City of Salem
National Pollutant Discharge Elimination System (NPDES)
Municipal Separate Storm Sewer System (MS4)

Summary of Water Quality Data
For Reporting Year 2015/2016

Prepared by:
City Salem Public Works Department
Stormwater Services
Stormwater Monitoring Staff

November 1, 2016

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1.0 Introduction

This document provides all monitoring data collected for the reporting year of July 1, 2015, to June 30, 2016 (RY 2015/16), in accordance with the City of Salem's NPDES MS4 permit requirements listed in Schedule B(5)(f)&(g). A background narrative for each monitoring element for which data were collected and a brief summary of results for RY 2015/16 is provided below, and all collected data are provided in the attached tables and figures. A more detailed analysis of data for the entire permit term can be found in Attachment A.

2.0 Monitoring Elements

Specific details for each monitoring element can be found in the City's *Stormwater and Surface Water Monitoring Plan*. Progress toward meeting the monitoring requirements defined in Table B-1 of the City's MS4 Permit are summarized in Table 1. Monitoring site locations are described in Table 2 and denoted in Figure 1, and the parameters analyzed for each monitoring element are listed in Table 3.

2.1 Monthly Instream Monitoring

Sampling of designated urban streams for the Monthly Instream[1] monitoring element is conducted on a predetermined monthly schedule at 24 different locations. This monitoring element includes the collection of grab samples and field measurements on 11 of Salem's MS4 stormwater runoff receiving streams and the Willamette River. Ten of these streams are paired with upstream (at or near where the stream enters the City's jurisdiction) and downstream (at or near where the stream exits the City's jurisdiction or enters a receiving stream) site locations. The eleventh stream, the West Fork Little Pudding River, only has a downstream site location, because the West Fork Little Pudding River starts in the greater Salem area and runs dry during the summer months. The Willamette River has three sites located upstream, mid-way, and downstream of city limits.

The general locations of all sites are provided in Table 2 and Figure 1.

A general suite of water quality parameters are collected for each site, with additional water quality parameters analyzed for the sites within the Pringle Creek Watershed (PRI1, PRI5, CLA1, and CLA10), West Fork Little Pudding River (LPW1), and the Willamette River (WR1, WR5, and WR10); these additional parameters are denoted with parentheses in the list below.

Water quality parameters collected include:

- Temperature
- Turbidity
- Specific Conductivity
- pH
- Dissolved Oxygen (DO)
- Nitrate + Nitrite as Nitrogen (NO_3+NO_2-N)

[1] Identified as "Urban Streams monitoring" in the City of Salem Stormwater Management Plan 2010.

- *Escherichia coli (E. coli)*
- Biochemical Oxygen Demand (BOD_{stream})
- Zinc -total recoverable and dissolved (CLA1, CLA10, PRI1, PRI5 only)
- Copper -total recoverable and dissolved (CLA1, CLA10, PRI1, PRI5 only)
- Lead -total recoverable and dissolved (CLA1, CLA10, PRI1, PRI5 only)
- Hardness (CLA1, CLA10, PRI1, PRI5only)
- Total Suspended Solids (TSS) (LPW1, WR1, WR5, WR10 only)
- Alkalinity (WR1, WR5, WR10 only)
- Ammonia (WR1, WR5, WR10 only)
- Total Phosphorus (TP) (WR1, WR5, WR10 only)
- Total Solids (TS) (WR1, WR5, WR10 only)
- Total Dissolved Solids (TDS) (WR1, WR5, WR10 only)

Data for this monitoring element are provided in Tables 5 through 8, and Figures 2 and 3. Some general observations from this reporting period compared to the last reporting period include:

- **E. coli** – fewer exceedances of the 406 MPN/100 mL threshold overall, fewer exceedances of the 2420 MPN/100 mL laboratory threshold, and lower means and medians
- **Copper** – fewer exceedances than last year
- **Lead** – fewer exceedances than last year
- **Zinc** – fewer exceedances than last year
- **Nitrate & Nitrite** – results were a bit higher than last year
- **BOD** – results were a bit higher than last year
- **Specific Conductivity** – remained the same
- **pH** – remained the same
- **Turbidity** – significant decrease in turbidity results overall
- **Rainfall** – more rainfall observed in the 24 hours prior to sample collection than last year

2.2 Continuous Instream Monitoring

The City maintains a network of Continuous Instream water quality monitoring sites and stream gauging sites on seven different urban streams within the city. There are currently 11 water quality and stream gauging sites and two stream gauge-only sites (PRI4 and LPW1) within city limits. The City also maintains three stream gauge-only sites as part of a flood warning system for the Mill Creek Watershed, all of which reside outside of Salem city limits and therefore are not included in this document. Figure 1 denotes the locations of each site that resides within city limits.

The Continuous Instream water quality and stream gaging site on Shelton Ditch was non-operational for the entire reporting year, while construction work to replace the historic Winter Street Bridge was performed. Due to the fact that this is a newer site and is not included in Table B-1 of the City's MS4 permit, all requirements for Continuous Instream monitoring were still met.

The monitoring sites for this monitoring element are positioned in an upstream/downstream configuration. The upstream sites are adjacent to where the stream enters the City and the

downstream sites are either above the confluence with another stream or where the stream exits the City's jurisdictional boundary.

Continuous data collected includes:

- Turbidity
- Specific Conductivity
- Temperature
- pH
- DO
- Stage

All data are recorded in 15-minute intervals. All continuous statistical data summaries presented in the various tables and figures were computed using grade A and/or grade B data. Qualifications for what constitutes grade A and grade B data are provided in Table 9, and monthly medians for collected data are summarized in Table 10. Plots of continuous data are provided in Figures 4 through 6.

Overall, for reporting year 2015/2016 there were less data gaps in the figures, most likely due to higher quality data being available. There were no significant changes in data trends or exceedances from last year.

The Continuous Instream monitoring element incorporates an alarm system that supports the City's Illicit Discharge Detection and Elimination (IDDE) program. The alarm system is used to record, notify, and prompt investigation of water quality abnormalities that may be indicative of illicit discharges. It serves as an important tool to aid in the elimination of periodic illicit discharges, helps to prioritize dry weather outfall screening activities (see section 2.5), and serves as an outreach/education opportunity for residents.

Figure 7 shows the number of alarms that occurred each year at any station that alarmed from 2009/2010 through 2015/2016. It should be noted that for this reporting year a station that does not normally get alarms, PRI12, had 7 alarms. Stormwater monitoring staff were able to work with Environmental Services staff to eventually locate a water softener with a drain line emptying into a ditch, which went into the creek and was causing spikes in conductivity each night. Environmental Services staff were able to get the property owner to correct the problem, and it was a great example of collaboration to find and fix a problem.

2.3 Instream Storm Monitoring

Instream Storm refers to the monitoring of MS4 receiving streams during defined storm events. Sampling occurs at three sites in the Pringle Creek Watershed (continuous instream monitoring sites PRI12, PRI3, and CLK1). Data collected are used to increase understanding of receiving waters within the Pringle Creek Watershed and help guide Salem's stormwater management strategies in watersheds throughout the city. This monitoring element was initiated this permit cycle and is expected to continue beyond the current MS4 permit; ultimately providing a dataset for long-term trending and spatial analyses.

Sampling consists of flow weighted composite samples, grab samples, and field measurements. Parameters include:

- *E. coli*
- Dissolved Oxygen
- pH
- Temperature
- Specific Conductivity
- Copper (Total Recoverable and Dissolved)
- Zinc (Total Recoverable and Dissolved)
- Lead (Total Recoverable and Dissolved)
- Hardness
- Ammonia Nitrogen (NH_3)
- NO_3+NO_2-N
- Ortho Phosphorus
- Total Phosphorus (TP)
- BOD_{stream}
- TSS

Data for this monitoring element are provided in Table 11. For reporting year 2015/2016, staff worked diligently to capture five separate storm events of adequate size, and met the requirements for this monitoring element.

2.4 Stormwater Monitoring

The City has collected water quality samples from a number of sites throughout the piped MS4 system since 1995. Three monitoring sites are identified in the current monitoring plan, one each for residential, commercial, and industrial land use. The commercial and industrial sites are new sites for this permit cycle, but the residential site had been sampled previously during the last MS4 Permit and continued to be sampled through this permit cycle. Data from this monitoring element will be aggregated with previous data collected from similar land use types. The aggregated datasets will be used to characterize Salem's MS4 stormwater runoff pollutant concentrations by land use and compare them with the ACWA characterized land use concentrations.

Sampling consists of flow weighted[2] composite samples, grab samples, and field measurements.

Parameters include:

- *E. coli*
- Dissolved Oxygen
- pH
- Temperature
- Specific Conductivity
- Copper (Total Recoverable and Dissolved)
- Zinc (Total Recoverable and Dissolved)

[2] Due to hydraulic conditions, accurate flow pace sampling is not achievable at the residential land use site (Electric), therefore the City has employed a time paced sampling protocol for this site.

- Lead (Total Recoverable and Dissolved)
- Hardness
- Ammonia Nitrogen (NH_3)
- NO_3+NO_2-N
- Ortho Phosphorus
- Total Phosphorus (TP)
- $BOD_{5\text{-day}}$
- TSS

Data for this monitoring element are provided in Table 12. For reporting year 2015/2016, staff collected samples during two separate storm events, and met the requirements for this monitoring element.

2.5 Priority Dry Weather Outfall/Manhole Screening

The RY 2015/2016 dry weather outfall screening effort included a total of 35 outfall inspections (outfall structures or the first available upstream manhole), 19 of which received analytical sampling due to the presence of flowing water. A total of 15 pipesheds were investigated based on these outfall inspections; four pipesheds were not investigated due to lack of time and resources. As part of the pipeshed investigations, a total of eight additional manholes received analytical confirmation sampling to identify the origin of flow.

Of the 35 outfalls inspected, 34 were identified in the City of Salem's *Dry Weather Outfall and Illicit Discharge Screening Plan* and 1 outfall was inspected at the suggestion of the City's Environmental Services Department after receiving a report of "white material" at the outfall. One of the structures (D42456216) identified in the plan has not been inspected since the inception of the plan, due to access constraints and will likely be removed from the plan.

Observational data collected at outfalls did not produce any direct indication of an illicit discharge at any of the 35 priority outfalls. However, increased pipeshed investigations for flowing outfalls resulted in the discovery and repair of 10 municipal drinking water leaks and one sanitary sewer leak that that were infiltrating the storm sewer system. A potentially illicit discharge was detected at D42466227, a manhole above outfall D42466417. After the initial sample was collected at this location, a short duration increase in flow occurred. A sample was collected from this increased flow for comparison and the City's Environmental Services Department was called to investigate the source of the flow; no source for this discharge was identified.

For RY2015/2016, pipeshed investigations were performed based on the presence of flow as opposed to the exceedance of a screening parameter. Once the origins of flow were isolated to a single pipe section or location, one or more of the following activities were conducted:

- Confirmation sampling
- CCTV inspections
- Water Distribution leak detection
- Environmental Services field investigation

Due to the additional time and effort required for this increased source tracking, the source(s) of all flowing outfalls were not able to be completely identified and/or resolved in RY 2015/2016, and will need to be investigated in subsequent years.

Field screening parameters include temperature, pH, specific conductivity, turbidity, chlorine, fluoride, detergents/surfactants, and ammonia, which were analyzed using a multi-parameter colorimeter and multi-parameter data sonde. Laboratory parameters include Potassium, Sodium, and E. coli, which were analyzed by the City's laboratory at the Willow Lake Water Pollution Control Facility. Results of the investigation of these outfalls/manholes include:

- 18 structures had concentrations of chlorine above the action level (> 0 mg/L),
- 23 structures had concentrations of fluoride exceeding the action level (0.1 mg/L),
- 1 structure had a specific conductivity exceeding the action limit (250 µS/cm),
- 1 structure had a concentration of detergents/surfactants exceeding the action limit (0.25mg/L),
- 1 structure had a concentration of Potassium exceeding the action limit (0.5 mg/L),
- 1 structure had a concentration of ammonia equal to the action limit (0.5 mg/L),
- 2 structures had concentrations of sodium exceeding the action limit (15 mg/L),
- 4 structures had E. coli concentrations exceeding the action limit (406 MPN/100mL).

Data collected for this permit requirement are provided in Table 13.

3.0 Conclusion

The City completed all MS4 Permit monitoring requirements for this reporting year and met all of the minimum monitoring requirements outlined in the MS4 Permit before its original expiration date of December 29, 2015. As the permit was administratively extended, staff will continue to collect data following Table B-1 in the upcoming reporting year 2016-2017. Cumulatively, data collected throughout this MS4 Permit cycle will be used to meet monitoring objectives identified in the City's monitoring plan, while also supporting data analyses.

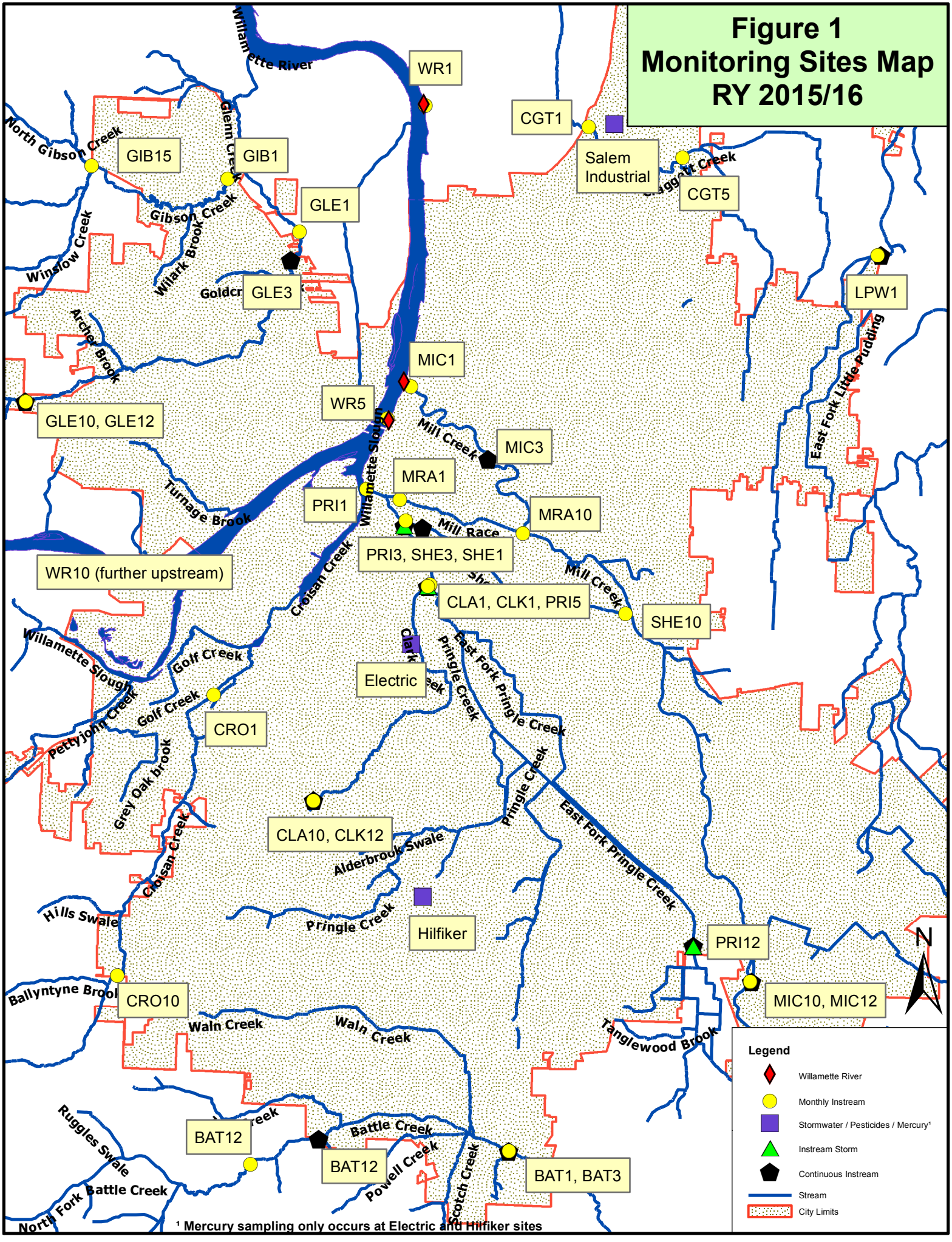
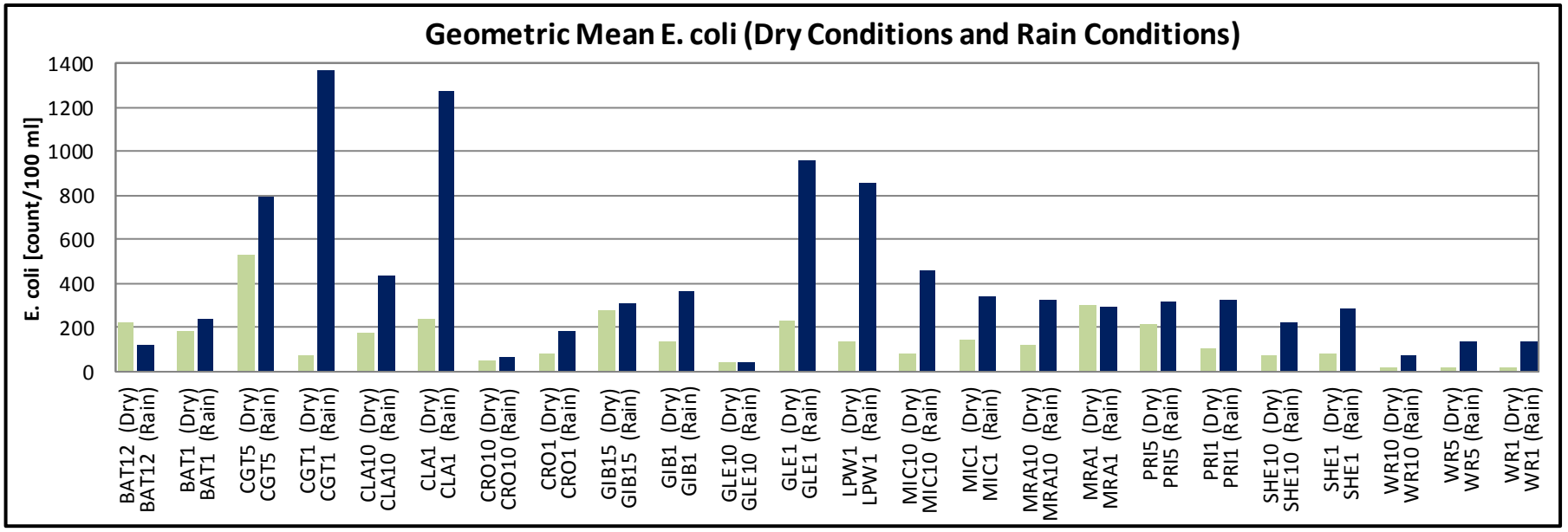
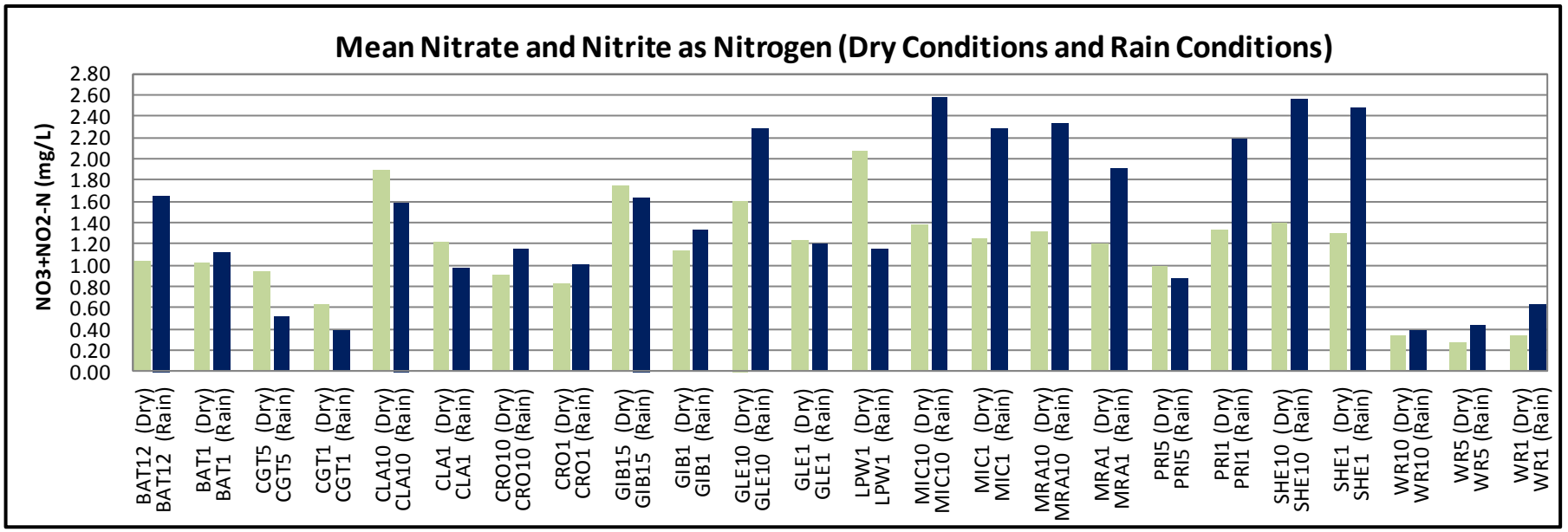


Figure 1
Monitoring Sites Map
RY 2015/16
WR1
CGT1
Salem Industrial
CGT5
GIB15
GIB1
GLE1
GLE3
LPW1
MIC1
WR5
MIC3
GLE10, GLE12
MRA1
PRI1
MRA10
PRI3, SHE3, SHE1
WR10 (further upstream)
CLA1, CLK1, PRI5
SHE10
Electric
CRO1
CLA10, CLK12
Hilfiker
PRI12
MIC10, MIC12
CRO10
BAT12
BAT12
BAT1, BAT3
Willamette River
North Gibson Creek
Glenn Creek
Gibson Creek
Winslow Creek
Wilark Brook
Archer Brook
Willamette Slough
Mill Creek
Turnage Brook
Croisan Creek
Mill Race
East Fork Little Pudding
Golf Creek
Pettyjohn Creek
Grey Oak brook
Pringle Creek
East Fork Pringle Creek
Alderbrook Swale
Hills Swale
Ballyntyne Brook
Waln Creek
Tanglewood Brook
Ruggles Swale
Battle Creek
North Fork Battle Creek
Powell Creek
Scotch Creek
N
Legend
Willamette River
Monthly Instream
Stormwater / Pesticides / Mercury¹
Instream Storm
Continuous Instream
Stream
City Limits
¹ Mercury sampling only occurs at Electric and Hilfiker sites

Figure 2

Monthly Instream Mean Value Comparison for Dry and Rain Conditions (Reporting Year 2015/2016)





Dry conditions defined as less than 0.5 inches of rainfall in the 24 hours prior to sample collection; **rain** conditions defined as greater than or equal to 0.05 inches of rainfall in the 24 hours prior to sample collection.

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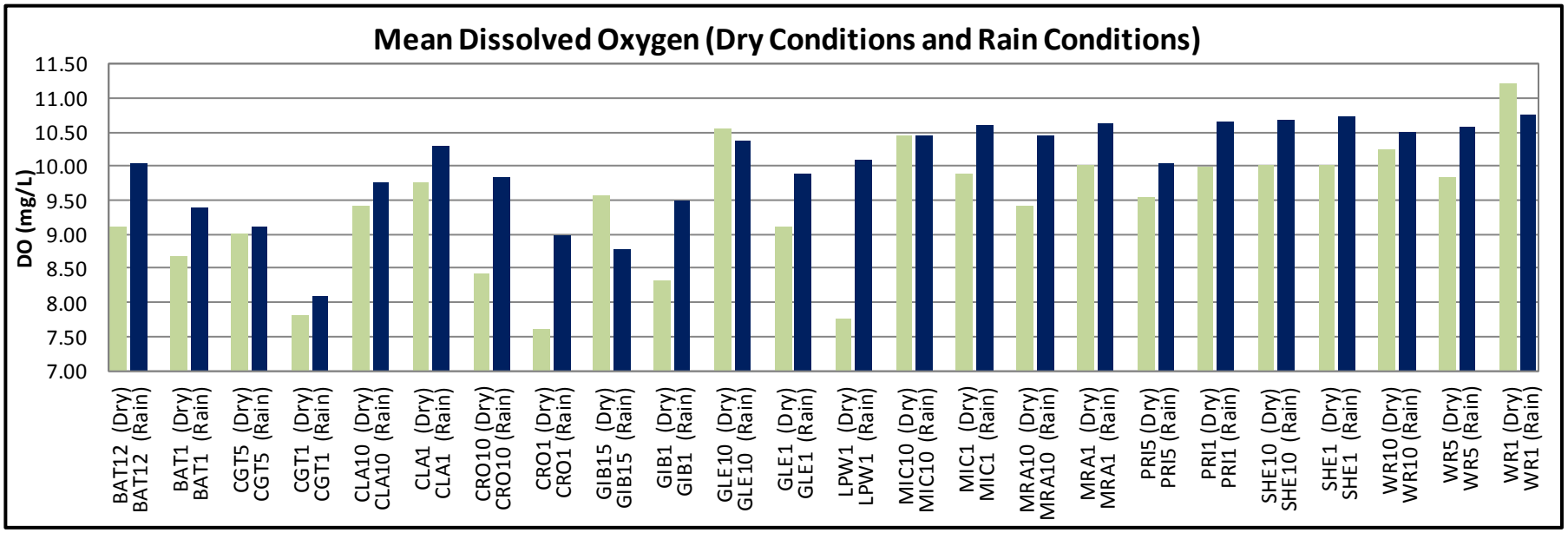

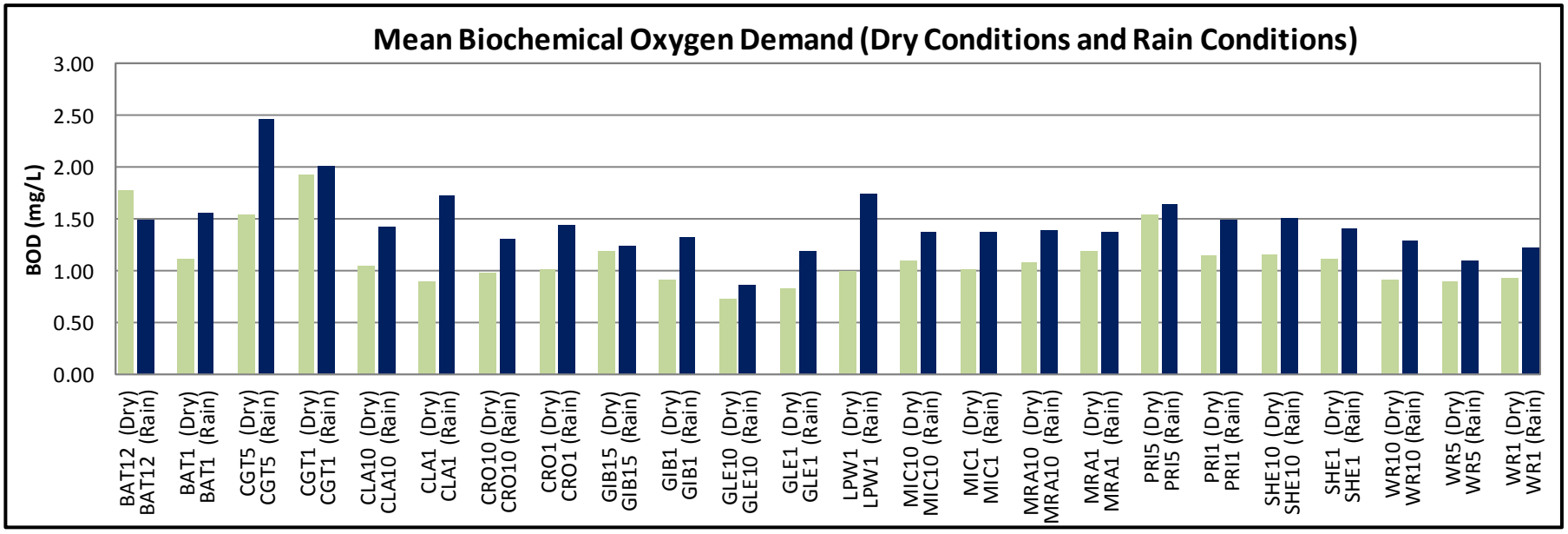

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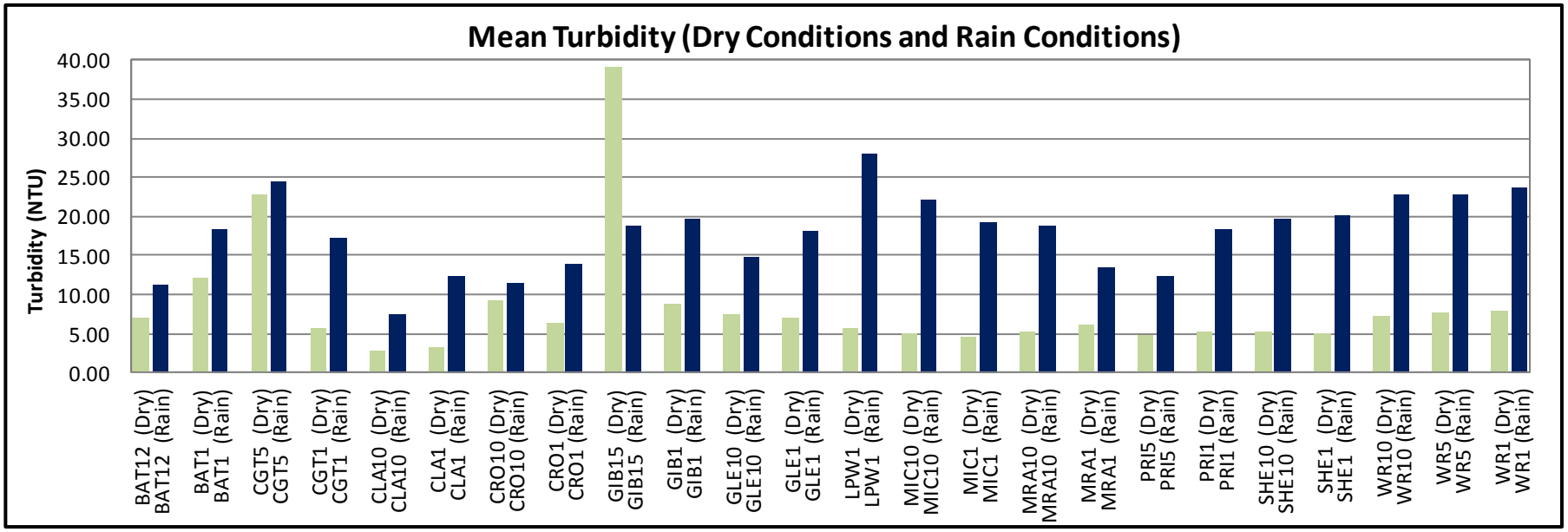

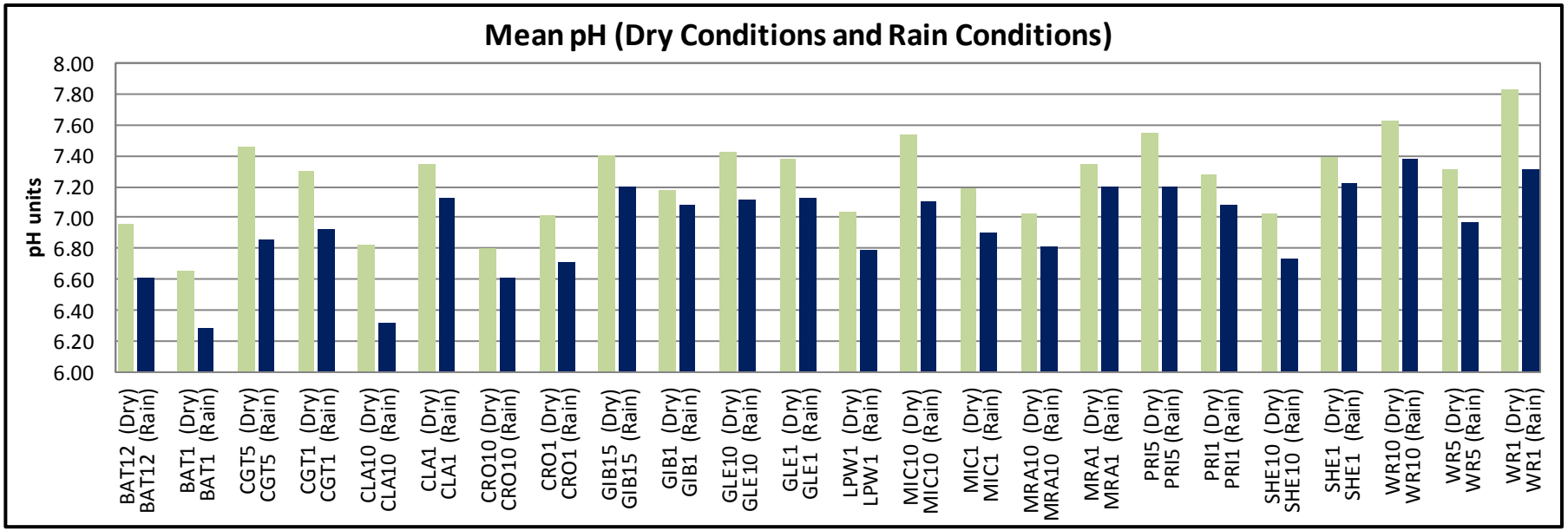

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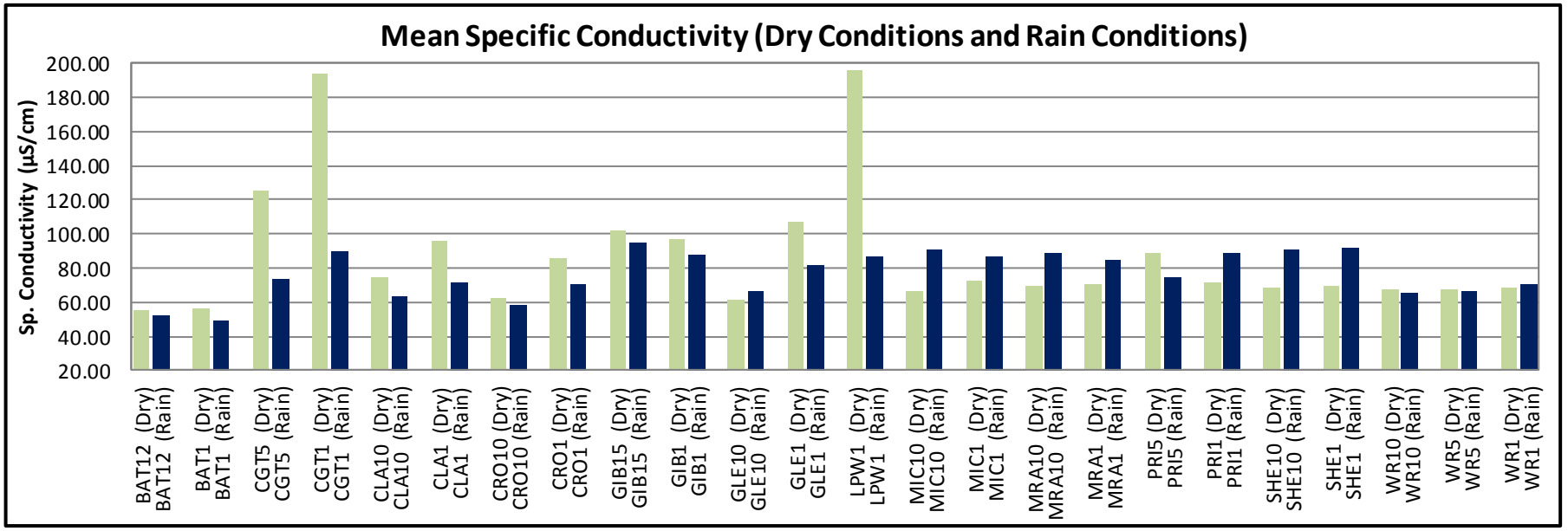
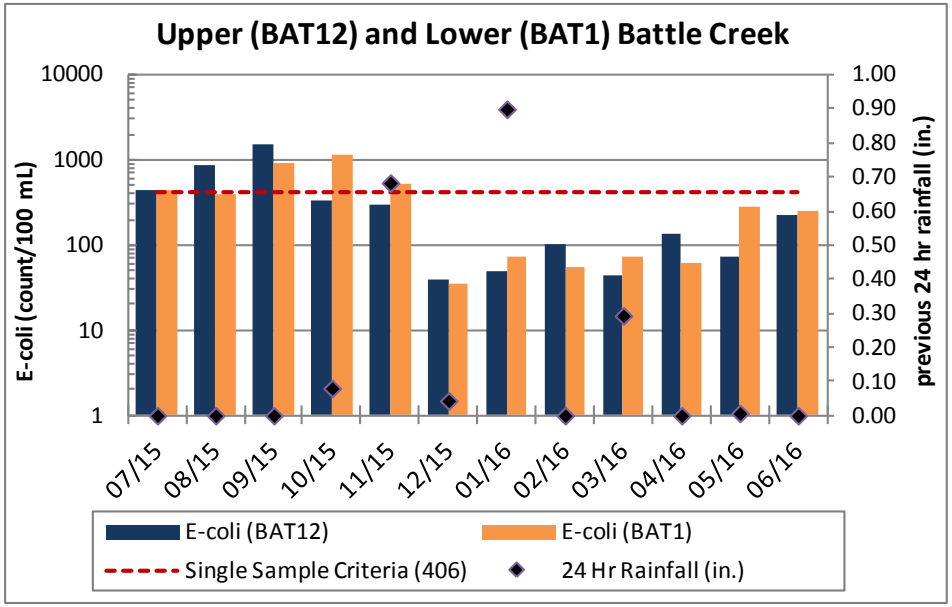
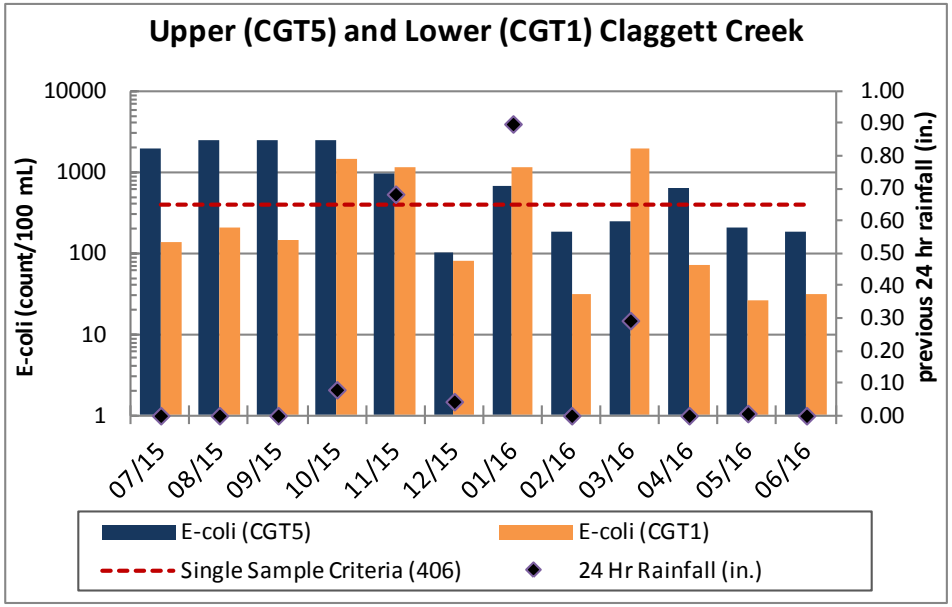


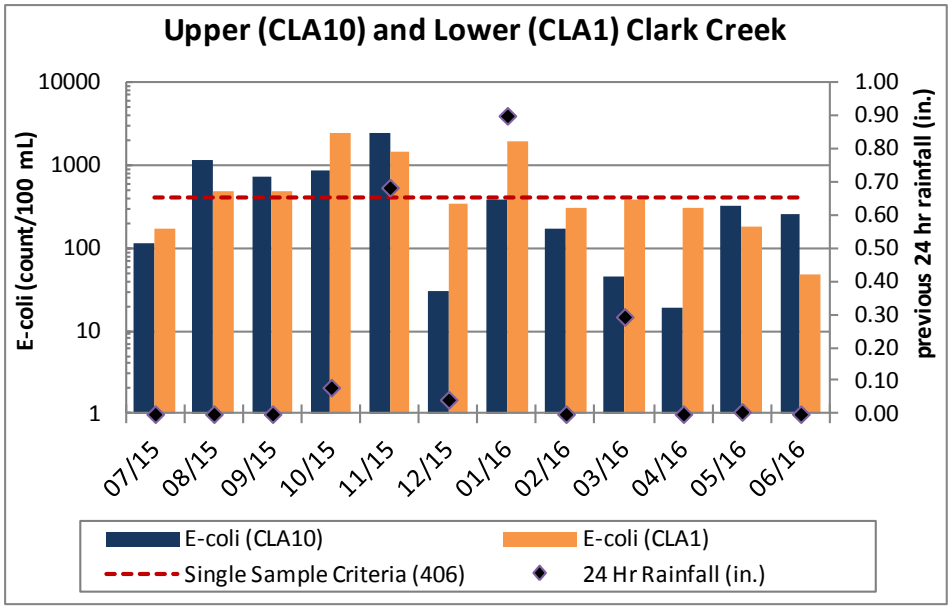
Dry conditions defined as less than 0.5 inches of rainfall in the 24 hours prior to sample collection; **rain** conditions defined as greater than or equal to 0.05 inches of rainfall in the 24 hours prior to sample collection.

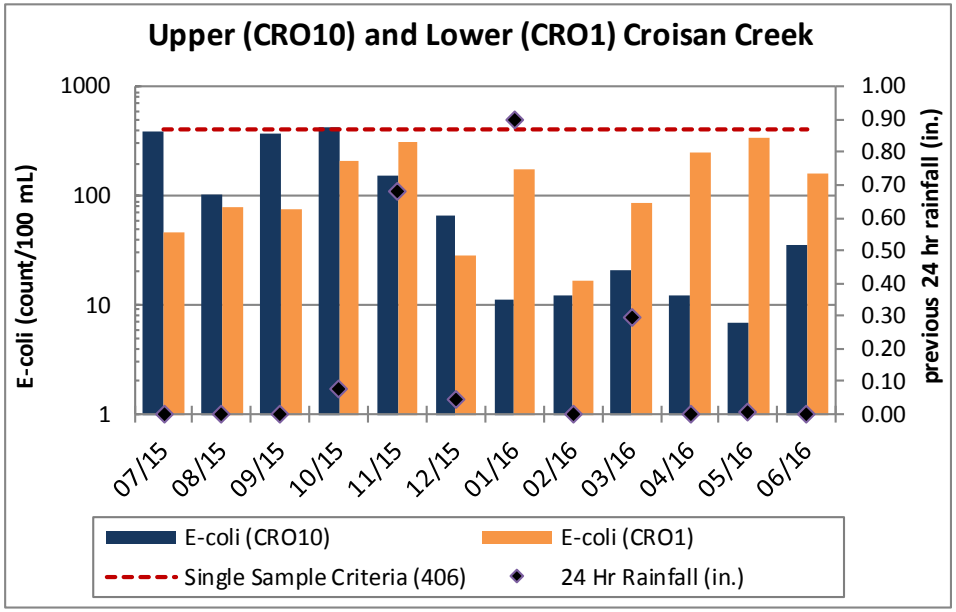
Figure 3

Monthly Instream E. Coli Upstream / Downstream Site Comparison (Reporting Year 2015/2016)





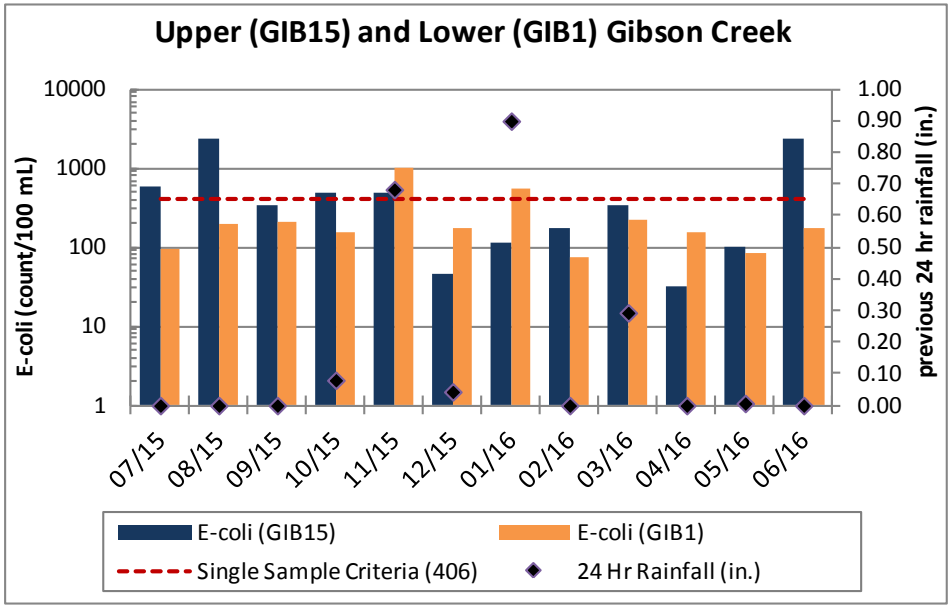


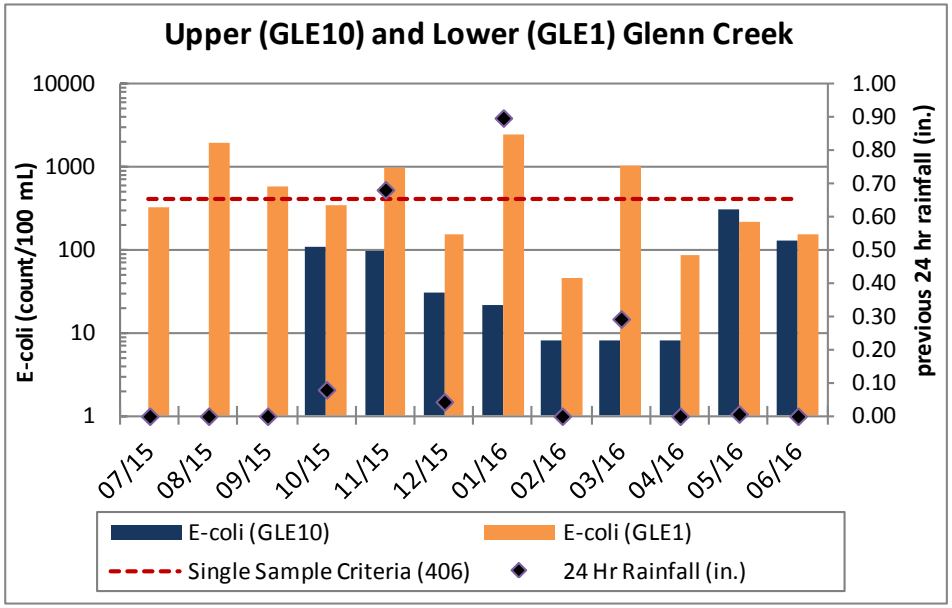


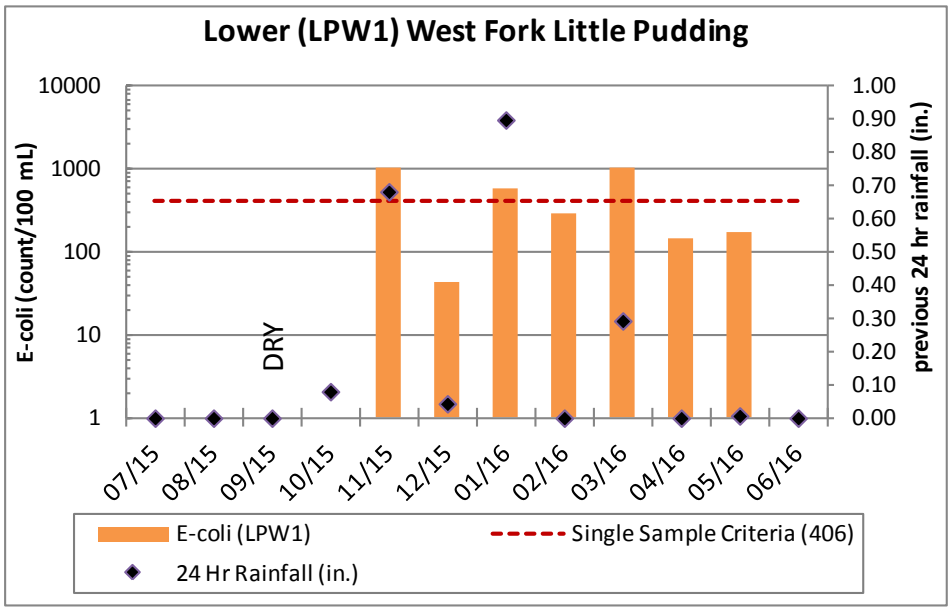
If 24 hour rainfall depth prior to sample collection differed between upstream and downstream sites, the average rainfall of the two sites was used.

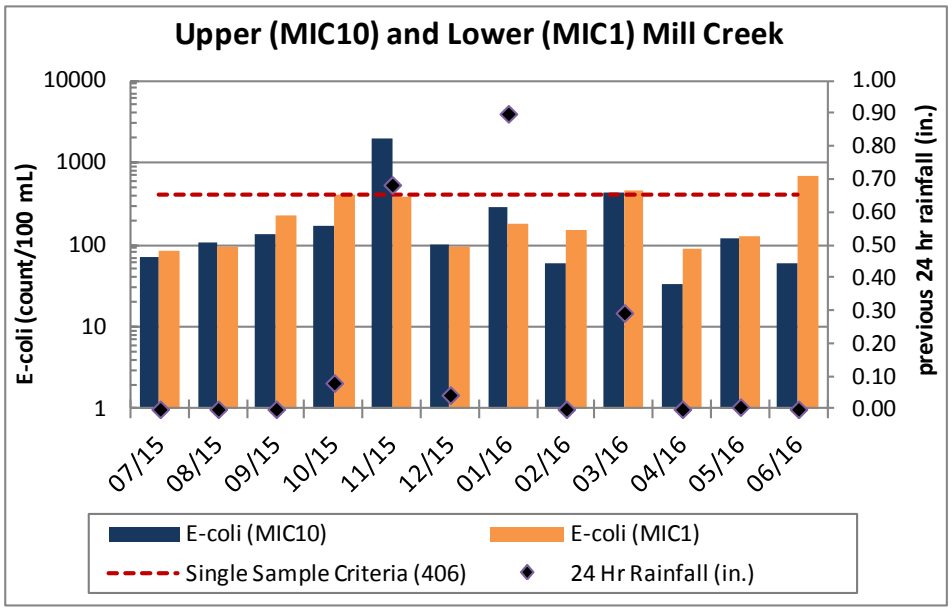
Figure 3

Monthly Instream E. Coli Upstream / Downstream Site Comparison (Reporting Year 2015/2016)









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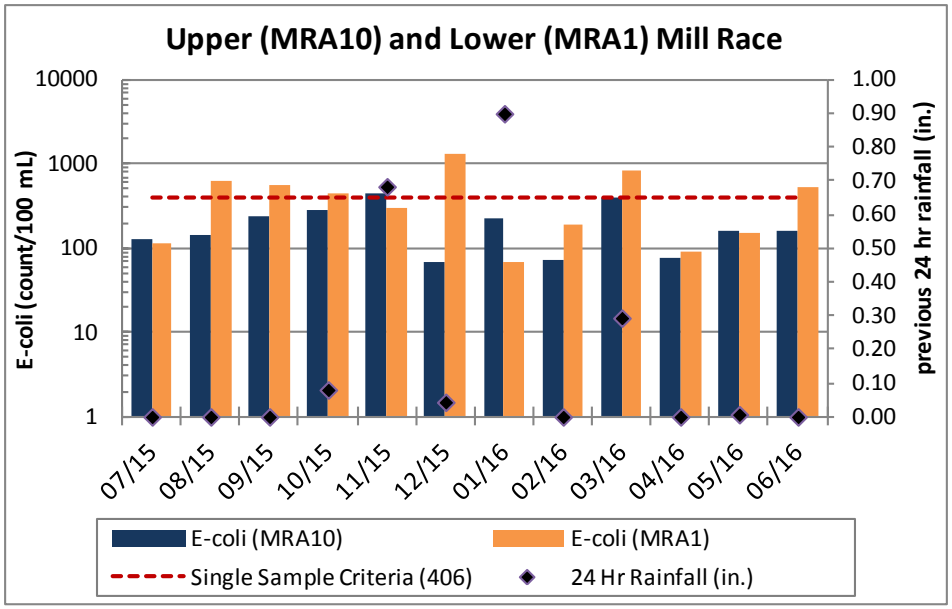
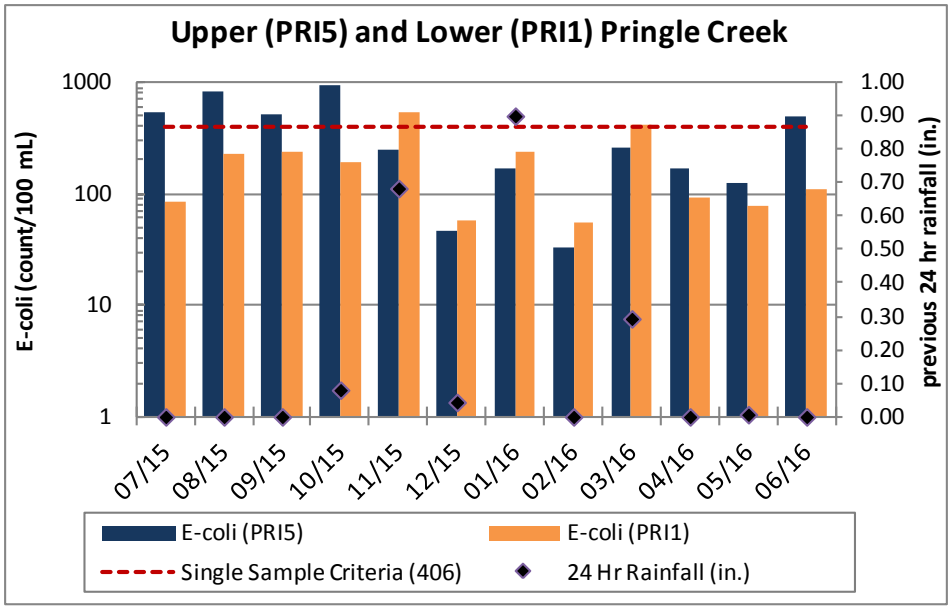
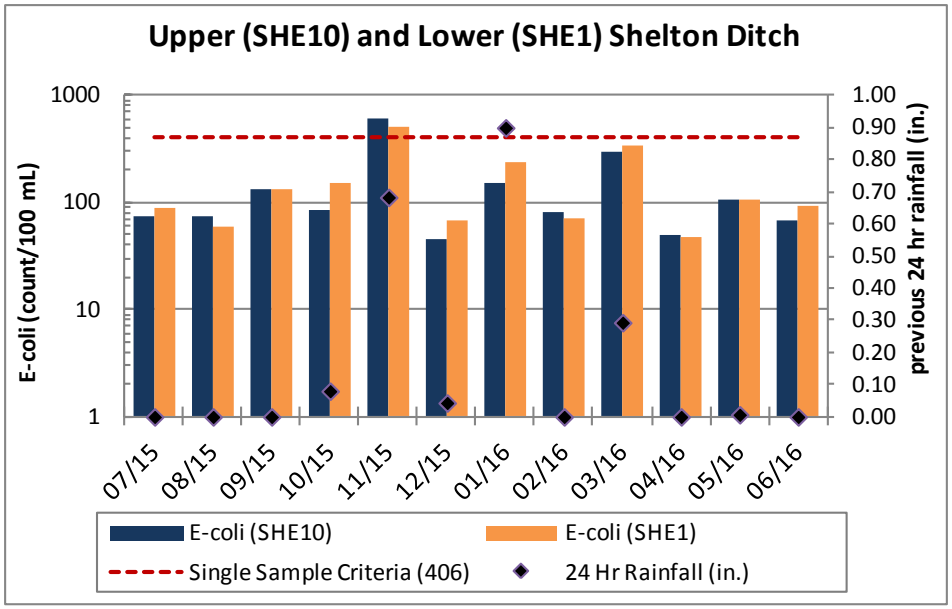
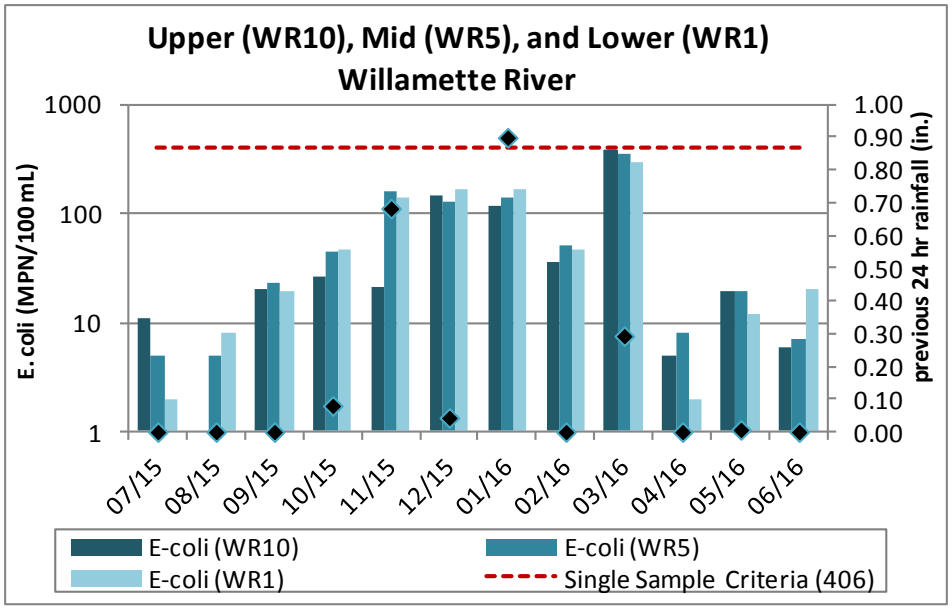




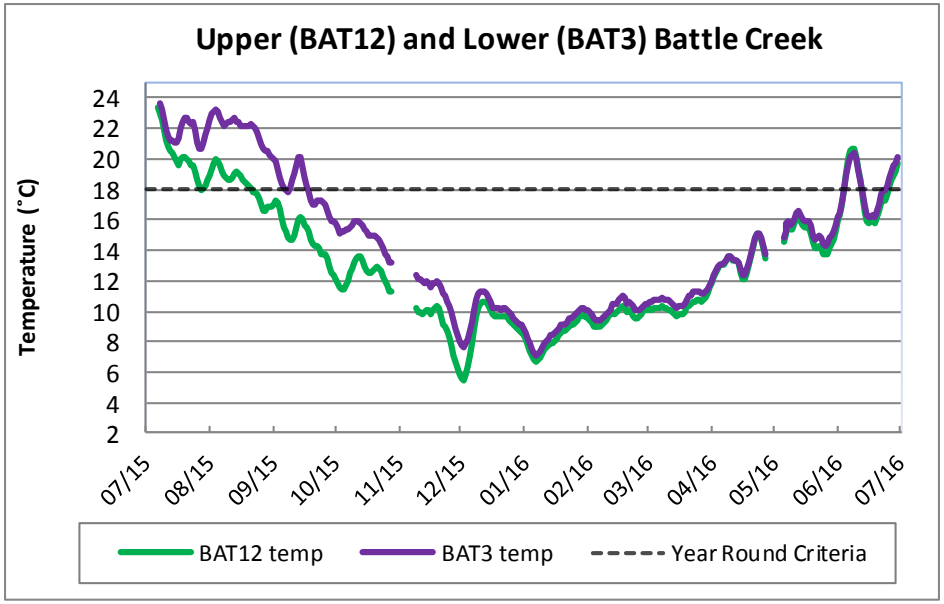


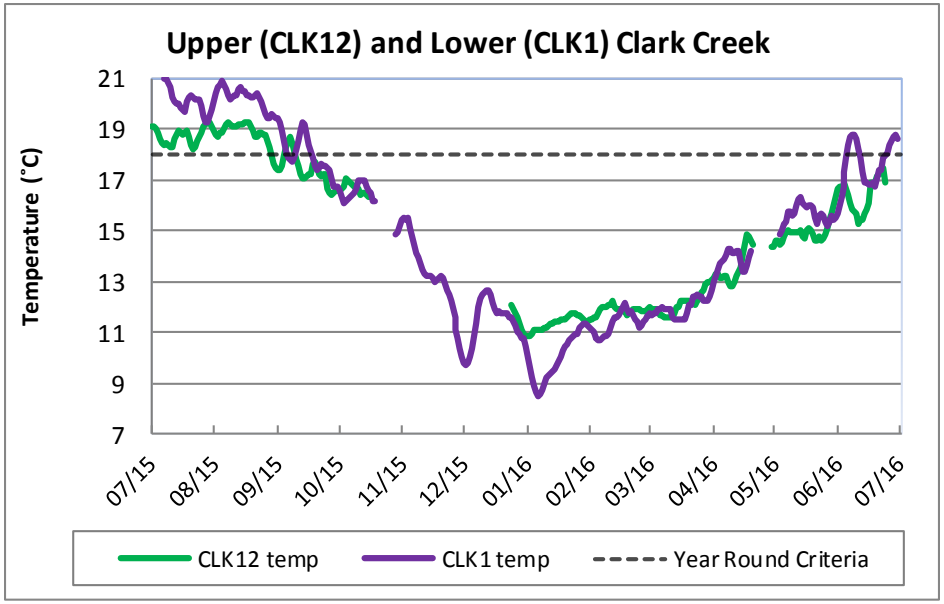


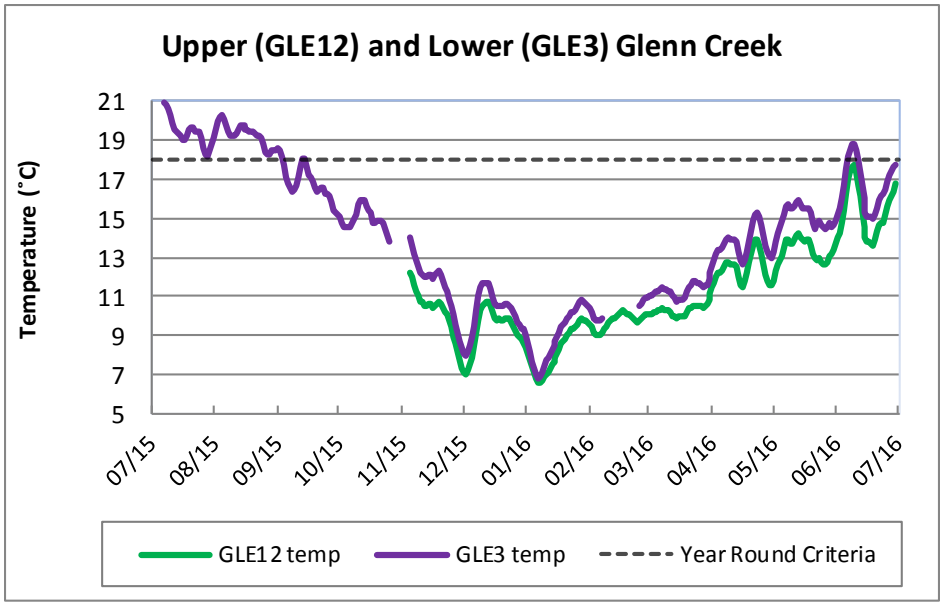
If 24 hour rainfall depth prior to sample collection differed between upstream and downstream sites, the average rainfall of the two sites was used.

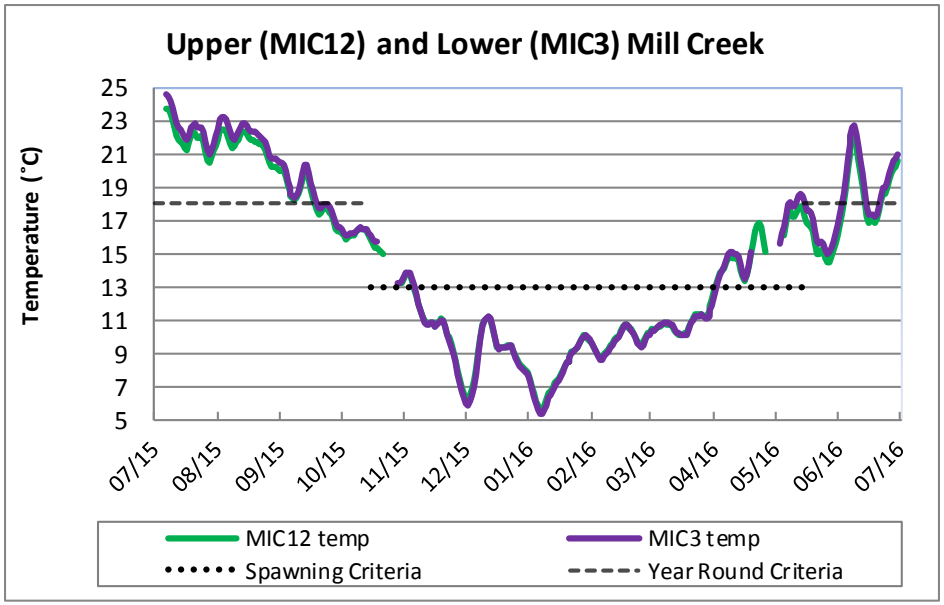
Figure 4

Continuous Instream Temperature 7-Day Moving Average Maximum (Reporting Year 2015/2016)







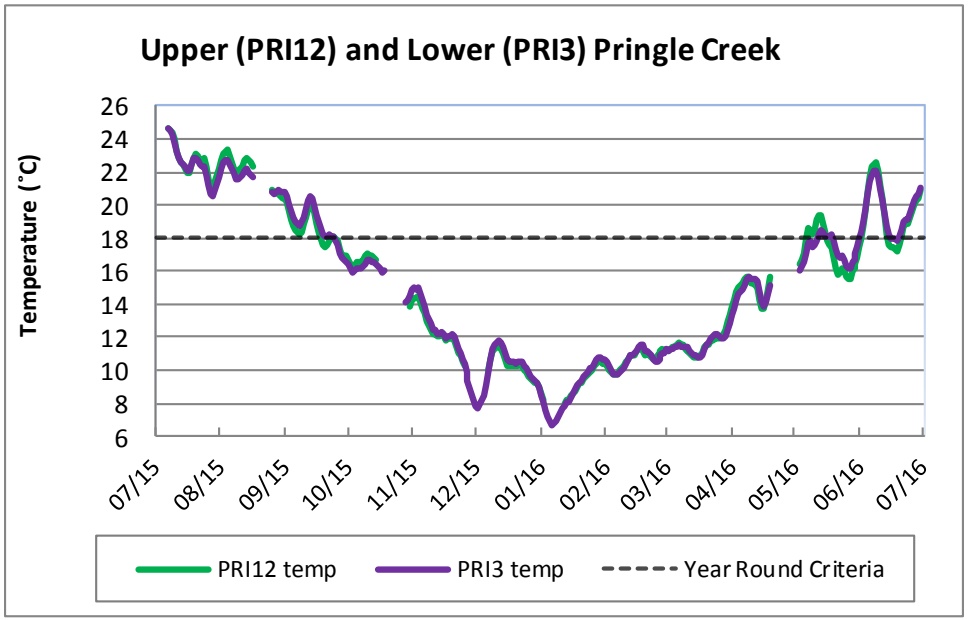


Presented temperature data consists of A grade data with greater than 80% of data points collected per day. Temperature criteria is defined in OAR 340--04100028 and OAR 340-0340, Tables 340A & B.

- Spawning Minimum Criteria for applicable streams may not exceed 7-day average maximum of 13 degrees C.
- Year Round Minimum Criteria may not exceed 7-day average maximum of 18 degrees C.

Figure 4

Continuous Instream Temperature 7-Day Moving Average Maximum (Reporting Year 2015/2016)

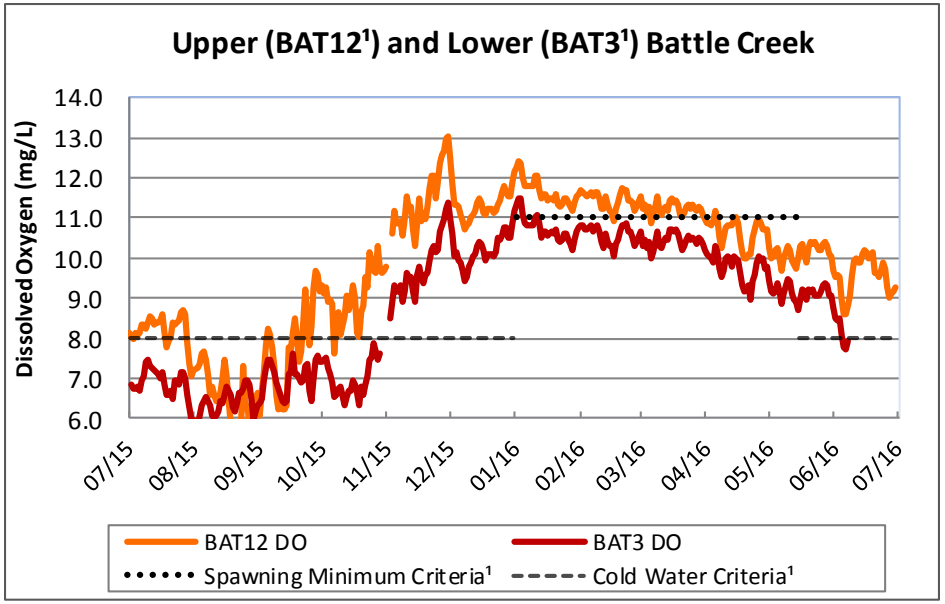


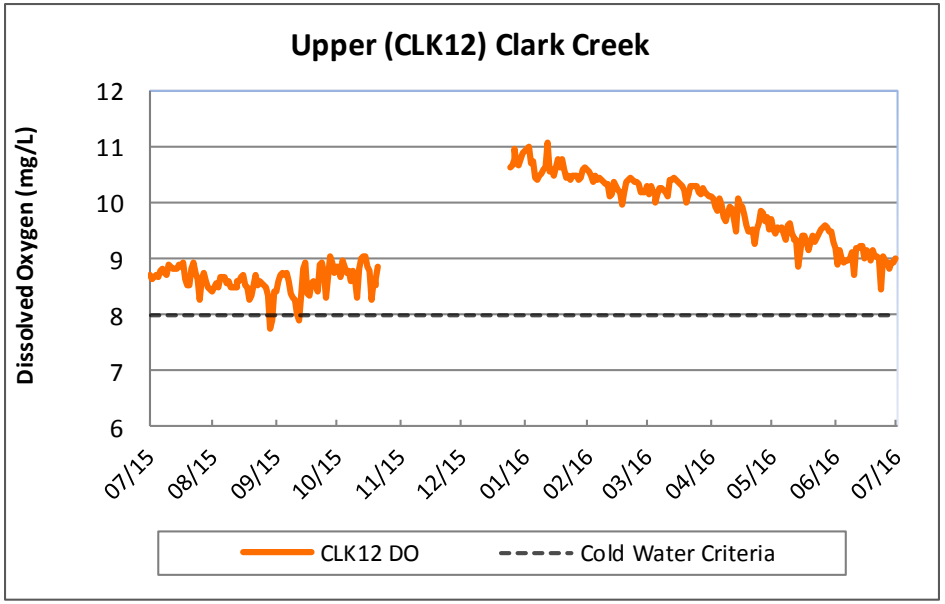
Presented temperature data consists of A grade data with greater than 80% of data points collected per day. Temperature criteria is defined in OAR 340--04100028 and OAR 340-0340, Tables 340A & B.

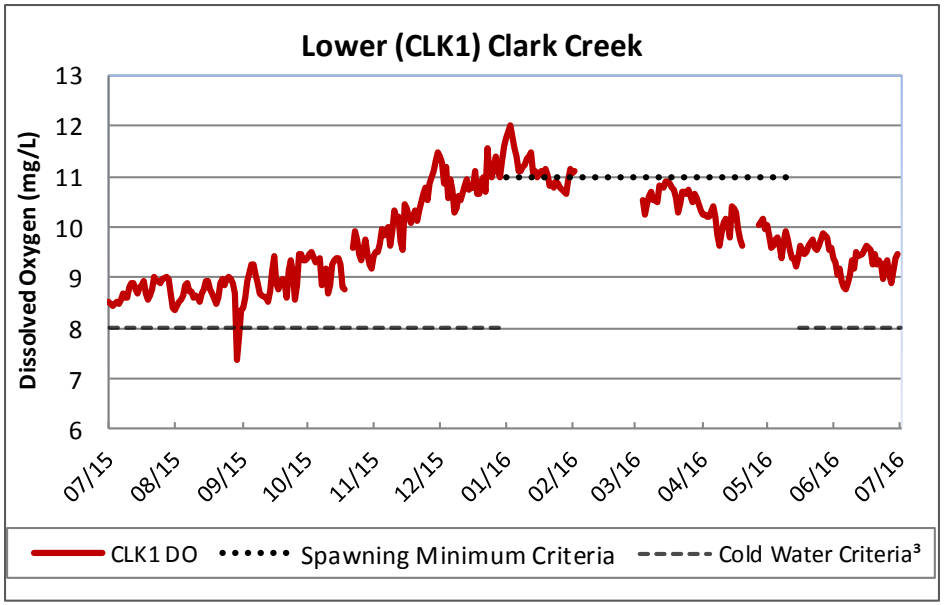
- Spawning Minimum Criteria for applicable streams may not exceed 7-day average maximum of 13 degrees C.
- Year Round Minimum Criteria may not exceed 7-day average maximum of 18 degrees C.

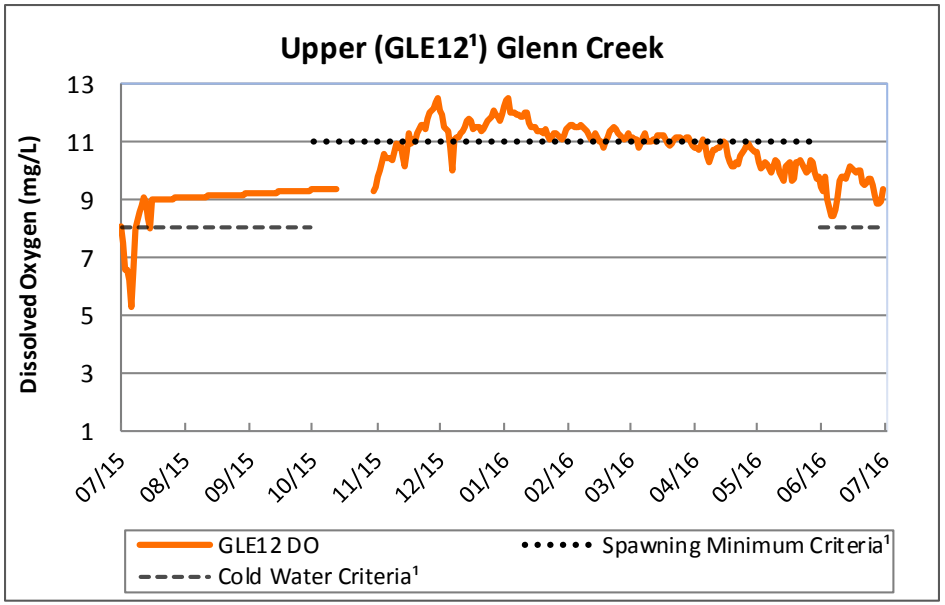
Figure 5

Continuous Instream Dissolved Oxygen Daily Mean (Reporting Year 2015/2016)









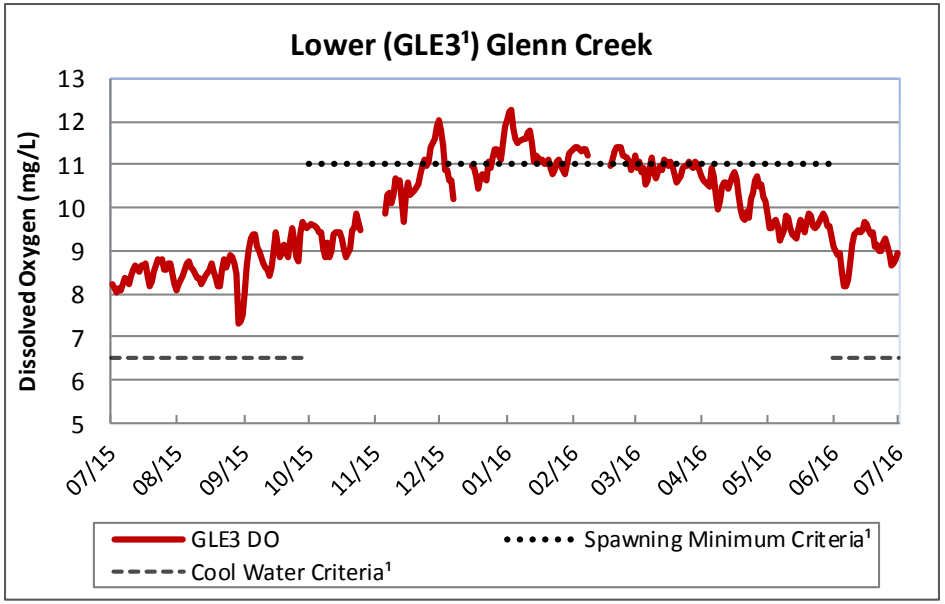
Presented DO data consists of A and B grade data with greater than or equal to 80% of data points collected per day. DO Criteria as defined in OAR 340-041-0016 and OAR 340-0340, Tables 340 A & B.

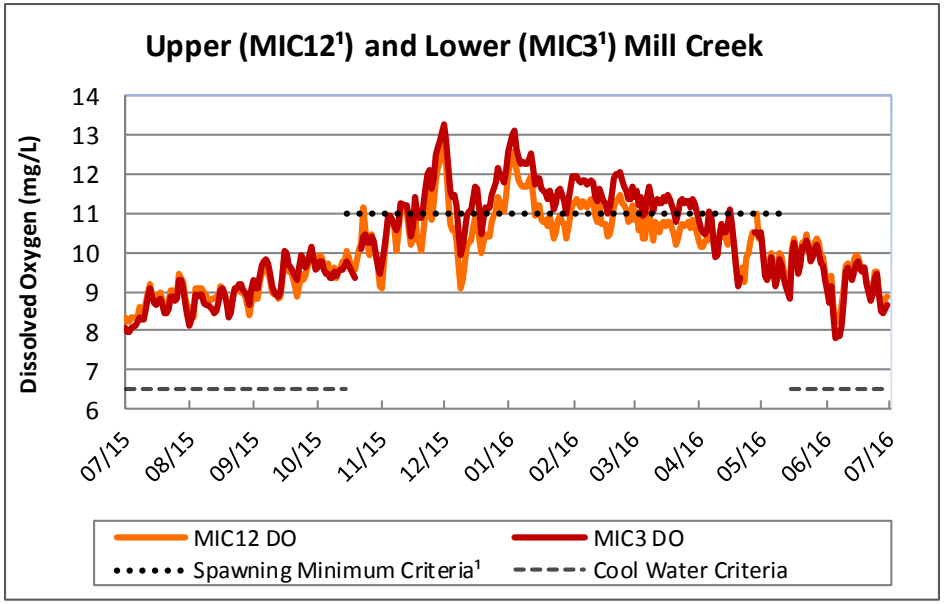
- Spawning Minimum Criteria for applicable streams may not be less than 11 mg/L.
- Oregon Cold Water Criteria for applicable streams may not be less than 8 mg/L.

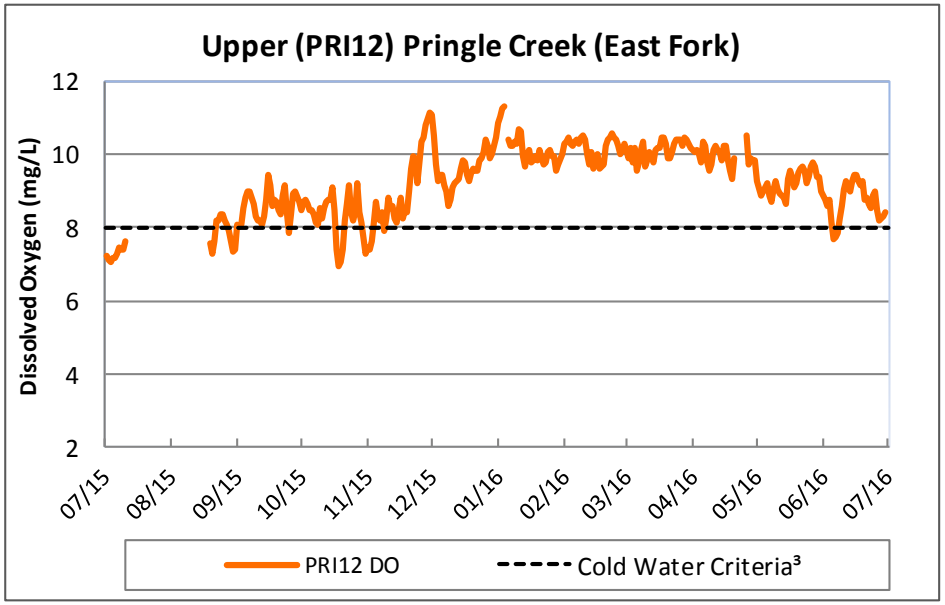
[1] Oregon's 2010 Integrated Report Section 303(d) listed.

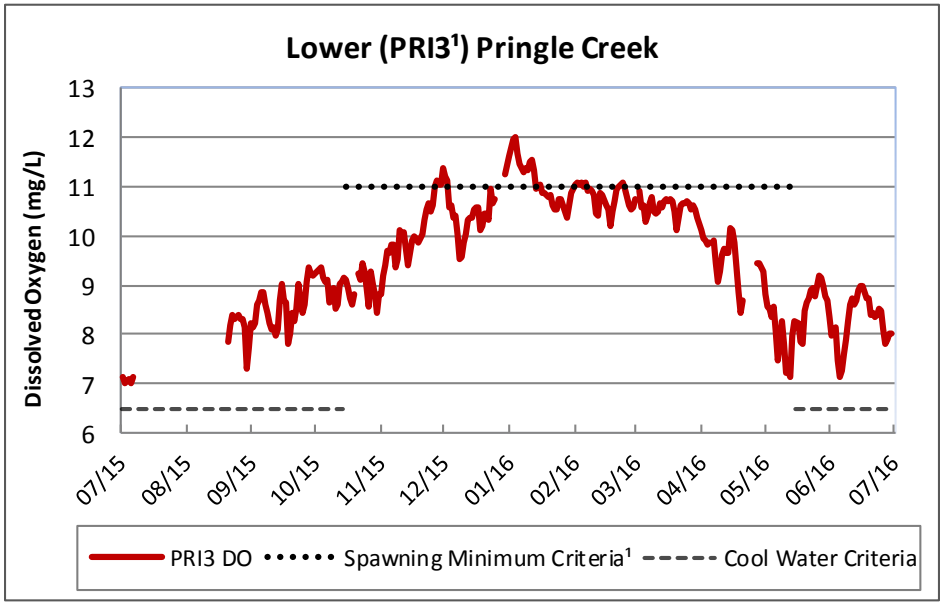
Figure 5

Continuous Instream Dissolved Oxygen Daily Mean (Reporting Year 2015/2016)









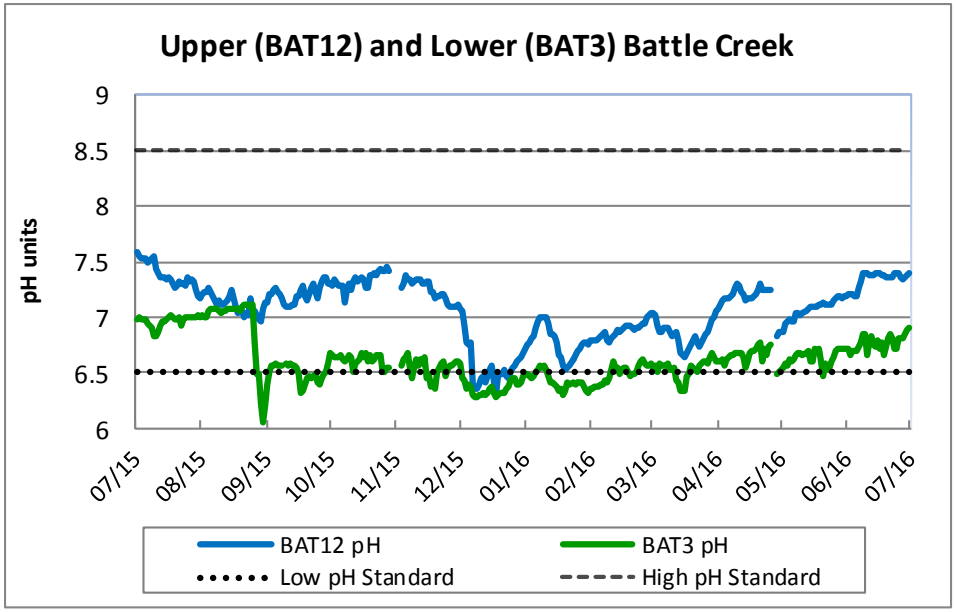
Presented DO data consists of A and B grade data with greater than or equal to 80% of data points collected per day. DO Criteria as defined in OAR 340-041-0016 and OAR 340-0340, Tables 340 A & B.

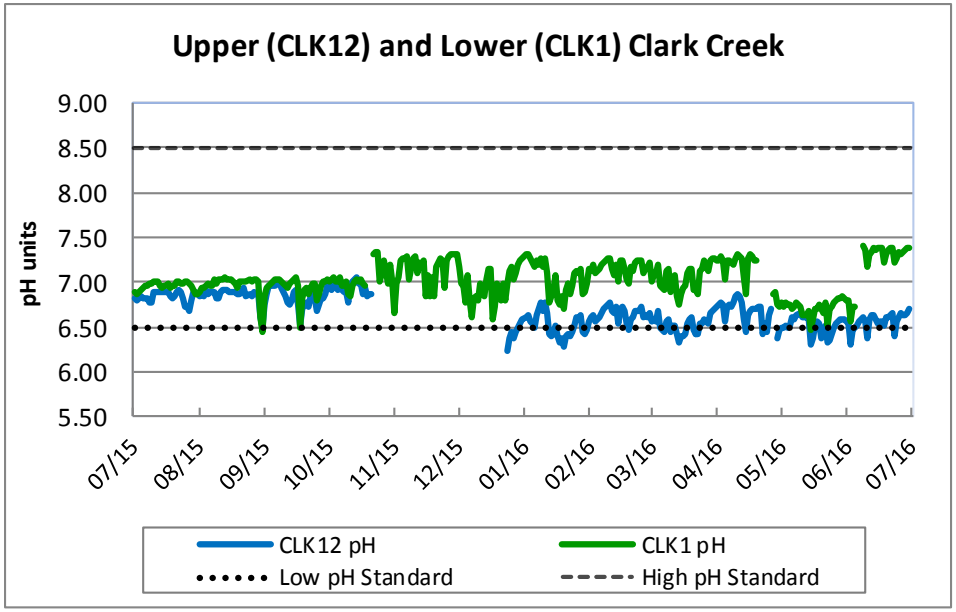
- Spawning Minimum Criteria for applicable streams may not be less than 11 mg/L.
- Oregon Cold Water Criteria for applicable streams may not be less than 8 mg/L.

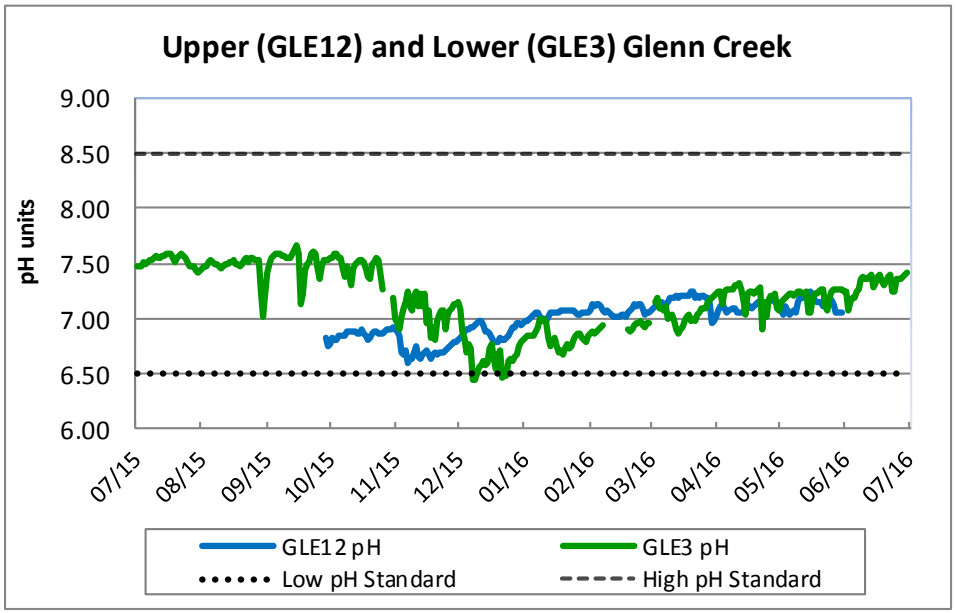
[1] Oregon's 2010 Integrated Report Section 303(d) listed.

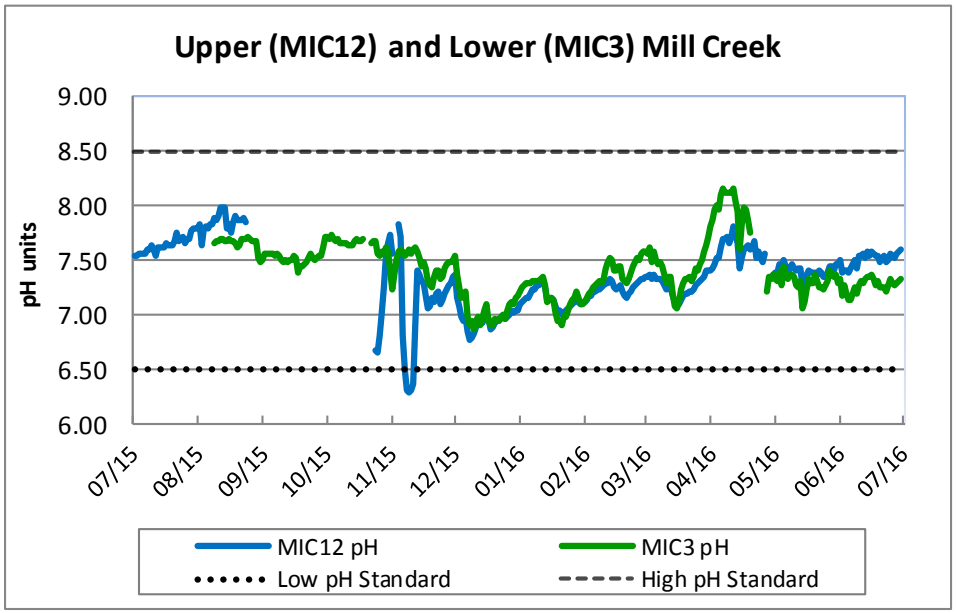
Figure 6

Continuous Instream pH Daily Mean (Reporting Year 2015/2016)



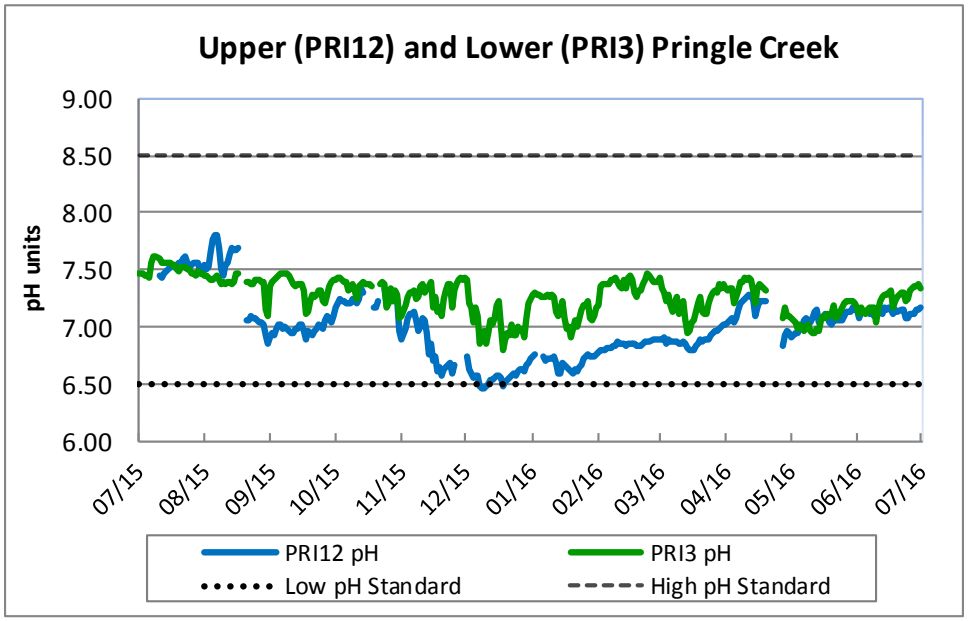






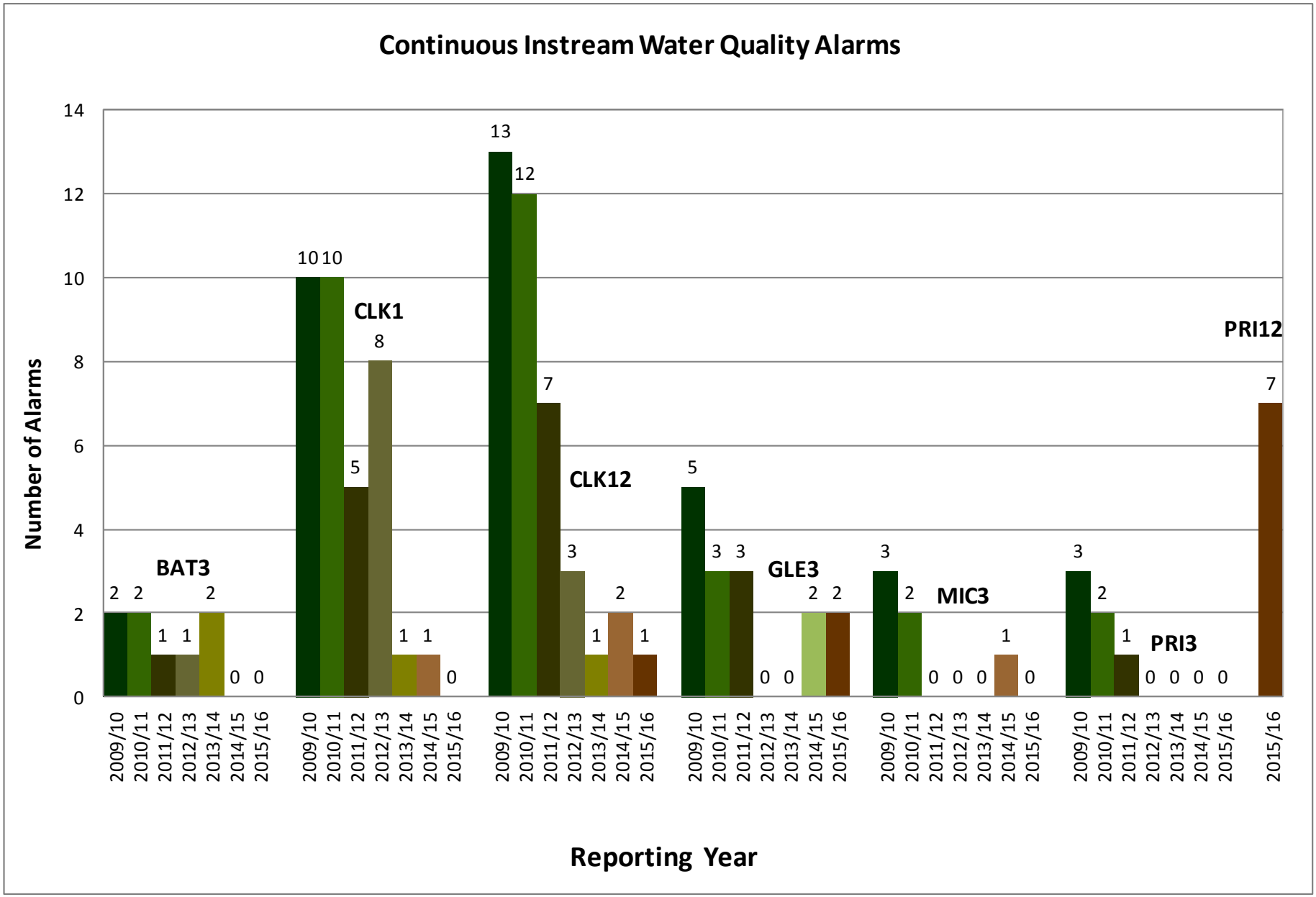
Presented pH data consist of A and B grade data with greater than or equal to 80% of data points collected per day.
As defined in OAR 341-041-0035 Water Quality Standards for the Willamette Basin, pH should not fall outside the ranges of 6.5 to 8.5 pH units.

Figure 6
Continuous Instream pH Daily Mean (Reporting Year 2015/2016)



Presented pH data consist of A and B grade data with greater than or equal to 80% of data points collected per day.
As defined in OAR 341-041-0035 Water Quality Standards for the Willamette Basin, pH should not fall outside the ranges of 6.5 to 8.5 pH units.

Figure 7
Continuous Instream Water Quality Alarms (Reporting Year 2009/2010 to 2015/2016)



Note: Alarm counts have been filtered to remove alarms that occurred during rain events, as well alarms that were erroneous or caused by sensor malfunction.

Table 1.
Completion of Table B-1 Environmental Monitoring Elements

Monitoring Type	# of sites	Total "Events" Needed	Completed 2010/2011	Completed 2011/2012	Completed 2012/2013	Completed 2013/2014	Completed 2014/2015	Completed 2015/2016	Remaining "Events" Needed
Monthly Instream	21	48 / site	12[1]	12[1]	12[1]	12[1]	12[1]	12[1]	COMPLETE
Continuous Instream	10	On going	NA	NA	NA	NA	NA	NA	COMPLETE
Instream Storm	3	25 / site	0[2]	6	6	5	4	4	COMPLETE
Stormwater (MS4)	3	15 / site	0[2]	4	4	4	1	2	COMPLETE
Pesticides	3	4 / site	0[2]	1	2	0	1	COMPLETE	
Mercury	2	2 / site / year	0[2]	2	1	1	COMPLETE[3]		
Macroinvertebrates	3	2 / site	0[2]	1	1	COMPLETE			

[1] Due to no flow or access issues, several of the sites had less than 12 data collection events; however, all sites are on track to meet the minimum permit requirements.

[2] The City's monitoring plan was not approved by the Department until June 29th, 2011; therefore, no sampling was conducted during this year for this element.

[3] Following Table B-1 Special Condition #6 of the City's NPDES MS4 permit, the City requested and received approval from Department to eliminate the mercury and methyl mercury monitoring requirement after completing the required two years of monitoring.

Table 2.
Site Locations for Each Monitoring Element

Monthly Instream	
Site ID	Site Location
BAT 1	Commercial St SE
BAT 12	Rees Hill Rd SE
CGT 1	Mainline Dr NE
CGT 5	Hawthorne St NE @ Hyacinth St NE
CLA 1	Bush Park
CLA 10	Ewald St SE
CRO 1	Courthouse Athletic Club
CRO 10	Ballantyne Rd S
GIB 1	Wallace Rd NW
GIB 15	Brush College Rd NW
GLE 1	River Bend Rd NW
GLE 10	Hidden Valley Dr NW
LPW 1	Cordon Rd NE
MIC 1	Front St Bridge
MIC 10	Turner Rd SE
MRA 1	High St SE
MRA 10	Mill Race Park
PRI 1	Riverfront Park
PRI 5	Bush Park
SHE 1	Church St SE
SHE 10	State Printing Office
WR1	Sunset Park (Keizer)
WR5	Union St. Railroad Bridge
WR10	Halls Ferry Road (Independence)

Continuous Instream	
Site ID	Site Location
BAT3	Commercial St SE
BAT12	Lone Oak Rd SE
CLK1[1]	Bush Park
CLK12	Ewald St SE
GLE3	Wallace Rd NW
GLE12	Hidden Valley Dr NW
LPW1[2]	Cordon Rd
MIC3	North Salem High School
MIC12	Turner Rd SE
PRI3[1]	Pringle Park
PRI4[2]	Salem Hospital Footbridge
PRI12[1]	Trelstad Ave SE
SHE3	Winter St. Bridge

Stormwater / Pesticides / Mercury	
Site Id	Site Location
Electric[3]	Electric St. SE and Summer St. SE
Hilfiker[3]	Hilfiker Ln. SE and Commercial St. SE
Salem Industrial	Salem Industrial Dr. NE and Hyacinth St. NE

[1] Instream Storm sampling done at these sites. [2] Stage-only gauging station. [3] Mercury monitoring conducted at these sites.

BAT = Battle Creek, CGT = Claggett Creek, CLA / CLK = Clark Creek, CRO = Croisan Creek, GIB = Gibson Creek, GLE = Glenn Creek, MIC = Mill Creek, MRA = Mill Race, PRI = Pringle Creek, SHE = Shelton Ditch, LPW = West Fork Little Pudding River, WR = Willamette River

Table 3.
Parameters for Each Monitoring Element

Parameter	Units	Monitoring Element			
		Instream Storm	Stormwater	Monthly Instream	Continuous Instream
Alkalinity	mg/L			x[1]	
Biological Oxygen Demand (BOD_{stream})	mg/L	x		x	
Biological Oxygen Demand (BOD_{5day})	mg/L		x		
Specific Conductivity (Sp. Cond)	µS/cm	x	x	x	x
Copper (Total Recoverable and Dissolved)	mg/L	x	x	x[2]	
Dissolved Oxygen (DO)	mg/L	x	x	x	x
E. coli	MPN/100 mL	x	x	x	
Hardness	mg/L	x	x	x[2]	
Lead (Total Recoverable and Dissolved)	mg/L	x	x	x[2]	
Ammonia Nitrogen (NH_3-N)	mg/L	x	x	x[1]	
Nitrate and Nitrite (NO_3-NO_2)	mg/L	x	x	x	
pH	S.U.	x	x	x	x
Total Dissolved Solids (TDS)	mg/L			x[1]	
Temperature	˚C	x	x	x	x
Total Phosphorus (TP)	mg/L	x	x	x[1]	
Ortho Phosphorus	mg/L	x	x		
Total Solids (TS)	mg/L			x[1]	
Total Suspended Solids (TSS)	mg/L	x	x	x[1,3]	
Turbidity	NTU			x	x
Zinc (Total Recoverable and Dissolved)	mg/L	x	x	x[2]	

[1] Willamette River sites only (WR1, WR5, and WR10).

[2] Pringle Creek Watershed sites only (PRI1, PRI5, CLA1, and CLA10).

[3] West Fork of Little Pudding River site only (LPW 1).

Table 4.
Water Quality Criteria for Monitored Streams

Parameter	Season	Criteria	Applicable Waterbody
Dissolved Oxygen	January 1-May 15	Spawning: Not less than 11.0 mg/L or 95% saturation	Battle Creek*, Claggett Creek*, Clark Creek*[3], Croisan Creek*, Glenn Creek*, West Fork Little Pudding River*
	October 1- May 31	Spawning: Not less than 11.0 mg/L or 95% saturation	Gibson Creek*□, Willamette River
	October 15 - May 15	Spawning: Not less than 11.0 mg/L or 95% saturation	Mill Creek*, Pringle Creek*[1], Shelton Ditch*
	Year Around (Non-spawning)	Cold water: Not less than 8.0 mg/L or 90% saturation	Battle Creek*, Croisan Creek*, Clark Creek, Glenn Creek*[4], Pringle Creek²
		Cool water: Not less than 6.5 mg/L	Claggett Creek*, Glenn Creek*, Mill Creek, Pringle Creek[1], Shelton Ditch, West Fork Little Pudding River
pH	Year Around	Must be within the range of 6.5 to 8.5 pH units	All Monitoring Streams
Temperature	October 15 - May 15	Salmon and steelhead spawning: 13˚C 7-day average maximum	Mill Creek, Shelton Ditch
	October 1- May 31	Salmon and steelhead spawning: 13˚C 7-day average maximum	Gibson Creek□
	Year Around (Non-spawning)	Salmon and trout rearing and migration: 18˚C 7-day average maximum	All Monitoring Streams
E. coli	Fall-Winter-Spring	30 day log mean of 126 E. coli organisms per 100 ml (or) no single sample > 406 organisms per 100 ml	All Monitoring Streams
	Summer	30 day log mean of 126 E. coli organisms per 100 ml (or) no single sample > 406 organisms per 100 ml	All Monitoring Streams
Biological Criteria	Year Around	Waters of the state must be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities.	Claggett Creek*, Clark Creek*, Croisan Creek*, Glenn Creek*, Pringle Creek Trib*, Willamette River*
Copper	Year Around	Freshwater Acute and Chronic Criteria: 18 and 12 µg/L respectively with values calculated for a hardness of 100 mg/L	Pringle Creek*
Lead	Year Around	Freshwater Acute and Chronic Criteria: 82 and 3.2 µg/L respectively with values calculated for a hardness of 100 mg/L	Pringle Creek*
Zinc	Year Around	Freshwater Acute and Chronic Criteria: 120 and 110 µg/L respectively with values calculated for a hardness of 100 mg/L	Pringle Creek*

Note: All waterbodies in this table are included under the Willamette Basin or Molalla-Pudding Subbasin TMDL for Temperature and E. coli.

* Oregon's 2010 Integrated Report Section 303(d) listed.

□ Gibson Creek is referred as Gibson Gulch in Oregon's 2010 Integrated Report.

¹ Applies to Pringle Creek from river mile 0 to 2.6.

² Applies to Pringle Creek from river mile 2.6 to 6.2.

³ Applies to Clark Creek from river mile 0 to 1.9.

⁴ Applies to Glenn Creek from river mile 4.1 to 7.

Table 5.
Median Values for Monthly Instream Sites (RY 2015/16)

Site ID	Number of Samples	Temperature (C)	DO (mg/L)	Sp. Cond (µS/cm)	Turbidity (NTUs)	pH (S.U.)	E. Coli (MPN/100 mL)	NO_3-NO_2 (mg/L)	BOD_{stream} (mg/L)
BAT 1	12	13.5	9.5	51.5	15.7	6.6	262.5	0.78	1.19
BAT 12	12	11.9	10.1	47.8	7.9	7.0	180.0	0.69	0.96
CGT 1	12	16.1	8.5	172.1	6.3	7.2	140.5	0.38	1.77
CGT 5	12	14.6	8.7	98.7	19.8	7.2	668.0	0.46	1.67
CLA 1	12	14.1	9.9	93.2	3.0	7.3	366.0	0.95	0.96
CLA 10	12	13.7	9.4	71.2	3.4	6.8	293.5	1.62	1.18
CRO 1	12	12.7	9.8	74.9	7.1	7.0	124.5	0.63	1.14
CRO 10	12	12.1	9.6	56.4	10.2	6.8	50.5	0.67	1.11
GIB 1	12	14.4	9.4	92.7	8.8	7.2	175.0	1.30	0.94
GIB 15	12	13.5	9.5	95.4	9.6	7.3	345.0	1.83	1.01
GLE 1	12	13.6	9.6	94.1	8.2	7.3	335.5	1.04	0.88
GLE 10	9	11.0	10.5	61.6	7.9	7.3	30.0	2.07	0.75
LPW 1	7	11.0	9.3	176.6	6.8	7.0	285.0	1.13	1.16
MIC 1	12	14.1	10.1	74.5	3.6	7.1	163.0	1.03	1.18
MIC 10	12	13.6	10.4	72.9	5.0	7.5	113.0	1.20	1.11
MRA 1	12	14.1	10.3	72.5	5.9	7.3	367.0	1.17	1.26
MRA 10	12	13.9	9.7	73.7	5.5	6.8	159.0	1.17	1.10
PRI 1	12	14.1	10.2	75.8	4.8	7.2	152.5	1.36	1.12
PRI 5	12	15.2	9.8	87.3	5.3	7.5	254.5	0.71	1.29
SHE 1	12	13.9	10.3	74.8	4.4	7.4	99.0	1.20	1.09
SHE 10	12	13.8	10.2	73.2	5.7	6.9	83.5	1.31	1.09
WR1	12	16.1	11.1	68.5	6.9	7.6	33.0	0.33	1.02
WR5	12	14.2	10.2	66.4	5.6	7.3	33.5	0.28	0.88
WR10	12	14.5	10.7	67.8	5.9	7.5	20.5	0.27	1.02

Table 6.

Number of Water Quality Criteria Exceedances for Monthly Instream Sites (RY 2015/16)

Site ID	Number of Samples	Dissolved Oxygen	pH	E. Coli[5]			Copper[6]		Lead[6]		Zinc[6]	
				Total #	Dry[2]	Rain[3]	Total	Dissolved	Total	Dissolved	Total	Dissolved
BAT 1	12	8	6	4	2	2						
BAT 12	12	6	2	3	3							
CGT 1	12	6		4	4							
CGT 5	12	1		7	4	3						
CLA 1	12	1		5	2	3	1				1	
CLA 10	12		4	4	2	2					1	1
CRO 1	12	5										
CRO 10	12	6	3	1		1						
GIB 1	12	6[1]		2		2						
GIB 15	12	7[1]		5	3	2						
GLE 1	12	3		5	2	3						
GLE 10[4]	9	3										
LPW 1[4]	7	3		3		3						
MIC 1	12	5	1	3	1	2						
MIC 10	12	6		2		2						
MRA 1	12	NA		6	4	2						
MRA 10	12	NA	1	1		1						
PRI 1	12	3		2		2						
PRI 5	12	5		5	4	1						
SHE 1	12	3		1		1						
SHE 10	12	4	2	1		1						
WR1	12	4										
WR5	12	4	1									
WR10	12	7										

Note: Copper, lead, and zinc collected at Pringle Creek Watershed sites only (PRI1, PRI5, CLA1, and CLA10).

NA = Not available (No dissolved oxygen water quality criteria associated with this waterbody).

[1] No year-round dissolved oxygen water quality criteria associated with this waterbody

[2] Dry is < 0.05 inches of rainfall in previous 24 hours.

[3] Rain is ≥ 0.05 inches of rainfall in previous 24 hours.

[4] Unable to sample all 12 due to lack of flow/too high of flow.

[5] Single sample criterion of > 406 organisms per 100 mL used.

[6] Exceedences calculated based on hardness concentration for each event.

Table 7.
Monthly Instream Data - Battle Creek (RY 2015/16)

Site Name:	BAT1								
Site Description:	Commercial St								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 11:30	18.9	6.65	72.1	22	6.7	435	0.26	1.18	0.00
8/18/2015 12:43	20.4	6.65	63.2	15.9	6.81	387	0.17	1.46	0.00
9/15/2015 10:27	13.4	7.14	67.4	20.2	6.8	921	0.15	1.38	0.00
10/20/2015 10:55	14.4	6.84	60	20.9	6.49	1120	0.16	2.12	0.08
11/17/2015 11:00	11.8	9.32	51	10.9	6.35	517	0.74	1.52	0.68
12/15/2015 11:00	9.4	10.56	54.9	15.5	6.14	36	2.88	0.87	0.04
1/19/2016 11:45	8.8	10.46	40.4	25.3	5.85	71	1.69	1.2	0.90
2/16/2016 11:27	10.4	10.47	48.2	4.6	6.41	55	2.06	0.83	0.00
3/15/2016 10:45	9.1	10.89	45	16.5	6.43	74	1.85	1.4	0.29
4/19/2016 11:15	13.5	9.69	47.2	5.26	6.69	61	1.19	0.99	0.00
5/17/2016 0:00	13.8	9.59	47.8	5.89	6.84	276	0.81	1.18	0.01
6/21/2016 10:35	15	8.68	52	6.72	6.81	249	0.6	0.92	0.00
Median	**13.45**	**9.46**	**51.50**	**15.70**	**6.59**	**263**	**0.78**	**1.19**	

Site Name:	BAT12								
Site Description:	Rees Hill Rd.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 11:05	18.3	7.85	66.7	12	7.24	435	0.16	1.04	0.00
8/18/2015 10:45	16.5	5.57	74.1	9.12	7.1	866	0.12	7.8	0.00
9/15/2015 10:10	11.1	8.07	75.6	9.38	7.27	1553	0.1	1.11	0.00
10/20/2015 10:45	13	8.73	71.9	5.68	7.1	326	<0.05	3.13	0.08
11/17/2015 10:40	10.1	10.05	49.6	7.63	6.62	291	0.42	1.1	0.68
12/15/2015 10:45	8.9	10.82	52.5	6.63	6.17	40	3.11	0.93	0.04
1/19/2016 11:35	8.7	10.55	45.9	17	6.22	50	2.44	0.8	0.90
2/16/2016 11:05	9.9	10.7	45.5	2.94	6.75	102	2.42	0.98	0.00
3/15/2016 10:30	8.8	10.82	43.2	14.5	6.5	45	2.09	0.94	0.29
4/19/2016 11:00	12.7	10.24	42.5	3.77	6.91	132	1.37	0.87	0.00
5/17/2016 10:38	13	10.23	42.1	4.46	7.05	72	0.69	0.7	0.01
6/21/2016 10:20	15.2	9.35	45.4	8.15	7.14	228	0.25	0.82	0.00
Median	**11.90**	**10.14**	**47.75**	**7.89**	**6.98**	**180**	**0.69**	**0.96**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.

Monthly Instream Data - Claggett Creek (RY 2015/16)

Site Name:	CGT1								
Site Description:	Mainline Dr S								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 13:10	23	5.8	210.5	4.38	7.24	133	<0.05	1.86	0.00
8/18/2015 13:40	23.3	7.68	206	4.46	7.63	201	<0.05	1.42	0.00
9/15/2015 11:37	16.3	3.44	154.9	6.12	7.32	148	0.05	4.47	0.00
10/20/2015 12:30	15.9	4.64	139.9	11.3	7.04	1414	0.13	2.58	0.08
11/17/2015 12:40	11.3	8.83	66.3	15.5	6.9	1120	0.32	1.76	0.68
12/15/2015 12:30	8.7	9.2	155.4	7.65	7.03	81	1.93	1.19	0.04
1/19/2016 14:05	8.3	NA	48	28	6.68	1120	0.44	1.78	0.90
2/16/2016 13:15	12	10.77	188.8	6.55	7.33	31	0.86	1.3	0.00
3/15/2016 12:45	9.5	10.81	104	13.8	7.06	1986	0.68	1.94	0.29
4/19/2016 13:45	19	7.86	223.2	5.34	7.26	72	0.45	1.6	0.00
5/17/2016 13:20	18.6	8.47	197.3	4.82	7.21	26	0.28	1.75	0.01
6/21/2016 12:20	20.3	9.2	212.7	5.76	7.4	32	0.19	1.79	0.00
Median	**16.10**	**8.47**	**172.10**	**6.34**	**7.23**	**141**	**0.38**	**1.77**	

Site Name:	CGT5								
Site Description:	Hawthorne Ave								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 12:55	20.9	7.79	74.9	46.7	7.29	1986	<0.05	1.47	0.00
8/18/2015 13:43	22.5	7.93	90.4	27.1	7.58	2420	<0.05	1.61	0.00
9/15/2015 11:20	13.9	6.86	97.6	49.3	7.19	>2420	<0.05	2.07	0.00
10/20/2015 12:15	15.3	6.92	85.1	25.4	6.99	>2420	0.08	3.34	0.08
11/17/2015 12:25	12	9.28	60.9	23.2	6.89	980	0.54	2.33	0.68
12/15/2015 12:15	9.2	10.55	164.9	12.8	7.03	102	3.14	1.2	0.04
1/19/2016 13:40	8.3	NA	39.3	33.2	6.57	687	0.46	2.49	0.90
2/16/2016 13:00	12.1	11.58	175.8	9.43	7.83	187	1.15	1.14	0.00
3/15/2016 12:25	9.5	11.12	106.9	16.4	6.98	248	0.99	1.69	0.29
4/19/2016 13:12	18.7	10.09	179.6	6.08	7.85	649	0.09	1.84	0.00
5/17/2016 12:55	17.1	8.72	117.3	15.2	7.54	210	0.18	1.64	0.01
6/21/2016 12:05	17	8.57	99.7	15.6	7.36	187	0.08	1.41	0.00
Median	**14.60**	**8.72**	**98.65**	**19.80**	**7.24**	**668**	**0.46**	**1.67**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.
Monthly Instream Data - Clark Creek (RY 2015/16)

Site Name:	CLA1								
Site Description:	Bush Park								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 10:05	18.2	9.03	97.6	3.93	7.03	167	0.69	0.84	0.00
8/18/2015 9:55	17.8	8.84	94.2	2.72	7.38	488	0.59	0.98	0.00
9/15/2015 10:00	14.64	9.49	93.2	2.16	7.33	488	0.54	0.78	0.00
10/20/2015 10:05	15.3	9.07	91	2.72	7.13	>2420	0.56	1.16	0.08
11/17/2015 10:25	12.6	9.96	74.8	9	7.31	1414	0.98	2.45	0.68
12/15/2015 10:10	11	10.68	101	6.32	7.33	345	2.52	1.16	0.04
1/19/2016 10:43	8.7	11.11	43	27.1	6.87	1986	0.91	1.82	0.90
2/16/2016 10:40	11.3	10.8	96.6	3.09	7.47	308	1.96	0.76	0.00
3/15/2016 10:15	10	11.08	75	10.7	7.19	387	1.42	1.47	0.29
4/19/2016 10:56	14	NA	97.8	2.32	7.4	308	1.48	0.9	0.00
5/17/2016 10:05	14.1	9.88	93.2	2.35	7.35	178	1.11	0.93	0.01
6/21/2016 9:55	15.5	9.62	88.6	2.88	7.5	47	0.83	0.76	0.00
Median	**14.05**	**9.88**	**93.20**	**2.99**	**7.33**	**366**	**0.95**	**0.96**	

Site Name:	CLA1						
Site Description:	Bush Park						
Collection Date/Time	Total Copper (mg/L)	Dissolved Copper (mg/L)	Total Lead (mg/L)	Dissolved Lead (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)	Hardness
7/21/2015 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0043	0.0073	40
8/18/2015 9:55	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0042	0.0031	32
9/15/2015 10:00	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0041	0.0028	34
10/20/2015 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0104	0.0095	31
11/17/2015 10:25	0.0033	0.0026	< 0.0005	< 0.0005	0.019	0.0153	23
12/15/2015 10:10	< 0.0025	< 0.0025	< 0.0010	< 0.0010	0.0108	0.0085	30
1/19/2016 10:43	0.0037	< 0.0025	0.0019	< 0.0005	0.0302	0.0157	18
2/16/2016 10:40	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0093	0.0079	32
3/15/2016 10:15	< 0.0025	< 0.0025	0.0005	< 0.0005	0.0171	0.0127	24
4/19/2016 10:56	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0098	0.0085	32
5/17/2016 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0095	0.0074	29
6/21/2016 9:55	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0045	0.0037	27
Median	**NA**	**NA**	**NA**	**NA**	**0.0097**	**0.0082**	**30.50**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

NA= Medians not calculated for copper and lead due to the large number of censored values.

Table 7.
Monthly Instream Data - Clark Creek (RY 2015/16)

Site Name:	CLA10								
Site Description:	Ewald Ave								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:51	16.8	8.96	70.2	3.64	7.05	113	1.16	0.83	0.00
8/18/2015 8:48	17.6	8.44	70.8	3.85	7.13	1120	1.08	1.54	0.00
9/15/2015 9:20	14.4	9	72.4	3.96	7.01	727	1.12	1.3	0.00
10/20/2015 9:50	15.5	8.92	70.2	3.25	6.81	866	1	1.19	0.08
11/17/2015 9:45	13.6	9.14	64.9	9.36	6.15	2420	1.46	2.22	0.68
12/15/2015 9:25	12.3	10.14	86.4	2.47	6.1	30	3.01	0.65	0.04
1/19/2016 10:20	9.3	10.67	42.4	11.5	5.89	387	1.4	1.29	0.90
2/16/2016 10:05	11.7	10.34	76.6	2.02	6.64	166	2.68	0.55	0.00
3/15/2016 9:40	11	10.35	74.2	5.83	6.41	44	2.49	0.98	0.29
4/19/2016 10:05	13	9.67	73.6	2.17	6.75	19	2.39	1.16	0.00
5/17/2016 9:56	13.7	9.69	71.6	2.2	6.95	326	1.94	0.81	0.01
6/21/2016 9:35	14.6	9.12	70.5	3.07	6.91	261	1.78	1.47	0.00
Median	**13.65**	**9.41**	**71.20**	**3.45**	**6.78**	**294**	**1.62**	**1.18**	

Site Name:	CLA10						
Site Description:	Ewald Ave						
Collection Date/Time	Total Copper (mg/L)	Dissolved Copper (mg/L)	Total Lead (mg/L)	Dissolved Lead (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)	Hardness
7/21/2015 9:51	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0043	0.0062	25
8/18/2015 8:48	< 0.0025	< 0.0025	< 0.0010	< 0.0005	0.0039	0.0053	21
9/15/2015 9:20	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.004	0.004	26
10/20/2015 9:50	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0653	0.0615	21
11/17/2015 9:45	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0289	0.027	19
12/15/2015 9:25	< 0.0025	< 0.0025	< 0.0010	< 0.0010	0.0108	0.0102	27
1/19/2016 10:20	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0164	0.0122	13
2/16/2016 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0107	0.0107	25
3/15/2016 9:40	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0123	0.0113	22
4/19/2016 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0076	0.0069	24
5/17/2016 9:56	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0188	0.0167	21
6/21/2016 9:35	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.011	0.0099	12
Median	**NA**	**NA**	**NA**	**NA**	**0.0109**	**0.0105**	**21.50**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

NA= Medians not calculated for copper and lead due to the large number of censored values.

Table 7.
Monthly Instream Data - Croisan Creek (RY 2015/16)

Site Name:	CRO1								
Site Description:	River Rd S								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 10:20	19.3	3.57	106	5.97	6.95	47	0.19	1.33	0.00
8/18/2015 10:10	17.9	2.72	108.8	7.55	6.98	79	0.13	1.17	0.00
9/15/2015 9:40	13.4	3.85	103.8	13.3	6.94	74	0.16	1.1	0.00
10/20/2015 10:00	14.6	3.86	91	9.16	6.56	214	0.18	1.87	0.08
11/17/2015 10:05	11	9.75	77.8	10.6	6.8	313	0.69	1.28	0.68
12/15/2015 9:55	9	11.4	66	6.65	6.58	29	2.6	1.1	0.04
1/19/2016 10:35	8.9	11.02	54.1	21.9	6.54	178	1.53	1.4	0.90
2/16/2016 10:20	10.1	11.1	65.2	4.06	7.17	17	1.55	0.73	0.00
3/15/2016 9:55	9.2	11.28	58.6	14.1	6.95	88	1.62	1.24	0.29
4/19/2016 10:20	12.5	10.19	70.3	3.97	7.21	248	0.92	1.03	0.00
5/17/2016 10:10	12.8	9.76	71.9	2.2	7.22	345	0.57	0.96	0.01
6/21/2016 9:50	14.1	8.25	89.3	6.27	7.06	161	0.44	0.64	0.00
Median	**12.65**	**9.76**	**74.85**	**7.10**	**6.95**	**125**	**0.63**	**1.14**	

Site Name:	CRO10								
Site Description:	Ballantyne Rd.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 10:45	17.5	3.78	82.2	14.6	6.87	387	0.37	1.2	0.00
8/18/2015 10:30	16.5	6.56	79.7	15	6.94	104	0.22	1.37	0.00
9/15/2015 9:56	12.4	6.99	78.2	16	6.91	365	0.21	1.04	0.00
10/25/2015 10:25	13.6	8.07	78.6	10.5	6.82	435	0.11	1.45	0.08
11/17/2015 10:25	10.8	9.62	60.2	11.3	6.44	156	0.79	1.17	0.68
12/15/2015 10:30	8.8	10.91	55.9	4.76	6.28	66	2.78	0.93	0.04
1/19/2016 11:00	8.8	10.7	47.7	14.3	6.45	11	1.95	1.41	0.90
2/16/2016 10:45	10	10.55	47.8	5.52	6.82	12	1.73	0.57	0.00
3/15/2016 10:15	9	11.03	47.5	9.9	6.71	21	1.74	1.18	0.29
4/19/2016 10:38	11.8	9.87	47.9	4.39	6.9	12	0.88	0.97	0.00
5/17/2016 10:25	12.5	9.56	50.5	6.18	6.77	7	0.55	0.9	0.01
6/21/2016 10:05	13.7	9.11	56.9	7.65	6.84	35	0.44	0.76	0.00
Median	**12.10**	**9.59**	**56.40**	**10.20**	**6.82**	**51**	**0.67**	**1.11**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.
Monthly Instream Data - Gibson Creek (RY 2015/16)

Site Name:	GIB1								
Site Description:	Wallace Rd.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 11:06	19.1	5.64	117.5	7.16	6.66	96	0.3	1.2	0.00
8/18/2015 11:00	20.2	4.69	117.3	8.55	7.03	196	0.24	1.3	0.00
9/15/2015 11:05	13.74	7.36	109.3	9.21	7.17	210	0.27	0.93	0.00
10/20/2015 11:10	15.1	6.23	110.6	8.3	7	150	0.2	1.66	0.08
11/17/2015 11:15	11.4	9.75	96.2	17	7.13	980	1.41	1.51	0.68
12/15/2015 11:00	8.6	11.04	76.6	16.6	7.17	178	2.68	0.61	0.04
1/19/2016 11:55	8.6	10.84	68.5	30.5	6.88	548	1.86	1.19	0.90
2/16/2016 11:40	10.7	10.78	80.6	9.02	7.28	76	2.18	0.54	0.00
3/15/2016 11:15	9.1	11.16	73.7	22.9	7.28	219	1.84	0.95	0.29
4/19/2016 12:00	15.8	9.39	87.9	5.98	7.32	150	1.58	0.84	0.00
5/17/2016 11:00	15	9.5	89.7	5.29	7.36	86	1.19	0.87	0.01
6/21/2016 10:40	15.7	8.17	95.7	7.74	7.4	172	0.64	0.91	0.00
Median	**14.37**	**9.45**	**92.70**	**8.79**	**7.17**	**175**	**1.30**	**0.94**	

Site Name:	GIB15								
Site Description:	Brush College Rd.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 11:30	18.3	8.22	121.6	9.17	7.18	579	0.63	1	0.00
8/18/2015 11:10	18.7	9.12	125	119	7.48	>2420	0.5	2.27	0.00
9/15/2015 11:20	12.94	9.23	115	5.95	7.63	345	0.84	1	0.00
10/20/2015 11:20	14	7.65	118.5	7.03	7.2	488	0.66	1.57	0.08
11/17/2015 11:25	10.5	9.82	106.4	15.4	7.18	488	1.63	1.59	0.68
12/15/2015 11:17	9.2	11.03	82.4	9.98	7.2	45	2.77	1.01	0.04
1/19/2016 12:10	9.1	10.67	74.7	23.8	7.19	111	2.02	0.88	0.90
2/16/2016 11:55	10.7	10.69	86.7	7.15	7.43	179	2.73	0.64	0.00
3/15/2016 11:35	9.6	6.99	77.2	28.7	7.25	345	2.2	0.9	0.29
4/19/2016 12:20	15.1	9.73	91.4	5.14	7.32	32	2.87	1.25	0.00
5/17/2016 11:10	14.5	9.87	92.3	6.78	7.45	101	2.12	0.97	0.01
6/21/2016 10:55	16.1	8.72	98.5	150	7.52	>2420	1.53	1.36	0.00
Median	**13.47**	**9.48**	**95.40**	**9.58**	**7.29**	**345**	**1.83**	**1.01**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.
Monthly Instream Data - Glenn Creek (RY 2015/16)

Site Name:	GLE1								
Site Description:	River Bend Rd.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 11:00	18.3	7.53	120.3	8.23	7.17	326	0.62	0.78	0.00
8/18/2015 10:30	17.2	7.29	125.1	10	7.42	1986	0.51	0.82	0.00
9/15/2015 10:50	13.31	8.23	121.9	6.4	7.41	579	0.43	0.8	0.00
10/20/2015 11:00	14.9	7.85	93.6	8.22	7.12	345	0.19	1.35	0.08
11/17/2015 11:00	11.6	9.89	90.9	16.8	7.25	980	1.06	1.32	0.68
12/15/2015 10:48	9.4	10.86	89.2	9.13	7.17	155	3.05	0.91	0.04
1/19/2016 11:40	8.9	10.83	62.1	29.1	6.95	2420	1.63	1.19	0.90
2/16/2016 11:15	10.8	10.73	90.4	7.1	7.46	46	2.02	< 0.50	0.00
3/15/2016 11:00	9.5	11.06	79.9	17.9	7.18	1046	1.89	0.88	0.29
4/19/2016 11:50	14.6	9.56	94.5	5.28	7.4	86	1.32	0.9	0.00
5/17/2016 10:45	13.8	9.71	101.3	4.92	7.44	214	1.02	0.82	0.01
6/21/2016 10:27	15.1	9.02	108.2	5.81	7.58	154	0.79	0.72	0.00
Median	**13.56**	**9.64**	**94.05**	**8.23**	**7.33**	**336**	**1.04**	**0.88**	

Site Name:	GLE10								
Site Description:	Hidden Valley Dr.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 11:55	No Flow								
8/18/2015 11:20	No Flow								
9/15/2015 12:00	No Flow								
10/20/2015 11:35	13.9	9.18	75.8	2.15	6.98	111	<0.05	1.01	0.08
11/17/2015 11:45	11	10.18	79.3	10.5	7.14	99	2.1	1.01	0.68
12/15/2015 11:30	9	11.04	61.6	9.42	7.29	30	3.13	0.71	0.04
1/19/2016 12:30	8.8	10.99	55.4	29.2	7.05	22	2.49	0.64	0.90
2/16/2016 12:05	10.4	10.85	55.8	7.89	7.41	8	2.03	< 0.50	0.00
3/15/2016 12:00	9.3	11.19	56.4	17	7.27	8	2.24	0.75	0.29
4/19/2016 12:40	13.7	10.09	56.8	7.07	7.32	8	1.25	0.81	0.00
5/17/2016 11:25	12.7	10.53	62.6	7.2	7.52	308	0.9	0.62	0.01
6/21/2016 11:05	13.9	10.22	68.1	6.24	7.6	130	0.67	< 0.50	0.00
Median	**11.00**	**10.53**	**61.60**	**7.89**	**7.29**	**30**	**2.07**	**0.75**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.

Monthly Instream Data - West Fork Little Pudding River (RY 2015/16)

Site Name:	LPW1									
Site Description:	Cordon Rd.									
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs	TSS
7/21/2015 12:35	No Flow									
8/18/2015 13:30	No Flow									
9/15/2015 11:00	No Flow									
10/20/2015 11:30	No Flow									
11/17/2015 11:40	11	8.69	59.6	11.4	6.71	1046	0.62	1.48	0.68	3.2
12/15/2015 11:35	8.3	9.31	187	6.84	6.78	43	5.08	0.89	0.04	3.3
1/19/2016 13:20	8.3	10.15	67.8	60.5	6.67	579	1.13	2.6	0.90	42
2/16/2016 12:20	11.3	11.6	198.9	5.35	7.27	285	2.54	0.68	0.00	3.3
3/15/2016 12:05	9.1	11.47	132.7	12.4	6.98	1046	1.71	1.16	0.29	4.4
4/19/2016 12:00	15.3	5.44	221.7	4.12	7.07	147	0.44	0.93	0.00	3.6
5/17/2016 12:36	15.3	4.7	176.6	6.16	7.02	172	0.23	1.48	0.01	3.6
6/21/2016 11:10	No Flow									
Median	**11.00**	**9.31**	**176.60**	**6.84**	**6.98**	**285**	**1.13**	**1.16**		**3.6**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.
Monthly Instream Data - Mill Creek (RY 2015/16)

Site Name:	MIC1								
Site Description:	Front St.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:02	21.1	8.72	58.2	3.46	7.02	86	0.1	0.98	0.00
8/18/2015 8:40	19.9	8.69	59	2.97	7.32	96	0.1	0.92	0.00
9/15/2015 8:30	14.7	9.83	58.4	3.75	7.03	225	0.08	0.73	0.00
10/20/2015 9:00	14.8	9.86	69.5	2.6	7	411	0.14	1.39	0.08
11/17/2015 8:55	10.8	10.61	116.1	15.4	7.08	387	4.04	1.34	0.68
12/15/2015 8:45	8.2	11.79	103.4	10.2	6.47	93	4.37	1.29	0.04
1/19/2016 9:35	9.1	10.95	82.6	21.4	6.61	179	2.74	1.27	0.90
2/16/2016 9:20	10.6	11.03	87	8.29	7.26	147	3.02	0.84	0.00
3/15/2016 8:55	9.4	10.97	79.4	37.2	6.92	461	2.18	1.47	0.29
4/19/2016 9:20	15.8	9.45	91.6	2.3	7.53	91	1.46	1.26	0.00
5/17/2016 9:15	13.4	10.29	67.4	3.04	7.36	125	0.59	1.1	0.01
6/21/2016 8:30	17.1	9.42	58.2	3.44	7.57	687	0.27	0.96	0.00
Median	**14.05**	**10.08**	**74.45**	**3.61**	**7.06**	**163**	**1.03**	**1.18**	

Site Name:	MIC10								
Site Description:	Turner Rd								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 12:25	19.9	9.92	55.8	3.34	7.88	70	0.19	1.09	0.00
8/18/2015 13:05	20.7	10.01	55	2.71	8.17	105	0.11	1.25	0.00
9/15/2015 10:45	13.2	10.36	55.3	3.62	7.66	133	0.07	0.92	0.00
10/20/2015 11:20	14.5	10.52	67.1	3.1	7.55	166	0.17	1.34	0.08
11/17/2015 11:15	10.5	10.1	131.7	31.6	7.05	1986	4.91	1.71	0.68
12/15/2015 11:15	8.3	10.95	98.3	9.26	6.73	99	4.91	1.07	0.04
1/19/2016 12:55	8.4	10.35	84.6	23.8	6.9	291	2.87	1.1	0.90
2/16/2016 11:56	10.4	11.02	82.3	7.98	7.17	58	3.1	0.78	0.00
3/15/2016 11:00	8.3	10.86	79.2	29.3	6.89	435	2.38	1.37	0.29
4/19/2016 11:40	15.2	10.59	78.7	4.17	7.54	34	1.82	1.51	0.00
5/17/2016 12:05	14	10.82	56.1	5.21	7.65	121	0.58	1.11	0.01
6/21/2016 10:55	16.5	9.96	49.6	4.78	7.52	61	0.25	1.03	0.00
Median	**13.60**	**10.44**	**72.90**	**5.00**	**7.53**	**113**	**1.20**	**1.11**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.
Monthly Instream Data - Mill Race (RY 2015/16)

Site Name:	MRA1								
Site Description:	High St.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:42	20.5	9	56.2	3.68	6.96	112	0.08	1.04	0.00
8/18/2015 9:30	19.6	8.98	56.9	5.97	7.29	613	0.07	1.2	0.00
9/15/2015 9:25	14.65	9.94	55.2	3.06	7.23	548	0.08	0.85	0.00
10/20/2015 9:40	14.5	9.75	67.4	2.97	7.19	435	0.13	1.48	0.08
11/17/2015 9:43	10	10.73	113.5	7.88	7.22	299	3.49	1.4	0.68
12/15/2015 9:30	6.6	10.57	113.2	14	6.91	1300	3.77	1.36	0.04
1/19/2016 10:04	8.1	10.94	78.6	12.7	7.01	69	2.24	1.32	0.90
2/16/2016 10:05	10.5	11.37	85.5	7.06	7.66	186	2.97	0.91	0.00
3/15/2016 9:35	8.2	11.1	77.5	30.1	7.4	816	1.76	1.31	0.29
4/19/2016 10:10	16.3	10.06	87.7	4.02	7.69	88	1.77	1.81	0.00
5/17/2016 9:40	13.7	10.7	59.7	5.21	7.6	153	0.58	1.15	0.01
6/21/2016 9:15	17.2	9.51	51.7	5.73	7.47	517	0.25	1.16	0.00
Median	**14.10**	**10.32**	**72.45**	**5.85**	**7.26**	**367**	**1.17**	**1.26**	

Site Name:	MRA10								
Site Description:	19th St.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:14	20.3	8.15	56.2	4.25	6.56	124	0.08	0.99	0.00
8/18/2015 8:55	19.3	8.27	55.7	2.98	6.77	145	0.06	1.12	0.00
9/15/2015 8:45	14.39	9.29	55.2	3.35	6.81	238	0.06	0.91	0.00
10/20/2015 9:00	14.3	9.33	67.1	3.02	6.78	276	0.14	1.36	0.08
11/17/2015 8:55	9.6	10.67	122.7	16.5	6.8	435	4.03	1.47	0.68
12/15/2015 9:00	7.9	11.11	103.5	8.49	6.6	70	4.64	1.08	0.04
1/19/2016 9:30	8.3	10.85	83.4	22.1	6.43	225	2.98	1.35	0.90
2/16/2016 9:35	10.1	11.04	85.7	7.76	7.4	74	3.06	0.87	0.00
3/15/2016 9:05	8.3	10.98	80.3	33.5	7.22	387	2.2	1.41	0.29
4/16/2016 9:40	16	8.73	89.2	3.99	7.37	75	1.77	1.62	0.00
5/17/2016 9:12	13.5	10.11	59.8	6.21	7.4	162	0.57	0.95	0.01
6/21/2016 8:40	17.2	8.55	51.4	4.87	7.25	156	0.29	1	0.00
Median	**13.90**	**9.72**	**73.70**	**5.54**	**6.81**	**159**	**1.17**	**1.10**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.
Monthly Instream Data - Pringle Creek (RY 2015/16)

Site Name:	PRI1								
Site Description:	Waterfront Park								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:30	20.3	8.96	59.6	3.42	6.95	84	0.11	1.06	0.00
8/18/2015 9:10	19.3	9.01	58.8	3.82	7.21	225	0.08	1.18	0.00
9/15/2015 9:05	14.4	9.87	57.9	3.39	7.12	233	0.09	0.9	0.00
10/20/2015 9:30	14.4	9.74	72.3	2.68	7.08	194	0.17	1.27	0.08
11/17/2015 9:10	10	10.7	121.6	16.5	7.1	548	3.75	1.94	0.68
12/15/2015 9:20	8	11.44	102.8	9.36	6.82	58	4.36	1.4	0.04
1/19/2016 9:50	8.4	11.05	79.2	20.1	6.91	236	2.66	1.02	0.90
2/16/2016 9:50	10.1	11.18	85.6	8.08	7.46	56	2.94	0.87	0.00
3/15/2016 9:20	8.4	11.14	79.9	33.5	7.22	411	2.16	1.72	0.29
4/19/2016 9:53	16.1	9.57	88.2	3.83	7.56	93	2.12	1.72	0.00
5/17/2016 9:30	13.7	10.47	61.2	5.22	7.52	79	0.6	0.95	0.01
6/21/2016 9:00	17.1	9.52	53.4	4.28	7.62	111	0.27	1.06	0.00
Median	**14.05**	**10.17**	**75.75**	**4.75**	**7.17**	**152.5**	**1.36**	**1.12**	

Site Name:	PRI1						
Site Description:	Waterfront Park						
Collection Date/Time	Total Copper (mg/L)	Dissolved Copper (mg/L)	Total Lead (mg/L)	Dissolved Lead (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)	Hardness
7/21/2015 9:30	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	0.0043	32
8/18/2015 9:10	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	0.0031	21
9/15/2015 9:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	< 0.0025	26
10/20/2015 9:30	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	< 0.0025	30
11/17/2015 9:10	0.0034	< 0.0025	< 0.0005	< 0.0005	0.0079	< 0.0025	44
12/15/2015 9:20	< 0.0025	< 0.0025	< 0.0010	< 0.0010	0.0034	< 0.0025	34
1/19/2016 9:50	0.0026	< 0.0025	< 0.0005	< 0.0005	0.0086	0.0055	27
2/16/2016 9:50	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	< 0.0025	35
3/15/2016 9:20	< 0.0025	< 0.0025	0.0005	< 0.0005	0.0079	0.0033	30
4/19/2016 9:53	0.0035	< 0.0025	< 0.0005	< 0.0005	0.0027	< 0.0025	33
5/17/2016 9:30	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	< 0.0025	25
6/21/2016 9:00	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0025	< 0.0025	22
Median	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**30**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

NA= Medians not calculated for copper and lead due to the large number of censored values.

Table 7.

Monthly Instream Data - Pringle Creek (RY 2015/16)

Site Name:	PRI5								
Site Description:	Bush Park								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 10:12	20.7	8.4	88	3.03	7.26	548	0.2	1.29	0.00
8/18/2015 10:05	20	8.34	90.1	3.01	7.58	816	0.15	1.29	0.00
9/15/2015 10:10	15.76	9.21	86.5	9.79	7.63	517	0.15	3.2	0.00
10/20/2015 10:20	14.7	8.79	84.9	5.22	7.3	921	0.17	2.24	0.08
11/17/2015 10:35	11.4	9.78	73.3	9.59	7.35	248	0.54	1.64	0.68
12/15/2015 10:15	9.4	10.57	98.7	8.61	7.22	46	2.9	1.14	0.04
1/19/2016 11:10	8.8	10.72	61.8	20.4	6.89	166	1.37	1.52	0.90
2/16/2016 10:50	10.8	11.29	90.2	5.37	7.72	33	1.92	1.14	0.00
3/15/2016 10:25	9.5	10.85	76.1	13.7	7.28	261	1.38	1.16	0.29
4/19/2016 11:10	16.2	NA	88.3	3.35	7.62	166	1.3	1.68	0.00
5/17/2016 10:10	16.2	9.78	89.1	2.56	7.62	126	0.88	1.26	0.01
6/21/2016 10:05	18	9.18	81.6	2.97	7.78	488	0.35	1.26	0.00
Median	**15.23**	**9.78**	**87.25**	**5.30**	**7.47**	**254.5**	**0.71**	**1.29**	

Site Name:	PRI5						
Site Description:	Bush Park						
Collection Date/Time	Total Copper (mg/L)	Dissolved Copper (mg/L)	Total Lead (mg/L)	Dissolved Lead (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)	Hardness
7/21/2015 10:12	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0031	0.0032	44
8/18/2015 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0027	0.003	30
9/15/2015 10:10	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0026	< 0.0025	41
10/20/2015 10:20	0.0025	< 0.0025	< 0.0005	< 0.0005	0.0049	0.005	35
11/17/2015 10:35	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.012	0.0086	27
12/15/2015 10:15	< 0.0025	< 0.0025	< 0.0010	< 0.0010	0.0082	0.0065	32
1/19/2016 11:10	< 0.0025	< 0.0025	0.0006	< 0.0005	0.0204	0.0137	23
2/16/2016 10:50	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0063	0.0048	34
3/15/2016 10:25	< 0.0025	< 0.0025	0.0005	< 0.0005	0.0138	0.01	25
4/19/2016 11:10	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0052	0.0038	34
5/17/2016 10:10	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0038	< 0.0025	33
6/21/2016 10:05	< 0.0025	< 0.0025	< 0.0005	< 0.0005	0.0032	< 0.0025	31
Median	**NA**	**NA**	**NA**	**NA**	**0.0051**	**0.0050**	**32.50**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

NA= Medians not calculated for copper and lead due to the large number of censored values.

Table 7.
Monthly Instream Data - Shelton Ditch (RY 2015/16)

Site Name:	SHE1								
Site Description:	Church St.								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:50	20.1	8.96	57.6	3.44	7.07	89	0.09	0.91	0.00
8/18/2015 9:40	19.3	8.94	56.6	2.53	7.38	58	0.07	0.97	0.00
9/15/2015 9:35	14.28	9.85	55.4	3.1	7.3	135	0.08	0.88	0.00
10/20/2015 9:50	14.3	9.97	69.3	2.47	7.32	154	0.15	1.33	0.08
11/17/2015 10:10	9.9	10.81	134.1	22.2	7.38	517	4.64	1.78	0.68
12/15/2015 9:35	7.8	11.52	102.8	10.5	7.05	68	4.5	1.12	0.04
1/19/2016 10:15	8.3	11	83.9	21.7	6.94	236	2.93	1.1	0.90
2/16/2016 10:15	10.1	11.28	84.9	7.16	7.52	72	2.9	1.07	0.00
3/15/2016 9:50	8.3	11.19	80.3	34.2	7.24	345	2.2	1.44	0.29
4/19/2016 10:20	15.8	9.59	89.1	4.07	7.54	47	1.82	2.01	0.00
5/17/2016 9:52	13.5	10.55	59.1	4.78	7.6	107	0.58	0.95	0.01
6/21/2016 9:25	17	9.57	50.8	3.8	7.67	91	0.26	0.97	0.00
Median	**13.89**	**10.26**	**74.80**	**4.43**	**7.35**	**99**	**1.20**	**1.09**	

Site Name:	SHE10								
Site Description:	Airport Road								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:02	20.7	8.98	56.2	3.2	6.83	74	0.13	1.01	0.00
8/18/2015 8:30	19.5	8.98	55.7	2.42	6.8	74	0.07	1.04	0.00
9/15/2015 8:20	14.14	9.88	54.5	3.47	6.87	131	0.06	0.84	0.00
10/20/2015 8:45	14.5	9.83	66.9	2.75	6.78	86	0.15	1.36	0.08
11/17/2015 8:40	9.9	10.9	133.3	19.6	6.8	613	4.74	2.32	0.68
12/15/2015 8:45	8.6	11.24	101.3	9.2	6.22	46	4.69	1.14	0.04
1/19/2016 9:07	8.5	11	84.2	23.2	6.22	150	3.19	0.83	0.90
2/16/2016 9:20	10	11.18	83.7	8.22	7.22	81	3.28	0.91	0.00
3/15/2016 8:40	8.6	10.98	79.4	33.4	7.11	291	2.18	1.51	0.29
4/19/2016 9:25	15.5	9.81	88.3	5.23	7.46	50	1.98	2.09	0.00
5/17/2016 8:53	13.4	10.55	58.2	4.91	7.17	105	0.64	0.98	0.01
6/21/2016 8:20	17	9.61	50.1	6.17	7.59	69	0.24	1.17	0.00
Median	**13.77**	**10.22**	**73.15**	**5.70**	**6.85**	**83.5**	**1.31**	**1.09**	

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.

Monthly Instream Data - Willamette River (RY 2015/16)

Site Name:	WR1								
Site Description:	Sunset Park (Keizer)								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 13:40	24	12	80.8	1.73	8.41	2	0.09	0.99	0.00
8/18/2015 14:00	23.2	11.96	74.2	4.34	8.02	8	0.06	1.03	0.00
9/15/2015 12:10	17.3	10.01	75.5	2.69	7.88	19	0.06	0.7	0.00
10/20/2015 13:00	16.4	10.14	79.4	9.42	7.54	46	0.13	1.28	0.08
11/17/2015 13:05	10.9	10.71	77.4	13.6	7.36	141	0.84	1.05	0.68
12/15/2015 12:55	7.8	11.09	58.7	33.8	6.89	166	1	1.04	0.04
1/19/2016 14:25	7.8	11.09	60.1	39.5	7.05	166	0.82	1.03	0.90
2/16/2016 13:40	10.2	10.89	58.3	12.9	7.4	46	0.64	0.68	0.00
3/15/2016 13:10	8.6	11.09	63.4	32.2	7.28	299	0.69	1.56	0.29
4/19/2016 14:14	15.8	10.88	68.1	3.15	7.61	2	0.4	1.01	0.00
5/17/2016 13:50	17.1	11.56	66	3.31	8.13	12	0.26	0.97	0.01
6/21/2016 12:45	19.5	11.29	68.8	1.77	8.3	20	0.14	0.92	0.00
Median	**16.10**	**11.09**	**68.45**	**6.88**	**7.58**	**33**	**0.33**	**1.02**	

Site Name:	WR1				
Site Description:	Sunset Park (Keizer)				
Alkalinity (mg/L)	Ammonia (mg/L)	TP (mg/L)	TDS (mg/L)	TS (mg/L)	TSS (mg/L)
30	< 0.050	0.037	63	66	3.2
33	< 0.050	0.038	76	78	2.4
31	< 0.050	0.035	77.6	82	4.4
31	< 0.050	0.06	101	111	10
28	< 0.050	0.066	77	88	10.8
20	< 0.050	0.104	58	88	30
22	< 0.050	0.12	60	98	38
24	< 0.050	0.064	51	63	12
24	< 0.050	0.12	68	103	34.8
29	< 0.050	0.037	59	63	4.4
29	< 0.050	0.036	67	72	5.2
29	< 0.050	0.029	78	80	2.4
29	**NA**	**0.049**	**67.5**	**81**	**7.6**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.

Monthly Instream Data - Willamette River (RY 2015/16)

Site Name:	WR5								
Site Description:	Union Street Railroad Bridge								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 9:25	21.6	8.63	76.7	2.07	7.19	5	0.07	0.88	0.00
8/18/2015 9:00	20.3	8.49	73.8	2.03	7.6	5	0.07	1.09	0.00
9/15/2015 8:50	16	9.34	77.1	3.62	7.33	23	0.06	0.66	0.00
10/20/2015 9:25	15.3	9.32	74.9	7.54	7.05	44	0.12	1.1	0.08
11/17/2015 9:10	10.1	10.77	70.5	12.2	6.92	158	0.33	0.87	0.68
12/15/2015 9:00	7	11.18	58.1	32.3	6.41	127	0.66	1.06	0.04
1/19/2016 9:55	8	11.09	59	35.7	6.69	142	0.72	0.88	0.90
2/16/2016 9:40	9.6	11.07	56.9	13.3	7.31	50	0.56	0.78	0.00
3/15/2016 9:15	8.4	11.19	63.1	35.6	7.2	345	0.58	1.47	0.29
4/19/2016 9:36	14.5	10.04	66.1	3.28	7.44	8	0.38	1.05	0.00
5/17/2016 9:28	13.8	10.28	64.5	3.07	7.46	19	0.23	0.88	0.01
6/21/2016 9:00	17.3	9.64	66.6	2.65	7.78	7	0.15	0.74	0.00
Median	**14.15**	**10.16**	**66.35**	**5.58**	**7.26**	**33.5**	**0.28**	**0.88**	

Site Name:	WR5				
Site Description:	Union Street Railroad Bridge				
Alkalinity (mg/L)	Ammonia (mg/L)	TP (mg/L)	TDS (mg/L)	TS (mg/L)	TSS (mg/L)
30	< 0.050	0.037	67	71	4.4
32	< 0.050	0.042	67	72	4.8
30	< 0.050	0.038	64.8	72	7.2
29	< 0.050	0.052	94	105	10.5
28	< 0.050	0.058	66	76	9.6
20	< 0.050	0.112	63	91	28
23	< 0.050	0.123	62	93	31.2
24	< 0.050	0.064	51	64	12.8
24	0.051	0.12	68	106	37.6
27	< 0.050	0.037	54	59	4.8
27	< 0.050	0.036	58	63	4.7
28	< 0.050	0.032	62	64	2.4
27.5	**NA**	**0.047**	**63.9**	**72**	**8.4**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 7.

Monthly Instream Data - Willamette River (RY 2015/16)

Site Name:	WR10								
Site Description:	Halls Ferry Road (Independence)								
Collection Date/Time	Temp (°C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTU)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Rainfall previous 24 hrs
7/21/2015 12:40	22.9	9.12	76.7	1.72	7.71	11	0.08	0.89	0.00
8/18/2015 11:40	21.8	9.67	74	1.94	7.69	1	0.08	1.08	0.00
9/15/2015 12:20	17.06	9.58	74.5	2.41	7.81	20	0.07	0.67	0.00
10/20/2015 12:05	15.7	9.41	75.4	8.31	7.41	26	0.13	1.18	0.08
11/17/2015 12:00	10.3	10.62	69.5	11.1	7.58	21	0.25	1.23	0.68
12/15/2015 12:40	8	10.77	56.4	32.1	7.27	146	0.83	0.91	0.04
1/19/2016 13:25	7.9	10.95	57.6	37.8	7.13	118	0.68	1.1	0.90
2/16/2016 12:50	9.7	10.9	59.4	11.7	7.45	36	0.57	0.79	0.00
3/15/2016 13:00	8.3	11.05	60.6	33.9	7.38	387	0.51	1.62	0.29
4/19/2016 13:10	14.9	10.39	68.3	3.42	7.37	5	0.53	1.1	0.00
5/17/2016 12:30	14.1	10.95	63.7	2.58	7.62	19	0.28	0.96	0.01
6/21/2016 12:15	18.2	10.72	67.3	1.83	8.11	6	0.23	0.9	0.00
Median	**14.50**	**10.67**	**67.80**	**5.87**	**7.52**	**20.5**	**0.27**	**1.02**	

Site Name:	WR10				
Site Description:	Halls Ferry Road (Independence)				
Alkalinity (mg/L)	Ammonia (mg/L)	TP (mg/L)	TDS (mg/L)	TS (mg/L)	TSS (mg/L)
31	< 0.050	0.033	60	62	2
33	< 0.050	0.04	60	64	4.4
32	< 0.050	0.036	69.2	74	4.8
30	< 0.050	0.058	94	105	10.5
28	< 0.050	0.054	62	70	7.5
21	< 0.050	0.105	65	89	24.4
22	< 0.050	0.118	60	93	32.8
24	< 0.050	0.061	48	60	12
24	< 0.050	0.118	69	105	35.6
27	< 0.050	0.036	53	61	8
26	< 0.050	0.036	63	68	4.8
28	< 0.050	0.031	71	75	3.6
27.5	**NA**	**0.047**	**62.5**	**72**	**7.75**

Note: Data in red exceed applicable water quality criteria (see Table 4). Single sample criterion (406 organisms/100 mL) used for E. Coli.

Table 8.
Monthly Instream Data - Duplicates (RY 2015/16)

Site ID	Collection Date/Time	Temp (C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTUs)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	TSS	Total Copper (mg/L)	Dissolved Copper (mg/L)	Total Lead (mg/L)	Dissolved Lead (mg/L)	Total Zinc (mg/L)	Dissolved Zinc (mg/L)	Hardness
GIB1	7/21/2015 11:08	19.1	6.2	116.7	7.38	6.76	96	0.31	0.93								
BAT1	07/21/2015 11:10	18.5	7.5	66.6	11.7	7.23	461	0.14	1								
GIB15	07/21/2015 11:32	18.3	8.21	121.6	9.32	7.19	517	0.69	0.73								
MIC10	08/18/2015 13:08	20.4	10.11	55.5	2.52	8.2	71	0.1	1								
CGT5	08/18/2015 13:46	20.2	8.39	91.1	23.4	7.52	>2420	< 0.05	1.22								
SHE10	09/15/2015 08:25	14.14	9.88	54.5	3.15	6.85	105	0.07	0.7								
CGT1	09/15/2015 11:41	16.4	3.36	155.1	6.21	7.35	61	0.05	4								
MIC1	10/20/2015 09:05	14.7	9.91	69.8	2.33	6.97	387	0.14	1.34								
MRA10	10/20/2015 09:05	14.2	9.33	67.1	2.7	6.82	210	0.15	1.33								
PRI1	11/17/2015 09:15	9.9	10.73	121.8	17.1	7.09	461	3.97	1.35		0.0034	< 0.0025	< 0.0005	< 0.0005	0.0079	0.003	44
MRA1	11/17/2015 09:50	10	10.73	113.5	7.67	7.34	517	3.69	1.35								
CLA10	12/15/2015 09:30	12.6	10.1	83.6	2.17	6.15	26	3.44	0.54		< 0.0025	< 0.0025	< 0.0010	< 0.0010	0.0108	0.01	24
SHE1	12/15/2015 09:40	8.1	11.37	102.6	9.98	7.06	68	4.71	0.78								
CRO1	12/15/2015 10:00	9	11.37	66	6.1	6.52	37	2.65	0.88								
CLA1	01/19/2016 10:45	8.7	11.11	43	28.4	6.81	2420	0.91	9		0.0039	< 0.0025	0.0018	< 0.0005	0.0299	0.0161	16
CRO10	01/19/2016 11:05	8.7	10.77	47.8	12.7	6.4	34	2.04	0.83								
PRI5	01/19/2016 11:12	8.8	10.69	61.7	21.1	7	138	1.35	10.5		< 0.0025	< 0.0025	0.0005	< 0.0005	0.0201	0.0138	22
BAT12	02/16/2016 11:08	9.7	10.78	45.6	2.89	6.6	125	2.37	< 0.50								
GLE1	02/16/2016 11:20	10.8	10.75	90.4	6.97	7.54	48	2.04	< 0.50								
BAT1	02/16/2016 11:32	10.3	10.52	48.3	5.4	6.57	60	1.95	< 0.50								
MIC10	03/15/2016 11:10	8.2	10.93	79.6	30.2	7.04	461	2.3	1.31								
GIB1	03/15/2016 11:16	9.3	11.02	73.6	24.2	7.22	142	1.94	0.74								
GIB15	03/15/2016 11:40	9.7	10.93	77	24.8	7.33	461	2.23	0.73								
LPW1	04/16/2016 12:16	15.2	5.39	217.7	4.04	7.08	238	0.46	0.97	5.8							
GLE10	04/19/2016 12:42	13.7	10.08	56.8	7.15	7.31	13	1.31	0.62								
CGT5	04/19/2016 13:12	18.7	10.06	179.5	6.55	7.85	387	0.1	1.61								
SHE10	05/17/2016 08:55	13.3	10.56	58.2	4.96	7.18	116	0.58	0.87								
CGT1	05/17/2016 13:25	18.7	8.45	197.3	4.9	7.2	39	0.27	1.87								
MIC1	06/21/2016 08:40	17.1	9.43	58	3.37	7.58	276	0.26	0.78								
MRA10	06/21/2016 08:45	17.2	8.54	51.4	4.35	7.24	121	0.24	0.96								

Note: Duplicate field measurements and duplicate grab samples are taken at a minimum of 10 percent of the sites each month. These sites are selected prior to sampling.

Table 8.

Monthly Instream Data - Willamette River Duplicates (RY 2015/16)

Site ID	Collection Date/Time	Temp (C)	DO (mg/L)	Sp Cond (µS/cm)	Turb (NTUs)	pH (S.U.)	E-Coli (#/ 100 mL)	NO_3-NO_2 (mg/L)	BOD (mg/L)	Alkalinity (mg/L)	Ammonia (mg/L)	TP (mg/L)	TDS (mg/L)	TS (mg/L)	TSS (mg/L)
WR10	09/15/2015 12:25	17.06	9.57	74.4	2.1	7.81	17	0.07	0.75	32	< 0.050	0.031	62	68	6
WR1	10/20/2015 13:05	16.4	10.16	80	10.6	7.57	83	0.12	0.98	31	< 0.050	0.059	92	102	10
WR5	11/17/2015 09:19	10	10.8	69	11.6	6.99	62	0.33	0.88	28	< 0.050	0.057	74	82	8
WR10	05/17/2016 12:35	14	10.99	64.1	2.93	7.6	20	0.28	0.98	26	na	0.039	63	69	5.6
WR1	06/21/2016 12:50	19.3	11.4	68.5	1.7	8.41	20	0.14	0.79	na	< 0.050	0.028	70	73	2.8

Note: Duplicate field measurements and duplicate grab samples are taken at a minimum of 10 percent of the sites each month. These sites are selected prior to sampling.

Table 9.
Continuous Instream Grade A and Grade B Data Qualifications

Grade Values	Temperature (˚C)	pH	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
A	± < 0.5	± ≤ 0.30	≤ 10%	± ≤ 3 or 5% (whichever is greater)	± ≤ 0.3
B	± 0.51 to 2.00	± > 0.3 to 0.50	> 10% to ≤ 15%	± ≤ 5 or 30% (whichever is greater)	± > 0.3 to ± ≤ 1.0

Note: As stated in the "Continuous Water Quality Monitoring Program Quality Assurance Project Plan", data grades are a result of the absolute difference (value or percent) of station instrument reading and audit instrument reading at the time of site audit.

Table 10.
Monthly Median Values for Continuous Instream Data (RY 2015/16)

Monthly Medians for **Turbidity** at Continuous Instream Sites												
	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Station Name	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)	Turbidity (NTU)
BAT3	12.27	12.16	13.17	15.82			9.83	5.82	8.50	5.96	7.80	9.52
BAT12	5.15	3.17	3.15	3.33	3.12		2.63	0.68	2.26	0.78	1.98	2.74
CLK1	1.90	1.40	0.70	1.50	3.10	6.50	5.70	2.90	4.70	1.90	1.80	2.80
CLK12		2.90	1.90	1.90			3.10	1.10	2.60	1.60	2.50	1.90
GLE3	7.10	6.50	4.80	4.70					8.90	4.30	3.40	3.50
GLE12					3.30	14.00	9.10	8.20	12.70	8.00	5.40	4.50
MIC3	3.58	2.86	2.96	2.57	4.79	14.63	8.28	6.21	9.29	3.33	2.90	2.90
MIC12	4.14	3.65	4.12	4.47	5.03	11.34	7.53	5.76	8.46	3.27	4.20	4.51
PRI3	7.56	6.37	3.13	2.17	4.65	9.48	7.60	5.63	8.34	2.16	2.40	2.57
PRI12			4.42	10.32	9.72	14.84	8.13	4.96	6.63	4.62	5.50	4.25
SHE3	Station offline for entire reporting year due to bridge replacement project											

Monthly Medians for **Specific Conductivity** at Continuous Instream Sites												
	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Station Name	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)	Specific Conductivity (µS/cm)
BAT3	62.41	65.36	65.13	65.08	58.04	54.17	50.76	50.82				
BAT12	61.50	66.93	64.18	64.18	50.85	52.65	48.47	47.19	44.28	45.24	44.57	46.83
CLK1	95.00	99.00	95.00	94.00			87.00			96.00	95.00	91.00
CLK12	70.00	72.00	73.00	72.00			79.00	76.00	65.00	75.00	73.00	72.00
GLE3	121.00	134.00	125.00	115.00	107.00				85.00	92.00	103.00	110.00
GLE12								62.00	62.00	58.00	64.00	70.00
MIC3	58.14	60.12	64.01	69.72	119.99	97.59	93.55	87.09	88.86	85.11	62.06	57.27
MIC12		53.54	55.93	61.74	118.00	95.28	93.31	87.27	86.32	83.37	68.44	61.53
PRI3	97.70	101.40		101.14	99.40	93.26	92.00	95.74	89.67	95.71	97.56	94.30
PRI12	62.80	63.64	66.30	83.23	117.41	92.96	86.74	87.35	83.12	86.17	73.07	64.23
SHE3	Station offline for entire reporting year due to bridge replacement project											

Presented median values consist of A and B grade data only. NA = 60% of the continuous record for a given month is not represented by A and B grade data.

Table 10.
Monthly Median Values for Continuous Instream Data (RY 2015/16)

Monthly Medians for **Temperature** at Continuous Instream Sites												
	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Station Name	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)	Temperature (˚C)
BAT3	19.58	19.51	16.15	13.97	10.67	9.55	8.67	9.36	9.84	11.98	13.76	16.05
BAT12	17.81	17.40	13.37	11.33	8.50	9.12	8.26	8.85	9.29	11.50	13.28	15.41
CLK1	18.52	18.72	16.54	15.23	12.24	10.87	9.67	10.67	11.12	12.82	14.32	16.17
CLK12	17.13	17.57	16.35	15.73			11.02	11.31	11.41	12.46	13.60	14.96
GLE3	18.32	18.16	15.34	14.08	11.09	9.80	8.99	9.51	10.42	12.40	14.01	15.50
GLE12					9.64	9.30	8.36	9.05	9.51	11.07	12.25	13.92
MIC3	21.24	20.46	16.83	14.66	9.80	8.57	7.89	9.09	10.10	13.18	15.52	18.07
MIC12	20.38	19.78	16.50	14.36	9.80	8.61	7.90	9.05	9.97	12.99	14.72	17.25
PRI3	20.74	19.84	17.08	14.93	11.13	9.78	8.83	9.95	10.75	13.75	15.90	18.05
PRI12	20.19	19.53	16.28	14.24	10.89	9.56	8.69	9.51	10.08	12.39	14.48	17.10
SHE3	Station offline for entire reporting year due to bridge replacement project											

Monthly Medians for **pH** at Continuous Instream Sites												
	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Station Name	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)	pH (S.U)
BAT3	6.98	7.06	6.51	6.62	6.57	6.35	6.42	6.51	6.56	6.66	6.65	6.78
BAT12	7.37	7.10	7.21	7.34	7.24	6.52	6.77	6.88	6.84	7.20	7.09	7.35
CLK1	6.96	6.98	6.97	7.01	7.23	7.00	7.08	7.21	7.11	7.24	6.74	7.35
CLK12	6.85	6.87	6.85	6.94			6.52	6.67	6.55	6.70	6.54	6.60
GLE3	7.54	7.50	7.55	7.50	7.08	6.66	6.83	6.93	7.05	7.23	7.22	7.35
GLE12					6.87	6.70	6.89	7.05	7.07	7.19	7.11	7.13
MIC3		7.63	7.49	7.62	7.47	7.02	7.15	7.35	7.36	7.65	7.24	7.26
MIC12	7.53	7.65			7.19	6.96	7.13	7.23	7.26	7.49	7.34	7.47
PRI3	7.50	7.40	7.35	7.36	7.32	7.00	7.18	7.37	7.21	7.30	7.08	7.25
PRI12	7.53	7.49	6.98	7.21	6.79	6.56	6.71	6.83	6.87	7.14	7.04	7.11
SHE3	Station offline for entire reporting year due to bridge replacement project											

Presented median values consist of A and B grade data only. NA = 60% of the continuous record for a given month is not represented by A and B grade data.

Table 10.

Monthly Median Values for Continuous Instream Data (RY 2015/16)

Monthly Medians for **Dissolved Oxygen** at Continuous Instream Sites												
	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Station Name	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)
BAT3	6.94	6.41	7.05	6.94	9.60	10.21	10.69	10.61	10.43	9.77	9.15	
BAT12	8.29	6.49	7.75	9.05	11.27	11.30	11.55	11.45	11.25	10.70	10.20	9.64
CLK1	8.73	8.70	8.98	9.29	10.17	10.86	11.06		10.61	10.09	9.63	9.26
CLK12	8.75	8.53	8.60	8.76			10.52	10.35	10.24	9.80	9.47	9.07
GLE3	8.44	8.47	9.06	9.32	10.60	10.96	11.19	11.27	10.92	10.42	9.63	9.10
GLE12					10.97	11.55	11.44	11.28	11.07	10.70	10.21	9.63
MIC3	8.56	8.80	9.55	9.66	11.11	11.42	11.74	11.64	11.22	10.33	9.71	9.08
MIC12	8.69	8.60	9.28	9.62	10.79	10.58	11.03	11.05	10.59	9.99	9.84	9.23
PRI3			8.61	8.93	9.99	10.42	10.95	10.85	10.54	9.47	8.48	8.37
PRI12			8.60	8.32	8.53	9.58	10.01	10.13	9.96	9.80	9.21	8.73
SHE3	Station offline for entire reporting year due to bridge replacement project											

Monthly Medians for **Stage** at Continuous Instream Sites												
	Jul 2015	Aug 2015	Sep 2015	Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
Station Name	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)	Stage (ft)
BAT3	3.94	3.91	3.92	3.93	4.31	5.92	5.24	4.85	5.19	4.46	4.23	4.15
BAT12	4.66	4.57	4.60	4.66	4.90	5.36	5.05	4.82	4.94	4.59	4.45	4.35
CLK1	3.78	3.76	3.87	3.90	4.30	4.67	4.46	4.30	4.46	4.24	4.11	4.08
CLK12	3.91	3.90	3.93	3.93	4.11	4.44	4.33	4.15	4.27	4.05	3.97	3.96
GLE3	4.07	4.03	4.03	4.07	4.44	5.36	4.88	4.55	4.76	4.39	4.23	4.15
GLE12	NA	NA	NA	0.68	0.90	1.36	1.24	1.06	1.17	0.94	0.84	0.78
LPW1	NA	NA	NA	NA	NA	2.24	1.98	1.79	2.18	1.57	NA	NA
MIC3	5.36	5.40	5.48	5.46	5.77	7.30	6.57	6.18	6.46	5.43	5.21	5.16
MIC12	7.03	7.04	6.98	6.79	7.35	8.90	8.16	7.89	8.11	7.26	7.17	7.15
PRI3	4.24	4.18	4.22	4.20	4.49	6.06	5.04	4.66	4.86	4.44	4.34	4.31
PRI4	7.51	7.46	7.51	7.45	7.83	8.64	8.25	7.94	8.16	7.67	7.51	7.47
PRI12	4.31	4.22	4.21	4.01	4.20	5.06	4.72	4.51	4.68	4.39	4.42	4.39
SHE3	Station offline for entire reporting year due to bridge replacement project											

Presented median values consist of A and B grade data only. NA = 60% of the continuous record for a given month is not represented by A and B grade data.

Table 11.
Instream Storm Monitoring Data (RY 2015/16)

Site Name:	CLK1																		
Site Description:	Lower Clark Creek just upstream of confluence with Pringle Creek																		
Sample Collection Date/Time	**E. Coli**	**Diss. Oxygen**	**pH**	**temp**	**Sp. Cond, field**	**Sp. Cond, comp**	**Cu**	**Cu diss**	**Zn**	**Zn diss**	**Pb**	**Pb diss**	**Hardness**	**NH3**	**NO_3-NO_2**	**Ortho P**	**TP**	**BODs**	**TSS**
mm/dd/yyyy HH:MM	MPN/100 mL	mg/L	S.U	˚C	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
08/29/2015 05:24	9804	7.04	6.74	19.3	128.2														
08/30/2015 09:31						83.9	0.0378	0.0224	0.378	0.258	0.009	0.0006	44	< 0.050	1.59	< 0.010	0.662	> 13.9	168
9/17/2015 3:15	17330	9.26	7.09	15.3	46.2														
9/17/2015 11:00						46.4	0.0192	0.0053	0.1536	0.0558	0.0095	< 0.0005	33	0.156	0.53	0.082	0.476	11.7	180
10/28/2015 03:57	1733	9.19	7.15	14.46	84.3														
10/28/2015 12:00						52.3	0.0085	0.0048	0.0522	0.034	0.0026	0.0015	35	0.137	0.52	0.088	0.187	7.8	36
12/02/2015 09:20	327	11.21	6.71	8.23	71.7														
12/02/2015 09:20						31	0.0078	0.0032	0.0803	0.0452	0.0011	< 0.0005	38	0.124	0.8	0.09	0.177	6.2	33.6
1/28/2016 5:00	676	10.47	7.11	11.43	61.9														
1/28/2016 10:55						38.8	0.0077	< 0.0025	0.0603	0.0126	0.0043	< 0.0005	18	< 0.050	0.7	0.018	0.157	4.1	79
Median	**1733**	**9.26**	**7.09**	**14.46**	**71.70**	**46.4**	**0.0085**	**0.00505**	**0.0803**	**0.0452**	**0.0043**	**NA**	**35**	**0.137**	**0.7**	**0.085**	**0.187**	**7.00**	**79.0**

Data in red exceed applicable water quality criteria (see Table 4).

NA= Median not calculated because ≥ 50% of values were censored values.

Table 11.
Instream Storm Monitoring Data (RY 2015/16)

Site Name:	**PRI3**																		
Site Description:	Lower Pringle Creek in Pringle Park, just upstream of confluence with Shelton Ditch																		
Sample Collection Date/Time	**E. Coli**	**Diss. Oxygen**	**pH**	**temp**	**Sp. Cond, field**	**Sp. Cond, comp**	**Cu**	**Cu diss**	**Zn**	**Zn diss**	**Pb**	**Pb diss**	**Hardness**	**NH3**	**NO_3-NO_2**	**Ortho P**	**TP**	**BODs**	**TSS**
mm/dd/yyyy HH:MM	MPN/100 mL	mg/L	S.U	°C	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
8/29/2015 5:54	9208	7.36	6.97	19.8	123.8														
9/30/2015 9:47						104	0.0269	0.0186	0.292	0.181	0.0059	0.0005	49	0.065	0.53	0.082	0.537	> 15.3	127
9/17/2015 3:50	9804	8.7	7.29	15.9	67.7														
9/17/2015 11:35						59.5	0.0159	0.0037	0.1449	0.0181	0.0071	< 0.0005	29	0.114	0.42	0.029	0.468	9.6	153
10/28/2015 4:19	548	9.2	7.23	13.09	91.8														
10/28/2015 12:20						70.5	0.0047	< 0.0025	0.0289	0.0166	0.0018	< 0.0005	24	< 0.050	0.45	0.044	0.126	4.4	36
12/1/2015 19:00	228	11.3	6.81	7.13	100.7														
12/2/2015 10:10						24.8	0.0052	< 0.0025	0.0495	0.0143	0.0016	< 0.0005	31	< 0.050	0.69	0.033	0.164	4	51.2
1/28/2016 5:13	148	10.33	7.18	11.21	59.9														
1/28/2016 5:15 - DUP	175	10.32	7.18	11.21	59.7														
1/28/2016 10:35						45.1	0.005	< 0.0025	0.0515	0.0129	0.0029	< 0.0005	22	< 0.050	0.96	0.016	0.145	2.6	66
Median	**388**	**9.76**	**7.18**	**12.15**	**79.75**	**59.5**	**0.0052**	**NA**	**0.0515**	**0.0166**	**0.0029**	**NA**	**29**	**NA**	**0.53**	**0.033**	**0.164**	**2.33**	**66.0**

Data in red exceed applicable water quality criteria (see Table 4).

NA= Median not calculated because ≥ 50% of values were censored values.

Table 11.
Instream Storm Monitoring Data (RY 2015/16)

Site Name:	PRI12																		
Site Description:	Upper East Fork Pringle Creek																		
Sample Collection Date/Time	**E. Coli**	**Diss. Oxygen**	**pH**	**temp**	**Sp. Cond, field**	**Sp. Cond, comp**	**Cu**	**Cu diss**	**Zn**	**Zn diss**	**Pb**	**Pb diss**	**Hardness**	**NH3**	**NO_3-NO_2**	**Ortho P**	**TP**	**BODs**	**TSS**
mm/dd/yyyy HH:MM	MPN/100 mL	mg/L	S.U	˚C	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
8/29/2015 6:19	1850	6.22	6.99	19.3	83.9														
8/30/2015 11:07						66.8	< 0.0025	< 0.0025	0.0152	0.0083	< 0.0005	< 0.0005	39	< 0.050	0.7	0.01	0.087	4.3	8
9/17/2015 4:22	2481	7.99	7.08	14.9	63.8														
9/17/2015 4:24	1396	7.96	7.06	14.9	63.9														
9/17/2015 9:45						59.6	0.0026	< 0.0025	0.0092	0.0095	< 0.0005	< 0.0005	25	< 0.050	0.28	0.02	0.083	3.7	15.5
10/28/2015 4:47	345	8.65	7.28	11.63	84.9														
10/28/2015 4:50	248	8.64	7.23	11.62	85														
10/28/2015 11:30						92.7	< 0.0025	< 0.0025	0.0082	0.0041	< 0.0005	< 0.0005	37	< 0.050	0.52	0.02	0.085	2.4	17.6
12/1/2015 19:30	63	9.86	6.89	7.67	70.3														
12/1/2015 19:33	63	9.83	6.87	7.67	70.3														
12/2/2015 10:50						36.5	0.0157	< 0.0025	12.2	2.43	0.0173	< 0.0005	63	< 0.050	2.15	0.013	0.73	2.5	312
1/28/2016 6:02	41	9.54	6.7	10.52	61.1														
1/28/2016 11:20						68.6	< 0.0025	< 0.0025	0.0454	0.0137	0.0008	< 0.0005	28	< 0.050	2.4	0.022	0.099	1.2	29
Median	**297**	**8.65**	**7.025**	**11.63**	**70.30**	**66.8**	**NA**	**NA**	**0.0152**	**0.0095**	**0.00905**	**NA**	**37**	**NA**	**0.7**	**0.02**	**0.087**	**2.5**	**17.6**

Data in red exceed applicable water quality criteria (see Table 4).

NA= Median not calculated because ≥ 50% of values were censored values.

Table 12.
Stormwater Monitoring Data (RY 2015/16)

Site Name:	Electric[1]																		
Land use Type:	Residential																		
Sample Collection Date/Time	E. Coli	Diss. Oxygen	pH	temp	Sp. Cond, field	Sp. Cond, comp	Cu	Cu diss	Zn	Zn diss	Pb	Pb diss	Hardness	NH3	NO_3-NO_2	Ortho P	TP	BOD5	TSS
mm/dd/yyyy HH:MM	MPN/100 mL	mg/L	S.U	˚C	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
8/29/2015 5:18	857	8.58	6.61	21.26	123.7														
8/30/2015 10:13						102	0.0198	0.0185	0.157	0.15	0.0008	< 0.0005	44	0.191	0.27	0.213	0.397	19.2	11.5
12/1/2015 18:20	4350	11.97	6.88	7.88	38.4														
12/2/2015 9:50						12.8	0.0058	0.0029	0.0567	0.0272	0.0031	< 0.0005	23	< 0.050	0.45	0.092	0.199	8.1	36

Site Name:	Hilfiker																		
Land use Type:	Commercial																		
Sample Collection Date/Time	E. Coli	Diss. Oxygen	pH	temp	Sp. Cond, field	Sp. Cond, comp	Cu	Cu diss	Zn	Zn diss	Pb	Pb diss	Hardness	NH3	NO_3-NO_2	Ortho P	TP	BOD5	TSS
mm/dd/yyyy HH:MM	MPN/100 mL	mg/L	S.U	˚C	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
8/29/2015 5:45	272	8.66	6.46	19.66	67.5														
8/30/2015 10:50						49.8	0.039	0.0289	0.299	0.262	0.0036	0.0005	36	0.67	0.84	0.064	0.399	20.2	68
9/17/2015 2:50	1553	9.95	6.92	14.4	13.03														
9/17/2015 10:25						18.2	0.0078	0.0043	0.0663	0.0521	0.0012	< 0.0005	11	0.233	0.22	0.047	0.102	4.8	18
21/1/15 18:00	9800	11.02	6.62	8.99	106.4														
12/2/2015 11:10						15.1	0.0075	0.0033	0.1	0.0749	0.0025	< 0.0005	21	0.167	0.22	0.019	0.089	4.9	28.4

Site Name:	Salem Industrial																		
Land use Type:	Industrial																		
Sample Collection Date/Time	E. Coli	Diss. Oxygen	pH	temp	Sp. Cond, field	Sp. Cond, comp	Cu	Cu diss	Zn	Zn diss	Pb	Pb diss	Hardness	NH3	NO_3-NO_2	Ortho P	TP	BOD5	TSS
mm/dd/yyyy HH:MM	MPN/100 mL	mg/L	S.U	˚C	µS/cm	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
8/29/2015 6:30	19860	7.81	6.38	18.79	67.4														
8/29/2015 6:36	24200	7.86	6.35	18.4	66.9														
8/30/2015 11:40						60	0.0201	0.0096	0.231	0.147	0.003	< 0.0005	30	0.28	1	0.073	0.49	13.3	104
12/1/2015 20:00	529	12.03	6.99	6.03	18.1														
12/2/2015 11:35						8	0.0046	< 0.0025	0.128	0.0996	0.0014	< 0.0005	23	< 0.050	0.12	0.05	0.171	3.2	29.2

[1]Due to the velocity and lift of water coming through the pipe at this site, the flow module is unable to detect the height of the water and often doesn't sample; therefore a time paced sampling method is utilized.

Table 13.
Priority Dry Weather Outfall/Manhole Screening Data (RY 2015/16)

Site Info				Flow		Field Screening					Laboratory Testing						Notes
Priority Outfall	Inspectin Location	Asset Type	Date/Time	Flow Present?	Est. flow (gpm)	Temp (°C)	pH	Specific Cond. (µS/cm)	Turbidity (NTU)	Total Chlorine (mg/L)	Fluoride (mg/L)	Detergents (mg/L)	Amonia (mg/L)	Potassium (mg/L)	Sodium (mg/L)	E. coli (MPN/100 mL)	
D39456229	D39456229	Outfall	08/05/2015 10:30	yes	1 to 5	16.50	6.52	73.30	1.23	0.27	0.2	0					
D30470203	D30470203	Outfall	08/10/2015 09:45	no													
D36472203	D36472203	Outfall	08/10/2015 10:45	yes	1 to 5	21.10	7.21	84.00	4.47	0.05	0.6	0	0	0.90	7.88	47	ES notified after source tracking, TV inspection, and notification of sewer dept.
D36472203	D36476211	ManHole	08/10/2015 13:50	yes	1 to 5	22.90	7.09	75.50	8.77	0.66	0.6			0.70	6.66		Notified Water dept., TV inspection later found water leak.
D48464249	D48464249	Outfall	08/10/2015 12:10	no													
D42468235	D42468235	Outfall	08/20/2015 13:20	no													
D42468244	D42468244	Outfall	08/20/2015 09:55	yes	20-30	19.20	7.52	119.30	3.37	0.03	0.3	0	0	0.69	7.70		
D42468PVT	D42468PVT	ManHole	08/20/2015 08:57	yes	1	18.80	7.37	109.90	19.40	0.14	0.2	0	0.03	1.54	9.04		
D45466212	D45466212	Outfall	08/20/2015 13:10	no													
D48464203	D48464203	Outfall	08/20/2015 12:10	no													
D42480223	D42480223	Outfall	08/25/2015 09:20	yes	30-50	18.50	7.34	94.60	1.24	0.00	0.7	0	0	0.90	6.86	63	Large water leak found with follow up - repaired
D42480223	D45478221	ManHole	08/25/2015 11:40	yes	30-50	20.10	7.36	65.30	0.56	1.26	0.7			0.60	6.37	< 1	
D42480223	D48478222	ManHole	08/25/2015 13:00	yes	1												Leak from fire hydrant - repaired
D45476207	D45476207	Outfall	08/27/2015 09:40	yes	50-100	18.00	7.70	274.60	0.67	0.00	0	0	0	2.00	9.40	209	flow tracked to wetland near penitentary, follow up needed.
D45476207	D45476255	ManHole	08/27/2015 14:00	yes	1	24.60	7.56	73.00	1.79	0.98	0.593			0.60	6.30	<10	likely a drinking water leak
D42480205	D42480205	Outfall	09/08/2015 13:00	no													
D42480215	D42480215	Outfall	09/08/2015 10:10	yes	30-50	19.70	7.54	63.90	1.10	0.00	0.6	0	0	0.79	19.50	<10	traced to broken water main, water dept. notified - repaired
D42480223	D42480223	Outfall	09/08/2015 10:06	yes	<1												follow up after repair, not sampled
D42482223	D42482223	Outfall	09/08/2015 13:20	yes	<1	17.90	7.42	85.80	3.11	0.03	0.6	0.75	0.5	1.61	7.00	2990	multiple sources upstream, included several water leaks
D42472264	D42472240	ManHole	09/10/2015 10:00	yes	20-30	20.00	7.38	126.30	2.11	0.00	0.3	0	0.02	1.60	7.54		white material present below outfall days prior, inspection requested by ES
D42482223	D48482278	ManHole	09/10/2015 14:10	yes	1 to 5					0.14							flow coming from catch basin
D42482224	D42482209	ManHole	09/10/2015 10:50	yes													standing water, further tracking revealed water leak
D42482224	D45482214	CleanOut	09/10/2015 13:30	yes						1.00							water leak, reported to water dept.

Data in red exceed action levels, see Dry Weather Outfall and Illicit Discharge Screening Plan for more information.

Table 13.
Priority Dry Weather Outfall/Manhole Screening Data (RY 2015/16)

Site Info				Flow		Field Screening					Laboratory Testing						Notes
Priority Outfall	Inspectin Location	Asset Type	Date/Time	Flow Present?	Est. flow (gpm)	Temp (°C)	pH	Specific Cond. (µS/cm)	Turbidity (NTU)	Total Chlorine (mg/L)	Fluoride (mg/L)	Detergents (mg/L)	Amonia (mg/L)	Potassium (mg/L)	Sodium (mg/L)	E. coli (MPN/100 mL)	
D54486217	D54486217	Outfall	09/23/2015 10:00	yes	50-100	15.40	7.41	71.80	1.51	0.00	0.6	0	0.00	0.82	6.46	226	leak coming from private service, unable to TV
D48486207	D48486207	Outfall	09/30/2015 14:20	no													backw ater from w etland
D51486201	D51486203	ManHole	09/30/2015 13:10	no													affected by backw ater from w etland, checked upstream manholes
D51486201	D51486203	ManHole	09/30/2015 13:30	yes	1 to 5	17.20	7.42	143.30	5.45	0.04	0.7	0	0.02	1.56	15.00	4884	animal living in stormline below w here sample collected and above manhole
D51486216	D51486212	ManHole	09/30/2015 12:15	yes	1 to 5	19.20	7.25	80.00	0.88	0.00	0.8	0	0.05	0.84	6.19	238	
D51488236	D51488236	Outfall	09/30/2015 10:51	no													
D54494201	D54494201	Outfall	09/30/2015 10:15	no													access blocked by blackberries, no flow in upstream manholes
D39460252	D39460252	Outfall	10/15/2015 13:15	yes	1	17.30	6.29	64.90	2.09	0.01	0.4	0	0	0.44	5.51	175	
D42466417	D42466227	ManHole	10/15/2015 11:06	yes	5 to 10	19.20	7.20	88.30	1.91	0.25	0.1	0	0.05	0.99	7.36	< 10	
D42466417	D42466227	ManHole	10/15/2015 11:20	yes	20-30	19.30	7.34	110.10	24.30	0.74	0.24	> 0.25	0.25	2.26	11.20	474	second sample taken due to sudden increase in flow
D48460229	D42460231	ManHole	10/15/2015 14:00	no													
D42476203	D42476203	Outfall	10/09/2015 13:00	no													
D45468241	D45468241	Outfall	10/09/2015 09:25	yes	15-20	17.70	7.93	165.40	0.80	0.02	0.1	0	0	1.02		10	
D45476217	D45476217	Outfall	10/09/2015 13:20	yes	1 to 5	18.00	7.60	201.50	6.56	0.06	0.5	0	0	2.83	8.85	121	
D51470205	D51470205	Outfall	10/09/2015 10:30	no													
D51488203	D51488203	Outfall	10/09/2015 11:25	yes	5 to 10	16.70	7.63	69.60	2.81	0.00	0.6	0	0.02	1.03	6.11	10	
D39478271	D39478270	ManHole	10/15/2015 09:10	yes	15-20	16.50	7.43	127.70	5.46	0.04	0.3	0	0	0.86	13.90	496	
D42476279	D39476232	ManHole	10/15/2015 08:45	no													
D45464207	D45464206	ManHole	10/15/2015 10:35	yes	5 to 10	15.80	7.52	90.90	1.62	0.02	0.5	0	0	0.42	6.23	86	
D54470205	D54470205	Outfall	10/15/2015 10:00	no													

Data in red exceed action levels, see Dry Weather Outfall and Illicit Discharge Screening Plan for more information.