Idaho Department of Environmental Quality
Reuse Permit
M-053-04

(Previous Permit No. LA-000053-03)

Southside Water and Sewer District (hereafter "permittee") is hereby authorized to construct, install, and operate a reuse facility in accordance with (1) this permit; (2) IDAPA 58.01.17 "Recycled Water Rules"; (3) an approved plan of operation; and (4) all other applicable federal, state, and local laws, statutes, and rules. This permit is effective from January 1, 2017 and expires on January 1, 2023.

Signature

Date

Daniel Redline

Regional Administrator
Coeur d'Alene Regional Office
Idaho Department of Environmental Quality

Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, ID 83814
(208) 769-1422

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1. Common Acronyms/Abbreviations and Definitions

BMP	best management practice
DEQ	Idaho Department of Environmental Quality
DEQ Guidance	DEQ Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater, latest revision
Director	Director of the Idaho Department of Environmental Quality or designee unless otherwise specified
EPA	Environmental Protection Agency
E_i	irrigation efficiency
FM	flow measurement or monitoring description or identifier
GW	prefix for ground water reporting serial number
IDAPA	Idaho Administrative Procedures Act
IDWR	Idaho Department of Water Resources
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). The equation used to calculate the IWR is: $IWR = P_{def} / E_i$
LG	prefix for lagoon reporting serial number
MG	million gallons
mg/kg	milligram per kilogram
mg/L	milligram per liter
MU	prefix for management unit reporting environmental serial number
NPDES	National Pollutant Discharge Elimination System
P_{def}	precipitation deficit - is synonymous with the net irrigation water requirement of the crop and for the purposes of this permit can be found at the following website http://data.kimberly.uidaho.edu/ETIdaho/
PO	plan of operation
QAPP	quality assurance project plan
SU	prefix for soil monitoring unit reporting serial number
SW	prefix for supplemental irrigation water reporting serial number
SWSD	Southside Water and Sewer District
WW	prefix for wastewater reporting serial number

2. Facility Information

Information Type	Information Specific to This Permit
Type of recycled water	Class C municipal wastewater
Method of treatment and reuse	Slow-rate irrigation on a total of 47.0 acres of land partitioned into 5 management units. 27.3 acres consist of fodder crop on 1 management unit. 1.9 acres consist of conifer seedlings on 1 management unit. The remaining 17.8 acres consist of mature conifer trees on 3 management units.
Collection and treatment system classification.	Wastewater collection system classification: Class I Wastewater treatment system classification: Class I
Facility location	Treatment Facility Location: 1670 Lakeshore Drive Sagle, Idaho 83860 Reuse Site Location: Approximately one (1) mile south of the SWSD treatment facility and 0.5 miles west of Idaho State Hwy. 95 on Pit Road.
Facility mailing address	Southside Water and Sewer District Office Drawer D Sandpoint, Idaho 83864 (208) 255-1041 southsidewaterandsewer@frontier.com
Facility responsible official and authorized representative	Responsible Official and Authorized Representative: Jim Haynes, Board Chairman (208) 290-7249 (cell) Jim.haynes@frontier.com Notify DEQ within 30 days if there is a change in personnel for any of the above facility contacts. A minor permit modification will be issued by DEQ to confirm the change.
Ground water	Depth to ground water varies from 66-94 feet below the ground surface. The general ground water flow direction is southwest to northeast. The ground water is part of the Sagle Aquifer which is the primary domestic drinking water source for the area. Public Well: The nearest public well is owned by the SWSD (PWS #ID1090131) located 0.6 miles north of the irrigation site. Private Wells: 18 private wells are located within 500 feet and another 40 private wells are located within 0.25 miles of the irrigation sites. Approximately eight (8) private wells are potentially downgradient from the sites.

Surface water	Pend Oreille River. Approximately 1.5 miles north of the irrigation sites. Beneficial uses: cold water aquatic life, primary contact recreation, drinking water supplies. Fry Creek. Approximately 1.5 miles west of irrigation sites. Beneficial uses: Undesignated.

3. Compliance Schedule for Required Activities

Compliance Activity (CA) Number and Completion Due Date	Compliance Activity Description
CA-053-01 Within one (1) year after permit issuance	**Plan of Operation (PO)**: The permittee shall submit for review and approval a Plan of Operation that reflects current operations and incorporates the requirements of this permit. The PO shall comply with the applicable requirements stated in IDAPA 58.01.17.300.05 and shall address applicable items in the Plan of Operation Checklist in the DEQ Guidance. The PO shall include the following site management plans or the permittee may submit the site management plans individually: 1. Buffer zone plan; 2. Cropping plan; 3. Emergency operating plan; 4. Irrigation management and scheduling plan; 5. Nuisance and Odor management plan; 6. Runoff management plan; 7. Waste solids management plan; 8. Ground water monitoring and statistical analysis of data plan. The PO shall be updated as needed to reflect current operations. The permittee shall notify DEQ of material changes to the PO and copies shall be kept on site and made available to DEQ upon request.

Compliance Activity (CA) Number and Completion Due Date	Compliance Activity Description
CA-053-02 Within one (1) year after permit issuance	**Quality Assurance Project Plan (QAPP)**: The permittee shall prepare and implement a QAPP that incorporates all monitoring and reporting required by this permit. A copy of the QAPP along with written notice that the permittee has implemented the QAPP shall be provided to DEQ. The QAPP shall be designed to assist in planning for the collection, analysis, and reporting of all monitoring in support of this permit and in explaining data anomalies when they occur. At a minimum, the QAPP must include the following: 1. Details on the number of measurements, number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection, and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements. 2. Maps indicating the location of each monitoring, and sampling point. 3. Qualification and training of personnel. 4. Names, addresses, and telephone numbers of the laboratories used by or proposed to be used by the permittee. 5. Example formats and tables that will be used by the permittee to summarize and present all data in the annual report. The format and content of the QAPP should adhere to the recommendations and references in the Quality Assurance and Data Processing sections of the DEQ Guidance. The permittee shall amend the QAPP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAPP. The permittee shall notify DEQ of material changes to the QAPP and copies shall be kept on site and made available to DEQ upon request.
CA-053-03 Within one (1) year after permit issuance and prior to starting irrigation on MU-053-04 & 05	**Installation of Two (2) New Ground Water Monitoring Wells:** The permittee shall submit to DEQ for review and approval plans and specifications for the monitoring wells prior to constructing the wells. After DEQ approval, the wells will be constructed. The wells will be located as described in the report titled "2014 Reuse Permit Re-Application Appendix G - Groundwater Analysis" prepared by Matt Uranga, P.E. of J-U-B Engineers dated April 2014. Once installed, all ground water monitoring requirements in this permit shall pertain to these monitoring wells in addition to all existing monitoring wells.
CA-053-04 12 months prior to permit expiration	**Pre-Application Workshop:** If the permittee intends to continue operating the reuse facility beyond the expiration date of this permit, the permittee shall contact DEQ and schedule a pre-application workshop to discuss the compliance status of the facility and the content required for the reuse permit application package.
CA-053-05 6 months prior to permit expiration	**Renewal Permit Application:** The permittee shall submit to DEQ a complete permit renewal application package, which fulfills the requirements specified at the pre-application workshop identified in CA-053-04.

4. Permit Limits and Conditions

4.1 Hydraulic Management Unit Descriptions

Serial Number	Description	Irrigation System Type and Irrigation Efficiency	Maximum Acres[a] Allowed
MU-053-01	Fodder Crop Field	Center Pivot, Big Gun and Stationary Lateral (Hand Line): E_i = 0.80	27.3
MU-053-02	Mature Conifer Forest	Stationary Lateral (Hand Line): E_i = 0.75	3.6
MU-053-03	Conifer Seedlings	Stationary Lateral (Hand Line): E_i = 0.75	1.9
MU-053-04	Mature Conifer Forest	Stationary Lateral (Hand Line): E_i = 0.75	4.4
MU-053-05	Mature Conifer Forest	Stationary Lateral (Hand Line): E_i = 0.75	9.8
		Total acreage	47.0

a. Maximum acres represent the total permitted acreage for irrigation for the MU as provided by the permittee. If the permittee uses less acreage in any season or year, then loading rates shall be presented and compliance shall be determined based on the actual acreage utilized during each season or year.

4.2 Hydraulic Loading Limits

Serial Number	Growing Season Hydraulic Loading	Nongrowing Season Maximum Hydraulic Loading, inches
MU-053-01	Substantially at the irrigation water requirement (IWR)[a]	Not allowed
MU-053-02	Substantially at or below the irrigation water requirement (IWR)[a]	Not allowed
MU-053-03[b]	Maximum of 0.10 inches/acre or 5,000 gallons for the growing season.	Not allowed
MU-053-04	Substantially at or below the irrigation water requirement (IWR)[a]	Not allowed
MU-053-05	Substantially at or below the irrigation water requirement (IWR)[a]	Not allowed

a. For compliance purposes, the source of P_{def} data used to calculate the IWR shall be specified in the PO.
b. Conifer seedlings on this management unit shall be replaced when they die to maintain a healthy crop spaced as recommended in the silvicultural report.

4.3 Constituent Loading Limits

Serial Number	Constituent Loading (from all sources)			
	Nitrogen (lbs./acre)	**Salt (NVDS) (lbs./acre)**	**COD growing season (lbs./acre-day)**	**COD non-growing season (lbs./acre-day)**
MU-053-01	**Grass Hay and Alfalfa** - 133% of typical crop uptake[a] **Oats** – 150% of typical crop uptake[a]	No limit	No limit	Not applicable
MU-053-02	117	No limit	No limit	Not applicable
MU-053-03	No limit	No limit	No limit	Not applicable
MU-053-04	132	No limit	No limit	Not applicable
MU-053-05	132	No limit	No limit	Not applicable

a. Typical crop uptake is the median constituent crop uptake from the 3 most recent years the crop has been grown. For crops having less than 3 years of on-site crop uptake data, other crop yield data or nutrient content values may only be used if approved in writing by DEQ in advance of use. If written approval is not provided by DEQ, compliance with the 133% or 150% nitrogen loading limit shall be determined by comparing the current year nitrogen loading to the current year nitrogen uptake.

4.4 Ground Water Nitrate Concentration Limit

Serial Number	Nitrate (mg/L) [a]
GW-053-01 (North Well)	5.29

a. Permit violation when this concentration is exceeded for two (2) consecutive sampling events.

4.5 Management Unit Buffer Zones

Serial Number	Buffer Distances (in feet) from Hydraulic Management Units					
	Public Water Supplies	Private Water Supplies	Inhabited Dwellings	Permanent and Intermittent Surface Water	Irrigation Ditches and Canals	Areas Accessible to the Public
MU-053-01	1,000	50	100	100	100	0
MU-053-02	1,000	50	100	100	100	0
MU-053-03	1,000	50	100	100	100	0
MU-053-04	1,000	50	100	100	100	0
MU-053-05	1,000	50	100	100	100	0

4.6 Other Permit Limits and Conditions

Category	Permit Limits and Conditions
Growing season	April 1 through October 31 (214 days)
Nongrowing season	November 1 through March 31 (151 days)
Reporting year for annual loading rates	January 1st through December 31st
Operator certification and endorsement	The wastewater treatment facility and reuse system 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 and properly trained to operate and maintain the system.
Disinfection limits in recycled water	Class B Total Coliform Concentration Limits: The median number of total coliform organisms does not exceed 2.2 total coliform organisms/100 mL, as determined from the bacteriological results of the last 7 days for which analyses have been completed. No sample shall exceed 23 total coliform organisms/100 mL in any confirmed sample.
Crop or vegetation allowed	Crops grown for direct human consumption (those crops that are not processed prior to consumption) are not allowed. Refer to IDAPA 58.01.17.602.02, Table 3, Class C, for a list of permissible crops.

Category	Permit Limits and Conditions
Grazing	Grazing is not allowed.
Posting	All new signs shall read “Warning: Recycled Water—Do Not Drink,” or equivalent signage both in English and Spanish. Signs to be posted at a minimum every 500 feet and at each corner of the outer perimeter of the irrigated site. Signs are required where management unit border areas accessible to the public.
Fencing	MU-053-01, MU-053-02, MU-053-03, MU-053-04 and MU-053-05: three-wire pasture fencing
Construction plans	Pursuant to Idaho Code §39-118, IDAPA 58.01.16, and IDAPA 58.01.17, detailed plans and specifications shall be submitted to DEQ for review and approval prior to construction, modification, or expansion of any wastewater treatment, storage, conveyance structures, or reuse facility. Inspection requirements shall be satisfied and within 30 days of completion of construction and the permittee shall submit as-built plans or a letter from an Idaho Professional Engineer certifying the facilities or structures were constructed in substantial accordance with the approved plans and specifications.
Backflow prevention and testing requirements	Backflow prevention is required to protect surface water and ground water from an unauthorized discharge of recycled water or wastewater. Refer to section 9.1.1 of this permit.
Records retention requirements	Keep records generated to meet the requirements of this permit for the duration of permit, including administrative extensions, plus 2 years.

5. Monitoring Requirements

5.1 Recycled Water and Supplemental Irrigation Water Sampling and Analyses

5.1.1 Constituent Monitoring

Monitoring Point Serial Number and Location	Sample Description	Sample Type and Frequency	Constituents (Units in mg/L Unless Otherwise Specified)
WW-053-01 Disinfected recycled water from sample tap on pump discharge line between lower storage lagoon and upper storage lagoon	Recycled water pumped from LG-053-03 to LG-053-04	Grab/ a minimum of 56 samples taken throughout the calendar year	- total coliform (organisms/ 100 mL)
WW-053-01 Disinfected recycled water from sample tap on pump discharge line between lower storage lagoon and upper storage lagoon	Recycled water pumped from LG-053-03 to LG-053-04	Grab/daily when pumping from lower storage lagoon to upper storage lagoon	- total chlorine residual
WW-053-02 Recycled water from sample tap located at center pivot when irrigating from upper storage lagoon to management units	Recycled water to MU-053-01, MU-053-02, MU-053-03, MU-053-04 and MU-053-05	Grab/monthly (during periods of irrigation)	- total Kjeldahl nitrogen, as N - nitrite + nitrate-nitrogen, as N - total phosphorus, as P - pH

5.1.2 Management Unit and Other Flow Monitoring

Management Unit or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Measured Parameters, each MU
FM-053-01 Flow meter at center pivot irrigating MU-053-01	Recycled water flow from LG-053-04	- Daily meter reading when irrigating - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)

Management Unit or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Measured Parameters, each MU
FM-053-02 Flow meter to southeast irrigation riser irrigating MU-053-02 & 03	Recycled water flow from LG-053-04	- Daily meter reading when irrigating - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)
FM-053-03 Flow meter to southwest irrigation riser irrigating MU-053-02 & 05	Recycled water flow from LG-053-04	- Daily meter reading when irrigating - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)
FM-053-034 Flow meter to southwest irrigation riser irrigating MU-053-01, 02 & 04	Recycled water flow from LG-053-04	- Daily meter reading when irrigating - Monthly compilation of data	- Volume (MG/month) - Application depth (inches/month)
MU-053-01 MU-053-02 MU-053-03 MU-053-04 MU-053-05	Acreage irrigated	- Daily when irrigating - Monthly compilation of data	- Acres

5.2 Ground Water Monitoring

5.2.1 Ground Water Monitoring Point Descriptions

Monitoring Point Serial Number	Common Designation	Well Type	Gradient Location
GW-053-01	MW 1	Monitoring well (North)	Downgradient
GW-053-02	MW 2	Monitoring well (West)	Upgradient
GW-053-03	MW 3	Monitoring well (South)	Midgradient
GW-053-04	MW 4	Monitoring well (Southwest)	Upgradient
GW-053-05	MW 5	Monitoring well (Northeast)	Downgradient

5.2.2 Ground Water Monitoring, Sampling, and Analyses

Monitoring Point Serial Number	Sampling Point Description	Sample Type and Frequency	Constituents (Units in mg/L Unless Otherwise Specified)
GW-053-01 through GW-053-04	Monitoring wells	Unfiltered grab sample/twice annually: April and October	-Chloride -Nitrate-N -Nitrite-N -TDS -Total Iron (Fe) -Total Manganese (Mn) -pH (standard units) -Total dissolved Fe and Mn *if total Fe or Mn exceeds secondary ground water quality standards specified by IDAPA 58.01.01.11.200.01.b* -Water table elevation (feet) - Water table depth (feet) - Specific conductance/electrical conductivity (µmhos/cm)
GW-053-05	Monitoring wells	Unfiltered grab sample/quarterly: February, April, July and October	-Chloride -Nitrate-N -Nitrite-N -TDS -Total Fe -Total Mn -pH (standard units) -Total dissolved Fe and Mn *if total Fe or Mn exceeds secondary ground water quality standards specified by IDAPA 58.01.01.11.200.01.b* -Water table elevation (feet) - Water table depth (feet) - Specific conductance/electrical conductivity (µmhos/cm)

5.3 Soil Monitoring

5.3.1 Soil Monitoring Unit Descriptions

Monitoring Point Serial Number	Description	Associated Hydraulic Management Unit
SU-053-01	Spray Field – Center Pivot	MU-053-01
SU-053-02	Mature Conifer Forest	MU-053-02
SU-053-03	Conifer Seedlings	MU-053-03
SU-053-04	Mature Conifer Forest	MU-053-04
SU-053-05	Mature Conifer Forest	MU-053-05

5.3.2 Soil Monitoring, Sampling, and Analyses

Monitoring Point Serial Number	Sample Type	Sample Frequency	Constituents (Units in mg/kg Soil Unless Otherwise Specified)
SU-053-01	Composite samples[a]	Annually in October or November after irrigation has stopped for the growing season	- Electrical conductivity (µmhos/cm) - Nitrate-N - Ammonium-N - Plant available phosphorous - % organic matter - pH (standard units)
SU-053-02 SU-053-03 SU-053-04 SU-053-05	Composite samples[a]	Annually in October or November after irrigation has stopped for the growing season	- Electrical conductivity (µmhos/cm) - Nitrate-N - Ammonium-N - % organic matter - pH (standard units)

a. The number of sample locations specified in the PO or QAPP for each SU shall be sampled. At each location, samples shall be obtained from three depths: 0–12 inches; 12–24 inches; and 24–36 inches or refusal. The samples obtained from each depth shall be composited by depth to yield three composite samples for each soil monitoring unit; one composite sample for each depth.

5.4 Crop Monitoring

5.4.1 Crop Harvest Monitoring

Associated Hydraulic Management Units	Sample Type	Sample Frequency	Parameters[a]
MU-053-01	Harvested portion, each crop	Each harvest	- Crop type - Harvest date - Harvested acreage (acres) - As-harvested ('wet') yield in customary harvested units (tons, bushels, cwt, etc.). - As-harvested (field) moisture content (%) - Dry yield (lbs.)

a. Documentation of reported yields shall be provided for each harvest from each MU.

5.4.2 Plant Tissue Monitoring

Associated Hydraulic Management Units	Sample Type	Sample Frequency	Parameters
MU-053-01	Harvested portion, each crop, each harvest	Each harvest	-Total nitrogen (% in dry weight) -Total phosphorus (% in dry weight)

5.5 Lagoon Information

Serial number	Description	Surface Area, ft^2	Maximum Operating Volume, MG	Liner Type
LG-053-01	Aerated Lagoon # 1 – Northeast lagoon at treatment site	21,780	1.0	Bentonite clay
LG-053-02	Aerated Lagoon # 2 – Southeast lagoon at treatment site	21,780	1.0	Bentonite clay
LG-053-03	Settling/Lower Storage Lagoon – West lagoon at treatment site	73,575	3.9	Bentonite clay
LG-053-04	Upper Storage Lagoon – located at irrigation site	211,524	20.6	HDPE

6. Reporting Requirements

6.1 Annual Report Requirements

The permittee shall submit to DEQ an Annual Report prepared by a competent environmental professional covering the previous reporting year.

6.1.1 Due Date

The Annual Report is due no later than January 31 of each year, which shall cover the previous reporting year.

6.1.2 Required Contents

The Annual Report shall include the following:

1. A brief interpretive discussion of all required monitoring data. The discussion shall address data quality objectives, validation, and verification; permit compliance; and reuse facility environmental impacts. The reporting year for this permit is specified in section 4.6.
2. Results of the required monitoring as described in section 5 of this permit. If the permittee monitors any parameter for compliance purposes 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. The report shall present all monitoring data in organized data summary tables to expedite review.
3. Status of all work described in section 3 of this permit.
4. Results of all backflow testing, repairs, and replacements required by Section 9.1.1 of this permit.
5. Discussion of major maintenance activities such as major equipment replacement, lagoon liner maintenance, and wastewater treatment and reuse facility maintenance.
6. A summary of all noncompliance events that occurred during the reporting year. Examples of noncompliance events that must be discussed include, but are not limited to: exceedance of permit limits, complaints, missed monitoring events, incorrect monitoring dates or frequencies, dry monitoring wells, uncontained spills causing runoff, construction without DEQ engineering plan approval, construction without engineering inspection, and reporting incorrect acreage.
7. Submittal of the calculations and observations for hydraulic management units specified in the table below.
8. Laboratory analytical reports for monitoring specified in Section 5 of the permit. Chain of custody forms, supporting information for laboratory analytical reports, and quality assurance documentation shall be available for review upon request by DEQ.
9. The parameters in the following table:

Monitoring Point Serial Number	Parameter (Calculate for each MU)	Units
MU-053-01 MU-053-02 MU-053-03 MU-053-04 MU-053-05	Recycled water loading rate	Million gallons/month Inches/month
	Irrigation water requirement for each crop	Inches/month Inches/growing season
	Recycled water total nitrogen and phosphorus loading rates	Pounds/acre-year
	Supplemental fertilizer nitrogen and phosphorus application rates, reported as elemental N and P	Pounds/acre-year
	Crop harvest and yield Report each harvest and the annual totals for each MU.	Crop types harvested Total harvested area (acres) Total 'wet' yield (pounds/yr., pounds/acre-yr.) Total 'dry' yield (pounds/yr., pounds/acre-yr.)
	Crop nitrogen and phosphorus removal rates (dry-basis) Report each harvest and the annual totals for each MU.	Pounds-N/acre-year Pounds-P/acre-year
	Calibration of all flow meters	NA

6.1.3 Submittals

All applications, annual reports, or information submitted to DEQ as required by this permit shall be signed and certified as follows:

1. Permit applications shall be signed by the Responsible Official as follows:
   a. For a corporation: by a responsible corporate officer;
   b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
   c. For a municipality, state, federal, Indian tribe, or other public agency: by either the principal executive officer, ranking elected official, or a person of decision-making authority who can legally bind the permittee with respect to the permit.
2. Annual reports and other information required by this permit shall be signed by the Responsible Official or by a duly Authorized Representative of that person. A person is a duly Authorized Representative only if:
   a. The authorization is made in writing by the responsible official;
   b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual having overall responsibility for environmental matters for the company; and

c. The written authorization is submitted to DEQ.

Submit all applications, annual reports, and other information required by this permit to the following DEQ regional office at this address:

Engineering Manager
Idaho Department of Environmental Quality
Coeur d'Alene Regional Office
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814

The annual report shall include the following certification statement and be signed, dated, and certified by the permittee's Responsible Official or duly Authorized Representative:

"*I certify that the information provided in this submittal was prepared in conformance with the Quality Assurance Project Plan required by permit (insert permit no. that required the QAPP), and is to the best of my knowledge, true, accurate and complete and I acknowledge that knowing submission of false or incomplete information may result in permit revocation as provided for in IDAPA 58.01.17.920.01 or other enforcement action as provided for under Idaho law.*"

Permit applications shall include the following certification statement and be signed, dated, and certified by the permittee's Responsible Official:

"I certify that the information provided in this submittal is, to the best of my knowledge, true, accurate and complete and I acknowledge that knowing submission of false or incomplete information may result in permit revocation as provided for in IDAPA 58.01.17.920.01, non-issuance of the permit, or other enforcement action as provided for under Idaho law."

Other information submitted to DEQ as required by the permit shall include the above certification statement and be signed, dated, and certified by the permittee's Responsible Official or duly Authorized Representative.

6.2 Emergency and Noncompliance Reporting

Report noncompliance incidents to the Engineering Manager at DEQ's Coeur d'Alene Regional Office at (208) 769-1422.

In case of emergencies, call the emergency 24-hour number at 1-800-632-8000 and DEQ's regional office.

See Section 8, "Standard Permit Conditions," and IDAPA 58.01.17.500.06 for reporting requirements for facilities.

All instances of 1) permit non-compliance which may endanger public health or the environment and 2) unauthorized discharges to surface waters of the State of Idaho shall be reported to DEQ's regional office by telephone within 24 hours from the time the permittee becomes aware of the discharge at the phone numbers provided in this section.

A written follow-up shall be provided to the DEQ regional office within 5 days from the time the permittee became aware of the permit non-compliance or unauthorized discharge.

Reporting of unauthorized discharges to surface waters of the United States to the Environmental Protection Agency (EPA) may also be required. Contact information for EPA is provided below:

EPA Contact Information:
NPDES/Stormwater Coordinator, USEPA Idaho Operations Office
950 W. Bannock, Suite 900
Boise, ID 83702
(208) 378-5746 / (208) 378-5744 and EPA Hot Line (206) 553-1846

7. Reserved.

8. Standard Permit Conditions

The following standard permit conditions are included as terms of this permit as required by the "Recycled Water Rules," (IDAPA 58.01.17.500).

500. STANDARD PERMIT CONDITIONS.
The following conditions shall apply to and be included in all permits. (4-1-88)

01. Compliance Required. The permittee shall comply with all conditions of the permit. (4-1-88)

02. Renewal Responsibilities. 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 in accordance with these rules. (4-1-88)

03. Operation of Facilities. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, control and monitoring, which are installed or used by the permittee to achieve compliance with the permit or these rules. (4-1-88)

04. Provide Information. The permittee shall furnish to the Director within a 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 rules. (4-1-88)

05. Entry and Access. The permittee shall allow the Director, consistent with Title 39, Chapter 1, Idaho Code, to: (4-1-88)

a. Enter the permitted facility. (4-1-88)

b. Inspect any records that must be kept under the conditions of the permit. (4-1-88)

c. Inspect any facility, equipment, practice, or operation permitted or required by the permit. (4-1-88)

d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility. (4-1-88)

06. Reporting. The permittee shall report to the Director under the circumstances and in the manner specified in this section: (4-1-88)

a. In writing at least 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. When the alteration or addition results in a need for a major modification, such alteration or addition shall not be made prior to Department approval issued in accordance with these rules. (4-7-11)

b. In writing thirty (30) days before any anticipated change which would result in noncompliance with any permit condition or these rules. (4-1-88)

c. Orally within twenty-four (24) hours from the time the permittee became aware of any noncompliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director. (4-1-88)

d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any noncompliance unless extended by the Department. This report shall contain: (4-1-88)

i. A description of the noncompliance and its cause; (4-1-88)

ii. The period of noncompliance including to the extent possible, times and dates and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and (4-7-11)

iii. Steps taken or planned, including timelines, to reduce or eliminate the continuance or reoccurrence of the noncompliance. (4-7-11)

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. (4-1-88)

07. Minimize Impacts. The permittee shall take all necessary actions to eliminate and correct any adverse impact on the public health or the environment resulting from permit noncompliance. (4-1-88)

08. Compliance with "Ground Water Quality Rule." Permits issued pursuant to these rules shall require compliance with IDAPA 58.01.11, "Ground Water Quality Rule." (4-7-11)

9. General Permit Conditions

The following general permit conditions are identical to the cited rules at the time of issuance and are enforceable as part of this permit. Note that the rules cited in this section, and elsewhere in this permit, are supplemented by the rules themselves. Rules applicable to your facility are enforceable whether or not they appear in this permit.

9.1 Operations

9.1.1 Backflow Prevention

Reuse facilities with existing or planned cross-connections or interconnections between the recycled water system and any water supply (potable or nonpotable) or surface water, shall have backflow prevention assemblies, devices, or methods as required by applicable rule or as specified in this permit and approved by DEQ.

For public water systems, backflow assemblies shall meet the requirements of IDAPA 58.01.08.543. Assemblies shall be adequately maintained and shall be tested annually by a certified backflow assembly tester, and repaired or replaced as necessary to maintain operational status.

For domestic water supply wells, backflow prevention devices shall meet the requirements of IDAPA 07.02.04 and shall be adequately operated and maintained.

Irrigation water supply wells shall meet the requirements of IDAPA 37.03.09.36 for preventing any waste or contamination of the ground water resource. Backflow prevention assemblies or devices used to protect the ground water shall be adequately operated and maintained.

Discharge of recycled water to surface water is authorized by the EPA NPDES program. An NPDES permit is required for any discharge to surface water and backflow prevention shall be implemented to prevent any unauthorized discharge. Backflow prevention assemblies or devices used to protect surface water shall be adequately operated and maintained.

Records of all testable backflow assembly test results, repairs, and replacements shall be kept at the reuse facility along with other operational records, and shall be discussed in the Annual Report and made available for inspection by DEQ. Other approved means of backflow prevention, such as siphons and air-gap structures that cannot be tested, shall be maintained in operable order.

9.1.2 Restricted to Premises

Wastewaters 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 United States Environmental Protection Agency (IDAPA 58.01.16.600.02).

9.1.3 Health Hazards, Nuisances, and Odors Prohibited

Health hazards, nuisances, and odors are prohibited as follows:

- Wastewater must not create a public health hazard or nuisance condition (IDAPA 58.01.16.600.03).
- No person shall allow, suffer, cause or permit the emission of odorous gases, liquids, or solids into the atmosphere in such quantities as to cause air pollution (IDAPA 58.01.01.776.01).
    - Air Pollution. The presence in the outdoor atmosphere of any air pollutant or combination thereof in such quantity of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property (IDAPA 58.01.01.006.06).

9.1.4 Solids Management

Biosolids are the nutrient-rich organic materials resulting from the treatment of sewage sludge. When treated and processed, sewage sludge becomes biosolids which can be safely recycled and applied as fertilizer to sustainably improve and maintain productive soils and stimulate plant growth.

Biosolids generated from sewage sludge are regulated by EPA under 40 CFR Part 503 and require a DEQ approved sludge disposal plan as outlined in IDAPA 58.01.16.650. Contact DEQ prior to application of biosolids at any permitted reuse facility.

Sludge is the semi-liquid mass produced and removed by wastewater treatment processes. This does not include grit, garbage, and large solids.

Sludge may be generated by wastewater treatment processes at municipal and industrial facilities. A DEQ-approved sludge disposal plan, as outlined in IDAPA 58.01.16.650, may be required.

Solid Waste is any garbage or refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended.

Solid waste does not include inert wastes, manures and crop residues ultimately returned to the soils at agronomic rates, and any agricultural solid waste which is managed and regulated pursuant to rules adopted by the Idaho Department of Agriculture. DEQ reserves the right to use existing authorities to regulate agricultural waste that impacts human health or the environment.

Solid waste is regulated under IDAPA 58.01.06, “Solid Waste Management Rules”. Wastes otherwise regulated by DEQ (i.e. this permit) are not regulated under 58.01.06.

Waste Solids include sludge and wastes otherwise regulated by DEQ in accordance with IDAPA 58.01.06.001.03.a.xii. Waste solids may include vegetative waste, silt and mud containing organic matter, and other non-inert solid wastes.

Inert wastes are defined as non-combustible, nonhazardous, and non-putrescible solid wastes that are likely to retain their physical and chemical structure and have a deminimis potential to generate leachate under expected conditions of disposal, which includes resistance to biological attack.

Waste solids require a DEQ approved sludge disposal plan as outlined in IDAPA 58.01.16.650.

9.1.5 Temporary Cessation of Operations and Closure (IDAPA 58.01.17.801)

Temporary cessation of operations and closure must be addressed as follows:

01. Temporary Cessation. A permittee shall implement any applicable conditions specified in the permit for temporary cessation of operations. When the permit does not specify applicable temporary cessation conditions, the permittee shall notify the Director prior to a temporary cessation of operations at the facility greater than sixty (60) days in duration and any cessation not for regular maintenance or repair. Cessation of operations necessary for regular maintenance or repair of a duration of sixty (60) days or less are not required to notify the Department under this section. All notifications required under this section shall include a proposed temporary cessation plan that will ensure the cessation of operations will not pose a threat to human health or the environment. (4-7-11)

02. Closure. A closure plan shall be required when a facility is closed voluntarily and when a permit is revoked or expires. A permittee shall implement any applicable conditions specified in the permit for closure of the facility. Unless otherwise directed by the terms of the permit or by the Director, the permittee shall submit a closure plan to the Director for approval at least ninety (90) days prior to ceasing operations. The closure plan shall ensure that the closed facility will not pose a threat to human health and the environment. Closure plan approval may be conditioned upon a permittee's agreement to complete such site investigations, monitoring, and any necessary remediation activities that may be required. (4-7-11)

9.1.6 Plan of Operation (IDAPA 58.01.17.300.05)

The PO must comply with the following:

05. Reuse Facility Operation and Maintenance Manual or Plan of Operations. A facility's operation and maintenance manual must contain all system components relating to the reuse facility in order to comply with IDAPA 58.01.16 "Wastewater Rules," Section 425. Manuals and manual amendments are subject to the review and approval provision therein. In addition to the content required by IDAPA 58.01.16.425, manuals for reuse facilities shall include, if applicable: operation and management responsibility, permits and standards, general plant description, operation and control of unit operations, land application site maps, wastewater characterization, cropping plan, hydraulic loading rate, constituent loading rates, compliance activities, seepage rate testing, site management plans, monitoring, site operations and maintenance, solids handling and processing, laboratory testing, general maintenance, records and reports, store room and inventory, personnel, an emergency operating plan, and any other information required by the Department. (4-7-11)

9.1.7 Seepage Testing Requirements (IDAPA 58.01.16.493.02.c)

03. Subsequent Tests. All lagoons covered under these rules must be seepage tested by an Idaho licensed professional engineer, an Idaho licensed professional geologist, or by individuals under their supervision every ten (10) years after the initial testing. (5-8-09)

9.1.8 Ground Water Quality Rule (IDAPA 58.01.11)

The permittee shall comply with the requirements of "Ground Water Quality Rule" (IDAPA 58.01.11).

9.2 Administrative

Requirements for administration of the permit are defined as follows.

9.2.1 Permit Modification (IDAPA 58.01.17.700)

01. **Modification of Permits**. A permit modification may be initiated by the receipt of a request for modification from the permittee, or may be initiated by the Department if one (1) or more of the following causes for modification exist: (4-7-11)

a. Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. (4-7-11)

b. New standards or regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. (4-7-11)

c. Compliance schedules. The Department determines good cause exists for modification of a compliance schedule or terms and conditions of a permit. (4-7-11)

d. Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which may cause an adverse impact to surface or ground waters. (4-7-11)

e. To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions. (4-7-11)

f. When a treatment technology proposed, installed, and properly operated and maintained by the permittee fails to achieve the requirements of the permit. (4-7-11)

9.2.2 Permit Transferable (IDAPA 58.01.17.800)

01. **General**. A permit may be transferred only upon approval of the Department. No transfer is required for a corporate name change as long as the secretary of state can verify that a change in name alone has occurred. An attempted transfer is not effective for any purpose until approved in writing by the Department. (4-7-11)

9.2.3 Permit Revocation (IDAPA 58.01.17.920)

01. **Conditions for Revocation**. The Director may revoke a permit if the permittee violates any permit condition or these rules, or the Director becomes aware of any omission or misrepresentation of condition or information relied upon when issuing the permit. (4-7-11)

02. **Notice of Revocation**. 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 requests an administrative hearing in writing. The hearing shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure

before the Board of Environmental Quality." (5-3-03)

03. Emergency Action. If 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, the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with IDAPA 58.01.23, Rules of Administrative Procedure Before the Board of Environmental Quality." (3-15-02)

04. Revocation and Closure. A permittee shall perform the closure requirements in a permit, the closure requirements of these rules, and complete all closure plan activities notwithstanding the revocation of the permit. (4-7-11)

9.2.4 Violations (IDAPA 58.01.17.930)

Any person violating any provision of these rules 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. (4-1-88)

9.2.5 Severability

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. Other Applicable Laws

DEQ may refer enforcement of the following provisions to the state agency authorized to enforce that rule. The permittee shall comply with all applicable provisions identified in this section. Compliance with this permit does not relieve the permittee from applicable requirements in other federal, state, and local laws, statutes, and rules.

10.1 Owner Responsibilities for Well Use and Maintenance

10.1.1 Well Use

The well owner must not operate any well in a manner that causes waste or contamination of the ground water resource. Failure to operate, maintain, knowingly allow the construction of any well in a manner that violates these rules, or failure to repair or properly decommission (abandon) any well as herein required will subject the well owner to civil penalties as provided by statute. See IDAPA 37.03.09.036.01 and consult the Idaho Department of Water Resources (IDWR) for more information.

10.1.2 Well Maintenance

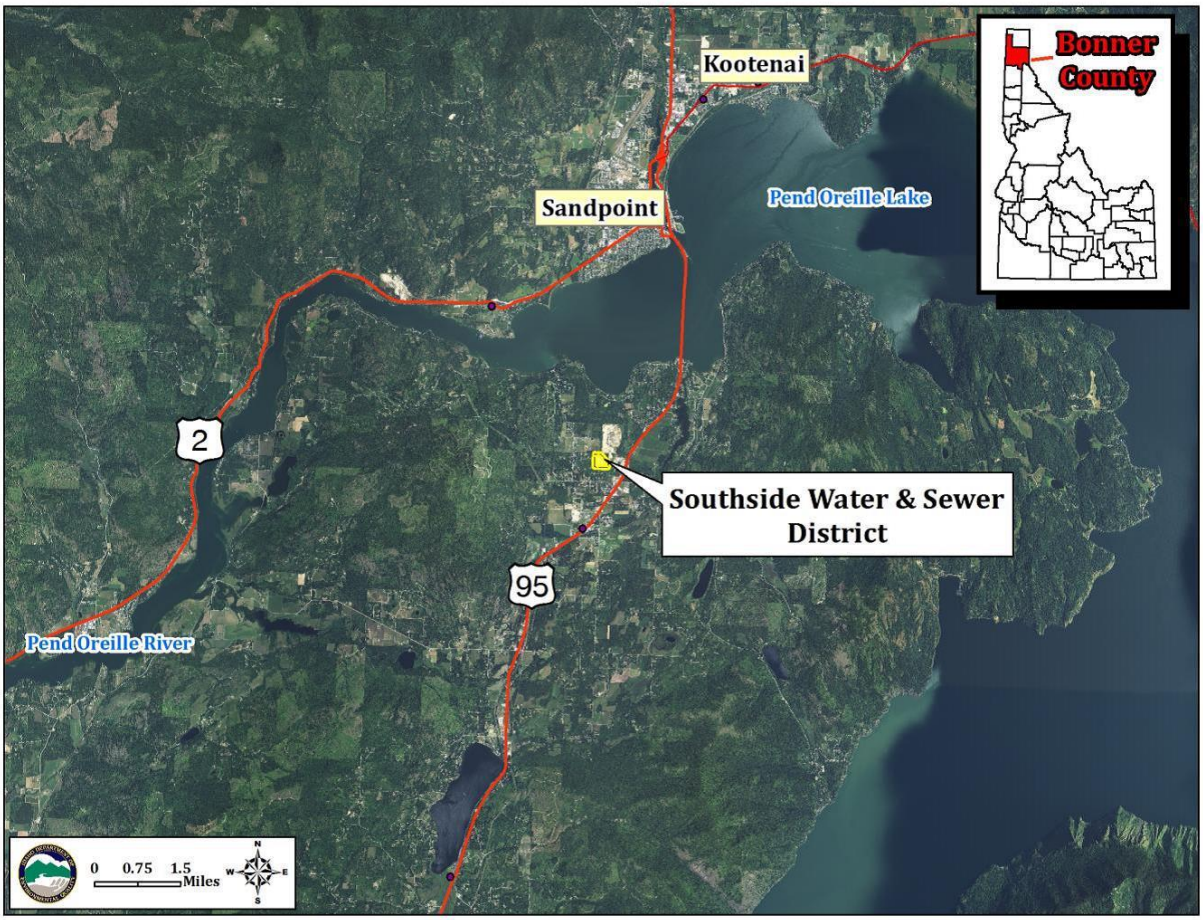
The well owner must maintain the well to prevent waste or contamination of ground waters through leaky casings, pipes, fittings, valves, pumps, seals, or through leakage around the outside of the casings, whether the leakage is above or below the land surface. Any person owning or controlling a noncompliant well must have the well repaired by a licensed well driller under a permit issued by the IDWR director in accordance with the applicable rules. See IDAPA 37.03.09.036.02 and consult IDWR for more information.

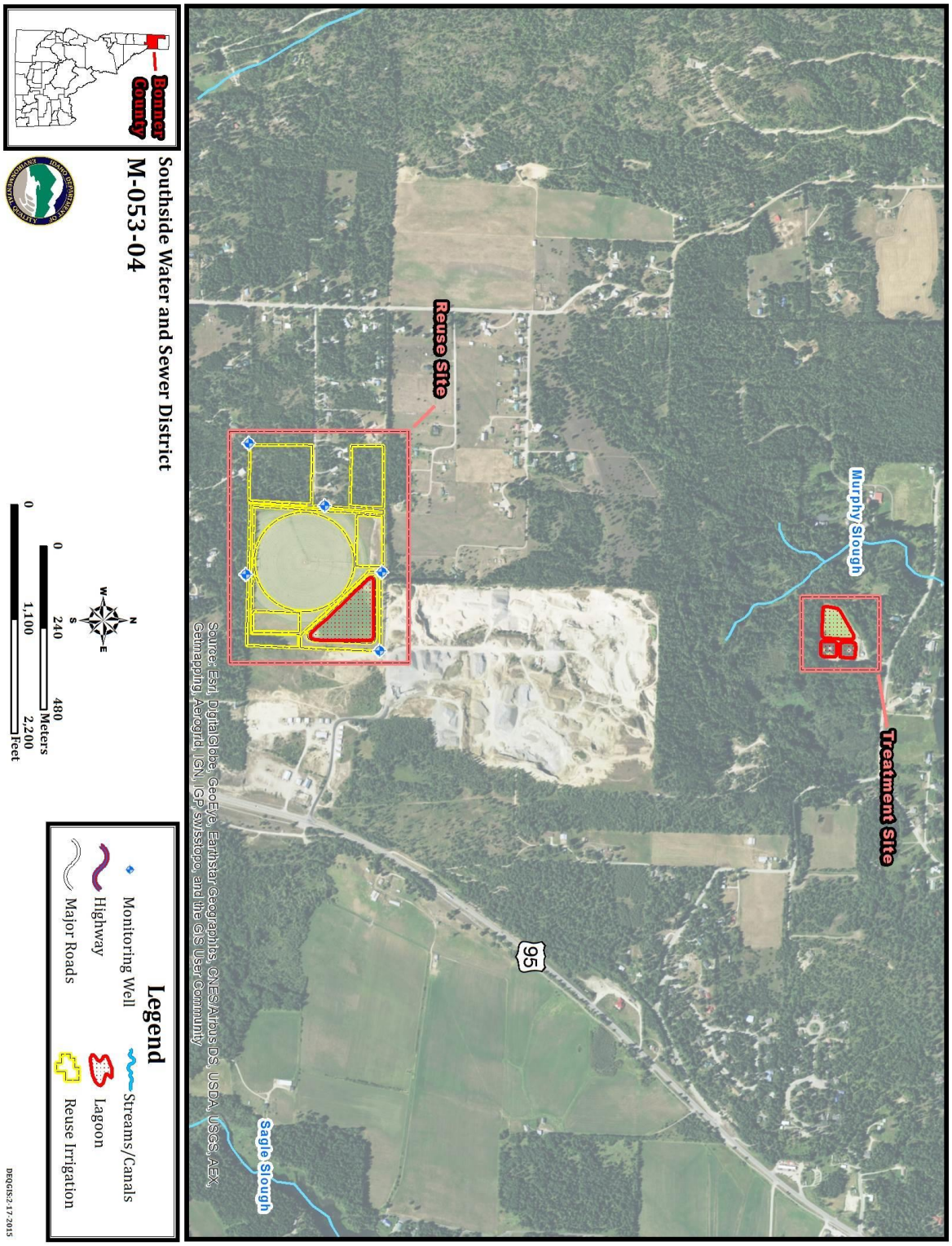
10.1.3 Wells Posing a Threat to Human Health and Safety or Causing Contamination of the Ground Water Resource

The well owner must have any well shown to pose a threat to human health and safety or cause contamination of the ground water resource immediately repaired or decommissioned (abandoned) by a licensed well driller under a permit issued by the IDWR director in accordance with the applicable rules. See IDAPA 37.03.09.036.06 and consult the IDWR for more information.

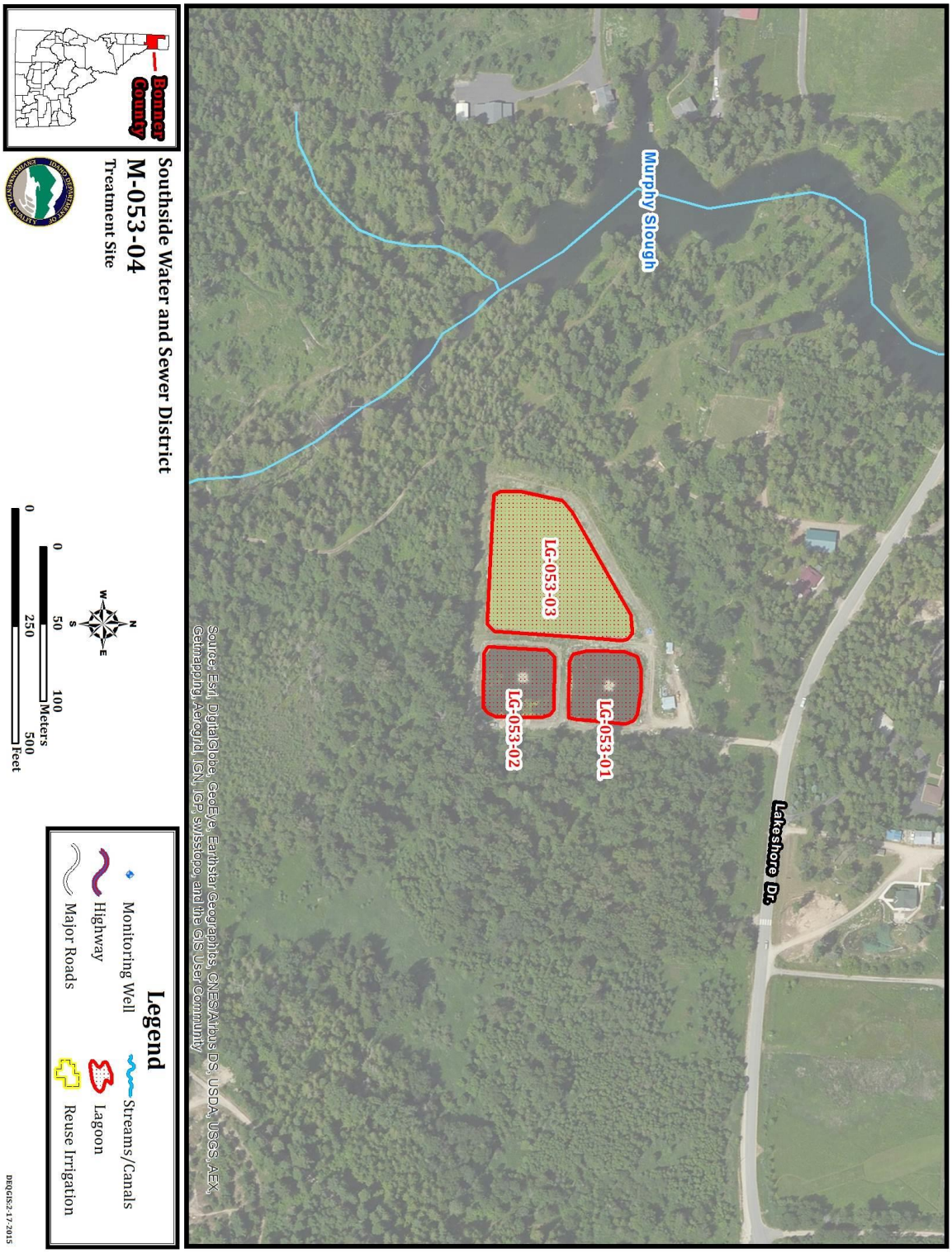
11. Site Maps

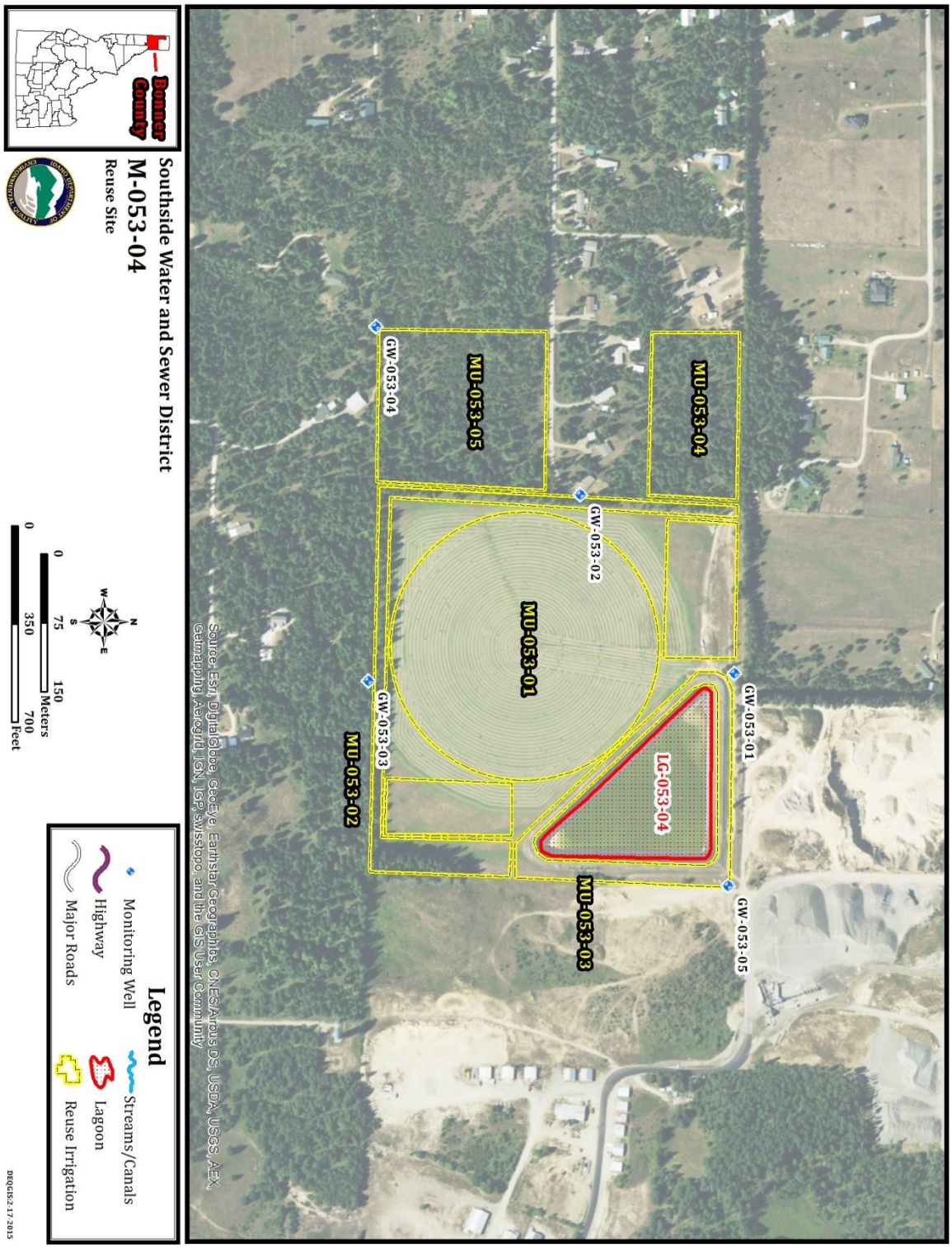
11.1 Regional Maps




Treatment Site
Murphy Slough
95
Reuse Site
Sagle Slough
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Bonner County
Southside Water and Sewer District
M-053-04
N
W
E
S
0
240
480
Meters
0
1,100
2,200
Feet
Legend
Monitoring Well
Streams/Canals
Highway
Lagoon
Major Roads
Reuse Irrigation
DEQGIS2.17.2015

11.2 Facility Maps



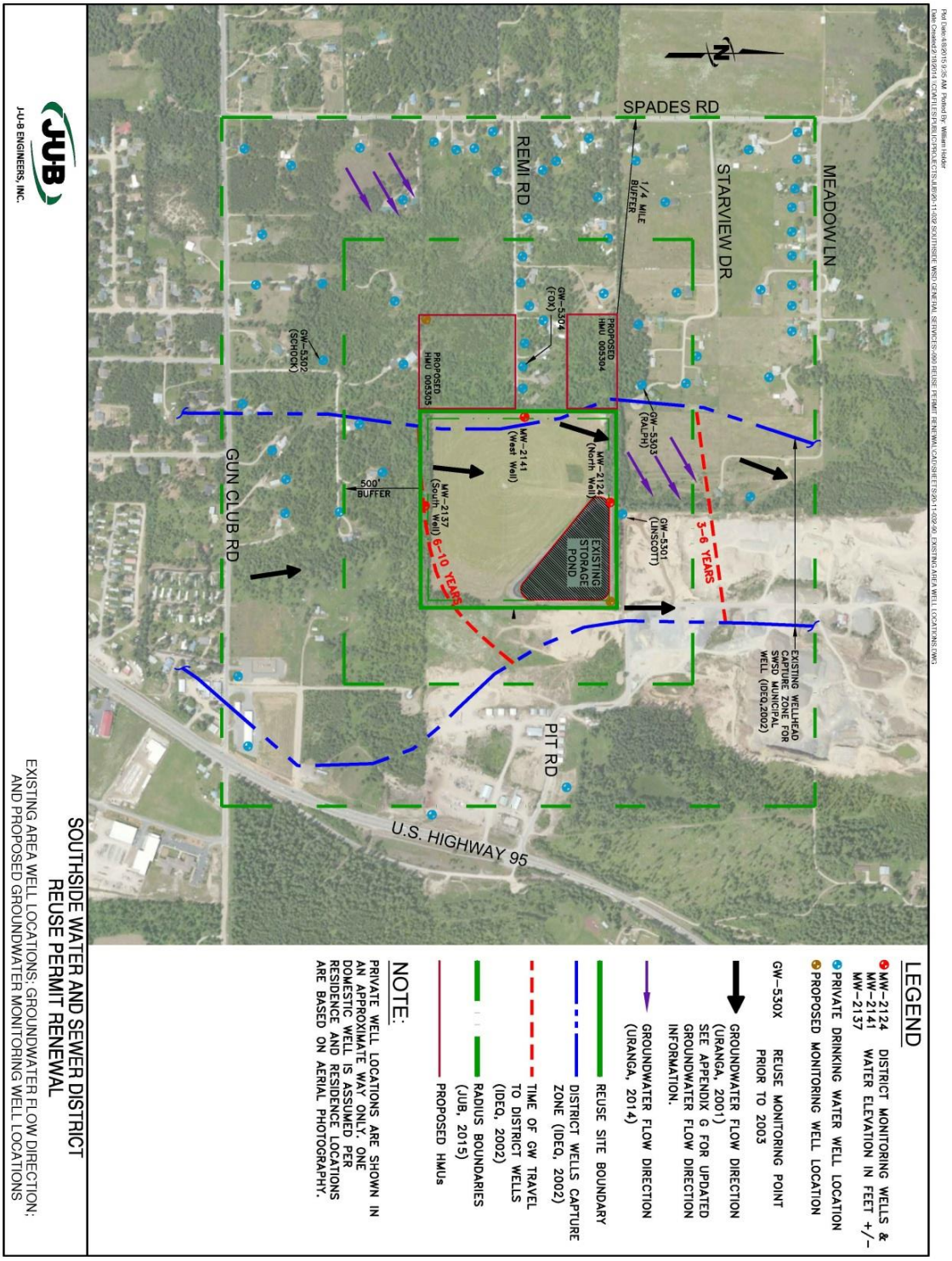
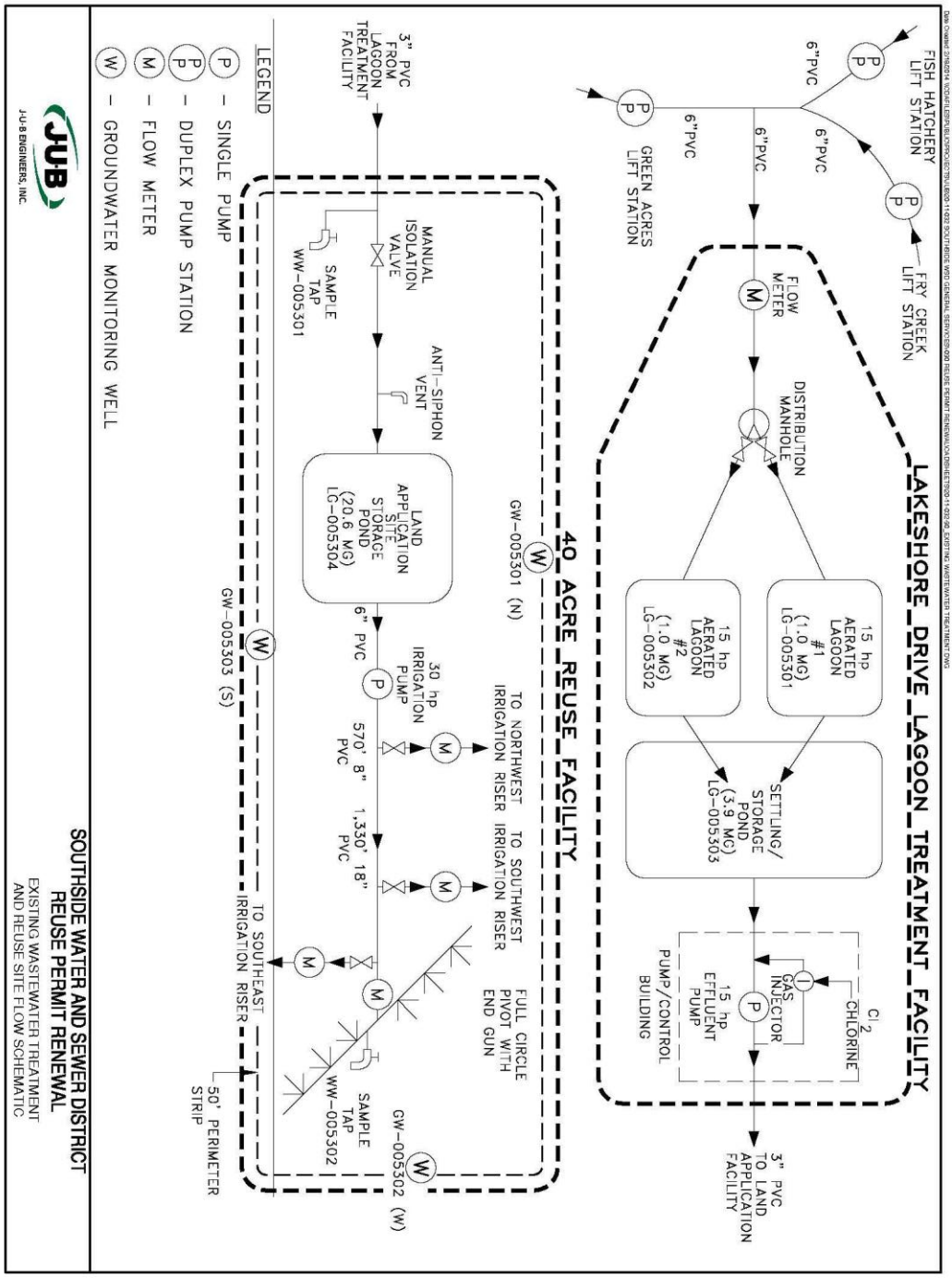

MU-053-04
GW-053-01
GW-053-05
LG-053-04
MU-053-03
GW-053-02
MU-053-05
MU-053-01
GW-053-04
GW-053-03
MU-053-02
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
Legend
Monitoring Well
Streams/Canals
Highway
Lagoon
Major Roads
Reuse Irrigation
0 75 150 Meters
0 350 700 Feet
N
W
E
S
Bonner County
Southside Water and Sewer District
M-053-04
Reuse Site
DEQGIS-2.17.2015

11.3 Other Maps

11.3.1 Management Units and Flow Meter Locations

11.3.2 Management Units w/ Residential Property Buffer Zones

11.3.3 Ground Water Flow Direction and Locations of Monitoring Wells and Private Wells



11.3.4 Wastewater Schematic Flow Diagram