

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D1: Adult Fish Sample Data Sheets (Phase I and Phase II)

Appendix D2: Young-of-the-Year Fish Sample Collection Data Sheets (Phase II)

Appendix D3: Lake Profiling and Surface Water Collection Data Sheets (Phase I Stratification and Overturn and Phase II Stratification)

Appendix D4: Sediment and Sediment Pore Water Collection Data Sheets (Phase II)

Appendix D5: Aquatic Vegetation Field Data Sheets (Phase I)

Appendix D6: Aquatic Invertebrates Field Data Sheets (Phase I)

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D1: Adult Fish Sample Data Sheets (Phase I and Phase II)

PHASE I

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: Coods Inlet (CI) #1 Date: 10/4/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

KPG
KPF
KPS

Fish #	Genus	Species	Length (mm)	Comments
001 S1	LMB		402 / 950	F ^{ovary} 7.8 _W
002 S7	LMB		350 / 575	
003 S2	LMB		291 / 325	
004 S2	LMB		323 / 425	
005 S2	LMB		295 / 250	
006 S1	Bluegill		152 / 69.7	
007 S7	Bluegill		159 / 74.1	

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: Crooks E Pg 2 Date: 10/4/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

KP8

KP9

Fish #	Genus	Species	Length (mm)	Comments
S1 001 008	Bluegill		135 / 45.5	
S1 002 009	Bluegill		138 / 41.1	
S2 003 010	Bluegill		188 / 118.5	
S2 004 011	Bluegill		166 / 99.2	
S2 005 012	Bluegill		168 / 90.0	
006	go to			
007	Pg 3			

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: Words Tule pg 3 Date: 10/7/07
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm) / <i>cm</i>	Comments
<u>001</u>	<u>013</u>	<u>Ch Catfish</u>	<u>680 / 2248</u>	<u>M</u>
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: WIRDS INLET pg 4 Date: 10-13-17
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001014	FLATHEAD	CATFISH	588mm / 2242g	OVARY 15.2g F
002015	FLATHEAD		508mm / 1277g	
003016	CHAUNEL	CATFISH	508mm / 1600g	
004017	CHAUNEL		480mm / 950g	M
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: HR1 → Curbulet Date: 10/3
 Stream / Location: OPTION Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

*removed
large
crayfish
from gut*

Fish #	Genus	Species	Length (mm)	Comments
001	<i>Si</i> <u>Routledge Bass</u>		<u>135"</u> <u>346</u>	<u>560W</u> <u>F Ovals</u> <u>Silver</u>
002	<u>LMB</u>		<u>347</u>	<u>500</u> <u>M</u>
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: HQ1 Date: 10/4/1
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	Bluegill		132	36.8
002	Bluegill		132	26.1
003	Bluegill		123	29.5
004	Bluegill		119	26.5
005	Bluegill		115	22.6
006	Bluegill		107	19.7
007			118	26.1

P3

P4

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL#1 Date: 10/5 + 10/6
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1719301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)/g	Comments
001	CH Catfish		538 / 1575	M
<u>S1</u> 002	LMB		372 / 825	F ovaries = 4.1 g
003	LMB		392 / 850	
<u>S2</u> 004 ^{10/6}	LMB		350 / 825	
005 ^{10/6}	LMB		346 / 625	
-006				
-007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: <u>DMC / DES</u>	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL 1 Date: Oct 11, 2012
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 006	Blue gill		83.7g 175mm	
002 007	Blue gill		56.2g 150mm	
003 008	Blue gill		72.4g 165mm	
004 009	Blue gill		40.4g 139mm	
005 010	Blue gill		59.2g 154mm	
006 011	Blue gill		40.6g 135mm	
007 012	Blue gill		44.9g 145mm	

Sample 1 {
 Sample 2 {

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL 1 Date: Oct 11, 2017
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 003	FHC		775g 456mm	
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL 2 pg 3 Date: 10/5
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC 1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
<u>001</u> <u>015</u>	<u>LM B</u>		<u>345 / 650</u>	<u>M</u>
<u>SI</u> <u>002</u> <u>016</u>	<u>LM B</u>		<u>325 / 425</u>	<u>M</u>
<u>003</u> <u>017</u>	<u>LM B</u>		<u>332 / 450</u>	<u>M</u>
<u>004</u> <u>018</u>	<u>LM B</u>		<u>306 / 400</u>	<u>M</u>
<u>SI</u> <u>005</u> <u>019</u>	<u>LM B</u>		<u>290 / 325</u>	<u>M</u>
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: L412 pg 2 Date: 10/5/14
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
<u>52</u> <u>001</u> <u>008</u>	<u>Bloogill</u>		<u>127 / 31.1</u>	
<u>002</u> <u>009</u>	<u>FH Catfish</u>		<u>415 / 650</u>	<u>Male</u>
<u>003</u> <u>010</u>	<u>CIT Catfish</u>		<u>493 / 1150</u>	<u>Male</u>
<u>004</u> <u>011</u>	<u>KY Bass</u>		<u>301 / 425</u>	
<u>51</u> <u>005</u> <u>012</u>	<u>KY Bass</u>		<u>302 / 350</u>	
<u>006</u> <u>013</u>	<u>KY Bass</u>		<u>321 / 500</u>	<u>Foray 4.0015</u>
<u>007</u> <u>014</u>	<u>KY Bass</u>		<u>352 / 650</u>	

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL#2 pg 1 Date: 10/5/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: SL1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	Bluegill		135 / 39.4	
002 S1	Bluegill		145 / 47.1	
003	Bluegill		160 / 74.8	
004	Bluegill		134 / 30.5	
005 S2	Bluegill		125 / 25.8	
006	Bluegill		128 / 25.9	
007	Bluegill		122 / 24.9	

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: #LHL#3 p81 Date: 10/5/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711391
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 S1	Hybrid	Striper	533	2100p M
002 S1	Hybrid	Striper	541	2130 F 2622g ovary =
003 S2	Hybrid	Striper	416	250 180 M
004 S1	Kentucky		330	537 F 219g ovary
005 S1	Kentucky		320	450 Not sexed
006 S1	Kentucky	Beard	332	500 M
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL#3 pgs 1 & 2 Date: 10/4/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
<u>P1</u> S2001 007	<u>Kentucky</u>	<u>Bass</u>	<u>353</u>	<u>700gr F</u> <u>0.16ug</u> <u>4.3gr</u>
S2002 008	<u>Kent</u>	<u>Bass</u>	<u>370</u>	<u>750</u>
<u>P2</u> S2003 009	<u>Kent</u>	<u>Bass</u>	<u>337</u>	<u>500gr</u>
004	<u>Flathead</u>	<u>Catfish</u>	<u>21.5"</u> <u>550</u>	<u>1700gr F</u> <u>Not</u> <u>subsampled</u> <u>over</u>
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL3 P8A3 Date: 10/5/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: SL1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Picture on Ricks

Fish #	Genus	Species	Length (mm) / <i>wt</i>	Comments
001	Bluegill		150 / 51.1	
002 <i>SI</i>	Bluegill		160 / 68.2	
003	Bluegill		158 / 65.9	
004	Bluegill		144 / 45.0	
005 <i>SL</i>	Bluegill		135 / 38.7	
006	Bluegill		140 / 37.4	
007	Bluegill		130 / 35.2	

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL #3 #4 PG 4 Date: 10/5/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm) or	Comments
51 001008	channel catfish		485 / 800	F No egg - D. Sawyer MISSING
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL3 PG #15 Date: 10/6/17

Stream / Location: _____ Time: _____

KPDES Permit#: _____

County: _____ Lat/Long Upstream Reach: _____

Lat/Long Downstream Reach: _____

Outfall #: _____ Duplicate/Replicate (circle one): yes no

Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	SI	CH CAFE sk	443/775	F orange = 0.44 gr
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____

Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: L4L3 Date: 10/18/17
 Stream / Location: Herrington Lake Time: 1630
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Wt Comments
001	<i>Channa catfish</i>	CC	730mm	5670g, 138.27
002				
003				
004				
005				
006				
007				

Gravid

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL#4 P&I Date: 10/3/17
 Stream / Location: _____ Time: 18:47 from lot
 KPDES Permit#: SC1711301 day inventories
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 S1	Lepomis	macrochirus	185	104gW
002 S1	Bluegill		182	88.8gW
003 S1	Bluegill		178	70.3gW
004 S1	Bluegill		168	45.4gW
005 S2	Bluegill		168	65.0gW
006 S2	Bluegill		159	64.2gW
007 S2	Bluegill		150	53.2

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL#4 Pg 2 Date: 10/3
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC 1711 301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
<u>S2</u> 001 008	Bluejill		148 / 48.4	
<u>S1</u> 002 / 001	KY Bass		287 / 300.2	Male
<u>S1</u> 003 / 002	KY Bass		310 / 375 ^{gr}	F ovary = 30 ^{gr}
<u>S2</u> 004 / 003	LM Bass		311 / 400 ^{gr}	F ovary = 20 ^{gr}
005 / 004 XTRA	KY Bass		258 / 200.6	
006 / 005 XTR	KY Bass		248 / 190.5	
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHLY P83 Date: 10/4
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

145

Fish #	Genus	Species	Length (mm)	Comments
000 001 SL	LMR		320 400	
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL-4 Date: Oct 12, 2017
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	CC		2270g 515mm	
002	FHC		3008g 682mm	
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHLAS p81 Date: 10/7/16
 Stream / Location: SC Time: _____
 KPDES Permit#: SC 1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm) / gwr	Comments
SI 001	CHCF		802 / 4737	F _{ovary} = 82 gwr
SI 002	CH Catfish		645 / 2440	
SI 003	CHCF		522 / 1175	
SI 004	CHCF		520 / 1325	
SI 005	CHCF		570 / 1450	
006	Bluegill		172 / 90	
SI 007 <i>cont p82</i>	LMB		377 / 825	F _{ovary} = 6.6 gwr

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL#5 pg 2 Date: 10/7
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
S1 001 008	LMB		392 / 900	
S1 002 009	LMB		410 / 1050	
S2 003 010	LMB		398 / 900	
S3 004 011	LMB		378 / 800	
S4 005 012	LMB		390 / 850	
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL 5

Date: Oct 11, 2017

Stream / Location: _____

Time: _____

KPDES Permit#: _____

County: _____

Lat/Long Upstream Reach: _____

Lat/Long Downstream Reach: _____

Outfall #: _____

Duplicate/Replicate (circle one): yes no

Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 013	Bluegill		96.5g 177mm	
002 014	Bluegill		101.4g 186mm	
003 015	Bluegill		83.1g 167mm	
004 016	Bluegill		56.0g 158mm	
005 017	Bluegill		55.3g 155mm	
006 018	Bluegill		50.4g 148mm	
007 019	Bluegill		55.2g 152mm	

sample 1

sample 2

Length (mm) of 75%tile of Longest Fish: _____

Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL6 Date: 10/7/17
 Stream / Location: _____ Time: _____
 KPDES Permit#: SC1711301
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	CH	Catfish	710/4625	Foray = 118.8
002	CH	CF	500/1200	
003	KY	Bass	333/475	Foray = 5.0g
004	Hybrid	stripe	503/1825	M
005	Hybrid	stripe	480/1650	Foray 13.5g
006	Hybrid	stripes	495/1800	
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHLp Date: 10-11-17
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 007	BLUEGILL		76.6g 171mm	
002 008	Blue ^{ll} gill		90.2g 180mm	
003 009	Bluegill		97.0g 173mm	
004 010	Bluegill		55g 148mm	
005 011	Bluegill		65.4g 167mm	
006 012	Bluegill		62.2g 161mm	
007 013	LMB		525g 334mm	

sample 1 {

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL6 Date: 10-11-2017

Stream / Location: _____ Time: _____

KPDES Permit#: _____

County: _____ Lat/Long Upstream Reach: _____

Lat/Long Downstream Reach: _____

Outfall #: _____ Duplicate/Replicate (circle one): yes no

Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 014	KY Bass		45g 329mm	
002 015	KY Bass		575g 325mm	
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____

Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHLL6 Date: Oct 12, 2017
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 016	LMB		1050g 442mm	
002 017	CC		550g 424mm	
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: LHL6 Date: Oct 13, 2016
 Stream / Location: _____ Time: _____
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001 018	CC		1925 g 603mm	
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MHL-3 Date: Oct 14, 2017
 Stream / Location: Herrington Lake Time: 1730
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	Sample 1 of 2	BG	146 mm	48.9g
002		BG	153 mm	57.7g
003		BG	152 mm	62.4g
004	Sample 2 of 2	BG	145 mm	47.8g
005		BG	138 mm	42.0g
006		BG	145 mm	49.3g
007		BG	141 mm	44.1g

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MHL3 Date: 10/14/17
 Stream / Location: Herrington Lake Time: 1930
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	wf (g) Comments
0028	Sample } 1 of 2	CC	505mm	1150g, 26.1g <small>ovary =</small>
0029		CC	540mm	1250g
0030	Sample } 2 of 2	CC	454mm	775g
0031		CC	474mm	875g
0032	Sample } 1 of 2	LMB	470mm	1550g, 12.3g <small>ovary =</small>
0033		LMB	385mm	900g
0034	Sample 2 of 2	LMB	385mm	900g

Length (mm) of 75%tile of Longest Fish: 1/3
 Total # Fish Collected in Sample: _____

This is correct!

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MHL 3 Date: 10/14/17
 Stream / Location: Herrington Lake Time: 1730
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
0015	Sampled	LMB	364 mm	800g
00216	2072 2135	LMB	345mm	600g
00317				
00418				
00519				
00620				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

41.8

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MAL-1 Date: Oct 14th 2017
 Stream / Location: Herrington Lake Time: 1630
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Sample to f2 Genus Species	Length (mm)	wt(g) Comments
001	LM13 ← LM13	366mm	750g, male
002	Sample } 1 of 1	KYB	334 mm 475g, Ovary = 4.26g
003		KYB	350 mm 525g
004	Sample } 1 of 2	FC	511 mm 1350g, Ovary = 11.5g
005		FC	460 mm 1300g
006	Sample } 2 of 2	FC	620 mm 2865g
007		FC	865 mm 8913g

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MUL1 Date: Oct, 14th, 2017
 Stream / Location: Herrington Lake Time: 1830
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	wt(g) Comments
001 8	1/2 of Sample	BS	160 mm	58.9g
002				
003				
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MHL-1 Date: Oct 15th, 2017
 Stream / Location: Herrington Lake Time: 1200 pm
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
0016	Sample 2 of 2	BG	147 mm	51.5g
00217		BG	147 mm	52.6g
00318		BG	147 mm	49.1g
004				
005				
006				
007				

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: MHL-1 Date: Oct 15th, 2017
 Stream / Location: Harrington Lake Time: 1200 pm
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
0019	LMB Sample 1 of 2	LMB	365 mm	625g
00210	Sample 2 of 2	LMB	347 mm	550g
00311		LMB	345 mm	525g
00412	Sample 1 of 2	BG	161 mm	55.6g
00513		BG	165 mm	73.7g
00614		BG	172 mm	83.5g
00715	Sample 2 of 2	BG	152 mm	51.7g

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: D121 Dix River (Below Dam) Date: 10-16-17
 Stream / Location: _____ Time: 1630
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
001	Green Sunfish	(GSF)	159 mm	81.2g ^{NS}
002 Sample 1 of 2		(GSF)	132 mm	39.8g
003			119 mm	29.5g
004			105 mm	21.6g
005 Sample 2 of 2			94 mm	14.5g
006			96 mm	14.1g
007			92 mm	12.1g

(GSF) Sample 1 N=3, Sample 2, N=8

Length (mm) of 75%tile of Longest Fish: _____

Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: D121 Dix River Date: 10-16-17
 Stream / Location: ↳ Below Dam Time: 1630
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
0018	Green Sunfish	(GSF)	96 mm	14.2g
0029 Sample 2 Cont'd			87 mm	11.9g
00310			92 mm	10.3g
00411			79 mm	8.0g
00512 Sample 1 off	Bluegill	BG	134 mm	32.5g
00613			112 mm	24.8g
00714	Longear Sunfish	LE	109 mm	26.1g

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

Document ID	DOWSOP03031
Version #	1.0
Effective Date	03/06/2014
Page(s)	Page 17 of 19

**SELENIUM FISH TISSUE
CHAIN-OF-CUSTODY**

Station #: DR1 Date: 10/18/17
 Stream / Location: Dix River (Below Dam) Time: 1830
 KPDES Permit#: _____
 County: _____ Lat/Long Upstream Reach: _____
 Lat/Long Downstream Reach: _____
 Outfall #: _____ Duplicate/Replicate (circle one): yes no
 Flow status (circle one): runoff event high flow low flow normal other

Fish #	Genus	Species	Length (mm)	Comments
00115	Large mouth Bass	LMVB	341mm	500g, Ovary = 7.8g
00216	Brown trout	BT	310mm	252g Ovary = 35.6g
00317	Spotted Sucker	SS	256mm	160g
00418		"	207mm	87g
00519	"	SS	350mm	500g
00620	Hogsucker	HS	287mm	285g, 9.92g
00721	"	HS	259mm	205g

All males }
 sample

G.avid

Length (mm) of 75%tile of Longest Fish: _____
 Total # Fish Collected in Sample: _____

Collected by: _____	Date: _____	Time: _____
Relinquished by: _____	Date: _____	Time: _____
Received by: _____	Date: _____	Time: _____

PHASE II



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>CI</i>
Fish Sampling Location Description (e.g. Above Dix Dam): <i>Both N & S banks Upper/Mid/Lower</i>	
KDFWR Wildlife Collection Permit#: <i>55-18,11270</i>	Notes / Observations:
Date: <i>06/15/2018</i>	
Start Time: <i>1444 - 2433 shall seconds</i>	
GPS Coordinates <i>37.78378 84.71177</i> (or where they can be found if collected electronically):	
Investigators: <i>Duc, DS, HDT</i>	Weather at Start: <i>Hot, water temp = 30°C</i>

Flow status (circle one): runoff event high flow low flow normal other

CF
EMB
#1

CI
BG
#1

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
<i>1064</i>	<i>001</i>	<i>Micropterus</i>	<i>salmoides</i>	<i>130</i>	<i>475</i>	
<i>2064</i>	<i>002</i>	<i>"</i>	<i>"</i>	<i>131</i>	<i>450</i>	
<i>3064</i>	<i>003</i>	<i>"</i>	<i>"</i>	<i>145</i>	<i>675</i>	
<i>4064</i>	<i>004</i>	<i>"</i>	<i>"</i>	<i>160</i>	<i>1050</i>	
<i>1067</i>	<i>005</i>	<i>Lepomis</i>	<i>macrochirus</i>	<i>64</i>	<i>71.2</i>	<i>lesion on left side</i>
<i>2067</i>	<i>006</i>	<i>"</i>	<i>"</i>	<i>57</i>	<i>61.9</i>	
<i>3067</i>	<i>007</i>	<i>"</i>	<i>"</i>	<i>59</i>	<i>46.0</i>	
<i>4067</i>	<i>008</i>	<i>"</i>	<i>"</i>	<i>52</i>	<i>37.9</i>	
	<i>009</i>					
	<i>010</i>					
	<i>011</i>					
	<i>012</i>					
	<i>013</i>					
	<i>014</i>					
	<i>015</i>					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>CI</i>
Fish Sampling Location Description (e.g. Above Dix Dam): <i>1st BN, North</i>	
KDFWR Wildlife Collection Permit#:	Notes / Observations:
Date: <i>6/19/18</i>	
Start Time: <i>0820</i>	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators:	Weather at Start:

Flow status (circle one): runoff event high flow low flow normal other

*1062
2062*

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	001	<i>Pylodictis</i>	<i>olivaris</i>	<i>23.9</i>	<i>2639</i>	<i>Fresh Dead</i>
	002	<i>Pylodictes</i>	<i>olivaris</i>	<i>25.3</i>	<i>2923</i>	
<i>002</i>	003	<i>Pylodictis</i>	<i>olivaris</i>	<i>18.2</i>	<i>1175</i>	<i>< 75% of previous but kept as separate sample</i>
	004					
	005					
	006					
	007					
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>HQ</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#: <i>SC/81/271</i>	Notes / Observations: <i>1314 seconds of soak time</i>
Date: <i>6/16/18</i>	
Start Time: <i>1314</i>	
GPS Coordinates <i>37.78305 84.71181</i> (or where they can be found if collected electronically):	
Investigators: <i>DM DJ HDT</i>	Weather at Start: <i>Hot Sunny</i>

Flow status (circle one): runoff event high flow low flow normal other

3064
4064

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	001	<i>Lepomis</i>	<i>macrochirus</i>	<i>7.4</i>	<i>130.5</i>	
	002	<i>"</i>	<i>"</i>	<i>6.6</i>	<i>98.7</i>	
	003					
	004					
	005					
	006					
	007					
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>HQ1</i>
Fish Sampling Location Description (e.g. Above Dix Dam): <i>HQT</i>	
KDFWR Wildlife Collection Permit#: <i>SC1811270</i>	Notes / Observations:
Date: <i>06/15/2018</i>	
Start Time: <i>1600</i>	
GPS Coordinates (or where they can be found if collected electronically): <i>37.77682, 84.71273</i>	
Investigators: <i>ROEL, DJ, HDT</i>	Weather at Start: <i>Hot, water temp 30.8</i>

Flow status (circle one): runoff event high flow low flow normal other

*HQ
B5*

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
<i>1 of 2</i>	001	<i>Lepomis</i>	<i>macrochirus</i> <i>BF</i>	<i>67</i>	<i>97.1</i>	
<i>2 of 2</i>	002	<i>Lepomis</i>	<i>macrochirus</i>	<i>56</i>	<i>42.7</i>	
	003					
	004					
	005					
	006					
	007					
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by: <i>[Signature]</i>	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL1</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#: <i>SC1811271</i>	Notes / Observations: <i>2039 seconds shack time</i> <i>Both N & S banks w/ no docks</i>
Date: <i>6/16/18</i>	
Start Time: <i>1132</i>	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators: <i>RBL DT HDT</i>	Weather at Start: <i>Sunny / Hot</i>

Flow status (circle one): runoff event high flow low flow normal other

1063
2009
3003
4004
1005
2006
3007

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	<i>001</i>	<i>Lepomis</i>	<i>macrochirus</i>	<i>7.1</i>	<i>119.8</i>	
	<i>002</i>	<i>Lepomis</i>	<i>macrochirus</i>	<i>7.2</i>	<i>122.0</i>	
	<i>003</i>	<i>Lepomis</i>	<i>macrochirus</i>	<i>5.5</i>	<i>41.8</i>	
	<i>004</i>	<i>Lepomis</i>	<i>macrochirus</i>	<i>6.5</i>	<i>84.0</i>	
	<i>005</i>	<i>Micropterus</i>	<i>salmonoides</i>	<i>13.8</i>	<i>640.0</i>	<i>opercular ♀</i>
	<i>006</i>	<i>Micropterus</i>	<i>salmonoides</i>	<i>13.5</i>	<i>560.0</i>	
	<i>007</i>	<i>Micropterus</i>	<i>salmonoides</i>	<i>17.7</i>	<i>1330</i>	<i>postopercular tail condition</i>
	<i>008</i>					
	<i>009</i>					
	<i>010</i>					
	<i>011</i>					
	<i>012</i>					
	<i>013</i>					
	<i>014</i>					
	<i>015</i>					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page 4 of 4

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL 1</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#:	Notes / Observations:
Date: <i>6/20/18</i>	
Start Time:	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators: <i>PJ, RBC</i>	Weather at Start: <i>Hot, Partially Sunny</i>

Flow status (circle one): runoff event high flow low flow normal other

1063
2083
3013
1061

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
<i>001</i>	<i>001</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>19.6</i>	<i>1540</i>	
	<i>002</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>20.4</i>	<i>1680</i>	
	<i>003</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>19.3</i>	<i>1380</i>	
<i>002</i>	<i>004</i>	<i>Ictalurus</i>	<i>punctatus</i>	<i>21.7</i>	<i>1540</i>	<i>See pg 3</i>
	<i>005</i>					<i>Label 6/18</i>
	<i>006</i>					
	<i>007</i>					
	<i>008</i>					
	<i>009</i>					
	<i>010</i>					
	<i>011</i>					
	<i>012</i>					
	<i>013</i>					
	<i>014</i>					
	<i>015</i>					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL1</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#:	Notes / Observations: <i>trout lines fished overnight</i>
Date: <i>6/18 118</i>	
Start Time: <i>905</i>	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators: <i>DL, DJ</i>	Weather at Start: <i>Sunny Hot</i>

Flow status (circle one): runoff event high flow low flow normal other

1061

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	001	<i>Ictalurus</i>	<i>punctatus</i>	<i>217</i>	<i>1540</i>	<i>sub & pimple like parasites, good condition</i>
	002					
	003					
	004	<i>changed to</i>				
	005	<i>FWB 002 (CCF) - LHL1 to 1806/8 10/11</i>				
	006					
	007	<i>In photos as FWB 001 (CCF) - LHL1 1806/8</i>				
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL 2</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#:	Notes / Observations:
Date: <i>06/20/18</i>	
Start Time:	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators: <i>DJ RBL</i>	Weather at Start: <i>Hot Partially Sunny</i>

Flow status (circle one): runoff event high flow low flow normal other

10/2
20/2

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	001	<i>Pylodictis</i>	<i>oliveris</i>	<i>19.1</i>	<i>1280</i>	
	002	<i>Pylodictis</i>	<i>oliveris</i>	<i>18.7</i>	<i>1230</i>	
	003					
	004					
	005					
	006					
	007					
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL3</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#: <i>SC1811271</i>	Notes / Observations: <i>Small area, made 2 passes</i> <i>1396 seconds soak time</i>
Date: <i>6/16/18</i>	
Start Time: <i>1341</i>	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators: <i>in DJ HDT</i>	Weather at Start: <i>Sunny Hot</i>

Flow status (circle one): runoff event high flow low flow normal other

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
<i>1062</i> 001	001	<i>Lepomis</i>	<i>macrochirus</i>	<i>58</i>	<i>58.8</i>	
<i>2062</i> "	002	<i>Lepomis</i>	<i>microchirus</i>	<i>66</i>	<i>89.8</i>	
	003					
	004					
	005					
	006					
	007					
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL 6</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#: <i>5C1811271</i>	Notes / Observations: <i>shoaked N side of cone to waterfall at lower end all collected w/ 1431 sec shock</i>
Date: <i>6/16/18</i>	
Start Time: <i>9:25 AM</i>	
GPS Coordinates <i>37.76007 84.68973</i> (or where they can be found if collected electronically):	
Investigators: <i>RBL, DJ, HDT</i>	Weather at Start: <i>Sunny Hot</i>

Flow status (circle one): runoff event high flow low flow normal other

1065
2065
3065
4065
5065
103
2063
3063

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	001	<i>Lepomis</i>	<i>macrochirus</i>	<i>72</i>	<i>124.6</i>	
	002	<i>Lepomis</i>	<i>macrochirus</i>	<i>67</i>	<i>94.7</i>	
	003	<i>Lepomis</i>	<i>macrochirus</i>	<i>68</i>	<i>102.3</i>	
	004	<i>Lepomis</i>	<i>macrochirus</i>	<i>63</i>	<i>78.8</i>	
	005	<i>Lepomis</i>	<i>macrochirus</i>	<i>5.8</i>	<i>55.0</i>	
	006	<i>Micropterus</i>	<i>salmonoides</i>	<i>147</i>	<i>780.0</i>	
	007	<i>Micropterus</i>	<i>salmonoides</i>	<i>139</i>	<i>700.0</i>	
	008	<i>Micropterus</i>	<i>salmonoides</i>	<i>145</i>	<i>780.0</i>	
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL 6</i>
Fish Sampling Location Description (e.g. Above Dix Dam):	
KDFWR Wildlife Collection Permit#:	Notes / Observations: <i>1-CCF for 002</i>
Date: <i>6/20/18</i>	
Start Time:	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators:	Weather at Start:

Flow status (circle one): runoff event high flow low flow normal other

Sample #	Fish #	Genus	Species	Length (mm) <i>mm</i>	Weight (grams)	Comments
<i>1064</i>	<i>001</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>165</i>	<i>720</i>	
<i>2064</i>	<i>002</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>193</i>	<i>1175</i>	
<i>3064</i>	<i>003</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>184</i>	<i>960</i>	
<i>4064</i>	<i>004</i>	<i>Pylodictis</i>	<i>olivaris</i>	<i>174</i>	<i>780</i>	
<i>1002</i>	<i>005</i>	<i>Ictalurus</i>	<i>punctatus</i>	<i>21.3</i>	<i>1650</i>	
<i>12062</i>	<i>006</i>	<i>Ictalurus</i>	<i>punctatus</i>	<i>17.3</i>	<i>825</i>	<i>was listed as FWS 001 (CCF)-LHL 6 180618 in photo log</i>
	<i>007</i>					
	<i>008</i>					
	<i>009</i>					
	<i>010</i>					
	<i>011</i>					
	<i>012</i>					
	<i>013</i>					
	<i>014</i>					
	<i>015</i>					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:



Document ID:
Version #
Effective Date:
Page ___ of ___

Herrington Lake Adult Fish Tissue Collection and Chain-Of-Custody Form

Study Lake or River: <i>Herrington Lake</i>	Sampling Location ID (e.g. LHL-2): <i>LHL 6</i>
Fish Sampling Location Description (e.g. Above Dix Dam): <i>Back of cove</i>	
KDFWR Wildlife Collection Permit#:	Notes / Observations: <i>on trotline GS bait fished overnight</i>
Date: <i>6/18 / 18</i>	
Start Time: <i>1000</i>	
GPS Coordinates (or where they can be found if collected electronically):	
Investigators:	Weather at Start:

Flow status (circle one): runoff event high flow low flow normal other

106

Sample #	Fish #	Genus	Species	Length (mm)	Weight (grams)	Comments
	001	<i>Ictalurus</i>	<i>punctatus</i>	<i>173</i>	<i>825</i>	
	002					
	003	<i>was</i>	<i>FWS 001 (CCF) - LHL6 - 180618 106</i>			
	004					
	005					
	006					
	007					
	008					
	009					
	010					
	011					
	012					
	013					
	014					
	015					

Length (mm) of 75%tile of Longest Fish:	Total # Fish Collected in Sample:	
Collected by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D2: Young-of-the-Year Fish Sample Collection Data Sheets (Phase II)

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AJS, FW</u>	Notes: <u>Recon Sampling</u>
Sampling Date(s): <u>July 17th, 2018</u>	
Weather Forecast: <u>80 F Sun/Cloud</u>	
Air Temp: <u>80 F</u> Water Temp: <u>~ 80 F</u>	

YOY Bass Sampling Region (circle one):

Upper Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>Upper Curds Inlet near CI 1</u>	<u>Minnow Traps (7)</u>	<u>930AM</u>	<u>1</u>	<u>15</u>	
	<u>Upper CI near outfall</u>	<u>Seine Net (Drop)</u>	<u>1045AM</u>	<u>2</u>	<u>~500+</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>ATS, DJ</u>	Notes: <i>* Analytical sample separate</i>
Sampling Date(s): <u>July 20, 2018</u>	
Weather Forecast: <u>UNK</u>	
Air Temp: <u>80F</u> Water Temp: <u>80F</u>	

YOY Bass Sampling Region (circle one):

Mid
Curds Inlet

 HQ Inlet

 LHL1(Rocky Arm)

 LHL2(Dix Dam)

 LHL3 Cove

 LHL 6 Cove

Sample ID: <small>e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)</small>	Sampling Location Description <small>e.g. 50' north of CI2, west shore</small>	Sampling Method <small>(Seine, Electrofish, Minnow Trap etc.)</small>	Start Time <small>(24hr clock)</small>	Sampling Duration <small>(in hrs)</small>	Sample Size <small>(N=)</small>	No. in Photo ^{a,b} <small>(N=)</small>
	<i>middle CI & cone of outfall + just downstream east shore</i>	<i>Seine (5 hauls)</i>	<i>1030</i>	<i>0.25</i>	<i>598</i>	
	<i>"</i>	<i>Seine (2 hauls)</i>	<i>"</i>	<i>0.25</i>	<i>128*</i>	

Notes:
 a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
 b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM

RAMBOLL

Primary Fish Collector(s): <u>AJS, FW</u>	Notes: * Also caught/released ~270 silverside minnows
Sampling Date(s): <u>Jul 21st, 2018</u>	
Weather Forecast: <u>UNK</u>	
Air Temp: <u>85</u> Water Temp: <u>~82f</u>	

YOY Bass Sampling Region (circle one):

Mid Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	Middle CI @ dry outfall near CI2	Seine Net (9 pulls)	1500	.75	181	
	Middle CI @ wet out fall near CI 2.1	" (2 pulls)	1545	.25	49*	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>ASJ, DJ</u>	Notes:
Sampling Date(s): <u>July 20, 2018</u>	
Weather Forecast: <u>Sunny, possibly rain</u>	
Air Temp: <u>72°</u> Water Temp: <u>estimate 80-85°</u>	

YOY Bass Sampling Region (circle one):

Lower Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>Lower Curds CT - 4 west shore</u>	<u>Seine net</u>	<u>10:45</u>	<u>2hrs 15min</u>	<u>31</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): 7-21-18	Notes: directions (left, right) determined by looking into the cove/inlet
Sampling Date(s): Forest, Alan	
Weather Forecast: ~70° sunny	
Air Temp: ~70° Water Temp: estimate 80-85°	

YOY Bass Sampling Region (circle one):

Lower Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	3.2 transect right bank & left bank	Trap	10:10	30 mins	10	
	Mouth of inlet right side 300ft from point	trap	13:35	5 mins	10	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>Forest, Alan</u>	Notes: <u>directions (left, right) determined by looking into the cove/inlet</u>
Sampling Date(s): <u>7-22-18</u>	
Weather Forecast: <u>Rain + overcast</u>	
Air Temp: <u>~70°</u> Water Temp: <u>estimate 60-65°</u>	

YOY Bass Sampling Region (circle one):

Lower Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>all of lower Curds inlet</u>	<u>traps</u>	<u>14:15</u>	<u>1hr 30mins</u>	<u>48</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): <u>ALSS, DJ</u>	Notes:
Sampling Date(s): <u>July 22, 2018</u>	
Weather Forecast: <u>75 cloudy</u>	
Air Temp: <u>70</u> Water Temp: <u>~80</u>	

YOY Bass Sampling Region (circle one):

Lower Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: <small>e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)</small>	Sampling Location Description <small>e.g. 50' north of CI2, west shore</small>	Sampling Method <small>(Seine, Electrofish, Minnow Trap etc.)</small>	Start Time <small>(24hr clock)</small>	Sampling Duration <small>(in hrs)</small>	Sample Size <small>(N=)</small>	No. in Photo ^{a,b} <small>(N=)</small>
	<u>Lower CI West Bank</u>	<u>Minnow traps (5)</u>	<u>940am</u>	<u>0.5</u>	<u>27</u>	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>ASFW</u>	Notes:
Sampling Date(s): <u>Jul 23</u>	
Weather Forecast: <u>Rain 70f</u>	
Air Temp: <u>70</u> Water Temp: <u>80f</u>	

YOY Bass Sampling Region (circle one):

Lower Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>lower CI westshore</u>	<u>Minnow Trap</u>	<u>946AM</u>	<u>.5</u>	<u>4</u>	
	<u>" eastshore</u>	<u>"</u>	<u>1015</u>	<u>1hr</u>	<u>52</u>	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AS, DJ</u>	Notes:
Sampling Date(s): <u>Jul 25, 2018</u>	
Weather Forecast: <u>Sunny 80f</u>	
Air Temp: <u>80f</u> Water Temp: <u>82f</u>	

YOY Bass Sampling Region (circle one):

LOWER Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	East Shore Rock Bowl	Minnow Traps (14)	1100	1.5hrs	56	
	"	Dip Net	1200	.5 .5	53	
	"	Minnow Traps (14)	1230	.3hr	25	
	"	"	1330	.3hr	7	
		Dip Net	1345	.25	8	
	"	Minnow Traps(14)	1440	.25	11	
		Dip Net	1440	.5	11	

148

Notes:
 a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
 b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AJS DJ</u>	Notes:
Sampling Date(s): <u>Thu Jul 26th</u>	
Weather Forecast: <u>85f sunny</u>	
Air Temp: <u>76f</u> Water Temp: <u>82-84f</u>	

YOY Bass Sampling Region (circle one):

LOWEL Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	East Shore Rock Bowl near point	minnow traps (14)	9 AM	1hr	80	
	"	dip net	9:30AM	0.25h	8	
	"	minnow traps	3:00pm	1hr	28	
	"	Electro Shocking	3:45pm	0.5hr (3435)	43	

145
116

29

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <i>AJS, OJ</i>	Notes:
Sampling Date(s): <i>Jul 26th, 2018</i>	
Weather Forecast: <i>86° Sunny</i>	
Air Temp: <i>86°</i> Water Temp: <i>82ft</i>	

YOY Bass Sampling Region (circle one):

Curds Inlet **HQ Inlet** LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<i>H2 Inlet East Bank Half of West bank</i>	<i>Electro shock</i>	<i>1100</i>	<i>1843s (1hr)</i>	<i>144</i>	
	<i>H2 Inlet over Half of West bank and back</i>	<i>"</i>	<i>1200</i>	<i>(1657s) .75hr</i>	<i>77</i>	

Notes:

- a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
- b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AJS, DJ</u>	Notes:
Sampling Date(s): <u>July 25, 2018</u>	
Weather Forecast: <u>Sunny 85F</u>	
Air Temp: <u>85F</u> Water Temp: <u>82F</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>East ~100ft Bank</u>	<u>Electro Shock</u>	<u>1350</u>	<u>1 Shock 4085</u>	<u>61</u>	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>Forest, Alan</u>	Notes: <u>directions (left, right) determined by looking into the cove/inlet</u>
Sampling Date(s): <u>7-24-18</u>	
Weather Forecast: <u>~80° Sunny</u>	
Air Temp: <u>80°</u> Water Temp: <u>estimate 80-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: <small>e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)</small>	Sampling Location Description <small>e.g. 50' north of CI2, west shore</small>	Sampling Method <small>(Seine, Electrofish, Minnow Trap etc.)</small>	Start Time <small>(24hr clock)</small>	Sampling Duration <small>(in hrs)</small>	Sample Size <small>(N=)</small>	No. in Photo ^{a,b} <small>(N=)</small>
	<u>Waterfall at back of Inlet</u>	<u>dip net</u>	<u>13:00</u>	<u>48 mins</u>	<u>6</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): Forest, Alvin	Notes: directions (left, right) determined by looking into the cove/inlet
Sampling Date(s): 7-22-18	
Weather Forecast: rain and overcast	
Air Temp: 72° Water Temp: estimate 80-85°	

YOY Bass Sampling Region (circle one):

Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	left side of HQ inlet, 200ft of shoreline	Seine	10:35	10 mins	0	
	right side of HQ inlet, 300 ft of shoreline cove	Seine	10:50	1 hr	15	
	//	dip net	11:50	40 mins	1	

Notes:
 a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
 b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>Foresch, Alan</u>	Notes: <u>directions (left, right) determined by looking into the cave/inlet</u>
Sampling Date(s): <u>7-21-18</u>	
Weather Forecast: <u>~70° sunny</u>	
Air Temp: <u>70°</u> Water Temp: <u>estimate 80-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1 (Rocky Arm) LHL2 (Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>Fallen Branch at waterfall at back of inlet</u>	<u>Trap</u>	<u>14:10</u>	<u>5mins</u>	<u>2</u>	
	<u>right side of inlet, start at 200 feet from waterfall</u>	<u>Seine</u>	<u>14:40</u>	<u>2hrs 20mins</u>	<u>105</u>	
	<u>covered ~200 ft of bank</u>					

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>Fonesti, Alan</u>	Notes: <u>directions (left, right) determined by looking into the cove/inlet</u>
Sampling Date(s): <u>7-26-18</u>	
Weather Forecast: <u>~70° sunny</u>	
Air Temp: <u>~70°</u> Water Temp: <u>estimate 80-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>Fallen Branch at waterfall at back of inlet</u>	<u>Traps</u>	<u>10:00</u>	<u>10mins</u>	<u>1</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): AJS DJ	Notes: * FW @ AM Arrived in H2 @ 1400 - Continued Seining on West Shore
Sampling Date(s): Jul 20, 2018	
Weather Forecast: Mixed 80F	
Air Temp: 80F Water Temp: ~78F-80F	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	Inner HQ @ back	Seine (3 hauls)	1300	1.0hr	40+10+10 n=60	
	H2 West Shore	" (5 hauls)	1400	0.5hr	~20fish	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): ASS, FW	Notes:
Sampling Date(s): July 17th, 2018	
Weather Forecast: 80F Sunny	
Air Temp: 80F Water Temp: 82F	

YOY Bass Sampling Region (circle one):

Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo^{a,b} (N=)
	HQ Inlet near water fall	Minnow Trap (1)	1015	~25	~10	
	H2 Inlet " "	Seine net	1300	~65	65	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): <u>AJS, DJ</u>	Notes:
Sampling Date(s): <u>July 22, 2018</u>	
Weather Forecast: <u>75 cloudy</u>	
Air Temp: <u>70</u> Water Temp: <u>~80</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo^{a,b} (N=)
	<u>LHL-1 Rockyfork left fork @ waterfall</u>	<u>Dip net</u>	<u>1215</u>	<u>2</u>	<u>~570 +~190</u>	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <i>AJS, FW</i>	Notes:
Sampling Date(s): <i>July 17th, 2018</i>	
Weather Forecast: <i>80° Sunny</i>	
Air Temp: <i>80°</i> Water Temp: <i>68.2°</i>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<i>LHL3 Inner Cove</i>	<i>Seine Net</i>	<i>1400</i>	<i>1.5</i>	<i>25</i>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): <u>Forrest, Alan</u>	Notes:
Sampling Date(s): <u>7-20-18</u>	
Weather Forecast: <u>Sunny</u>	
Air Temp: <u>72</u> Water Temp: <u>estimate 80-85</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo^{a,b} (N=)
	<u>LHL-3 cove</u>	<u>Seine</u>	<u>15:00</u>	<u>0.5 (30mins)</u>	<u>3</u>	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY) FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>Forest Alan</u>	Notes:
Sampling Date(s): <u>7-22-18</u>	
Weather Forecast: <u>Overcast / slight rain</u>	
Air Temp: <u>~68°</u> Water Temp: <u>estimate 80°-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet
HQ Inlet
LHL1(Rocky Arm)
LHL2(Dix Dam)
LHL3 Cove
LHL 6 Cove

Sample ID: <small>e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)</small>	Sampling Location Description <small>e.g. 50' north of CI2, west shore)</small>	Sampling Method <small>(Seine, Electrofish, Minnow Trap etc.)</small>	Start Time <small>(24hr clock)</small>	Sampling Duration <small>(in hrs)</small>	Sample Size <small>(N=)</small>	No. in Photo^{a,b} <small>(N=)</small>
	LHL-3 core	dip net	15:50	0.5 (30 mins)	2	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): <u>AJS, FW</u>	Notes:
Sampling Date(s): <u>July 23 2018</u>	
Weather Forecast: <u>Cloudy</u>	
Air Temp: <u>66</u> Water Temp: <u>estimate 80-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo^{a,b} (N=)
	LHL3 cove	Traps	11:30	0.25	2	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AS FW</u>	Notes:
Sampling Date(s): <u>July 24, 2018</u>	
Weather Forecast: <u>86F Sunny</u>	
Air Temp: <u>86</u> Water Temp: <u>82F</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	LHL3 Cove	Minnow Traps (6)	9:30AM	0.5 hr	2	
	LHL3 North side	" (7)	1000 9:45AM	1 hr	0 (only adults)	
	"	Seine Net (1 pull)		.25 hr	0	
	LHL3 M Cove NS	" (2 pulls)		.5 hr	0	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AJS</u>	Notes:
Sampling Date(s): <u>Jul 26th, 2018</u>	
Weather Forecast: <u>80F Sunny</u>	
Air Temp: <u>80</u> Water Temp: <u>est. note 80-85</u>	

YOY Bass Sampling Region (circle one):

Harding Inlet Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	Both Banks of HI	Electro Shock	1330	1.0 (1598g)	41	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

**Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM**



Primary Fish Collector(s): <u>AJS, EW</u>	Notes:
Sampling Date(s): <u>Jul 16, 2018</u>	
Weather Forecast: <u>80F Rain</u>	
Air Temp: <u>80F</u> Water Temp: <u>84F</u>	

(HARDIN Inlet) YOY Bass Sampling Region (circle one):

Curds Inlet
 HQ Inlet
 LHL1(Rocky Arm)
 LHL2(Dix Dam)
 LHL3 Cove
 LHL 6 Cove

Sample ID: <small>e.g. (YOYBASS-001-LHL6), or (YOYBASS-001TS-LHL6)</small>	Sampling Location Description <small>e.g. 50' north of CI2, west shore</small>	Sampling Method <small>(Seine, Electrofish, Minnow Trap etc.)</small>	Start Time <small>(24hr clock)</small>	Sampling Duration <small>(in hrs)</small>	Sample Size <small>(N=)</small>	No. in Photo ^{a,b} <small>(N=)</small>
	<u>HI near boat ramp</u>	<u>Seine Net</u>	<u>1800</u>	<u>.5hr</u>	<u>~230</u>	

Notes:

a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).

b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>AJS, DJ</u>	Notes:
Sampling Date(s): <u>Jul 25, 2018</u>	
Weather Forecast: <u>Sunny</u>	
Air Temp: <u>70°</u> Water Temp: <u>80-85°</u>	

HARDIN INLET YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>Boat Ramp 30' right</u>	<u>seine (2) pulls</u>	<u>830AM</u>	<u>.5</u>	<u>0</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM

RAMBOLL

Primary Fish Collector(s): <u>Don, Alan</u>	Notes: <u>directions (left, right) is determined by looking into the cove/inlet</u>
Sampling Date(s): <u>7-23-19</u>	
Weather Forecast: <u>~65° cloudy</u>	
Air Temp: <u>-65°</u> Water Temp: <u>estimate 80-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>near 300 ft left of water fall at end of cove</u>	<u>dip net</u>	<u>9:50</u>	<u>2 hrs 10 min</u>	<u>29 AM, 109</u>	
	<u>500 ft left of water fall at end of cove</u>	<u>Seine</u>	<u>12:05</u>	<u>2 hrs</u>	<u>392</u>	
	<u>At waterfall at end of cove</u>	<u>traps</u>	<u>14:30</u>	<u>30 min</u>	<u>11</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

Herrington Lake Young-Of-The-Year (YOY)
FISH COLLECTION EFFORT FORM



Primary Fish Collector(s): <u>Dom Alan</u>	Notes: <u>directions (left, right) determined by looking into the cove/inlet</u>
Sampling Date(s): <u>7-24-18</u>	
Weather Forecast: <u>~70° Sunny</u>	
Air Temp: <u>~70°</u> Water Temp: <u>est. water 80-85°</u>	

YOY Bass Sampling Region (circle one):

Curds Inlet HQ Inlet LHL1(Rocky Arm) LHL2(Dix Dam) LHL3 Cove LHL 6 Cove

Sample ID: e.g. (YOYBASS-001-LHL6), or (YOYBASS - 001TS - LHL6)	Sampling Location Description e.g. 50' north of CI2, west shore)	Sampling Method (Seine, Electrofish, Minnow Trap etc.)	Start Time (24hr clock)	Sampling Duration (in hrs)	Sample Size (N=)	No. in Photo ^{a,b} (N=)
	<u>Small cove on right when heading into LHL-6 cove</u>	<u>traps</u>	<u>9:35</u>	<u>20 mins</u>	<u>12</u>	
	<u>//</u>	<u>dip net</u>	<u>9:55</u>	<u>20 mins</u>	<u>8</u>	
	<u>left bank ~300ft from waterfall</u>	<u>Seine</u>	<u>10:15</u>	<u>20 mins</u>	<u>50+</u>	

Notes:
a) For unaffected YOY Bass, a maximum of 100 individuals will fit within 20" X 10" image field, providing detailed imagery of both the left and right sides of the fish (two photos).
b) For the YOY analytical subsample of approximately 10 YOY bass (minimum 5 grams total weight), detailed imagery will be captured of both the left and right sides of each individual (two photos) before they are frozen for shipment to the laboratory.

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D3: Lake Profiling and Surface Water Collection Data Sheets (Phase I Stratification and Overturn and Phase II Stratification)

PHASE I STRATIFICATION AND OVERTURN

Herrington Lake Surface Water Quality and Dissolved Oxygen Profile Data Collection Sheet

Herrington Lake Transect Location	LHL-2 (Two)	
GPS Coordinates (or where they can be found if collected electronically)	Trimble Vna Dix Dam	
Investigators:	A. Smith, B. Garber	Date: Oct 6, 2017 Time: 11:21 AM
Temperature/Depth/Oxygen Probe Used	YSI 850 MDS	
Probe Calibration Date	Oct 6, 2017	
Secchi Disk Depth	8 FT WATER DEPTH: 195 FT	

Depth (feet)	DO (mg/L)	Cond.	Temp (°C or °F)	PH	Stratification Layer (if known)	Was Surface Water Collected? (Y,N)	SAMPLE Sample ID (if collected) DEPTH	SAMPLE Observer Notes, if any
10	5.65	0.313	22.47	8.56				
25	4.11	0.313	22.04	7.96	Epilimnion	Y	25 FT	SW-001(25)LHL2 -171006
30	3.55	0.319	21.84	7.92				
40	2.32	0.333	21.63	7.56				
50	1.94	0.295	20.24	7.6	Top of Thermocline	Y	50 FT	SW-002(50)LHL2 -171006
60	3.04	0.283	19.44	7.6				
70	1.77	0.279	17.71	7.47				
80	1.72	0.272	15.76	7.47				
90	1.63	0.262	14.16	7.47				
100	1.65	0.245	12.82	7.46	Hypolimnion	Y	100 FT	SW-003(100)LHL2 -171006
110	1.63	0.246	12.06	7.48				
120	1.40	0.244	11.35	7.5				
130	2.84	0.24	10.63	7.56				
140	2.93	0.23	9.81	7.62				
150	2.57	0.228	9.5	7.67				
160	1.85	0.226	9.09	7.76				

- Notes
- DO Dissolved oxygen
 - Temp Temperature
 - °C Degrees Celcius
 - °F Degrees Fahrenheit
 - mg/L milligrams per liter
 - Y/N Yes or No

we

Herrington Lake Surface Water Quality and Dissolved Oxygen Profile Data Collection Sheet

Herrington Lake Transect Location	LHL2 (Two)		
GPS Coordinates (or where they can be found if collected electronically)	see Trimble Yuma	LHL2 - Dix Dam	Air Temp = 5°C (from USI)
Investigators:	A. Smith, B. Gorkel		Date: Dec 11, 2017 Time: 9:15 AM
Temperature/Depth/Oxygen Probe Used	USI 650 MDS		
Probe Calibration Date	Dec 6th, 2017 - 9 ft	Checked Dec 11, 2017	Winter Sampling @ 25 ft
Secchi Disk Depth	WATER DEPTH = 190 ft		

Depth (feet)	DO (mg/L)	Cond. $\mu S/cm$	Temp (°C or °F)	pH	Stratification Layer (if known)	Was Surface Water Collected? (Y,N)	Sample ID (if collected) Depth	Observer Notes, if any
10	5.34	0.341	13.12	7.86	NONE			
20	5.31	0.341	13.12	7.86		Y	25 ft	SW001 (25) LHL2-171211
30	5.35	0.341	13.12	7.86				
40	5.36	0.341	13.12	7.86				
50	5.33	0.341	13.12	7.86				
60	5.32	0.341	13.12	7.86				
70	5.30	0.341	13.12	7.86				
80	5.29	0.341	13.12	7.86				
90	5.28	0.341	13.12	7.86				
100	5.26	0.341	13.12	7.86				
110	5.22	0.341	13.12	7.85				
120	5.14	0.341	13.11	7.84				
130	4.65	0.340	12.98	7.80				
140	2.24	0.339	12.92	7.62				
150	1.68	0.337	12.30	7.56				

- Notes
- DO Dissolved oxygen
 - Temp Temperature
 - °C Degrees Celcius
 - °F Degrees Fahrenheit
 - mg/L milligrams per liter
 - Y/N Yes or No

PHASE II STRATIFICATION



Herrington Lake Surface Water Collection and Profiling Data Form

Sampling Region (e.g. Curds Inlet): <i>Curds Inlet</i>					Herrington Lake Transect Location (e.g. CI-1): <i>CI 3.2</i>		
GPS Coordinates (or where they can be found if collected electronically): <i>Trumble Yuma</i>							
Investigators: <i>ADS, FW</i>						Date: <i>June 21, 2018</i>	
Water Quality Probe (e.g. YSI 650 MDS): <i>YSI 650 MDS, 600 XCM</i>						Start Time: <i>10:15 AM</i>	
Probe Calibration Date: <i>June 20, 2018</i>				Weather at start: <i>Breeze 80F</i>			
Secchi Disk Depth (in feet): <i>3 ft</i>				Water Depth (surface to bottom): <i>27 ft</i>			
Notes or Observations:				Stratification Layers for Reference: Epilimnion - Sunlight zone with higher DO and water temp. Metalimnion (Thermocline) - water temp and DO drops. Hypolimnion - Deep zone - lower stable DO and water temp.			
YSI / SW Sample Depth (feet bws)	Dissolved Oxygen (DO in mg/L)	Conductivity (mS/cm)	Water Temperature (°C or °F)	pH	Stratification Layer (if known)	Surface Water Sample? (Y/N)	SW Sample ID
<i>0</i>	<i>6.02</i>	<i>0.219</i>	<i>29.84C</i>	<i>9.31</i>			
<i>2</i>	<i>4.90</i>	<i>0.219</i>	<i>29.86C</i>	<i>9.31</i>			
<i>4</i>	<i>5.53</i>	<i>0.218</i>	<i>29.85C</i>	<i>9.26</i>			
<i>6</i>	<i>5.58</i>	<i>0.220</i>	<i>29.85C</i>	<i>9.28</i>			
<i>8</i>	<i>4.25</i>	<i>0.355</i>	<i>28.49C</i>	<i>8.9</i>			
<i>10</i>	<i>3.11</i>	<i>0.582</i>	<i>25.64C</i>	<i>8.39</i>			
<i>12</i>	<i>2.47</i>	<i>0.623</i>	<i>25.10C</i>	<i>8.04</i>			
<i>14</i>	<i>1.64</i>	<i>0.567</i>	<i>24.29C</i>	<i>7.74</i>			
<i>16</i>	<i>1.21</i>	<i>0.534</i>	<i>23.96C</i>	<i>7.75</i>			
<i>18</i>	<i>0.58</i>	<i>0.475</i>	<i>23.39C</i>	<i>7.56</i>			
<i>20</i>	<i>0.31</i>	<i>0.392</i>	<i>22.65C</i>	<i>7.81</i>			
<i>22</i>	<i>0.20</i>	<i>0.386</i>	<i>22.39C</i>	<i>7.66</i>			
<i>24</i>	<i>0.16</i>	<i>0.395</i>	<i>22.30C</i>	<i>7.58</i>			
<i>26</i>	<i>0.15</i>	<i>0.402</i>	<i>22.36C</i>	<i>7.54</i>			

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No



Herrington Lake Surface Water Collection and Profiling Data Form

Sampling Region (e.g. Curds Inlet): <i>Curds Inlet</i>		Herrington Lake Transect Location (e.g. CI-1): <i>CI-4</i>	
GPS Coordinates (or where they can be found if collected electronically): <i>Trimble Yuma</i>			
Investigators: <i>AJS, FW</i>		Date: <i>6/16/2018</i>	
Water Quality Probe (e.g. YSI 650 MDS): <i>650MDS, 6920V2, 600XLM</i>		Start Time: <i>1300</i>	
Probe Calibration Date: <i>June 15th, 2018</i>		Weather at start: <i>85°F Sunny</i>	
Secchi Disk Depth (in feet): <i>3ft</i>		Water Depth (surface to bottom): <i>75-90ft</i>	
Notes or Observations: <i>* Additional Confirmation w/ U-10 portable water meter</i>		Stratification Layers for Reference: Epilimnion - Sunlight zone with higher DO and water temp. Metalimnion (Thermocline) - water temp and DO drops. Hypolimnion - Deep zone - lower stable DO and water temp.	

YSI / SW Sample Depth (feet bws)	Dissolved Oxygen (DO in mg/L)	Conductivity (mS/cm)	Water Temperature (°C or °F)	pH	Stratification Layer (if known)	Surface Water Sample? (Y/N)	SW Sample ID
0	—	—	—	—			
10	9.52	0.482	26.28	8.37		Y	SW02(10)-CI4-180616
20	4.77	0.711	24.38	7.8			
30	1.65	0.580	22.09	7.19			
40	0.86	0.396	19.41	7.09			
50	0.91	0.318	16.78	6.89			
60	0.98	0.300	14.32	5.66			
70	0.63	0.309	15.12	5.98		Y	SW02(70)-CI4-180616
80	1.23	0.313	14.19	6.08			
<i>Confirmation w/ 600XLM</i>							
0	14.10	0.219	30.84	7.70			
10	11.00	0.645	26.27	7.33			
15	9.06	0.667	25.31	7.37			
20	1.12	0.408	22.86	7.17			
30	0.63	0.435	22.26	7.16			
40	0.51	0.350	20.38	7.20			
50	0.42	0.292	18.95	7.22			
60	0.42	0.292	18.95	7.27			
70	0.58	0.293	19.00	7.36			
80	0.56	0.293	18.90	7.41			

Notes:
 °C Degrees Celsius
 °F Degrees Fahrenheit
 bws below water surface
 mg/L milligrams per liter
 mS/cm milliSiemens per centimeter
 pH Potential of Hydrogen
 Y/N Yes or No

Confirmation w/ U-10

10	10.70
15	8.52
20	1.36



Herrington Lake Surface Water Collection and Profiling Data Form

Sampling Region (e.g. Curds Inlet): LHL Rocky Fork		Herrington Lake Transect Location (e.g. CI-1): LHL1	
GPS Coordinates (or where they can be found if collected electronically): Trimble Juno			
Investigators: AJS, FW		Date: June 15, 2018	
Water Quality Probe (e.g. YSI 650 MDS): YSI 650, 6920V2, 600XLM		Start Time: 1320	
Probe Calibration Date: June 15, 2018		Weather at start: ~86F Sunny	
Secchi Disk Depth (in feet): 3ft+		Water Depth (surface to bottom): ~80ft	
Notes or Observations: Confirmation w. YSI 650/ 600XLM		Stratification Layers for Reference: Epilimnion - Sunlight zone with higher DO and water temp. Metalimnion (Thermocline) - water temp and DO drops. Hypolimnion - Deep zone - lower stable DO and water temp.	

YSI / SW Sample Depth (feet bws)	Dissolved Oxygen (DO in mg/L)	Conductivity (mS/cm)	Water Temperature (°C or °F)	pH	Stratification Layer (if known)	Surface Water Sample? (Y/N)	SW Sample ID
0	-	-	-	-			
10	6.7	0.278	25.50	7.66		Y	SW002(10)-LHL1-180615
20	4.3	0.354	22.59	7.30			
30	2.23	0.347	21.17	6.97			
40	0.88	0.321	19.17	6.72			
50	0.58	0.302	16.47	6.35			
60	0.64	0.316	14.45	6.08			
70	0.75	0.306	15.46	6.15		Y	SW002(70)-LHL1-180615
Confirmation w. 600XLM							
0	15.25	0.208	31.27	8.80			
10	5.61	0.269	21.29	8.07			
20	1.20	0.347	22.38	7.56			
30	0.68	0.333	21.74	7.41			
40	0.70	0.267	20.39	7.35			
50	0.34	0.232	16.59	7.32			
60	0.42	0.221	14.30	7.81			
70	0.32	0.216	13.54	7.69			

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No



Herrington Lake Surface Water Collection and Profiling Data Form

Sampling Region (e.g. Curds Inlet): DIX DAM					Herrington Lake Transect Location (e.g. CI-1): LHL2					
GPS Coordinates (or where they can be found if collected electronically): TRIMBLE YUMA										
Investigators: AJS, FW							Date: 6/18/18			
Water Quality Probe (e.g. YSI 650 MDS): YSI 650 MDS, 10920V2							Start Time: 10AM			
Probe Calibration Date: 6/18, 2018					Weather at start: 80 F SUNNY					
Secchi Disk Depth (in feet): 3-4 FT					Water Depth (surface to bottom): 190-200 FT					
Notes or Observations: *CONFIRMATION OBSERVATIONS MADE WITH HORIBA U-10 -SW Samples not taken @ LHL2					Stratification Layers for Reference: Epilimnion - Sunlight zone with higher DO and water temp. Metalimnion (Thermocline) - water temp and DO drops. Hypolimnion - Deep zone - lower stable DO and water temp.					
	YSI / SW Sample Depth (feet bws)	Dissolved Oxygen (DO in mg/L)	Conductivity (mS/cm)	Water Temperature (°C or °F)	pH	Stratification Layer (if known)	Surface Water Sample? (Y/N)	Confirmation DO (mg/L) 6/18	Confirmation DO (mg/L) 6/19	<i>w/ 600 xLM membrane</i>
171.7	0	12.9	0.203	30.60	9.11		N	12.92	14.33	
110.9	10	9.11	0.303	25.27	7.91			5.43	5.14	
N/A	15	N/A	N/A	N/A	N/A					0.44 1.44
7.6	20	0.65	0.376	22.97	7.13				0.41	
6.8	30	0.60	0.279	21.62	7.08					
6.5	40	0.59	0.285	20.27	6.95					
14.7	50	1.43	0.202	16.70	6.81			0.77	0.50	
39.6	60	4.07	0.183	14.12	6.77			2.43	4.71	
42.1	70	4.39	0.186	13.44	7.51					
49.1	80	5.18	0.186	12.88	7.38					
58.4	90	6.23	0.180	12.44	7.26					
57.2	100	6.12	0.179	12.27	7.25			5.1	7.60	
56.1	110	6.03	0.177	12.12	7.16					
55.9	120	6.03	0.170	11.93	7.14					
54.2	130	5.88	0.162	11.66	7.08					
48.7	140	5.33	0.161	11.26	7.02					
41.0	150	4.52	0.161	10.93	6.94					
43.6	160	4.82	0.159	11.04	7.0					
30.4	170	3.38	0.161	10.75	6.92					
5.9	180	0.66	0.168	10.33	6.75					
5.6	190	0.63	0.173	10.03	6.72					
7.0	200	0.79	0.170	9.99	6.83					

Notes:

- °C Degrees Celsius
- °F Degrees Fahrenheit
- bws below water surface
- mg/L milligrams per liter
- mS/cm milliSiemens per centimeter
- pH Potential of Hydrogen
- Y/N Yes or No



Herrington Lake Surface Water Collection and Profiling Data Form

Sampling Region (e.g. Curds Inlet): LHL6 Near Marina				Herrington Lake Transect Location (e.g. CI-1): LHL6 Cove			
GPS Coordinates (or where they can be found if collected electronically): Trimble Yuma							
Investigators: AJS, FW					Date: Jan 15, 2018		
Water Quality Probe (e.g. YSI 650 MDS): YSI 650 MDS, 8920V2					Start Time: 1110		
Probe Calibration Date: Jan 15, 2018				Weather at start: 81F Sunny			
Secchi Disk Depth (in feet): 3 FT				Water Depth (surface to bottom): 1160 FT			
Notes or Observations:				<u>Stratification Layers for Reference:</u> Epilimnion - Sunlight zone with higher DO and water temp. Metalimnion (Thermocline) - water temp and DO drops. Hypolimnion - Deep zone - lower stable DO and water temp.			
YSI / SW Sample Depth (feet bws)	Dissolved Oxygen (DO in mg/L)	Conductivity (mS/cm)	Water Temperature (°C or °F)	pH	Stratification Layer (if known)	Surface Water Sample? (Y/N)	SW Sample ID
0	19.62	0.211	28.52	9.39			
10	1.29	0.265	24.56	8.12		Y	SW002(10)-LHL6-180617
15	—	—	—	—			
20	1.02	0.298	22.28	7.55			
30	1.00	0.294	21.10	7.48			
40	1.69	0.257	19.28	7.51			
50	5.18	0.254	16.01	7.28		Y	SW002(50)-LHL6-180617
60	6.43	0.254	13.77	6.98			
70	8.67	0.253	13.02	6.72			
80	9.44	0.254	12.65	6.68			
90	10.49	0.253	12.28	6.42			
100	10.67	0.251	12.07	6.27		Y	SW002(100)-LHL6-180617
110	10.85	0.246	11.77	6.06			
120	10.21	0.244	11.53	5.87			
130	10.17	0.242	11.31	5.67			
140	8.76	0.247	10.87	5.28			
150	1.37	0.253	10.65	5.07			

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No



Herrington Lake Surface Water Collection and Profiling Data Form

Sampling Region (e.g. Curds Inlet): <u>LHLE</u>		Herrington Lake Transect Location (e.g. CI-1): <u>LHLE</u>	
GPS Coordinates (or where they can be found if collected electronically): <u>Krimble Yuma</u>			
Investigators: <u>HDT, FW</u>		Date: <u>6/15/18</u>	
Water Quality Probe (e.g. YSI 650 MDS): <u>YSI 650 MDS, H2RIBA U-10</u>		Start Time: <u>1110</u>	
Probe Calibration Date: <u>6/19/2018 600 XLM</u>		Weather at start: <u>83°F Sunny</u>	
Secchi Disk Depth (in feet): <u>3FT</u>		Water Depth (surface to bottom): <u>33°F ~ 160ft</u>	
Notes or Observations: <u>* CONFIRMATION OBSERVATIONS MADE WITH U-10</u>		Stratification Layers for Reference: Epilimnion - Sunlight zone with higher DO and water temp. Metalimnion (Thermocline) - water temp and DO drops. Hypolimnion - Deep zone - lower stable DO and water temp.	

YSI / SW Sample Depth (feet bws)	Dissolved Oxygen (DO in mg/L)	Conductivity (mS/cm)	Water Temperature (°C or °F)	pH	Stratification Layer (if known)	Surface Water Sample? (Y/N)	SW Sample ID
265.5	0	11.53	30.61	9.35			
15.6	10	1.35	24.65	7.98		Y	SW002(10)-LHLE-180617
5.3	15	0.56	23.10	7.88			
3.4	20	0.32	22.19	7.77			
3.1	30	0.29	21.49	7.64			
4.8	40	0.51	19.94	7.69			
31.3	50	3.07	16.37	7.81		Y	SW002(50)-LHLE-180617
55.1	60	5.37	13.97	7.44			
56.5	70	5.83	13.20	7.40			
63.1	80	6.50	12.89	7.40			
70.9	90	7.36	12.72	7.43			
78.0	100	8.29	12.54	7.44		Y	SW002(100)-LHLE-180617
82.2	110	8.81	12.28	7.48			
82.2	120	8.77	12.10	7.48			
83.0	130	8.93	11.92	7.51			
81.5	140	8.77	11.77	7.50			
83.3	150	9.03	11.75	7.50			
73.9	160	8.09	11.48	7.48			

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No

* WATER QUALITY UNIT (conf)	
DEPTH	DO (mg/L)
10	3.49
40	0.30
50	0.63

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D4: Sediment and Sediment Pore Water Collection Data Sheets (Phase II)



Herrington Lake Sediment Collection Form

Sampling Region (e.g. Curds Inlet): *Curds Inlet* **Sampling Date:** *June 19th, 2018*
GPS Coordinates (or file location if collected digitally): *Trumbull Yuma* **Start Time (Boat Launched):** *10 AM*
REH Investigator(s): *as* **Weather at Start:** *81f sunny*
Dive Crew; Diver(s) down: *Shawn Nairis, Spencer George*

Notes or Observations:
- hot humid
- Trawl lines pulled from curds Inlet
- Spencer George - Dives Down for CI1A, B - Only

Sample Location/Transect	Sample Time	Water Depth (in feet)	Local Bottom Substrate (Rocky, Silty, etc.,)	Field Dup or MS/MSD?	Jar #s and size collected	PW Peeper Deployed? (Y or N)	Sediment Sample ID	Location Notes	
<i>Spencer</i> CI1B	1230	10ft	clay silt debris	No	None	Y	None	only 50' across	
	CI1A	1245	13ft	- more loose rocks silt	FD	None	Y	"	MAX 13ft deep
<i>Derak</i> CI2B	1300	16ft	sandy mud woody debris	No	None	Y	"	max 16ft deep	
	CI2.1 A	1330	18ft	silty mud 80/20	No	3x 4oz	Y	"	max 18ft
	CI2.1 B	1340	17ft	"	No	3x 4oz	Y	MSD	
	CI2.1 C	1350	"	"	No	4x 4oz	FN	MSD	one extra Jar to ensure volume

** - proper says 17ft*

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No

Sediment Collection / Pore Water Deployment Configuration Sketch and/or Relocation Notes:



Herrington Lake Sediment Collection Form

Sampling Region (e.g. Curds Inlet): <i>Curds Inlet</i>	Sampling Date: <i>Tues June 19th</i>
GPS Coordinates (or file location if collected digitally): <i>Trimble UMa</i>	Start Time (8:55 <i>Sample location</i>):
REH Investigator(s): <i>AJS</i>	Weather at Start:
Dive Crew; Diver(s) down: <i>Derek Proffitt</i>	<i>v88f sunny humid</i>
Notes or Observations: -	

Derek
•
•
•
Stran

Sample Location/Transect	Sample Time	Water Depth (in feet)	Local Bottom Substrate (Rocky, Silty, etc.,)	Field Dup or MS/MSD?	Jar #s and size collected	PW Peeper Deployed? (Y or N)	Sediment Sample ID	Location Notes
<i>CI2.2 A</i>	<i>1415</i>	<i>19ft</i>	<i>rocky silty</i>	<i>No</i>	<i>3x 4oz</i>	<i>Y</i>		<i>max 19ft deep</i>
<i>CI2.2 B</i>	<i>1425</i>	<i>17ft</i>	<i>50/50 silt mud</i>	<i>No</i>	<i>3x 4oz</i>	<i>Y</i>		
<i>CI2.2 C</i>	<i>1430</i>	<i>10ft</i>	<i>25 Cobble 25 Gravel 50 silt</i>	<i>FD</i>	<i>6x 4oz</i>	<i>N</i>		<i>- field dup</i>
<i>CI4 A</i>								<i>- Ne</i>
<i>CI4 B</i>								

Notes:
 °C Degrees Celsius
 °F Degrees Fahrenheit
 bws below water surface
 mg/L milligrams per liter
 mS/cm milliSiemens per centimeter
 pH Potential of Hydrogen
 Y/N Yes or No

Sediment Collection / Pore Water Deployment Configuration Sketch and/or Relocation Notes:



Herrington Lake Sediment Collection Form

Sampling Region (e.g. Curds Inlet):	Sampling Date: Wed June 20th, 2018
GPS Coordinates (or file location if collected digitally): Trimble Yuma	Start Time (Boat Launched): 830AM
REH Investigator(s): AJS	Weather at Start: 80F sunny humid
Dive Crew; Diver(s) down: Shawn Nairn	
Notes or Observations: Sediment samples already collected on June 19th @ CI4A, B	

Sample Location/Transect	Sample Time	Water Depth (in feet)	Local Bottom Substrate (Rocky, Silty, etc.,)	Field Dup or MS/MSD?	Jar #s and size collected	PW Peeper Deployed? (Y or N)	Sediment Sample ID	Location Notes
• CI4A	920	22ft	Other Field Sheet	No	other field sheet	Y	other field sheet	Peeper deployed on cord line @ Trailway 22ft
• CI4B	930	17ft	"	No	"	Y	"	" @ 17ft
• CI3.2A	1030	35ft	75/25 Sand/ Small Gravel	No	3x 4oz	Y		@
• CI3.2B	1045	17ft	rocky looking for sed	Peeper MS/MSD	3x 4oz	Y MS/MSD		- dive @ 17ft searching for sediment to deploy peepers
• CI4C	930	10ft	pebbles pockets of silt	Sed MS/MSD	9x 4oz + extra bag for volume	N		
• CI3.2C	1050	10ft	NA	No	3x 4oz	N		

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No

Sediment Collection / Pore Water Deployment Configuration Sketch and/or Relocation Notes:

- CI4A @ 22ft deep, silty knee deep sediment

- CI3.2B peeper MS/MSD

as 17ft 29ft - where sediment avail.



Herrington Lake Sediment Collection Form

Sampling Region (e.g. Curds Inlet): <i>Curds Inlet</i>	Sampling Date: <i>June 20th, 2018</i>
GPS Coordinates (or file location if collected digitally):	Start Time (Boat Launched): <i>Arrived at CI 3.1 11:20 AM</i>
REH Investigator(s): <i>AJ3</i>	Weather at Start: <i>88f Sunny humid hot.</i>
Dive Crew; Diver(s) down: <i>Derek Proffitt</i>	

Notes or Observations:

Sample Location/Transect	Sample Time	Water Depth (in feet)	Local Bottom Substrate (Rocky, Silty, etc.,)	Field Dup or MS/MSD?	Jar #s and size collected	PW Peeper Deployed? (Y or N)	Sediment Sample ID	Location Notes
• CI 3.1A	1130	30ft	silty mud	Peeper FD	3x 4oz	Y FD		- deep sediment
• CI 3.1B	1140	17ft		No	3x 4oz	Y		
• CI 3.1C	1150	10ft	pebbles silt	No	3x 4oz	N		
• CI 3A	1240	23ft	50/50 sand silt	Peeper Sed FD	3x 4oz	Y FD		- Sed 3A is FD
• CI 3B	1250	17ft 20ft	more rocky	No	3x 4oz	Y	- peepers @ 20ft	- diver looking for sand-boulders, gravel
• CI 3C	1300	10ft	50/25/25 gravel/Cobble/silt	No	3x 4oz	N		

- Notes:
- °C Degrees Celsius
 - °F Degrees Fahrenheit
 - bws below water surface
 - mg/L milligrams per liter
 - mS/cm milliSiemens per centimeter
 - pH Potential of Hydrogen
 - Y/N Yes or No

Sediment Collection / Pore Water Deployment Configuration Sketch and/or Relocation Notes:

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D5: Aquatic Vegetation Field Data Sheets (Phase I)

^{MTS}
**WATER QUALITY AND VEGETATION FIELD DATA SHEET
 FOR HERRINGTON LAKE**

See CI-1 coordinates

STREAM NAME <u>CI-1</u>		LOCATION <u>Curds Inlet</u>	
STATION # _____	RIVERMILE _____	STREAM CLASS <u>NA</u>	
LAT <u>GPS</u>	LONG <u>GPS</u>	RIVER BASIN <u>Herrington Lake</u>	
STORET # <u>AV</u>		AGENCY _____	
INVESTIGATORS _____			
FORM COMPLETED BY <u>M.T. Sorensen</u>		DATE TIME <u>10/11/17</u> 7:30 <u>10:30</u> AM-PM	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS ☁ ☁	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) 0% <input type="checkbox"/> %cloud cover <input checked="" type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 25% <input checked="" type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Temperature _____ °C <u>70's</u> F Other _____
-------------------------------------	---	--	---

SITE LOCATION/MAP CI-1 AV-001(04)-CI-1-171004 1130 ^{MTS}	Draw a map of the site and indicate the areas sampled (or attach a photograph) See CAP Vegetation ID AV-001-CI1-171004 Sample collected along ^{MTS} wadeable wadeable shoreline. Periphyton abundant on rocks and duckweed abundant in water Collected by wading and kayak
---	--

STREAM CHARACTERIZATION Vegetation Sample weight	Stream Subsystem ^{MTS} <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input checked="" type="checkbox"/> Other	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km ² weight: 240.71g
--	--	--

CI-1 (Pg 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

MTS

CI-1

WATERSHED FEATURES See CAP maps	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other <input type="checkbox"/> Residential Adjacent EWBrown	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present. <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input checked="" type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP Maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/reach area) Qualitative - LWD prevalent	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input checked="" type="checkbox"/> Free floating <input checked="" type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <u>periphyton duckweed some</u> Portion of the reach with aquatic vegetation _____ % (<u>80% periphyton</u>) <u>sedge</u>	
WATER QUALITY See water quality logbook	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globbs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
SEDIMENT/SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Ohs <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse	Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")	✓	Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")	✓	Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")	✓			
Sand	0.06-2mm (gritty)	✓			
Silt	0.004-0.06 mm	✓			
Clay	< 0.004 mm (slick)	MTS			

CI-1 (Pg 2 of 2)

**WATER QUALITY AND VEGETATION FIELD DATA SHEET
FOR HERRINGTON LAKE**

C.A.P.E MTS

STREAM NAME	HERRINGTON	LOCATION	CI-2 Curds Inlet
STATION #	RIVERMILE	STREAM CLASS	
LAT See GPS	LONG See GPS	RIVER BASIN	
STORET #	AGENCY	ICU, Ramboll Environ	
INVESTIGATORS	K.L., H.T.		
FORM COMPLETED BY	DATE	REASON FOR SURVEY	
AJS/MTS	Oct 5, 2017 TIME 3:45 AM PM	CAP	

WEATHER CONDITIONS	Now	Past 24 hours	Has there been a heavy rain in the last 7 days?
	<input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover <input checked="" type="checkbox"/> clear/sunny	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> %	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Temperature 24°C Other _____

SITE LOCATION/MAP	Draw a map of the site and indicate the areas sampled (or attach a photograph)
CI-2	See CAP AV001 (0.5-2.0) - CI2-171005 Vegetation ID ^{MTS} AV-001 - CI2-171005 Sample collected along wadeable shoreline at depths ~ 0-2 ft.

STREAM CHARACTERIZATION	Stream Subsystem	Stream Type
	<input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	<input checked="" type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater
Vegetation sample weight	Stream Origin	Catchment Area _____ km ²
	<input type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog	<input checked="" type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other _____
		weight = 37.2 g

CI-2 (Page 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

CI-2

WATERSHED FEATURES See CAP maps	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other <input type="checkbox"/> Residential Adjacent Ed Brown	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg) Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No	
LARGE WOODY DEBRIS	LWD _____ m ² Qualitative LWD present at shore Density of LWD _____ m ² /km ² (LWD/ reach area) some floating	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input type="checkbox"/> Attached Algae dominant species present Periphyton + duckweed + submerged aquatic vegetation Portion of the reach with aquatic vegetation _____ % 30-40% SAV (periphyton)	
WATER QUALITY See Water Quality Log book + sheets	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____ Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globbs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____	
SEDIMENT/SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")	✓	Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")	✓	Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")	✓			
Sand	0.06-2mm (gritty)	✓			
Silt	0.004-0.06 mm	✓			
Clay	< 0.004 mm (slick)	✓			

CI-2 (Pg 2 of 2)

MTS
~~WATER QUALITY AND VEGETATION FIELD DATA SHEET~~
 FOR HERRINGTON LAKE

LAKE

STREAM NAME <u>HERRINGTON</u>	LOCATION <u>CI-3 Curds Inlet</u>	
STATION # <u>RIVERMILE</u>	STREAM CLASS	
LAT <u>See GPS</u> LONG <u>See GPS</u>	RIVER BASIN	
STORET #	AGENCY <u>KU, Ramboll Environ</u>	
INVESTIGATORS		
FORM COMPLETED BY <u>AJS / MTS</u>	DATE <u>10-5-17</u> TIME <u>4:40</u> AM <input checked="" type="checkbox"/> PM	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover <input checked="" type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> %	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Temperature <u>70</u> °C <u>9</u> °F Other _____
--------------------	---	--	---

SITE LOCATION/MAP <u>CI-3</u>	Draw a map of the site and indicate the areas sampled (or attach a photograph) <p style="text-align: center;"><u>See Cap</u> <u>AV-001 (0.5-2.0) - CI3-171005</u> <u>MTS</u> <u>Vegetation ID</u> <u>AV-001-CI3-171005</u></p> <p style="text-align: center;">Sample collected along shoreline at depths ~ 0-2ft that were wadeable. Mostly submerged aquatic vegetation.</p>
----------------------------------	--

STREAM CHARACTERIZATION <u>Vegetation sample weight</u>	Stream Subsystem <u>MTS</u> <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Stream Type <input type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater Catchment Area _____ km ² weight = <u>54.75g</u>
--	---	--

CI-3 (Page 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

CI-3

MTS

WATERSHED FEATURES See CAD Maps	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other <input type="checkbox"/> Residential Adjacent EN Brown	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAD Maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Qualitative LWD present at shoreline Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <u>Periphyton (long filaments)</u> (K10 th Periphyton) Portion of the reach with aquatic vegetation _____ % <u>long filaments</u>	
WATER QUALITY See Water Quality Logbook Sheets	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other Water Surface Oils <input checked="" type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globbs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
SEDIMENT/ SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")	✓	Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")	✓	Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")	✓			
Sand	0.06-2mm (gritty)	✓			
Silt	0.004-0.06 mm	✓			
Clay	< 0.004 mm (slick)				

CI-3 (Page 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET
MTS FOR HERRINGTON LAKE

STREAM NAME <u>CI-4</u>	LOCATION <u>Herrington Lake</u>
STATION # _____ RIVERMILE _____	STREAM CLASS <u>Curds Inlet</u>
LAT <u>See GPS</u> LONG <u>See GPS</u>	RIVER BASIN _____
STORET # _____	AGENCY _____
INVESTIGATORS _____	
FORM COMPLETED BY <u>MTS</u>	DATE <u>10/5</u> TIME <u>4:40</u> AM <input type="radio"/> PM <input checked="" type="radio"/> REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	Now	Past 24 hours	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover _____ <input checked="" type="checkbox"/> clear/sunny	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> % _____ <input checked="" type="checkbox"/> <u>MTS</u>	Air Temperature <u>69</u> °C Other _____

SITE LOCATION/MAP	Draw a map of the site and indicate the areas sampled (or attach a photograph)
<u>CI-4</u>	<p><u>See CAP</u></p> <p><u>AV-001 (0.92) - CI4 - 171005</u> <u>MTS</u></p> <p><u>Vegetation ID</u></p> <p><u>AV-001 - CI4 - 171005</u></p> <p>Sample collected by divers at approximately 12-foot depth and 20ft depth (periphyton + attached algae) submerged aquatic vegetation (SAV)</p>

STREAM CHARACTERIZATION <u>Vegetation sample weight</u>	Stream Subsystem <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal <u>MTS</u>	Stream Type <input type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater
	Stream Origin <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog <input checked="" type="checkbox"/> Spring-fed <input checked="" type="checkbox"/> Mixture of origins <input type="checkbox"/> Other _____	Catchment Area _____ km ² <u>Weight 65.8g</u>

CI-4 (Page 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

CI-4

MTS

WATERSHED FEATURES See CAP Maps	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other <input type="checkbox"/> Residential Adjacent EW Brown	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP Maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area) LWD only in limited areas of shoreline	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input checked="" type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <i>Periphyton - long, thick filaments</i> Portion of the reach with aquatic vegetation <i>5% submerged aquatic vegetation</i>	
WATER QUALITY See Water Quality Logbook Sheets	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input checked="" type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globbs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
SEDIMENT/SUBSTRATE	Odors <input type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Oils <input type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input type="checkbox"/> Yes <input type="checkbox"/> No	

75% periphyton
- 25% SAV

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")	Rocky ledge very deep	Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")		Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)				
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

CI-4 (Page 2 of 2)

n05
**WATER QUALITY AND VEGETATION FIELD DATA SHEET
 FOR HERRINGTON LAKE**

STREAM NAME <u>HQ Inlet</u>	LOCATION <u>Herrington Lake</u>
STATION # _____ RIVERMILE _____	STREAM CLASS <u>HQ Inlet</u>
LAT <u>GPS</u> LONG <u>GPS</u>	RIVER BASIN _____
STORET # _____	AGENCY _____
INVESTIGATORS _____	
FORM COMPLETED BY <u>MT Sorensen</u>	DATE <u>10/6/87</u> AM _____ PM _____
	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover <input checked="" type="checkbox"/> clear/sunny </td> <td style="width: 33%; vertical-align: top;"> Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> % <input checked="" type="checkbox"/> </td> <td style="width: 33%; vertical-align: top;"> Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Temperature _____°C <u>70's</u>°F Other _____ </td> </tr> </table>	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover <input checked="" type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> % <input checked="" type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Temperature _____°C <u>70's</u> °F Other _____			
Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover <input checked="" type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> % <input checked="" type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Air Temperature _____°C <u>70's</u> °F Other _____					
SITE LOCATION/MAP <u>CI-1</u>	Draw a map of the site and indicate the areas sampled (or attach a photograph) <u>Sample ID</u> <u>AV-001-HQ-171006</u> <u>(Collected by divers)</u> <u>Very fine periphyton</u> <u>attached to rocks</u>						
STREAM CHARACTERIZATION	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"> Stream Subsystem <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal </td> <td style="width: 50%;"> Stream Type <input type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater </td> </tr> <tr> <td> Stream Origin <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog </td> <td> <input checked="" type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other </td> </tr> <tr> <td colspan="2"> Catchment Area _____ km² <u>Weight 11g</u> </td> </tr> </table>	Stream Subsystem <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	Stream Type <input type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater	Stream Origin <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog	<input checked="" type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other	Catchment Area _____ km ² <u>Weight 11g</u>	
Stream Subsystem <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	Stream Type <input type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater						
Stream Origin <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog	<input checked="" type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other						
Catchment Area _____ km ² <u>Weight 11g</u>							

HQ Inlet (Pg 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

HQ Inlet

WATERSHED FEATURES See CAP Maps	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP Maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km² (m²x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity (at thalweg) _____ m/sec	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____% <input type="checkbox"/> Run _____% <input type="checkbox"/> Pool _____% Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² LWD in Inlet along shoreline Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <u>100% periphyton (very fine attached to rocks)</u> Portion of the reach with aquatic vegetation _____%	
WATER QUALITY See Water Quality Sheets & Logbook	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
SEDIMENT/SUBSTRATE	Odors <input type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse	Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")		Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")		Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)				
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

HQ Inlet (Pg 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET
MTS FOR HERRINGTON LAKE

STREAM NAME <u>LHL1</u>	LOCATION <u>Herrington Lake LHL-1</u>
STATION # _____ RIVERMILE _____	STREAM CLASS <u>NPS</u> <u>Rock Run Embayment</u>
LAT <u>67S</u> LONG <u>67S</u>	RIVER BASIN <u>Herrington Lake</u>
STORET # <u>AV</u>	AGENCY _____
INVESTIGATORS _____	
FORM COMPLETED BY <u>Forrest Wade/MTS</u>	DATE <u>10/12/17</u> TIME <u>1:30</u> AM PM
REASON FOR SURVEY <u>CAP</u>	

WEATHER CONDITIONS	Now	Past 24 hours	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover _____ <input type="checkbox"/> clear/sunny	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 100% MTS <input checked="" type="checkbox"/>	Air Temperature _____ °C High <u>69°F</u> Other _____

SITE LOCATION/MAP	Draw a map of the site and indicate the areas sampled (or attach a photograph)
<u>LHL 1</u>	<p><u>See CAP</u></p> <p>AV-001 (0-1) - 1710 MTS</p> <p>AV-001 - 1710 MTS</p> <p><u>Vegetation ID</u></p> <p><u>AV-001 - LHL1 - 171012</u></p> <p>This location in embayment had a steep shelf on one side with submerged aquatic vegetation (algae + periphyton). Collected by divers.</p>

STREAM CHARACTERIZATION <u>Vegetation Sample Weight</u>	Stream Subsystem <u>MTS</u> <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	Stream Type <input checked="" type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater
	Stream/Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Catchment Area _____ km ² <u>Weight 96.5g</u>

LHL-1 (Pg 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

LHL-1 MTS

WATERSHED FEATURES See CAP	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Agricultural <input type="checkbox"/> Other <input checked="" type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP MAP	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area) Qualitative - Present along shoreline	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present 100% periphyton Portion of the reach with aquatic vegetation _____ %	
WATER QUALITY See Water Quality Sheet	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globbs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other
SEDIMENT/ SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other Looking at stones which are not deeply embedded, are the undersides black in color? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	Sleep shell, little access to sediment
Boulder	> 256 mm (10")	Rocky ledges varied depth	Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")		Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)				
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

LHL-1 (Pg 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET FOR HERRINGTON LAKE

MTS

STREAM NAME <u>LHL-2</u>	LOCATION <u>LHL-2 (Near Dam)</u>	
STATION # _____ RIVERMILE _____	STREAM CLASS _____	
LAT <u>See GPS</u> LONG <u>See GPS</u>	RIVER BASIN <u>Herrington Lake</u>	
STORET # _____	AGENCY _____	
INVESTIGATORS _____		
FORM COMPLETED BY <u>MTSorensen</u>	DATE <u>10/12</u> TIME _____ AM PM	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	<table style="width: 100%;"> <tr> <td style="width: 33%;"> Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny </td> <td style="width: 33%;"> Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> % <input checked="" type="checkbox"/> </td> <td style="width: 33%;"> Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C <u>High 69°F</u> Other _____ </td> </tr> </table>	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> % <input checked="" type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C <u>High 69°F</u> Other _____
Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> % <input checked="" type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C <u>High 69°F</u> Other _____		
SITE LOCATION/MAP <u>LHL-2</u>	Draw a map of the site and indicate the areas sampled (or attach a photograph) <u>See CAP</u> AV-001 (to it) MTS <u>Vegetation ID</u> <u>AV-001-LHL-171012</u> <p style="font-size: small;">Sample location near dam was difficult to access and obtain vegetation from wading. Divers collected attached algae & periphyton from depths > 10ft.</p>			
STREAM CHARACTERIZATION <u>Vegetation sample weight</u>	<table style="width: 100%;"> <tr> <td style="width: 50%;"> Stream Subsystem <input type="checkbox"/> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____ </td> <td style="width: 50%;"> Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km² <u>Weight 50.2g</u> </td> </tr> </table>	Stream Subsystem <input type="checkbox"/> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km ² <u>Weight 50.2g</u>	
Stream Subsystem <input type="checkbox"/> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km ² <u>Weight 50.2g</u>			

LHL-2 (Pg 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

LHL-2

MTS

WATERSHED FEATURES See CAP	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Agricultural <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Other <u>Dam</u>	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP Maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Floating Algae <input type="checkbox"/> Rooted submerged <input checked="" type="checkbox"/> Attached Algae <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating dominant species present <u>Periphyton & attached algae</u> → <u>~90% attached algae</u> Portion of the reach with aquatic vegetation <u>← % Shoreline width & depth sampled</u>	
WATER QUALITY See Water Quality Sheets + Logbook	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Fishy <input type="checkbox"/> Chemical <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Turbid <input type="checkbox"/> Other _____
SEDIMENT/ SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Chemical <input type="checkbox"/> Other _____ <input type="checkbox"/> Sewage <input type="checkbox"/> Anaerobic <input type="checkbox"/> Petroleum <input type="checkbox"/> None Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Relict shells <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	<u>Collection at dam along shoreline</u>
Boulder	> 256 mm (10")		Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")		Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)				
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

LHL-2 (Pg 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET FOR HERRINGTON LAKE

STREAM NAME <u>LHL-3</u>	LOCATION <u>LHL-3</u>	
STATION # _____ RIVERMILE _____	STREAM CLASS _____	
LAT <u>See GPS</u> LONG <u>See GPS</u>	RIVER BASIN <u>Herrington Lake</u>	
STORET # _____	AGENCY _____	
INVESTIGATORS _____		
FORM COMPLETED BY <u>MtSon</u>	DATE <u>10/12</u> TIME _____ AM PM	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> 50% showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> %	Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C Other _____
--------------------	--	--	---

SITE LOCATION/MAP <u>See CAP</u> <u>LHL-3</u>	Draw a map of the site and indicate the areas sampled (or attach a photograph) <u>Sample ID</u> <u>AV-001 - LHL3 - 171012</u> <u>Sample collected by waders along shoreline. Depth = 0-2ft.</u>
---	--

STREAM CHARACTERIZATION <u>Sample Weight</u>	Stream Subsystem <u>MtS</u> <input type="checkbox"/> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input checked="" type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Stream Type <u>MtS</u> <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km ² <u>Weight 28.7g</u>
---	--	---

LHL-3 (Pg 1 of 2)

~~WATER QUALITY AND VEGETATION FIELD DATA SHEET~~

LHL-3

MIS

WATERSHED FEATURES See CAP	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channalized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² <i>A little along shoreline</i> Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input type="checkbox"/> Attached Algae dominant species present <i>Periphyton + attached algae (15%)</i> Portion of the reach with aquatic vegetation _____ % <i>Shoreline algae 30% periphyton</i>	
WATER QUALITY See Water Quality sheets & Logbook	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
SEDIMENT/SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)		Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

LHL-3 (Pg 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET FOR HERRINGTON LAKE

STREAM NAME <u>LHL-4</u>	LOCATION <u>LHL-4</u>
STATION # _____ RIVERMILE _____	STREAM CLASS _____
LAT _____ LONG _____	RIVER BASIN <u>Herrington Lake</u>
STORET # _____	AGENCY _____
INVESTIGATORS _____	
FORM COMPLETED BY <u>M. J. [Signature]</u>	DATE <u>10/12</u> AM <input type="radio"/> PM <input checked="" type="radio"/> REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover _____ <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> %	Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C Other _____
--------------------	--	--	---

SITE LOCATION/MAP <u>See CAP</u> <u>LHL-4</u>	Draw a map of the site and indicate the areas sampled (or attach a photograph) <div style="text-align: center; font-size: 1.2em;"> <u>Sample 10</u> <u>AV-001-LHL3-171012</u> (Collected by divers) </div>
---	---

STREAM CHARACTERIZATION <u>Sample</u> <u>Weight</u>	Stream Subsystem <u>MTS</u> <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input checked="" type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km ² <u>Weight > 50g</u> (with water)
---	---	--

Source: Rapid Bioassessment Protocols For Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates, and Fish, Second Edition - Form 1

WATER QUALITY AND VEGETATION FIELD DATA SHEET

LHL-4

WATERSHED FEATURES See CAP	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP Maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	
	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No	
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area) <i>Some submerged along shoreline</i>	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input type="checkbox"/> Attached Algae dominant species present <i>Periphyton + attached algae</i> Portion of the reach with aquatic vegetation _____ % <i>(20% algae, 20% periphyton)</i>	
WATER QUALITY See Water Quality Logbook & Sheets	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	
	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____	
SEDIMENT/ SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)		Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

LHL-4 (Page 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET FOR HERRINGTON LAKE

STREAM NAME <u>LHL5</u>	LOCATION <u>Herrington Lake</u> ↗	
STATION # _____ RIVERMILE _____	STREAM CLASS <u>Mullard Cove / Cave Run</u> ↗	
LAT <u>GPS</u> LONG <u>GPS</u>	RIVER BASIN <u>Herrington Lake</u>	
STORET # <u>AV</u>	AGENCY _____	
INVESTIGATORS _____		
FORM COMPLETED BY <u>Mt Sorensen</u>	DATE <u>10/12/17</u> TIME <u>11:30</u> AM PM	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	<table style="width: 100%;"> <tr> <td style="width: 33%;"> Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny </td> <td style="width: 33%;"> Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <u>100%</u> <input type="checkbox"/> </td> <td style="width: 33%;"> Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C Other _____ </td> </tr> </table>	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <u>100%</u> <input type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C Other _____			
Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input checked="" type="checkbox"/> showers (intermittent) <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <u>100%</u> <input type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C Other _____					
SITE LOCATION/MAP <u>See CAP</u> <u>LHL-5</u>	Draw a map of the site and indicate the areas sampled (or attach a photograph) <u>Sample ID</u> <u>AV-001-LHL5-171012</u> <u>(Collected by divers)</u>						
STREAM CHARACTERIZATION	<table style="width: 100%;"> <tr> <td style="width: 50%;"> Stream Subsystem <u>MTS</u> <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal </td> <td style="width: 50%;"> Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater </td> </tr> <tr> <td> Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog </td> <td> <input type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other _____ </td> </tr> <tr> <td colspan="2"> Catchment Area _____ km² <u>Weight 40.7g</u> </td> </tr> </table>	Stream Subsystem <u>MTS</u> <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater	Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog	<input type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other _____	Catchment Area _____ km ² <u>Weight 40.7g</u>	
Stream Subsystem <u>MTS</u> <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater						
Stream Origin <input type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog	<input type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other _____						
Catchment Area _____ km ² <u>Weight 40.7g</u>							

LHL5 (Pg 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

LHL5

WATERSHED FEATURES <p style="font-size: 24px; font-family: cursive;">See CAP</p>	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES <p style="font-size: 24px; font-family: cursive;">See CAP Maps</p>	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____% <input type="checkbox"/> Run _____% <input type="checkbox"/> Pool _____% Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <i>75% submerged algae + 25% periphyton</i> Portion of the reach with aquatic vegetation _____%	
WATER QUALITY <p style="font-size: 24px; font-family: cursive;">See Water Quality Sheets</p>	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
SEDIMENT/SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")				
Gravel	2-64 mm (0.1"-2.5")		Muck-Mud	black, very fine organic (FPOM)	
Sand	0.06-2mm (gritty)				
Silt	0.004-0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004 mm (slick)				

LHL-5 (Pg 2 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET FOR HERRINGTON LAKE

STREAM NAME <u>LHL-6</u>	LOCATION	
STATION # _____ RIVERMILE _____	STREAM CLASS	
LAT <u>GPS</u> LONG <u>GPS</u>	RIVER BASIN	
STORET # <u>AV</u>	AGENCY	
INVESTIGATORS		
FORM COMPLETED BY <u>MT Sorensen</u>	DATE TIME <u>10/12/17</u> _____ AM _____ PM	REASON FOR SURVEY <u>CAP</u>

WEATHER CONDITIONS	Now <input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) _____% <input type="checkbox"/> %cloud cover <input type="checkbox"/> clear/sunny	Past 24 hours <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> % <input type="checkbox"/>	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input type="checkbox"/> No Air Temperature _____ °C Other _____
--------------------	--	---	--

SITE LOCATION/MAP	Draw a map of the site and indicate the areas sampled (or attach a photograph) <div style="font-size: 1.5em; text-align: center;"> <u>Sample ID</u> <u>AV-001-LHL5 -17/10/12</u> <u>(Collected by divers)</u> </div>
-------------------	---

STREAM CHARACTERIZATION	Stream Subsystem <input type="checkbox"/> Perennial <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Pfdal Stream Origin <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Spring-fed <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Swamp and bog <input type="checkbox"/> Other _____	Stream Type <input type="checkbox"/> Coldwater <input checked="" type="checkbox"/> Warmwater Catchment Area _____ km ² <div style="font-size: 1.5em; text-align: center;"> <u>Weight 32.5g</u> </div>
-------------------------	---	---

LHL-6 (Page 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

LHL-6

WATERSHED FEATURES See CAP	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES See CAP maps	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km ² (m ² x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity _____ m/sec (at thalweg)	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____ % <input type="checkbox"/> Run _____ % <input type="checkbox"/> Pool _____ % Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <u>Periphyton + algae - attached</u> Portion of the reach with aquatic vegetation _____ %	
WATER QUALITY	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____
SEDIMENT/SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse	Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")		Muck-Mud	black, very fine organic (FPOM)	
Cobble	64-256 mm (2.5"-10")		Marl	grey, shell fragments	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)				
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

LHL-6 (Pg 2 of 2)

3

**WATER QUALITY AND VEGETATION FIELD DATA SHEET
FOR HERRINGTON LAKE**

Dix River STREAM NAME C-2 MB		LOCATION Curd's lot ^{MTS} Dix River	
STATION # _____ RIVERMILE _____		STREAM CLASS NA	
LAT GPS LONG GPS		RIVER BASIN Herrington Lake - Downstream	
STORET # _____		AGENCY from dam	
INVESTIGATORS _____			
FORM COMPLETED BY WTSorenson		DATE TIME 10/07/17 AM PM	REASON FOR SURVEY CAP

WEATHER CONDITIONS	Now	Past 24 hours	Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input type="checkbox"/> storm (heavy rain) <input type="checkbox"/> rain (steady rain) <input type="checkbox"/> showers (intermittent) <input checked="" type="checkbox"/> %cloud cover clear/sunny	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> % <input checked="" type="checkbox"/>	Air Temperature _____ °C 70s Other _____

SITE LOCATION/MAP Dix River	Draw a map of the site and indicate the areas sampled (or attach a photograph)
	Sample ID AV-001-DR-171007 Sample collected from Wadeable area near spillway

STREAM CHARACTERIZATION	Stream Subsystem <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Tidal	Stream Type <input type="checkbox"/> Coldwater <input type="checkbox"/> Warmwater
	Stream Origin <input checked="" type="checkbox"/> Glacial <input type="checkbox"/> Non-glacial montane <input type="checkbox"/> Swamp and bog <input checked="" type="checkbox"/> Spring-fed <input type="checkbox"/> Mixture of origins <input type="checkbox"/> Other	Catchment Area _____ km ² Weight 31.3g

Dix River (Pg 1 of 2)

WATER QUALITY AND VEGETATION FIELD DATA SHEET

WATERSHED FEATURES <i>See CAP maps</i>	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
RIPARIAN VEGETATION (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous dominant species present _____	
INSTREAM FEATURES <i>See CAP maps</i>	Estimated Reach Length _____ m Estimated Stream Width _____ m Sampling Reach Area _____ m ² Area in km² (m²x1000) _____ km ² Estimated Stream Depth _____ m Surface Velocity (at thalweg) _____ m/sec	
	Canopy Cover <input type="checkbox"/> Partly open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded High Water Mark _____ m Proportion of Reach Represented by Stream Morphology Types <input type="checkbox"/> Riffle _____% <input type="checkbox"/> Run _____% <input type="checkbox"/> Pool _____% Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No	
LARGE WOODY DEBRIS	LWD _____ m ² Density of LWD _____ m ² /km ² (LWD/ reach area)	
AQUATIC VEGETATION	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input checked="" type="checkbox"/> Attached Algae dominant species present <i>Periphyton - 100%</i> Portion of the reach with aquatic vegetation _____%	
WATER QUALITY <i>See water quality sheets + logbook</i>	Temperature _____ °C Specific Conductance _____ Dissolved Oxygen _____ pH _____ Turbidity _____ WQ Instrument Used _____	
	Water Odors <input checked="" type="checkbox"/> Normal/None <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Water Surface Oils <input checked="" type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Glob <input type="checkbox"/> Fleck <input checked="" type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured) <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____	
SEDIMENT/SUBSTRATE	Odors <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Other _____ Oils <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse Deposits <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Sand <input type="checkbox"/> Relict shells <input type="checkbox"/> Other _____ Looking at stones which are not deeply embedded, are the undersides black in color? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

INORGANIC SUBSTRATE COMPONENTS (should add up to 100%)			ORGANIC SUBSTRATE COMPONENTS (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5"-10")		Muck-Mud	black, very fine organic (FPOM)	
Gravel	2-64 mm (0.1"-2.5")				
Sand	0.06-2mm (gritty)		Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

Dix River (Pg 2 of 2)

APPENDIX D: SAMPLE COLLECTION FIELD DATA SHEETS

Appendix D6: Aquatic Invertebrates Field Data Sheets (Phase I)

3.135
8.47

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>CI-1</u>		
	DATE <u>Oct 4, 2017</u>	TIME <u>1130</u>	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>AJS / MTS Jensen</u>		Sample Volume: <u>NA</u> <u>5.34 g weight</u>
	OTHER: <u>Sample ID A1-001-CI-171004</u>		Depuration Time <u>24 hrs</u>
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input checked="" type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? <u>NO</u> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input checked="" type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other: <u>at outfall mixing</u>	<input type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input checked="" type="radio"/> Other: <u>Slightly Turbid at outfall mixing</u>
	WATER SURFACE		
	<input type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input checked="" type="radio"/> Some foam (<u>very limited</u>) <input type="radio"/> More than 3" foam		
	Color <u>Pale Yellow</u> Color		
	WATER ODOR		
<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage	<input type="radio"/> Gasoline <input type="radio"/> Chlorine <input type="radio"/> Sulfur	<input type="radio"/> Other	
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input checked="" type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input checked="" type="checkbox"/> Midge Fly Larvae
	<input type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input checked="" type="checkbox"/> Dragonfly & Damselfly	<input checked="" type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input type="checkbox"/> Crayfish	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input checked="" type="checkbox"/> Leeches
	<input checked="" type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	<u>Sample weight</u> <u>14.7 g</u>
	<input checked="" type="checkbox"/> Gilled Snails	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID CI-2		
	DATE 10-05-17	TIME	<input type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: M. Sorenson		Sample Volume: 11g
	OTHER: Sample ID - A1-001-CI2-171005		Depuration Time 24 hrs
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input checked="" type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? <div style="text-align: center; font-size: 1.5em;">NO</div> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
<input type="radio"/> Gasoline <input type="radio"/> Chlorine <input type="radio"/> Sulfur <input type="radio"/> Other			
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input checked="" type="checkbox"/> Crayfish (2)	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input type="checkbox"/> Gilled Snails	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	Weight 11g

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>C13</u>		
	DATE <u>10-05-17</u>	TIME	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>MT Sorensen</u>		Sample Volume: <u>28.47g</u>
	OTHER: <u>Sample ID - A1-001-C13-171005</u>		Depuration Time <u>24 hrs</u>
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input checked="" type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? <u>NO</u> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
<input type="radio"/> Gasoline <input type="radio"/> Chlorine <input type="radio"/> Sulfur <input type="radio"/> Other			
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input checked="" type="checkbox"/> Mayfly Nymphs (<u>160</u>)	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input checked="" type="checkbox"/> Crayfish (<u>4</u>)	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input checked="" type="checkbox"/> Gilled Snails (<u>13</u>)	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>C14</u>		
	DATE <u>10-05-17</u>	TIME	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>MTSorensen</u>		Sample Volume: <u>14.4g</u>
	OTHER: <u>Sample ID - A1-001-C14-171005</u>		Depuration Time: <u>24 hrs</u>
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input checked="" type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? <u>NO</u> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input checked="" type="checkbox"/> Crayfish <u>(2)</u>	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input type="checkbox"/> Gilled Snails	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID HQ INLET		
	DATE 10-6-17	TIME	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: K. Leigh / MTSorensen		Sample Volume: 119
	OTHER: Sample ID AV-001-012-111005 HQ-171006		Depuration Time 24 hrs
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input checked="" type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny MTS <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input checked="" type="checkbox"/> Midge Fly Larvae
	<input checked="" type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input checked="" type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input type="checkbox"/> Crayfish	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input checked="" type="checkbox"/> Gilled Snails	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	
	Sample weight 119		

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID LHL1		
	DATE 10-12-17	TIME 9:30	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: BG		Sample Volume: 28.29
	OTHER: Sample ID A1-001-LHL1-171012		Depuration Time 24 hrs
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input checked="" type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? Yes	
	Other:		
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input checked="" type="checkbox"/> Mayfly Nymphs (2)	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input checked="" type="checkbox"/> Crayfish (4)	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input checked="" type="checkbox"/> Gilled Snails (15)	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	Weight 28.29

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>LHL 2</u>		
	DATE <u>10-12-17</u>	TIME <u>1100</u>	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>FMW / MTSORSEN</u>		Sample Volume: <u>8.1g</u>
	OTHER: <u>Sample ID - A1-001-LHL2-171012</u>		Depuration Time
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input checked="" type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? <u>Yes</u> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input type="radio"/> Natural/None <input type="radio"/> Gasoline <input type="radio"/> Other <input type="radio"/> Fishy <input type="radio"/> Chlorine <input type="radio"/> Sewage <input type="radio"/> Sulfur		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs <input checked="" type="checkbox"/> Mayfly Nymphs <input type="checkbox"/> Water Penny Larvae <input type="checkbox"/> Riffle Beetles <input type="checkbox"/> Aquatic Snipe Flies <input type="checkbox"/> Caddisflies <input checked="" type="checkbox"/> Gilled Snails	<input type="checkbox"/> Net Spinning Caddisflies <input type="checkbox"/> Dobsonfly/Helgrammite <input type="checkbox"/> Dragonfly & Damselfly <input checked="" type="checkbox"/> Crayfish (2) <input type="checkbox"/> Crane Flies <input type="checkbox"/> Aquatic Sow Bugs <input type="checkbox"/> Scud <input type="checkbox"/> Clams & Mussels	<input type="checkbox"/> Midge Fly Larvae <input type="checkbox"/> Black Fly Larvae <input type="checkbox"/> Lunged Snails <input checked="" type="checkbox"/> Aquatic Worms <input checked="" type="checkbox"/> Leeches <u>Weight 8.1g</u>

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>LHL3</u>		
	DATE <u>10-12-17</u>	TIME <u>1230</u>	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>FMW/MTSorenson</u>		Sample Volume: <u>23.6g</u>
	OTHER: <u>Sample ID-A1-001-LHL3</u>		Depuration Time <u>24 hrs</u>
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input checked="" type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours? <u>Yes</u> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <u>MTS</u> <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input checked="" type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input checked="" type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input checked="" type="checkbox"/> Crayfish (2)	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input checked="" type="checkbox"/> Gilled Snails	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	<u>Weight - 23.6g</u>

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID LHL4		
	DATE 10-12-17	TIME 13:30	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: BG		Sample Volume: 25.69
	OTHER: Sample ID A1-001-171012		Depuration Time 24hrs
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input checked="" type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours Rain in last 24 hrs? Yes	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input checked="" type="checkbox"/> Mayfly Nymphs (35)	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input checked="" type="checkbox"/> Crayfish (2)	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input type="checkbox"/> Aquatic Sow Bugs	
	<input type="checkbox"/> Gilled Snails	<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	Weight 25.6g

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>LHLS</u>		
	DATE <u>10-12-17</u>	TIME <u>1530</u>	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>BG</u>		Sample Volume: <u>Wegut 7.95g</u>
	OTHER:		Depuration Time
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input checked="" type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours <u>Yes</u>	
	Other:		
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
	<input type="radio"/> Gasoline <input type="radio"/> Chlorine <input type="radio"/> Sulfur		
	<input type="radio"/> Other		
	TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D	
X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater			
<input type="checkbox"/> Stonefly Nymphs		<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
<input checked="" type="checkbox"/> Mayfly Nymphs <u>(70)</u>		<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
<input type="checkbox"/> Water Penny Larvae		<input type="checkbox"/> Dragonfly & Damselfly	<input type="checkbox"/> Lunged Snails
<input type="checkbox"/> Riffle Beetles		<input checked="" type="checkbox"/> Crayfish <u>(2)</u>	<input type="checkbox"/> Aquatic Worms
<input type="checkbox"/> Aquatic Snipe Flies		<input type="checkbox"/> Crane Flies	<input type="checkbox"/> Leeches
<input type="checkbox"/> Caddisflies		<input type="checkbox"/> Aquatic Sow Bugs	<u>Weight 7.95g</u>
<input type="checkbox"/> Gilled Snails <u>(100)</u>		<input type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>LHL6</u>		
	DATE <u>10-12-17</u>	TIME <u>1620</u>	<input checked="" type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>FMW</u>		Sample Volume: <u>18.5g</u>
	OTHER: <u>Sample ID - OAI-001-LHL6-171012</u>		Depuration Time <u>24 hrs</u>
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input checked="" type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours <u>Yes</u> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs <input checked="" type="checkbox"/> <u>D</u> Mayfly Nymphs (<u>120</u>) <input type="checkbox"/> Water Penny Larvae <input type="checkbox"/> Riffle Beetles <input type="checkbox"/> Aquatic Snipe Flies <input type="checkbox"/> Caddisflies <input checked="" type="checkbox"/> <u>R</u> Gilled Snails (<u>3</u>)	<input type="checkbox"/> Net Spinning Caddisflies <input checked="" type="checkbox"/> <u>R</u> Dobsonfly/Helgrammite (<u>2</u>) <input type="checkbox"/> Dragonfly & Damselfly <input checked="" type="checkbox"/> <u>R</u> Crayfish (<u>1</u>) <input type="checkbox"/> Crane Flies <input type="checkbox"/> Aquatic Sow Bugs <input type="checkbox"/> Scud <input type="checkbox"/> Clams & Mussels	<input type="checkbox"/> Midge Fly Larvae <input type="checkbox"/> Black Fly Larvae <input type="checkbox"/> Lunged Snails <input type="checkbox"/> Aquatic Worms <input type="checkbox"/> Leeches <u>Weight 18.5g</u>

HERRINGTON LAKE MACROINVERTEBRATE SAMPLING FORM

SITE	HERRINGTON LAKE TRANSECT ID <u>DIX RTRD River</u>		
	DATE <u>10-7-17</u>	TIME	<input type="radio"/> Grab sample <input type="radio"/> Hester Dendy
	FORM COMPLETED BY: <u>MTSorensen / BC</u>		Sample Volume: <u>10.96g</u>
	OTHER: <u>Sample 10-A1-001-DR-171007</u>		Depuration Time: <u>24hrs</u>
WEATHER	Present conditions (check all that apply)		
	<input type="radio"/> Heavy Rain <input type="radio"/> Overcast <input type="radio"/> Steady Rain <input type="radio"/> Partly Cloudy <input type="radio"/> Intermittent Rain <input checked="" type="radio"/> Clear/Sunny	Inches of rain in last 24 Hours ? <p style="text-align: center; font-size: 1.5em;">No</p> Other:	
OBSERVATIONS	Check all that apply		
	FLOW	WATER CLARITY	WATER COLOR
	<input type="radio"/> Dry <input type="radio"/> Stagnant/Still <input type="radio"/> Low <input checked="" type="radio"/> Normal <input type="radio"/> High <input type="radio"/> Flood over banks	<input checked="" type="radio"/> Clear/Transparent <input type="radio"/> Cloudy/Slightly Turbid <input type="radio"/> Opaque/Very Turbid <input type="radio"/> Other:	<input checked="" type="radio"/> None <input type="radio"/> Brown/Muddy <input type="radio"/> Green <input type="radio"/> Milky/White <input type="radio"/> Tannic/Black <input type="radio"/> Other:
	WATER SURFACE		
	<input checked="" type="radio"/> Clear/Sunny <input type="radio"/> Oily sheen that breaks when disturbed <input type="radio"/> Oily sheen that does not break when disturbed <input type="radio"/> Some foam <input type="radio"/> More than 3" foam		
	WATER ODOR		
	<input checked="" type="radio"/> Natural/None <input type="radio"/> Fishy <input type="radio"/> Sewage		
<input type="radio"/> Gasoline <input type="radio"/> Chlorine <input type="radio"/> Sulfur <input type="radio"/> Other			
TAXA GROUPS	MARK THESE TAXA AS X, R, C, or D		
	X = not found, R (rare)=1-9, C (common)=10-99 and D (dominant)=100 individuals or greater		
	<input type="checkbox"/> Stonefly Nymphs	<input type="checkbox"/> Net Spinning Caddisflies	<input type="checkbox"/> Midge Fly Larvae
	<input type="checkbox"/> Mayfly Nymphs	<input type="checkbox"/> Dobsonfly/Helgrammite	<input type="checkbox"/> Black Fly Larvae
	<input type="checkbox"/> Water Penny Larvae	<input type="checkbox"/> Dragonfly & Damselfly	<input checked="" type="checkbox"/> Lunged Snails
	<input type="checkbox"/> Riffle Beetles	<input type="checkbox"/> Crayfish	<input type="checkbox"/> Aquatic Worms
	<input type="checkbox"/> Aquatic Snipe Flies	<input type="checkbox"/> Crane Flies	<input checked="" type="checkbox"/> Leeches
	<input type="checkbox"/> Caddisflies	<input checked="" type="checkbox"/> Aquatic Sow Bugs	
	<input type="checkbox"/> Gilled Snails	<input checked="" type="checkbox"/> Scud	
		<input type="checkbox"/> Clams & Mussels	
Weight <u>10.96g</u>			