## Lake Habitat Assessment Form

Visit Type:  Initial  Secondary  Final  Other:														
LOCATION VERIFICATION >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>														
Site Code & map location) ID														
AN-Code	Date	÷		Time		Geo		Bio						
Basin County				Quad										
GPS Type EPE			XY's Pro	ofed				Ву						
Field Lat X-site	Ν	Field Lor	X-site						w					
Corrected Lat	Ν	Correcte	d Lon						W					
Launch Site Lat	Ν	Launch S	Site Lon						W					
Sampled       Yes       No       If not, why?       No Access-Physica         If not, why?       No Access-Landow         If not, why?       Dry       Filled       O	ner D ther:	enial ( 🗆 V	erbal Der	nial / 🗆 P	osted / 🗆		d / 🗆 P	rivate	)					
Sample Type       Image: Habitat       YSI       Image: Fecal       Image: Lake       AMD         Duplicate type       Image: None       Image: Habitat       Image: Fecal       Image: Fecal	-	ents 🛛 Acional District Provident P		Orthopho	•	Other: ite mov	ad2		□ No					
Explanation?	Du				Wa3 3									
Directions To Site														
Sketch of Lake Area and Comments: Indicate North wit shore fecal sample (F), water sample (wq), indicate lat and overall idea of the lake layout relative to the WQ vs. Habiat landmarks on the shore.	long s	site with (X	. Draw th	ne sketch	with a coa	rse res	olutior	to giv						
Notes														

Reviewers Initials     ACTIVITIES AND DISTURBANCES >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>													
Local Watershed Eros	ion		🗆 None	)	□ S	light		Moder	ate		leavy		
Atmospheric Odors (R					Descript								
Local NPS Pollution			ential 🗆 C	Obvious	lf ob	ovious, n	nagnitud	<b>e?</b>	☐ Slight	□ Mod	erate 🛛 Heavy		
Specify Obvious or Poter other than Siltation/Sedir			ot, etc.)										
Point Source Discharg	es 🛛	Yes [	No Pt	. Sourc	e(s)								
Immediate Shore Activ	vities & D	Disturb	ances (R	ate 1-Lo	w, 2-Mo	derate, 3-	High, 4-Ex	treme I	n Each Box	That App	lies)		
Residential		ecreatio			Agricult			Industr		Management			
Residences			arks/ pground			ual Row rops		Indust	rial Plants		Liming		
Lawns		Park	ing Lots		Pa	asture		Surfa	ace Mine		Rip/Rap or Bank Stabilization		
Power Lines			: Access/ Dock		Hay P	roduction		Dee	ep Mine		Dredging		
Construction		Swi	imming		Or	chards		Coa	al Prep		Channelized		
Pipes/Drains		Fi	ishing			oultry		Qu	arries		Fill		
Bridges/Culverts		Pipe	s/Drains			estock ccess		Ra	ilroad		Dams/Impounded		
Width Surf Road Type Intensity			ot Trails		Irri	gation		Lo	gging	Multip Cou	ourpose State or nty Maintained Roads		
			lorse, Bike Frails		Pipe	s/Drains		Pow	er lines		Width		
Codes for Width and Surface Type are			es/Culverts		Bridge	s/Culverts			odyards/ wmills		A=Single Lane		
Displayed on the Right Under Multipurpose	Width	Surf Type	Road Intensity	Width	Surf Type	Road Intensity		Sanita	ry Landfill		B=Double Lane		
State or County Maintained Roads.		,,							ste H2O atment		C=Multi-Lane		
Human Activities	∕es ⊡No	D	Boating Activitie			s 🗆 No			king H2O atment	s	urface Type		
Elaborate on any of the above. Which of the a								Pipe	s/Drains		A=Dirt		
								Park	ing Lots		B=Rutted Dirt		
								Bridge	s/Culverts		C=Applied Limestone		
								Gas/	Oil Well		D=Applied Non- Limestone		
									Oil Lines		E=Asphalt		
							Width	Surf Type	Road Intensity		F=Concrete		
											Road Intensity		
If known, what is the p agriculture, mining, log deep or strip, valley fil sources above the rea <u>NOT LEAVE THIS BOX</u>	gging, ho ls, etc.  \ ch?  Indi	ouses, What is icate if	, urban? If s the pred	f mining Iominar	g prese nt NPS	nt, is it a pollution	ctive or a ?? Are th	abando ere poi	ned, int	Road No	otes:		

FIE	ELD WATER	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	>>>>>	Reviev	vers Initials			
AN	Code		Date			-						
W	Q Sample Loc	ation 🛛 Near-S	Shore 🗆 Ve	ertical 🗆 Othe	er:	W	Q Type	] Single	Profile	Othe	r:	
So	nde Method	Van-Dorn Bo	ttle 🗆 Gra	b		Lab Water Met	hod 🗆	Van-Do	rn Bottle 🛛	Grab		
Flag		hysicochemical ameters		onal Water ₋evel		Water Odors		Surf	ace "Oils"		Turbidity	
		Temperature °C	В	elow Normal	N	lormal			None		Clear	
		pH (std. Units)	N	ormal		ewage Not Septic)			Flecks		Slightly Turbid	
		Dissolved Oxygen (mg/L)	AI	oove Normal	Р	etroleum			Sheen		Moderately Turbid	
		Conductivity (µmhos/cm)		ooding	c	Chemical			Globs		Highly Turbid	
			Notes:		A	naerobic (septic)	)		Slick	Water	color:	
	nde I.D. #:				c	Other:			Į			
Met	er or any readi	cur with the Water ngs are suspect, space to the right			Foam/S	uds -4 or NR)						
					``	•		<u> </u>				
AB	OVE: Record	readings in box	for corres			atus and History		V in the	box for othe	er cate	gories.	
<u> </u>	rrent			Past 24 H			,	-	Major Rain	Event	□ Yes □ No	
		s and Precipitati	on Comme	(If Know	vn)				in past we	ek?		
					Lake	e Info						
	ke Depth at Sampling	64	Secchi De		£4.	Depth of Top WQ Sample		ft	Depth Bottom Samp	WQ	ft	
Lo	ocation (10 offshore)	ft	at Sampli Locatio		ft	Time of Top     Time of       WQ Sample     Bottom WQ       Sample     Sample						
m	- Filtered for	Chlorophyll A	Sample:						bove depth nalysis Req			
La	ke Profile Note	es:						-				

Reviewers Initials SHORELINE LITTORAL ZONE HABIAT CHARACTERIZATION>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>																
BOTTOM SUBSTRATE           Sediment Odor         Normal         Sewage         Petroleum/ Other         Chemical         Anaerobic (Dentic)         Other																
Sediment Odor	Odor         Normal         Sewage         Petroleum/ Oil         Chemical         Anaerobic (Septic)         Other															
Sediment Color	Brown		Black		Red		Gray		Ot	her						
Score Codes:	0=Absent	(0%) ´	1=Spars	se <b>(0-</b> <1	0%) 2=	Mode	erate (1	0-40%)	3=He	avy (>	40-75%	%)	4=Very H	leavy (>75%)		
Substrate	Particles			ticle des				Size	e Class	;				Bottom Substrate Score		
Bedrock			В	R	Smooth s	urface	e rock/h	ardpan	า (>400	0 mm	-bigge	er tha	n a car)			
Boulder	Boulder BL Basketball to car (>250-4000 mm)															
Cobble CB Tennis ball to basketball (>64-250 mm)																
Coarse Gravel CG Marble to tennis ball (>16-64 mm)																
Fine Gravel			F	G	Ladybug t	o mai	ble (>	2-16 m	m)							
Sand			S	Α	Gritty – up	o to la	dybug	(>0.06	6-2 mm	)						
Silt & Fines (Including Clay & Muck)     ST     Fine – not gritty (<0.06 mm)																
Woody Debris			W	/D	Logs, Stic	ks, et	с.									
Organic (Leaf Pac Littoral Zone Bottom				כ	Leaves, D	-	• •	anic Ma	atter							
	AC	UATIC	MACRO	ОРНҮТ	ES					So parse leavy (	(0-<10	%)		nt (0%) lerate (10-40%) Heavy (>75%)		
Submergent	Emer	gent		Floatir	ng		otal Aq rophyte		r				oyhtes ward?	🗆 Yes 🗆 No		
Littoral Zone Aquatio	c Macrophyt	e Notes	& Comn	nents:												
		FIS	SH COV	ER	_					So parse leavy (	(0-<10	%)		nt (0%) Jerate (10-40%) Heavy (>75%)		
Aquatic and Inur	ndated Her	baceou	is Veget	ation			Ove	erhangi	ing Veç	jetatio	n <1m	of Su	urface			
Large Woody [	Debris/Snag diameter		3 m or ≈	1 ft.			Unde	rcut Ba	anks, L	edges	or Sh	arp D	Propoffs			
Small Woody I Debris <0.3 m o									В	oulde	s					
Inundated Live 1	Inundated Live Trees or Roots (>0.3 m or ≈1 ft diameter)							Artificial/Human Structures-Docks, Landings, etc.								
Littoral Zone Fish Cover Notes & Comments:																

SHORELINE F	RIPARIA	N ZONE H	IABIAT CH	HARACT	TERIZATION	<b>V</b> >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Reviewers Ini	tials	
ANCode					Date					
_	RIPARI		/EGETATIO	ON/COVE	ER TYPE (Me	asured within	n 15 m x 15 r	n plot along s	shoreline)	
Riparian Zone N	otes & Co	mments:								
Invasive Species reach riparian ar		apanese Kn apanese Ho			eaven		Crown Vetc Other:	h ∐ Kudzu	🗌 Bamboo 🛛 Au	tumn Olive
Vegetation Typ	e Codes:	N = None	-					<b>.</b>	0.11	
D = Deciduous MD = Mixed De	C = C	oniferous			Hemlock, Rh	ododendron)	1=Spars	se (0-<10%)	: 0=Absent (0%) 2=Moderate	(10-40%)
MC = Mixed De							3=Heav	y (>40-75%)	4=Very Heavy	y (>75%)
	Canopy	(>5 M High)	(>15 Feet)	Unders	story (0.5 – 5 M	/I High) (1.5-	Gro	und Cover (<0	.5 M High) (≈1.5 Fe	et)
	ounopy	(ו iii nigri)			15 Feet)				.o m mgn) (~1.0 r c	,
					l trees and					Exposed soil
		es such as S		such	y Vegetation as Willow,	Tall Herbs,				surface, Readily
		Maples, Bo er Birch, He			Knotweed Ie devil),	Grasses, & Forbs	Ferns, Gı	rasses, Mosses	s, Wildflowers	erodible – not rock
Determined Within The 1 <sup>st</sup>					lodendron, ingstem					faces or asphalt
18 m (60 Ft) From Shoreline		DIO	CMALL		-					roads
Edge		BIG TREES	SMALL TREES		WOODY	NON-	WOODY	HEBS,	STANDING	BARREN.
	VEG. TYPE	(TRUNK >0.3 m	(TRUNK >0.3 m	VEG. TYPE	SHRUBS & SAPLINGS	WOODY SHRUBS,	SHRUBS & SAPLINGS	GRASSES, & FORBS	WATER OR INNUNDATED	BARE
		or ≈1 ft DBH)	or ≈1 ft DBH)			SAPLINGS		u l oneo	VEGETATION	Dirti

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 WVDEP WAB Lake Habitat Assessment Form (4/1/2014)

Rev	viewers Initia	als	LAND	OWNER/STA	KEHOLDER	INFORMATION, RI	ECON, & PHO	TOS >>>>>>>>>>>>>>>>>>>>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
	Landowne					Landowner/			
Sta	keholder N	lame				Stakeholder Na	ame		
Add	Iress					Address			
1°P	hone # (	)				1°Phone # (	)		
A	LT # (	)				ALT# (	)		
		Requested [ ]	WS	Report Requ	iested [ ]	Stream Data Re		WS Report R	
Othe	er Pertinent La	andowner Infor	mation (e.g.	, email) & Com	ments:	Other Pertinent La	ndowner Inform	ation (e.g., email) & (	Comments:
D	iscuss the a	accessibility to				sted property, fend ed, get key from lai		ad, long walk over	treacherous
		Easy Access		-		y		d 🗆 Fenced 🗆 (	Gated
	еск ан	•				rt Hike 🛛 Long Hi			
that		Other (explain)				5			r
Rec	on/Accessik	oility Notes:							
Pho	tography Lo	og >>>>>>>>>	>>>>>>	Camera Ty	уре			Camera Numbe	r
#	Photo ID (office)	Disk Photo # (field)		ame and/or -Code	Phote	Description (Use	e Key Words)	Date	Photographer
1									
2									
3									
4									
-									
5									
6									
7									
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8									
9									
10									
11									
40									
12									

Rev	iewers Initials	ANCode					Date	SONDE LAKE PROFILE READINGS								RT 1>>>
Measurement	WQ Sample ID	Depth Description (e.g., Top, Middle Bottom, Thermocline, <i>etc</i> .)	Depth (in feet) (Mandatory for each reading)	Time (Mandatory for each reading)	Temperature Flag	Temp (°C)	pH Flag	рН (S.U.)	Dissolved Oxygen Flag	Dis. Oxygen (mg/L)	Conductivity Flag	Specific Conduct (umhos/ cm)	Chlorophyll A Flag	Chloroph yll A (ug/L)	Turbidity Flag	Turbidity (NTU)
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20				<b>D 7</b> W					4/1/2014)							

Rev	iewers Initials	s SONDE LAKE PROFILE READINGS PART 2>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>													·>>>>>>>	
Measurement	WQ Sample ID	Depth Description ( <i>e.g.,</i> Top, Middle Bottom, Thermocline, <i>etc.</i> )	Depth (ft) (Mandatory for each reading)	Depth (ft) Mandatory for each reading) Time (Mandatory for each reading) Time (Mandatory for each reading) Time (°C) Temp (°C)										Chloro- phyll A (ug/L)	Turbidity Flag	Turbidity (NTU)
21																
22																
23																
24																
25																
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