## **Lake Habitat Assessment Form**

Visit Type	: 🛮 🗆 Init	ial □ S	econo	dary	□ Final [	☐ Other:												
LOCATIO	LOCATION VERIFICATION >>>>>>>>>>>>> Reviewers Initials																	
	Lake Name (with Temporary Site Code & map location) ID																	
AN-Code							Date	е				Time			Geo		Bio	
Basin					County							Quad						
GPS Type				EPE						XY'	s Pro	ofed					Ву	
Field Lat X	(-site						N	Fie	eld Lor	า X-s	site							W
Corrected	Lat						N	Co	orrecte	d Lo	on							W
Launch Si	te Lat						N	La	unch (	Site	Lon							W
Sampled	□ Yes □	□ No	If no	τ, ?	□ No Acces □ No Acces □ Dry □ Fi	s-Landow	ner D	Deni	-				-		Fenced	1 / 🗆 P	rivate	)
Sample Typ					al □ Lake I	□ AMD □					in 🗆 (	Orthoph	osph					
Duplicate t		None [	] Habit	at 🗆	Fecal		Du	ıplic	cate WC	) ID				Was s	ite mov	red?	□ Yes	□ No
Explanation																		
Directions	To Site																	
Sketch of shore fecal overall idea landmarks	sample (I	F), wate ke layo	er sam	ple (v	wq), indicat	e lat and l	long s	site	with (X	). Dr	raw th	e sketc	h wit	h a coa	rse res	olution	to giv	
Notes																		

Reviewers Initials ACTIVITIES AND DISTURBANCES >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>																
Local	Waters	on		□ No	one		□S	light			Moder	ate	☐ Heavy			
	•			ate 0-4					escript							
	NPS Po					tential	<u></u> 0	bvious	; If ob	vious	s, ma	gnitude	? [	<b>∃</b> Slight	□ Mod	erate ☐ Heavy
				ntial NPS		ot, etc.)										
	Source				∵. ∃Yes [	No	Pt.	Source	e(s)							
									` '	derate,	3-Hi	qh, 4-Ex	treme I	n Each Box	That Appl	lies)
F	Residen	tial		R	Recreation				Agricultu				Industr			/lanagement
	Res	idence	s			Parks/ npground	,			ual Rov	w		Indust	rial Plants		Liming
	L	.awns			Parl	king Lots	;		Pasture				Surfa	ace Mine		Rip/Rap or Bank Stabilization
	Pow	er Line	es			t Access/ Dock	′	Hay Production				Dee	p Mine		Dredging	
	Cons	structio	on		Swimming				Orchards				Co	al Prep		Channelized
	Pipes/Drains				F	ishing				oultry			Qı	ıarries		Fill
	Bridges/Culverts				Pipe	es/Drains	;			estock ccess			Ra	ilroad		Dams/Impounded
Width	Surf Type	Roa Inten				ot Trails			Irri	igation			Lo	gging		purpose State or Inty Maintained Roads
						Horse, Bil Trails	ke		Pipe	s/Drain	ıs		Pow	er lines		Width
	s for Wi face Ty				Bridge	es/Culver	rts		Bridge	s/Culve	erts			odyards/ wmills		A=Single Lane
Display Unde	yed on t er Multip	the Ri	ght se	Width	Surf Type	Road Intensi		Width	Surf Type	Roa Inten			Sanita	ry Landfill		B=Double Lane
	te or Contained												ste H2O atment		C=Multi-Lane	
	Activiti			′es □ N		Activ							ting H2O atment	s	Surface Type	
									ces checked to the Lake?				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
														orested,	Road No	otes:
												ive or a Are the				
												fied cor				
				BLANK		,,	•		(,		• -		••••	. <u></u>		

FIE	FIELD WATER>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>														
AN	ANCode Date  WQ Sample Location														
WC	Q Sample Loc	ation	Shore 🗆 Ve	ertica	I □ Other:			WQ 1	Гуре	<b>∃</b> Single	□ Profil	e □ Ot	her:		
Sor	Sonde Method														
Flag	Polow														
		Temperature	°C	Below Norm			Normal		None				Cle	ar	
		pH (std. Units	s)	Norm			Sewage (Not Septic)		Flecks	3	Sheen		Slightly Turk		
		Dissolved Oxygen (mg/		Abov Norn			Petroleum		Globs		Slick		Мо	derately Turbid	
		Conductivity (µmhos/cm)		Floo			Chemical	Wate	er Notes	<b>::</b>				ghly Turbid	
	Sonde I.D.	. #:	Foa (Non-S		Suds (Soap)		Anaerobic (septic)					Water	cold	or:	
If any problems occur with the Water Meter or any readings are suspect,  Other:															
100.	ABOVE: Record readings in box for corresponding physicochemical parameter. Insert a √ in the box for other categories.														
						•	tatus and His								
Cui	rrent				ast 24 Hou (If Known)						Major Ra in past			□ Yes □ No	
Fie	d Water Note	es and Precipitat	ion Comme		(II MIOW.)						π ρασι	WCO.			
						Lak	e Info								
S	ce Depth at	ft	Secchi De			ft	Depth of T WQ Samp			ft	Botto Sai	oth of om WQ mple	:	ft	
	cation (10 offshore)		Locatio				Time of To WQ Samp	le			Botto Sai	ne of om WQ mple			
mL	. Filtered for	Chlorophyll A	Sample:								bove de <sub>l</sub> nalysis F				
Lak	e Profile Note	es:													

Reviewers Initial	Reviewers Initials SHORELINE LITTORAL ZONE HABIAT CHARACTERIZATION>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>																	
					вотто	M SUB	STRA	TE										
Sediment Odor	Normal		Sewage		Petroleum/ Oil		Che	mical		erobic eptic)		Other						
Sediment Color	Brown		Black		Red	(	Gray		Other									
Score Codes	s: 0=Abser	t (0%)	1=Spars	e (0-<	10%) 2=	Moder	ate (1	0-40%)	3=Heavy	(>40-75°	%) 4	4=Very H	eavy (>75%)					
Substrat	e Particles		Part Cod					Size	e Class				Bottom Substrate Score					
Bedrock			В	R	Smooth s	urface	rock/l	nardpar	n (>4000 mi	n –bigg	er thai	n a car)						
Boulder			В	L	Basketbal	l to car	(>2	50-4000	mm)									
Cobble			С	В	Tennis ba	Tennis ball to basketball (>64-250 mm)												
Coarse Gravel			С	G	Marble to	tennis	ball	(>16-64	· mm)									
Fine Gravel			F	G	Ladybug t	o mark	ole (>	2-16 m	m)									
Sand			S	A	Gritty – up	to lad	lybug	(>0.06	6-2 mm)									
Silt & Fines (Incl Muck)	uding Clay	&	s	Т	Fine - not	gritty	(<0.0	6 mm)										
Woody Debris			W	D	Logs, Stic	ks, etc												
Organic (Leaf Pa	ck, Detritu	s)	C	)	Leaves, D	ecayin	g Org	anic Ma	atter									
	ı	QUAT	IC MACRO	PHYT	ES				1=Spars 3=Heav	e (0-<10	%)		nt (0%) lerate (10-40%) Heavy (>75%)					
Submergent	Em	ergent		Floati	ng		tal Aq	uatic e Cover		Do N	acrop		□ Yes □ No					
Littoral Zone Aqua	tic Macroph	yte Not	es & Comm	ents:														
		ı	FISH COVE	ΞR					1=Spars 3=Heav	e (0-<10	%)		nt (0%) lerate (10-40%) Heavy (>75%)					
Aquatic and In	undated He	erbace	ous Veget	ation			Ove	erhangi	ing Vegeta	ion <1m	of Su	ırface						
Large Woody	Debris/Sn diamet		0.3 m or ≈′	l ft.			Unde	rcut Ba	nks, Ledge	s, or Sh	arp D	ropoffs						
Small Woody Debris (Woody Brush/Woody Debris <0.3 m or ≈1 ft. diameter-alive or dead)  Boulders																		
Inundated Live		Roots (				,	Artific	ial/Hun	nan Structu etc		ks, La	andings,						
Littoral Zone Fish			ments:		Ш	Ш												

SHORELINE R	IPARIA	N ZONE H	IABIAT CH	HARACT	TERIZATION	<i> </i> >>>>>>>	>>>>>>	Reviewers Ini	tials	
ANCode							Date			
	RIPAR	IAN ZONE	VEGETATIO	ON/COVE	ER TYPE (Me	asured within	15 m x 15 ı	n plot along s	shoreline)	
Riparian Zone No	tes & Co	mments:								
Investigation Consider	· I	lawawaaa Kw	-two-st 🗆	Tunn of III		ii flana Daga		h DKuden	□ Dambaa □ Au	turna Oliva
Invasive Species reach riparian are	_	Japanese Kn Japanese Ho				ଘ-ଗତra Rose □ Wineberry	⊔ Crown veto □ Other:	:h □ Kudzu ∣	⊔ Bamboo ⊔ Au	tumn Olive
			noyouonio							
Vegetation Type	•							Coore Codes	. O. Absort (00/)	
Vegetation Type D = Deciduous MD = Mixed Dec	Codes	: N = None Coniferous	( <i>i.e.</i> , Spruc	e, Pine, I		ododendron)	1=Spars	se (0-<10%)	: 0=Absent (0%) 2=Moderate	(10-40%)
	Codes C = C	: N = None Coniferous (>10-49% C	( <i>i.e.</i> , Spruc	e, Pine, I			1=Spars			(10-40%)
D = Deciduous MD = Mixed Dec	e Codes C = ( ciduous niferous	: N = None Coniferous (>10-49% C (>10-49% E	(i.e., Spruc coniferous) Deciduous)	e, Pine, I		ododendron)	1=Spar 3=Heav	se (0-<10%) /y (>40-75%)	2=Moderate ( 4=Very Heavy	(10-40%) v (>75%)
D = Deciduous MD = Mixed Dec	e Codes C = ( ciduous niferous	: N = None Coniferous (>10-49% C	(i.e., Spruc coniferous) Deciduous)	e, Pine, I	Hemlock, Rh	ododendron)	1=Spar 3=Heav	se (0-<10%) /y (>40-75%)	2=Moderate	(10-40%) v (>75%) eet)
D = Deciduous MD = Mixed Dec	e Codes C = ( ciduous niferous	: N = None Coniferous (>10-49% C (>10-49% E	(i.e., Spruc coniferous) Deciduous)	e, Pine, I Underst Small	Hemlock, Rho ory (0.5 – 5 M Feet)	ododendron)	1=Spar 3=Heav	se (0-<10%) /y (>40-75%)	2=Moderate ( 4=Very Heavy	(10-40%) ( >75%) eet) Exposed soil
D = Deciduous MD = Mixed Dec	e Codes C = ( ciduous niferous Canopy	: N = None Coniferous (>10-49% C (>10-49% E	(i.e., Spruc coniferous) Deciduous) (>15 Feet)	e, Pine, I Underst Small	Hemlock, Rho ory (0.5 – 5 M Feet) I trees and y Vegetation	ododendron)	1=Spar 3=Heav	se (0-<10%) /y (>40-75%)	2=Moderate ( 4=Very Heavy	(10-40%) ( (>75%) eet)  Exposed
D = Deciduous MD = Mixed Dec	Canopy  Big Tre Oaks	: N = None Coniferous (>10-49% C (>10-49% E r (>5 M High)  ees such as 3 , Maples, Bo	(i.e., Spruc coniferous) Deciduous) (>15 Feet) Sycamore, ox Elder,	e, Pine, I  Underst  Small shrubb such Alder,	Hemlock, Rho ory (0.5 – 5 M Feet) I trees and y Vegetation as Willow, Knotweed	ododendron) High) (1.5-15 Tall Herbs, Grasses, &	1=Spars 3=Heav	se (0-<10%) /y (>40-75%)	2=Moderate of 4=Very Heavy	eet)  Exposed soil surface, Readily erodible –
D = Deciduous MD = Mixed Dec MC = Mixed Cor	Canopy  Big Tre Oaks	: N = None Coniferous (>10-49% C (>10-49% E (>5 M High)	(i.e., Spruc coniferous) Deciduous) (>15 Feet) Sycamore, ox Elder,	e, Pine, I  Underst  Small shrubb such Alder, (blu Rhod	ory (0.5 – 5 M Feet)  I trees and y Vegetation as Willow, Knotweed the devil),	ododendron) High) (1.5-15 Tall Herbs,	1=Spars 3=Heav	se (0-<10%) ry (>40-75%) ound Cover (<0.	2=Moderate of 4=Very Heavy	eet)  Exposed soil surface, Readily erodible – not rock faces or
D = Deciduous MD = Mixed Dec MC = Mixed Cor  Determined Within The 1st 18 m (60 Ft)	Canopy  Big Tre Oaks	: N = None Coniferous (>10-49% C (>10-49% E r (>5 M High)  ees such as 3 , Maples, Bo	(i.e., Spruc coniferous) Deciduous) (>15 Feet) Sycamore, ox Elder,	e, Pine, I  Underst  Small shrubb such Alder, (blu Rhod	ory (0.5 – 5 M Feet) I trees and y Vegetation as Willow, Knotweed ue devil),	ododendron) High) (1.5-15 Tall Herbs, Grasses, &	1=Spars 3=Heav	se (0-<10%) ry (>40-75%) ound Cover (<0.	2=Moderate of 4=Very Heavy	eet)  Exposed soil surface, Readily erodible – not rock
D = Deciduous MD = Mixed Dec MC = Mixed Cor  Determined Within The 1st	Canopy  Big Tre Oaks	: N = None Coniferous (>10-49% C (>10-49% E r (>5 M High)  ees such as 3 , Maples, Bo	(i.e., Spruc coniferous) Deciduous) (>15 Feet) Sycamore, ox Elder,	e, Pine, I  Underst  Small shrubb such Alder, (blu Rhod	ory (0.5 – 5 M Feet)  I trees and y Vegetation as Willow, Knotweed ie devil), lodendron, ingstem	ododendron) High) (1.5-15  Tall Herbs, Grasses, & Forbs	1=Spars 3=Heav Gro	se (0-<10%) ry (>40-75%)  ound Cover (<0.	2=Moderate of 4=Very Heavy 5 M High) (≈1.5 Fe	eet)  Exposed soil surface, Readily erodible – not rock faces or asphalt roads
D = Deciduous MD = Mixed Dec MC = Mixed Cor  Determined Within The 1st 18 m (60 Ft) From Shoreline	Canopy  Big Tre Oaks Riv  VEG.	: N = None Coniferous (>10-49% C (>10-49% E  r (>5 M High)  ees such as 3 r, Maples, Bo rer Birch, He  BIG TREES (TRUNK	(i.e., Spructoniferous) Deciduous) (>15 Feet) Sycamore, ox Elder, mlock SMALL TREES (TRUNK	e, Pine, I  Underst  Small shrubb such Alder, (blu Rhod Wi	ory (0.5 – 5 M Feet)  I trees and y Vegetation as Willow, Knotweed ue devil), odendron, ingstem  WOODY SHRUBS &	Tall Herbs, Grasses, & Forbs	1=Spars 3=Heav Gro Ferns, G	se (0-<10%) ry (>40-75%)  bund Cover (<0.  rasses, Mosses  HEBS, GRASSES,	2=Moderate of 4=Very Heavy 5 M High) (≈1.5 Feathers, Wildflowers  STANDING WATER OR	eet)  Exposed soil surface, Readily erodible – not rock faces or asphalt roads  BARREN, BARE
D = Deciduous MD = Mixed Dec MC = Mixed Cor  Determined Within The 1st 18 m (60 Ft) From Shoreline	Canopy  Big Tre Oaks	N = None Coniferous (>10-49% C (>10-49% E (>5 M High)  Sees such as S (Maples, Bover Birch, He  BIG TREES (TRUNK >0.3 m or ≈1 ft	(i.e., Spructoniferous) Deciduous) (>15 Feet)  Sycamore, ox Elder, mlock  SMALL TREES (TRUNK >0.3 m or ≈1 ft	e, Pine, I Underst Small shrubb such Alder, (blu Rhod Wi	ory (0.5 – 5 M Feet)  I trees and y Vegetation as Willow, Knotweed ie devil), odendron, ingstem	Tall Herbs, Grasses, & Forbs	1=Spars 3=Heav Gro	se (0-<10%) ry (>40-75%)  bund Cover (<0.	2=Moderate of 4=Very Heavy 5 M High) (≈1.5 Fe	eet)  Exposed soil surface, Readily erodible – not rock faces or asphalt roads  BARREN,
D = Deciduous MD = Mixed Dec MC = Mixed Cor  Determined Within The 1st 18 m (60 Ft) From Shoreline	Canopy  Big Tre Oaks Riv  VEG.	N = None Coniferous (>10-49% C (>10-49% E  (>5 M High)  Res such as S (, Maples, Bo (, Maples, Bo (, He  BIG TREES (TRUNK (, >0.3 m	(i.e., Spructoniferous) Deciduous) (>15 Feet) Sycamore, ox Elder, mlock SMALL TREES (TRUNK >0.3 m	e, Pine, I  Underst  Small shrubb such Alder, (blu Rhod Wi	ory (0.5 – 5 M Feet)  I trees and y Vegetation as Willow, Knotweed ue devil), odendron, ingstem  WOODY SHRUBS &	Tall Herbs, Grasses, & Forbs	1=Spars 3=Heav Gro Ferns, G	se (0-<10%) ry (>40-75%)  bund Cover (<0.  rasses, Mosses  HEBS, GRASSES,	2=Moderate of 4=Very Heavy 5 M High) (≈1.5 Fe s, Wildflowers  STANDING WATER OR INNUNDATED	eet)  Exposed soil surface, Readily erodible – not rock faces or asphalt roads  BARREN, BARE

Page 5 WVDEP WAB Lake Habitat Assessment Form (8/15/2016)

Rev	iewers Initia	als	LAND	OWNER/STA	KEHOLDER	INFORMATI	ON, RECON	I, & PHOT	OS >>>	>>>>>	>>>>>>
	Landowne	-					owner/				
Stal	keholder N	lame				Stakehol	der Name				
Add	Iress					Address					
1ºP	hone # (	)				1°Phone #	<b>#</b> (	)			
Α	LT# (	)				ALT#	(	)			
		Requested [ ]		Report Requ			Data Reque				equested [ ]
Othe	r Pertinent L	andowner Infor	mation (e.g.,	email) & Comr	ments:	Other Pertin	nent Landowi	ner Informa	tion (e.	g., email) & (	Comments:
D	iscuss the	accessibility t		ncluding acce					d, long	y walk over	treacherous
		Easy Access		Access   F					□ Fe	enced 🗆 (	Gated
	eck all 📗	Get Key from I									
ınaı	abbiv.	Other (explain					J				
Rec	on/Accessil	bility Notes:									
DI.				O					0	N	
Pho		og >>>>>>		Camera Ty	/pe				Came	ra Numbe	r
#	Photo ID (office)	Disk Photo # (field)		ame and/or -Code	Phot	o Descriptio	n (Use Key	Words)		Date	Photographer
1											
2											
3											
4											
5											
,											
6											
7											
8											
9											
10											
11											
12											

Rev	riewers Initials	ANCode			Date	SONDE LAKE PROFILE READINGS PART 1								RT 1>>>		
Measurement	WQ Sample ID	Depth Description (e.g., Top, Middle Bottom, Thermocline, etc.)	Depth (in feet) (Mandatory for each reading)	Time (Mandatory for each reading)	Temperature Flag	Temp (°C)	pH Flag	pH (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																
18																
19																
20																
20				Page 7 M/M/C												

Rev	iewers Initials	SONDE LAKE PROFILE READINGS PART 2>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>														
1101			?>>>>> I	·>>>>>>	>>>>	>>>>>	>>>>	>>>>>	>>>>	>>>>>	>>>					
Measurement	WQ Sample ID	Depth Description (e.g., Top, Middle Bottom, Thermocline, etc.)	Depth (ft) (Mandatory for each reading)	Time (Mandatory for each reading)	Temperature Flag	Temp (°C)	pH Flag	pH (S.U.)	Dissolved Oxygen Flag	Dis. Oxygen (mg/L)	Conductivity Flag	Specific Conduct (umhos/ cm)	Chlorophyll A Flag	Chloro- phyll A (ug/L)	Turbidity Flag	Turbidity (NTU)
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																
36																
37																
38																
39																
40				Page 9 W///												