

MODIFICATION TO STUDY PLAN FOR MINK INJURY DETERMINATION

INVESTIGATION OF MINK ABUNDANCE AND DENSITY RELATIVE TO POLYCHLORINATED BIPHENYL CONTAMINATION WITHIN THE HUDSON RIVER DRAINAGE

HUDSON RIVER NATURAL RESOURCE DAMAGE ASSESSMENT

HUDSON RIVER NATURAL RESOURCE TRUSTEES

STATE OF NEW YORK

U.S. DEPARTMENT OF COMMERCE

U.S. DEPARTMENT OF THE INTERIOR

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Hudson River NRDA, Lead Administrative Trustee
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Silver Spring, MD 20910-3281



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INTRODUCTION

Past and continuing discharges of polychlorinated biphenyls (PCBs) have contaminated the natural resources of the Hudson River. The Hudson River Natural Resource Trustees – New York State, the U.S. Department of Commerce, and the U.S. Department of the Interior – are conducting a natural resource damage assessment (NRDA) to assess and restore those natural resources injured by PCBs (Hudson River Natural Resource Trustees 2002).

Many species of mammals rely on the Hudson River, including its floodplain, for habitat, food, and as a breeding ground. Mammals that depend on the river for food and habitat include otter, muskrat, raccoon, beaver, and mink. The Hudson River NRDA Plan identified mink health as an area of biological injury investigation.

On August, 2, 2010, the Trustees released a Draft Study Plan entitled, “Investigation of Mink Occupancy Relative to Polychlorinated Biphenyl Contamination within the Hudson River Drainage” (Hudson River Natural Resource Trustees, 2010). Following peer and public review of that plan, the Trustees determined that revisions to that plan were appropriate, resulting in the March 19, 2012 Draft Study Plan (Hudson River Natural Resource Trustees, 2012a) being released for further peer and public review, culminating in a Final Study Plan released on July 13, 2012 (Hudson River Natural Resource Trustees, 2012b).

As outlined in the Final Study Plan, the summer of 2012 served as a pilot study to inform the design of the 2013 sampling season. On August 15, 2013, the Trustees released a modification to the study plan detailing changes to the study plan that occurred as the study progressed in 2013 (Hudson River Natural Resource Trustees, 2013). Following the 2013 sampling season, the Trustees decided to conduct a second full sampling season in 2014. The modifications below pertain to 2014.

The Trustees have evaluated the changes to the study described in this Study Plan Modification for 2014 and determined that the changes are not sufficiently substantive to necessitate peer and public review of the Study Plan Modification for Year 2014.

MODIFICATIONS

Sample sites – During the 2013 sampling season, the total number of sites sampled was 144, with 69 sites surveyed in the Mohawk River drainage and 75 sites surveyed in the Hudson River drainage. These same sites will be targeted for surveys during 2014. In addition to the sites surveyed in 2013, surveys will target an additional 46 sites (26 in the Mohawk and 20 in the Hudson) to bring the total number of targeted sample sites to 190. Final number of sample sites surveyed will be dependent on landowner permission.

Dog teams – During the 2014 sampling season, the number of dog teams will be increased from the two used in 2013 to three dog teams.

Hair snares – Hair snares will not be used in 2014.

Data collection sheets – The scat collection data sheet has been revised. Appendix A contains the revised scat collection data sheet.

Data collection – To standardize the collection of water depth data, measuring poles with measurement marks on them will be used to measure water depth.

REFERENCES

Hudson River Natural Resource Trustees. 2002. Hudson River Natural Resource Damage Assessment Plan. September 2002. U.S. Department of Commerce, Silver Spring, MD.

Hudson River Natural Resource Trustees. 2010. Draft Study Plan for Mink Injury Determination. Investigation of Mink Occupancy Relative to Polychlorinated Biphenyl Contamination within the Hudson River Drainage. Draft for Public Review and Comment. August 2010. U.S. Department of Commerce, Silver Spring, MD.

Hudson River Natural Resource Trustees. 2012a. Study Plan For Mink Injury Determination Investigation of Mink Abundance and Density Relative to Polychlorinated Biphenyl

Contamination within the Hudson River Drainage, Hudson River Natural Resource Damage Assessment. Public Release Version. Draft. March 19, 2012. U.S. Department of Commerce, Silver Spring, MD.

Hudson River Natural Resource Trustees. 2012b. Study Plan For Mink Injury Determination

Investigation of Mink Abundance and Density Relative to Polychlorinated Biphenyl Contamination within the Hudson River Drainage, Hudson River Natural Resource Damage Assessment. Public Release Version. Final. July 13, 2012, 2012. U.S. Department of Commerce, Silver Spring, MD.

APPENDIX A

2014 HRNRDA MINK ABUNDANCE STUDY

SCAT COLLECTION DATA SHEET

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Site Info		Habitat Info							
Date:		Upstream				Downstream			
Site ID:	Stream section (m)	Ease of access	Bank Slope Index	Stream width	Water depth	Ease of access	Bank Slope Index	Stream width	Water depth
Visit: 1 2 3									
Recorder/Collector:	0 - 50								
	50 - 100								
Dog Team:	100 - 150								
GPS ID:	150 - 200								
Camera ID:	200 - 250								
Start time:	250 - 300								
End time:	300 - 350								
Temp (°C):	350 - 400								
Wind (m/s):	400 - 450								
Precipitation:	450 - 500								
None Humid	500 - 550								
Drizzle Rain	550 - 600								
Upstream	600 - 650								
Waypoint start:	650 - 700								
Waypoint end:	700 - 750								
Downstream	750 - 800								
Waypoint start:	800 - 850								
Waypoint end:	850 - 900								
OTTER PRESENT:	900 - 950								
Yes No	950 - 1000								
	KEY:	1: Easy 2: Medium 3: Difficult	1: Flat 2: < 45° 3: > 45° 4: Vertical	0 - 5ft >5 - 10 ft >10 - 15 ft etc...	0 - 1ft >1 - 2ft >2 - 3 ft etc...	1: Easy 2: Medium 3: Difficult	1: Flat 2: < 45° 3: > 45° 4: Vertical	0 - 5ft >5 - 10 ft >10 - 15 ft etc...	0 - 1ft >1 - 2ft >2 - 3 ft etc...

General comments Observations

Scat Collection Data Sheet

SITE: _____

DATE: _____

PAGE _____ of _____

Scat Info

Time	Sample letter	GPS (waypt)	Photo number	Confidence		Scat location description	Distance to water	Scat size		Scat condition		Dog reward	Notes
				Dog	Handler			Length	Width	Fresh	Color		
<i>hh:mm</i>	<i>A, B, C, ..., ZZ</i>	<i>Way point number</i>	<i>DSCN0309</i>	<i>H: High M: Medium L: Low</i>	<i>leaf liter; on log; latrine; base of tree etc...</i>	<i>Distance in meters</i>	<i>cm tip to tip or widest part OR F for fragment</i>	<i>FRESH: M= moist/fresh DS = dry moist DF = dry firm D = dry throughout</i>		<i>COLOR: Bl = Black BIG = Black/Green G = Green Br = Brown Gy = Grey Other</i>			

HUDSON RIVER

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