> wrote:

Great thank you!

Ester

From: Kibler, Bob [mailto:bob_kibler@fws.gov]
Sent: Monday, May 19, 2014 12:12 PM
To: Ester Ceja
Subject: Re: Bruneau Wastewater Improvement Project - USFWS Consultation Request

Hi Ester:

I believe I recently provided a response to a consultant regarding an inquiry emailed to Mike Carrier for this proposal. I'll grab a copy of the response from our records and forward it to you right after lunch.

Thanks!

On Mon, May 19, 2014 at 12:05 PM, <Ester.Ceja@deq.idaho.gov> wrote:

Bob,

Good afternoon. I wanted to follow up on the attached agency consultation request which was sent last month. The 30 day agency consultation deadline has come and gone, but I want to make sure that the USFWS doesn't have any concerns with the proposed wastewater improvement project.

Thanks,
Ester Ceja

--
Bob Kibler

U.S. Fish and Wildlife Service-Ecological Services

Idaho Fish and Wildlife Office

1387 South Vinnell Way, Room 368

Boise, Idaho 83709

(208) 378-5255 Phone

(208) 378-5262 Fax

Bob_Kibler@FWS.GOV Email

http://www.fws.gov/idaho/ Internet Site

--
Bob Kibler
U.S. Fish and Wildlife Service-Ecological Services
Idaho Fish and Wildlife Office
1387 South Vinnell Way, Room 368
Boise, Idaho 83709

(208) 378-5255 Phone
(208) 378-5262 Fax
Bob_Kibler@FWS.GOV Email
http://www.fws.gov/idaho/ Internet Site

Rex Harding

From: Michael.May@deq.idaho.gov
Sent: Tuesday, January 13, 2015 2:59 PM
To: Rex Harding
Cc: Kevin.Ryan@deq.idaho.gov; Noel.LaRoque@id.usda.gov; Valerie.Greear@deq.idaho.gov
Subject: Revision to ESA/EFH Memo - Bruneau WWG - 13 Jan 2015
Attachments: SWATER SCAN14052314540.pdf; Idaho Species List - Bruneau WWG - 13 Jan 2015.PDF

------< Attachment Information >------

Title : Idaho Species List - Bruneau WWG - 13 Jan 2015

Title : Bruneau ESA/EFH Memo and email on Tribal response_5.23.14

Rex,

As we discussed, the Idaho Species List that Ester Ceja used in her May 23, 2014 Endangered Species Act/Essential Fish Habitat memo has expired. I am attaching a copy of the current Idaho Species List, along with a copy of her memo. Although the list was revised on August 14, 2014, there were no changes affecting Owyhee County. Therefore, Ester's memo and its conclusions remain valid. Please include this email and the attached species list in Appendix D of the EID, as an update to the ESA/EFH memo. Also revise §5.6 of the EID to reference the ESA/EFH memo, and directly address the U.S. Fish & Wildlife Service concerns identified in its appended correspondence.

If you have any questions or concerns, please contact me.

Mike May

Sr. Water Quality Specialist

Idaho Department of Environmental Quality

1410 North Hilton

Boise, Idaho 83706

(208) 373-0406

This information is for general reference only. Please visit http://ecos.fws.gov/ipac/ to obtain an official list for purposes of Endangered Species Act section 7 consultation. Revised 08/14/2014. downloaded 13 January 2015

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	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*	*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					T-DCH							T			T			C
Jefferson		C	P-PCH	T																T		
Jerome		C										T		E								
Kootenai			P	T					T-DCH										T		T	
Latah				T															T		T	
Lemhi		C	P	T					T-DCH													C
Lewis									T-DCH										T			
Lincoln		C	P																			
Madison		C	P-PCH	T																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					T-DCH										T		T	C
Teton				T	T																	C
Twin Falls	C	C										T		E								
Valley				T		T			T-DCH													C
Washington		C				T		C	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

Kibler, Bob <bob_kibler@fws.gov>

Re: Bruneau Sewer District EID

1 message

Kibler, Bob <bob_kibler@fws.gov> Tue, May 13, 2014 at 3:55 PM
To: Morgan Locke <mlocke@jub.com>

Greetings Morgan:

I have reviewed the proposed City of Bruneau Wastewater Treatment Facility upgrades, and am providing the following technical assistance comments and recommendations for your consideration via the State Environmental Review Process.

The Fish and Wildlife Service supports any actions that would ensure that untreated wastewater will not entering the surface or ground waters of the Bruneau River Valley. The Bruneau River, Floodplain, and C.J. Strike Reservoir receives significant use by migratory birds and other fish and wildlife species. These habitats are important for mitigating the loss of habitats and recreational opportunities impacted by inundation lands by the filling of the C.J. Strike Dam.

Because the City's lagoons are currently positioned within the floodplain (to take advantage of gravity feed of the effluent), these facilities are at greater risk of over-topping or breaching during spring flood events. Also, naturally high ground water levels of the floodplain enhance the risk of groundwater exposure to undesirable micro-organisms, chemicals, and nutrients percolating from the containment ponds. Extra care should be given to ensure that these structures are sized and reinforced adequately to provide for full effluent containment, resistance to seepage, protection from flood scour, and elevated adequately to preclude over-topping by flood waters.

As the City of Bruneau continues to grow, we would recommend that alternative upland sites be evaluated for their potential use for the future expansion of the wastewater treatment facilities. Also, we suggest that the City initiate programs to promote the installation of water conservation appliances in new homes and buildings to provide a means to reduce the per capita volume of gray and dark water that is produced and in need of treatment.

Thank you for the opportunity to provide these technical comments. To aid us in providing better recommendations for future actions, it would be helpful to us to know if any of these recommendations were deemed practical and were accepted into the project design. Please contact me if you have questions or require additional information.

On Tue, May 13, 2014 at 3:14 PM, Morgan Locke <mlocke@jub.com> wrote:

Bob,

Attached is a pdf of the original letter sent to Michael Carrier. Please let me know if I can help you with anything else. Thank you so much for your time.

Morgan Locke

This list was revised by the USFWS on October 22, 2013.

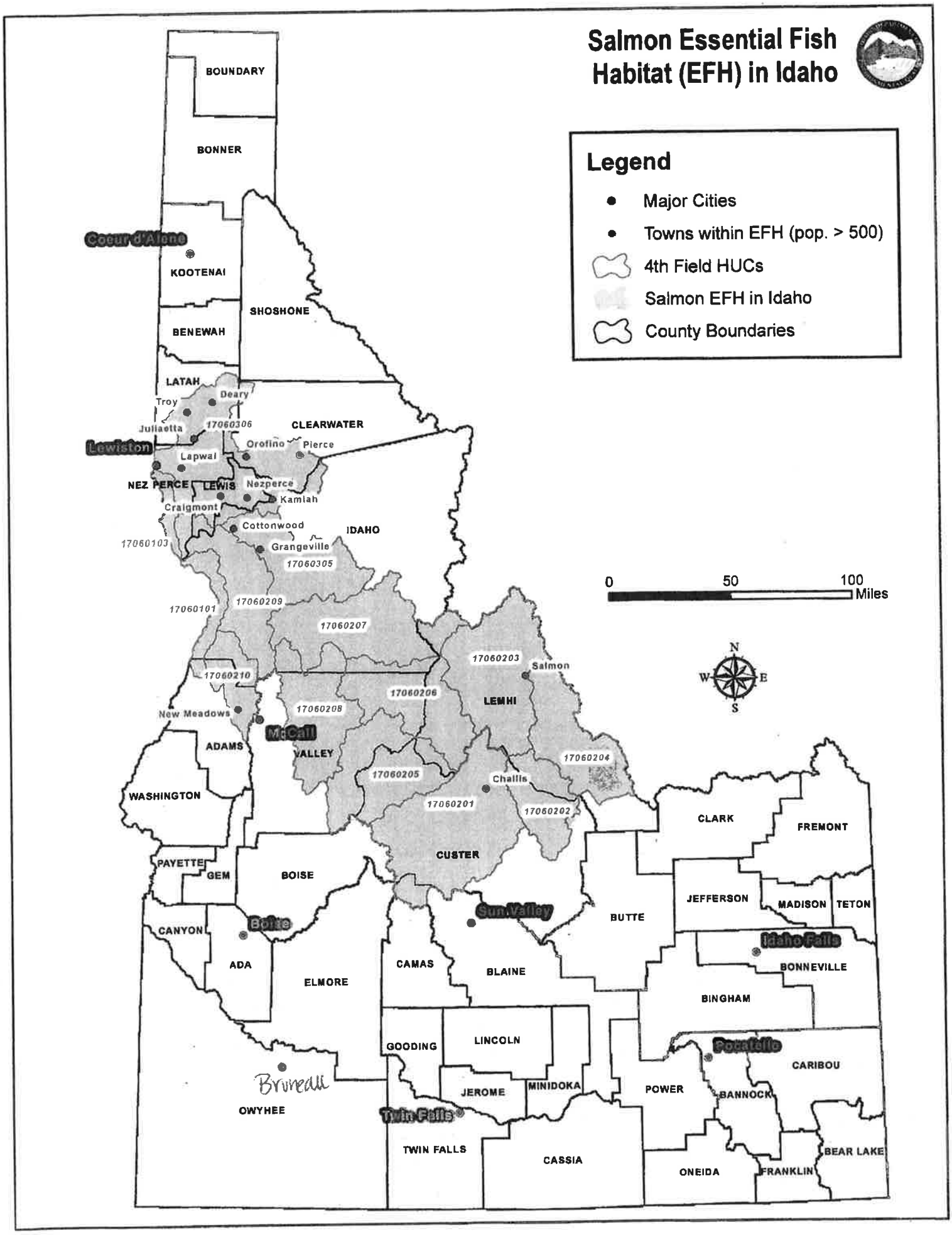
U.S. Fish and Wildlife Service • Idaho Fish and Wildlife Office

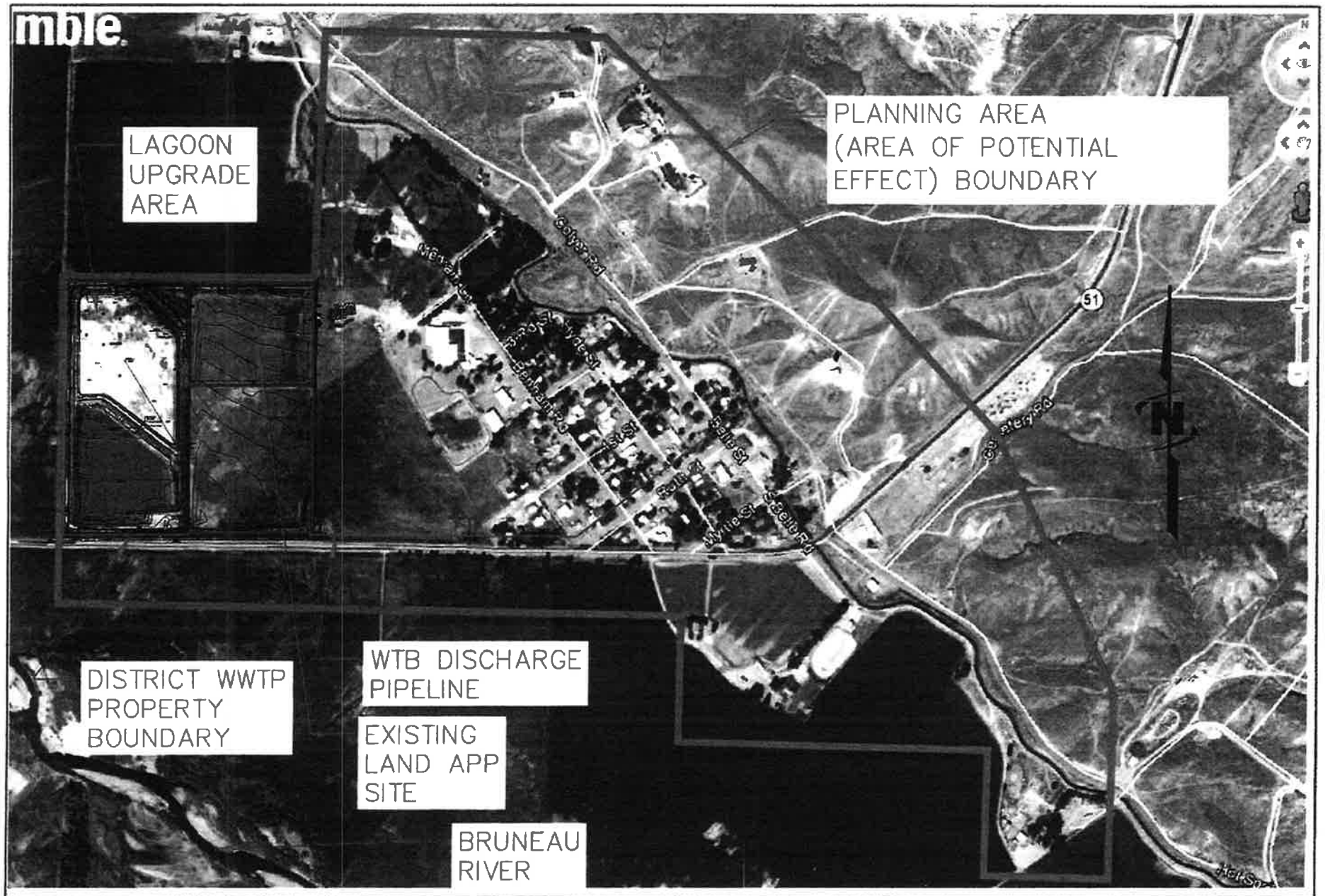
CANDIDATE, PROPOSED AND LISTED SPECIES & PROPOSED AND DESIGNATED CRITICAL HABITAT IN IDAHO

	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									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

Salmon Essential Fish Habitat (EFH) in Idaho





JUB
J-U-B ENGINEERS, INC.

ENVIRONMENTAL INFORMATION DOCUMENT
BRUNEAU WATER AND SEWER DISTRICT

FIGURE 4-2
PLANNING AREA

Morgan Locke

From: Murphy,Chris <chris.murphy@idfg.idaho.gov>
Sent: Monday, May 12, 2014 11:17 AM
To: Ward,Rick; Holmquist,Robin
Cc: Morgan Locke
Subject: Bruneau Sewage Upgrade
Attachments: Scanned from a Xerox multifunction device001.pdf

FYI

An JUB Engineering sent this to me, regarding Bruneau Water and Sewer Improvements. You may have received this, I'm not sure. I do not have any comments regarding effects on the adjacent C. J. Strike WMA. It seems that any improvements preventing failure of the old system would be beneficial for preventing future impacts to C. J. Strike WMA.

Thanks

Chris Murphy
Staff Biologist - Wetlands, Restoration, and Vegetation Wildlife Bureau, Habitat Section, Boise
208-287-2728

Cc

Morgan L. Locke
Administration Assistant

J-U-B ENGINEERS, Inc.
115 Northstar Avenue, Twin Falls, ID 83301 p | 208 733 2414 f | 208 733 9455 e | mlocke@jub.com

THE J-U-B FAMILY OF COMPANIES:
www.jub.com
www.gatewaymapping.com
www.langdongroupinc.com

Alan Giesbrecht

From: MaryAnna.Peavey@deq.idaho.gov
Sent: Monday, October 26, 2015 12:03 PM
To: Alan Giesbrecht
Cc: Michael.May@deq.idaho.gov; Tim.Wendland@deq.idaho.gov
Subject: Revision to the ESA/EFH Memo - Bruneau WWG
Attachments: SWATER SCAN14052314540.pdf; Updated Species List for Owyhee County - Bruneau WWG.PDF

Alan,

As previously discussed, the Idaho Species List that Ester Ceja used in her May 23, 2014 Endangered Species Act/Essential Fish Habitat memo has expired. I am attaching a copy of the current Species List for Owhyee County, along with a copy of her memo. Although the list was revised, there were no changes affecting Owhyee County. Therefore, Ester's memo and its conclusions remain valid. Please include this email and the attached species list in Appendix D of the EID, as an update to the ESA/EFH memo. Also make sure that §5.6 of the EID to reference the ESA/EFH memo and directly address the U.S. Fish & Wildlife concerns identified in the appended correspondence.

If you have any questions or concerns, please do not hesitate to contact me.

Thanks,
MaryAnna Peavey
Loan Program Coordinator
Department of Environmental Quality
1410 N Hilton
Boise, Idaho 83706
(208)373-0122
(208)373-0576 fax

U.S. Fish & Wildlife Service

Bruneau Wastewater Project

IPaC Trust Resource Report

Generated October 26, 2015 09:06 AM MDT

This report is for informational purposes only and should not be used for planning or analyzing project-level impacts. For projects that require FWS review, please return to this project on the IPaC website and request an official species list from the Regulatory Documents page.

US Fish & Wildlife Service

IPaC Trust Resource Report

Project Description

NAME

Bruneau Wastewater Project

PROJECT CODE

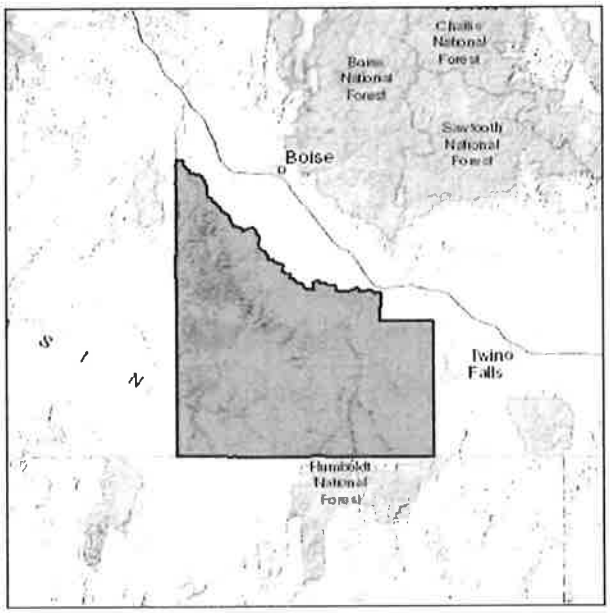
DNGI7-LMY6R-DTBHP-ERTB7-HMLXOI

LOCATION

Owyhee County, Idaho

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Idaho Fish And Wildlife Office
1387 South Vinnell Way, Suite 368
Boise, ID 83709-1657
(208) 378-5243

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the Endangered Species Program and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under Section 7 of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an official species list on the Regulatory Documents page.

Birds

Yellow-billed Cuckoo Coccyzus americanus — Threatened

CRITICAL HABITAT
There is **proposed** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06R

Fishes

Bull Trout Salvelinus confluentus — Threatened

CRITICAL HABITAT
There is **final** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E065

Flowering Plants

Slickspot Peppergrass Lepidium papilliferum — **Proposed Endangered**

CRITICAL HABITAT
There is **proposed** critical habitat designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q34X

Snails

Bruneau Hot Springsnail Pyrgulopsis bruneauensis — **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=G03R

Snake River Physa Snail Physa natricina — **Endangered**

CRITICAL HABITAT
No critical habitat has been designated for this species.

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=G01L

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

Bull Trout Critical Habitat Final designated

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E065#crithab

Slickspot Peppergrass Critical Habitat Proposed

https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q34X#crithab

Alan Giesbrecht

From: Michael.Stambulis@deq.idaho.gov
Sent: Monday, October 26, 2015 4:05 PM
To: Alan Giesbrecht
Cc: MaryAnna.Peavey@deq.idaho.gov
Subject: Official Species List for project: Bruneau Water & Sewer District Wastewater Improvement Project
Attachments: Official_Species_List_ID FISH AND WLDLFE OFC_26_Oct_2015.pdf; ipacProjectShapefile.zip

Alan,

I am unsure if MaryAnna actually provided you an official species list from the appropriate office. I believe she may have provided you a resource list which is just a little different and not necessarily considered an official list.

I am attaching the information I received from the US Fish and Wildlife Office. Please let me know if you have any questions.

Sincerely,

Michael Stambulis
Engineering Manager
Idaho Department of Environmental Quality
(208) 373-0123

-----Original Message-----
From: fwhq_ecos_support@fws.gov [mailto:fwhq_ecos_support@fws.gov]
Sent: Monday, October 26, 2015 4:02 PM
To: Michael Stambulis
Subject: [SPAM?]Official Species List for project: Bruneau Water & Sewer District Wastewater Improvement Project

This email contains a US Fish and Wildlife Service official species list for your project (Bruneau Water & Sewer District Wastewater Improvement Project) from the following office:

> Idaho Fish and Wildlife Office
> 1387 SOUTH VINNELL WAY, SUITE 368
> BOISE, ID 83709
> (208) 378-5243

Also attached is a shapefile of the project boundary you defined in IPaC. If you wish to return to IPaC in the future and use the same project boundary for another project, when defining your project location, use the IPaC 'Upload shape file' feature and select this shapefile.

You may also view your official species list by returning to the IPaC project Regulatory Documents page at http://ecos.fws.gov/ipac/project/W5ANM6WFDJCYHBMENW5RZDZ4QE/regulatoryDocuments.

If you have any problems opening the document, please contact the ECOS help desk at http://ecos.fws.gov/ecp/help.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Idaho Fish and Wildlife Office
1387 SOUTH VINNELL WAY, SUITE 368
BOISE, ID 83709
PHONE: (208)378-5243 FAX: (208)378-5262

Consultation Code: 01EIFW00-2016-SLI-0048 October 26, 2015
Event Code: 01EIFW00-2016-E-00049
Project Name: Bruneau Water & Sewer District Wastewater Improvement Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

Please note: The IPaC module for producing a list of proposed and designated critical habitat is currently incomplete. At this time, we ask that you use the information given below to determine whether your action area falls within a county containing proposed/designated critical habitat for a specific species. If you find that your action falls within a listed county, use the associated links for that species to determine if your action area actually overlaps with the proposed or designated critical habitat.

Canada Lynx (*Lynx canadensis*) - *Designated February 24, 2009.*
Counties: Boundary County.

Federal Register Notice:
http://www.gpo.gov/fdsys/pkg/FR-2009-02-25/pdf/E9-3512.pdf#page=1
Printable Maps:
http://www.fws.gov/mountain-prairie/species/mammals/lynx/criticalhabitat_files/20081222_fedre

GIS Data: http://criticalhabitat.fws.gov/docs/crithab/zip/lunx_ch.zip
KML for Google Earth: (None Currently Available)

Selkirk Mountains Woodland Caribou (*Rangifer tarandus Caribou*) - *Proposed November 30, 2011.*
Counties: Bonner and Boundary Counties.

Federal Register Notice: http://www.fws.gov/idaho/home/2011-30451FINALR.pdf
Printable Maps: http://www.fws.gov/idaho/home/Map1_sub1_150.pdf
GIS Data: (None Currently Available)
KML for Google Earth: (None Currently Available)

Bull Trout (*Salvelinus confluentus*) - *Designated September 30, 2010.*
Counties: Adams, Benewah, Blaine, Boise, Bonner, Boundary, Butte, Camas, Clearwater, Custer, Elmore, Gem, Idaho, Kootenai, Lemhi, Lewis, Nez Perce, Owyhee, Shoshone, Valley, and Washington Counties.

Federal Register Notice:
http://www.gpo.gov/fdsys/pkg/FR-2010-10-18/pdf/2010-25028.pdf#page=2
Printable Maps: http://www.fws.gov/pacific/bulltrout/CH2010_Maps.cfm#CHMaps
GIS Data: http://criticalhabitat.fws.gov/docs/crithab/zip/bulltrout.zip
KML for Google Earth:
http://www.fws.gov/pacific/bulltrout/finalcrithab/BT_FCH_2010_KML.zip

Kootenai River White Sturgeon (*Acipenser transmontanus*) - *Designated July 9, 2008.*
Counties: Boundary County.

Federal Register Notice:
http://www.gpo.gov/fdsys/pkg/FR-2008-07-09/pdf/E8-15134.pdf#page=1
Printable Maps: (None Currently Available)
GIS Data: http://criticalhabitat.fws.gov/docs/crithab/zip/fch_73fr39506_acit_2009.zip
KML for Google Earth: (None Currently Available)

Slickspot Peppergrass (*Lepidium papilliferum*) - Proposed May 10, 2011. Counties: Ada, Canyon, Elmore, Gem, Owyhee, and Payette Counties.

Federal Register Notice: http://www.gpo.gov/fdsys/pkg/FR-2011-10-26/pdf/2011-27727.pdf
Printable Maps: http://www.fws.gov/idaho/Lepidium.html
GIS Data: (None Currently Available)
KML for Google Earth: (None Currently Available)

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Bruneau Water & Sewer District Wastewater Improvement Project

Official Species List

Provided by:

Idaho Fish and Wildlife Office
1387 SOUTH VINNELL WAY, SUITE 368
BOISE, ID 83709
(208) 378-5243

Consultation Code: 01EIFW00-2016-SLI-0048
Event Code: 01EIFW00-2016-E-00049

Project Type: WASTEWATER FACILITY

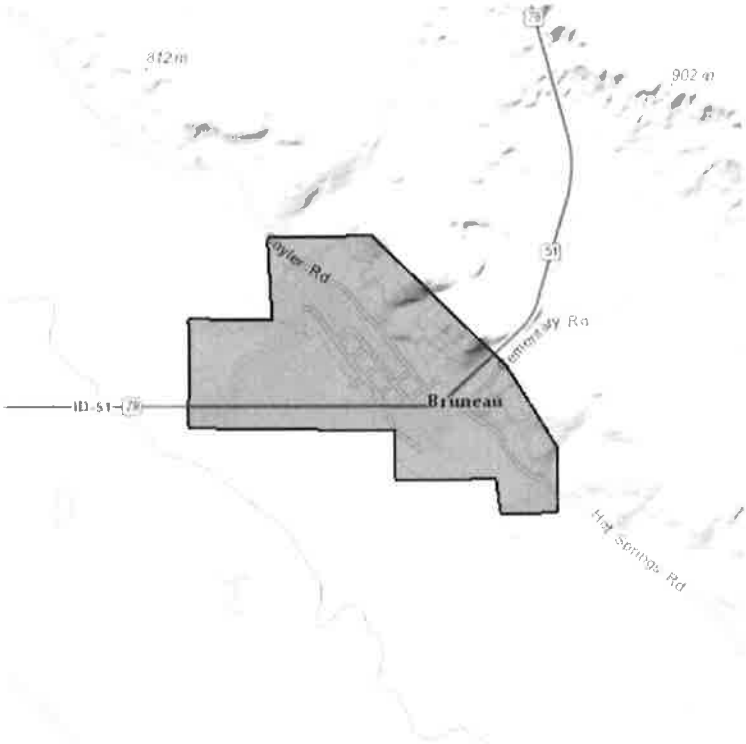
Project Name: Bruneau Water & Sewer District Wastewater Improvement Project
Project Description: Upgrades to Bruneau water and sewer district wastewater treatment facility including lagoons with deer proof fence.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

United States Department of Interior
Fish and Wildlife Service

Project name: Bruneau Water & Sewer District Wastewater Improvement Project

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-115.81224723246079 42.88396636712184, -115.8123161011127 42.884038269389904, -115.81232351516478 42.88411756846813, -115.81226475089296 42.88420457974618, -115.8121884219341 42.88422732182204, -115.80725317135108 42.88420288737434, -115.80745088193399 42.887679604104875, -115.80743083907493 42.887759150718345, -115.80736898853989 42.88781303848347, -115.8011481835943 42.88786355774507, -115.79302924964801 42.8820898889944, -115.79006310170476 42.87852309534699, -115.79005516080876 42.87568567165225, -115.79010476320875 42.87562436460216, -115.79017992523592 42.87560049784401, -115.79339176293779 42.87556002473744, -115.79347525085466 42.87566068765222, -115.79376216244749 42.87710911131589, -115.799778194102 42.87706984698109, -115.799840311351 42.87712034294189, -115.7998636682578 42.87719691218889, -115.7998636682578 42.87925019825072, -115.8121740911726 42.879410414003246, -115.81223484895635 42.879460977127756, -115.81225762176929 42.87953667083183, -115.81224723246079 42.88396636712184)))

Project Counties: Owyhee, ID

United States Department of Interior
Fish and Wildlife Service

Project name: Bruneau Water & Sewer District Wastewater Improvement Project

Endangered Species Act Species List

There are a total of 0 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

There are no listed species identified for the vicinity of your project.

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Rex Harding

From: Eastman, Susan <Eastman.Susan@epa.gov>
Sent: Friday, May 30, 2014 12:53 PM
To: Rex Harding
Subject: RE: Brunueau Water and Sewer EID info for Sole Source Aquifer EPA approval

Hi Rex, fyi, my program only has authority to review and approve funding for projects located in the review areas of FEDERALLY designated SSA's. The aquifer you listed is not federally designated and when I tried to find the exact location on a map it was still not entirely clear whether the project was in the ESRP SSA or not. Regardless, I have given you an approval so you are covered either way. In the future please check the website I sent and if the project is not located in one of the SSA's listed (map links are on the site as well you can zoom into) then I do not need to review or approve and in fact have NO statutory authority to do so. Thanks!

Thank you for submitting your project for review. We have reviewed the information provided and find that the project will not have a significant adverse impact on the Eastern Snake River Plain Sole Source Aquifer and therefore the funding may proceed.

EPA reviews federally financially assisted projects that are proposed in federally designated Sole Source Aquifer review areas to determine if the projects have a potential to contaminate the aquifer through a recharge zone so as to create a significant hazard to public health. Such projects are submitted to EPA by federal, state, and local governments, and by the public.

This correspondence only addresses the Sole Source Aquifer Program, any other federal environmental requirements are your responsibility to ensure compliance. Please retain this email for your records.

From: Rex Harding [mailto:RLH@JUB.com]
Sent: Wednesday, May 14, 2014 7:42 AM
To: Eastman, Susan
Subject: RE: Brunueau Water and Sewer EID info for Sole Source Aquifer EPA approval

Attached hereto is the completed checklist.

From: Eastman, Susan [mailto:Eastman.Susan@epa.gov]
Sent: Monday, May 12, 2014 3:10 PM
To: Rex Harding
Subject: Brunueau Water and Sewer EID info for Sole Source Aquifer EPA approval

Please fill out the attached check list and submit to me. I've sent this to several staff at JUB in the past so please share! I do the approvals via email with the checklist which is usually enough information for me to make a determination. If I need more information after reviewing the checklist I will ask for it. I've also included a link to the EPA Region 10 SSA website fyi.

http://yosemite.epa.gov/r10/water.nsf/Sole+Source+Aquifers/SSA

Susan Eastman, Environmental Scientist
US EPA
1200 Sixth Ave Suite 900
OWW 136
Seattle,WA 98101-3140
CWA ISA and SDWA TSA, Sole Source Aquifer Program,
Source Water Protection Program, Idaho GW 106
206 553 6249
Eastman.Susan@epa.gov

This e-mail and any attachments transmitted with it may contain information that is confidential or otherwise protected from disclosure. The information it contains is intended solely for the use of the one to whom it is addressed, and any other recipient is directed to immediately destroy all copies. If this electronic transmittal contains Professional Design Information, Recommendations, Maps, or GIS Database, those are "draft" documents unless explicitly stated otherwise in the email text.

STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE
1445 North Orchard Street•Boise, ID 83706-2239•(208) 373-0550

J.U.B. ENGINEERS
RECEIVED
MAY 09 2014
TWIN FALLS, IDAHO

DEQ Response to Request for Environmental Comment

Date:	*05/07/2014*
Agency Requesting Comments:	*JUB Engineers*
Date Request Received:	*04/07/2014*
Applicant/Description:	*Improvements to wastewater system*

Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at http://www.deq.idaho.gov/ieg/.

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. Air Quality

- *Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).*

  For questions, contact David Luft, Air Quality Manager, at 373-0550.

- *IDAPA 58.01.01.201 requires an owner or operator of a facility to obtain an air quality permit to construct prior to the commencement of construction or modification of any facility that will be a source of air pollution in quantities above established levels. DEQ asks that cities and counties require a proposed facility to contact DEQ for an applicability determination on their proposal to ensure they remain in compliance with the rules.*

  For questions, contact the DEQ Air Quality Permitting Hotline at 1-877-573-7648.

2. Wastewater and Recycled Water

- *DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.*

  All projects for construction or modification of wastewater systems require

preconstruction approval. Recycled water projects and subsurface disposal projects require separate permits as well.

- *DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.*

- *DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

For questions, contact Todd Crutcher, Engineering Manager, at 373-0550.

3. Drinking Water

- *DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.*

  All projects for construction or modification of public drinking water systems require preconstruction approval.

- *DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at http://www.deq.idaho.gov/water-quality/drinking-water.aspx). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.*

- *If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.*

- *DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.*

- *DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

For questions, contact Todd Crutcher, Engineering Manager at 373-0550.

4. Surface Water

- *A DEQ short-term activity exemption (STAE) from this office is required if the project will involve de-watering of ground water during excavation and discharge back into surface water, including a description of the water treatment from this process to prevent excessive sediment and turbidity from entering surface water.*

- *Please contact DEQ to determine whether this project will require a National Pollution Discharge Elimination System (NPDES) Permit. If this project disturbs more than one acre, a stormwater permit from EPA may be required.*

- *If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.*

- *The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call 208-334-2190 for more information. Information is also available on the IDWR website at:* http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/AlterationPermit/AlterationPermit.htm

- *The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.*

  For questions, contact Lance Holloway, Surface Water Manager, at 373-0550.

5. Hazardous Waste And Ground Water Contamination

- ***Hazardous Waste.*** *The types and number of requirements that must be complied with under the federal Resource Conservations and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.*

- *No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards, Rules and Regulations for Hazardous Waste, and Rules and Regulations for the Prevention of Air Pollution.*

- ***Water Quality Standards.*** *Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852).*

  Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.

- ***Ground Water Contamination.*** *DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or*

disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method."

For questions, contact Aaron Scheff, Waste & Remediation Manager, at 373-0550.

6. ***Additional Notes***
   - *If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at 373-0550, or visit the DEQ website (http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks.aspx) for assistance.*
   - *If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.*

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any our technical staff at 208-373-0550.

Sincerely,

Danielle Robbins

Danielle Robbins
danielle.robbins@deq.idaho.gov
Boise Regional Office
Idaho Department of Environmental Quality

C: File # 1954

Cc: Werntz, James; Kenknight, Jeff
Subject: Bruneau Water and Sewer District EID Improvement Project - Request for Comments

Hello Kassidie,

Thank-you for providing the Environmental Protection Agency (EPA) the opportunity to comment on the proposed improvement project for Bruneau Water and Sewer District. We do not have substantial comments on the proposed project at this time. I have shared the EID with colleagues in my office. Below are our collective comments that may require further consideration.

It was not clear in your Request for Comments letter if the North lagoon reconstruction would be lined to prevent infiltration to groundwater given the close proximity to the Bruneau River and C.J. Strike Reservoir. Nutrient enrichment of these waters would have negative consequences on their beneficial uses.

The construction activities for the proposed project should be evaluated to determine if there is a need to apply for permit coverage under EPA's Construction General Permit (CGP) for stormwater discharges associated with the proposed project. For more information regarding the CGP, please refer to the following link, http://cfpub.epa.gov/npdes/stormwater/cgp.cfm

Stormwater discharges from construction activities (such as clearing, grading, excavating, and stockpiling) that disturb one or more acres, or smaller sites that are part of a larger common plan of development or sale, are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater program. Prior to discharging stormwater, construction operators must obtain coverage under an NPDES permit. If you have additional questions, feel free to contact me at the phone number listed below.

Maria Lopez
Environmental Scientist
950 W. Bannock Street
Suite 900
Boise, ID 83702
Telephone: (208) 378-5616
Fax: (208) 378-5744

Rex Harding

From: Tanya Moore
Sent: Monday, May 19, 2014 4:37 PM
To: Morgan Locke
Cc: Rex Harding
Subject: FW: Bruneau sewer project

From: Loper, David [mailto:David.Loper@phd3.idaho.gov]
Sent: Monday, May 19, 2014 4:36 PM
To: Tanya Moore
Subject: Bruneau sewer project

To whom it may concern:

Southwest District Health does not have any comment regarding the Bruneau sewer project.

Sincerely,

David M. Loper, REHS/RS, CPM
Director, Environmental Health Services
Southwest District Health
208.455.5401

Spoke to Rob Howarth, environmental Health Director from Central District Health Department on 5/09/14 regarding Bruneau Sewer District EID. He has no comments.

J.U.B. ENGINEERS
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MAY 09 2014

TWIN FALLS, IDAHO

Morgan J. Lake
5/09/14

STATE OF IDAHO

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

April 14, 2014

Dear Rex Harding:

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

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

2270 Old Penitentiary Road • P.O. Box 790 • Boise, Idaho 83701 (83712 for physical address) • (208) 332-8500 •
www.agri.idaho.gov

EASTERN SUPERVISORY AREA
Jerome Office
324 South 417 East
Jerome, ID 83338
Phone (208) 324-2561
Fax (208) 324-2917
pbrown@idl.idaho.gov

IDAHO DEPARTMENT OF LANDS

THOMAS SCHULTZ, DIRECTOR
EQUAL OPPORTUNITY EMPLOYER

STATE BOARD OF LAND COMMISSIONERS
C. L. "Butch" Otter, Governor
Ben Ysursa, Secretary of State
Lawrence G. Wasden, Attorney General
Brandon Woolf, State Controller
Tom Luna, Sup't of Public Instruction

May 16, 2014

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TWIN FALLS, IDAHO

sent via e-mail to mlocke@jub.com

Morgan Locke
Administration Assistant
J-U-B Engineers
131 SW 5th Avenue Suite A
Twin Falls, ID 83301

RE: Bruneau Sewer District Request for Comments Regarding the Preparation of an Environmental Information Document

Dear Ms. Locke:

Thank you for the opportunity to review and comment on the Bruneau Sewer District request for comments regarding the preparation of an Environmental Information Document.

As you may know, Idaho Department of Lands' (IDL) mission is to manage State Endowment Trust Lands (Endowment Lands) in a manner that will maximize long-term financial returns to the Beneficiary Institutions. The IDL mission is a constitutional mandate and is overseen by the State Board of Land Commissioners. Endowment Lands are not managed for the public at large and should not be referred to as "public lands" or "open space," either specifically or in a generic sense. These are working lands producing revenue for the Beneficiary Institutions.

IDL has reviewed the request for comment materials regarding the Bruneau Sewer District proposed Environmental Information Document. Based on the documentation provided to IDL, the project will not impact Endowment Lands at this time. Should the project be modified during the review or approval process, IDL requests that updated information be submitted to the IDL Eastern Area Office for additional review.

Thank you again for the opportunity to review and comment on this project. Please contact our Eastern Area Manager, Pat Brown at (208) 525-7167 or myself at the phone number or e-mail listed below, if you have questions or need more information.

Sincerely,

Julianne Shaw
Assistant Planner
IDL Director's Office Boise, Idaho
(208) 334-0262
jshaw@idl.idaho.gov

cc: Patrick A. Brown, Eastern Area Manager
Kate Langford, Bureau Chief, Strategic Business Bureau

IDAHO COMMERCE

C.L. "Butch" Otter, Governor
Jeffery Sayer, Director

J.U.B. ENGINEERS
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APR 11 2014

TWIN FALLS, IDAHO

Rex L. Harding
JUB Engineers
115 Northstar Avenue
Twin Falls, ID 83301

RE: Bruneau Water and Sewer District Environmental Information Document (EID) Improvement Project – Request for Comments for Preparation of an Environmental Information Document

Dear Rex:

Thank you for your request for comments. At this time, Idaho Commerce has no comments.

Sincerely,

Amanda Ames

Amanda Ames
Community Development Analyst
Idaho Commerce

Morgan Locke Sent letter

From: Bill Lind - NOAA Federal <bill.lind@noaa.gov>
Sent: Monday, May 12, 2014 7:18 AM
To: Morgan Locke
Subject: Re: Bruneau Sewer District EID

Good morning Morgan. For some reason, I don't seem to have any correspondence from you regarding this project. However, having said that, the City of Bruneau is located upstream of the Hells Canyon Dam Complex, an impassable barrier to ESA-listed fish species under NMFS jurisdiction. That being the case, it's unlikely that NMFS will have any comments on your action. If you would like me to review it anyway, I'd be happy to do so. You'll just need to send me a copy of the document, either to this email address or via the mail. Thanks.

On Fri, May 9, 2014 at 1:34 PM, Morgan Locke <mlocke@jub.com> wrote:

Mr. Bill Lind,

I am following up on the Bruneau Sewer District Environmental Information Document (EID) that was sent to you on March 31, 2014 from J-U-B Engineers, Inc. We have currently not received any comments or feedback from you. Please respond to me with an approximate date that we will receive comment or state that you have no comments. Thank you for your time.

Thank you,

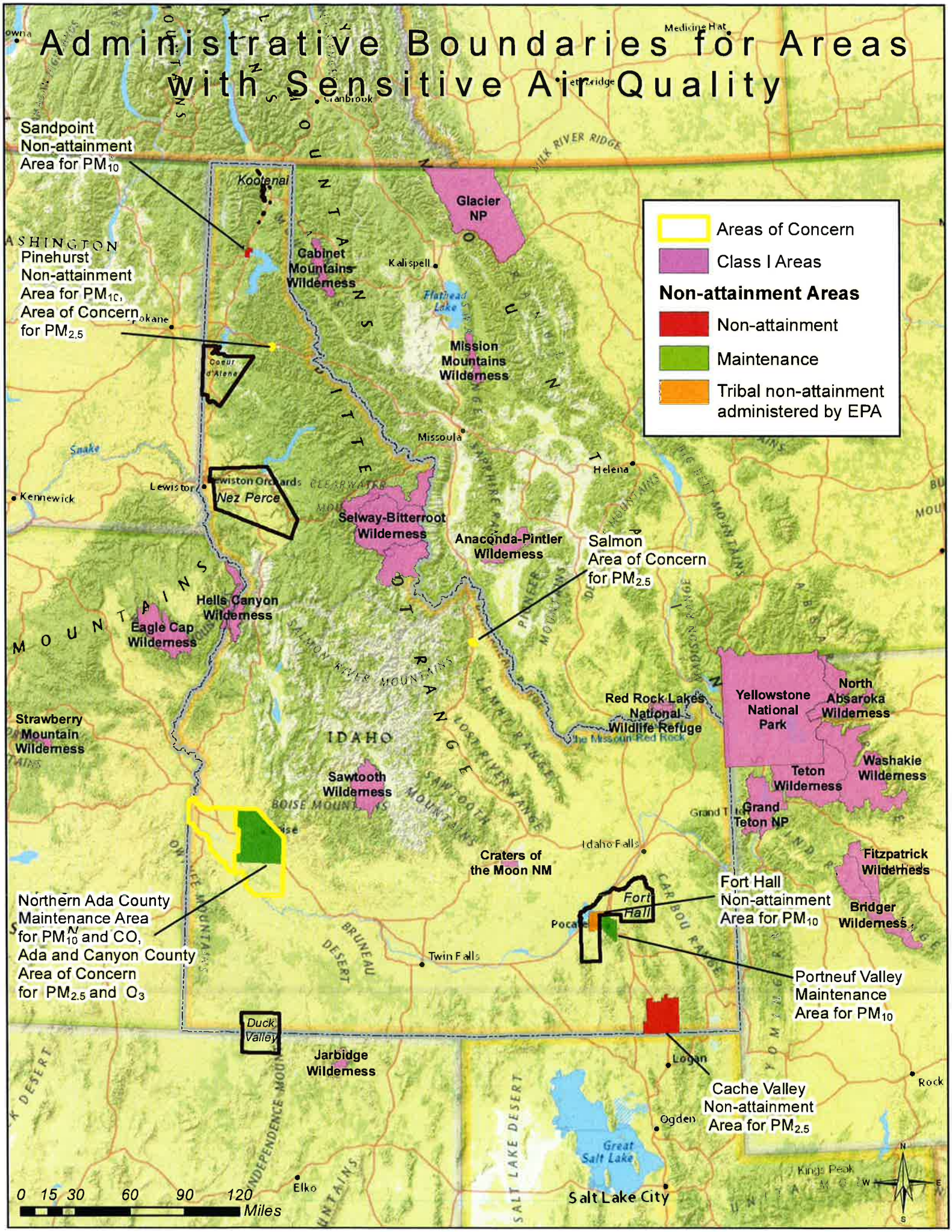
Morgan L. Locke

Administration Assistant

J-U-B ENGINEERS, Inc.

115 Northstar Avenue, Twin Falls, ID 83301

p | 208 733 2414 *f* | 208 733 9455 *e* | mlocke@jub.com

THE J-U-B FAMILY OF COMPANIES:
www.jub.com
www.gatewaymapping.com

Administrative Boundaries for Areas with Sensitive Air Quality