



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes No

WIN Station Name: Pine Barren above Lambert Bridge Rd

Date:

3/16/20

(mm/dd/yyyy)

WIN/ Field ID: G4NW0218

WBID: 5

Latitude: 30.879969

(Decimal Degrees)

County: Escambia

ORG ID: 21FLPNS

Longitude: 87.394265

(Decimal Degrees)

Receiving Body of Water: Escambia River

RQ-2020-

03-23-19

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
MK		X	X		
MC		X	X		

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
☐ Syringe	☐ Pole
☐ Dipper	☐ Other
Depth Measured with Equipment ID: YSL	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: Dry/ Pooled/ <u>Low</u> Normal / High / Flooded		Meter ID# 154179	
Photos: Yes / No	Flow: No Flow / <u>Flowing</u> / NA	Tide: Rising/ Falling/ Slack/ <u>NA</u>	Tide Times: High Low
Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:			
SBIO ID Numbers:	SBIO-ID: 80847	HA-ID: 16563	RPS-ID: 9557
Macrophyte-ID:		LIMS#: 2165461	
Notes: SCI score 61			

Duplicate Sample

Time Zone: EST CEN Time:	Field ID: (WIN ID_DUP)
WIN DMT Activity ID:	

Blank

Time Zone: EST CEN Time:	Field ID: (Blank Type_DDMMYYYY)
DI Source:	Location:
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank	Equipment ID:

Signature:	Date:
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LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets (Initials/Date) Migrate Data to WIN (Initials/Date) Verify Data In WIN: (Initials/Date)



RQ-2020-

Customer:

Project ID:

03-23-19

NW DIST

SMP

Collected By:

Field Report Prepared By:

Sampling Agency:

MIKE KING / INDEPENDENT CLARK

MIKE KING

FREP NW LOC

Field/WIN ID



G4NW0218

Location:

Pine Barren above Lambert Bridge Rd

Comments:

Matrix: Fresh / Marine

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT)
3/16/20	9:46	6.36	89.3	19.0	5.03	0.1	0.2	0.2	43.3	0.02
EST / CST		☒ VOB (S)								

Cental Lab please use top row for login purposes

EST / CST										
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Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / ☒ W-NO2NO3 / ☒ W-TKN / ☒ W-TOC / ☒ W-S-A-TP	☒ Ice ☒ H2SO4*	☒ <2		
	Lot # SA9203100 Exp: 07/22/20				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	☒ Ice ☒ HNO3*	☒ <2		
	Lot # NA Exp: 07/08/20				
Filtered Nutrients (P125ML)	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice			
	Filter Lot # 169532471 Exp: 169532471				
	Syringe Lot # 9629988 Exp: 9629988				
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CHC / ☒ W-COLOR / ☒ W-SO4 / ☒ W-TDS	☒ Ice			
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / ☐ W-BR-IC / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-Q/LDC	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
	☒ Contract Lab				
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3	☐ Ice			
	☐ PCR-GULL2 ☐ PCR-GFD ☐				
Tracers (BG-500ML)	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ WE8321-MS ☒ W-PSNP-TQ ☐ W-F-240R	☒ Ice			
	☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			

Relinquished By:

Date/Time:

Shipping Method

Number of Coolers Shipped:

Received By:

Date/Time:

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Email Submittal form to: lab.receiving@floridadep.gov.

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Pine Barren above Lambert Bridge Rd County: Essex Date: 2/16/20 Investigators: MIKE KING

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N	N		60	1	N	N		
	2	N				2				
	3	X	Y			3				
	4					4				
	5			40		5			72	
	6					6				
	7					7				
	8	N	N			8				
	9	N	N			9				
10	1	N	N		70	1	N			
	2					2				
	3					3				
	4			84		4				
	5					5			60	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N	N		80	1	N			
	2					2				
	3					3				
	4					4				
	5			80		5			68	
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N	N		90	1	N			
	2					2				
	3					3				
	4					4				
	5			70		5			72	
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			64		5			64	
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N			Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank. Record canopy cover as the number of small densimeter quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6. Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.					
	2									
	3									
	4									
	5			72						
	6									
	7									
	8									
	9									

STORET Station Number: G4NW0218

Secchi depth 0.4
Estimated? Y

points ranked 4-6 0
total points assessed 99
% points ranked 4-6 0

Check accompanying data collected at same site/date:
Algal mat sample
Linear Veg Survey X
Habitat Assessment X
SOI/Biorecon X
Water sample X
RQ-2019-02-11-28
2020-03-23-19

Algal Thickness Rank

N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm

SBIO Visit ID: 80847

RPS ID 9557

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID G4NW0218 ORG ID 2IFLPNS LATITUDE 30.879969
 COUNTY ESCAMBIA WIN ID/STORET # G4NW0218 LONGITUDE 87.394245
 DATE 3/16/20 TIME 0946 CTZ SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Pine Barren above Lambert Bridge Rd RQ-2020- 03-23-19
 FIELD ID/NAME G4NW0218 RECEIVING BODY OF WATER ESC. River WBID 5 Project: SMP

RIPARIAN ZONE / STREAM FEATURES

LIMS ID: 2165469

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☐							Landscape Development Intensity Index (LDI) N/A
Local Watershed Erosion (select one): ☐ None ☐ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy							Typical Width (m) Depth (m)/Velocity (m/sec) Transect m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>15</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) <u>1 - 2</u>		0.35 m/s 0.3 m/s 0.3 m/s	
High Water Mark: <u>3.0</u> + <u>0.4</u> = <u>3.4</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No		0.2 m deep 0.3 m deep 0.2 m deep	
Artificially ☒ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☐ Recent, severe				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☒ Moderate Shaded (46-80%)			

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse	Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):	Smothering of Substrates Sand Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐
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SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon % Coverage INVERT # Times Sampled PERI # Times Sampled				WATER QUALITY								
Woody Debris (Snags)	<u>9.5</u>	<u>5</u>		Top:	<u>0.2</u>	<u>19.0</u>	<u>5.03</u>	<u>8.36</u>	<u>89.3</u>	<u>433</u>	<u>0.02</u>	<u>0.4</u>
Undercut Banks / Roots	<u>3</u>	<u>5</u>		Mid:								☒ VOB
Leaf Packs or Mat	<u>0.5</u>	<u>5</u>		Bottom:								TOTAL DEPTH
Aquatic Vegetation				Meter ID:	<u>154179</u>							<u>0.4</u>
Rock or Shell Rubble				Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐				Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐				
Sand	<u>86</u>			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA 1209106</u> Exp: <u>7/22</u>				Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐				
Mud / Muck / Silt				Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: Exp:				Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐				
Other <u>gravel</u>	<u>1</u>	<u>3</u>		System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐								

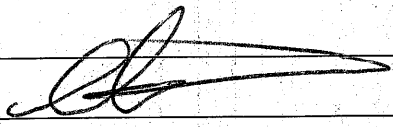
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☒ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☐ ☒ ☐ ☐				AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.			
SAMPLING TEAM: <u>MIKE KING / MYRANIDA CLARK</u>				SIGNATURE: 		DATE: <u>03/16/2020</u>	

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY: 21FLPNS		STORET STATION NUMBER: 64NW0218	DATE (MM/DD/YY): 03/16/20	RECEIVING BODY OF WATER: Escambia R.
REMARKS: WBID 5	COUNTY: Escambia	FIELD ID/NAME: Pine Barren abv Lambert Bridge 64NW0218		

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

118 TOTAL SCORE

Date: <u>3/16</u>	Analyst: <u>MIKE KINS</u>	Signature: 
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SBIO ID: 80847
62-160.800, F.A.C.

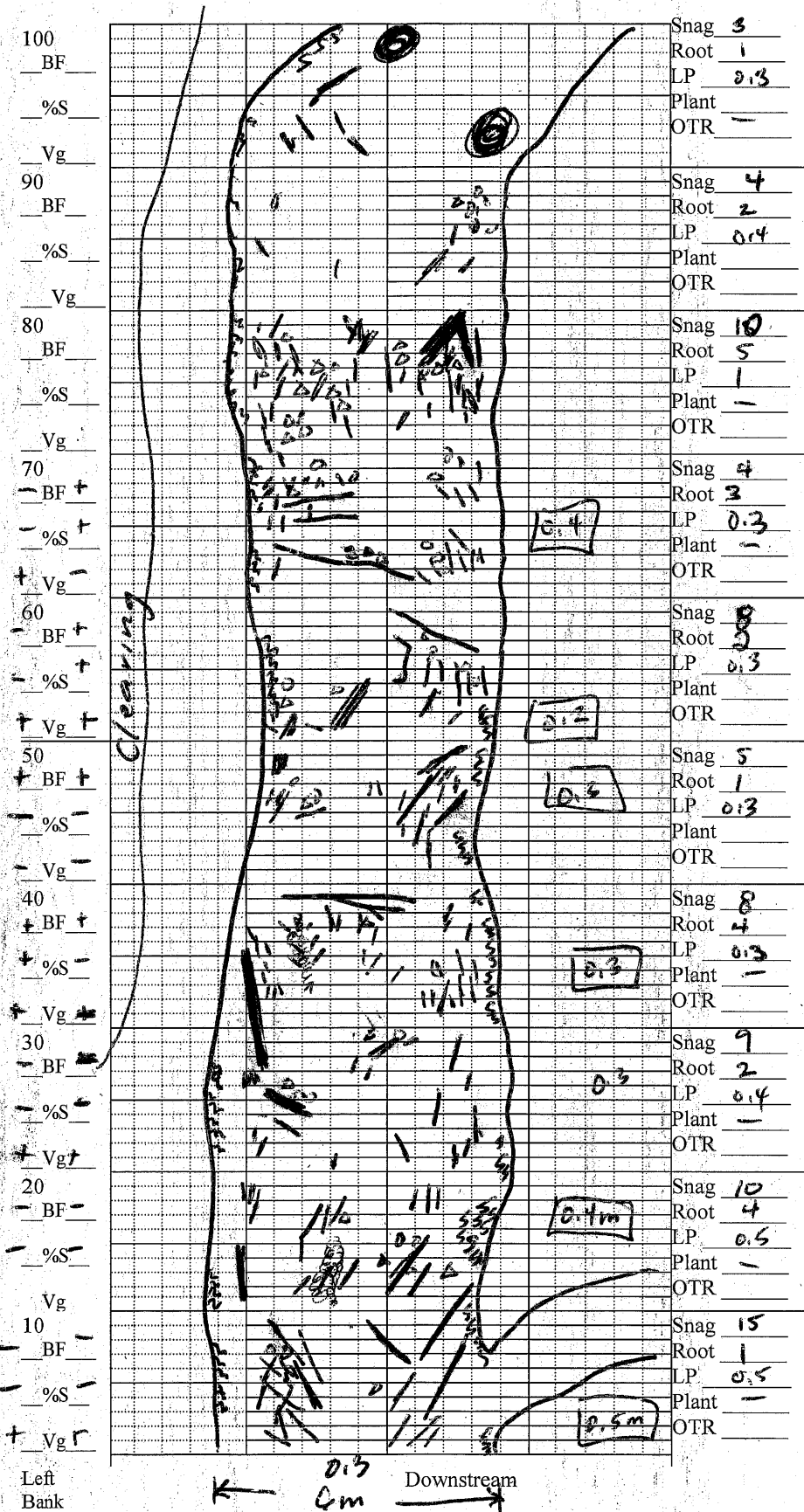
HA ID: 16563

Revision Date: March 1, 2014

Stream/River Habitat Sketch Sheet, Form FD 9000-4 (June 1, 2001)

Length of grid represents 100 m of stream (not linear meters).

(Horizontal scale is double vertical scale, draw proportionately).



Substrates: Code key, draw proportionate habitat abundance.

	Snags	76	9.5
	Roots/undercut banks	25	3.12
	Leaf Packs (or mats)	4.3	0.5
	Macrophytes		
	gravel		

Velocity:

Note where velocity measures were taken. 30 m

Habitat Smothering:

Note areas (on map) where sand or silt is something substrates, limiting habitability.

Bank Stability:

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

Riparian Buffer Width:

Note areas (on map) where natural vegetation is altered or eliminated.

Average width 8 m

Average depth 0.4 m

WQ & chemistry taken @ 40 m

Storet. G4NW0218

Field ID.

Date: 3/16/20

Sampled By: M. King

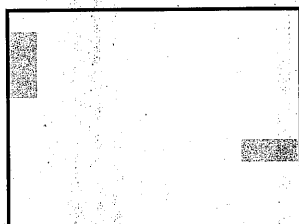
Plants observed/other notes:

[illegible]

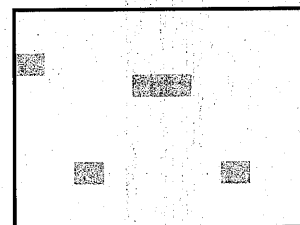
Revision Date: March 1, 2014.

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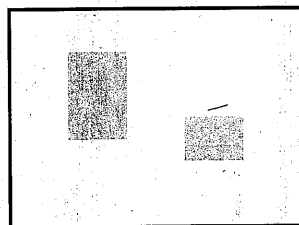
5% Macrophyte Coverage



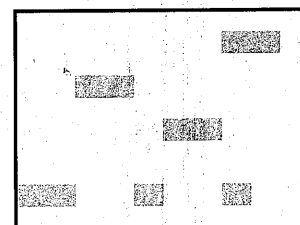
5% Macrophyte Coverage



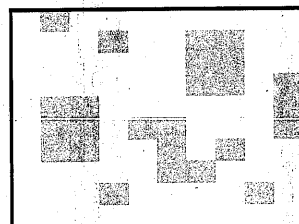
10% Macrophyte Coverage



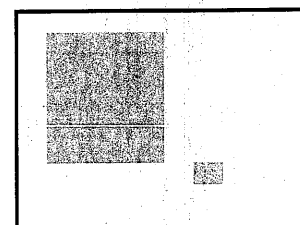
10% Macrophyte Coverage



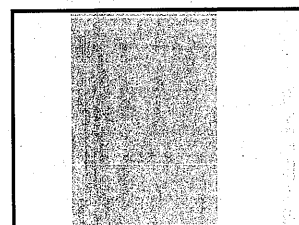
25% Macrophyte Coverage



25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage

