

# Environmental Assessment Checklist

**Project Name: Seeley Lake Sewer Type II Facility**

**Proposed Implementation Date: May 2014**

**Proponent: Clearwater Unit, Southwestern Land Office, Montana DNRC**

**County: Powell County**

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## Type and Purpose of Action

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### Description of Proposed Action:

The Seeley Lake Sewer District is proposing the Seeley Lake Sewage Treatment facility. The project is located on Department of Natural Resources and Conservation (DNRC)-managed trust lands in the E1/2 E1/2 portion of Section 36, Township 17 North, Range 15 West. (see attached vicinity map and easement exhibit) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Easement Acres
Common Schools- K-12 Education	Sec. 36 T17N, R15W	640	29.43

### Objectives of the project include:

The Seeley Lake Sewer District, a political subdivision of the State of Montana and Missoula County, has proposed a wastewater treatment plant to address groundwater degradation issues caused by septic tank effluent discharge into groundwater. Most of Seeley Lake's development occurred prior to the establishment of health department regulations in 1996, which means that most septic systems do not meet current regulations and create a health hazard for the community. A wastewater treatment facility would reverse degradation to groundwater as well as insure economic sustainability and growth of the Seeley community.

### Proposed activities include:

Installation of a 10-inch pipeline to carry effluent to the facility, along with construction of an access road and Sequencing Batch Reactor (SBR) wastewater treatment facility that would discharge to groundwater. The area proposed for acquisition is envisioned to serve future expansion over a 25 – 50 year period.

The lands involved in this proposed project are held in trust by the State of Montana. (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

### DNRC would manage lands involved in this project in accordance with:

Administrative Rules for Forest Management (ARM 36.11.401 through 471) and all other applicable state and federal laws.

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## Project Development

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### SCOPING:

DATE:

- o November 26, 2014

• PUBLIC SCOPED:

- o The scoping notice was posted on the DNRC Website:  
<http://dnrc.mt.gov/PublicInterest/Notices/Default.asp>
- o Sent to 60 individuals and groups – adjacent landowners, statewide scoping list, tribes and other interested parties.
- o Published in the Seeley Pathfinder, and twice in both the Missoulian legal notices and Powell County's Silver State Post.

• AGENCIES SCOPED:

- o Montana Fish, Wildlife & Parks
- o Montana Governor's Office
- o Montana Attorney General's Office
- o Office of State Superintendent of Public Instruction
- o Office of Securities & Insurance
- o Office of Secretary of State for Montana
- o Confederated Salish & Kootenai Tribes
- o USFS
- o Powell County Board of County Commissioners
- o Missoula County Community Planning Services

• COMMENTS RECEIVED:

- o How many: 3
- o Concerns:
  - Potential impact on tribal cultural sites not yet identified
  - Potential contamination of Morrell Creek
  - Potential contamination of groundwater
  - Potential air, noise or odor pollution
  - Lack of public access for hunting and recreation
  - Alternate sites are more appropriate
- o Responses (how were concerns addressed):
  - This site was inventoried with negative results to Class III standards by the USFS in 2004. The Confederated Salish & Kootenai Tribes have requested to be contacted if any cultural resources are discovered and a clause would be placed in the permanent easement document requiring this notification.
  - The pipeline carrying untreated waste would be constructed to ordinary public utility standards, and tested prior to operation.
  - Groundwater, air, noise or odor pollution is regulated by the Missoula County Sewer District is required to comply with the US Clean Water Act (PL95-500, PL95-217, PL97-117, PL100-4); the Montana Water Quality Act MCA 75-5-101 through 641; Public Water Supply Act MCA 75-6-101 through 121 (State Water & Wastewater Design Standards); and Public Health Law MCA 50-2-116 (County Authority)
  - DNRC-managed trust land remains open to walk-in public access for hunting and recreation. Approximately 3 of the 29.43 acres are already impacted with the road proposed in the easement. The remaining acreage is a small portion of the 640 acre site – which is already impacted with a 10 acre public shooting range, a 34.4 acre airport runway, and a 1.3 mile/9.5 acre open USFS road.
  - Missoula County pursued several locations, including USFS and private lands. The private landowner did not want to sell their land to the Sewer District for this purpose. Prior to utilizing USFS lands, the federal Townsite Act must be complied with, demonstrating that there is no equally suitable private, local government, State or other Federal land available. The DNRC-managed trust parcel is located within the project area, it has been reviewed for soils and engineering, and is already impacted with public uses such as an airport and public shooting range. The granting of easements for public

uses does meet a trust mandate of generating revenue for the trust in a sustainable, responsible manner.

Internal and external issues and concerns were considered during project planning and design.

DNRC specialists were consulted, including: DNRC Wildlife Biologist, Archaeologist, and Soil Scientist/Hydrologist

Internal and external issues and concerns were incorporated into project planning and design and would be implemented in the final easement and any construction agreements.

#### **OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:**

- **United States Fish & Wildlife Service-** DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands Habitat Conservation Plan (HCP) and the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at [www.dnrc.mt.gov/HCP](http://www.dnrc.mt.gov/HCP)
- **Montana Department of Environmental Quality (DEQ)-** Construction of the Sequencing Batch Reactor (SBR) by the grantee and associated infrastructure must meet all Federal, State, County regulatory requirements for protection of surface water and groundwater nutrient standards, including but not limited to provisions of the U.S. Clean Water Act, Montana Water Quality Act, Montana Public Water Supply Act and Public Health Laws, Montana DEQ, Stormwater discharge permit.

#### **ALTERNATIVES CONSIDERED:**

**No-Action:** A No-action alternative was considered whereby the DNRC would not recommend approval of the easement to the state Land Board.

**Action Alternative (Provide a brief description of all proposed activities):** Three permanent easements (road, sewer pipeline & SBR sewer plant) would be granted to the Seeley Sewer District, which would allow for year-round motorized access along with the construction and operation of an SBR sewer system.

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### **Impacts on the Physical Environment**

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Evaluation of the impacts on the proposed action including **primary, secondary and cumulative** impacts on the Physical Environment.

<b>Vegetation</b>	<b>IMPACT</b>				<b>Can Impact be mitigated?</b>
	N/A	Negligible	Minor	High	
Noxious Weeds			X		Yes
Rare Plants	X				None Identified
Vegetative community			X		
Old Growth			X		

*Comments:* No rare plants, unique vegetative communities or old growth forest stands were identified along the proposed road, utility corridor or within the SBR sewer development site. Clearing and construction of the

SBR Sewer development site would disturb up to 30 acres and maintain a portion of trees, that would result be a minor impact to the broader forest area. Spotted knapweed, Canada thistle and other minor weeds occur in the area mainly on roads and disturbed areas that have low vegetative cover. Noxious weeds can increase on disturbed sites and much of the SBR construction area would be bared for construction. There is expected to be low to moderate primary and secondary effects and low cumulative effects to noxious weeds based on implementing revegetation and control measures.

*Vegetation Mitigations:* Retain portions of existing forest cover that are not within the designed construction footprint of the SBR and associated road and utility easements. Recommended noxious weed mitigations: On the SBR Sewer building site and settling site, operator would remove surface soil to 4-inches for redistribution on the buried infiltration field and non-traffic area to promote revegetation. Operator would revegetate bare soils with site adapted grasses approved by DNRC. Operator would complete periodic monitoring of access road and area and complete herbicide / revegetation treatments as needed to ensure revegetation and low weed occurrence. The grantee would comply with the Montana County Noxious Weed Management Act, Montana Code Annotate 77-22-2101 et seq., and may be required to submit a revegetation plan to the Powell & Missoula County Weed Board if it is determined to be necessary.

Geology & Soil Quality and Moisture	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Nutrient Cycling		X			Change in use
Soil Productivity			X		Change in use
Slope Stability	X				<10% slope
Erosion		X			Yes
Compaction		X			Yes

*Comments:* No unstable soils or unsuitable geology was identified on the proposed access road or SBR development sites. Materials are a complex of outwash gravels, sands and silts that have few limitations for excavation and development. Erosion potential is low on these well-drained soils and gentle slopes. There is a swale in the NE corner of the survey site that remains seasonally wet following winter runoff and has moderate slopes that would not be feasible to construct an evenly graded site or infiltration field on. The proposed SBR sewer buildings and infrastructure, access road, pipeline, and utilities would remove vegetation on up to 30 acres and change land-use to commercial purposes.

*Soil Mitigations:* On the Sequencing Batch Reactor (SBR Sewer) building site and access road complete the following recommended mitigations and details outlined in construction agreement: Refrain from construction activities within a no-build area identified within an approximate 1-acre swale in the NE corner of the Easement Parcel. Construct all access roads and complete timber harvest operations to comply with Best Management Practices. The access road should be constructed to provide all season access. During site clearing, remove surface soil to 4-inches on building sites and redistribute on non-traffic areas to promote revegetation. Within the 25-acre sewer treatment plant site the "Groundwater Infiltration Galleries" are to be covered with soil or material and not exposed to the air in order to ensure infiltration during all seasons. Excess sludge would be removed from site and no land application is planned. Revegetate bare soils with site adapted grasses approved by DNRC for erosion, dust and weed control.

Water Quality, Quantity and Distribution	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Sediment Delivery		X			No measurable effects
Water Yield		X			No measurable effects

Nutrient Affects to Water Quality			X		Yes
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*Comments:* The proposed Sequence Batch Reactor (SBR) buildings as well as the infrastructure of road access and buried pipeline to the site, would not have measurable effects on sediment delivery or water yield on this gentle terrain that is small (26 acres) in relative area. No stream crossings or surface waters occur on the project site. An area of localized wet site vegetation (dogwood) occurs in the NE most corner of the proposed site, would be excluded from development, except for continued use of a monitoring well. The preliminary engineering evaluation for the SBR states the effluent would meet drinking water standards and not detrimentally affect surface or ground waters based on projected nutrient reductions and sterilization of effluent prior to discharge into buried infiltration gallery fields (Great West Engineering 2012). The SBR would be designed to meet all required state and federal water quality permits for wastewater facilities; standards for subsurface wastewater treatment systems to protect ground water quality, public water supplies, and public health and minimize nutrients in effluents. Within the sewer serviced area, current trends on nutrient effects to groundwater would be expected to improve and provide a net benefit to water quality.

*Water Quality, Quantity and Distribution Mitigations:* Complete construction of buildings, roads and infrastructure to control erosion in a manner consistent with the engineered design and details outlined in construction agreement. SBR facility design must provide adequate storage of effluent during peak use. Construct the sewer force-main supply pipeline in compliance with regulations and bury the pipeline at adequate depth to protect the pipeline from frost or surface traffic that may intersect the road. Complete the design and implement effluent treatments and monitoring to protect groundwater quality and comply with all applicable state (MT DEQ), federal and local permitting requirements for protection of surface and ground water quality. Operator would continue groundwater monitoring of installed groundwater wells concurrent with SBR operations to monitor for changes.

Fisheries	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Sediment	X				
Flow Regimes	X				
Woody Debris	X				
Stream Shading	X				
Stream Temperature	X				
Connectivity	X				
Populations	X				

*Comments:* There are no surface waters adjacent to the project site, not stream crossings on the proposed access road and no downslope connectivity of surface drainage to surface waters. There would be no measurable effect on off-site sediment from the project area within DNRC-managed trust land. Morrell Creek, is the nearest fish bearing stream, and over ¼-mile in distance from any proposed action. Morrell Creek is an important fishery for bull trout and westslope cutthroat trout but would not be measurably affected by the proposed action on DNRC-managed trust lands. No Columbia redband trout occur in the area. The hydrogeological report by MTBMG & Great West Engineering found the hydraulic gradient is in a southerly direction, which is away from Morrell Creek, and thus groundwater injected effluent would be unlikely to affect Morrell Creek. Within the sewer serviced area, current trends on nutrient effects to groundwater would be expected to improve and provide a net benefit to water quality.

Wildlife	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Threatened and Endangered Species					
Grizzly bear ( <i>Ursus arctos</i> ) Habitat: Recovery areas,			X		Y

security from human activity					
<b>Canada lynx</b> ( <i>Felix lynx</i> ) Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	X				
<b>Bull Trout</b> ( <i>Salvelinus confluentus</i> ) Habitat: clean cold water, streams, rivers, lakes	X				
<b>Sensitive Species</b>					
<b>Bald eagle</b> ( <i>Haliaeetus leucocephalus</i> ) Habitat: Late-successional forest more than 1 mile from open water	X				
<b>Black-backed woodpecker</b> ( <i>Picoides arcticus</i> ) Habitat: Mature to old burned or beetle-infested forest	X				
<b>Coeur d'Alene salamander</b> ( <i>Plethodon idahoensis</i> ) Habitat: Waterfall spray zones, talus near cascading streams	X				
<b>Columbian sharp-tailed grouse</b> ( <i>Tympanuchus Phasianellus columbianus</i> ) Habitat: Grassland, shrubland, riparian, agriculture	X				
<b>Common loon</b> ( <i>Gavia immer</i> ) Habitat: Cold mountain lakes, nest in emergent vegetation	X				
<b>Fisher</b> ( <i>Martes pennanti</i> ) Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian	X				
<b>Flammulated owl</b> ( <i>Otus flammeolus</i> ) Habitat: Late-successional ponderosa pine and Douglas-fir forest		X			
<b>Gray Wolf</b> ( <i>Canis lupus</i> ) Habitat: Ample big game populations, security from human activities		X			
<b>Harlequin duck</b> ( <i>Histrionicus histrionicus</i> ) Habitat: White-water streams, boulder and cobble substrates	X				
<b>Northern bog lemming</b>	X				

<i>(Synaptomys borealis)</i> Habitat: Sphagnum meadows, bogs, fens with thick moss mats					
<b>Mountain plover</b> <i>(Charadrius montanus)</i> Habitat: short-grass prairie, alkaline flats, prairie dog towns	X				
<b>Peregrine falcon</b> <i>(Falco peregrinus)</i> Habitat: Cliff features near open foraging areas and/or wetlands	X				
<b>Pileated woodpecker</b> <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest		X			
<b>Townsend's big-eared bat</b> <i>(Plecotus townsendii)</i> Habitat: Caves, caverns, old mines	X				
<b>Montana Arctic Grayling</b> <i>(Thymallus arctucus montanus)</i> Habitat: clean cold water, streams, rivers, lakes	X				
<b>Westslope Cutthroat Trout</b> <i>(Oncorhynchus clarki lewisi)</i> Habitat: clean cold water, streams, rivers, lakes	X				
<b>Columbia Redband Trout</b> <i>(Oncorhynchus mykiss gairdneri)</i> Habitat: clean cold water, streams, rivers	X				
<b>Wolverine</b> <i>(Gulo gulo)</i> Habitat: Alpine tundra and high-elevation boreal and coniferous forests that maintain deep persistent snow into late spring	X				
<b>Yellowstone Cutthroat Trout</b> <i>(Oncorhynchus clarkii bouvieri)</i> Habitat: white-water streams, boulder and cobble substrates	X				
<b>Big Game Species</b>					
<b>Elk</b>		X			
<b>Whitetail</b>		X			
<b>Mule Deer</b>		X			

*Comments:* Proposed activities would occur in the 'occupied habitat' area as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones. Proposed construction and operation could disturb grizzly bears, but the site is fairly close to several other sources of disturbance and would not be expected to be used extensively. Proposed electrified fencing around treatment facilities would reduce potential for conflicts with grizzly bears.

Proposed construction and operation could disturb flammulated owls and pileated woodpeckers. Proposed removal of approximately 29 acres of potential flammulated owl and 11 acres of pileated woodpecker habitats could affect 1-2 individuals of each of these species. Continued use of the vicinity by these species would be anticipated.

Wolves using the area could be disturbed by the proposed activities and are most sensitive at den and rendezvous sites, which are not known to occur in the project area or within 1 mile of the project area. Given the proximity of the project area to several other sources of disturbance that likely limits use of the project area by wolves, negligible changes in use levels would be anticipated. Big game, as the primary food source for wolves, could also be disturbed, but big game use of the vicinity would not be appreciably altered. No big game winter range or security habitats exist in the project area.

**Wildlife Mitigations:**

- Proposed construction would not be permitted between April 1 and June 15 to minimize the potential for disturbance to grizzly bears, gray wolves, big game, and a host of avian species.
- Food, garbage, attractants, and other unnatural bear foods would be stored in a bear-resistant manner during construction
- Minimize potential for conflicts with bears by installing electrified fencing around the facilities that would exclude bears.
- Restrict motorized public access at all times on newly constructed access roads to minimize potential for disturbance to a variety of wildlife using the project area and to reduce the potential for snag loss associated with firewood gathering.

Air Quality	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Smoke	X				
Dust		X			

*Comments:* Increased levels of dust would occur during construction as top soils are disturbed during construction. Impacts would be temporary and localized.

Will the proposed action result in potential impacts to:	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Historical or Archaeological sites	X				
Aesthetics			X		
Demands on Environmental Resources of Land, Water or Energy			X		

*Comments:*

There would be a permanent impact to the view shed as a result of the construction of a sewage treatment facility.

The construction and operation of a sewage treatment facility would be a net-positive impact on water resources in the area.

**Mitigations:**

The proposal is to locate the facility nearly a half mile from homes located to the south of the subject property. An airport is located to the west, and a public shooting range to the north. This easement would be nonexclusive and still allow for timber and grazing management of the parcel. The facility itself would positively impact water resources once operational by reducing nitrate discharge into water resources.

**OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:** *List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

Missoula County Growth Policy, Seeley Lake Regional Plan, Seeley Lake Water & Sewer Preliminary Engineering Report (Great West Engineering, May 2012)

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## Impacts on the Human Population

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Evaluation of the impacts on the proposed action including **primary, secondary and cumulative** impacts on the Human Population.

Will the proposed action result in potential impacts to:	IMPACT				Can Impact be mitigated?
	N/A	Negligible	Minor	High	
Health and Human Safety			X		
Industrial, Commercial and Agricultural Activities and Production			X		
Quantity and Distribution of Employment			X		
Local Tax Base and Tax Revenues			X		
Demand for Government Services		X			
Access To and Quality of Recreational and Wilderness Activities		X			
Density and Distribution of population and housing	X				
Social Structures and Mores	X				
Cultural Uniqueness and Diversity	X				

**Comments:** Construction and operation of a SBR sewer facility would have positive impacts on the human population. Human health and safety would be improved in the sewer district's service area through reduction of nitrates and chlorides. Commercial activities are limited in growth due to county regulations limiting septic discharge to 600 gallons per day, and installation of sewage treatment facilities would be expected to reduce restrictions on commercial growth, having a positive impact on employment. The sewage plant itself is a

government undertaking, delivering services, and is planned to allow for further expansion. While the SBR plant removes approximately 27 acres from public recreational access, the Seeley region is home to significant USFS, DFWP and DNRC surface land holdings. The parcel where the proposed sewer is located is adjacent to large tracts of contiguous USFS holdings.

**Locally Adopted Environmental Plans and Goals:** *List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

The water quality issue has been analyzed at length for more than a decade. Multiple studies have been completed which analyze and recommend a multitude of ways with which to address the water quality degradation issue. The following is a partial list of documents utilized by Missoula County to assist them in the decision-making process of what has become this easement application for placement, construction and operation of an SBR sewer plant on DNRC-managed trust lands:

Missoula County Soil Surveys	Lolo National Forest Soil Surveys
US Census Report	Missoula County Growth Policy
DEQ Nutrient Standard Rules	Middle Blackfoot-Nevada Creek TMDL & Water Quality Improvement Plan
Missoula County Health Code	Montana Water Quality Act
Groundwater Evaluation, Bureau of Mines & Geology	Missoula County Carrying Capacity Study
Powell County Growth Policy	Powell County Zoning & Development Regulations

**Other Appropriate Social and Economic Circumstances:**

**No Action:** The No Action alternative would not generate any return to the trust at this time.

**Action:** A fair-market appraisal was completed by Norman Lee, Blue Star Ranch, in January 2014. It was reviewed by a certified Montana appraiser, and valued at a highest and best use of rural residential and recreational land. While the facility would serve Missoula County residents, it is located in Powell County. This parcel is zoned at residential uses, 160 acres minimum lot size. A value of \$1,900/acre was determined to be the fair market value of the parcel. Costs for the easements, if approved, are as follows:

Sewage plant	25.0 acres	\$47,500
30' Road Easement	3.32	\$6,308
10' Pipeline easement	1.11	\$2,109
	Total	\$55,917

**Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur?**

No.

**Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?**

No.

**Environmental Assessment Checklist Prepared By:**

**Name: Dana Boruch**  
**Title: Right of Way Specialist**  
**Date: April 23, 2014**

## Finding

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### Alternative Selected

Action alternative – SBR sewer plant with mitigations as outlined in this EA.

### Significance of Potential Impacts

I find that the Action Alternative will not have significant impacts on the human environment for the following reasons:

- The Action Alternative confirms to the management philosophies of DNRC and is in compliance with existing laws, rules, policies and stanrds applicable to this type of proposed action
- Review of these parcels indicates that they have no unique characteristics, critical habitat or environmental conditions indicating that the tract should not contain a sewer treatment facility and associated roads and utilities.
- DNRC will not be precluded from proposing and analyzing for future actions on the parcel.

### Need for Further Environmental Analysis

- The CEA adequately addressed the issues identified during project development and displayed the information needed to make a decision.
- Evaluation of the potential impacts of the Seeley Lake Sewer Type II Facility proposal indicates that no significant impacts would occur.
- The analysis provided adequate opportunities for public review and comment. Public concerns were incorporated into the project design.

EIS

More Detailed EA

No Further Analysis

### Environmental Assessment Checklist Approved By:

**Name: Kristen S. Baker-Dickenson**

**Title: Clearwater Unit Manager**

**Date: 4/23/2014**

**Signature: /s/ Kristen S. Baker-Dickenson**