Biological Assessment of

Gainesville Regional Utility –

Main Street Water Reclamation Facility

Alachua County

NPDES # FL0027251

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Biology Section

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Facility Overview

The Main Street Water Reclamation Facility operated by Gainesville Regional Utility (GRU) is a Municipal Domestic Wastewater Treatment Facility. The effluent is discharged into Sweetwater Branch, a Class III Fresh Water (see map Appendix A). The permitted discharge of the wastewater system is 7.5 million gallons per day (MGD). The annual average flow for April 2013 to March 2014 at monitoring site EFD-1 was 7.2 MGD with a mean flow of 2.33 MGD for the reuse outfalls. The plant has the capability to divert flow to its reuse system, but maintains a continuous discharge to Sweetwater Creek. The flow measurement recorded by facility meters during this survey was 4.816 MGD (GRU-Main Street WRF Staff).

Biological assessments are prepared by FDEP staff to provide information for review of NPDES permit renewal applications. Biological assessments, in conjunction with other information concerning the subject facility and its receiving-water body, are used to determine appropriate permit conditions.

See the Facility Summary (Appendix B) for a description of the facility, summary of permit limits, Administrative Order (AO), and Discharge Monitoring Report (DMR) information. The facility is operating under AO136-NE that formalizes a timeline to design and complete improvements and modifications to the facility which will reduce the total nitrogen load to Sweetwater Branch. The AO also requires progress reports be sent to FDEP.

Methods

The purpose of this investigation was to determine the discharge's effects on the biota of the receiving waters. Chemical and biological comparisons were made between three sites located in Sweetwater Branch—a Control Site (beginning 100 meters [m] and ending 200 m upstream of the point of discharge, outfall D-001), a Test Site (beginning 200 m and ending 100 m downstream of D-001), and a Downstream Site (beginning 2200 m and ending 2100 m downstream of D-001) which was evaluated to determine the far-field impacts of the effluent. Effluent samples were taken as grab and composite samples from monitoring location EFD-1 after dechlorination.

All field and laboratory biological methods followed Bureau of Laboratories and Biology Section Standard Operating Procedures (see http://www.dep.state.fl.us/labs/library/lab_sops.htm and http://www.dep.state.fl.us/water/sas/sop/sops.htm for details) and met DEP quality assurance/quality control standards (see http://www.dep.state.fl.us/water/sas/qa/index.htm). Explanations of specific methods and measurements can be found in Appendix C.

The following were involved in this investigation: Sharon Piltz, Kyle Watson, Jeremy Parrish, Patrick O'Connor, Jake Mast (FDEP Northeast District Office, Jacksonville), and FDEP Central Laboratory in Tallahassee. The report was reviewed by District representatives and the Point Source Studies Review Committee (Mike Tanski, Andrew Tintle, and Jennifer Weger).

Results

Physical and Chemical Parameters (See Table 1 and Appendices D, E and F)

- Habitat Assessment scores were similar at the Control Site (89) and Test Site (86), and higher at the Downstream Site (105), though the scores place all three sites in the Suboptimal category. The Test and Control Sites had similar, low scores for habitat diversity compared to a slightly higher score at the Downstream Site, while scores for habitat availability were low at the Downstream and Control Sites and higher at the Test Site. Moderate habitat smothering was apparent at all three sites. Sweetwater Branch has been artificially channelized through the three sites, with some evidence of recovery. Bank stability was compromised by slope and lack of armoring which led to raw, eroded areas, especially at the Test Site.
- The pH (Standard Units) and dissolved oxygen (mg/L and % saturation) of the effluent, Test Site, Downstream Site, and Control Site complied with Class III Freshwater Quality Criteria (62-302.530, F.A.C.) and/or effluent permit limits. Specific conductance (µmhos/cm) was elevated in the effluent and at the Test, Downstream, and Control Sites (546, 879, 827, and 414 µmhos/cm, respectively), but still complied with the Class III Freshwater Quality Criteria (62-302.530, F.A.C.). The especially high specific conductance of the Test and Downstream Sites may be attributable to the effluent—measurements of the effluent for toxicity samples (collected April 14, 16, and 18) ranged from 679 to 1,013 µmhos/cm, suggesting fluctuating effluent quality.

Organic Constituents (See Table 2 and Appendix F)

- Gamma-BHC (Lindane) was not detected in the effluent which complied with effluent permit limits.

- No organic constituents or pesticides were detected in the Test, Downstream, or Control Site samples, nor in the equipment blank. Butyl benzyl phthalate was detected between the method detection limit (MDL) and the practical quantitation limit (PQL) (I-qualifier) in the field blank, but was not detected in any of the in-stream sites or effluent samples.

Nutrients (See Table 2 and Appendix F)

- Total ammonia and organic nitrogen in the effluent composite sample complied with effluent permit limits. The amount of un-ionized ammonia in the effluent grab sample complied with the effluent permit limit and Class III Freshwater Quality Criteria (62-302.530, F.A.C.).
- The nutrient levels detected in the effluent composite, effluent grab, Test Site, and Downstream Site samples of ortho-phosphate, total phosphorus, nitrate plus nitrite, total Kjeldahl nitrogen, organic nitrogen, and total nitrogen were each higher than the respective amounts detected in the Control Site samples. Total ammonia and total organic carbon amounts were similar in the effluent and the three in-stream site samples.
- Total phosphorus and total ammonia were detected in the equipment blank samples between their respective MDLs and PQLs (I-qualifier).

Analytical Water Chemistry (See Table 2 and Appendix F)

- Chlorophyll *a* (corrected) was detected between the MDL and the PQL (I-qualifier) in the effluent grab, Test Site, and Downstream Site samples and was not detected (U-qualifier) in the Control Site sample.
- The amount of effluent total residual chlorine (TRC; mg/L) measured for disinfection and after dechlorination complied with the effluent permit limits and/or Class III Freshwater Quality Criteria (62-302.530, F.A.C.).
- CBOD amounts in the effluent composite and in all of the in-stream site samples were between the MDL and the PQL (I-qualifier). The CBOD values are qualified as estimated due to a laboratory control result being outside of the acceptable limits (J-qualifier). The amounts of effluent total suspended solids (TSS; mg/L) and carbonaceous biochemical oxygen demand (CBOD: mg/L) complied with the effluent permit limits. TSS were detected between the MDL and PQL (I-qualifier) in the effluent composite, Test Site, and Downstream Site samples, and were not detected in the Control Site sample (U-qualifier).
- Turbidity, alkalinity, and fluoride levels in the effluent grab and Test, Downstream, and Control Site samples complied with Class III Freshwater Quality Criteria (62-302.530, F.A.C.).

Microbiology (See Table 2 and Appendix F)

- Fecal coliforms were detected in the effluent grab and in the Test, Downstream, and Control Site samples at levels which complied with Class III Freshwater Quality Criteria (62-302.530, F.A.C.) and/or permit limits. Analyses were performed by the Columbia Analytical Services, Jacksonville, Florida using Standard Method 9222D.

Toxicity Whole Effluent Test (See Table 2 and Appendix F)

- Tests were performed April 15 through April 22, 2014.
- During the chronic definitive bioassay, the effluent composite sample IC25 for the water flea, *Ceriodaphnia dubia*, and the IC25 for the fish, *Pimephales promelas*, were calculated as being greater than 100% effluent, and therefore complied with effluent permit limits.
- For more information or to obtain copies of the toxicity bench sheets, please contact the Biology Laboratory at 850-245-8177.

Metals (See Table 3 and Appendix F)

- Metals detected in the effluent composite sample were present in amounts that complied with effluent permit limits and/or Class III Freshwater Quality Criteria (62-302.530, F.A.C.).
- All metals in Test, Downstream, and Control Site grab samples were either undetected or detected at levels that complied with Class III Freshwater Quality Criteria (62-302.530, F. A. C.). Aluminum, magnesium, potassium, sodium, and zinc were detected in higher amounts in the effluent composite, Test Site, or Downstream Site samples than in the Control Site sample; calcium, copper, and iron were detected in lower amounts.

- Aluminum was detected in the equipment blank between the MDL and the PQL (I- qualifier).

Algal Growth Potential (See Table 4 and Appendix F)

- Raschke and Shultz (1987) determined that AGP values above 5.0 mg dry weight/L, which represents a "problem" threshold for fresh receiving waters, imply nutrient enrichment. The AGP value in the effluent grab sample using the freshwater species, *Pseudokirchneriella subcapitata,* was approximately 50 times greater than the problem threshold value, and Test Site and the Downstream Site AGP values were approximately 43 times higher than the problem threshold value. The Control Site AGP value was approximately four times higher than the problem threshold value. The analytical chemistry suggests that the effluent and all three in-stream sites are nitrogen-limited.

Bioassessment

Periphyton (See Table 5 and Appendix E)

- Periphyton communities of the Test, Downstream, and Control Site samples consisted mostly of diatoms, although the Test Site contained half as many diatom taxa. The diatom community was dominated by *Nitzschia amphibia* in the Test and Downstream Site samples and by the genus *Rhoicosphenia* in the Control Site samples. No information is available at this time as to the water quality tolerances and/or ecological preferences for these taxa in Florida.
- The Rapid Periphyton Surveys (RPS) conducted at the Test and Downstream Sites showed no evidence of nutrient enrichment in comparison with the RPS of the Control Site. Filamentous mat-forming algae were not found at any of the sampled points at the Test and Control Sites, and were found at only 6% of the sampled points at the Downstream Site. The canopy was mostly closed at the Test Site and more open (more gaps to allow sunlight) at the Control and Downstream Sites.

Macroinvertebrates (See Tables 6 and Appendix F)

- Quantitative macroinvertebrate data were collected from Hester-Dendy samplers at the Test, Downstream, and Control Sites. The Shannon-Weaver diversity scores were similar and high at the Test and Control Site samples (3.69 and 3.75, respectively) however, there is a potential for negative bias (lower score) at the Control Site due to a low number (< 300) of individuals collected (Lande, 1996.). A Shannon-Weaver diversity score was not calculated for the Downstream Site sample due to sampler loss. All three sites were strongly dominated by dipterans, especially the Control Site. Ephemeropterans and trichopterans, which are known to be more sensitive to pollution, were present at a very low percent dominance at the Control Site compared to the Test and Downstream Site. Oligochaetes, which are known to be tolerant of pollution, were found to comprise a higher percentage of the community at the Test Site (15.9%) compared to the Downstream (1.1%) and Control (5.3%) Sites.
- Qualitative macroinvertebrate data were collected from dipnet samples at each of the three in-stream sites. The Stream Condition Index (SCI) score of the Test Site was slightly lower than the Downstream Site and the Control Site. The Test Site scored a 28, placing it in Category 3, while the Downstream Site scored a 39 and the Control Site scored a 45, placing those two sites in Category 2 (see Appendix C for an explanation of SCI Categories). Differences in available habitat and specific conductance may account for some of the community differences among sites. In comparison to one another, the Test Site and Downstream Site samples had a similar and greater percentage of very tolerant individuals, whereas the Control Site had a higher percentage of suspension and filter feeders and greater number of clingers. There was a lower percentage of Tanytarsini individuals at the Test Site (which tend to decline with human disturbance) compared to the Downstream and Control Sites (see Appendix C for an explanation of how these SCI metrics typically respond to human disturbance).
- For more information or to obtain a copy of the taxa lists, please contact the Biology Laboratory at 850-245-8177.

Conclusion

The nutrient amounts detected in the effluent composite and grab, Test Site, and Downstream Site samples were higher than the amounts detected in the Control Site sample, indicating that the effluent is contributing to nutrient enrichment at the Test Site. All AGP values were over the problem threshold, and the AGP values of the effluent, Test Site, and Downstream Site were each at least an order of magnitude higher than that of the Control Site, providing further evidence of effluent nutrient enrichment of Sweetwater Creek. Despite the high potential for algal growth, the RPSs conducted at each site did not find much filamentous, mat-forming algae (periphyton). Still, the especially high potential

for algal growth in the nutrient-enriched sites downstream of D-001 is a concern, as periphyton growth may respond to seasonal changes and variation in canopy cover. Hester-Dendy sampler loss at the Downstream Site and the low numbers of individuals on the Control Site Hester-Dendy samplers prevent a direct comparison of these communities. The low SCI score at the Test Site is indicative of community degradation when compared to the higher SCI score at the Control Site.

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Table 1. Effluent limits, Class III Freshwater Criteria and field parameters

GRU Main Street WRF	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab	Test Site	Downstream Site	Control Site
Habitat Assessment	-	-	-	-	86	105	89
Sample Depth	m	-	-	0.2	0.1	0.15	0.2
Temperature	C	-	-	21.2	20.5	19.2	16.9
pH	SU	6.0 - 8.5	6.4 - 8.4	7.0	7.5	7.0	7.8
Specific Conductance	umhos/cm	≤ 1,275	-	546	879	827	414
Dissolved Oxygen	% saturation	≥ 38	-	101.6 c	95.8 c	89.0 c	85.6 c
Dissolved Oxygen	mg/L	-	≥ 6.0	9.0	8.6	8.2	8.3

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

c - Value is calculated

Table 2. Effluent limits, Class III Freshwater Criteria, analytic organic and pesticide, nutrient, water chemistry, microbiology and toxicity data

GRU Main Street WRF	Units	Class III Criteria	Effluent Permit Limits	Effluent (24-hour composite)	Effluent (Grab)	Test Site	Downstream Site	Control Site	Field Blank	Equipment Blank
Organic Constituents										
Butyl benzyl phthalate	µg/L	-	-	-	0.96 U	0.95 U	0.94 U	0.94 U	1.1 l	-
Gamma-BHC (Lidane)	µg/L	-	≤ 0.08	-	0.0020 U	0.0019 U	0.0019 U	0.0019 U	-	0.0019 U
Nutrients and Analytical Water Chemistry										
Ortho-phosphate	mg P/L	-	Report p	-	0.89	0.64	0.83	0.12	0.004 U	-
Total Phosphorus	mg P/L	-	Report p	0.96	1.00	0.79	0.95	0.17	-	0.004 l
Total Ammonia	mg N/L	-	≤ 3.64 p	0.037	0.033	0.028	0.039	0.032	-	0.002 l
Un-ionized Ammonia (calculated salinity)	mg N/L	≤ 0.02 s	≤ 0.02 c	-	< 0.02 c	< 0.02 c	< 0.02 c	< 0.02 c	-	-
Nitrate and Nitrite	mg N/L	-	-	4.9	4.6	3.7	3.9	0.28	-	0.004 U
Total Kjeldahl Nitrogen	mg N/L	-	Report p	0.62	0.65	0.64	0.68	0.47	-	0.080 U
Organic Nitrogen	mg N/L	-	≤ 3.5 p	0.58 c	0.62 c	0.61 c	0.64 c	0.44 c	-	0.04 c[1]
Total Nitrogen	mg N/L	-	Report p	5.5 c	5.3 c	4.3 c	4.6 c	0.75 c	-	0.04 c[1]
Total Organic Carbon	mg C/L	-	-	-	6.4 A	6.4	6.7	7.9	0.50 U	-
Chlorophyll *a* - Corrected	µg/L	-	-	-	0.71 l	0.98 l	0.64 l	0.55 U	-	-
Phaeophytin	µg/L	-	-	-	0.40 U	0.40 U	0.40 U	0.40 U	-	-
Hardness	mg/L	-	-	177	-	180 c	178 c	187 c	-	-
Total Residual Chlorine (for disinfection)	mg/L	-	≥ 0.05 p	-	0.1	-	-	-	-	-
Total Residual Chlorine (for dechlorination)	mg/L	≤ 0.01	≤ 0.01	-	0.01	-	-	-	-	-
CBOD, 5 day, N - inhibited	mg/L	-	≤ 10 p	0.28 lJ	-	1.2 lJ	0.64 lJ	0.62 lJ	-	-
Total Suspended Solids	mg/L	-	≤ 20 p	2 l	-	2 l	2 l	2 U	-	-
Turbidity	NTU	< 29 t	-	-	0.85	0.95	1.3	1.1	0.10 U	-
Color (true)	PCU	-	-	-	5.1 l	9	18 A	39	2.5 U	-
Alkalinity	mg CaCO3/L	≥ 20	-	-	52 A	68	69	140 A	0.65 U	-
Chloride	mg Cl/L	-	-	-	180 A	150	140	20	0.20 U	-
Fluoride	mg F/L	≤ 10.0	-	-	0.45	0.42	0.41	0.27	0.035 U	-
Sulfate	mg SO4/L	-	-	-	100 A	92	91	35	0.20 U	-
Microbiology										
Fecal Coliforms	cfu/100 mL	≤ 400	≤ 800	-	30 B	52	140 B	350	-	-
Toxicity (Chronic Definitive, IC25)										
Bioassay - Water flea *(Ceriodaphnia dubia)* reproduction	% effluent	-	≥ 100	> 100	-	-	-	-	-	-
Bioassay - Fish *(Pimephales promelas)* growth	% effluent	-	≥ 100	> 100	-	-	-	-	-	-

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

Table 2 qualifiers

c - Value is calculated
p - 24-hour flow proportioned composite
s - Single sample
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptance range
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
L - Actual value is known to be greater than value given (appears in Appendix F)
U - Material analyzed for but not detected; value reported is the method detection limit
1 - Value is calculated using half the MDL value of the analyte(s) that were not detected

Table 3. Effluent limits, Class III Freshwater Criteria and analytical metals data

GRU Main Street WRF	Units	Effluent Class III Criteria	Effluent Permit Limits	Effluent (24-hour composite)	Test Site Class III Criteria	Test Site	Downstream Site Class III Criteria	Downstream Site	Control Site Class III Criteria	Control Site	Equipment Blank
Hardness (calculated)	mg/L	-	Report p	180 c	-	180 c	-	178 c	-	187 c	-
Aluminum	µg/L	-	-	104	-	107	-	109	-	56	5.7 I
Arsenic	µg/L	≤ 50	-	0.59 I	≤ 50	0.62 I	≤ 50	0.72 I	≤ 50	0.78 I	0.25 U
Cadmium	µg/L	≤ 0.41 b	≤ 0.41 bp	0.050 U	≤ 0.42 b	0.050 U	≤ 0.42 b	0.050 U	≤ 0.43 b	0.050 U	0.050 U
Calcium	mg/L	-	-	41	-	44	-	44.2	-	57.6	0.075 U
Chromium, Total [n]	µg/L	≤ 140 b	-	0.52 I	≤ 140 b	0.54 I	≤ 140 b	0.51 I	≤ 140 b	0.49 I	0.30 U
Copper	µg/L	≤ 15 b	-	0.56 I	≤ 16 b	0.82 I	≤ 15 b	0.97 I	≤ 16 b	1.45	0.50 U
Iron	µg/L	≤ 1,000	-	41 I	≤ 1,000	82 I	≤ 1,000	110 I	≤ 1,000	240	30 U
Lead	µg/L	≤ 6.6 b	-	0.20 U	≤ 6.9 b	0.20 U	≤ 6.6 b	0.37 I	≤ 7.0 b	0.36 I	0.20 U
Magnesium	mg/L	-	-	18.1	-	17.7	-	16.5	-	10.4	0.040 U
Nickel	µg/L	≤ 85 b	-	0.78 I	≤ 87 b	0.89 I	≤ 85 b	0.84 I	≤ 88 b	0.89 I	0.25 U
Potassium	mg/L	-	-	8.3	-	7.5	-	7	-	2.3	0.30 U
Selenium	µg/L	≤ 5.0	-	0.20 U	≤ 5.0	0.20 U	≤ 5.0	0.20 U	≤ 5.0	0.23 I	0.20 U
Silver	µg/L	≤ 0.07	≤ 0.07 p	0.025 U	≤ 0.07	0.025 U	≤ 0.07	0.025 U	≤ 0.07	0.025 U	0.025 U
Sodium	mg/L	-	-	111	-	102	-	91.1	-	12.9	0.50 U
Zinc	µg/L	≤ 190 b	≤ 190 bp	21	≤ 200 b	18 I	≤ 200 b	18 I	≤ 200 b	5.3 I	5.0 U

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

c - Value is calculated
b - Value is calculated based on hardness, (62-302.530, F.A.C.)
n - Class III Freshwater Quality Criterion (62-302.530(19)(a), F.A.C.) is for chromium-III
p - 24hour flow proportioned composite
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
U - Material analyzed for but not detected; value reported is the method detection limit

Table 4. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN) and total nitrogen (TN) limitation and ratios of nitrogen to phosphorus

GRU Main Street WRF						
Location	**Test Species**	**AGP (measured)**	**Predicted AGP (TSIN) ± 20%**	**Predicted AGP (TN) ± 20%**	**Inorganic N:P ratio**	**Total N:P ratio**
Effluent Grab	*Pseudokirchneriella subcapitata*	247	176.1 ± 35.2	199.5 ± 39.9	5.2	5.3
Test Site	*Pseudokirchneriella subcapitata*	207 A	141.7 ± 28.3	164.9 ± 33	5.8	5.5
Downstream Site	*Pseudokirchneriella subcapitata*	220	149.7 ± 29.9	174 ± 34.8	4.7	4.8
Control Site	*Pseudokirchneriella subcapitata*	19.1	11.9 ± 2.4	28.5 ± 5.7	2.6	4.4

A - Value reported is the mean of two or more determinations

Table 5. Periphyton samples – qualitative

GRU Main Street WRF	Test Site	Downstream Site	Control Site
Wet Algae Analysis			
Number of Wet Taxa	8	8	6
Number of Wet Algal Units Identified	300	300	300
% Blue-green	6.3	4	5
% Green	1.7	1.3	1
% Euglenophytes	0.3	0.0	0.0
% Diatoms	91.7	94.7	94.0
Diatom Analysis			
Number of Diatom Taxa	23	41	43
Number of Diatom Valves Identified	500	500	500
Percent Dominant Diatom Taxon	48.8	32.4	57.4
Dominant Diatom Taxon Name (Class)	*Nitzschia amphibia* (Bacilariophyceae)	*Nitzschia amphibia* (Bacilariophyceae)	*Rhoicosphenia sp.* (Bacilariophyceae)

Table 6. Macroinvertebrate Hester-Dendy samples - quantitative

GRU Main Street WRF	Test Site	Downstream Site	Control Site
Summary Statistics			
Shannon-Weaver Diversity	3.69	- [2]	3.75 [3]
Hester-Dendy Replicates	3	2	3
Number of Taxa	40	36	30
Number of EPT Taxa	2	3	1
Percent Dominant Taxon	24.6	28.5	29.0
Dominant Taxon Name (Order)	*Cricotopus bicinctus* (Diptera)	*Rheocricotopus robacki* (Diptera)	*Corynoneura sp.* (Diptera)
Total Number of Individuals (counted)	992	858	265 [3]
Total Number of Individuals (#/m^2)	1970	3406	528
Community Composition: Percent of total			
Acariformes	0.1	0.2	0.0
Amphipoda	0.5	0.2	0.8
Bivalvia	0.0	0.0	0.0
Coleoptera	1.5	3.3	2.7
Decapoda	0.0	0.0	0.0
Diptera	75.2	73.4	89.7
Ephemeroptera	0.6	10.0	0.0
Gastropoda	0.2	0.1	0.4
Odonata	0.0	0.2	0.0
Oligochaeta	15.9	1.1	5.3
Trichoptera	6.0	11.3	0.4
Other	0.0	0.12	0.9
Functional Feeding Groups: Percent of total			
Browser-Grazers	0.0	0.1	0.0
Burrowing Deposit Feeders	15.9	1.1	5.3
Piercers	0.0	2.1	0.0
Predators	3.6	6.8	2.4
Scavengers	0.0	0.1	0.0
Scrapers	1.0	1.8	1.7
Shredders	31.0	24.6	12.0
Surface Deposit Feeders	40.9	41.6	59.5
Suspension Feeders	7.0	11.7	19.1
Unknown	0.6	10.2	0.0

2 - Shannon-Weaver scores are only calculated at sites with more than 2 replicates.

3 - Shannon Weaver Diversity scores calculated on samples with < 300 individuals have the potential for negative bias (lower diversity scores compared to sites with more individuals) (Lande 1996).

Table 7. Macroinvertebrate dipnet samples - qualitative

GRU Main Street WRF	Test Site		Downstream Site		Control Site	
Summary Statistics						
Stream Condition Index 2007 (value)	28 A		39 A		45 A	
Stream Condition Index 2007 (category) [4]	3		2		2	
Stream Condition Index Metrics	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
Number of Total Taxa	15	21	29	31	29	23
Number of Ephemeroptera Taxa	1	1	1	2	1	1
Number of Trichoptera Taxa	2	2	2	2	2	2
Number of Clinger Taxa	2	2	2	3	4	4
Number of Long-lived Taxa	1	1	0	1	1	2
Number of Sensitive Taxa	1	2	3	4	3	2
Percent of Dominant Taxon	26.8	23.9	27.9	27.3	28.8	32.0
Percent Suspension Feeders and Filterers	16.6	15.1	6.7	10.1	28.8	28.8
Percent of Tanytarsini Individuals	0.0	0.7	4.4	12.3	5.6	2.0
Percent of Very Tolerant Individuals	34.4	34.5	38.0	40.3	20.6	15.7
Total Number of Individuals	157	142	158	154	160	153
Community Composition: Percent of total						
Dominant Taxon Name	*Cricotopus bicinctus* (Diptera)	*Cricotopus bicinctus* (Diptera)	*Polypedilum illinoense grp.* (Diptera)	*Polypedilum illinoense grp.* (Diptera)	*Microcylloepus pusillus* (Coleoptera)	*Microcylloepus pusillus* (Coleoptera)
Amphipoda	0.0	0.0	1.9	0.7	3.1	0.7
Bivalvia	1.9	1.4	0.6	1.3	3.1	0.7
Coleoptera	19.1	21.8	8.2	4.6	28.8	32.0
Decapoda	0.0	0.0	0.0	0.0	0.0	0.7
Diptera	37.6	42.3	65.2	80.5	41.3	36.0
Ephemeroptera	13.4	10.6	7.6	5.2	0.6	3.9
Gastropoda	8.3	6.3	4.4	2.6	1.9	2.0
Odonata	0.6	1.4	1.3	0.7	7.5	5.2
Oligochaeta	0.0	0.7	1.3	0.0	1.3	0.0
Trichoptera	19.1	15.5	8.2	4.6	11.9	19.0
Other	0.0	0.0	1.3	0.0	0.6	0.0
Functional Feeding Groups: Percent of total						
Burrowing Deposit Feeders	0.0	0.7	1.3	0.0	1.3	0.0
Piercers	4.5	2.1	4.4	3.3	1.3	4.6
Predators	3.2	5.6	8.9	5.8	8.8	6.2
Scavengers	0.0	0.0	0.0	0.0	0.0	0.3
Scrapers	24.5	22.5	8.5	4.9	16.6	19.9
Shredders	16.2	17.3	26.6	28.6	12.5	10.5
Surface Deposit Feeders	35.0	35.9	36.1	42.2	30.9	29.7
Suspension Feeders	16.6	15.1	6.7	10.1	28.8	28.8
Unknown	0.0	0.7	7.6	5.2	0.0	0.0

A - Value reported is the mean of two determinations

4 - SCI_2007 categories from Table LT 7200-2 of DEP-SOP-002/01 as referenced in Quality Assurance Rule (62-160 F.A.C.), December 3, 2008: Values 0 ≤ 34 are Category 3; Values 35 < 67 are Category 2; Values 68 ≤ 100 are Category 1.

Appendix A

Map of Facility

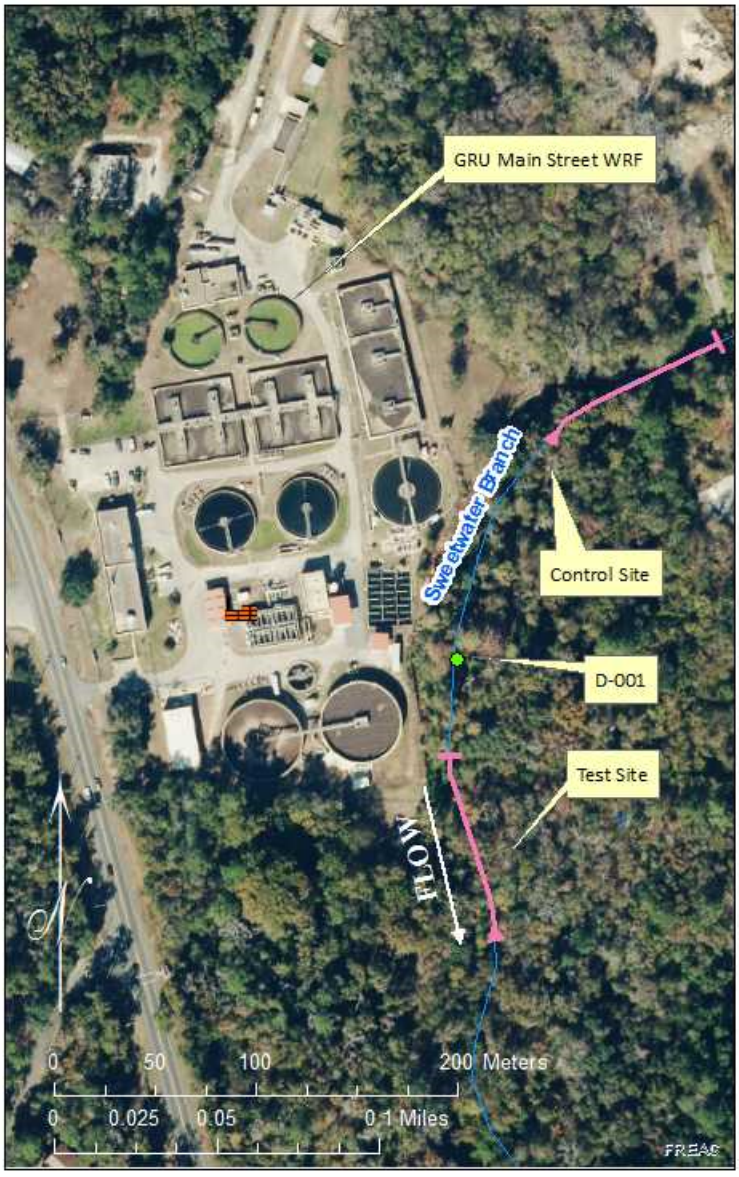
Gainesville Regional Utility Main Street Water Reclamation Facility
(GRU Main Street WRF)

Fifth Year Bioassessment Sampling Locations









Appendix B

Facility Summary

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By: Kyle Watson	**Contact Number:** 904-256-1624
Facility Name (as it appears on permit): Main Street Water Reclamation Facility	**Former Names:**
NPDES Permit Number: FL0027251	**Permit Expiration Date:** 3/18/2015
Physical Address: 200 S.E. 16th Avenue Gainesville, Florida 32601	
District: Northeast	**County:** Alachua
Function of Facility: Treat domestic wastewater for disposal and reuse purposes.	
Facility Type: Domestic Wastewater	**Permitted Capacity (MGD):** 7.5 MGD
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): 6.7 MGD	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): 2.33 MGD	
Description of type of Discharge: ☒ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify**	

Description of Sampling Location(s) - actual permit designation of permitted sampling point(s):

FLW-1 Flow meter to measure reclaimed water convey to the reuse system.
PPI-1 Effluent sample point after high-level disinfection on the reclaimed water distribution pipe and 740 feet from the Pump Station W-3
PPI-2 Total Nitrate probe located in the aeration basins
EFB-1 Sample point at the Parshall flume immediately after filtration and prior to disinfection
CAL-4 Calculate percent of fecal coliform less than the detection limit
RWS-A Sample point (same as EFD-1) for Primary and Secondary drinking water standards.

Description of Permitted Outfall(s):

An existing 7.5 MGD annual average daily flow (AADF) permitted discharge to Sweetwater Branch (Class III fresh waters; Water Body Identification number (WBID) 2711) at Discharge Location (D-001). Sweetwater Branch flows into Alachua Sink which is in the Orange Creek planning unit of the Ocklawaha River basin. The point of discharge D-001 is located at approximately latitude 29 ◦ 38' 03" N, longitude 82 ◦ 19' 03" W.

Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility):

a. Pretreatment Unit Processes: The pretreatment unit processes comprise two mechanical bar screens (3/4-inch opening, 4-foot width), one vortex grit removal unit (16-foot, 4-inch diameter), two grit cyclone units (18-inch screw diameter), two grit cyclone units (10-inch diameter), two grit pumps (220 gpm each), and an odor control solid bed (1,800 square feet, 48-inch media depth).

b. Biological Treatment Processes: The biological treatment process consists of three aeration basins (One has a volume of 1.6 million gallons (MG) and the other two, each has a volume of 1.38 MG.). The biological treatment system is aerated by 11 surface aerators (3 @ 75 hp and 8 @ 60 hp).

c. Clarification System: The clarification system consists of three secondary clarifiers (one @ 100-foot diameter, 10-foot side water depth; two @ 85-foot diameter, 14-foot side water depth).

d. Filtration System: The filtration system consists of four filter influent pumps (4,170 gpm each), one continuously backwashed Dynasand filter system (8 @ 50-sq.ft sections, each with 4-modules with 40-inches of media depth), two air compressors (125 cfm @ 125 psig), two filter compressors (125 cfm @ 125 psig), and two filter air dryers (100 cfm each).

e. Disinfection System: The disinfection system consists of three chlorine contact basins (0.18 Mgal. total) and two 6,000 gallon sodium hypochlorite storage tanks, and five pumps (5 @ 7 gph and 2 @ 24.6 gph). Dechlorination System: The system consists of one 2,000-gal sodium bisulfite storage tank and two peristaltic hose feed pumps (7.0 gph each).

f. Biosolids Treatment Process: The biosolids treatment process consists of two aerobic digesters (1.25 MG each) which are equipped with surface aerators (100 hp each), three digested sludge feed pumps (400 gpm each), one gravity sludge thickener (40 feet diameter), two gravity belt sludge thickeners (2 meter width each), three sludge thickening polymer blend/feed units, and one sludge thickening bulk storage tank (4,500 gal).

PART I: Continued

Effluent Limitations					Monitoring Requirements			
Parameter	**Units**	**Max /Min**	**Limit**	**Statistical Basis**	**Frequency of Analysis**	**Sample Type**	**Monitoring Site Number**	**Notes**
Flow, Surface Water Discharge from Outfall D-001	MGD	Max	7.5	Annual Average	Continuous	Recording Flow Meter with Totalizer	EFD-1	See I.Error! Reference source not found..4
		Max	Report	Monthly Average				
BOD, Carbonaceous 5-day, 20ºC	mg/L	Max	5.0	Annual Average	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	5.0	Monthly Average				
		Max	7.5	Weekly Average				
		Max	10.0	Single Sample				
Solids, Total Suspended	mg/L	Max	10.0	Annual Average	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	10.0	Monthly Average				
		Max	15.0	Weekly Average				
		Max	20.0	Single Sample				
Coliform, Fecal	#/100mL	Max	200	Annual Average	5 Days/Week	Grab(1)	EFD-1	See I.Error! Reference source not found..Error! Reference source not found.
		Max	400	90th percentile value				
		Max	200	Monthly Geometric Mean				
		Max	800	Single Sample				
pH	s.u.	Min	6.4	Single Sample	Continuous	Meter	EFD-1	See I.Error! Reference source not found..Error! Reference source
		Max	8.4	Single Sample				

								not found.
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	Continuous	Meter	EFA-1	See I.Error! Reference source not found..Error! Reference source not found. and I.Error! Reference source not found..Error! Reference source not found.
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	Daily (7days/wk)	Meter	EFD-1	
Oxygen, Dissolved (DO)	mg/L	Min	6.0	Single Sample	Daily (7days/wk)	Meter	EFD-1	See I.Error! Reference source not found..7
Oxygen demand, Ultimate *(For the period of **December** through **March** of Each Year)*	mg/L	Max	52.0	Single Sample	5 Days/Week	Calculated	CAL-1	See I.Error! Reference source not found..8
Oxygen demand, Ultimate *(For the period of **April** through **November** of Each Year)*	mg/L	Max	38.0	Single Sample	5 Days/Week	Calculated	CAL-1	See I.Error! Reference source not found..8

Nitrogen, Ammonia, Total (as N) *(For the period of **December** through **March** of Each Year)*	mg/L	Max	Report	Annual Average	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	4.87	Monthly Average				
		Max	Report	Weekly Average				
		Max	4.87	Single Sample				
Nitrogen, Ammonia, Total (as N) *(For the period of **April** through **November** of Each Year)*	mg/L	Max	Report	Annual Average	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	3.64	Monthly Average				
		Max	Report	Weekly Average				
		Max	3.64	Single Sample				
Nitrogen, Ammonia, Total unionized (as N)	mg/L	Max	Report	Annual Average	5 Days/Week	Calculated	CAL-2	See I.Error! Reference source not found..10
		Max	0.02	Monthly Average				
		Max	Report	Weekly Average				
		Max	0.02	Single Sample				
Nitrogen, Organic, Total (as N)	mg/L	Max	Report	Annual Average	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	3.5	Monthly Average				
		Max	Report	Weekly Average				
		Max	3.5	Single Sample				
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Annual Average	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	Report	Monthly Average				
		Max	Report	Single Sample				
		Max	Report	Weekly Average				
Nitrogen, Total (as N)	mg/L	Max	Report	Single Sample	5 Days/Week	24-hr flow proportioned composite	EFD-1	
		Max	Report	Weekly Average				
		Max	Report	Monthly Average				
		Max	Report	Annual Average				
Nitrogen, Total	lb/month	Max	Report	Monthly Total	Monthly	Calculated	CAL-3	See I.Error! Reference source not found..9
	lb/yr	Max	40,380	Annual Total				
Temperature (ºC), Water	Deg ºC	Max	Report	Single Sample	5 Days/Week	Meter	EFD-1	
Phosphate, Ortho (as P)	mg/L	Max	Report	Annual Average	Weekly	Filtered Grab	EFD-1	
		Max	Report	Monthly Average				
		Max	Report	Single Sample				
		Max	Report	Weekly Average				
Phosphorus, Total (as P)	mg/L	Max	Report	Annual Average	Weekly	24-hr flow proportioned composite	EFD-1	
		Max	Report	Monthly Average				
		Max	Report	Single Sample				
		Max	Report	Weekly Average				
Phosphorus, Total	lb/month	Max	Report	Monthly Total	Monthly	Calculated	CAL-3	

(as P)	lb/yr	Max	Report	Annual Total				See I.Error! Reference source not found..9
Gamma BHC (Lindane)	µg/L	Max Max	0.063 0.08	Annual Average Single Sample	Quarterly	24-hr FPC	EFD-1	
Mercury, Total Recoverable	µg/L	Max	0.012	Single Sample	Quarterly	Grab	EFD-1	See I.Error! Reference source not found..11
Silver, Total Recoverable	µg/L	Max	0.07	Single Sample	Quarterly	24-hr FPC	EFD-1	See I.Error! Reference source not found..12
Zinc, Total Recoverable	µg/L	Max	Exp(0.8473 [lnH]+0.884)	Single Sample	Quarterly	24-hr TPC	EFD-1	See I.Error! Reference source not found..12
Cadmium, Total Recoverable	µg/L	Max	Exp(0.7409 [lnH] – 4.719)	Single Sample	Quarterly	24-hr TPC	EFD-1	See I.Error! Reference source not found..12
Hardness, Total (as CaCO3)	mg/L	Max	Report	Single Sample	Quarterly	24-hr FPC	EFD-1	See I.Error! Reference source not found..12
Chronic Whole Effluent Toxicity, 7-Day IC25 (*Ceriodaphnia dubia*)	percent	Min	100	Single Sample	Semi-Annual (2 times year)	24-hr flow proportioned composite	EFD-1	See I.Error! Reference source

								not found..14
Chronic Whole Effluent Toxicity, 7-Day IC25 (*Pimephales promelas*)	percent	Min	100	Single Sample	Semi-Annual (2 times year)	24-hr flow proportioned composite	EFD-1	See I.Error! Reference source not found..14
BOD, Carbonaceous 5-day, 20ºC	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Solids, Total Suspended	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Fecal Coliform	#/100 mL	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Oxygen, Dissolved (DO)	mg/L	Max	Report	Single Sample	Quarterly	Meter	SWB-1 SWD-1	See I.Error! Reference source not found..15
pH	S.U.	Max	Report	Single Sample	Quarterly	Meter	SWB-1 SWD-1	See I.Error! Reference source not found..15
Temperature (ºC), Water	Deg C	Max	Report	Single Sample	Quarterly	Instrument	SWB-1 SWD-1	See I.Error! Reference source not found..15

Specific Conductance	UMHO/ CM	Max	Report	Single Sample	Quarterly	Meter	SWB-1 SWD-1	See I.Error! Reference source not found..15
Nitrogen, Ammonia, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Nitrogen, Organic, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Nitrite plus Nitrate, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Nitrogen, Total, as N	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Phosphate, Ortho (as P)	mg/L	Max	Report	Single Sample	Quarterly	Filtered Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Phosphorus, Total (as P)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error!

								Reference source not found..15
Chlorophyll-a	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Stream, Velocity	Feet/sec	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15
Hardness (as $CaCO_3$)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWB-1 SWD-1	See I.Error! Reference source not found..15

Per AO 136 – NE

	Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Total Nitrogen, as N, Mass Load **Phase I: Beginning on the Issuance Date of the Permit**	Lbs/mon	Max	Report	Monthly Total	Monthly	Calculated	CAL-3	
	Lbs/yr	Max	**157,532**	Annual Total				
Total Nitrogen, as N, Mass Load **Phase II: Beginning on: September 2, 2014 or Issuance Date of the next permit cycle whichever comes later**	Lbs/mon	Max	Report	Monthly Total	Monthly	Calculated	CAL-3	
	Lbs/yr	Max	**134,506**	Annual Total				
Total Nitrogen, as N, Mass Load **Final Phase: Beginning on April 1, 2019**	Lbs/mon	Max	Report	Monthly Total	Monthly	Calculated	CAL-3	
	Lbs/yr	Max	40,380	Annual Total				

PART I: Continued

Receiving Waters:	**Classification (indicate whether fresh or marine):**
Sweetwater Branch	Class III fresh waters

Toxicity Test Requirements (routine and/or additional test language, test species, salinity adjustment, etc.):
The permittee shall comply with the following requirements to evaluate **chronic** whole effluent toxicity of the discharge from outfall D-001.

a. Effluent Limitation

(1)In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC_{25}) shall not be less than 100% effluent. [Rules 62-302.530(61) and 62- 4.241(1)(b), F.A.C.]

(2) For acute whole effluent toxicity, the 96-hour LC_{50} shall not be less than 100% effluent in any test. [Rule 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]

b. Monitoring Frequency

(1) Routine toxicity tests shall be conducted once every 6 months starting within 6 months of the most recent test, and lasting for the duration of the permit. Upon completion four consecutive valid routine tests, that do not indicate unacceptable chronic toxicity, the permittee may petition the Department for a reduction in frequency for toxicity monitoring. These tests are referred to as routine tests.

Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.):

Plan of Action from AO 136 – NE:

	ACTION ITEM	DUE DATE
Phase I: Beginning on the Issuance date of the Permit		
Main Street Water Reclamation Facility Improvement		
(1)	Submit in writing notification to the Department that design of improvements/modifications to the Main Street WRF (facility) has begun	Completed
(2)	Complete thirty percent (30%) of the design of the improvements/modifications to the facility (notify DEP in writing)	Completed
(3)	Complete sixty percent (60%) of the design of the improvements/modifications to the facility (notify DEP in writing)	Completed
(4)	Complete ninety percent (90%) of the design of the improvements/modifications to the facility (notify DEP in writing)	Completed
(5)	Complete one hundred percent (100%) of the design of the improvements/modifications to the facility and bid document, and submit application for a permit revision if it is required (notify DEP in writing)	Completed
(6)	Beginning contractor selection (notify DEP in writing)	Completed
(7)	Construction contractor selected notice to proceed (notify DEP in writing)	Completed
(8)	Begin construction of the improvement (notify DEP in writing)	Completed
(9)	Submit third report summarizing construction progress of the improvement (notify DEP in writing)	Completed
(10)	Complete the construction and submit Notification of Completion of Construction (DEP Form 62-620.910(12))if the permit revision was required.	November 1, 2014
Paynes Prairie Sheetflow Restoration Project (PPSRP)		
(1)	Complete thirty percent (30%) plans design of the PPSRP (notify DEP in writing)	Completed
(2)	Complete sixty percent (60%) plans design of the PPSRP (notify DEP in writing)	Completed
(3)	Submit permit application to SJRWMD (notify DEP in writing)	Completed
(4)	Submit the plans to Alachua County for review (notify DEP in writing)	Completed
(5)	Update on status of Section 319 grant (notify DEP in writing)	Completed
(6)	Complete ninety percent (90%) plans design of the PPSRP (notify DEP in writing)	Completed
(7)	Update on status of TMDL water quality restoration grant (notify DEP in writing)	Completed
(8)	Complete one hundred percent (100%) of the design of the PPSRP and bid document (notify DEP in writing)	Completed
(9)	Submit a completed ERP permit application to SJRWMD and/or DEP	Completed

(10)	Cost share funding appropriated (notify DEP in writing)	Completed
(11)	Construction contractor selected notice to proceed (notify DEP in writing)	Completed
(12)	Beginning construction of the PPSRP (notify DEP in writing)	Completed
Phase II: Beginning on the Issuance Date of the next permit cycle		
(1)	Submit to DEP first report summarizing construction progress of the PPSRP	March 1, 2015 (or the issuance date of the next permit cycle, whichever is later)
(2)	Submit to DEP second report summarizing progress construction of the PPSRP	March 1, 2016
(3)	Submit to DEP third report summarizing construction progress of the PPSRP	December 1, 2016
(4)	Complete construction of the PPSRP (notify DEP in writing)	March 1, 2017
(5)	Submit Notification of Completion of Construction (DEP Form 62-620.910(12)) if required.	April 1, 2017
Final Phase: Beginning on April 1, 2018		
(1)	The facility shall begin to comply with final mass load allocation for total nitrogen of 40,380 lb/year	April 1, 2018
(2)	The facility shall comply with final mass load allocation for total nitrogen of 40,380 lb/year	April 1, 2019

Facility Mixing Zone Details (if applicable):
N/A

List Permit Violations (DMR data) and plant upsets that occurred at the plant within the last year:

Date	Parameter and Units	Limit	Result
Jan, Feb, Apr, Aug, Sept, Oct 2013	Total Nitrogen, Monthly Average (mg/L), R-001	5.0	5.35, 6.39, 5.34, 5.36, 6.61, 7.54 respectively
March 2013	Total Suspended Solids, Maximum (mg/L), R-001	5.0	6.0
April 2013	Coliform Fecal, Maximum (#/100ml), R-001	25	34
September 2013	Total Recoverable Mercury, Maximum (ug/L), D-001	0.012	0.4
March 2014	Silver, Total Recoverable (ug/L), D-001	0.07	0.2

Describe previous FYI and WQBEL study:
The previous CEI conducted as part of the FYI, was considered 'In Compliance'.

Describe previous or current Enforcement Actions (including WLs):

CO 13-1591 – SSO - Resolved
CO 05-1477 – SSO - Resolved

Describe any violations or problems noted in previous inspection:
N/A

Discuss whether DMR trends within previous five years are improving or declining:
Improving with the aid of required implementations.

Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):

PART II: Sampling Event Information

Date(s) sample collected: **4/17/14**	**Sampler(s):** **Kyle Watson, Sharon Piltz**
Temperature (Deg C): **21.2**	**pH (SU):** **6.98**
Dissolved Oxygen (mg/L): **9.01**	**Conductivity (umhos/cm):** **546**
Total Residual Chlorine (mg/L): **1.0**	**Total Residual Chlorine - after Disinfection (mg/L):** **.01**
Method of Chlorination: **sodium hypochlorite**	**Method of De-chlorination:** **sodium bisulfite**

Flow During Sample Collection for each outfall(MGD):
4.816

Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):
EFD-1 = 7.2 MGD

Describe Discharge during Sampling Event:
☒ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify**

Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:

The water levels were 'normal' though they did rise and fall during the deployment of the HD's due to various rain events. We did have one of the HD racks fall apart during deployment which is why only two condos were retrieved from the far down stream site above the wetlands.

Appendix C

Explanation of Measurements

(1) Quality Assurance and Quality Control

FDEP's quality assurance requirements for analytical laboratories and field activities are codified in Chapter 62-160, F.A.C., Quality Assurance (QA Rule) and in internal Standard Operating Procedures (FDEP SOPs). Methods for all analyses are on file at the FDEP Central Laboratory in Tallahassee and may be viewed on the web at http://www.dep.state.fl.us/labs/library/lab_sops.htm and/or http://www.dep.state.fl.us/water/sas/qa/index.htm.

(2) Chemical Analyses of the Effluent

The effluent was analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides following FDEP SOPs. The results from these analyses were compared with Water Quality Criteria (62-302, F.A.C.) and facility permit limits.

(3) Toxicity Bioassays

Greater than 50% mortality in an acute toxicity test may constitute an exceedance of 62-302.500(1)a and/or facility permit limits. A 25% inhibition concentration (IC25) is the effluent concentration causing a 25% reduction in a biological response such as biomass or reproduction when compared to a control population. An IC25 of less than 100% in a chronic test may constitute exceedances of 62-302.530(20), 62-302.530(61) and/or facility permit limits. A no observed effect concentration (NOEC) less than 100% effluent in a chronic test may constitute an exceedance of 62-302.530(61) and/or facility permit limits. Standard reference toxicant (SRT) tests are conducted monthly to ensure quality in toxicity testing.

(4) Bacteriological Testing

High levels of fecal coliform bacteria may constitute an exceedance of 62-302.530(6) and/or facility permit limits. Fecal coliform and enterococci results often are based on colony counts outside the acceptable range (B-qualifier). The dilutions performed on the sample did not yield results within the method acceptable range of 20- 60 colony forming units per plate. The B-qualifier does not affect data quality.

(5) Habitat Assessment

Habitat assessment is used to evaluate the physical structure and extent of disturbance in a waterbody. Eight aspects are ranked, with 20 possible points for each aspect (QA Rule SOP FT 3100). The Habitat Assessment score includes types and amounts of benthic substrates, water velocity, amount of sand or silt accumulation, extent of artificial channelization, bank stability, and riparian zone width and vegetation type. All scores are summed to yield an overall Habitat Assessment score. Habitat Assessment score ranges from 11-160 and overall habitat quality is assigned to one of four categories: Optimal (120-160 points), Suboptimal (80-119 points), Marginal (40-79 points), and Poor (11-39 points).

(6) Algal Growth Potential (AGP)

The algal growth potential (AGP) value is the peak growth of the alga within that 14-day period, recorded as mg dry weight/L. Raschke and Shultz (1987) found that an AGP above 5.0 mg dry weight/L represents a “problem” threshold for fresh receiving waters, implying nutrient enrichment. High AGP values may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C. and/or 62-302.530(47)(b), F.A.C..

The concentration of nutrients in a water sample may be used to calculate the expected yield of AGP under the assumption that other required nutrients (e.g. silicon, micronutrients) are present in excess (Miller *et al*. 1978). The expected amount of production is calculated as 38 times the total soluble inorganic nitrogen (nitrate and nitrite plus ammonia) under nitrogen limitation or 430 times the ortho-phosphate (OP) concentration under phosphorus limitation with an error of $\pm$ 20%. When the ratio of nitrogen to phosphorus (N: P) is less than 10:1, nitrogen limitation of algal production is likely. When the N: P ratio is 20:1 or greater, phosphorus limitation is likely (USEPA 2000). For ratios in-between, co-limitation may occur. Production of lower biomass than expected may be evidence of growth inhibition related to toxic compounds present in the water sample tested and may constitute an exceedance of 62-302.530(61), F.A.C.

(7) Algal Phytoplankton and Periphyton Assemblages

Qualitative periphyton are sampled by taking subsamples of algae from natural substrates throughout the sample reach. Phytoplankton were sampled from the water column using a 1 L grab sample. Periphyton were subsampled and identified to the lowest practical level, usually species. Wet taxa and diatoms are identified separately. In the wet taxa analysis, soft algae are identified to the lowest practical level, and diatoms are identified only to order level (diatom). In the diatom analysis, diatoms are identified to the lowest practical level.

Chlorophyll *a* Content: Chlorophyll *a* content is an estimate of algal biomass . High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may be constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a) F.A.C. and/or 62-302.530(47)(b) F.A.C..

Algal Density: Algal density is estimated as number of natural units/ml for phytoplankton samples. Although algal density of a single site is highly variable and depends on a number of factors, comparison of algal density at a control site to algal density at a related test site gives a partial comparison of algal biomass at the two sites (Stevenson and Smol 2003).

Taxa richness: Taxa richness is the number of distinct algal taxa present in a sample. Extreme nutrient enrichment tends to reduce the number of different types of algae present in a sample because a few tolerant taxa tend to reproduce rapidly and constitute the majority of the cells present. However, moderate nutrient enrichment of nutrient poor waters may sometimes be correlated with increased algal taxa richness (Stevenson and Bahls 1999) as the algal community begins to respond to the increased input of nutrients.

Community Composition: Shifts in relative proportions of major groups of algae downstream of a point source, compared to upstream, control conditions, may indicate negative effects of a discharge (Stevenson and Bahls 1999) and may constitute exceedances of 62-302.530(46) F.A.C., 62-302.530(47)(a) F.A.C., 62-302.530(47)(b) F.A.C. and/or 62-302.530(61) F.A.C.

Rapid Periphyton Survey: The Rapid Periphyton Survey (RPS) (conducted per ***DEP SOP FS 7230***) quantifies the extent and abundance of algae in a 100 m stream segment. Nine observations are made every 10 m for a total of 99 observations (11 transects, including 0 and 100 m marks). A canopy measurement is made at the mid-point of each transect using a spherical densiometer. A small handful of substrate is haphazardly collected at each transect point and is visually examined for the presence/absence and for the type of algae (filamentous, diatom, or other). The average thickness is measured perpendicular to the substrate and this noted on the Rapid Periphyton Survey field sheet (***FD 9000-25***). If more than 25% of points assessed have algae thicker than 6 mm, the occurrence of mat forming filamentous algae in the stream is greater than typically seen in reference streams.

(8) Benthic Macroinvertebrate Assemblages

Benthic macroinvertebrates were collected using two methods. Quantitative samples were collected from Hester-Dendy multi-plate samplers incubated for 28 days. Qualitative collections are made using 20 dipnet sweeps (QA Rule SOP FS7420). Benthic macroinvertebrates were sorted and identified to the lowest practical taxonomic level, usually species.

Taxa richness: Taxa richness is the number of distinct macroinvertebrate taxa present in a sample. Stress, habitat destruction and pollution tend to reduce the number of different types of organisms present (Karr and Chu 1998). Decreases in taxa richness related to a facility's effluent may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C. and/or 62-302.530(61), F.A.C..

Percent Contribution of Dominant Taxon: Percent contribution of the dominant taxon is calculated by dividing the number of individuals in the most abundant taxa by the total number of individuals counted. Percent contribution of the dominant taxon tends to increase with increasing perturbation (Plafkin *et al*., 1989). Increases in the percent contribution of the dominant taxon related to a facility's effluent may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C. and/or 62-302.530(47)(b), F.A.C..

Community Composition: Shifts in proportions of major groups of organisms downstream of a point source, compared to upstream, control conditions, may indicate negative effects of a discharge (Fore et. al. 2007, Karr and Chu 1998). Shifts in community composition related to a facility's effluent may constitute exceedances of 62-302.530(46) F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C. and/or 62-302.530(61), F.A.C.

Functional Feeding Groups: Environmental degradation may differentially affect groups of invertebrates based on how the group feeds (e.g. predators, deposit feeders, etc.). In Florida, pollution may be responsible for reducing the numbers of filter feeders and shredders (Fore et. al. 2007). Changes in the proportions of functional feeding groups related to a facility's effluent may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C. and/or 62-302.530(61), F.A.C..

Shannon-Weaver Diversity Index: This index is specified in the Florida Administrative Code 62-302 as a measure of biological integrity. Low diversity scores are undesirable. Where diversity is low, only a few taxa are abundant as compared to an area where many taxa are present in equitable abundance among taxa (Magurran 1988). A difference of 25% in Shannon-Weaver diversity between results from Hester-Dendy multiplate samplers incubated for 28 days at test and control sites constitute exceedances of 62-302.530(10), F.A.C..

The Stream Condition Index (SCI): The SCI is a composite macroinvertebrate metric developed for Florida (Fore et. al. 2007). This Index was revised in 2007 using data from qualitative dipnet samples. The SCI now assigns points to ten parameters; depending on how closely each parameter approaches an expected value (QA Rule SOP LT 7200). Points are assigned according to in which bioregion (Panhandle, Northeast, or Peninsula) the sampling location exists -and summed to yield a final SCI score (range 0-100). Included in the calculation of SCI are taxa richness, number of Ephemeroptera taxa, number of Trichoptera taxa, percent contribution of the dominant taxon, number of sensitive taxa, number of clinger taxa, number of long-lived taxa, percent contribution of Tanytarsini, percent contribution of very tolerant, and the percent contribution of suspension and filter feeders. As human disturbance increases, it is expected that taxa richness, the number of Ephemeroptera taxa, Trichoptera taxa, sensitive taxa, clinger taxa, long-lived taxa, and the percent contribution of Tanytarsini and suspension and filter feeders will decrease while percent contribution of dominant taxon, and percent contribution of very tolerant taxa will increase.

Scores are broken into three categories (1, 2, and 3). Sites in Category 1 are described as having higher diversity than Category 2 sites, particularly for Ephemeroptera and Trichoptera. A Category 1 site may have several more clinger and sensitive taxa, a higher proportion of Tanytarsini, and a lower percent of a dominant taxon than a site in Category 2. The site will also have a very small percentage of very tolerant individuals, if any.

Sites in Category 2 are described as having an average of 30 species with several different taxa of Ephemeroptera and Trichoptera. A Category 2 site also has several different long-lived taxa and, on average, 5 clinger and 6 sensitive taxa. There is a slight increase in dominance by a single taxon relative to sites in Category 1. Very tolerant taxa represent a small percentage of individuals but are noticeably increased as compared to sites in Category 1.

Sites in Category 3 are described as having a notable loss in taxonomic diversity, and Ephemeroptera, Trichoptera, long-lived, clinger and sensitive taxa are uncommon or rare. Filter feeders are reduced by at least 50%. The site is dominated by a tolerant taxon, and very tolerant individuals represent a large proportion of the individuals collected.

SCI 2007 categories are from Table LT 7200-2 of DEP-SOP-002/01 as referenced in Draft Quality Assurance Rule (62-160, F.A.C.), December 3, 2008. A decrease in ordinal SCI score from the Control to the Test site may be evidence of degradation related to a facility's effluent. An SCI score in Category 3, if it is shown to be related to a facility's effluent, may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C., or of 62-302.530(61).

(9) Definition of Qualifiers

A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptable range.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value
K - Actual value is known to be less than value given
L - Actual value is known to be greater than value given
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate
Z - Colonies were too numerous to count (TNTC)

Appendix D

Chain of Custody

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FYI5 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger
Field Report Prepared By: S. Pitz

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Collected By: K. Wadson/S. Pitz
Send Final Report To: Heather Webber
Sampling Agency: NED ROC

Lab ID *	Lo		☑ Comp ☐ Grab	Collection (comp begin or grab) Eastern Date 4/13/14 Time 0700 Central	Composite end Eastern Date 4/14/14 Time 0700 Central		Bottle Group(s)**
	Fi GRU MAIN ST 5YI EFD-1 24HICOMP			Tot Res Chlorine (mg/L) <0.01	Diss Oxygen (mg/L)	Storet Station Number	B
	Matrix (include type e.g. Salt, Fresh, etc) EFF	Temp (C) 29 Fridge	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments 7.48 mgd			
Lab ID *	Loc GRU Main St 5YI EFD 1 GRAB		☐ Comp ☑ Grab	Collection (comp begin or grab) Eastern Date 4/14/14 Time 1245 Central	Composite end Eastern Date Time Central		Bottle Group(s)**
	Fie			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L) 8.84	Storet Station Number	
	Matrix (include type e.g. Salt, Fresh, etc) EFF	Temp (C) 22.73	pH 6.79	Sample Depth 0.2 ☐ m ☐ ft	0.33 6.79 ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			
Lab ID *	Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Eastern Date Time Central	Composite end Eastern Date Time Central		Bottle Group(s)**
	Field ID			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			
Lab ID *	Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Eastern Date Time Central	Composite end Eastern Date Time Central		Bottle Group(s)**
	Field ID			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			

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** Please see reverse side for Bottle Group information.

last revised October 1, 2003

2 bioassay bottles

C. Reichert 4/15/14 1125

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FYI5 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger
Field Report Prepared By: S. Piltz
Collected By: S. Piltz / J. Mast
Send Final Report To: Heather Webber
Sampling Agency: NED ROC

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Lab ID *	Loc 			☒ Comp ☐ Grab	Collection (comp begin or grab) Eastern Central Date 4/15/14 Time 0700	Composite end Eastern Central Date 4/16/14 Time 0700	Bottle Group(s)** B
	Fiel				Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (include type e.g. Salt, Fresh, etc) EFF	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)		NPDES Number
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			
Lab ID *	Loc 			☐ Comp ☒ Grab	Collection (comp begin or grab) Eastern Central Date 4/16/14 Time 0821	Composite end Eastern Central Date Time	Bottle Group(s)** —
	Fiel				Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L) 9.2	Storet Station Number
	Matrix (include type e.g. Salt, Fresh, etc) EFF	Temp (C) 21.62	pH 6.59	Sample Depth ☐ m ☐ ft 0.2	0.42 ☐ Salinity (PPTh) 858 ☐ Sp Conductance (umho/cm)		NPDES Number
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			
Lab ID *	Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Eastern Central Date Time	Composite end Eastern Central Date Time	Bottle Group(s)**
	Field ID				Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)		NPDES Number
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			
Lab ID *	Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Eastern Central Date Time	Composite end Eastern Central Date Time	Bottle Group(s)**
	Field ID				Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)		NPDES Number
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments			

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** Please see reverse side for Bottle Group information.

last revised October 1, 2003

4/17/14 1047
2 bioassay bottles
C. Reichert

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FYI5 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger
Field Report Prepared By: S. Piltz
Collected By: J. Mast/S. Piltz/J. Parrish/P. O'Connell
Send Final Report To: Heather Webber
Sampling Agency: NED ROC

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Lab ID *
Lo
Fi
GRU Main St 5YI EFD-1 GRAB

☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Central: Date 4/17/14 Time 0830
Composite end Eastern Central: Date Time
Bottle Group(s)**: A

Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L): 9.01
Storet Station Number:

Matrix (include type e.g. Salt, Fresh, etc): Eff
Temp (C): 21.2
pH: 6.98
Sample Depth ☑ m ☐ ft: 0.2
0.30 ☐ Salinity (PPTh)
546 ☐ Sp Conductance (umho/cm)
NPDES Number:

Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
Comments:

Lab ID *
Lo
Fie
GRU MAIN ST 5YI EFD-1 24HCOMP

☒ Comp ☐ Grab
Collection (comp begin or grab) Eastern Central: Date 4/16/14 Time 0830
Composite end Eastern Central: Date 4/17/14 Time 0820
Bottle Group(s)**: B

Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:

Mat
Eff
Temp (C) Fridge: 1.3
pH:
Sample Depth ☐ m ☐ ft:
☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
NPDES Number:

Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
Comments:

Lab ID *
Locati
Field I
GRU MAIN ST 5YI DOWNSTEAM

☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Central: Date 4/17/14 Time 0945
Composite end Eastern Central: Date Time
Bottle Group(s)**: C+D

Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L): 8.6
Storet Station Number:

Matrix (include type e.g. Salt, Fresh, etc): Fresh
Temp (C): 20.5
pH: 7.48
Sample Depth ☑ m ☐ ft: 0.1
0.43 ☐ Salinity (PPTh)
879 ☐ Sp Conductance (umho/cm)
NPDES Number:

Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
Comments:

Lab ID *
Locat
Field
GRU HD1 DOWNSTREAM

☒ Comp ☐ Grab
Collection (comp begin or grab) Eastern Central: Date 3/19/14 Time
Composite end Eastern Central: Date 4/17/14 Time
Bottle Group(s)**: D

Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:

Matrix (include type e.g. Salt, Fresh, etc): Fresh
Temp (C):
pH:
Sample Depth ☐ m ☐ ft:
☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
NPDES Number:

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Longitude ☐ dd ☐ dms
Comments:

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last revised October 1, 2003

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FY15 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger

Field Report Prepared By: S. P. Hz

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Collected By: J. Mast/S.P. Hz/J. Parrish/P. O'Connor

Send Final Report To: Heather Webber

Sampling Agency: NED ROC

Lab ID * GRU HD2 DOWNSTREAM

☒ Comp ☐ Grab | Collection (comp begin or grab) Eastern Central Date 3/19/14 Time | Composite end Eastern Central Date 4/17/14 Time | Bottle Group(s)** D

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc): Fresh | Temp (C) | pH | Sample Depth ☐ m ☐ ft | ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Lab ID * L F GRU HD3 DOWNSTREAM

☒ Comp ☐ Grab | Collection (comp begin or grab) Eastern Central Date 3/19/14 Time | Composite end Eastern Central Date 4/17/14 Time | Bottle Group(s)** D

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc) | Temp (C) | pH | Sample Depth ☐ m ☐ ft | ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Lab ID * Loc Fiel GRU HD4 DOWNSTREAM

☒ Comp ☐ Grab | Collection (comp begin or grab) Eastern Central Date 3/19/14 Time | Composite end Eastern Central Date 4/17/14 Time | Bottle Group(s)** D

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc) | Temp (C) | pH | Sample Depth ☐ m ☐ ft | ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Lab ID * Local Field GRU MAIN ST SYI UPSTREAM CONTI

☐ Comp ☒ Grab | Collection (comp begin or grab) Eastern Central Date 4/17/14 Time 1045 | Composite end Eastern Central Date Time | Bottle Group(s)** Comp

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) 8.27 | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc): Fresh | Temp (C) 16.94 | pH 7.75 | Sample Depth ☑ m 0.2 ☐ ft | 0.2 4/14 ☑ Salinity (PPTh) ☑ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

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** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Page ~~1 of 5~~ 2 of

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FYI5 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger
Field Report Prepared By: S.P. Itz

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Collected By: J. Mast / S.P. Itz / J. Parrish / P. O'Connor
Send Final Report To: Heather Webber
Sampling Agency: NED ROC

Lab ID *	Loc / Fie	Comp / Grab	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	GRU HD1 UPSTEAM	☒ Comp ☐ Grab	Date 3/19/14 Time	Date 4/17/14 Time	D
	Matrix (include type e.g. Salt, Fresh, etc): Fresh	Temp (C)	pH	Tot Res Chlorine (mg/L) / Diss Oxygen (mg/L) / Storet Station Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Sample Depth ☐ m ☐ ft / ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) / NPDES Number / Comments	

Lab ID *	Loc / Fie	Comp / Grab	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	GRU HD2 UPSTEAM	☒ Comp ☐ Grab	Date 3/19/14 Time	Date 4/17/14 Time	D
	Matrix (include type e.g. Salt, Fresh, etc): Fresh	Temp (C)	pH	Tot Res Chlorine (mg/L) / Diss Oxygen (mg/L) / Storet Station Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Sample Depth ☐ m ☐ ft / ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) / NPDES Number / Comments	

Lab ID *	Loc / Fie	Comp / Grab	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	GRU HD3 UPSTEAM	☒ Comp ☐ Grab	Date 3/19/14 Time	Date 4/17/14 Time	D
	Matrix (include type e.g. Salt, Fresh, etc): Fresh	Temp (C)	pH	Tot Res Chlorine (mg/L) / Diss Oxygen (mg/L) / Storet Station Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Sample Depth ☐ m ☐ ft / ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) / NPDES Number / Comments	

Lab ID *	Loc / Fie	Comp / Grab	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	GRU HD4 UPSTEAM	☒ Comp ☐ Grab	Date 3/19/14 Time	Date 4/17/14 Time	D
	Matrix (include type e.g. Salt, Fresh, etc): Fresh	Temp (C)	pH	Tot Res Chlorine (mg/L) / Diss Oxygen (mg/L) / Storet Station Number	
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Sample Depth ☐ m ☐ ft / ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) / NPDES Number / Comments	

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** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Page ~~1 of 5~~ 3 of

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FYI5 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger

Field Report Prepared By: S. Piltz

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Collected By: S. Piltz/J. Mast/J. Parrish/P. O'Connor

Send Final Report To: Heather Webber

Sampling Agency: NED ROC

Lab ID *

Loca
GRU FAR DOWNSTREAM TEST ABV WI

Fiel

☐ Comp ☒ Grab | Collection (comp begin or grab) Eastern Central: Date 4/17/14 Time 825 | Composite end Eastern Central: Date Time | Bottle Group(s)**: C+D

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L): 8.2 | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc): Fresh | Temp (C): 19.2 | pH: 7.0

Sample Depth ☑ m: 0.5 ☐ ft | ☑ Salinity (PPTh): 0.4 | ☑ Sp Conductance (umho/cm): 827 | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Lab ID *

Locat
GRU HDP FAR DOWNSTREAM ABV WI

Field

☒ Comp ☐ Grab | Collection (comp begin or grab) Eastern Central: Date 3/19/14 Time | Composite end Eastern Central: Date 4/17/14 Time | Bottle Group(s)**: D

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc): Fresh | Temp (C) | pH

Sample Depth ☐ m ☐ ft | ☐ Salinity (PPTh) | ☐ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Lab ID *

L
GRU HDP FAR DOWNSTREAM ABV WI

F

☒ Comp ☐ Grab | Collection (comp begin or grab) Eastern Central: Date 3/19/14 Time | Composite end Eastern Central: Date 4/17/14 Time | Bottle Group(s)**: D

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc): Fresh | Temp (C) | pH

Sample Depth ☐ m ☐ ft | ☐ Salinity (PPTh) | ☐ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Lab ID *

Loca
Field Blank

Fiel

☐ Comp ☒ Grab | Collection (comp begin or grab) Eastern Central: Date 4/17/14 Time 825 | Composite end Eastern Central: Date Time | Bottle Group(s)**: E

Tot Res Chlorine (mg/L) | Diss Oxygen (mg/L) | Storet Station Number

Matrix (include type e.g. Salt, Fresh, etc): DI | Temp (C) | pH

Sample Depth ☐ m ☐ ft | ☐ Salinity (PPTh) | ☐ Sp Conductance (umho/cm) | NPDES Number

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Comments

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	4/17/14	FedEx		4-18-14 0925				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Page ~~1 of 5~~ 4 of

ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

9143 Philips Highway, Ste 200 • Jacksonville, FL 32256 (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011 PAGE 1 OF 1

SR# J1402768 CAS Contract

J1402768 5
Florida Department of Environmental Protection
GRU Main St 5Y

Project Name: GRU Main St 5YI
Project Number: 2014-04-07-36
Project Manager:
Email Address:
Company/Address: FDEP
Phone #:
FAX #:
Sampler's Signature:
Sampler's Printed Name:

ANALYSIS REQUESTED (Include Method Number and

PRESERVATIVE: 8

NUMBER OF CONTAINERS: FC

1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other Ice

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	FC	REMARKS/ ALTERNATE DESCRIPTION
GRU EFD Grab		4/17/14	0830	eff	2	✓	
GRU Downstream Test		4/17/14	0945	SW	2	✓	
GRU Upstream Control		4/17/14	1045	SW	2	✓	
GRU Far Downstream		4/17/14	1021	SW	2	✓	

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

SAMPLE RECEIPT CONDITION/COOLER TEMP: 0.4°C CUSTODY SEALS: Y N

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
X STANDARD
REQUESTED FAX DATE:
REQUESTED REPORT DATE:

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
X III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Specialized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
PO #:
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: J. Pitts	Printed Name: Shawn Leyburn	Printed Name	Printed Name	Printed Name	Printed Name
Firm: DEP	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 4/17/14 1432	Date/Time: 4/17/14 1432	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Retained by Client

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Page 8 of 8

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-04-07-36
FYI5 GRU- Main Street WRF Sampling Inspection

Requester: Jennifer G. Weger
Field Report Prepared By: S. Piltz
Collected By: S. Piltz / J Parrish
Send Final Report To: Heather Webber
Sampling Agency: NED ROC

Customer: NE-DIST
Project ID: FYI5
PMAS: 1143

Lab ID *	Location / Field ID	Collection (comp begin or grab) / Composite end	Tot Res Chlorine (mg/L) / Diss Oxygen (mg/L) / Storet Station Number	Matrix / Temp (C) / pH / Sample Depth / Salinity (PPTh) / Sp Conductance (umho/cm) / NPDES Number	Latitude / Longitude / Comments	Bottle Group(s)**
	GRU Main St 5YI EFD-1 GRAB	☐ Comp ☒ Grab Date 4/18/14 Time 0827 Eastern Central	Diss Oxygen (mg/L) 8.7	Matrix: Eff; Temp (C) 22.15; pH 6.95; Sample Depth 0.2 ☑ m ☐ ft; Salinity (PPTh) 0.51; Sp Conductance (umho/cm) 1013	Latitude ☐ dd ☐ dms; Longitude ☐ dd ☐ dms	—
	GRU MAIN ST 5YI EFD-1 24HTCOMP	☒ Comp ☐ Grab Date 4/17/14 Time 0845 Eastern Central; Composite end Date 4/18/14 Time 0845 Central	Tot Res Chlorine (mg/L) <0.01	Matrix: Temp (C) ~~Fridge~~ 1.9; pH; Sample Depth ☐ m ☐ ft; Salinity (PPTh) ☐; Sp Conductance (umho/cm) ☐	Latitude ☐ dd ☐ dms; Longitude ☐ dd ☐ dms; Comments: Flow 7.35 MGD	B
	EQUIP BLANK	☐ Comp ☒ Grab Date 4/18/14 Time 1120 Eastern Central	Tot Res Chlorine (mg/L) ☐; Diss Oxygen (mg/L) ☐	Matrix: DI; Temp (C); pH; Sample Depth ☐ m ☐ ft; Salinity (PPTh) ☐; Sp Conductance (umho/cm) ☐	Latitude ☐ dd ☐ dms; Longitude ☐ dd ☐ dms; Comments	E
		☐ Comp ☐ Grab Date Time Eastern Central; Composite end Date Time Eastern Central	Tot Res Chlorine (mg/L) ☐; Diss Oxygen (mg/L) ☐	Matrix: Temp (C); pH; Sample Depth ☐ m ☐ ft; Salinity (PPTh) ☐; Sp Conductance (umho/cm) ☐	Latitude ☐ dd ☐ dms; Longitude ☐ dd ☐ dms; Comments	

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	4/18/14	FedEx	M. Fairbanks	4-19-14 0900				

* Shaded Areas for Lab use only.

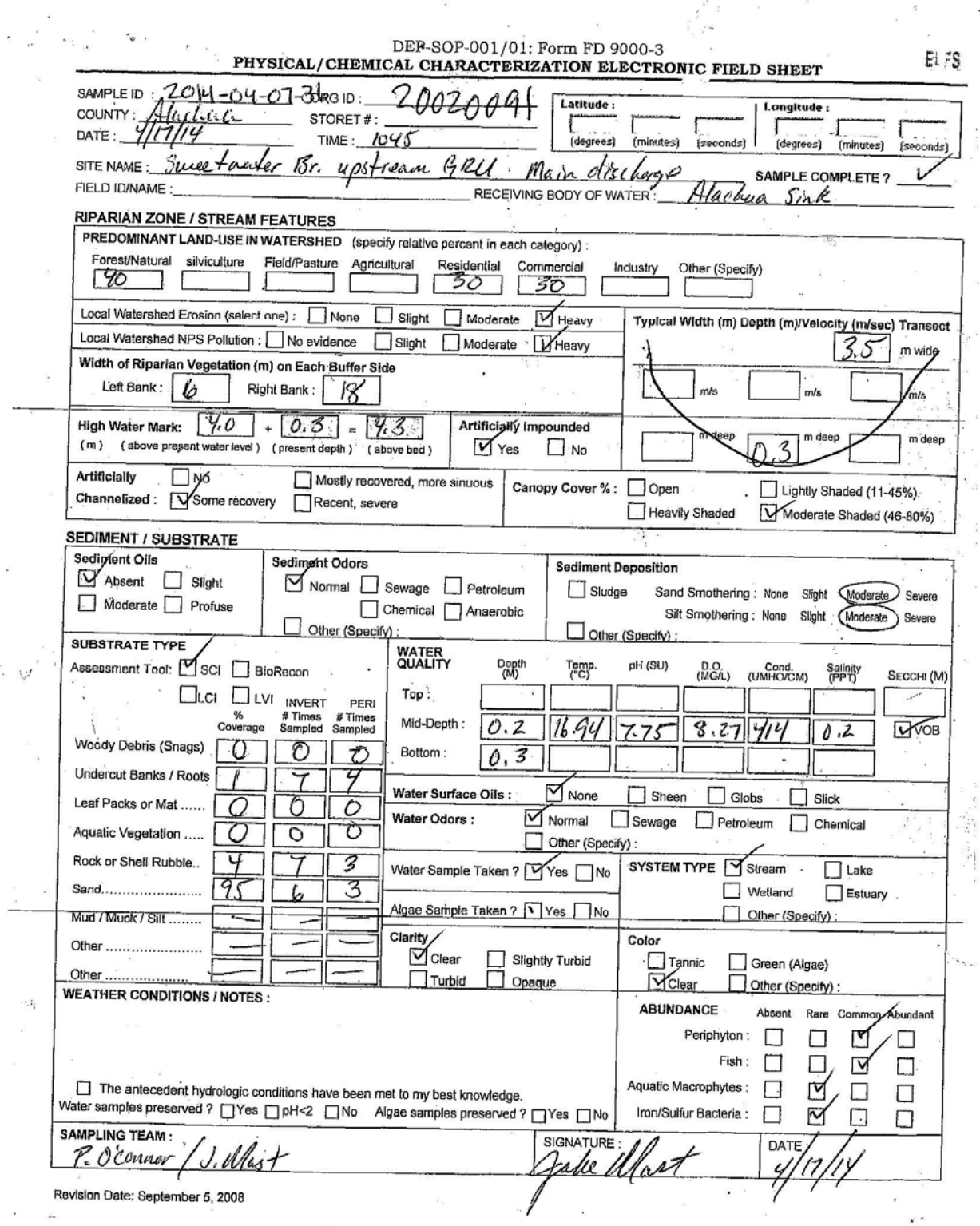
** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Cooler # 1 0.2°C 1 brown T Bottle
Cooler # 2 0.3°C 2 brown Tops
M. Fairbanks 4-19-14

Appendix E

Physical/Chemical and Habitat Assessment field sheets



DEP-SOP-001/01: Form FD 9000-3

PHYSICAL/CHEMICAL CHARACTERIZATION ELECTRONIC FIELD SHEET

EL FS

SAMPLE ID : 2014-04-07-3 ORG ID : 20020041
COUNTY : Alachua STORET # :
DATE : 4/17/14 TIME : 1045
Latitude : (degrees) (minutes) (seconds) Longitude : (degrees) (minutes) (seconds)
SITE NAME : Sweetwater Br. upstream GRU Main discharge SAMPLE COMPLETE ? ✓
FIELD ID/NAME : RECEIVING BODY OF WATER : Alachua Sink

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
40				30	30		

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☐ Moderate ☑ Heavy
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☑ Heavy
Width of Riparian Vegetation (m) on Each Buffer Side — Left Bank : 6 Right Bank : 18
High Water Mark: 4.0 (m) + 0.3 (present depth) = 4.3 (above bed) (above present water level)
Artificially Impounded ☑ Yes ☐ No
Artificially Channelized : ☐ No ☑ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe
Canopy Cover % : ☐ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☑ Moderate Shaded (46-80%)

Typical Width (m) Depth (m)/Velocity (m/sec) Transect
3.5 m wide
m/s m/s m/s
m deep 0.3 m deep m deep

SEDIMENT / SUBSTRATE

Sediment Oils : ☑ Absent ☐ Slight ☐ Moderate ☐ Profuse
Sediment Odors : ☑ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) :
Sediment Deposition : ☐ Sludge Sand Smothering : None Slight (Moderate) Severe Silt Smothering : None Slight (Moderate) Severe ☐ Other (Specify) :

SUBSTRATE TYPE — Assessment Tool: ☑ SCI ☐ BioRecon ☐ LCI ☐ LVI

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	0	0	0
Undercut Banks / Roots	1	7	4
Leaf Packs or Mat	0	0	0
Aquatic Vegetation	0	0	0
Rock or Shell Rubble	4	7	3
Sand	95	6	3
Mud / Muck / Silt	—	—	—
Other	—	—	—
Other	—	—	—

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :							
Mid-Depth :	0.2	16.94	7.75	8.27	414	0.2	☑ VOB
Bottom :	0.3						

Water Surface Oils : ☑ None ☐ Sheen ☐ Globs ☐ Slick
Water Odors : ☑ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Other (Specify) :
Water Sample Taken ? ☑ Yes ☐ No
Algae Sample Taken ? ☑ Yes ☐ No
SYSTEM TYPE ☑ Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) :
Clarity : ☑ Clear ☐ Slightly Turbid ☐ Turbid ☐ Opaque
Color : ☐ Tannic ☐ Green (Algae) ☑ Clear ☐ Other (Specify) :

WEATHER CONDITIONS / NOTES :

ABUNDANCE

	Absent	Rare	Common	Abundant
Periphyton :	☐	☐	☑	☐
Fish :	☐	☐	☑	☐
Aquatic Macrophytes :	☐	☑	☐	☐
Iron/Sulfur Bacteria :	☐	☑	☐	☐

☐ The antecedent hydrologic conditions have been met to my best knowledge.
Water samples preserved ? ☐ Yes ☐ pH<2 ☐ No Algae samples preserved ? ☐ Yes ☐ No

SAMPLING TEAM : P. O'Connor / J. Mast SIGNATURE : Jake Mast DATE 4/17/14

Revision Date: September 5, 2008

Form FD 9000-25 **FDEP Rapid Periphyton Survey (DEP SOP FS 7230)** Revised 10/11/11

Site: SW tw tvr br above GRUPOD County: Alachua Date: 04/17/14 Investigators: JMast, PO'Connor

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (0 - 6)	Canopy Cover (# shaded)	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (0-6)	Canopy Cover (# shaded)	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (0-6)	Canopy Cover (# shaded)
0	1	0		40	1	0		80	1	0	
	2				2				2	0	
	3				3				3	0	
	4				4				4	0	
	5		84		5		88		5	1	52
	6				6				6	1	
	7				7				7	1	
	8				8				8	1	
	9				9				9	0	
10	1	0		50	1	1		90	1	0	
	2				2	1			2		
	3				3	1			3		
	4				4	0			4		
	5		100		5	0	84		5		50
	6				6	0			6		
	7				7	1			7		
	8				8	1			8	1	
	9				9	1			9	1	
20	1	0		60	1	0		100	1	0	
	2				2	0			2	1	
	3				3	0			3	1	
	4				4	0			4	1	
	5		98		5	0	60		5	1	100
	6				6	0			6	0	
	7				7	1			7	0	
	8				8	0			8	0	
	9				9	0			9	0	
30	1	0		70	1	0					
	2	0			2	0					
	3	0			3	0					
	4	NA			4	0					
	5	NA	88		5	0	12				
	6	0			6	0					
	7	0			7	0					
	8	0			8	1					
	9	0			9	1					

Check accompanying data collected at same site/date.

Water sample	
Algal mat sample	
SCI/Biorecon (circle 1)	
Habitat Assessment	
RQ:	

Algal Thickness Rank

0	rough, no algae
1	< or =0.5 mm or slimy
2	>0.5 - 1 mm
3	>1mm - 6 mm
4	>6 - 20 mm
5	>20 mm - 10 cm
6	>10 cm

Record an "X" for points where algae is not sampled because the substrate cannot be seen or reached with the hand. If the cell is left blank, data managers will assume point was not evaluated.

Record canopy cover as the NUMBER OF SMALL DENSIOMETER SQUARES (OUT OF 96) THAT HAVE CANOPY COVER. Measure while facing upstream.

Collect an algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

DEP-SOP-001/01: Form FD 9000-5
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET

SUBMITTING AGENCY CODE: / SUBMITTING AGENCY NAME:	STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
	20020091	04-17-14	

REMARKS:	COUNTY:	LOCATION:	FIELD ID/NAME:
GRU FYIS	ALACHUA	Sweetwater Br ABOVE GRU POD	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 8	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 5	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 14	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 20 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering 10 Primary Score 37	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components **Artificial Channelization** 10	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank 6 Left Bank 8	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank 8 Left Bank 6	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 8 Left Bank 6 Secondary Score 52	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

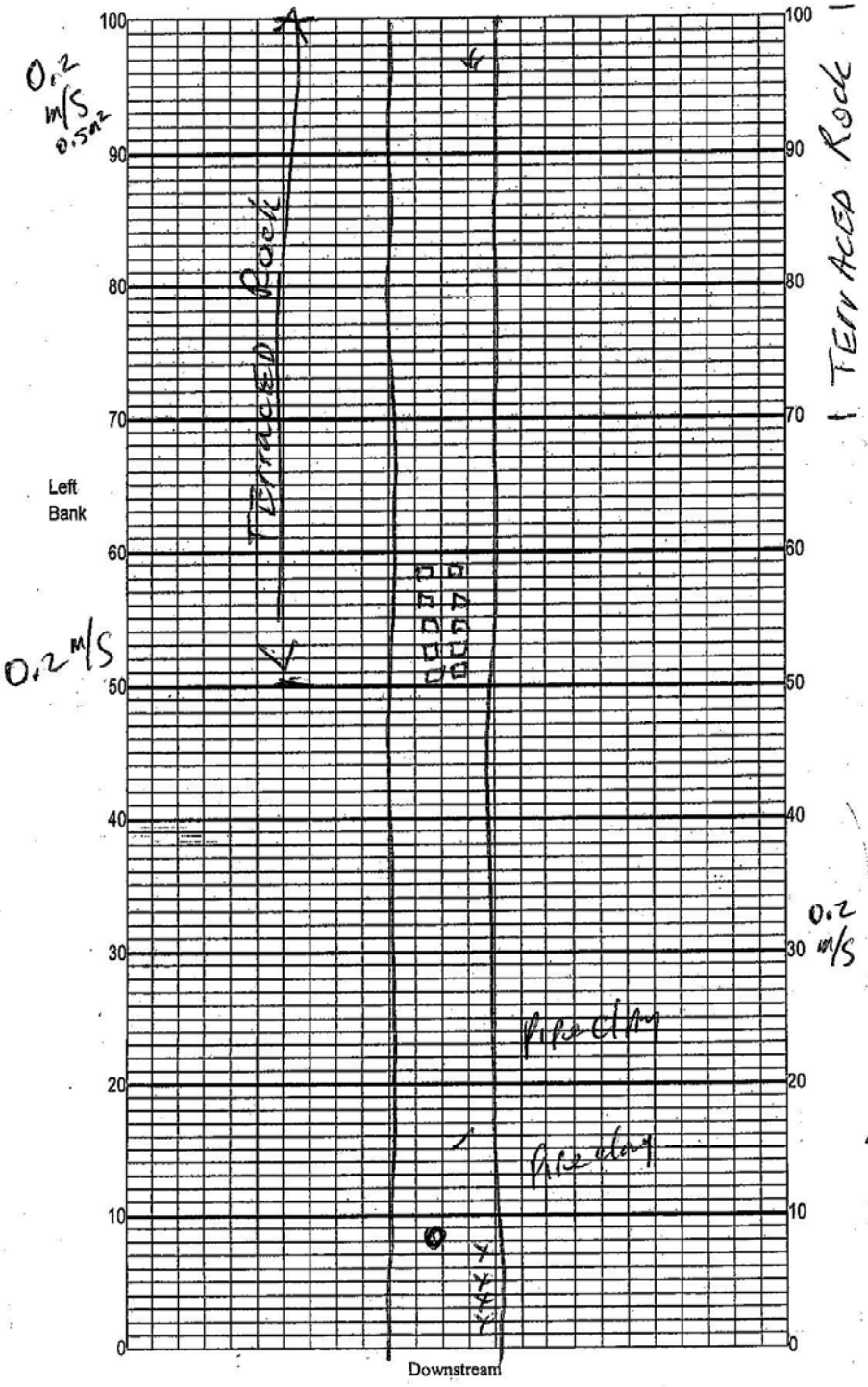
89 **TOTAL SCORE**

RQ-2014-04-07-36

Date:	Analyst:	Signature:
04-17-14	Patrick OConnor	Patrick OConnor

Form FD 9000-5 Revision Date: December 19, 2011

DEP-SOP-001/01 Form FD 9000-4
Stream/River Habitat Sketch Sheet



Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

Location: Sweetwater Br Above GRV Pod
Date: 04/17/14
Sampler: PORGANISM

100 m: Latitude _____
Longitude _____
0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

- / Snags ____
- X Roots/undercut banks ____
- O Leaf Packs (or mats) ____
- V Aquatic Macrophytes ____
- □ rock ____
- ____ ____
- Pools total # observed = ____ # range expected = ____

Average width 3.5 m
Average depth 0.3 m
Velocity measured at 30, 50, 100 meter mark.
WQ & chemistry taken at 0 meter mark.

Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:
< 2m² AQUATIC Veg.
1% Roots
4% Rock
< 2m² Leaf
< 2m² SNag
~~< 2m~~

Revision Date: June 2, 2011

DEP-SOP-001/01: Form FD 9000-3

PHYSICAL/CHEMICAL CHARACTERIZATION ELECTRONIC FIELD SHEET

ELFS

SAMPLE ID : 2014-04-07-36 ORG ID : 20020092
COUNTY : Alachua STORET # :
DATE : 4/7/14 TIME :
Latitude : (degrees) (minutes) (seconds) Longitude : (degrees) (minutes) (seconds)
SITE NAME : Sweetwater Br. below GRU effluent
SAMPLE COMPLETE ? ✓
FIELD ID/NAME : RECEIVING BODY OF WATER : Alachua Sink

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
40				30	30		

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☐ Moderate ☑ Heavy
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☑ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side
Left Bank : 6m Right Bank : 18m

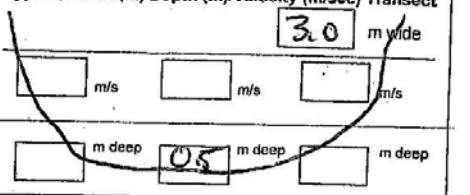
High Water Mark: 4.0 (m) + 0.5 (above present water level) = 4.5 (present depth) (above bed)

Artificially Impounded ☑ Yes ☐ No

Artificially Channelized : ☐ No ☑ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % : ☐ Open ☑ Heavily Shaded ☐ Lightly Shaded (11-45%) ☐ Moderate Shaded (46-80%)

Typical Width (m) Depth (m)/Velocity (m/sec) Transect



SEDIMENT / SUBSTRATE

Sediment Oils ☑ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☑ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) :

Sediment Deposition ☐ Sludge
Sand Smothering : None Slight (Moderate) Severe
Silt Smothering : None (Slight) Moderate Severe
☐ Other (Specify) :

SUBSTRATE TYPE
Assessment Tool: ☑ SCI ☐ BioRecon ☐ LCI ☐ LVI

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	0	0	0
Undercut Banks / Roots	3	7	4
Leaf Packs or Mat	0	0	0
Aquatic Vegetation	0	0	0
Rock or Shell Rubble..	20	7	5
Sand.....	77	6	3
Mud / Muck / Silt	—	—	—
Other	—	—	—
Other	—	—	—

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :							
Mid-Depth :	0.5	20.5	7.48	8.6	879	0.43	☑ VOB
Bottom :							

Water Surface Oils : ☑ None ☐ Sheen ☐ Globs ☐ Slick

Water Odors : ☑ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Other (Specify) :

Water Sample Taken ? ☑ Yes ☐ No
Algae Sample Taken ? ☐ Yes ☑ No

SYSTEM TYPE ☑ Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) :

Clarity ☑ Clear ☐ Slightly Turbid ☐ Turbid ☐ Opaque

Color ☐ Tannic ☐ Green (Algae) ☑ Clear ☐ Other (Specify) :

WEATHER CONDITIONS / NOTES :
Clear, calm and perfect (Sharon)

ABUNDANCE

	Absent	Rare	Common	Abundant
Periphyton :	☐	☐	☑	☐
Fish :	☐	☐	☑	☐
Aquatic Macrophytes :	☑	☐	☐	☐
Iron/Sulfur Bacteria :	☑	☐	☐	☐

☐ The antecedent hydrologic conditions have been met to my best knowledge.
Water samples preserved ? ☑ Yes ☐ pH<2 ☐ No Algae samples preserved ? ☐ Yes ☐ No

SAMPLING TEAM : J. Must / S. Pitz
SIGNATURE : Jake Must
DATE : 4/7/14

Revision Date: September 5, 2008

Form FD 9000-25 **FDEP Rapid Periphyton Survey (DEP SOP FS 7230)** Revised 10/11/11

e: | County: | Date: | Investigators:

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (0 - 6)	Canopy Cover (# shaded)
0	1		
	2	N/A	
	3		
	4		
	5		101
	6		
	7		
	8		
	9		
10	1		
	2		
	3		
	4		
	5		106
	6		
	7		
	8		
	9		
20	1		
	2	N/A	
	3		
	4		
	5		98
	6		
	7		
	8		
	9		
30	1		
	2		
	3		
	4	N/A	
	5		94
	6		
	7		
	8		
	9		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (0-6)	Canopy Cover (# shaded)
40	1		
	2		
	3		
	4		
	5		98
	6		
	7		
	8		
	9		
50	1		
	2		
	3		
	4		
	5		106
	6		
	7		
	8		
	9		
60	1		
	2		
	3		
	4		
	5		94
	6		
	7		
	8		
	9		
70	1		
	2		
	3		
	4		
	5		106
	6		
	7		
	8		
	9		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (0-6)	Canopy Cover (# shaded)
80	1		
	2		
	3		
	4		
	5		100
	6		
	7		
	8		
	9		
90	1		
	2		
	3		
	4		
	5		97
	6		
	7		
	8		
	9		
100	1		
	2		
	3	N/A	
	4		
	5		106
	6		
	7		
	8		
	9		

Check accompanying data collected at same site/date.	
Water sample	
Algal mat sample	
SCI/Biorecon (circle 1)	
Habitat Assessment	
RQ:	

Algal Thickness Rank	
0	rough, no algae
1	< or =0.5 mm or slimy
2	>0.5 - 1 mm
3	>1mm - 6 mm
4	>6 - 20 mm
5	>20 mm - 10 cm
6	>10 cm

Record an "X" for points where algae is not sampled because the substrate cannot be seen or reached with the hand. If the cell is left blank, data managers will assume point was not evaluated.

Record canopy cover as the NUMBER OF SMALL DENSIOMETER SQUARES (OUT OF 96) THAT HAVE CANOPY COVER. Measure while facing upstream.

Collect an algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

DEP-SOP-001/01: Form FD 9000-5
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET

SUBMITTING AGENCY CODE: / SUBMITTING AGENCY NAME:	STORET STATION NUMBER: 20020092	DATE (MMDDYY): 4/17/14	RECEIVING BODY OF WATER: Alachua Sink
REMARKS:	COUNTY: Alachua	LOCATION: Sweetwater Br. below GRU eff.	FIELD ID/NAME:

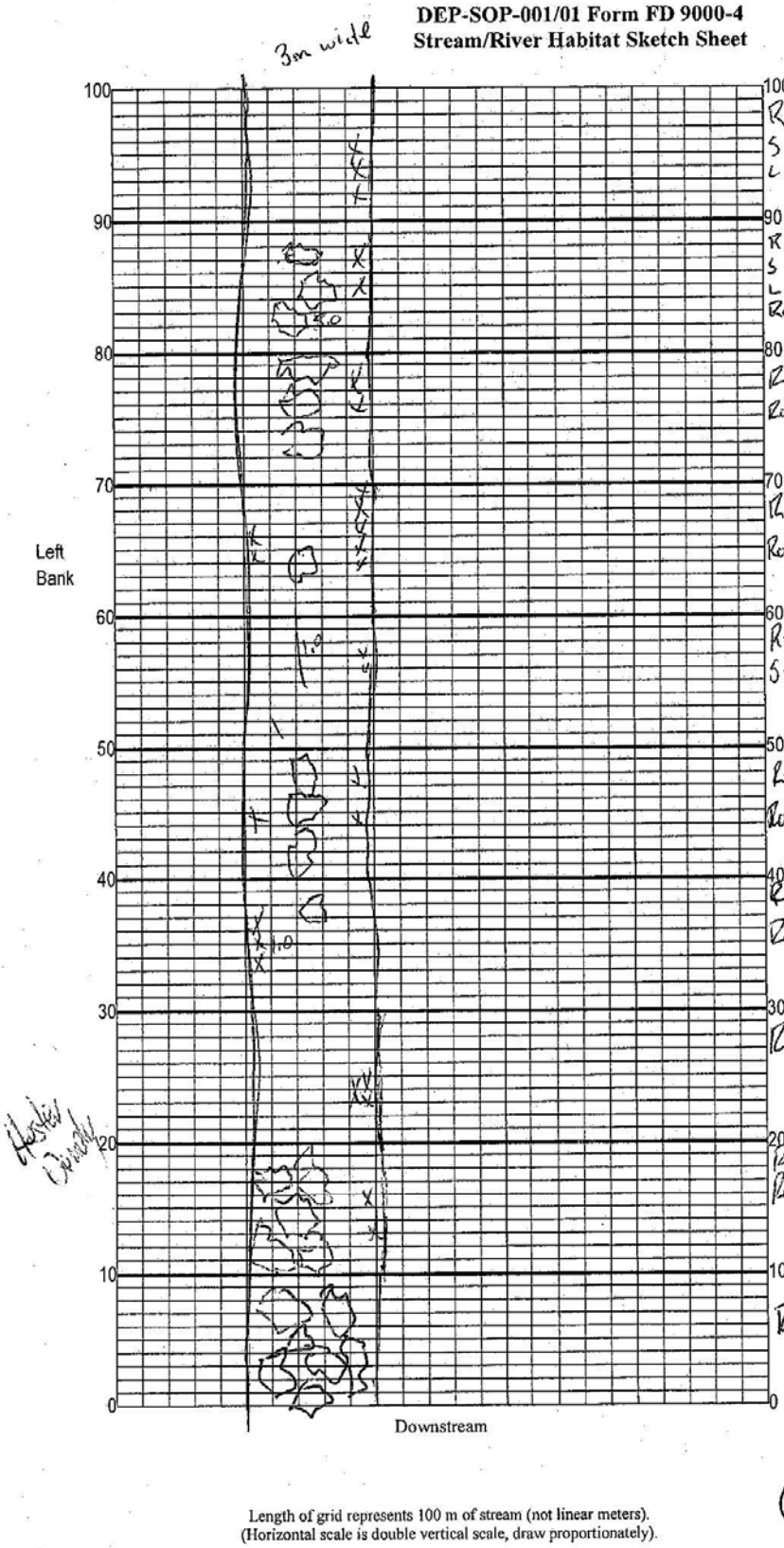
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 6	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 (6)	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 13	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 (13) 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 7.0	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 (20) 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering 4 Primary Score 43	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 (4) 3 2 1
Secondary Habitat Components **Artificial Channelization** 10	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. (10) 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank 3 Left Bank 3	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. (3) 2 1
Riparian Buffer Zone Width Right Bank 9 Left Bank 3	Width of vegetation greater than 18 m 10 (9)	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 9 Left Bank 6 Secondary Score 43	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

86 **TOTAL SCORE**

Date: 4/17/14	Analyst: J. Must / S. Pelz	Signature: Jake Must

Form FD 9000-5 Revision Date: December 19, 2011

DEP-SOP-001/01 Form FD 9000-4
Stream/River Habitat Sketch Sheet



Location: Susquehanna R. below GRU discharge

Date: 4/17/14

Sampler: J. Must / S. Piltz

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance.		%
	Snags	0.1
	Roots/undercut banks	3
	Leaf Packs (or mats)	0
	Aquatic Macrophytes	0
	Rock	20
	Pools	total # observed = ____ # range expected =

Average width 3.0 m
Average depth 0.5 m

Velocity measured at 20 meter mark.

WQ & chemistry taken at 15 meter mark.

Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

300 m² area
Roots - 9.75
Rocks - 60.5
Snag - 1.25
71.50 m² hab

23%

Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

Revision Date: June 2, 2011

DEP-SOP-001/01: Form FD 9000-3 (3/8/13)

PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID 2014-04-07-31 ORG ID GINE0001 LATITUDE
COUNTY ALACHUA STORET # LONGITUDE
DATE 04/17/14 TIME SAMPLING AGENCY DEP NED
SITE NAME Sweetwater Br 50m Above constructed WETLAND
FIELD ID/NAME RECEIVING BODY OF WATER PAINES PRAIRIE

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other
40				30	30		

Landscape Development Intensity (LDI):

Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy

Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side
Left Bank: >18m Right Bank: >18m

Hydrologic Modification Score (per FT 3101):

High Water Mark: 1.0 (m) + 0.3 (above present water level) = 1.3 (present depth) (above bed)

Artificially Impounded ☐ Yes ☒ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect
3.5 m wide
m/s | 0.3 m/s | m/s
m deep | 0.3 m deep | m deep

Artificially Channelized: ☐ No ☒ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☒ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):

Sediment Deposition
Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐
Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐
Algae Smothering: None ☐ Slight ☐ Moderate ☐ Severe ☐

SUBSTRATE TYPE
Assessment Tool: ☒ SCI ☒ RPS ☐ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	3	5	
Undercut Banks / Roots	1	5	
Leaf Packs or Mat	2	5	
Aquatic Vegetation	0	6	
Rock or Shell Rubble..	0	0	
Sand.....	94	0	
Mud / Muck / Silt	0	0	
Other	0	0	
Other	0	0	

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :								VOB
Mid:	0.15	19.2	7.0	8.2	89	827	0.4	☒ VOB
Bottom								

Meter ID: QUANTA SN QT00237

Water Odors Normal ☐ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☒ Cl

Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: H_2SO_4 2210753 Exp: 10/14
HNO_3 1401666 06/15

Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐

Algae Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: ICE Exp:

Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐

ABUNDANCE

	Absent	Rare	Common	Abundant
Periphyton:	☐	☐	☒	☐
Fish:	☐	☐	☒	☐
Aquatic Plants:	☐	☒	☐	☐
Iron/Sulfur Bacteria:	☐	☒	☐	☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐

WEATHER CONDITIONS / NOTES: OVERCAST RAIN THE LAST 48 HRS
ONGOING CONSTRUCTION DS of SCI Area
RQ-2014-04-07-34

☑ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM J Parrish, P. O'Connor SIGNATURE: DATE: 04/17/14

Revision Date: March 8, 2013

Sweetwater Br 50-150 m above const. Wetlands

Form FD 9000-25 **FDEP Rapid Periphyton Survey (DEP SOP FS 7230)** Revised 6/12/12

Site: 04/17/14 County: Alachua Date: 04/17/14 Investigators: S Parrish, P Ochs

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover
0	1	0	
	2		
	3		
	4		
	5		60
	6		
	7		
	8		
	9		
10	1	0	
	2	NA	
	3	0	
	4		
	5		55
	6		
	7		
	8		
	9	1	
20	1	0	
	2		
	3		
	4		
	5		65
	6		
	7		
	8		
	9	1	
30	1	0	
	2		
	3		
	4		
	5		32
	6		
	7		
	8		
	9	4	
40	1	0	
	2		
	3		
	4		
	5		30
	6		
	7		
	8		
	9	4	
50	1	0	
	2		
	3		
	4		
	5		48
	6		
	7		
	8		
	9	4	
60	1	4	
	2	0	
	3		
	4		
	5		80
	6		
	7		
	8		
	9	4	
70	1	1	
	2	0	
	3		
	4		
	5		56
	6		
	7		
	8	3	
	9	4	
80	1	3	
	2	0	
	3		
	4		
	5		86
	6		
	7		
	8		
	9	3	
90	1	3	
	2	0	
	3		
	4		
	5		98
	6		
	7		
	8		
	9	3	
100	1	1	
	2	0	
	3		
	4		
	5		
	6		
	7		
	8		
	9	4	

# points ranked 4-6	
total points assessed	
% points ranked 4-6	

Secchi depth:

Check accompanying data collected at same site/date.	
Algal mat sample	
Habitat Assessment	
Linear Veg. Survey	
SCI/Biorecon (circle 1)	
Water sample	
RQ:	

Algal Thickness Rank	
N	rough, no algae; slimy; algae to 1 mm
3	>1mm - 6 mm
4	>6 - 20 mm
5	>20 mm - 10 cm
6	>10 cm

Record "N" for points deeper than the Secchi depth; algae are presumed absent. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. Note if thickness estimated for deep points which can be seen but not reached.

Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6.

Collect an algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

DEP-SOP-001/01: Form FD 9000-5
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET

SUBMITTING AGENCY CODE: / SUBMITTING AGENCY NAME:	STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
	61NE0001	04/17/14	PAINES Prairie

REMARKS:	COUNTY:	LOCATION:	FIELD ID/NAME:
	Alachua	Sweet water Br 50-150 m Above const. WETland	

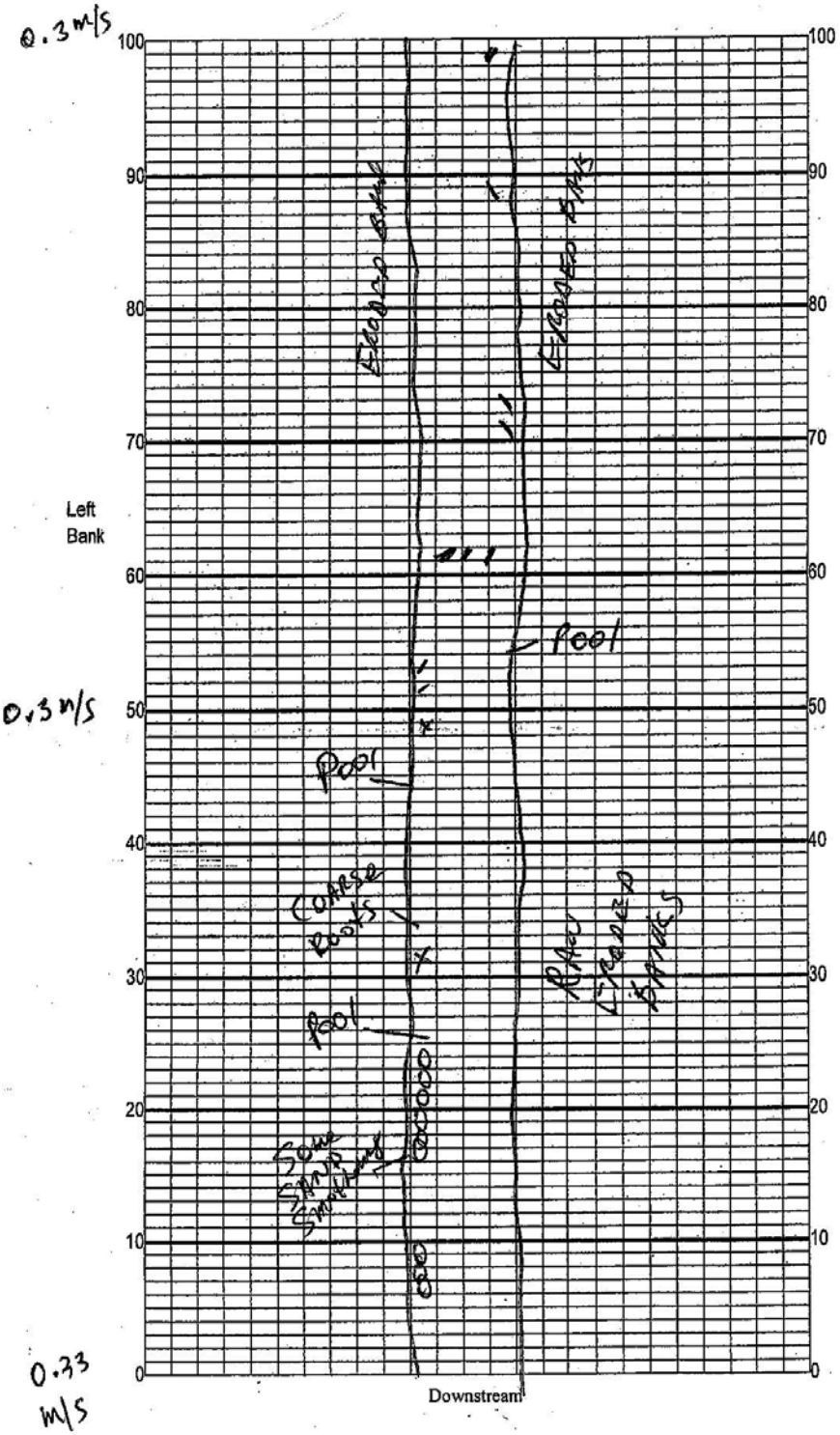
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 11	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 6	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity 18	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 20 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering 11 Primary Score 46	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components **Artificial Channelization** 11	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank 5 Left Bank 5	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank 10 Left Bank 10	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 9 Left Bank 9 Secondary Score 59	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. 10 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

105 **TOTAL SCORE**

Date: 04/17/14	Analyst: PO'Connor	Signature: Patterson

Form FD 9000-5 Revision Date: December 19, 2011

DEP-SOP-001/01 Form FD 9000-4
Stream/River Habitat Sketch Sheet



Location: Sweetwater Br 50-150 m Above Const. Wetlands

Date: 04/17/14

Sampler: J Parrish, P. O'Connor

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	

Substrates: Code key, draw proportionate habitat abundance.	%
✓ Snags	
X Roots/undercut banks	
O Leaf Packs (or mats)	
✓ Aquatic Macrophytes	
Pools total # observed = 3	
# range expected = 2-5	

Average width 4 m
Average depth 0.3 m

Velocity measured at 0, 50, 100 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

OBVIOUS NPS TRASH

< 2 m² AQUATIC Vegetation

2% LEAF
3% SNAG
1% Root

Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

Revision Date: June 2, 2011

Appendix F

Chemical analysis of effluent and receiving water

Date_Sampled	UDL	Station	SCH_Group	Component	Result	Units	MDL	PQL
4/14/2014 7:00	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Toxicology	Bioassay-Chron-Def-FW-C.dubia, NOEC	100	NOEC		
4/14/2014 7:00	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Toxicology	Bioassay-Chron-Def-FW-Fish, NOEC	100	NOEC		
4/14/2014 7:00	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Toxicology	Bioassay-Chron-Def-FW-C.dubia, IC25	100 L	IC25		
4/14/2014 7:00	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Toxicology	Bioassay-Chron-Def-FW-Fish, IC25	100 L	IC25		
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.28 IJ	mg/L	0.2	2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Magnesium	18.1	mg/L	0.04	0.16
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Calcium	41	mg/L	0.075	0.3
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Zinc	21	ug/L	5	20
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Lead	0.20 U	ug/L	0.2	0.8
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Chromium	0.52 I	ug/L	0.3	1.2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Hardness	177	mg/L	0.4	1.6
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Arsenic	0.59 I	ug/L	0.25	1
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Nickel	0.78 I	ug/L	0.25	1
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Copper	0.56 I	ug/L	0.5	1
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Iron	41 I	ug/L	30	120
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Sodium	111	mg/L	0.5	2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Potassium	8.3	mg/L	0.3	1.2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Aluminum	104	ug/L	5	20
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Selenium	0.20 U	ug/L	0.2	0.8
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Metals	Silver	0.025 U	ug/L	0.025	0.1
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Nutrients	TSS	2 I	mg/L	2	10
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Nutrients	Total-P	0.96	mg P/L	0.005	0.05
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Nutrients	Kjeldahl Nitrogen	0.62	mg N/L	0.08	0.2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Nutrients	NO2NO3-N	4.9	mg N/L	0.08	0.2
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Nutrients	Ammonia-N	0.037	mg N/L	0.002	0.005
4/17/2014 8:30	Effluent Comp	GRU MAIN ST 5YI EFD-1 24HTCOMP	Pesticides	Gamma-BHC	0.0020 U	ug/L	0.002	0.008
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	AGP/LN	Algal Growth Potential	247	mg DryWt/L	0.3	0.9
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.40 U	ug/L	0.4	1.2
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.71 I	ug/L	0.55	1.7
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Overflow	Fecal Coliforms-Membrane Filter	30 B	cfu/100 mL	1.6	1.6
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Kjeldahl Nitrogen	0.65	mg N/L	0.08	0.2
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	O-Phosphate-P	0.89	mg P/L	0.16	0.4
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Color (true)	5.1 I	PCU	2.5	6

4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Total-P	1	mg P/L	0.025	0.25
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Fluoride	0.45	mg F/L	0.035	0.1
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Turbidity	0.85	NTU	0.1	0.1
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	NO2NO3-N	4.6	mg N/L	0.08	0.2
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Organic Carbon	6.4 A	mg C/L	1	2
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Sulfate	100 A	mg SO4/L	2	5
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Alkalinity	52 A	mg CaCO3/L	0.65	2.5
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Ammonia-N	0.033	mg N/L	0.002	0.005
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Chloride	180 A	mg Cl/L	2	5
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Metalaxyl	0.038 U	ug/L	0.038	0.15
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Mevinphos	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Naled	0.038 U	ug/L	0.038	0.15
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Norflurazon	0.029 U	ug/L	0.029	0.12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Parathion Methyl	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Phorate	0.0048 U	ug/L	0.0048	0.019
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Ametryn	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Ethion	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Parathion Ethyl	0.019 U	ug/L	0.019	0.077
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Simazine	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Alachlor	0.058 U	ug/L	0.058	0.23
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Atrazine	0.024 U	ug/L	0.024	0.095
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Chlorpyrifos Ethyl	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Diazinon	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Butylate	0.019 U	ug/L	0.019	0.077
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Bromacil	0.038 U	ug/L	0.038	0.15
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Atrazine Desisopropyl	0.014 U	ug/L	0.014	0.055
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Atrazine Desethyl	0.016 U	ug/L	0.016	0.063
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Fonofos	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Ethoprop	0.0048 U	ug/L	0.0048	0.019
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Disulfoton	0.0048 U	ug/L	0.0048	0.019
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Azinphos Methyl	0.019 U	ug/L	0.019	0.077
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Prometon	0.019 U	ug/L	0.019	0.077
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Metolachlor	0.058 U	ug/L	0.058	0.23
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Fenamiphos	0.029 U	ug/L	0.029	0.12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Metribuzin	0.021 U	ug/L	0.021	0.085
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Malathion	0.0096 U	ug/L	0.0096	0.038
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Prometryn	0.019 U	ug/L	0.019	0.077
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Hexazinone	0.029 UJ	ug/L	0.029	0.12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Chlorpyrifos Methyl	0.0096 U	ug/L	0.0096	0.038

4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Pesticides	Demeton	0.023 U	ug/L	0.023	0.092
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2,4-Dichlorophenol	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38 U	ug/L	38	150
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Acenaphthylene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Benzo(a)anthracene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Chrysene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Dimethyl phthalate	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Fluorene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2,4-Dimethylphenol	9.6 U	ug/L	9.6	38
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2,4-Dinitrotoluene	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9 U	ug/L	1.9	7.7
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Di-n-butyl phthalate	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Di-n-octyl phthalate	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2-Chloronaphthalene	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Hexachlorobutadiene	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Isophorone	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Phenol	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2,6-Dinitrotoluene	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Anthracene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Hexachlorobenzene	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Phenanthrene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2,4-Dinitrophenol	14 UJ	ug/L	14	58
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9 U	ug/L	1.9	7.7
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Naphthalene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Benzo(a)pyrene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Butyl benzyl phthalate	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Diethyl phthalate	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9 U	ug/L	1.9	7.7
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Nitrobenzene	1.9 U	ug/L	1.9	7.7
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2-Nitrophenol	0.96 U	ug/L	0.96	3.8

4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	4-Nitrophenol	14 U	ug/L	14	58
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Acenaphthene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Benzidine	96 U	ug/L	96	380
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9 U	ug/L	1.9	7.7
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	2-Chlorophenol	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.96 U	ug/L	0.96	3.8
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Fluoranthene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Hexachloroethane	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Pentachlorophenol	2.9 U	ug/L	2.9	12
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Priority Organic Pollutants	Pyrene	0.19 U	ug/L	0.19	0.77
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Sample Depth	0.2	m		
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Temperature	21.2	C		
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Specific Conductance	546	umhos/cm		
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	Dissolved Oxygen	9.01	mg/L		
4/17/2014 8:30	Effluent Grab	GRU Main St 5YI EFD-1 GRAB	Nutrients	pH	6.98			
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	AGP/LN	Algal Growth Potential	207 A	mg DryWt/L	0.3	0.9
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.98 I	ug/L	0.55	1.7
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.2 IJ	mg/L	0.2	2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.40 U	ug/L	0.4	1.2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Overflow	Fecal Coliforms-Membrane Filter	52	cfu/100 mL	2	2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Selenium	0.20 U	ug/L	0.2	0.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Potassium	7.5	mg/L	0.3	1.2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Copper	0.82 I	ug/L	0.5	1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Calcium	44	mg/L	0.075	0.3
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Chromium	0.54 I	ug/L	0.3	1.2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Iron	82 I	ug/L	30	120
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Magnesium	17.7	mg/L	0.04	0.16
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Lead	0.20 U	ug/L	0.2	0.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Aluminum	107	ug/L	5	20
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Zinc	18 I	ug/L	5	20
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Arsenic	0.62 I	ug/L	0.25	1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Nickel	0.89 I	ug/L	0.25	1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Silver	0.025 U	ug/L	0.025	0.1

4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Metals	Sodium	102	mg/L	0.5	2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Fluoride	0.42	mg F/L	0.035	0.1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Sulfate	92	mg SO4/L	0.4	1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Color (true)	9	PCU	2.5	6
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	TSS	2 I	mg/L	2	10
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Organic Carbon	6.4	mg C/L	0.5	1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Kjeldahl Nitrogen	0.64	mg N/L	0.08	0.2
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Alkalinity	68	mg CaCO3/L	0.65	2.5
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Chloride	150	mg Cl/L	0.4	1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Ammonia-N	0.028	mg N/L	0.002	0.005
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	NO2NO3-N	3.7	mg N/L	0.04	0.1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Total-P	0.79	mg P/L	0.005	0.05
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	O-Phosphate-P	0.64	mg P/L	0.04	0.1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Turbidity	0.95	NTU	0.1	0.1
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Pesticides	Gamma-BHC	0.0019 U	ug/L	0.0019	0.0075
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Benzo(a)pyrene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Di-n-butyl phthalate	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Hexachloroethane	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Acenaphthene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9 U	ug/L	1.9	7.6
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Pyrene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9 U	ug/L	1.9	7.6
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2,4-Dimethylphenol	9.5 U	ug/L	9.5	38
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2,6-Dinitrotoluene	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2-Chlorophenol	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38 U	ug/L	38	150
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	4-Nitrophenol	14 U	ug/L	14	57
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Acenaphthylene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Benzidine	95 U	ug/L	95	380
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Di-n-octyl phthalate	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Hexachlorobenzene	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9 U	ug/L	1.9	7.6
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Naphthalene	0.19 U	ug/L	0.19	0.76

4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Nitrobenzene	1.9 U	ug/L	1.9	7.6
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Pentachlorophenol	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2,4-Dichlorophenol	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Anthracene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Dimethyl phthalate	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Fluoranthene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Hexachlorobutadiene	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9 U	ug/L	2.9	11
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Isophorone	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Phenol	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2,4-Dinitrotoluene	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9 U	ug/L	1.9	7.6
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Chrysene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Diethyl phthalate	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2,4-Dinitrophenol	14 UJ	ug/L	14	57
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2-Nitrophenol	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Butyl benzyl phthalate	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Fluorene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Phenanthrene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	2-Chloronaphthalene	0.95 U	ug/L	0.95	3.8
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Priority Organic Pollutants	Benzo(a)anthracene	0.19 U	ug/L	0.19	0.76
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	pH	7.48			
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Dissolved Oxygen	8.6	mg/L		
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Specific Conductance	879	umhos/cm		
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Temperature	20.5	C		
4/17/2014 9:45	Test Site	GRU MAIN ST 5YI DOWNSTREAM TEST	Nutrients	Sample Depth	0.1	m		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	AGP/LN	Algal Growth Potential	19.1	mg DryWt/L	0.3	0.9
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.62 IJ	mg/L	0.2	2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.40 U	ug/L	0.4	1.2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.55 U	ug/L	0.55	1.7
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Overflow	Fecal Coliforms-Membrane Filter	350	cfu/100 mL	10	10

4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Selenium	0.23 I	ug/L	0.2	0.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Lead	0.36 I	ug/L	0.2	0.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Silver	0.025 U	ug/L	0.025	0.1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Iron	240	ug/L	30	120
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Sodium	12.9	mg/L	0.5	2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Arsenic	0.78 I	ug/L	0.25	1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Chromium	0.49 I	ug/L	0.3	1.2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Nickel	0.89 I	ug/L	0.25	1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Copper	1.45	ug/L	0.5	1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Aluminum	56	ug/L	5	20
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Calcium	57.6	mg/L	0.075	0.3
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Zinc	5.3 I	ug/L	5	20
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Magnesium	10.4	mg/L	0.04	0.16
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Metals	Potassium	2.3	mg/L	0.3	1.2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	TSS	2 U	mg/L	2	10
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Ammonia-N	0.032	mg N/L	0.002	0.005
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Sulfate	35	mg SO4/L	0.2	0.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Total-P	0.17	mg P/L	0.005	0.05
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Alkalinity	140 A	mg CaCO3/L	0.65	2.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Color (true)	39	PCU	2.5	6
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Fluoride	0.27	mg F/L	0.035	0.1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	NO2NO3-N	0.28	mg N/L	0.004	0.01
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Organic Carbon	7.9	mg C/L	0.5	1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Turbidity	1.1	NTU	0.1	0.1
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Kjeldahl Nitrogen	0.47	mg N/L	0.08	0.2
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Chloride	20	mg Cl/L	0.2	0.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	O-Phosphate-P	0.12	mg P/L	0.004	0.01
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Pesticides	Gamma-BHC	0.0019 U	ug/L	0.0019	0.0075
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Pentachlorophenol	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Benzidine	94 U	ug/L	94	380
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Dimethyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9 U	ug/L	1.9	7.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9 U	ug/L	1.9	7.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Nitrobenzene	1.9 U	ug/L	1.9	7.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2,4-Dinitrotoluene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Acenaphthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.94 U	ug/L	0.94	3.8

4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2-Nitrophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38 U	ug/L	38	150
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Butyl benzyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2,4-Dichlorophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2,6-Dinitrotoluene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Anthracene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Benzo(a)pyrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Isophorone	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Naphthalene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Phenanthrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2,4-Dimethylphenol	9.4 U	ug/L	9.4	38
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9 U	ug/L	1.9	7.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Hexachloroethane	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Diethyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Pyrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Acenaphthylene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Benzo(a)anthracene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9 U	ug/L	1.9	7.5
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Chrysene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Fluorene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Hexachlorobenzene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Hexachlorobutadiene	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Phenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2,4-Dinitrophenol	14 UJ	ug/L	14	57
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2-Chlorophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	4-Nitrophenol	14 U	ug/L	14	57
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Di-n-butyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Di-n-octyl phthalate	0.94 U	ug/L	0.94	3.8

4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Fluoranthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8 U	ug/L	2.8	11
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	2-Chloronaphthalene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Specific Conductance	414	umhos/cm		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Sample Depth	0.2	m		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	pH	7.75			
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Dissolved Oxygen	8.27	mg/L		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Sample Depth	0.2	m		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Temperature	16.94	C		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	pH	7.75			
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Dissolved Oxygen	8.27	mg/L		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Specific Conductance	414	umhos/cm		
4/17/2014 10:45	Control Site	GRU MAIN ST 5YI UPSTREAM CONTR	Nutrients	Temperature	16.94	C		
4/17/2014 8:35	Downstream Site	GRU FAR DOWNSTREAMTEST ABV WET	Nutrients	Dissolved Oxygen	8.2	mg/L		
4/17/2014 8:35	Downstream Site	GRU FAR DOWNSTREAMTEST ABV WET	Nutrients	Specific Conductance	827	umhos/cm		
4/17/2014 8:35	Downstream Site	GRU FAR DOWNSTREAMTEST ABV WET	Nutrients	Temperature	19.2	C		
4/17/2014 8:35	Downstream Site	GRU FAR DOWNSTREAMTEST ABV WET	Nutrients	pH	7			
4/17/2014 8:35	Downstream Site	GRU FAR DOWNSTREAMTEST ABV WET	Nutrients	Sample Depth	0.15	m		
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	AGP/LN	Algal Growth Potential	220	mg DryWt/L	0.3	0.9
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.64 I	ug/L	0.55	1.7
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.64 IJ	mg/L	0.2	2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.40 U	ug/L	0.4	1.2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Overflow	Fecal Coliforms-Membrane Filter	140 B	cfu/100 mL	1.6	1.6
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Arsenic	0.72 I	ug/L	0.25	1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Chromium	0.51 I	ug/L	0.3	1.2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Magnesium	16.5	mg/L	0.04	0.16
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Zinc	18 I	ug/L	5	20
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Potassium	7	mg/L	0.3	1.2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Iron	110 I	ug/L	30	120
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Selenium	0.20 U	ug/L	0.2	0.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Lead	0.37 I	ug/L	0.2	0.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Copper	0.97 I	ug/L	0.5	1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Aluminum	109	ug/L	5	20
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Sodium	91.1	mg/L	0.5	2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Nickel	0.84 I	ug/L	0.25	1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Silver	0.025 U	ug/L	0.025	0.1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Metals	Calcium	44.2	mg/L	0.075	0.3

4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Color (true)	18 A	PCU	2.5	6
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	NO2NO3-N	3.9	mg N/L	0.04	0.1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Sulfate	91	mg SO4/L	0.4	1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Alkalinity	69	mg CaCO3/L	0.65	2.5
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Turbidity	1.3	NTU	0.1	0.1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	TSS	2 I	mg/L	2	10
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Kjeldahl Nitrogen	0.68	mg N/L	0.08	0.2
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Organic Carbon	6.7	mg C/L	0.5	1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Fluoride	0.41	mg F/L	0.035	0.1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Ammonia-N	0.039	mg N/L	0.002	0.005
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Chloride	140	mg Cl/L	0.4	1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	O-Phosphate-P	0.83	mg P/L	0.04	0.1
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Total-P	0.95	mg P/L	0.005	0.05
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Pesticides	Gamma-BHC	0.0019 U	ug/L	0.0019	0.0075
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Acenaphthylene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Di-n-butyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Hexachlorobutadiene	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Hexachloroethane	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2,4-Dinitrotoluene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Benzidine	94 U	ug/L	94	380
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Fluoranthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9 U	ug/L	1.9	7.5
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2,4-Dichlorophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2-Chlorophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2-Nitrophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Hexachlorobenzene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Pyrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2,4-Dimethylphenol	9.4 U	ug/L	9.4	38
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38 U	ug/L	38	150
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9 U	ug/L	1.9	7.5
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	4-Nitrophenol	14 U	ug/L	14	57
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9 U	ug/L	1.9	7.5

4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Dimethyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Pentachlorophenol	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Phenanthrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2,4-Dinitrophenol	14 UJ	ug/L	14	57
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Butyl benzyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Nitrobenzene	1.9 U	ug/L	1.9	7.5
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2-Chloronaphthalene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Diethyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8 U	ug/L	2.8	11
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Isophorone	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Phenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Acenaphthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Anthracene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Chrysene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Di-n-octyl phthalate	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9 U	ug/L	1.9	7.5
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Naphthalene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Benzo(a)anthracene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Benzo(a)pyrene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	Fluorene	0.19 U	ug/L	0.19	0.75
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Priority Organic Pollutants	2,6-Dinitrotoluene	0.94 U	ug/L	0.94	3.8
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Dissolved Oxygen	8.2	mg/L		
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Temperature	19.2	C		
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Sample Depth	0.15	m		
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	Specific Conductance	827	umhos/cm		
4/17/2014 10:21	Downstream Site	GRU FAR DOWNSTREAM TEST ABV WET	Nutrients	pH	7			
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.5	1
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.2	0.5
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.004	0.01
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Fluoride	0.035 U	mg F/L	0.035	0.1
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.1	0.1

4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.2	0.5
4/17/2014 8:25	Field Blank	Field Blank	Nutrients	Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Demeton	0.023 U	ug/L	0.023	0.092
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Diazinon	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Ethion	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Parathion Methyl	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Prometryn	0.019 U	ug/L	0.019	0.076
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Bromacil	0.038 U	ug/L	0.038	0.15
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Butylate	0.019 U	ug/L	0.019	0.076
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Parathion Ethyl	0.019 U	ug/L	0.019	0.076
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Atrazine Desethyl	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Azinphos Methyl	0.019 U	ug/L	0.019	0.076
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Metalaxyl	0.038 U	ug/L	0.038	0.15
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Naled	0.038 U	ug/L	0.038	0.15
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Chlorpyrifos Methyl	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Metribuzin	0.019 U	ug/L	0.019	0.076
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Mevinphos	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Norflurazon	0.029 U	ug/L	0.029	0.11
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Atrazine Desisopropyl	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Ethoprop	0.0048 U	ug/L	0.0048	0.019
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Fonofos	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Metolachlor	0.057 U	ug/L	0.057	0.23
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Phorate	0.0048 U	ug/L	0.0048	0.019
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Hexazinone	0.029 UJ	ug/L	0.029	0.11
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Disulfoton	0.0048 U	ug/L	0.0048	0.019
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Atrazine	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Ametryn	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Simazine	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Prometon	0.019 U	ug/L	0.019	0.076
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Malathion	0.0095 U	ug/L	0.0095	0.038
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Alachlor	0.057 U	ug/L	0.057	0.23
4/17/2014 8:25	Field Blank	Field Blank	Pesticides	Fenamiphos	0.029 U	ug/L	0.029	0.11
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.0 U	ug/L	2	7.8
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2.0 U	ug/L	2	7.8

4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Chrysene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Diethyl phthalate	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Naphthalene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Phenanthrene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	4-Nitrophenol	15 U	ug/L	15	59
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Anthracene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Pentachlorophenol	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 I	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Fluorene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39 U	ug/L	39	160
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Isophorone	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Nitrobenzene	2.0 U	ug/L	2	7.8
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Phenol	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Pyrene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	15 UJ	ug/L	15	59
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Acenaphthene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.98 U	ug/L	0.98	3.9
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.0 U	ug/L	2	7.8

4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	ug/L	2	7.8
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Benzidine	98 U	ug/L	98	390
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Hexachloroethane	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9 U	ug/L	2.9	12
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Fluoranthene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.20 U	ug/L	0.2	0.78
4/17/2014 8:25	Field Blank	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	9.8 U	ug/L	9.8	39
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Hardness	0.40 U	mg/L	0.4	1.6
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Calcium	0.075 U	mg/L	0.075	0.3
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Copper	0.50 U	ug/L	0.5	1
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Nickel	0.25 U	ug/L	0.25	1
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Sodium	0.50 U	mg/L	0.5	2
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Magnesium	0.040 U	mg/L	0.04	0.16
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Aluminum	5.7 I	ug/L	5	20
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Iron	30 U	ug/L	30	120
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Chromium	0.30 U	ug/L	0.3	1.2
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Lead	0.20 U	ug/L	0.2	0.8
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Arsenic	0.25 U	ug/L	0.25	1
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Potassium	0.30 U	mg/L	0.3	1.2
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Zinc	5.0 U	ug/L	5	20
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Silver	0.025 U	ug/L	0.025	0.1
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Metals	Selenium	0.20 U	ug/L	0.2	0.8
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Nutrients	Ammonia-N	0.002 I	mg N/L	0.002	0.005
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.08	0.2
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.004	0.01
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Nutrients	Total-P	0.004 I	mg P/L	0.002	0.005
4/18/2014 11:20	Equipment Blank	EQUIP BLANK	Pesticides	Gamma-BHC	0.0019 U	ug/L	0.0019	0.0075

EPA End Sheet

The Bioassay of the Gainesville Regional Utility Main Street Water Reclamation Facility effluent sampled on April 17, 2014, NPDES #FL0027251

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 2 7 2 5 1 11	12 1 4 0 4 1 7	# B	# S	# 1

Remarks

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The Priority Pollutants Analysis of the Gainesville Regional Utility Main Street Water Reclamation Facility effluent sampled on April 17, 2014, NPDES #FL0027251

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 2 7 2 5 1 11	12 1 4 0 4 1 7	# X	# S	# 1

Remarks

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Biological Analyses of the Gainesville Regional Utility Main Street Water Reclamation Facility effluent sampled on April 17, 2014, NPDES #FL0027251

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 0 2 7 2 5 1 11	12 1 4 0 4 1 7	# S	# S	# 1

Remarks

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