STUDY PLAN
FOR
FRESHWATER MUSSEL INJURY DETERMINATION
POPULATION ASSESSMENT AND POTENTIAL FUNCTIONAL ROLES
OF NATIVE MUSSELS
IN MULTIPLE SECTIONS OF THE UPPER HUDSON RIVER:
2015 REMEDIAL INJURY STUDY

AMENDMENT 1

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

FINAL

MAY 26, 2015

Available from:
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
Hudson River NRDA, Lead Administrative Trustee
Damage Assessment Center, N/ORR31
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STUDY PLAN FOR FRESHWATER ASSESSMENT AND POTENTIAL FUNCTIONAL ROLES OF NATIVE MUSSELS IN MULTIPLE SECTIONS OF THE UPPER HUDSON RIVER: 2015 REMEDIAL INJURY STUDY

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.

The Hudson River PCBs Superfund Site (the "Site") extends about 200 miles between Hudson Falls and the Battery in New York City. A 40-mile stretch of the freshwater non-tidal Upper Hudson River, from Fort Edward to Troy, NY, is the site of an extensive PCB federal Superfund remediation project being conducted by The General Electric Company pursuant to the Record of Decision issued by EPA in 2002. Dredging to remove PCBs, followed by capping or backfilling of dredged areas, began in 2009 and is expected to be completed in 2015. The Hudson River Natural Resource Trustees have been assessing PCB contamination and injuries to natural resources in the Hudson River.

As part of the NRDA, the Trustees conducted a pilot freshwater mussel survey in the Fort Miller and Stillwater Pools in 2013 (HRNRT 2014a). Based on the 2013 preliminary investigations, the Trustees then determined it was appropriate to conduct a freshwater mussel survey in 2014 in additional pools of the Upper Hudson River where remediation had yet to commence, revisit pools following remediation, and sample upstream reference pools.

The Draft Study Plan for Mussel Injury Investigation for the Hudson River was released for public review and comment on June 2, 2014. On August 15, 2014, following the 30-day comment period, the Study Plan for Freshwater Mussel Injury Determination, Population Assessment and Potential Functional Roles of Native Mussels in Multiple Sections of the Upper Hudson River: 2014 Remedial Injury Study (Study Plan) was finalized (HRNRT 2014b). The Responsiveness Summary for the Study Plan was issued September 2, 2014 (HRNRT 2014c). This freshwater mussel survey was not implemented in 2014 and will instead occur in 2015. The 2013 study and the pending 2015 study will be used to assess potential injuries to these resources and will also be used to help determine whether future studies will be performed, and if so, to help in their design.

This document constitutes an amendment to the 2015 Study Plan. The work proposed in 2015 is consistent with the work set forth in the 2014 Study Plan with the following modifications:

1. The survey will be implemented in 2015 instead of 2014.
2. The first study objective "Quantify freshwater mussel assemblages in areas that are targeted for dredging ("to be remediated") to estimate the potential loss of freshwater mussels and some of the potential services provided by these mussels in areas that will be dredged" may not be achievable if dredging of the Lower Mechanicville Pool (Certification Units 94-96) proceeds in advance of the mussel survey.
3. Where "to be remediated" areas have been dredged prior to commencement of the mussel survey, sampling will consist of "unremediated areas" and "remediated areas" rather than unremediated areas and "to be remediated" areas.

REFERENCES

HRNRT (Hudson River Natural Resource Trustees). 2014a. Population Assessment and Potential Functional Roles of Native Mussels in Select Reaches of the Upper Hudson River:

2013 Remedial Injury Pilot Study, Hudson River Natural Resource Damage Assessment, Public Release Version, Final, September 10, 2014. http://www.darrp.noaa.gov/northeast/hudson/pdf/2013HudsonRiverMusselSurvey_PublicRelease.pdf

HRNRT (Hudson River Natural Resource Trustees). 2014b. Study Plan for Freshwater Mussel Injury Determination Population Assessment and Potential Functional Roles of Native Mussels in Multiple Sections of the Upper Hudson River: 2014 Remedial Injury Study, Hudson River Natural Resource Damage Assessment, Public Release Version, Final, August 15, 2014. http://www.darrp.noaa.gov/northeast/hudson/pdf/2014HudsonRiverMusselSurveyWorkPlan_For%20Public%20Release_081514.pdf

HRNRT (Hudson River Natural Resource Trustees). 2014c. Responsiveness Summary for the Study Plan For Freshwater Mussel Injury Determination Population Assessment and Potential Functional Roles of Native Mussels in Multiple Sections of the Upper Hudson River: 2014 Remedial Injury Study, Hudson River Natural Resource Damage Assessment, Public Release Version, September 2, 2014, http://www.darrp.noaa.gov/northeast/hudson/pdf/Hudson_River_Mussel_Work_Plan_Responsiveness_Summary_09022014.pdf

Department of Environmental Conservation