Idaho Department of Environmental Quality
Reuse Permit
M-159-02

(Previous Permit No. LA-000159-01)

Malad City (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 Reuse Plan of Operation; and
(4) all other applicable federal, state, and local laws, statutes, and rules.

This permit is effective from the date of signature and expires on, **March 2, 2027**

Katy Bergholm
Signature

March 3, 2022
Date

Katy Bergholm
Regional Administrator
Pocatello Regional Office
Idaho Department of Environmental Quality

Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way, Building #300
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Pocatello, ID. 83201

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1. Common Acronyms, Abbreviations and Definitions

CA	compliance activity
COD	chemical oxygen demand
crop uptake	those constituents assimilated by the crop from the soil, and those from applied fertilizer, biosolids and other soil amendments, recycled water, irrigation water, and other sources. Crop uptake excludes those constituents assimilated from the atmosphere, such as gaseous nitrogen fixed by legumes. Crop uptake plus atmospheric assimilated constituents equals crop content.
cwt	a unit of weight measurement equal to 100 pounds
DEQ	Idaho Department of Environmental Quality
Director	Director of the Idaho Department of Environmental Quality or designee unless otherwise specified
E_i	irrigation efficiency
EPA	Environmental Protection Agency
FM	prefix for flow measurement/monitoring location, device, or method reporting serial number
GW	prefix for ground water reporting serial number
IDAPA	Idaho Administrative Procedures Act
IDWR	Idaho Department of Water Resources
IPDES	Idaho Pollutant Discharge Elimination System
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
lb	pound
LG	prefix for lagoon reporting serial number
material change	a change in a document required by this permit that would impact DEQ's ability to ensure compliance and protect human health and the environment
µmhos/cm	micromhos per centimeter
MG	million gallons
mg/kg	milligram per kilogram
mg/L	milligram per liter
mL	milliliter

MU	prefix for management unit reporting environmental serial number
NPDES	National Pollutant Discharge Elimination System
N	nitrogen
ppm	parts per million
P	phosphorus
PO	plan of operation
QAPP	quality assurance project plan
Responsible Official	facility contact person authorized by the permittee to communicate with DEQ on behalf of the permittee on any matter related to the permit, including without limitation, the authority to communicate with and receive notices from DEQ regarding notices of violation or non-compliance, permit violations, permit enforcement, and permit revocation. The responsible official provides written certification of permit application materials, annual report submittals, and other information submitted to DEQ as required by the permit. Any notice to or communication with the responsible official is considered a notice to or communication with the permittee. The responsible official may designate an authorized representative to act as the facility contact person for any of the activities or duties related to the permit, except signing and certifying the permit application, which must be done by the responsible official. The authorized representative shall act as the responsible official and shall bind the permittee as described in this definition. Designation of the authorized representative shall follow the requirements specified in section 6.1.3 of the permit.
SU	prefix for soil monitoring unit reporting serial number
SW	prefix for supplemental irrigation water reporting serial number
WW	prefix for wastewater reporting serial number
yr	year

2. Facility Information

Information Type	Information Specific for This Permit
Class of recycled water	Municipal Class D
Method of treatment and reuse	Three treatment lagoons, two winter storage lagoons, sodium hypochlorite disinfection, and reuse. Disinfection of recycled water to Class D disinfection requirements. Use of recycled water for crop irrigation via slow rate land application.
Collection and Treatment System Classification	Class I Wastewater Treatment System Class I Wastewater Collection System Land Application/Reuse
Facility mailing address **Facility Location** **Phone** **E-mail**	Malad City 59 Bannock Street Malad, ID 83252-1240 Section 35, Township 14S, Range 36E Section 2-3, Township 15S, Range 36E Phone: 208-766-4010 Maladcity@hotmail.com
Facility Responsible Official and Authorized Representative	Responsible Official: Mayor Authorized Representative: None Notify DEQ within 30 days of personnel changes to any of the facility contacts listed above.
Ground Water	Depth to ground water is 52 feet at the new lagoon site. The reuse area is not within the boundaries of a Nitrate Priority Area. Groundwater reported to flow toward the southwest.
Surface Water	Twomile Creek, runs between the irrigated management units. Beneficial uses: Secondary Contact Recreation

3. Compliance Schedule for Required Activities

Compliance Activity Number and Completion Due Date	Compliance Activity Description
CA-159-01 6 months (180 days) following permit issuance	**Plan of Operation (PO)**: The permittee shall submit to DEQ for review and approval a PO 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 most recent PO Checklist available. 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. Grazing Management Plan 5. Irrigation Management and Scheduling 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.
CA-159-02 90 days following monitoring well installation and prior to commencing land application	**Ground Water Monitoring Well Network Evaluation:** The permittee shall have an Idaho licensed Professional Engineer (PE) or an Idaho licensed Professional Geologist (PG) prepare and submit the following to DEQ for review and approval: 1. A determination of ground water depth, elevation, and flow direction of all monitoring wells in the monitoring well network 2. A ground water elevation contour map 3. A detailed report evaluating the ability of the installed ground water monitoring well network to adequately characterize impacts to ground water resulting from reuse activities and lagoon seepage. If the existing ground water monitoring well network is determined to be inadequate, or if any wells are incapable of producing the required samples, the permittee shall prepare plans for a modified ground water monitoring well network that will provide sufficient data to characterize the impacts to ground water and prepare an implementation schedule for the modified ground water monitoring well network. Following completion of the monitoring wells, the Permittee shall implement ground water monitoring in accordance with the requirements in Section 5.2.2 of this permit. Results from the sampling of any wells not specifically listed in this permit shall also be reported.

Compliance Activity Number and Completion Due Date	Compliance Activity Description
CA-159-03 6 months (180 days) following permit issuance, and prior to commencing land application	**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 permittee must follow the QAPP when collecting, analyzing, and reporting monitoring data submitted 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 reuse 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-159-04 6 months (180 days) following permit issuance, or 30 days after construction of all runoff and run-on control structures are completed, if after 6 months.	**Runoff Management Plan:** The permittee shall prepare and submit to DEQ for review and approval a Runoff Management Plan with control structures and other BMP's (e.g. collection basins, berms, etc.) designed to contain runoff from any management unit used for recycled water application to property not owned by Malad City except in the event of a 25 year, 24-hour storm event or greater, using Western Regional Climate Center (WRCC) Precipitation Frequency Map, found at http://www.wrcc.dri.edu/pcpnfreq , 'Isopluvials of 25-YR, 24 HR Precipitation in tenths of an inch.' For the Malad City reuse facility, the 25-year, 24-hour event map is approximately 2.4 inches. The Runoff Management Plan must also address any run-on to the new treatment lagoon area, and to management units MU-159-02, MU-159-03, MU-159-04, MU-159-05, and to the existing treatment lagoon site.

Compliance Activity Number and Completion Due Date	Compliance Activity Description
CA-159-05 12 months prior to permit expiration	**Pre-Application Conference:** 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 conference to discuss the compliance status of the facility and the content required for the reuse permit application package.
CA-159-06 One hundred eighty (180) days prior to permit expiration	**Renewal Permit Application:** The permittee shall submit to DEQ a complete permit renewal application package that fulfills the requirements specified in CA-159-05 and identified at the pre-application conference.

4. Permit Limits and Conditions

4.1. Hydraulic Management Unit Descriptions

Serial Number	Description	Irrigation System Type and Irrigation Efficiency (Ei)	Maximum Acres[a] Allowed
MU-159-02	Management Unit	Pivot (E_i = 0.80)	17
MU-159-03	Management Unit	Pivot (E_i = 0.80)	44
MU-159-04	Management Unit	Pivot (E_i = 0.80)	30
MU-159-05	Management Unit	Pivot (E_i = 0.80)	20
		Total acreage	111

a. Maximum acres represent the total permitted acreage of 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	Non-growing season maximum hydraulic loading
MU-159-02 MU-159-03 MU-159-04 MU-159-05	Substantially at the crop specific IWR[a]	Non-growing season application is not allowed

a. For compliance purposes, the method for calculating the IWR shall be specified in the PO.

4.3. Constituent Loading Limits

Serial Number	Constituent loading limit (from all sources)			
	Nitrogen (lb per acre)	Phosphorus (lb per acre)	Salt (Non-volatile dissolved solids, NVDS) (lb per acre)	COD (lb per acre per day)
MU-159-02 MU-159-03 MU-159-04 MU-159-05	150% of typical crop uptake[a]	100% of typical crop uptake[a]	N/A[b]	N/A[b]

a. Typical crop uptake is the median constituent crop uptake from the three most recent years the crop has been grown. For crops having fewer than three years of on-site crop uptake data, other crop yield data or nutrient content values may only be used if DEQ provides written approval before the growing season.

b. N/A indicates not applicable as a limited constituent at this time.

4.4. Management Unit Buffer Zones

Serial Number	Buffer Distances (in feet) from Hydraulic Management Units[a] Class D Recycled water in a rural area with sprinkle irrigation					
	Public Water Supplies	Private Water Supplies	Inhabited Dwellings	Permanent and Intermittent Surface Water	Irrigation Ditches and Canals	Areas Accessible to the Public
MU-159-02 MU-159-03 MU-159-04 MU-159-05	1,000	500	500	100	50	300

a. Buffer zone distances apply unless a DEQ-approved Buffer Zone Plan indicates that reduced buffer zones are acceptable due to DEQ-approved mitigation measures.

4.5. Other Permit Limits and Conditions

Category	Permit Limits and Conditions
Growing Season	April 1 through October 31 (214 days)
Non-growing Season	November 1 through March 31 (151 days)
Reporting Year for Annual Loading Rates	November 1 through October 31
Disinfection limits in recycled water	Class D Recycled Water: The median number of total coliform organisms shall not exceed two hundred thirty (230) per one hundred (100) milliliters, as determined from the bacteriological results of the last three (3) days for which analyses have been completed. No sample shall exceed two thousand three hundred (2300) organisms per one hundred (100) milliliters in any confirmed sample.
Crop or vegetation restrictions	Refer to IDAPA.58.01.17.602.02, Table 3 which specifies the type of crop or vegetation that can be grown based on the class of municipal recycled water used.
Grazing	Prior to grazing, the permittee shall submit a grazing management plan and receive written plan approval from DEQ.
Posting	Signs shall read “Warning: Recycled Water—Do Not Enter,” or equivalent signage both in English and Spanish. Signs to be posted every 500 feet and at each corner of the outer perimeter of the irrigated site. Signs are required where management unit border areas are accessible to the public.
Fencing	Three-wire fencing required around the treatment lagoons, the winter storage lagoons (in accordance with IDAPA 58.01.16, “Wastewater Rules.” Section 493.09.c.i.), and each management unit.
Operator Licensure	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 of the Wastewater Rules and properly trained to operate and maintain the system.

Construction Plans & Specifications	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 before construction, modification, or expansion of any wastewater treatment, storage, conveyance structures, ground water monitoring wells, or reuse facility. Inspection requirements shall be satisfied, and within 30 days of completion of construction, 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 two years.

5. Monitoring Requirements

5.1. Recycled Water and Irrigation Water Monitoring, 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-159-02 Recycled water sampling point following disinfection and prior to land application.	Recycled water after disinfection and before application to MU-159-02 MU-159-03 MU-159-04 MU-159-05	Grab sample or 24-hour composite sample a minimum of four (4) individual aliquots evenly distributed by volume and over time. Reported monthly for MU-159-02, 03, 04, and 05 during periods of recycled water use.	- Total nitrogen - Total phosphorus - COD - Non-volatile dissolved solids
		Monthly Grab Sample for MU-159-02, 03, 04, and 05 during periods of recycled water use. In order to calculate the median coliform limits: A minimum of 3 weekly samples will be collected in the first month, (or 30 days) of operation each year to determine compliance with the Class D disinfection standards listed in Table 4.5 of this permit Return to standard monthly sampling thereafter, once three confirmed samples are taken and recorded.	-Total Coliform Organisms /100 mL
SW-159-02 Irrigation water from any source if applied to: MU-159-02 MU-159-03 MU-159-04 MU-159-05	Irrigation water prior to mixing with recycled water, and prior to being applied to MU-159-02, 03, 04, or 05	Grab sample Twice - April and August of first permit year when irrigating (or when the first irrigation occurs). The first year's sampling results will be used to calculate loadings in all subsequent years.	- Total nitrogen - Total phosphorus - Non-volatile dissolved solids

5.1.2. Management Unit Flow Monitoring

Management Unit or Flow Measurement Serial Number and Location	Sample Description	Sample Type and Frequency	Measured Parameters, each MU
MU-159-02 MU-159-03 MU-159-04 MU-159-05 Treatment lagoon / winter storage lagoon pump house flow meter	Effluent volume from LG-159-08 or LG-159-09 after disinfection, prior to application on: MU-159-02 MU-159-03 MU-159-04 MU-159-05	- Daily meter reading. - Monthly, seasonal, and annual compilation of data	- Daily effluent volume (MG per month and depth reported as inches per acre per month)
MU-159-02 MU-159-03 MU-159-04 MU-159-05 Flow meter for supplemental irrigation water source	Volume of water from Deep Creek, canals, or other sources to: MU-159-02 MU-159-03 MU-159-04 MU-159-05	- Daily flow meter readings, Daily pump run times, or hour meter readings and volume conversions - Monthly, seasonal, and annual compilation of data	- Daily Irrigation water volume when applying (MG per month and depth reported as inches per acre per month)

5.2. Ground Water Monitoring

5.2.1. Ground Water Monitoring Point Descriptions

Monitoring Point Serial Number	Common Designation	Well type	Gradient Location
Existing Wells			
GW-159-01	Monitoring Well #1	Monitoring Well	Upgradient from MU-159-01 (Old Management Unit)
GW-159-02	Monitoring Well #2	Monitoring Well	Downgradient from MU-159-01
GW-159-03	Monitoring Well #3	Monitoring Well	Downgradient from MU-159-01
GW-159-04	Monitoring Well #4	Monitoring Well	Downgradient from MU-159-01
New Wells			
GW-159-11	Monitoring Well #11	Monitoring Well	Upgradient from Management Units and New Lagoons
GW-159-12	Monitoring Well #12	Monitoring Well	Upgradient from MU-159-02, and MU-159-05, Downgradient from the New Lagoons
GW-159-13	Monitoring Well #13	Monitoring Well	Upgradient from MU-159-04 and GW-159-14
GW-159-14	Monitoring Well #14	Monitoring Well	Downgradient from MU-159-04, GW-159-12, and GW-159-11
GW-159-15	Monitoring Well #15	Monitoring Well	Downgradient from MU-159-04, GW-159-11, GW-159-12, and GW-159-13
GW-159-16	Monitoring Well #16	Monitoring Well	Downgradient from MU-159-03

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-159-01 GW-159-02 GW-159-03 GW-159-04 GW-159-11 GW-159-12 GW-159-13 GW-159-14 GW-159-15 GW-159-16	Monitoring wells	Groundwater Elevation, Water Depth Measurement to water below ground surface Twice Annually, April and October.	- Water table elevation (1/100 of a foot) - Water table depth (1/100 of a foot)
		Unfiltered grab sample/twice annually April and October The permittee may sample wells more frequently to show GWQR compliance, related to lagoon closure	- Nitrate-nitrogen, as N - Total phosphorus, as P - Orthophosphate - Total dissolved solids - Total Iron - Dissolved Iron - Total Manganese - Dissolved Manganese - Chloride - Total Coliform Organisms /100 mL
		Field sampling parameters sampled and recorded in the field for each well	- Electrical conductivity (µmhos/cm) - Temperature - pH (standard units)

5.3. Soil Monitoring

5.3.1. Soil Monitoring Unit Descriptions

Monitoring point serial number	Description	Associated Hydraulic Management Unit
SU-159-02 SU-159-03 SU-159-04 SU-159-05	Soil Management Unit	MU-159-02 MU-159-03 MU-159-04 MU-159-05

5.3.2. Soil Monitoring, Sampling, and Analyses

Monitoring point serial number	Sample type (see Note)	Sample frequency	Constituents (units in mg/kg soil unless otherwise specified)
SU-159-02 SU-159-03 SU-159-04 SU-159-05	Composite samples [a]	Annually in March or April, prior to recycled water application	- pH (standard units) - Plant available phosphorus (Olsen Method) - Nitrate - nitrogen - Ammonium nitrogen - Electrical Conductivity (µmhos/cm, in saturated paste extract) - Exchangeable sodium percentage, (unitless) - Organic Matter (%)

a. The number of sample locations shall be specified in the PO or QAPP for each SU. 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-159-02 MU-159-03 MU-159-04 MU-159-05	Harvested portion, each crop, from each management unit Reported separately by acreage if different crops are grown Crop samples and yields may be averaged over all management units, but the most stringent loading limits will then also apply equally over all management units	Each harvest	- Crop type - Harvest date - Sample collection date - Harvested acreage (acres) - As-harvested ('wet') yield in customary harvested units (tons, bushels, cwt, etc.) - As-harvested (field) moisture content (%)[b] - Dry yield (lb)

a. Documentation of reported yields shall be provided for each harvest from each MU.
b. Field moisture shall be monitored at the time the harvested crop is weighed.

5.4.2. Plant Tissue Monitoring

Associated Hydraulic Management Units	Sample Type	Sample Frequency	Parameters[a]
MU-159-02 MU-159-03 MU-159-04 MU-159-05	Harvested portion, each crop Reported separately by acreage if different crops are grown	Each harvest	- Moisture content (%)[b] - Total Kjeldahl nitrogen (%) - Nitrate nitrogen, as N (ppm) - Phosphorus as P (ppm) - Ash (%)

a. Report dry-basis results for all parameters except lab moisture content.
b. The plant tissue sample shall be taken from the harvested portion of each crop at the time the crop is harvested, or just prior to harvest.

5.5. Lagoon Information

Serial number	Description	Estimated Surface Area, acres	Maximum Operating Volume, MG	Liner Type
LG-159-01	Lagoon #1 Existing Primary Treatment	8.61	9.82	Unknown
LG-159-02	Lagoon #2 Existing Treatment	8.90	14.5	Unknown
LG-159-03	Lagoon #3 Existing Treatment	8.22	13.4	Unknown
LG-159-04	Lagoon #4 Existing Treatment	7.33	11.9	Unknown
LG-159-05	Lagoon #5 Primary Treatment	1.75	4.73	HDPE
LG-159-06	Lagoon #6 Treatment	1.86	4.73	HDPE
LG-159-07	Lagoon #7 Treatment	1.30	3.10	HDPE
LG-159-08	Winter Storage Lagoon #8	6.54	30	HDPE
LG-159-09	Winter Storage Lagoon #9	5.49	30	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:

- Detailed results of the required monitoring as described in section 5 of this permit. The report shall present all monitoring data in summary tables to expedite review. 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.
- A brief interpretive discussion of the results of all required monitoring data as specified by section 5. The discussion shall address data quality objectives, validation, and verification; explain what the data say about permit compliance; and reuse facility environmental impacts. The reporting year for this permit is specified in section 4.5.
- Status of all work described in section 3 of this permit.
- Results of all backflow testing, repairs, and replacements required by section 9.1.1 of this permit.
- Discussion of major maintenance activities such as major equipment replacement, lagoon liner maintenance, and wastewater treatment and reuse facility maintenance.
- 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.
- Laboratory analytical reports that show results, analytical methods, and practical quantitation limits 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.
- The calculations and results for the parameters in the following table:

Monitoring Point Serial Number	Parameter (Calculate for each MU)	Units
MU-159-02 MU-159-03 MU-159-04 MU-159-05	Recycled water loading rate	Million gallons per month, and Inches per month for each MU
	Supplemental Irrigation Water loading rate	Million gallons per month, and Inches per month for each MU
	IWR for each crop grown	Inches per month, and Total inches during the GS
	COD loading rate	Pounds per acre per day, compiled monthly
	Recycled water nitrogen, phosphorus, and non-volatile dissolved solids loading rates	Pounds per acre per year on a monthly basis
	Supplemental Irrigation water nitrogen, phosphorus, and Non-volatile dissolved solids loading rates	Pounds per acre per year on a monthly basis
	Fertilizer nitrogen and phosphorus application rates, reported separately as elemental N and P	Pounds per acre per year on a monthly basis
	Crop harvest and yield, Report each harvest and the annual totals for each MU.	Crop types harvested Total harvested area (acres) Total 'dry' yield (lb/yr, lb/acre per year)
	Crop nitrogen, phosphorus, and ash removal rates (dry-basis). Report each harvest and the annual totals for each MU.	Pounds-N per acre per year Pounds-P per acre per year Pounds Ash per acre per year

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:

- Permit applications shall be signed by the Responsible Official as follows:
  - For a corporation: by a responsible corporate officer;
  - For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
  - 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.
- 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:
  - The authorization is made in writing by the responsible official;

- 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
- 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
Pocatello Regional Office
444 Hospital Way #300
Pocatello, ID 83201

The annual report, or any other data or monitoring information submitted to DEQ, 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 M-159-02, 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

The permittee shall report noncompliance incidents to DEQ's regional office at 208-236-6160, or 1-800-655-6160

The permittee may also be required to report unauthorized discharges to surface waters to DEQ's IPDES program. The DEQ IPDES hotline is (833) IPDES24 or (833) 473-3724.

In case of public health emergencies, the permittee should call the 24-hour Idaho Emergency Medical Services Communications Center number at (800) 632-8000.

Section 8 of this permit and IDAPA 58.01.17.500.06 provide the reporting requirements for facilities.

The permittee shall report all instances of permit non-compliance that may endanger public health or the environment and unauthorized discharges to surface waters of the State of Idaho to DEQ's regional office by telephone (phone numbers provided in this section) within 24 hours from the time the permittee becomes aware of these events at the phone numbers provided in this section.

The permittee shall provide a written follow-up to the DEQ regional office within five days from the time the permittee became aware of the permit non-compliance or unauthorized discharge.

7. Section 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 based on 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 regulated by DEQ or EPA. An IPDES or 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 an IPDES or NPDES permit (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 DEQ or 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 solids 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)

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

Figure 1. Malad City - Vicinity Map

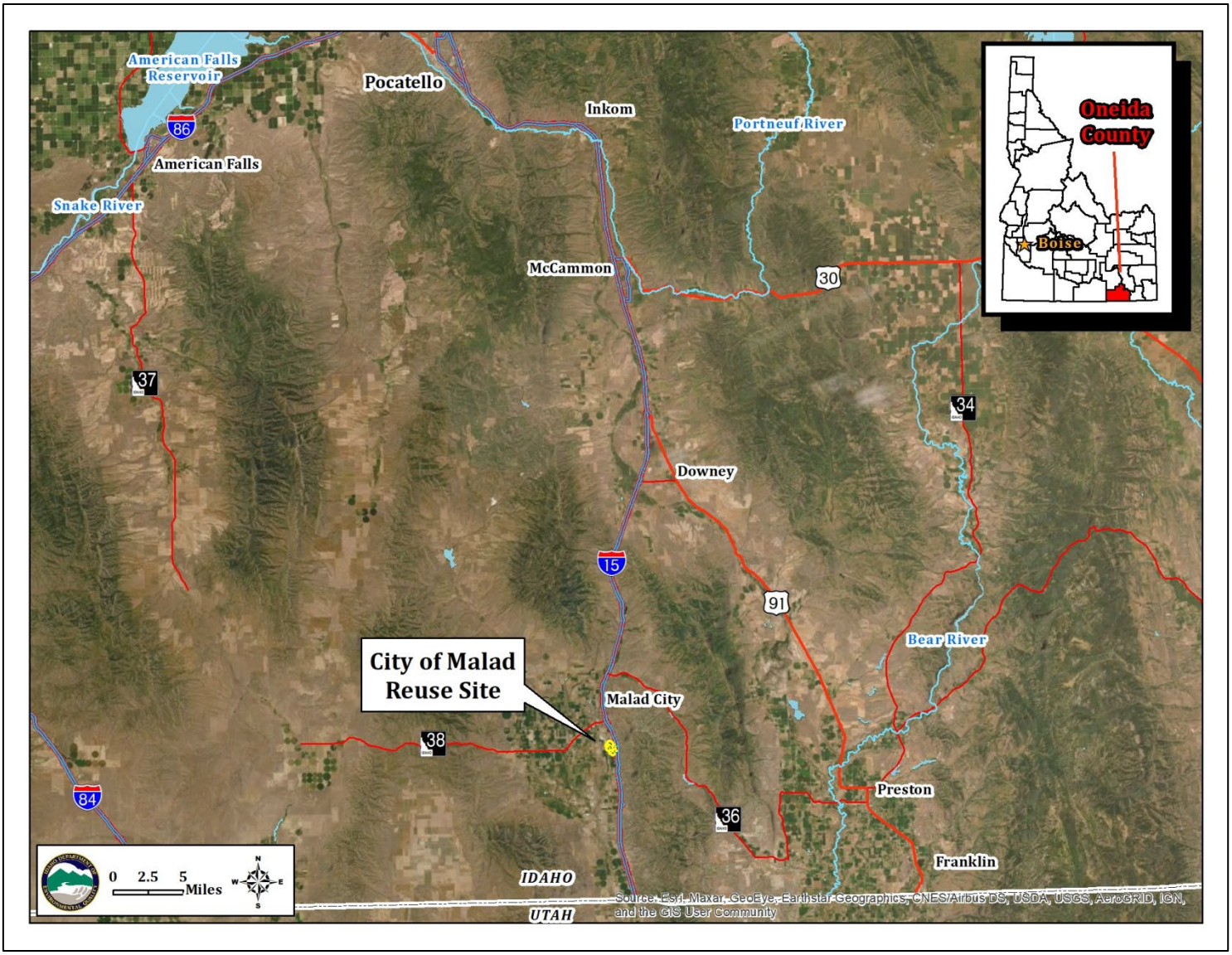

Figure 2. Malad City proposed irrigated management units, and lagoons.

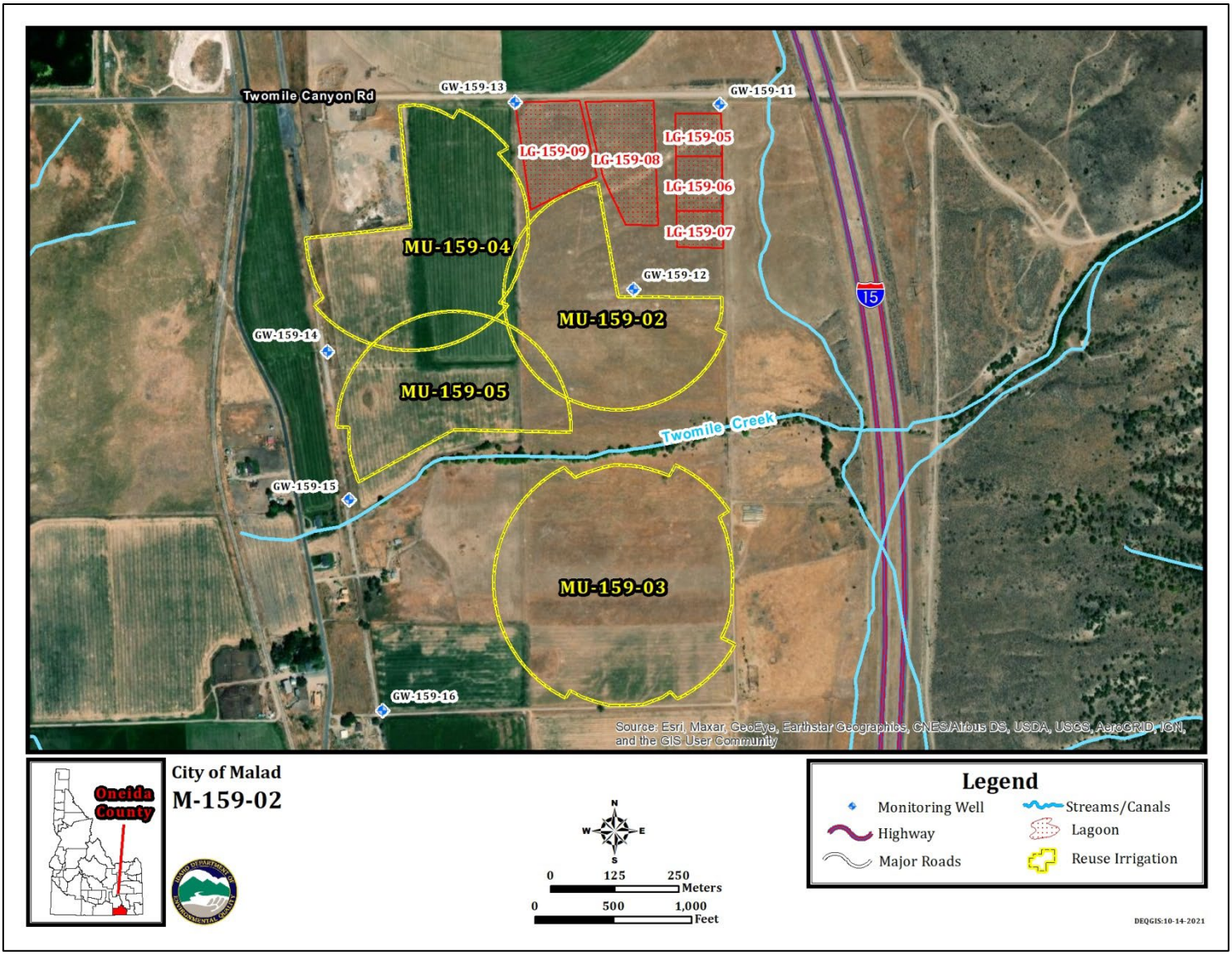

Figure 3. Malad City management unit MU-159-01, and existing lagoons. GW-159-05, GW-159-06, and GW-159-07 are private wells and are not active sampling locations.

