

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

UNITED STATES OF AMERICA,)
)
Plaintiff,) CIVIL ACTION NO.
)
v.)
)
CABOT CORPORATION; DETREX)
CORPORATION; ELKEM METALS COMPANY)
L.P.; THE CLEVELAND ELECTRIC)
ILLUMINATING COMPANY; GENCORP INC.;)
MALLINCKRODT.'NNE; MILLENNIUM "*****"+)
INORGANIC CHEMICALS INC.; OCCIDENTAL)
CHEMICAL CORPORATION; OHIO POWER)
COMPANY; OLIN CORPORATION; RMI)
TITANIUM COMPANY, INC.; THE)
SHERWIN-WILLIAMS COMPANY; UNION)
CARBIDE CORPORATION; CBS OPERATIONS)
INC.; NORFOLK SOUTHERN RAILWAY)
COMPANY; NORFOLK SOUTHERN)
CORPORATION; CONRAIL INC.;)
and CONSOLIDATED RAIL CORPORATION,)
Defendants.)

STATE OF OHIO, ex rel. Michael DeWine,)
Ohio Attorney General,)
Plaintiff,) CIVIL ACTION NO.
)
v.)
)
CABOT CORPORATION; DETREX)
CORPORATION; ELKEM METALS COMPANY)
L.P.; THE CLEVELAND ELECTRIC)
ILLUMINATING COMPANY; GENCORP INC.;)
MALLINCKRODT.'NNE; MILLENNIUM "*****"+)
INORGANIC CHEMICALS INC.; OCCIDENTAL)
CHEMICAL CORPORATION; OHIO POWER)
COMPANY; OLIN CORPORATION; RMI)
TITANIUM COMPANY, INC.; THE)
SHERWIN-WILLIAMS COMPANY;)

UNION CARBIDE CORPORATION; CBS)
OPERATIONS INC.; NORFOLK SOUTHERN)
RAILWAY COMPANY; NORFOLK)
SOUTHERN CORPORATION; CONRAIL INC.;)
CONSOLIDATED RAIL CORPORATION;)
UNITED STATES GENERAL SERVICES)
ADMINISTRATION; UNITED STATES)
DEPARTMENT OF ENERGY; UNITED)
STATES DEPARTMENT OF THE NAVY; and)
UNITED STATES MARITIME)
ADMINISTRATION,)
)
)
Defendants.)
_____)

**CONSENT DECREE
REGARDING ASHTABULA RIVER AREA NATURAL RESOURCE DAMAGES**

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I. BACKGROUND

A. The United States of America (the “United States”) on behalf of the Secretary of the United States Department of the Interior (“DOI”) and the Secretary of the United States Department of Commerce (“Commerce”) (acting through the National Oceanic and Atmospheric Administration (“NOAA”)), and the State of Ohio (the “State”), by and through the Attorney General of Ohio, on behalf of the people of Ohio, and at the request of the Ohio Environmental Protection Agency (“Ohio EPA”) (collectively the “Plaintiffs”), filed Complaints asserting claims under Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (“CERCLA”), 42 U.S.C. § 9607, and Section 311 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1321, commonly known as the Clean Water Act (“CWA”), seeking damages for injury to, destruction of, or loss of natural resources belonging to, managed by, held in trust by, controlled by, or appertaining to the United States or the State, resulting from releases of hazardous substances into or which have migrated into the Ashtabula River Area, including the costs of assessing such injury, destruction, or loss.

B. The Complaints filed by Plaintiffs herein allege that natural resources, including but not limited to, fish, invertebrates, birds, water and sediments, have been injured and that the public has suffered the loss of natural resource services, including lost recreational fishing, reduced opportunities for navigation, and passive human use losses, as a result of releases of hazardous substances to the Ashtabula River Area from various facilities in Ashtabula, Ohio. The Complaints also allege that Plaintiffs have incurred costs in connection with the assessment of such injuries, destruction or losses. The Complaints allege that hazardous substances, including, but not limited to, polychlorinated biphenyls (“PCBs”), polynuclear aromatic

hydrocarbons (“PAHs”), chlorinated benzenes, chlorinated ethenes, hexachlorobutadiene and heavy metals, have been detected in the sediments, water and fish of the Ashtabula River Area.

C. The Complaints further allege that Settling Defendants are liable for damages for injury to, destruction of, or loss of natural resources within the Ashtabula River Area because Settling Defendants (or their predecessors) are owners or operators of one or more facilities from which such releases occurred or were owners or operators of one or more such facilities at a time hazardous substances were disposed at such facilities. In addition, the Complaint filed by the State alleges that Settling Federal Agencies are liable for damages for injury to, destruction of, or loss of natural resources within the Ashtabula River Area because Settling Federal Agencies (or their predecessors) are owners or operators of one or more facilities from which such releases occurred or were owners or operators of one or more such facilities at a time hazardous substances were disposed at such facilities.

D. The defendants that have entered into this Consent Decree (“Settling Defendants”) do not admit any liability to the Plaintiffs arising out of the transactions or occurrences alleged in the Complaints. The Settling Federal Agencies do not admit any liability arising out of the transactions or occurrences alleged in any claim asserted by the State. By entering into this Consent Decree, undertaking the obligations imposed under its terms, and making the payments required by its terms, Settling Defendants and Settling Federal Agencies do not expressly, or by implication, admit liability for damages for injury to, destruction of, or loss of natural resources in the Ashtabula River Area as alleged in the Complaints or otherwise.

E. Pursuant to Executive Order 12580 and the National Contingency Plan, 40 C.F.R. Part 300 (the “NCP”), DOI through the United States Fish and Wildlife Service (“FWS”) and the

United States Department of Commerce, acting through NOAA, have been delegated authority to act as Federal Trustees for natural resources impacted by the releases of hazardous substances into or within the Ashtabula River Area. Ohio EPA has been delegated authority to act as the State Trustee for natural resources impacted by such releases of hazardous substances.

F. Pursuant to 43 C.F.R. Part 11, the FWS, NOAA, and Ohio EPA (collectively the “Trustees”) initiated an assessment of injuries to natural resources resulting from the releases of hazardous substances into or within the Ashtabula River Area.

G. Pursuant to the Great Lakes Legacy Act of 2002, as amended, 33 U.S.C. § 1268, the United States Environmental Protection Agency entered into a Project Agreement with the Ashtabula City Port Authority to provide for, among other things, removal of approximately 497,000 cubic yards of contaminated sediments from a segment of the Ashtabula River between the Upper Turning Basin and the Fifth Street Bridge, proper disposal of such sediments, and implementation of certain habitat restoration activities. Funding for the Ashtabula River Great Lakes Legacy Act Project (“GLLA Project”) was provided by the United States, the Ashtabula City Port Authority, in cooperation with ARCG II, and the State of Ohio. Sediment removal activities under the Project Agreement were completed during 2007, but habitat mitigation activities under the GLLA Project have not yet been completed.

H. Pursuant to the Rivers and Harbors Act of 1937 and the Water Resources Development Act of 1986, as amended, 33 U.S.C. § 2211, and pursuant to Sections 312 (a) and (f) (3) of the Water Resources Development Act of 1990, as amended, 33 U.S.C. § 1272(a) and (f)(3), the Department of the Army and the Ashtabula City Port Authority have entered into a Project Cooperation Agreement (W912P4-07-D-0003) for the removal of approximately 135,000

cubic yards of contaminated sediments found outside the boundaries and adjacent to the Federal navigation channel between the Fifth Street Bridge and the mouth of the Ashtabula River, and for the disposal of such contaminated sediment in a privately owned disposal facility, as described in the Final Comprehensive Management Plan (feasibility report) and Environmental Impact Statement dated August, 2004 and approved by the Assistant Secretary of the Army on March 3, 2006. The dredging, removal and disposal of contaminated sediments pursuant to Project Cooperation Agreement W912P4-07-D-0003 commenced by April 1, 2008 and was completed in July, 2008. The Project is defined at Section I.A. of the “Project Cooperation Agreement between the Department of the Army and Ashtabula City Port Authority for Removal and Disposal of Contaminated Sediments from Outside the Boundaries and Adjacent to the Federal Navigation Channel Between the Fifth Street Bridge and the Mouth of the Ashtabula River” entered into on August 22, 2007.

I. In March, 2008, the Trustees published their Draft Natural Resource Restoration Plan and Environmental Assessment for the Ashtabula River and Harbor Site, dated February 22, 2008 (“Draft Restoration Plan”). The Trustees held a public meeting on April 22, 2008 in Ashtabula, Ohio regarding the Draft Restoration Plan and provided an opportunity for submission of public comments on the Draft Restoration Plan until April 30, 2008. After considering and responding to the comments submitted during the public comment period on the Draft Restoration Plan, the Trustees published notice of adoption of a final Natural Resource Restoration Plan and Environmental Assessment for the Ashtabula River and Harbor Site on November 10, 2009. A transcript of the public meeting, copies of the public comments on the Draft Restoration Plan, and the Trustees’ response to such comments are all available to the

public as part of the administrative record maintained by the Trustees for the Ashtabula River Area.

J. In order to facilitate more expeditious restoration of natural resources, ARCG II has previously incurred \$695,289 in connection with acquisition of five of the Restoration Properties identified in Appendix B and various preliminary restoration planning activities.

K. The United States, the State of Ohio and the Settling Defendants (collectively, the “Parties” to this Consent Decree) recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith, that implementation of this Consent Decree will avoid prolonged and complicated litigation among the Parties, and that this Consent Decree is fair, reasonable, consistent with applicable law, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without adjudication of any issue of fact or law, except as provided in Section II (Jurisdiction), and with the consent of the Parties, it is hereby Ordered, Adjudged, and Decreed:

II. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and Sections 107 and 113(b) of CERCLA, 42 U.S.C. §§ 9607 and 9613(b). The Court also has personal jurisdiction over the Parties. Venue lies in this district pursuant to Section 113(b) of CERCLA, 42 U.S.C. § 9613(b), and 28 U.S.C. § 1391(b) and (e), because the releases and injuries alleged in the Complaints occurred within this district, and a substantial part of the events giving rise to Plaintiffs’ claims occurred in this district. For the purposes of this Consent Decree, or any action to enforce this Decree, Settling Defendants

consent to this Court's jurisdiction over this Decree and any such action and over Settling Defendants as well as to venue in this district.

III. PARTIES BOUND

2. The obligations of this Consent Decree apply to and are binding upon the United States and the State, and upon the Settling Defendants and any successors, assigns or other persons otherwise bound by law. No change in ownership or corporate status of a Settling Defendant including, but not limited to, any transfer of assets or real or personal property, shall relieve such Settling Defendant of its obligation to ensure that the terms of the Decree are implemented.

3. ARCG II and the Railroads may each retain contractors to perform obligations under this Consent Decree, including, without limitation, acquiring and holding title to Restoration Properties and Additional Restoration Properties, establishing and recording Environmental Covenants, negotiating subordination agreements, conveying Restoration Properties and Additional Restoration Properties to Acceptable Entities, and performing work required under Restoration Workplans or SOWs. ARCG II and the Railroads shall require contractors to perform all work in conformity with all requirements of this Consent Decree. ARCG II and the Railroads shall nonetheless be responsible for ensuring that their contractors and subcontractors perform all work contemplated herein in accordance with this Consent Decree. ARCG II shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work on behalf of ARCG II under this Consent Decree. The Railroads shall provide a copy of this Consent Decree to all officers, employees,

and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work on behalf of the Railroads under this Consent Decree. In any action to enforce this Consent Decree, no Settling Defendant shall raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

IV. DEFINITIONS

4. Unless otherwise expressly provided herein, the terms used in this Consent Decree that are defined in the CWA, CERCLA, the NCP, or the DOI Natural Resource Damage Assessment and Restoration Regulations, 43 C.F.R. Part 11, shall have the meaning assigned to them in such statutes or regulations. Whenever terms listed below are used in this Consent Decree or in the Appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. “Acceptable Entity” means a nonprofit corporation, governmental authority, including a local park district or department, or other organization or entity, approved in writing by the Trustees to be a grantee of a property interest in any Restoration Property or Additional Restoration Property.

b. “Additional Restoration Property” or “Additional Restoration Properties” means any real property or properties, other than those listed in Appendix B, approved by the Trustees as suitable for implementation of ARCG II Restoration Projects pursuant to the provisions of Paragraph 7, below.

c. “ARCG II” means each of the following companies, which are members of an unincorporated association known as the “Ashtabula River Cooperating Group II”: Cabot

Corporation; Detrex Corporation; Elkem Metals Company L.P.; The Cleveland Electric Illuminating Company; GenCorp Inc.; Mallinckrodt. 'NNE; Millennium Inorganic Chemicals Inc.; Occidental Chemical Corporation; Ohio Power Company; Olin Corporation; RMI Titanium Company, Inc.; The Sherwin-Williams Company; Union Carbide Corporation; and CBS Operations Inc. All obligations of ARCG II under this Consent Decree shall be joint and several obligations of each ARCG II member.

d. “ARCG II Restoration Projects” means natural resource restoration projects that are implemented by ARCG II in accordance with the requirements of Section VI, below. The term “ARCG II Restoration Projects” includes: 1) the acquisition of property interests acceptable to the Trustees in Restoration Properties identified in Appendix B and any Additional Restoration Properties identified by the Trustees pursuant to Paragraph 7, below; 2) the development and implementation of Restoration Workplans for Restoration Properties and Additional Restoration Properties, in accordance with the requirements of Paragraphs 8 - 10, below; and 3) the conveyance to an Acceptable Entity of title to, or other property interest held by ARCG II in, such Restoration Properties and Additional Restoration Properties in accordance with Paragraph 15, below.

e. “Ashtabula River Area” means all areas below the ordinary high water mark within a segment of the Ashtabula River located in Ashtabula County, Ohio between United States Army Corps of Engineers Station 195 and the mouth of the Ashtabula River (where it meets the Ashtabula Harbor) and within the Ashtabula Harbor, as specifically depicted on the Map attached as Appendix A.

f. “Assessment Costs” means the costs that the Trustees have paid in connection with the assessment of the Natural Resource Damages in the Ashtabula River Area.

g. “CERCLA” means the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. § 9601 *et seq.*

h. “Consent Decree” or “Decree” means this Consent Decree and all Appendices attached hereto, as well as all plans, reports or other items or deliverables approved by the Trustees pursuant to this Consent Decree. In the event of a conflict between this Consent Decree and any Appendix hereto, or any plan, report or other item or deliverable approved by the Trustees pursuant to this Consent Decree, this Consent Decree shall govern.

i. “CWA” means the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 *et seq.*, also known as the Clean Water Act.

j. “Day” means a calendar day unless expressly stated to be a Working Day. “Working Day” means a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next Working Day.

k. “DOI” means the United States Department of the Interior and any successor departments or agencies of the United States.

l. “Effective Date” means the effective date of this Consent Decree as provided by Section XXII (Effective Date and Retention of Jurisdiction) of this Consent Decree.

m. “Environmental Covenant” means an “Environmental covenant” as defined in Ohio Revised Code § 5301.80(D) that complies with Ohio Revised Code §§ 5301.80 - 5301.92.

n. “FWS” means the Fish and Wildlife Service of the United States Department of the Interior.

o. “Interest” means interest accruing at the rate established pursuant to 28 U.S.C. § 1961.

p. “Lodging Date” means the date on which this Consent Decree is lodged with the Court.

q. “Natural Resources” means land, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources, belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States or the State.

r. “Natural Resource Damages” means compensation for injury to, destruction of, or loss of, Natural Resources in the Ashtabula River Area arising from or relating to releases of hazardous substances into, or which have migrated into, the Ashtabula River Area, as set forth in Section 107(a)(4)(C) of CERCLA. Natural Resource Damages includes reimbursement of Assessment Costs incurred by the Trustees in assessing such injury, destruction, or loss arising from or relating to such a release, and each of the categories of damages described in 43 C.F.R. §11.15.

s. “NOAA” means the National Oceanic and Atmospheric Administration of the United States Department of Commerce and any successor departments or agencies of the United States.

t. “NRDAR Fund” means DOI’s Natural Resource Damage Assessment and Restoration Fund.

u. “Ohio EPA” means the Ohio Environmental Protection Agency and any successor departments or agencies of the State of Ohio.

v. “Paragraph” means a portion of this Consent Decree identified by an arabic numeral or an upper case letter.

w. “Parties” means the United States, the State, and the Settling Defendants.

x. “Plaintiffs” means the United States and the State.

y. “Qualified Costs” means reasonable costs incurred by ARCG II after the date of lodging of this Consent Decree in connection with implementation of ARCG II Restoration Projects in accordance with the requirements of this Consent Decree, including reasonable costs of:

1) acquiring property interests acceptable to the Trustees in Additional Restoration Properties, including but not limited to, the title report, the title insurance, as built drawings, filing fees, and any such costs approved by the Trustees in writing prior to ARCG II’s acquisition of such properties, provided that ARCG II establishes Environmental Covenants on such properties in accordance with Paragraphs 11 - 14, below;

2) establishing Environmental Covenants in accordance with Paragraphs 11 - 14, below;

3) developing Restoration Workplans in accordance with Paragraphs 8 and 9, below;

4) performing work in accordance with the requirements of approved Restoration Workplans pursuant to Paragraph 10, below; and

5) conveying Restoration Properties and Additional Restoration Properties to an Acceptable Entity in accordance with Paragraph 15, below;

provided, however, that the term “Qualified Costs” does not include: a) any costs of acquisition of Restoration Properties, including but not limited to, the title report, the title insurance, as built drawings, and filing fees; b) any costs incurred by the ARCG II, its contractors or representatives, in negotiating the acquisition of property interests or Environmental Covenants in, or in negotiating the conveyance to an Acceptable Entity of property interests acceptable to the Trustees in, the Restoration Properties or Additional Restoration Properties; c) any closing costs not listed on standard closing documents; or d) any costs incurred in connection with any dispute resolution proceeding pursuant to Section XIII, below, or in connection with litigation or other efforts by ARCG II to enforce any terms of Environmental Covenants or any agreements between ARCG II and any person not a party to this Consent Decree.

z. “Railroads” means Norfolk Southern Railway Company, Norfolk Southern Corporation, Conrail Inc., and the Consolidated Rail Corporation. All obligations of the Railroads under this Consent Decree shall be joint and several obligations of Norfolk Southern Railway Company, Norfolk Southern Corporation, Conrail Inc., and the Consolidated Rail Corporation.

aa. “Railroads Restoration Project” means the natural resource restoration project described in the Railroad Restoration Workplan attached hereto as Appendix G.

bb. “Railroads Restoration Property” refers to the real property described in the Railroads Restoration Project Workplan attached hereto as Appendix G.

cc. “Restoration Property” or “Restoration Properties” means one or more of the real properties identified in Appendix B.

dd. “Section” means a portion of this Consent Decree identified by a roman numeral.

ee. “Settling Defendants” means the ARCG II and the Railroads.

ff. “Settling Federal Agencies” means the United States General Services Administration, the United States Department of Energy, the United States Department of the Navy, the United States Maritime Administration, and any predecessor or successor agencies or departments of the United States.

gg. “State” means the State of Ohio.

hh. “Trustees” means DOI, NOAA and Ohio EPA.

ii. “United States” means the United States of America, including all of its departments, agencies and instrumentalities, including, without limitation, DOI, FWS, NOAA and the Settling Federal Agencies.

jj. “WRDA” means the Water Resources Development Act of 1990, as amended, 33 U.S.C. § 2316 *et seq.*

kk. “WRDA Project” means the Water Resources Development Act project to dredge and dispose of the contaminated sediment of the Ashtabula River downstream of the Fifth Street Bridge, United States Army Corps of Engineers Station 139, as described more particularly in the “Project Cooperation Agreement between the Department of the Army and

Ashtabula City Port Authority for Removal and Disposal of Contaminated Sediments from Outside the Boundaries and Adjacent to the Federal Navigation Channel Between the Fifth Street Bridge and the Mouth of the Ashtabula River” entered into on August 22, 2007.

V. STATEMENT OF PURPOSE

5. The mutual objectives of the Parties in entering into this Consent Decree are: (i) to provide for the restoration, replacement, or acquisition of the equivalent of the natural resources allegedly injured, destroyed, or lost as a result of releases of hazardous substances into or within the Ashtabula River Area through implementation of ARCG II Restoration Projects and the Railroads Restoration Project consistent with the restoration plans approved by the Trustees; (ii) to reimburse natural resource damage assessment costs and certain other costs incurred by the Trustees, as provided herein; (iii) to resolve potential liability among the Parties with respect to Natural Resource Damages as provided herein, without determining any other rights, claims or obligations of any parties, including any such rights, claims or obligations at issue in *ARCG II v. Norfolk Southern, et al.*, United States District Court, Northern District of Ohio, Case No. 1:07CV3311; and, (iv) to avoid costly and time-consuming litigation.

VI. ARCG II RESTORATION PROJECTS

6. Subject to the provisions of Paragraph 19, below, ARCG II shall implement ARCG II Restoration Projects on each of the Restoration Properties identified in Appendix B, in accordance with the provisions set forth below in this Section VI.

7. The Trustees may identify Additional Restoration Properties that they determine are suitable for implementation of ARCG II Restoration Projects consistent with the approved Restoration Plan. For a period of one year after the Effective Date of this Consent Decree,

ARCG II shall use best efforts, subject to the provisions of Paragraph 19, below, to acquire such Additional Restoration Properties, including the payment of reasonable sums which shall be subject to approval by the Trustees. Subject to the provisions of Paragraph 19, below, ARCG II shall implement ARCG II Restoration Projects in accordance with the provisions set forth below in this Section VI on any Additional Restoration Properties acquired by ARCG II.

8. For each Restoration Property and for each Additional Restoration Property acquired prior to the Effective Date of this Consent Decree, ARCG II shall, within 90 days after the Effective Date of this Consent Decree, develop and submit to the Trustees for approval in accordance with the provisions of Section VIII (Review and Approval of Workplans and Other Submissions), Restoration Workplans providing detailed descriptions of activities proposed to be undertaken on each such Restoration Property and Additional Restoration Property to restore, replace or acquire the equivalent of natural resources that the Trustees allege were injured as a result of releases of hazardous substances into or within the Ashtabula River Area, together with proposed schedules for implementation of such activities, estimated costs of such activities, and the basis for such cost estimates. Each such Restoration Workplan shall be consistent with the Natural Resource Restoration Plan & Environmental Assessment for the Ashtabula River and Harbor Site attached hereto as Appendix C (hereinafter "Restoration Plan") and with the Scope of Work attached as Appendix D to this Consent Decree.

9. For each Additional Restoration Property acquired after the Effective Date of this Consent Decree, ARCG II shall, within 60 days after acquisition of such Additional Restoration Property, develop and submit to the Trustees for approval in accordance with the provisions of Section VIII (Approval of Workplans and Other Submissions), a Restoration Workplan

providing a detailed description of activities proposed to be undertaken on such Additional Restoration Property to restore, replace or acquire the equivalent of natural resources that the Trustees allege were injured as a result of releases of hazardous substances into or within the Ashtabula River Area, together with a proposed schedule for implementation of such activities, an estimate of the costs of such activities, and the basis for such cost estimates. Each such Restoration Workplan shall be consistent with the Restoration Plan and with the Scope of Work attached as Appendix D to this Consent Decree.

10. Upon approval of each Restoration Workplan submitted pursuant to Paragraph 8 or 9, above, ARCG II shall implement the ARCG II Restoration Project described in such approved Restoration Workplan, in accordance with the terms and schedules therein, subject to ARCG II's right to contest Trustees' determination with respect to any schedule in such Workplan in accordance with Section XIII (Dispute Resolution). All such work shall be performed consistent with the Restoration Plan, the Scope of Work, and the provisions of Paragraph 21, below.

11. Within 30 days following approval of the Restoration Workplan for any Restoration Property or any Additional Restoration Property acquired by ARCG II or its contractors pursuant to this Consent Decree, ARCG II shall submit to the Trustees:

a. for approval in accordance with Section VIII (Review and Approval of Workplans and Other Submissions), a draft Environmental Covenant relating to the Restoration Property or Additional Restoration Property that is the subject of such approved Restoration Workplan; and

b. a description of all interests in such Restoration Property or Additional Restoration Property that would not be subject to the Environmental Covenant under Ohio Revised Code § 5301.86(A), absent a subordination agreement.

Each such draft Environmental Covenant shall be consistent with and in substantially the same form as the Environmental Covenant Template set forth in Appendix E.

12. If requested by the Trustees, ARCG II shall seek to negotiate subordination agreements with persons holding any interest identified pursuant to Paragraph 11.b, above, and shall incorporate any such subordination agreements in a revised draft Environmental Covenant submitted to the Trustees for approval.

13. Subject to the right of ARCG II to contest, in accordance with Section XIII (Dispute Resolution), any disapproval or modification of the draft Environmental Covenant by the Trustees, ARCG II shall, within 30 days after approval of any draft Environmental Covenant by the Trustees, execute such Environmental Covenant as approved by the Trustees and present the executed Environmental Covenant to the Trustees for signature.

14. Within 30 days after receipt of all Trustee signatures on any Environmental Covenant, ARCG II shall cause the fully executed Environmental Covenant to be recorded in the office of the Ashtabula County Recorder, as provided in Ohio Revised Code § 5301.88.

15. For each Restoration Property and Additional Restoration Property acquired by ARCG II or its contractors, ARCG II shall cause any property interest held by ARCG II or its contractors in such Restoration Property or Additional Restoration Property (including title) to be conveyed to an Acceptable Entity, free and clear of liens and other encumbrances (except for

encumbrances acceptable to the Trustees), in accordance with the requirements set forth in Paragraphs 16 - 18, below.

16. At the time ARCG II submits each draft Environmental Covenant pursuant to Paragraph 11.a., above, ARCG II shall also submit to the Trustees for approval in accordance with Section VIII (Review and Approval of Workplans and Other Submissions):

a. a draft deed or other instrument providing for conveyance of any interest of ARCG II in the Restoration Property or Additional Restoration Property that is the subject of the Environmental Covenant (other than ARCG II's interest as a holder of the Environmental Covenant) to an Acceptable Entity; and

b. a current title commitment or report prepared in accordance with the U.S. Department of Justice Standards for the Preparation of Title Evidence in Land Acquisitions by the United States (2001) (the "Standards"), or otherwise acceptable to the Trustees.

17. Concurrently with the submission of each draft deed or other instrument to the Trustees, ARCG II shall provide a copy of such draft deed or other instrument to the Acceptable Entity named as grantee in the deed, and a copy of the Environmental Covenant relating to such property. All such draft deeds or other instruments shall be enforceable under the laws of the State of Ohio, free and clear of liens and other encumbrances (except for encumbrances acceptable to the Trustees) , and otherwise acceptable under the United States Attorney General's Title Regulations promulgated pursuant to 40 U.S.C. § 255.

18. Subject to the right of ARCG II to contest, in accordance with Section XIII (Dispute Resolution) any disapproval or modification by the Trustees of any draft deed, for each draft deed submitted pursuant to Paragraph 16.a., above, ARCG II shall, within 30 days

following approval of such draft deed by the Trustees, cause the title searches of the Restoration Property or Additional Restoration Property that is the subject of the deed to be updated if requested by the Trustees, and execute and deliver to the Acceptable Entity, the approved deed along with final title evidence acceptable under the Standards for each such Restoration Property or Additional Restoration Property. ARCG II shall ensure that each such deed is properly recorded.

19. Nothing in this Consent Decree shall be construed to require ARCG II to expend more than \$1,454,711.00 in Qualified Costs for ARCG II Restoration Projects. If ARCG II is unable to acquire one or more of the Additional Restoration Properties identified by the Trustees pursuant to Paragraph 7, above, within one year after the Effective Date of this Consent Decree and ARCG II has expended less than \$1,454,711.00 in Qualified Costs upon completion of ARCG II Restoration Projects on the Restoration Properties and all of the Additional Restoration Properties acquired by ARCG II, then ARCG II shall pay to the NRDAR Fund, Ashtabula River Account within thirty (30) days of completion of all ARCG II Restoration Projects, the difference between \$1,454,711.00 and the amount of the Qualified Costs expended by ARCG II.

20. Accounting to the Trustees. ARCG II shall submit to the Trustees on a monthly basis (a) an accounting of costs incurred by ARCG II in connection with ARCG II Restoration Projects, to the extent that ARCG II believes such costs are Qualified Costs, and (b) a statement of ARCG's projected costs of completing remaining activities under all Restoration Workplans approved under this Section VI.

21. ARCG II shall notify the Trustees in writing whenever it appears that the costs identified in Paragraph 20(a) and (b), above, would exceed the limitation on Qualified Costs in

Paragraph 19, above. After receiving any such notification, the Trustees may provide ARCG II with a written Statement of Priorities for proceeding with remaining work on the ARCG II Restoration Projects. Following receipt of any such statement, ARCG II shall implement all remaining work consistent with the Statement of Priorities.

22. Completion of Required Restoration Activities. When ARCG II has satisfied all requirements under this Section VI, ARCG II shall submit to the Trustees for approval a Restoration Completion Report. The Restoration Completion Report shall include a detailed description of all activities performed by ARCG II on each Restoration Property and Additional Restoration Property acquired pursuant to this Consent Decree and shall include as-built drawings, signed and stamped by a professional engineer, for any construction undertaken pursuant to an approved Restoration Workplan. In addition, the Restoration Completion Report shall include a final statement of the total Qualified Costs incurred by ARCG II.

a. The Restoration Completion Report shall state whether ARCG II fully implemented all provisions of each approved Restoration Workplan and provide a description of any Restoration Workplan provisions not completed by ARCG II. The Restoration Completion Report shall include a statement, signed by a registered professional engineer and the ARCG II's Project Coordinator, affirming that all restoration activities undertaken by ARCG II pursuant to this Section were performed in accordance with approved Restoration Workplans and all other requirements of this Consent Decree.

b. If the Restoration Completion Report indicates that ARCG II did not fully implement all provisions of approved Restoration Workplans, the Restoration Completion Report shall include a final accounting of the Qualified Costs incurred by ARCG II, signed by

ARCG II's Project Coordinator, together with supporting documentation demonstrating that all such costs claimed by ARCG II satisfy the requirements of Paragraph 4.y, above.

c. The Restoration Completion Report shall contain the following statement, signed by ARCG II's Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

VII. RAILROADS RESTORATION PROJECT

23. Railroads shall implement the Railroads Restoration Project described in the approved Railroads Restoration Workplan attached hereto as Appendix G, in accordance with the terms and schedules of such Workplan. All such work shall be consistent with the Restoration Plan attached as Appendix C to this Consent Decree.

24. Within 30 days after the Effective Date of this Consent Decree, Railroads shall submit to the Trustees:

a. for approval in accordance with Section VIII (Review and Approval of Workplans and Other Submissions) a draft Environmental Covenant relating to Railroads Restoration Property; and

b. a description of all interests in such Railroads Restoration Property that would not be subject to the Environmental Covenant under Ohio Revised Code § 5301.86(A), absent a subordination agreement.

Such draft Environmental Covenant shall be consistent with and in substantially the same form as the Environmental Covenant Template set forth in Appendix E.

25. If requested by the Trustees, Railroads shall seek to negotiate subordination agreements with persons holding any interest identified pursuant to Paragraph 24.b, above, and shall incorporate any such subordination agreements in a revised draft Environmental Covenant submitted to the Trustees for approval.

26. Within 30 days after approval of such draft Environmental Covenant by the Trustees, Railroads shall execute such Environmental Covenant as approved by the Trustees and present the executed Environmental Covenant to the Trustees for signature.

27. Within 30 days after receipt of all Trustee signatures on the Environmental Covenant, Railroads shall cause the fully executed Environmental Covenant to be recorded in the office of the Ashtabula County Recorder, as provided in Ohio Revised Code § 5301.88.

28. Completion of Required Restoration Activities. When Railroads have satisfied all requirements under this Section VII, Railroads shall submit to the Trustees for approval a Restoration Completion Report. The Restoration Completion Report shall include a detailed description of all activities performed by Railroads on the Railroads Restoration Property and shall include as-built drawings, signed and stamped by a professional engineer, for all construction undertaken pursuant to the approved Railroads Restoration Project Workplan.

a. The Restoration Completion Report shall include a statement, signed by a registered professional engineer and Railroads' Project Coordinator, affirming that all restoration activities undertaken by Railroads pursuant to this Section were performed in accordance with the approved Railroads Restoration Workplan and all other requirements of this Consent Decree.

b. The Restoration Completion Report shall contain the following statement, signed by Railroads' Project Coordinator:

To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

VIII. REVIEW AND APPROVAL OF WORKPLANS AND OTHER SUBMISSIONS

29. After review of any Workplan, draft deed or Environmental Covenant, report or other item submitted for approval pursuant to this Consent Decree, the Trustees shall: (a) approve the submission in whole or in part; (b) approve the submission upon specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove, in whole or in part, the submission, directing the submitting Party or Parties to modify the submission; or (e) any combination of the above.

30. Following approval, approval upon conditions, or modification by the Trustees of any Workplan or other submittal pursuant to the preceding Paragraph, the submitting Party or Parties shall proceed to take any action required by the Workplan, or other submittal, as approved or modified by the Trustees, subject only to any right of such Party or Parties to contest such disapproval or modification under Section XIII (Dispute Resolution).

31. Resubmission of Plans.

a. Upon receipt of a notice of disapproval pursuant to Paragraph 29(d), the Party or Parties submitting the Workplan or other submission shall, within 30 days or such longer time as specified by the Trustees in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XIV, shall accrue during the 30-day period or otherwise specified period but

shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraph 33.

b. Notwithstanding the receipt of a notice of disapproval of any Workplan or other submission pursuant to Paragraph 29(d), the Party or Parties submitting such Workplan or other submission shall proceed, at the direction of the Trustees, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve the submitting Party or Parties of any liability for stipulated penalties under Section XIV (Stipulated Penalties).

32. In the event that a resubmitted Workplan or other submission, or portion thereof, is disapproved by the Trustees, the Trustees may again require the submitting Party or Parties to correct the deficiencies, in accordance with the preceding Paragraphs. Trustees also retain the right to modify or develop the resubmitted Workplan or other submission. The submitting Party or Parties shall implement any Workplan or other submission as modified or developed by the Trustees, subject only to the right of such Party or Parties to invoke the procedures set forth in Section XIII (Dispute Resolution).

33. If upon resubmission, a plan, report, or item is disapproved or modified by the Trustees due to a material defect, the submitting Party or Parties shall be deemed to have failed to submit such plan, report, or item timely and adequately unless the submitting Party or Parties invokes the dispute resolution procedures set forth in Section XIII (Dispute Resolution) and the Trustees' action is overturned pursuant to that Section. The provisions of Section XIII (Dispute Resolution) and Section XIV (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If the Trustees'

disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XIV.

34. All Workplans and other items required to be submitted to Trustees for approval under this Consent Decree shall, upon approval or modification by the Trustees, be enforceable under this Consent Decree. In the event the Trustees approve or modify a portion of a plan, report, or other item required to be submitted to the Trustees under this Consent Decree, the approved or modified portion shall be enforceable under this Consent Decree.

IX. PAYMENTS FOR ASSESSMENT COSTS AND TRUSTEE-SPONSORED NATURAL RESOURCE RESTORATION ACTIVITIES

35. Payments by ARCG II. Within 30 days after the Effective Date of this Consent Decree, ARCG II shall pay to the Trustees a total of \$1,027,445.70, for Assessment Costs, plus Interest on such amount accruing from June 1, 2010, and an additional \$415,000.00 for Trustee-sponsored natural resource restoration activities, including oversight and operation and maintenance of ARCG II Restoration Projects, as specified below in this Paragraph.

a. Payment to the United States. ARCG II shall pay \$1,234,285.20, plus Interest accruing from June 1, 2010 through the date of payment on the sum of the principal amounts set forth in Paragraph 35.a.(2) and (3), to the United States by FedWire Electronic Funds Transfer (“EFT”) to the U.S. Department of Justice account in accordance with current EFT procedures, referencing DOJ Case Number 90-11-2-210/1. Payment shall be made in accordance with instructions provided to the ARCG II by the Financial Litigation Unit of the United States Attorney’s Office for the Northern District of Ohio following lodging of the Consent Decree. Any payments received by the Department of Justice after 4:00 p.m. (Eastern

Time) will be credited on the next business day. Of the total amount paid by ARCG II pursuant to this Paragraph 35.a.:

(1) \$415,000.00 shall be deposited in a segregated sub-account within the NRDAR Fund, to be managed by DOI for the joint benefit and use of the federal and state Trustees to pay for Trustee-sponsored natural resource restoration activities, including oversight and operation and maintenance of ARCG II Restoration Projects, in accordance with Section X, below.

(2) \$763,494.90, plus Interest on that amount accruing from June 1, 2010 through the date of payment, shall be deposited in the DOI NRDAR Fund, in reimbursement of DOI's Assessment Costs.

(3) \$55,790.30, plus Interest on that amount accruing from June 1, 2010 through the date of payment, shall be deposited in the NOAA Damage Assessment Restoration and Revolving Fund ("DARRF"), in reimbursement of NOAA's Assessment Costs.

b. Payment to State of Ohio. ARCG II shall pay \$208,160.50, plus Interest on that amount accruing from June 1, 2010 through the date of payment, to the State of Ohio in reimbursement of the State of Ohio's Assessment Costs. The payment shall be made in the form of an Electronic Funds Transfer to the Treasurer, State of Ohio, to be deposited into the Natural Resource Damages Fund, referencing the Ashtabula River NRD claim. A copy of the Electronic Funds Transfer transmittal shall be sent to: Steven Snyder or his successor, DERR Fiscal Officer, Ohio EPA, P.O. Box 1049, Columbus, Ohio 43216-1049; and to Assistant Attorney General

Timothy J. Kern, Environmental Enforcement Section, Ohio Attorney General's Office, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215.

36. Payments by Railroads. Within 30 days after the Effective Date of this Consent Decree, Railroads shall pay to the Trustees a total of \$306,791.25 for Assessment Costs plus Interest on that amount accruing from June 1, 2010 through the date of payment, and an additional \$25,000.00 for Trustee-sponsored natural resource restoration activities, as specified below in this Paragraph.

a. Payment to the United States. Railroads shall pay \$269,635.34, plus Interest accruing from June 1, 2010 through the date of payment on the sum of the principal amounts set forth in Paragraph 36.a.(2) and (3), to the United States by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account in accordance with current EFT procedures, referencing DOJ Case Number 90-11-2-210/1. Payment shall be made in accordance with instructions provided to Railroads by the Financial Litigation Unit of the United States Attorney's Office for the Northern District of Ohio following lodging of the Consent Decree. Any payments received by the Department of Justice after 4:00 p.m. (Eastern Time) will be credited on the next business day. Of the total amount paid by Railroads pursuant to this Paragraph 36.a.:

(1) \$25,000.00 shall be deposited in a segregated sub-account within the NRDAR Fund, to be managed by DOI for the joint benefit and use of the federal and state Trustees to pay for Trustee-sponsored natural resource restoration activities in accordance with Section X, below.

(2) \$227,976.58, plus Interest on that amount accruing from June 1, 2010 through the date of payment, shall be deposited in the DOI NRDAR Fund, in reimbursement of DOI's Assessment Costs.

(3) \$16,658.76, plus Interest on that amount accruing from June 1, 2010 through the date of payment, shall be deposited in the NOAA DARRF, in reimbursement of NOAA's Assessment Costs.

b. Payment to State of Ohio. Railroads shall pay \$62,155.91, plus Interest on that amount accruing from June 1, 2010 through the date of payment, to the State of Ohio in reimbursement of the State of Ohio's Assessment Costs. The payment shall be made in the form of an Electronic Funds Transfer to the Treasurer, State of Ohio, to be deposited into the Natural Resource Damages Fund, referencing the Ashtabula River NRD claim. A copy of the Electronic Funds Transfer transmittal shall be sent to: Steven Snyder or his successor, DERR Fiscal Officer, Ohio EPA, P.O. Box 1049, Columbus., Ohio 43216-1049; and to Assistant Attorney General Timothy J. Kern, Environmental Enforcement Section, Ohio Attorney General's Office, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215.

37. Payments on behalf of Settling Federal Agencies. As soon as reasonably practicable after the Effective Date of this Consent Decree, and consistent with Paragraph 37.a and 37.b, the United States, on behalf of Settling Federal Agencies, shall pay to the Trustees a total of \$768,799.69, which payment includes Interest accruing from July 1, 2008.

a. Payment For Assessment Costs of DOI and NOAA. The United States, on behalf of Settling Federal Agencies, shall pay \$613,040.87 to the U.S. Department of Justice,

referencing DOJ Case Number 90-11-2-210/1, and in accordance with Interagency Payment System information furnished by the U.S. Department of Justice. Any payments received by the Department of Justice after 4:00 p.m. (Eastern Time) will be credited on the next business day.

Of the total amount paid on behalf of Settling Federal Agencies pursuant to this Paragraph 37a.:

(1) \$571,295.05 shall be deposited in the DOI NRDAR Fund, in reimbursement of DOI's Assessment Costs.

(2) \$41,745.82 shall be deposited in the NOAA DARRF, in reimbursement of NOAA's Assessment Costs.

The United States, including the Settling Federal Agencies, and the Settling Defendants recognize and acknowledge that the payment obligations of the Settling Federal Agencies under this Paragraph 37.a can only be paid from appropriated funds legally available for such purpose.

Nothing in this Consent Decree shall be interpreted as or constitute a commitment or requirement that any Settling Federal Agency obligate or pay funds pursuant to this Paragraph 37.a in contravention of the Anti-Deficiency Act, 31 U.S.C. §§ 1341-42 and §§ 1511-19, or any other applicable law.

b. Payment to State of Ohio. The United States, on behalf of Settling Federal Agencies, shall pay \$155,758.82 to the State of Ohio. The payment shall be made in the form of an Electronic Funds Transfer to the Treasurer, State of Ohio, to be deposited into the Natural Resource Damages Fund, referencing the Ashtabula River NRD claim. A copy of the Electronic Funds Transfer transmittal shall be sent to: Steven Snyder or his successor, DERR Fiscal Officer, Ohio EPA, P.O. Box 1049, Columbus., Ohio 43216-1049; and to Assistant Attorney General Timothy J. Kern, Environmental Enforcement Section, Ohio Attorney General's

Office, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215. The State and the Settling Federal Agencies agree that in any judicial proceeding to enforce payment of the amounts owed to the State under this Consent Decree, Settling Federal Agencies may raise as a defense their obligation to comply with the Anti-Deficiency Act, 31 U.S.C. §§ 1341-42 and §§ 1511-19, or any other applicable law. While the State disagrees that such defenses exist, the State and Settling Federal Agencies agree that it is premature at this time to raise and adjudicate the existence of such defenses.

38. Notice of Payment. Upon making payments required under this Section, the Party or Parties making the payment shall send to the following addresses written notice that payment has been made:

For notice to the United States:

Chief, Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611
Ref. DJ # 90-11-2-210/1

Department of the Interior
Natural Resource Damage Assessment and Restoration Program
Attn: Restoration Fund Manager
1849 C Street, NW
Mailstop 4449
Washington, DC 20240

Department of the Interior
Office of the Solicitor
Three Parkway Center, Suite 385
Pittsburgh, PA 15220

NOAA/U.S. Department of Commerce
General Counsel's Office for Natural Resources/NE
NOAA Office of General Counsel
55 Great Republic Drive
Gloucester, MA 01930

For notice to the State of Ohio:

Fiscal Officer
DERR
Ohio EPA
P.O. Box 1049
Columbus, Ohio 43216-1049
ATTN: Steven Snyder or his successor

Timothy J. Kern
Assistant Attorney General
Environmental Enforcement Section
Ohio Attorney General's Office
30 East Broad Street - 25th Floor
Columbus, Ohio 43215

39. In the event that Settling Defendants do not make any payment required by this Section IX when due, the Party or Parties responsible for such payment shall pay Interest on the unpaid balance commencing on the payment due date and accruing through the date of full payment. In the event that Settling Federal Agencies do not make any payment required under Paragraph 37 within 120 days after entry of this Consent Decree, Settling Federal Agencies shall pay Interest on the unpaid balance commencing on the 121st day after entry through the date of full payment. All payments required pursuant to this Paragraph shall be made in the same manner and directed to the same funds or accounts as specified in Paragraph 35.a and b (for payments by ARCG II), Paragraph 36.a and b (for payments by Railroads), and Paragraph 37.a and b (for payments by Settling Federal Agencies). Any payments pursuant to this Paragraph shall be in

addition to any other remedies provided by this Consent Decree for failure to make timely payments required under this Section.

X. TRUSTEE-SPONSORED NATURAL RESOURCE RESTORATION ACTIVITIES

40. All funds deposited in a segregated sub-account within the NRDAR Fund pursuant to Paragraphs 19, 35.a.(1) or 36.a.(1) shall be managed by DOI for the joint benefit and use of the Trustees to pay for natural resource restoration efforts in accordance with this Consent Decree, including but not limited to, planning, selection and implementation of any natural resource restoration activities, as well as any administrative, legal, oversight and maintenance activities undertaken by the Trustees in connection with ARCG II Restoration Projects or the Railroad Restoration Project. All such funds shall be applied toward the costs of restoration, rehabilitation, or replacement of injured natural resources, and/or acquisition of equivalent resources.

41. Restoration Planning. The Trustees have prepared a Restoration Plan describing how the funds will be used for restoration, rehabilitation, replacement or acquisition of equivalent resources. The Restoration Plan is attached hereto as Appendix C.

42. Use and Expenditure of Funds. Decisions regarding any use or expenditure of funds under this Section shall be made by the Trustees, acting through a Trustee Council. Settling Defendants and Settling Federal Agencies shall not be entitled to dispute, in this or any other forum or proceeding, any decision of the Trustees relating to use of funds or restoration efforts under this Section.

**XI. ACCESS TO RESTORATION PROPERTIES; INFORMATION
AND DOCUMENT RETENTION**

43. a. Commencing on the date of lodging of this Consent Decree, ARCG II shall provide the Plaintiffs and their representatives access at all reasonable times to the Restoration Properties upon presentation of credentials, and allow Plaintiffs and their representatives to move about, without restriction, for the purposes of conducting any activity related to this Consent Decree, including but not limited to monitoring implementation of ARCG II Restoration Projects, verifying any data or information submitted to the Plaintiffs under this Consent Decree, and assessing ARCG II's compliance with this Consent Decree.

b. Upon acquisition of any Additional Restoration Property, ARCG II shall provide the Plaintiffs and their representatives access at all reasonable times to such Additional Restoration Property, and to allow Plaintiffs and their representatives to move about such Additional Restoration Property, without restriction, for the purposes of conducting any activity related to this Consent Decree, including but not limited to monitoring implementation of ARCG II Restoration Projects, verifying any data or information submitted to the Plaintiffs under this Consent Decree, and assessing ARCG II's compliance with this Consent Decree.

44. Commencing on the date of lodging of this Consent Decree, Railroads shall provide the Plaintiffs and their representatives access at all reasonable times to the Railroads Restoration Property upon presentation of credentials, and allow Plaintiffs and their representatives to move about, without restriction, for the purposes of conducting any activity related to this Consent Decree, including but not limited to monitoring implementation of the Railroads Restoration Project, verifying any data or information submitted to the Plaintiffs under this Consent Decree, and assessing Railroads' compliance with this Consent Decree.

45. All rights of access pursuant to this Section XI shall be in addition to, and shall not limit, any access rights afforded by any law or regulation.

46. Settling Defendants shall provide to Plaintiffs, upon request, copies of all documents and information within their possession or control (or that of their contractors or agents) relating to compliance with this Consent Decree. Settling Defendants shall also make available to Plaintiffs their employees, agents, or representatives with knowledge of relevant facts concerning their compliance with this Consent Decree.

47. Until 10 years after the entry of this Consent Decree, Settling Defendants shall preserve and retain all records and documents now in their possession or control, or which come into their possession or control, that relate in any manner to: (i) the claims alleged in the Complaint; or (ii) Settling Defendants' compliance with this Consent Decree. At the conclusion of this document retention period, Settling Defendants shall notify the United States and the State at least 90 days prior to the destruction of any such records or documents, and, upon request by the United States or the State, Settling Defendants shall deliver any such records or documents to the United States or the State.

a. ARCG II and Railroads may assert business confidentiality claims covering part or all of the documents or information submitted to the Plaintiffs under this Consent Decree, to the extent permitted by and in accordance with 40 C.F.R. Part 2 (with respect to information or documents submitted to the United States) and in accordance with applicable state law (with respect to information or documents submitted to the State). For documents or information determined to be confidential by Plaintiffs, the United States will afford the documents or information confidentiality protection as provided by 40 C.F.R. Part 2, Subpart B, and the State

will afford the documents or information confidentiality protection as provided by applicable state law. If no claim of confidentiality accompanies documents or information when they are submitted to the Plaintiffs, the public may be given access to such documents or information without further notice in accordance with 40 C.F.R. Part 2, Subpart B or applicable state law.

b. Settling Defendants may assert that certain documents and information are privileged under the attorney-client privilege or any other privilege recognized by law. If Settling Defendants assert such a privilege in lieu of providing documents, Settling Defendants shall provide the Plaintiffs with the following: (i) the title of the document; (ii) the date of the document; (iii) the name and title of the author of the document; (iv) the name and title of each addressee and recipient; (v) a description of the contents of the document; and (vi) the privilege asserted by Settling Defendants. No documents or information created or generated pursuant to the requirements of the Consent Decree shall be withheld on the grounds that they are privileged.

48. The United States acknowledges that each Settling Federal Agency is subject to all applicable Federal record retention laws, regulations and policies.

XII. FORCE MAJEURE

49. “Force majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the Settling Defendants, of any entity controlled by Settling Defendants, or of Settling Defendants' contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Settling Defendants' best efforts to fulfill the obligation. The requirement that the Settling Defendants exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring

and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. “Force Majeure” does not include financial inability to complete any requirements of this Consent Decree.

50. If any event occurs or has occurred that may delay the performance of an obligation of any Settling Defendant under this Consent Decree, whether or not caused by a force majeure event, the Party or Parties whose performance may be affected by the event shall notify orally the Trustees, within 3 days of when such Party or Parties first knew that the event might cause a delay. Within 14 days thereafter, such Party or Parties shall provide to the Trustees a written notice setting forth: an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; the rationale for attributing such delay to a force majeure event if such a claim may be asserted by the Party or Parties submitting the notice; and a statement as to whether, in the opinion of the Party or Parties submitting the notice, such event may cause or contribute to an endangerment to public health, welfare or the environment. The Party or Parties submitting such notice shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure of any Party to comply with the above requirements shall preclude such Party from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. For purposes of this Section, circumstances known, or that should have been known, by any ARCG II member, any entity controlled by any ARCG II member or any contractor retained by ARCG II for purposes of this Consent Decree, shall be deemed to be known by all ARCG II

members, and circumstances known, or that should have been known, by either of the Railroads, any entity controlled by either of the Railroads, or any contractor retained by Railroads for purposes of this Consent Decree, shall be deemed to be known by both Railroads.

51. If the Trustees agree that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by the Trustees, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If the Trustees do not agree that the delay or anticipated delay has been or will be caused by a force majeure event, the Trustees will notify the Settling Defendants in writing of their decision. If the Trustees agree that the delay is attributable to a force majeure event, the Trustees will notify the Settling Defendants in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

52. Settling Defendants may invoke the dispute resolution procedures set forth in Section XIII (Dispute Resolution) to contest any decision of the Trustees under this Section, provided that they shall do so no later than 15 days after receipt of notice of the Trustees' decision. In any such proceeding, the Settling Defendants invoking dispute resolution shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that such Settling Defendants

complied with the requirements of Paragraphs 49 and 50, above. In any case where this burden is carried by the Party or Parties asserting the force majeure claim, the delay at issue shall be deemed not to be a violation of the affected obligation of this Consent Decree identified to Trustees and the Court.

XIII. DISPUTE RESOLUTION

53. The dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree; provided, however, that: nothing in this Consent Decree shall be construed to authorize any Party to dispute any action or determination of the Trustees: (a) disapproving, modifying, or conditionally approving, any provision (other than the proposed implementation schedule) in any Workplan submitted pursuant to Section VI, above; or (b) in selecting or carrying out any natural resource restoration activities or in managing or expending funds pursuant to Section X (Trustee-Sponsored Natural Resource Restoration Activities). The procedures set forth in this Section shall not apply to actions by Trustees to enforce obligations of any Settling Defendants that have not been disputed in accordance with this Section. Nor shall this Section apply to disputes between or among Settling Defendants and the Settling Federal Agencies under this Consent Decree.

54. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when the Party contesting the action or determination of the Trustees sends the Trustees a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 30 Days from the date the dispute arises, unless that period is modified by written agreement of the Parties to the dispute. If

the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the Trustees shall be considered binding unless, within 30 Days after the conclusion of the informal negotiation period, the Party contesting the action or determination of the Trustees (the “Disputing Party”) invokes formal dispute resolution procedures as set forth below.

55. Formal Dispute Resolution. The Disputing Party shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the Trustees a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting the Disputing Party’s position and any supporting documentation relied upon by the Disputing Party. The Trustees shall serve their Statement of Position within 45 Days of receipt of the Disputing Party’s Statement of Position. The Trustees’ Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the Trustees.

a. An administrative record of the dispute shall be maintained by the Trustees and shall contain all Statements of Position, including supporting documentation, submitted pursuant to this Section. Where appropriate, the Trustees may allow submission of supplemental Statements of Position by the parties to the dispute.

b. The Regional Director of FWS and the Director of Ohio EPA or their designees will jointly issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 55.a. This decision shall be binding upon the Disputing Party, subject only to the right to seek judicial review pursuant to Paragraph 56.

56. The Disputing Party may seek judicial review of the dispute by filing with the Court and serving on the Trustees, in accordance with Section XIX of this Consent Decree (Notices and Submissions), a motion requesting judicial resolution of the dispute. The motion must be filed within 10 Days of receipt of the administrative decision pursuant to Paragraph 55.b. The motion shall contain a written statement of the Disputing Party's position on the matter in dispute, including the Disputing Party's position concerning the applicable Standard of Review to be applied by the Court pursuant to Paragraph 58.a or b, below, together with any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

57. The Trustees shall respond to the Disputing Party's motion within the time period allowed by the Local Rules of this Court. The Disputing Party may file a reply memorandum, to the extent permitted by the Local Rules.

58. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 55 pertaining to the adequacy or appropriateness of implementation schedules, or any other items requiring approval by the Trustees under this Consent Decree; the adequacy of the performance of restoration activities undertaken pursuant to Sections VI and VII of this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, the Disputing Party shall have the burden of demonstrating, based on the administrative record, that the administrative resolution of the dispute by the Regional Director

FWS and the Director of Ohio EPA, or their designees, is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 55, the Disputing Party shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.

59. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of any Settling Defendant under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 64. If the Settling Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XIV (Stipulated Penalties).

XIV. STIPULATED PENALTIES

60. Settling Defendants shall be liable to Plaintiffs for stipulated penalties in the amounts set forth below in this Paragraph for failure to comply with the requirements of this Consent Decree specified below, unless excused pursuant to Section XII (Force Majeure). “Compliance” shall include completion of activities under this Consent Decree or any work plan approved under this Consent Decree in accordance with all applicable requirements of law, this Consent Decree, any applicable Statement of Work, and any plans approved by Trustees pursuant to this Consent Decree and within the specified time schedules established by and approved under this Consent Decree.

a. The following stipulated penalties shall accrue per violation per day for each failure to submit a timely or adequate Restoration Workplan pursuant to Paragraphs 8 or 9:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500	1st through 14th day
\$1,000	15th through 30th day
\$1,500	31st day and beyond

b. The following stipulated penalties shall accrue per violation per day for each failure to establish and record any Environmental Covenant in accordance with Paragraph 14 or 27:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,500	15th through 30th day
\$5,000	31st day and beyond

c. The following stipulated penalties shall accrue per violation per day for each failure to implement any approved Restoration Workplan in accordance with Paragraphs 10 or 23:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500	1st through 14th day
\$1,000	15th through 30th day
\$1,500	31st day and beyond

d. The following stipulated penalties shall accrue per violation per day for each failure to make any payment required pursuant to Paragraphs 35 or 36:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500	1st through 14th day
\$1,000	15th through 30th day
\$1,500	31st day and beyond

61. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section VIII (Review and Approval of Workplans and Other Submissions), during the period, if any, beginning on the 31st day after the Trustees' receipt of such submission until the date that the Trustees notify Settling Defendants of any deficiency; (2) with respect to a decision by the Regional Director of FWS and the Director of Ohio EPA or their designees under Paragraph 55.b of Section XIII (Dispute Resolution), during the period, if any, beginning on the 21st day after the date that Settling Defendants' reply to Trustees' Statement of Position is received until the date that the Regional Director of FWS and the Director of Ohio EPA or their designees issue a final decision regarding such dispute; or (3) with respect to judicial review by this Court of any dispute under Section XIII (Dispute Resolution), during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Decree.

62. Following the Trustees' determination that Settling Defendants have failed to comply with applicable requirements of this Consent Decree, the Trustees may give such Settling

Defendants written notification of the same, describing the noncompliance, and a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether the Trustees have notified the Settling Defendants of a violation.

63. All stipulated penalties shall be due and payable within 30 days of Settling Defendants' receipt of a demand for payment of the penalties unless Settling Defendants invoke the Dispute Resolution procedures under Section XIII (Dispute Resolution). For any noncompliance referred to in Paragraph 60.a - c, above, one-half of the stipulated penalty amount due shall be paid to the United States, and one-half of the stipulated penalty amount due shall be paid to the State of Ohio as specified below in this Paragraph. All stipulated penalties pursuant to Paragraph 60.d, above, for failure to make any payments due to any Federal Trustee pursuant to Section IX shall be paid to the United States, as specified in Paragraph 63.a. All stipulated penalties pursuant to 60.d, above, for failure to make any payments to State Trustees pursuant to Section IX shall be paid to the State of Ohio as specified in Paragraph 63.b.

a. All stipulated penalties due to the United States shall be paid by certified or cashier's check made payable to the United States Treasury and sent to the United States Attorney for the Northern District of Ohio and sent to:

801 West Superior Avenue
Suite 400
Cleveland, OH 44113-1852

b. All stipulated penalties due to the State of Ohio shall be paid by certified or cashier's checks made payable to "Treasurer, State of Ohio" and sent to Martha Sexton, Paralegal, or her successor at the Office of the Attorney General of Ohio, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215.

c. Copies of the transmittal letters and checks shall be sent to the United States and to the State in the manner provided by Section XIX (Notices and Submissions).

64. Penalties shall continue to accrue as provided in Paragraph 61 during any dispute resolution period, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of the Trustees that is not appealed to this Court, accrued penalties determined to be owing shall be paid to the Trustees within 15 days of the agreement or the receipt of the Trustees' decision;

b. If the dispute is appealed to this Court and the Trustees prevail in whole or in part, Settling Defendants shall pay all accrued penalties determined by the Court to be owed to the Trustees within 60 days of receipt of the Court's decision or order, except as provided in Subparagraph c below;

c. If the District Court's decision is appealed by any Party, Settling Defendants shall pay all accrued penalties determined by the District Court to be owing to the United States or the State into an interest-bearing escrow account within 60 days of receipt of the Court's decision or order. Penalties shall be paid into this account as they continue to accrue, at least every 60 days. Within 15 days of receipt of the final appellate court decision, the escrow agent shall pay the balance of the account to the Trustees or to Settling Defendants to the extent that they prevail.

65. If Settling Defendants fail to pay stipulated penalties when due, Plaintiffs may institute proceedings to collect the penalties, as well as Interest. Settling Defendants shall pay Interest on the unpaid balance, which shall begin to accrue on the date of a demand for payment made by the Plaintiffs.

66. The payment of penalties shall not alter in any way Settling Defendants' obligation to complete the performance of any tasks required under this Consent Decree.

67. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States or the State to seek any other remedies or sanctions available by virtue of Settling Defendants' violation of this Decree or of the statutes and regulations upon which it is based, including but not limited to injunctive relief, and civil and criminal sanctions. Nor shall anything in this Consent Decree be construed as prohibiting, altering, or in any way limiting the ability of the DOI, FWS, NOAA or the State to seek any other remedies or sanctions available by virtue of Settling Defendants' violation of this Decree or of the statutes and regulations upon which it is based.

68. Notwithstanding any other provision of this Section, the Plaintiffs may, in their unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

XV. COVENANTS BY PLAINTIFFS

69. Except as provided in Paragraphs 72 and 73, Plaintiffs covenant not to sue the Settling Defendants for Natural Resource Damages pursuant to Section 107(a)(4)(C) of CERCLA, 42 U.S.C. § 9607 (a)(4)(C), Section 311(f)(4) and (5) of the CWA, 33 U.S.C. §1321(f)(4) and (5), or state law. With respect to each Settling Defendant, this covenant not to sue is conditioned upon the satisfactory performance of such Settling Defendant's obligations under this Consent Decree. This covenant not to sue extends only to Settling Defendants and does not extend to any other person.

70. Except as specifically provided in Paragraphs 72 and 74, DOI, FWS and NOAA covenant not to take administrative action against the Settling Federal Agencies for Natural Resource Damages pursuant to Section 107(a)(4)(C) of CERCLA, 42 U.S.C. § 9607 (a)(4)(C), and Section 311(f)(4) and (5) of the CWA, 33 U.S.C. §1321(f)(4) and (5). These covenants by DOI, FWS and NOAA shall take effect upon the receipt of the payments required by Paragraph 37.a of Section IX (Payments For Assessment Costs And Trustee-Sponsored Natural Resource Restoration Activities). These covenants by DOI, FWS and NOAA are conditioned upon the satisfactory performance by Settling Federal Agencies of their obligations under this Consent Decree. DOI's, FWS' and NOAA's covenants extend only to the Settling Federal Agencies and do not extend to any other person.

71. Except as specifically provided in Paragraphs 72 and 75, the State of Ohio covenants not sue or issue administrative findings and orders against the United States for Natural Resource Damages pursuant to Section 107(a)(4)(C) of CERCLA, 42 U.S.C. § 9607 (a)(4)(C), Section 311(f)(4) and (5) of the CWA, 33 U.S.C. §1321(f)(4) and (5), or state law. The State's covenants shall take effect upon the receipt of the payment required by Paragraph 37.b of Section IX (Payments For Assessment Costs And Trustee-Sponsored Natural Resource Restoration Activities). The State's covenants are conditioned upon the satisfactory performance by the Settling Federal Agencies of their obligations under this Consent Decree. The State's covenants extend only to the United States and do not extend to any other person.

XVI. RESERVATION OF RIGHTS BY PLAINTIFFS

72. General Reservations of Rights. The covenants set forth in Section XV (Covenants by Plaintiffs) do not pertain to any matters other than those expressly specified in

Paragraphs 69 - 71, above. The United States and the State reserve, and this Consent Decree is without prejudice to, all rights against Settling Defendants, and DOI, FWS, NOAA and the State reserve, and this Consent Decree is without prejudice to, all rights against Settling Federal Agencies, with respect to all other matters. Notwithstanding any other provision of this Consent Decree, the United States and the State reserve all rights against Settling Defendants, and DOI, FWS, NOAA and the State reserve all rights against Settling Federal Agencies, with respect to:

- a. claims based on a failure by any Settling Defendant or Settling Federal Agency to meet a requirement of this Consent Decree;
- b. liability for any other damages that are not within the definition of Natural Resource Damages;
- c. liability for any injury to, or destruction or loss of, Natural Resources resulting from implementation of the GLLA Project, if the habitat restoration component of the GLLA Project is not completed in accordance with the Ashtabula River Great Lakes Legacy Act Project Agreement, and the Great Lakes Legacy Act Restoration Project Construction Services Ashtabula River Area of Concern (CH2MHill September 2009);
- d. liability of any person arising from any injury to Natural Resources resulting from any release or disposal of hazardous substances by such person after the date of lodging of this Consent Decree, but not including any liability arising from further migration of previously released hazardous substances present in the environment in the Ashtabula River Area as of June 18, 2008;
- e. liability pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), and state law, to implement any response actions relating to the Ashtabula

River Area or reimburse any response costs incurred in connection with response actions relating to the Ashtabula River Area; and

f. criminal liability.

73. Special Reservations Regarding Natural Resource Damages. Notwithstanding any other provision of this Consent Decree, the United States and the State reserve the right to institute proceedings against any Settling Defendant in this action or in a new action seeking recovery of Natural Resource Damages, including costs of damages assessments, based on: (i) conditions, including but not limited to the release of hazardous substances at or to the Ashtabula River Area, previously unknown to the Trustees, that are discovered after the date of lodging of this Consent Decree, and that cause or contribute to new or additional injuries to, losses of, or destruction of Natural Resources, or new or additional service losses (“Unknown Conditions”); or (ii) information concerning the release of hazardous substances or the resulting injuries to Natural Resources, previously unknown to the Trustees, that is received, in whole or in part, after the date of lodging of this Consent Decree and that, together with any other relevant information, indicates that there are new or additional injuries to, losses of or destruction of Natural Resources, or new or additional service losses (“New Information”). For purposes of this Paragraph, the information and conditions known to the Trustees shall include only the information and the conditions set forth in the administrative record supporting the Restoration Plan, and any additional information of which the Trustees became aware between the date of issuance of the final Restoration Plan and the date of lodging of the Consent Decree regarding conditions in the Ashtabula River Area on or before June 18, 2008 or regarding injuries, losses or destruction of Natural Resources, or the services they provide, resulting from such conditions.

74. Special Reservations By NOAA, FWS and DOI Regarding Natural Resource Damages. Notwithstanding any other provision of this Consent Decree, DOI, FWS and NOAA reserve the right to take administrative action against Settling Federal Agencies for the recovery of Natural Resource Damages, including costs of damages assessments, based on: (i) conditions, including but not limited to the release of hazardous substances at or to the Ashtabula River Area, previously unknown to the DOI, FWS and NOAA, that are discovered after the date of lodging of this Consent Decree, and that cause or contribute to new or additional injuries to, losses of, or destruction of Natural Resources, or new or additional service losses (“Unknown Conditions”); or (ii) information concerning the release of hazardous substances or the resulting injuries to Natural Resources, previously unknown to the DOI, FWS and NOAA, that is received, in whole or in part, after the date of lodging of this Consent Decree and that, together with any other relevant information, indicates that there are new or additional injuries to, losses of or destruction of Natural Resources, or new or additional service losses (“New Information”). For purposes of this Paragraph, the information and conditions known to the DOI, FWS and NOAA shall include only the information and the conditions set forth in the administrative record supporting the Restoration Plan, and any additional information of which the Trustees became aware between the date of issuance of the final Restoration Plan and the date of lodging of the Consent Decree regarding conditions in the Ashtabula River Area on or before June 18, 2008 or regarding injuries, losses or destruction of Natural Resources, or the services they provide, resulting from such conditions.

75. Special Reservations By The State Regarding Natural Resource Damages. Notwithstanding any other provision of this Consent Decree, the State reserves the right to

institute proceedings against the Settling Federal Agencies in this action or in a new action seeking recovery of Natural Resource Damages, including costs of damages assessments, based on:

(i) conditions, including but not limited to the release of hazardous substances at or to the Ashtabula River Area, previously unknown to the State, that are discovered after the date of lodging of this Consent Decree, and that cause or contribute to new or additional injuries to, losses of, or destruction of Natural Resources, or new or additional service losses (“Unknown Conditions”); or (ii) information concerning the release of hazardous substances or the resulting injuries to Natural Resources, previously unknown to the State, that is received, in whole or in part, after the date of lodging of this Consent Decree and that, together with any other relevant information, indicates that there are new or additional injuries to, losses of or destruction of Natural Resources, or new or additional service losses (“New Information”). For purposes of this Paragraph, the information and conditions known to the State shall include only the information and the conditions set forth in the administrative record supporting the Restoration Plan, and any additional information of which the Trustees became aware between the date of issuance of the final Restoration Plan and the date of lodging of the Consent Decree regarding conditions in the Ashtabula River Area on or before June 18, 2008 or regarding injuries, losses or destruction of Natural Resources, or the services they provide, resulting from such conditions.

**XVII. COVENANTS BY SETTLING DEFENDANTS
AND SETTLING FEDERAL AGENCIES**

76. Covenants Not to Sue By Settling Defendants. Settling Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States or the State, or their contractors or employees, with respect to Natural Resource Damages, including payments made under Section IX of this Consent Decree, or any liability for costs

incurred in connection with any response actions undertaken in the Ashtabula River Area pursuant to the Great Lakes Legacy Act, 33 U.S.C. § 1268, including but not limited to: (i) any direct or indirect claims for reimbursement of any payment for Natural Resource Damages based on Sections 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613 or (ii) any claim against the United States or the State pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613, relating to Natural Resource Damages or any response actions undertaken in the Ashtabula River Area pursuant to the Great Lakes Legacy Act, 33 U.S.C. § 1268. These covenants not to sue shall not apply in the event that the United States or the State brings a cause of action against Settling Defendants pursuant to the reservations set forth in Paragraphs 72 and 73, above, but only to the same extent and for the same matters, transactions, or occurrences as are raised in the claims asserted by the United States or the State pursuant to such reservations.

77. Covenant by Settling Federal Agencies. Settling Federal Agencies hereby agree not to assert any direct or indirect claim for reimbursement of any payment for Natural Resource Damages based on Sections 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613; and covenant not to sue the Settling Defendants or the State under Sections 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613, with respect to Natural Resource Damages, including payments made under Section IX of this Consent Decree, or any liability for costs incurred in connection with any response actions undertaken in the Ashtabula River Area pursuant to the Great Lakes Legacy Act, 33 U.S.C. § 1268. These covenants shall not apply in the event that DOI, FWS, and/or NOAA take administrative action against Settling Federal Agencies pursuant to the reservations set forth in Paragraphs 72 or 74, above, but only to the same extent and for the same matters, transactions, or occurrences as are raised in the administrative actions taken by DOI, FWS, and/or NOAA

pursuant to such reservations. Nor shall these covenants by Settling Federal Agencies apply in the event the State brings a claim and/or administrative action against the Settling Federal Agencies pursuant to the reservations set forth in Paragraphs 72 or 75, above, but only to the same extent and for the same matters, transactions, or occurrences as are raised in the claims or actions brought by the State pursuant to such reservations.

78. a. Reservations of Rights By Settling Defendants

(1) Except as provided in Paragraph 76, above, Settling Defendants reserve the right to assert and maintain claims against any person for recovery of any costs incurred in connection with any response actions undertaken in the Ashtabula River Area pursuant to the Great Lakes Legacy Act, 33 U.S. C. § 1268, and the Water Resources Development Act, 33 U.S.C. § 1272.

(2) Railroads reserve the right to assert and maintain any and all claims they may have relating to Natural Resource Damages, including contribution claims, against the following persons:

American Premier Underwriters, Inc.
Triad Salvage, Inc.
Acme Scrap Iron and Metal Company
Columbia Iron and Metal Company

b. Waiver of Certain Claims Against Other Persons. Except as provided in Paragraph 78.a.(2), above, each Settling Defendant agrees not to assert any claim and to waive all claims or causes of action that it may have against any person not a party to this Consent Decree for all matters relating to Natural Resource Damages, including for contribution; provided, however, that each Settling Defendant reserves the right to assert and pursue all claims or causes of action (including contribution claims) against any such person: (1) relating to any liability

with respect to claims asserted by the United States, DOI, NOAA, or the State pursuant to reservations of rights in Paragraphs 72 or 73, but only to the same extent and for the same matters, transactions, or occurrences as are raised in the claims of the United States, DOI, NOAA, or the State pursuant to such reservations of rights; and (2) relating to any Natural Resource Damages in the event such person first asserts, and for so long as such person pursues, any claim or cause of action against such Settling Defendant relating to Natural Resource Damages.

XVIII. EFFECT OF SETTLEMENT/CONTRIBUTION PROTECTION

79. The Parties agree, and by entering this Consent Decree this Court finds, that each Settling Defendant and Settling Federal Agency is entitled, as of the Effective Date of the Consent Decree, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), or other federal law, for matters addressed in this Consent Decree. The “matters addressed” in this Consent Decree are Natural Resource Damages, as defined herein.

80. Each Settling Defendant agrees that with respect to any suit or claim for contribution brought against it for matters related to this Consent Decree, it will notify, in writing, the United States and the State within 10 days of service of any complaint on them. In addition, each Settling Defendant shall notify the United States and the State within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a Court setting a case for trial.

81. Waiver of Claim-Splitting Defenses.

a. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, or Natural Resource Damages or other relief

related to the Ashtabula River Area, the Settling Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the Covenants by Plaintiffs set forth in Section XV.

b. In any subsequent administrative or judicial proceeding initiated by the State for injunctive relief, or Natural Resource Damages or other relief related to the Ashtabula River Area, the Settling Federal Agencies shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the State in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the Covenants by Plaintiffs set forth in Section XV.

XIX. NOTICES AND SUBMISSIONS

82. Whenever, under the terms of this Consent Decree, written notice is required to be given or a plan, report or other submission is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Party in writing. All notices and submissions shall be considered effective upon receipt, unless otherwise provided. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Decree.

As to the United States:

For the Department of Justice:

Chief, Environmental Enforcement Section (DJ #90-11-2-210/1)
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

For DOI:

Office of the Solicitor
U.S. Department of the Interior
Three Parkway Center, Suite 385
Pittsburgh, PA 15220

For NOAA:

General Counsel's Office for Natural Resources/NE
NOAA Office of General Counsel
55 Great Republic Drive
Gloucester, MA 01930

For the Settling Federal Agencies:

Chief, Environmental Defense Section (DJ # 90-11-6-16703)
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 23986
Washington, DC 20026-3986

As to the State:

For the Ohio Attorney General's Office:

Timothy J. Kern
Assistant Attorney General
Environmental Enforcement Section
Ohio Attorney General's Office
30 East Broad Street - 25th Floor
Columbus, Ohio 43215

For Ohio EPA:

Ohio EPA
Division of Emergency and Remedial Response
Northeast District Office
2110 Aurora Road
Twinsburg, Ohio 44087
ATTN: Regan Williams

As to ARCG II:

Joseph A. Heimbuch
de maximis inc.
2975 Bee Ridge Road
Suite C
Sarasota, FL 34239

Joseph D. Lonardo
Vorys, Sater, Seymour & Pease, LLP
1909 K Street, N.W. , 9th Floor
Washington, D.C. 20006-1152

Ralph E. Cascarilla
Walter & Haverfield, LLP
1301 East Ninth Street
Cleveland, Ohio 44114-1821

As to Railroads:

For Norfolk Southern Railway Company and Norfolk Southern Corporation:

Karin Stamy
Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510

Russ McDaniel
Norfolk Southern Corporation
1200 Peachtree Street, NE Box 13
Atlanta, GA 30309

For Consolidated Rail Corporation and Conrail Inc.:

Jonathan M. Broder
Consolidated Rail Corporation
1717 Arch Street, 32nd Floor
Philadelphia, PA 19103

83. Certification of Notices and Submissions. All notices and submissions required by this Consent Decree to be submitted by or on behalf of any Settling Defendant(s) shall be certified by a responsible official or designated representative of the respective Settling Defendant(s), and accompanied by the following certification:

I certify that the information contained in or accompanying this submission is true, accurate and complete. This certification is based on my personal preparation, review, or analysis of the submission, and/or supervision of persons who, acting on my direct instructions, made the verification that the submitted information is true, accurate and complete.

XX. TERMINATION

84. Request for Termination.

a. ARCG II may serve upon Plaintiffs a Request for Termination of Consent Decree With Respect to ARCG II, together with supporting information, once: (1) ARCG II has paid all amounts due pursuant to Paragraphs 19, 35 and 39, and all accrued stipulated penalties as

required by this Consent Decree; (2) ARCG II has completed all requirements of Section VI (ARCG II Restoration Projects), including the establishment of Environmental Covenants on all Restoration Properties and Additional Restoration Properties acquired pursuant to this Consent Decree; and (3) Trustees have approved the Restoration Completion Report submitted pursuant to Section VI.

b. Railroads may serve upon Plaintiffs a Request for Termination of Consent Decree With Respect to Railroads, together with supporting information, once: (1) Railroads have paid all amounts due pursuant to Paragraphs 36 and 39, and all accrued stipulated penalties as required by this Consent Decree; (2) Railroads have completed all requirements of Section VII (Railroads Restoration Project), including the establishment of an Environmental Covenant; and (3) Trustees have approved the Restoration Completion Report submitted pursuant to Section VII.

85. Following receipt by Plaintiffs of any Request for Termination pursuant to the preceding Paragraph, Plaintiffs may confer informally with the requesting Party to resolve any question or disagreement concerning whether such Party has satisfied the applicable criteria under Paragraph 84 for termination of this Consent Decree. If Plaintiffs agree that the applicable criteria have been satisfied by the requesting Party, Plaintiffs and the requesting Party shall submit for the Court's approval a joint stipulation terminating the Decree with respect to the requesting Party.

86. If Plaintiffs do not agree that the requesting Party has satisfied the applicable criteria under Paragraph 84 for termination of this Consent Decree, the requesting Party may invoke Dispute Resolution under Section XIII of this Decree. However, the requesting Party

shall not seek dispute resolution of any dispute regarding termination, under Paragraph 55 of Section XIII (Dispute Resolution), until 60 days after service of its Request for Termination.

87. The provisions set forth in Paragraph 47 and in Sections XV (Covenants by Plaintiffs), XVI (Reservation of Rights by Plaintiffs), XVII (Covenants by Settling Defendants and Settling Federal Agencies), and XVIII (Effect of Settlement/Contribution Protection) will remain enforceable notwithstanding termination of this Consent Decree.

XXI. PUBLIC COMMENT

88. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) days, for public notice and comment in accordance with the provisions of 28 C.F.R. § 50.7. The United States and the State reserve the right to withdraw or withhold their consent if the comments received disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate.

XXII. EFFECTIVE DATE AND RETENTION OF JURISDICTION

89. This Consent Decree shall take effect upon entry by the Court; provided, however, that Settling Defendants shall be bound upon the lodging of this Consent Decree to comply with obligations of Settling Defendants specified in this Consent Decree as accruing upon lodging.

90. The Court shall retain jurisdiction to modify and enforce the terms and conditions of this Consent Decree and to resolve disputes arising hereunder as may be necessary or appropriate for the construction or execution of this Consent Decree.

XXIII. APPENDICES

91. The following Appendices are attached to and incorporated into this Consent

Decree:

Appendix A	Map of the Ashtabula River Area
Appendix B	List of Restoration Properties
Appendix C	Natural Resource Restoration Plan and Environmental Assessment for the Ashtabula River and Harbor Site
Appendix D	Scope of Work for ARCG II Restoration Workplans
Appendix E	Environmental Covenant Template
Appendix F	Trustee Memorandum of Understanding (MOU)
Appendix G	Railroads Restoration Workplan

XXIV. CONSENT DECREE MODIFICATIONS

92. Any material modification of this Consent Decree shall be made by agreement of the Parties to this Consent Decree and in writing, and shall not take effect unless approved by the Court. Any non-material modification of this Decree shall be made by agreement of the Parties to this Consent Decree and in writing, and shall not take effect until filed with the Court. Nothing in this Consent Decree shall be deemed to alter the Court's power to enforce, supervise, or approve modifications to this Consent Decree.

93. The provisions of this Consent Decree are not severable. The Parties' consent hereto is conditioned upon the entry of the Consent Decree in its entirety without modification, addition, or deletion except as agreed to by the Parties.

94. Unanticipated or increased costs or expenses associated with the implementation of actions called for by this Consent Decree and economic hardship or changed financial circumstances shall not serve as a basis for modifications of this Consent Decree.

XXV. SIGNATORIES/SERVICE

95. The undersigned representatives of the Settling Defendants and the State, and the Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice each certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

96. Settling Defendants hereby agree not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States or the State has notified Settling Defendants in writing that they no longer support entry of the Consent Decree.

97. Settling Defendants shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on their behalf with respect to all matters arising under or relating to this Consent Decree. Settling Defendants hereby agree to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to service of a summons.

XXVI. FINAL JUDGMENT

98. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between and among the United States, the State, and the Settling Defendants.

SO ORDERED THIS _____ DAY OF _____, _____.

United States District Judge

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR THE UNITED STATES OF AMERICA

Date: 1/31/12

IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

Date: 2/1/12

STEVEN J. WILLEY (Ohio 0025361)
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611

Date: 3/30/12

DANIEL DERTKE
Environmental Defense Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 23986
Washington, D.C. 20026-3986

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

UVGXGP 'F GVVGNDCJ
United States Attorney
Northern District of Ohio

Date: _____

s/ Steven Paffilas
STEVEN PAFFILAS
Assistant United States Attorney
Northern District of Ohio
801 W. Superior Ave., Suite 400
Cleveland, Ohio 44113
(216) 622-3698

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR THE STATE OF OHIO

MICHAEL DEWINE
OHIO ATTORNEY GENERAL

Date: MARCH 30, 2012

Timothy J. Kern *TJ*
Assistant Attorney General
Environmental Enforcement Section
30 East Broad Street, 25th Floor
Columbus, Ohio 43215

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT CABOT CORPORATION

Date: 7/22/2010

(

Signature

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Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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FOR DEFENDANT DETREX CORPORATION

Date: 7-20-10

Signature

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SOUTHFIELD, MI 48075

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Title: _____

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT ELKEM METALS ~~COMPANY~~
~~INC~~ COMPANY - ASHTABULA LP

Date: 7/27/10

Signature

Typed Name: Mark Nilsen

Title: President

Address: Airport Office Park, Building 2
400 Rouser Road
Moon Township, PA 15108

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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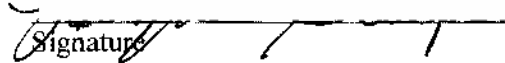
Title: _____

Address: _____

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT THE CLEVELAND
ELECTRIC ILLUMINATING COMPANY

Date: 8-5-10


Signature

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Title: Assistant Corporate Secretary

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Akron, OH 44308

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Title: _____

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Cleveland, OH 44114

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FOR DEFENDANT GENCORP, INC.

Date: 8/5/11

Signature 

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Address: 820 Starkweather

Plymouth, MI 48170

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT MALLINCKRODT, LLC

Date: 2/21/10

Signature [Handwritten Signature]

[Handwritten Initials]
[Handwritten Initials]

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Title: Vice President

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Hazelwood, MO 63042

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT MILLENNIUM INORGANIC CHEMICALS, INC.

Date: 7-26-10

Signature

Typed Name: Scott Strayer

Title: Site Director - Ashtabula Complex

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Ashtabula Ohio 44004

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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Title: _____

Address: 351 West Camden Street

Baltimore, Md. 21201

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT OCCIDENTAL CHEMICAL CORPORATION

Date: July 28, 2010



Signature

Typed Name: Michael G. Anderson

Title: Vice President

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Title: General Counsel

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT OHIO POWER COMPANY

Date: July 29, 2010


Signature

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Columbus, Ohio 43215

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT OLIN CORPORATION

Date: 7/30/10

Signature

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Title: V.P. General Counsel & Secretary

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT RMI TITANIUM COMPANY,
INC.

Date: 8/5/2010

Signature

Typed Name: Rick Mason

Title: Director, Safety & Environmental

Address: RMI TITANIUM COMPANY, INC.

1000 Warren Avenue

Niles, OH 44446

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

Typed Name: _____

Title: _____

Address: _____

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT THE SHERWIN-WILLIAMS COMPANY

Date: July 21, 2010

Signature

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Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT UNION CARBIDE CORPORATION

Date: Aug. 9, 2010

Signature



Typed Name: Margaret Lattin Bazany

Title: Authorized Representative

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Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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Title: _____

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THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT CBS OPERATIONS, INC.

Date: August 2, 2010

Signature

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Title: Vice President and Assistant Secretary

Address: 20 Stanwix Street, 10th Floor

Pittsburgh, PA 15222

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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Title: _____

Address: _____

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT NORFOLK SOUTHERN CORPORATION

Date: 8/27/2010


Signature

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Title: Vice President, Safety & Environmental

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Box 73

Atlanta, GA 30309

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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Title: General Counsel - Operations

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Norfolk, VA 23510

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT CONRAIL, INC.

Date: August 16, 2010

Signature

Typed Name: Jonathan M. Broder
 Title: Vice President-Corporate Development & Chief Legal Officer
 Address: 1717 Arch Street
32nd Floor
Philadelphia, PA 19103

Agent Authorized to Accept Service on Behalf of Above-Signed Party:

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32nd Floor
Philadelphia, PA 19103

THE UNDERSIGNED PARTY enters into this Consent Decree Regarding Ashtabula River Area Natural Resource Damages:

FOR DEFENDANT CONSOLIDATED RAIL CORPORATION

Date: August 16, 2010

Signature 

Typed Name: Jonathan M. Broder
Vice President-Corporate Development &
Title: Chief Legal Officer
Address: 1717 Arch Street
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Philadelphia, PA 19103

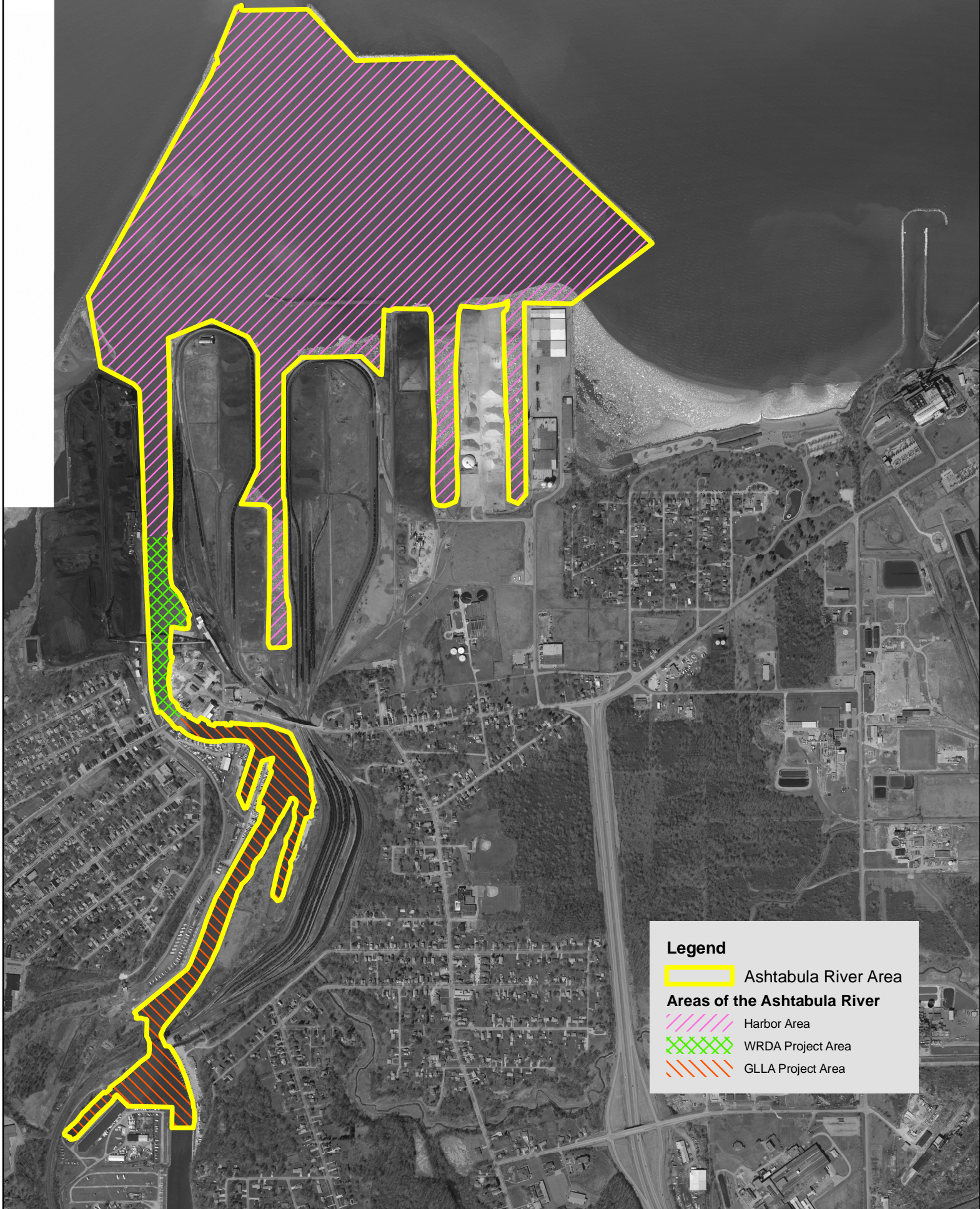
Agent Authorized to Accept Service on Behalf of Above-Signed Party:

Typed Name: Jonathan M. Broder
Vice President-Corporate Development &
Title: Chief Legal Officer
Address: 1717 Arch Street
32nd Floor
Philadelphia, PA 19103





Appendix A

Map of the Ashtabula River Area

Ashtabula River Area



Legend

-  Ashtabula River Area
- Areas of the Ashtabula River**
-  Harbor Area
-  WRDA Project Area
-  GLLA Project Area

0 550 1,100 2,200 3,300 4,400 Feet

APPENDIX B

List of Restoration Properties

1. Richard and Eva Caylor Property, Diane Lane off E. South Ridge Road, Ashtabula Township (Parcel No. 03-008-00-024-00) and Plymouth Township (Parcel No. 42-001-00-013-00), Ashtabula County, Ohio.
2. Mario and Patricia Guarracino Property, Harmon Hill Road, Ashtabula Township, Ashtabula County, Ohio (Parcel No. 03-015-00-019-00).
3. Ancillary Estate of Walter Kightlinger and Katherine Kightlinger Trust Property, State Line Road, Richmond Township, Ashtabula County, Ohio (Parcel No. 45-001-00-002-00).
4. Robert and Lallita Bush Property, 5260 Arbor Drive, Richmond Township, Ashtabula County, Ohio (Parcel No. 27-023-00-016-15).
5. Allen and Alice Shiner Properties, State Line Road, Richmond Township, Ashtabula County, Ohio (Parcel Nos. 45-001-00-003-00 and 45-001-003-01).
6. Ashtabula Township Park Commission [former CDM] Property, East 24th Street, City of Ashtabula, Ashtabula County, Ohio (Parcel No. 05-314-00-002-00).

Appendix C

Natural Resource Restoration Plan & Environmental Assessment for the Ashtabula River and Harbor Site

**Final Natural Resource Restoration Plan
&
Environmental Assessment
for the
Ashtabula River and Harbor Site**

September 14, 2009

Prepared by:

**U.S. Fish and Wildlife Service, Region 3
Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, OH 43068**

and

**Ohio EPA
Division of Emergency & Remedial Response
Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087**



TRUSTEES: State of Ohio
Ohio Environmental Protection Agency
Department of the Interior
U.S. Fish and Wildlife Service

LEGAL AUTHORITY: Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (as amended), 42 U.S.C. § 9601, *et seq.*

am Federal Water Pollution Control Act (Clean Water Act) (as amended), 33 U.S.C. § 1251, *et seq.*

Natural Resource Damage Assessment, 43 C.F.R. Part 11

National Environmental Policy Act, 42 U.S.C. §§4321-4347

RESPONSIBLE
FEDERAL AGENCIES: Region 3, U.S. Fish and Wildlife Service, lead agency
National Oceanic and Atmospheric Administration

RESPONSIBLE
STATE AGENCIES: Ohio Environmental Protection Agency, lead agency
Ohio Department of Natural Resources

CONTACT: David DeVault
NRDA Case Manager
U.S. Fish and Wildlife Service
Fort Snelling, MN 55111
612-713-5340

Regan Williams
Site Coordinator
Ohio EPA Northeast District Office
Twinsburg, OH 44087
33
Re

DATE: September 14, 2009

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SECTION 1

INTRODUCTION AND SUMMARY

This Final Restoration Plan and Environmental Assessment (RP/EA) has been prepared by State and Federal natural resource Trustees to address natural resources injured and ecological services lost due to releases of hazardous substances at the Ashtabula River and Harbor Site (the Site).

The Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601, *et seq.* [CERCLA, or more commonly known as the federal “Superfund” law) and the Federal Water Pollution Control Act, 33 U.S.C. § 1251, *et seq.* (more commonly known as the Clean Water Act or (CWA)] authorize States, Indian Tribes, and certain Federal agencies that have authority to manage or control natural resources, to act as “Trustees” on behalf of the public, to restore, rehabilitate, replace, and/or acquire natural resources equivalent to those injured by hazardous substance releases. The Department of the Interior’s Natural Resource Damage Assessments (NRDA) regulations are set forth at 43 C.F.R Part 11.

The State of Ohio, represented by the Ohio Environmental Protection Agency (Ohio EPA) and the United States Department of the Interior (DOI), represented by the United States Fish and Wildlife Service (USFWS) (collectively, referred to as the Trustee Council) have worked together, in a cooperative process, with Trustee Advisors¹ to determine what is necessary to address natural resource injuries caused by past releases of polychlorinated biphenyls (PCBs) and other hazardous substances at the Site.

The State of Ohio and the United States are considering entering into a negotiated settlement with the Potentially Responsible Parties (PRPs) in which the PRPs would implement various projects to restore, replace, rehabilitate and/or acquire the equivalent of the natural resources injured at the Site, and/or the services those resources provide. This RP/EA is directed solely at the identification of restoration projects intended to compensate the public for injuries to natural resources at the Ashtabula River and Harbor Site². The Fields Brook portion of the Site was settled separately and the “Final Natural Resource Restoration Plan & Environmental Assessment for the Fields Brook Superfund Site” was released in July 2004.

In summary, the purpose of this Final RP is to present the Trustees Preferred Alternative to accomplish the goal of restoring, rehabilitating, replacing and/or acquiring the equivalent of those natural resources, and the services those resources provide that have been injured in the Ashtabula River and Harbor. Public comments are being sought on this Final RP/EA and will be considered and incorporated in the Final RP/EA as appropriate.

¹ The Trustee Council Advisors, per the 1998 Fields Brook Memorandum of Understanding (which includes the Ashtabula River and Harbor), include the United States Department of Justice; the United States Department of the Interior Solicitor’s Office; the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration; the United States Environmental Protection Agency; the United States Coast Guard; the Ohio Attorney General; and, the Ohio Department of Natural Resources (ODNR).

² The Site is defined as the Ashtabula River from the Upper Turning Basin to the Harbor Mouth.

SECTION 2

PURPOSE AND NEED FOR RESTORATION

2.1 The Ashtabula River and Harbor Site – Summary of Release History

The Ashtabula River is located in northeast Ohio, flowing in a northwesterly direction to its confluence with Lake Erie at the City of Ashtabula, Ohio. The drainage basin covers approximately 355 km². Tributaries include Fields Brook, Hubbard Run, Strongs Brook, and Ashtabula Creek. The City of Ashtabula, with a population of 20,962³, is the only significant urban center in the watershed. The rest of the drainage basin is primarily rural and agricultural. There is concentrated industrial development around Fields Brook and to the east of the River mouth. The Ashtabula Harbor, located at the mouth, is a significant Great Lakes Harbor. Commodities such as limestone, iron, coal and other bulk commodities regularly transit the Harbor. The Ashtabula River, downstream of Fields Brook, is heavily contaminated with hazardous substances including PCBs, polycyclic aromatic hydrocarbons (PAHs) and heavy metals. Sources include industrial facilities located along Fields Brook, as well as historical ship building and scrapping activities, spills and accidents at adjacent rail yards, and activities associated with bulk cargo shipping.

Fields Brook, the source of much of the contamination in the Ashtabula River, is on the National Priorities List (NPL) of uncontrolled hazardous waste sites (Superfund) and is being remediated under that authority. Fields Brook is a small tributary entering the Ashtabula River from the east at approximately river mile 1.8. Manufacturing along Fields Brook, ranging from metal fabrication to chemical production, has occurred since the early 1940s. The decades of manufacturing activity and waste management practices at industrial facilities resulted in the discharge or release of a variety of hazardous substances to Fields Brook, which have migrated downstream, contaminating the Ashtabula River and Harbor Site.

In 1994, as an alternative to the impending designation of the Ashtabula River as an operable unit of the Fields Brook Superfund Site, the Ashtabula River Partnership (Partnership) was formed to facilitate a voluntary cleanup. The Partnership is comprised of more than 50 public and private “partners.” Public Partners include the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (U.S. EPA), the USFWS, and Ohio EPA. Private Partners include local industries, several of which have been named PRPs at the Site.

The contaminated portion of the Ashtabula River and Harbor is being remediated using funds provided by some of the RPs at the Fields Brook Superfund Site, the U.S. EPA (Great Lakes Legacy Act), Ohio EPA, and the USACE. Remedial dredging is underway and completion is expected in 2008.

2.2 Natural Resource Injuries

Injuries to surface water resources, fishery resources, and avian resources have occurred. An estimated 511 acres of the Ashtabula River and Harbor have been contaminated by hazardous substances.

³ Population is based on 2000 census data.

Toxic contaminants have wide ranging effects on aquatic and terrestrial life. Acute (short term) effects may include the death of birds, fish and other animals, and death or low growth rate in plants. Chronic (long term) effects on aquatic life may include shortened lifespan, reproductive problems, lower fertility, and changes in appearance or behavior. Many hazardous substances, including PCBs, are categorized as persistent bioaccumulative toxics (PBTs). They degrade very slowly in the environment, accumulate in living things, and magnify as they move up the food chain. General information on potential effects of the hazardous substances detected can be found in the Agency for Toxic Substances and Disease Registry (ATSDR) fact sheets (www.atsdr.cdc.gov) and the U.S. EPA ECOTOX database (www.epa.gov/ecotox).

Reports on specific injuries at the Site can be found at <http://www.fws.gov/midwest/AshtabulaNRDA/>. Additional information on surface water resources injured can be found in Ohio EPA's 2006 biological study of the lower Ashtabula River at http://www.epa.state.oh.us/dsw/document_index/psdindx.html.

2.3 Authority and Legal Requirements

This Final RP/EA has been prepared jointly by Ohio EPA and the USFWS. Each of these Agencies is a designated natural resources Trustee under Section 107(f) of CERCLA, 42 U.S.C. § 9607(f), Section 311 of the CWA, 33 U.S.C. § 1321, and other applicable law, including Subpart G of the National Contingency Plan (NCP), 40 C.F.R. §§ 300.600-300.615. As a Trustee, each Agency is authorized to act on behalf of the public to assess natural resource injuries and recover damages for injuries to natural resources and losses of natural resource services attributed to releases of hazardous substances. The Federal Authorized Official (AO) is the DOI official delegated the authority to act on behalf of the Secretary of the Department of the Interior to conduct a natural resource damage assessment and restoration (NRDAR). The AO is the Region 3 Regional Director for the U.S. Fish and Wildlife Service, and represents the interests of the Department, including all affected Bureaus. In accordance with 42 U.S.C. § 9607(f)(2)(B), the Director of Ohio EPA has been designated the natural resource Trustee by the Governor of Ohio pursuant to letter dated July 20, 2007.

The purpose of the EA is to consider alternative actions to restore, rehabilitate, replace, and/or acquire the equivalent of any natural resources injured and natural resource services lost as a result of releases of PCBs and other hazardous substances into the Ashtabula River and Harbor Site, pursuant to applicable State and Federal laws and regulations. This document will also serve as the RP for implementing the selected Alternative as required under the NRDA regulations.

The Alternative selected in the RP must be consistent with statutory mandates and regulatory procedures that specify that recovered damages are used to undertake feasible, safe, and cost-effective projects that address injured natural resources, consider actual and anticipated conditions, have a reasonable likelihood of success, and are consistent with applicable laws and policies.

2.4 Overview of Damage Determination

DOI has adopted regulations under CERCLA and the CWA establishing procedures for assessing natural resource damages. The NRDA regulations are codified at 43 C.F.R. Part 11.

As defined in the NRDA regulations, injury is an adverse biological, chemical, or physical effect on natural resources, such as death, decreased population, or lost services (*i.e.*, fishing or hunting opportunities, ecosystem functions). Damages are the estimated value of the injured resources. The objective of the NRDA process is to compensate the public through environmental restoration for injuries to natural resources that have been caused by releases of hazardous substances into the environment. Under Section 107(f)(1) of CERCLA, damage settlements can only be used to restore, rehabilitate, replace, and/or acquire the equivalent of trust resources injured, destroyed, or lost as a result of the release of hazardous substances.

Accordingly, this Final RP/EA has been developed to evaluate and, ultimately, select restoration projects designed to compensate the public for damages that occurred to natural resources at the Site. The RP/EA is not intended to completely quantify the extent of restoration needed. Implementation of selected restoration projects will occur over a period of time, dependent upon the project type.

The NRDA regulations provide that restoration plans should consider ten factors when evaluating and selecting projects to restore or replace injured natural resources. The following factors will be used to select an Alternative and to compare projects within an Alternative. (See 43 C.F.R. § 11.82)

1. Technical feasibility
2. The relationship of the expected costs of the Alternative to the expected benefits
3. Cost-effectiveness
4. The results of actual or planned response actions
5. The potential for additional injury resulting from the proposed actions
6. The natural recovery period
7. Ability of the resources to recover with or without alternative actions
8. Potential effects of the action on human health and safety
9. Consistency with relevant Federal, State, and Tribal policies
10. Compliance with applicable Federal, State, and Tribal laws

As discussed, the selected Alternative must restore, rehabilitate, replace and/or acquire the equivalent of those natural resources injured by the discharge or release of PCBs and other hazardous substances at the Site. Because the Site is a complex community of invertebrates, fish, wildlife, plants and humans, the Trustees intend to consider as much of the watershed as possible and address areas of potential improvement for the ecosystem as a whole.

Based on the recommendations of the Trustee Council and input from the public, the Authorized Official will select one of the Alternatives and will determine, based on the facts and recommendations contained herein, and public comment, whether this EA is adequate to support a Finding of No Significant Impact (FONSI), or whether an Environmental Impact Statement (EIS) is required.

SECTION 3

RESTORATION ALTERNATIVES

3.1 Alternative A: No Action

The No Action Alternative, required by the National Environmental Policy Act (NEPA), consists of expected conditions under current programs pursued outside the NRDA process. It is the baseline against which other actions can be compared. If this Alternative were implemented, the Trustee Council would not initiate specific actions to restore injured natural resources or compensate the public for ongoing natural resource injuries caused by releases of hazardous substances into the environment. Existing environmental degradation not directly related to hazardous substance releases would continue to occur (land development, shoreline hardening, etc.), and perhaps worsen under Alternative A. The State and Federal agencies would continue to manage, conserve and protect the Ashtabula River and Harbor as outlined in current programs and regulations and within current budget constraints. The public would not be compensated for injuries to natural resources.

3.2 Alternative B: Natural Resource Based Restoration (Preferred Alternative)

CERCLA authorizes trustees to replace and/or acquire natural resources equivalent to those injured by hazardous substance releases, in lieu of or in addition to, restoring or rehabilitating the injured natural resource.

Alternative B involves projects that would restore and replace injured and lost natural resources, while concurrently providing enhanced ecosystem and public use services to compensate for injuries caused by releases of hazardous substances. Projects within this Alternative could be implemented anywhere in the State of Ohio with a preference for projects in the watershed of the Ashtabula River and Harbor. Alternative B projects are focused on maintaining the important linkages between the physical, chemical and biological properties of the overall ecosystem and the services it provides. These projects include the following: (1) enhancement and preservation of riparian, flood plain and upland habitat; (2) enhancement, preservation and reestablishment of wetlands; and (3) improvement of aquatic habitat. Each of these categories of projects is expected to improve and enhance the ecosystem to benefit injured natural resources. Concomitantly, these projects would benefit the public by enhancing active and passive outdoor recreational opportunities. These goals would be accomplished through the acquisition, preservation and restoration of contiguous tracts of valuable habitat, where feasible, which would be made available to the public for active and/or passive recreational use. This holistic approach supports the goal of restoring, replacing and rehabilitating injured resources, and enhancing outdoor recreational activities.

The Trustee Council anticipates that ecological priorities for all restoration project categories under Alternative B will be influenced primarily by the following key factors:

- 1) Relationship to injuries (restoration opportunities that address services and values similar to those lost due to the release of hazardous substances are preferred);
- 2) Quality of restoration opportunities (projects with substantial ecological opportunities are preferred);

- 3) Ecological function/hydraulic connectivity (areas in proximity to the Ashtabula River and Harbor are preferred); and,
- 4) Cost and cost-effectiveness (projects with lower cost per restored or replaced services or values are preferred).

Prior to the selection and implementation of any Site specific actions, the Trustees will review the specific projects to determine if they comply with all applicable requirements: NEPA, Historic Preservation Act, Endangered Species Act, Americans with Disabilities Act, etc.

3.2.1 Wetland, Flood Plain, Riparian and Associated Upland Habitat Preservation, Reestablishment or Enhancement Projects

Restoration projects under this Alternative would concentrate on the need to preserve and enhance certain properties adjacent to the Ashtabula River. Protection and restoration of riparian habitat and associated wetlands and ecologically associated uplands would foster and promote increased spawning and nursery habitats, and nesting and foraging opportunities for a wide variety of fish, birds and other wildlife. Such projects will also reduce erosion and resultant sediment loading to the Ashtabula River. Restoration projects described in Alternative B would provide ecological functions similar to, but not necessarily the same as those injured by hazardous substances.

Wetland, flood plain, riparian, and ecologically associated upland protection and enhancement would help replace habitats that have been impaired or destroyed in the Ashtabula River and Harbor area. The Trustee Council will focus its efforts on areas where hydraulic alterations, invasive species, or other modifications have destroyed or impaired former wetlands, flood plain habitat, and/or ecologically associated upland habitats. The Trustee Council's wetland, flood plain, riparian, and upland habitat reestablishment and enhancement strategy would include active restoration projects such as improving existing flood plain, establishing and/or preserving wetlands, establishing interconnections between surface water and wetlands, and removing invasive plant species. Low impact techniques such as closing off drainage ditches, disrupting (or not repairing) drain tile systems, and reestablishing wetland and flood plain plants and other native vegetation in order to reestablish natural characteristics that have been eliminated would also be utilized, as appropriate. The Trustee Council intends to target restoration of degraded wetland, riparian, and upland habitats located in coastal areas, within flood plains, and adjacent to existing valuable natural areas. Wetland, flood plain, riparian and ecologically associated upland reestablishment and enhancement projects that will improve water quality (including reducing loadings of suspended sediments) and provide habitat for biological resources are preferred. If a specific restoration project uses alternative techniques or involves more development than described in this section, a Site specific NEPA determination would be made.

3.2.1.1 Acquisition of Natural Areas

Alternative B recognizes the significance of preserving the riparian, wetland, flood plain and upland habitat of the Ashtabula River and Harbor area. To achieve this goal, the Trustee Council will focus its efforts on identifying, acquiring and preserving parcels of land with the following attributes: (1) coastal areas; (2) areas with commercial and/or residential development pressure; (3) contiguous parcels; and, (4) areas of high natural quality. Areas with high natural quality or "natural areas" are those parcels of land that significantly contribute to the ecological qualities of

the Ashtabula River and Harbor watershed. Once preserved and protected, lost and injured resources are restored, and public recreational activities, both active and passive, improve.

The Trustee Council will select specific areas for preservation based upon the following criteria: (1) the ecological value of the habitat; (2) the ability to improve the habitat; (3) the ability to preserve the habitat; (4) the geographical and ecological diversity of the parcel; (5) local and regional development plans; (6) the ability to find willing sellers; and, (7) citizens' concerns and comments. Preservation of properties would be achieved through fee title purchase from willing land owners, subject to an Environmental Covenant and/or through the purchase of Conservation Easements. Those properties that could be preserved in perpetuity will be considered a higher priority than those with a fixed duration. Land acquired will be conveyed to individual State, Federal or local governmental agencies, land trusts, or non-governmental conservation organizations following specific procedures and standards for each entity.

While the primary purpose of the preservation of land is to protect and preserve fish and wildlife habitats, portions of the acquired properties will likely be available to the public for passive and/or active recreational opportunities. The parcels may be available to serve as fishing spots, or for other activities such as wildlife viewing, hiking, or hunting. Acquisition of appropriately selected properties will, in general, contribute to a successful restoration of the Ashtabula River and Harbor, and promote its ecological stability.

3.2.1.2 Invasive Species Removal and Planting of Native Species

Restoration projects under Alternative B may include the replanting and reestablishment of native species on properties acquired through fee title, subject to an Environmental Covenant, and on properties where a Conservation Easement has been secured. Reestablishment efforts will focus on restoring natural areas that are in a somewhat degraded natural condition. In some instances, the reestablishment of native species may be suggested for properties or portions of properties owned by local Park districts. Native species will be reestablished once non-native species have been removed and eradicated. The removal of non-native species and planting of native species will enhance ecosystem function and, as a result, enhance the ecosystem functions provided to the natural resources and the public.

3.2.1.3 CDM Property

In June 2006, the Trustees provided the Ashtabula Township Park Commission (ATPC) with funds from the Fields Brook Natural Resource Damages settlement to purchase a 37-acre tract of land from the CDM Development Corporation (CDM). The property is subject to an Environmental Covenant, which preserves the property in perpetuity for conservation purposes. Under Alternative B, the Trustees would implement restoration and rehabilitation activities on the property to further enhance its ecosystem services. The restoration could include the following: (1) the reestablishment of a hydrological connection between the wetlands and the Ashtabula River, either directly or through the use of a water control device; (2) the removal of exotic and non-native species on approximately six acres; (3) the reestablishment of native species on six acres of wetlands; (4) the construction of an elevated boardwalk along the upland side of the wetlands; (5) the construction of a canoe launch; and, (6) improvement of the gravel parking lot along 24th Street.

These projects will provide enhanced ecosystem services and improve public access to the River. On the ecological side, the reestablished and connected wetlands will provide spawning and nursery habitat for fish, as well as nesting areas for wetland birds. This will increase and improve the functioning of the ecosystem. The construction of the boardwalk and canoe launch will improve public access and provide opportunities for environmental education through passive recreational use.

3.2.2 *Fishery Resource Enhancement Projects*

The abundance and diversity of fish species that once inhabited the Ashtabula River and Harbor is very different from the fishery currently observed due to anthropogenic effects, including effects of pollutants. Data collected prior to the remediation currently underway in the Ashtabula River indicated that the fish community was impaired, and did not meet the ecoregional biocriteria for Warm Water Habitat in Ohio. The data evidenced that highly pollution-tolerant species were abundant in certain sampling locations on the River.

In light of the data described above, the Trustees have proposed projects designed to achieve healthy, self-sustaining native fish populations in the Ashtabula River and Harbor area. Projects in Alternative B will, therefore, focus on the following: (1) acquisition of tracts of land along the Ashtabula River, which will help to reduce sediment loading, and thereby provide direct benefits to the fishery; (2) establishment of a hydrological connection between the wetlands and the River on the CDM property, which will provide a significant spawning and nursery area for fish; and, (3) restoration of certain existing wetlands, which will provide improved foraging opportunities.

3.3 *Alternative C: Augmentation of Human Use Related Natural Resource Services in the Ashtabula Watershed and Adjacent Lake Erie*

Alternative C involves projects that would provide services the same as, or similar to, those human use services lost through injuries to natural resources. The projects can be divided into two components: enhancements to the Breakwall Lighthouse and projects that provide fishing access to the Ashtabula River and Harbor and Lake Erie; and, construction of an educational interpretative center at Walnut Beach and other environmental educational opportunities. Alternative C projects would not restore, replace and/or rehabilitate injured or lost natural resources. The Trustee Council expects that priorities for all restoration projects or categories of projects under Alternative C will be influenced primarily by the following key factors:

- 1) Relationship to injuries (restoration opportunities that address services and values similar to those lost due to the release of hazardous substances are preferred);
- 2) Quality of restoration opportunities (projects with substantial ecological opportunities are preferred);
- 3) Ecological function/hydraulic connectivity (areas in proximity to the Ashtabula area and the restoration area are preferred); and
- 4) Cost and cost-effectiveness (projects with lower cost per restored or replaced services or values are preferred).

Under this Alternative, prior to the selection and implementation of any Site specific actions, the Trustees will review the specific projects to determine if they comply with all applicable requirements: NEPA, Historic Preservation Act, Endangered Species Act, Americans with Disabilities Act, etc.

3.3.1 *Breakwall Lighthouse and Projects that Provide Fishing Access to the Ashtabula River and Harbor, and Lake Erie*

This category of projects would provide human use services the same as, or similar to those lost through natural resource injuries, but would not enhance the injured natural resources. Projects within Alternative C would be implemented in the County of Ashtabula, with an emphasis on the adjacent shoreline of Lake Erie. Alternative C projects include the following: (1) improvements to the Breakwall Lighthouse; (2) construction of a walkway to the Breakwall Lighthouse; (3) construction of restroom facilities near the Breakwall Lighthouse; and, (4) construction of a transient boat dock. The cost of these projects has been estimated to be approximately \$8 million. The projects proposed in Alternative C, particularly the walkway and transient boat dock, could provide increased access to the public for active recreational opportunities, including fishing. The combined projects could enhance tourism to the County of Ashtabula. However, none of the proposed projects promote the holistic approach of restoring natural resources, while enhancing outdoor recreational activities.

3.3.2 *Interpretive Educational Center*

The Trustees have received a proposal to construct an Interpretative Educational Center at Walnut Beach. The cost of the proposed Interpretative Educational Center has been estimated to be approximately \$2.25 million. Educational displays at the Center could explain the Lake Erie ecosystem, invasive plant control, fish species, and the Ashtabula River Partnership.

3.4 Alternatives B and C: Criteria and Priorities for Restoration Project Categories

3.4.1 *Technical Feasibility*

Projects that use reliable, proven methods are preferred to those that rely on experimental, untested methods. Other factors that can affect project success, such as validity of assumptions inherent to the project approach, will also be considered by the Trustee Council.

3.4.2 *Benefit Scope*

Restoration projects that provide a broad scope of measurable ecological benefits to a wide geographic area of fish or wildlife population are favored over those that are focused on a limited set of benefits to a limited area or population. Restoration projects with a high ratio of expected ecological benefits to expected cost are preferred. This aspect may be assessed relative to other proposed projects that benefit the same resource. Projects that provide natural resource services through protection, and/or enhancement of the natural resources providing those services are preferred over projects designed solely to provide services. Projects that benefit more than one injured natural resource are expected to be given priority. Wherever possible, natural habitat functions which are self-sustaining and essential to maintain the habitat will be restored, enhanced

and/or protected. If projects provide equal benefits, those with minimal operation and maintenance activities will be preferred.

3.4.3 *Quantifiable Benefits*

Projects expected to provide quantifiable benefits and likely to achieve success will have a higher priority than projects that do not. Restoration projects should include an evaluation of success and a monitoring component to determine the effectiveness of restoration actions in providing the public with similar services and values to those lost because of releases of hazardous substances into the environment. A timeline outlining the implementation and progression of the restoration project will be used by the Trustee Council to determine completion and success of the project. Overall success of the RP will depend upon success of each restoration project.

3.4.4 *Potential Impact*

Preference will be given to projects that avoid or minimize additional natural resource injury or environmental degradation. The Trustee Council will require that requisite permits are obtained and comply with applicable regulations. All projects selected for implementation will be expected to comply with applicable and relevant laws, policies and regulations. To assure that Federally and State-listed threatened or endangered species will not be adversely affected, or proposed species are not jeopardized, the Trustee Council will require that the guidelines outlined in Appendix A are followed during implementation of NRD restoration activities.

3.4.5 *Other Project Support*

Preference is expected to be given to projects or aspects of Trustee Council projects that are not already being implemented or have insufficient funding under other programs. Although the Trustee Council may use restoration planning efforts completed by other programs, preference is given to projects that would not otherwise be implemented without NRD restoration funds.

3.4.6 *Voluntary Land Acquisition/Easements*

Preservation of habitats through acquisition of land or Conservation Easements will only be from willing sellers or participants. Landowners are, and will be, under no obligation to sell land to the government agencies or other organizations associated with the Trustee Council. Neighbors adjacent to land purchased for preservation under this RP will retain all of their current rights to their land. Land acquisitions may be conducted by government agencies using settlement moneys, or directly by settling PRPs. The government agencies are required to pay fair market value for land purchased. Fair market value would be determined through established appraisal procedures.

3.4.7 *Tribal Cultural Resources*

The preservation or restoration of specific areas or resources that have appreciable cultural value to Indian tribes are important to the Trustee Council. A search of the Native American Consultant Database maintained by the National Park Service identified no Indian tribes with relevant interest in Ashtabula County.

3.5 Preferred Alternative

The Trustee Council has recommended Alternative B as the Preferred Alternative. The direct provision of human use related natural resource services provided for in Alternative C would be less cost effective and more limited in scope than provision of those services through natural resource protection and enhancement. In order to concentrate funds on restoring resources that were impacted by the release of PCBs and other hazardous substances at the Ashtabula Site, Alternative B is recommended as the Preferred Alternative for this Final RP/EA. The final decision on the selected Alternative will be made by the State and Federal Authorized Officials based on recommendations from the Trustee Council staff and input from the public.

3.6 Summary of Alternative Actions

Table 1: Comparison of Alternatives A, B & C

Actions	Alternative A	Alternative B	Alternative C
	No Action	Natural Resource Based Restoration (Preferred Action)	Augmentation of Human Use Related Natural Resource Services
Restore, rehabilitate, replace and/or acquire the equivalent of natural resources injured from the release of hazardous substances into the environment and services those resources provide	No	Yes	Partial. Limited replacement of services. No restoration of resources.
Rehabilitate wetlands, flood plains, riparian and associated upland habitat	No	Yes	No
Improve aquatic habitat and near-shore habitat	No	Yes	No
Provide for enhancement of abundance and diversity of self-sustaining fish populations	No	Yes	No
Preservation of wetlands, flood plain, riparian and associated upland habitat	No	Yes	No
Improve outdoor recreational opportunities/enhance public awareness	No	Yes	Yes

SECTION 4

AFFECTED ENVIRONMENT

The terrestrial, wetland, and aquatic habitats of the Ashtabula EA area support a wide diversity of birds, fish, and mammals, including many rare, threatened, and endangered species. The health of the ecosystem and the quality of its habitats are vital to the invertebrates, plants, fish,

and wildlife of the area. Public uses and enjoyment of these resources also depend on the health and quality of the Ashtabula EA area.

4.1 Physical Characteristics

The restoration area is located in northeastern Ohio in Ashtabula County, 55 miles east of Cleveland. The Ashtabula River drainage basin covers approximately 355 Km² with the River entering the Central Basin of Lake Erie at the City of Ashtabula. South of the City of Ashtabula land use is a mixture of agriculture and forest. Immediately south of the City of Ashtabula, in the Ashtabula River Gulf area, is the 405 acre Indian Trails Park owned and operated by the Ashtabula Township Parks Commission. The Park encompasses four miles of the Ashtabula River creating a unique park setting characterized by scenic vistas and aquatic life, adjacent flood plain, upland hardwood forests, wetlands, sensitive wildflowers and wildlife habitat. The bedrock in the area slopes towards Lake Erie and varies in depth from 0-60 feet. The predominant soils in the area are silt and clay. This area is impermeable glacial till. The climate of the restoration area is seasonal and continental, with an average July high air temperature of 82.4 degrees Fahrenheit, and an average January low air temperature of 17.6 degrees Fahrenheit. Annual precipitation is approximately 36.6 inches.

4.2 Biological Environment

4.2.1 Habitat/Vegetation

Upstream of the City of Ashtabula, habitat consists of a mixture of agricultural lands and forest dominated by maple (*Acer sp.*), black cherry (*Prunus serotina*), ash (*Fraxinus sp.*), and oak (*Quercus sp.*) trees. “High quality” natural forest (primarily comprised of native species) exists on the east valley wall of the Ashtabula River just south of the mouth of Fields Brook. Non-native species, including garlic mustard (*Allaria petiolata*) and Japanese honeysuckle (*Lonicera japonica*) exist as the under-story vegetation in the forest south of Fields Brook (around Riverside Marina). West of the Ashtabula River mouth (near Walnut Beach) there is an important sand dune system. The sand dunes, dominated by beach grass, have been cited by a Cleveland Museum of Natural History Curator as one of the finest beach grass dunes in Ohio (Ashtabula River Partnership 2001).

4.2.2 Listed, Proposed, and Candidate Species

The Ashtabula Site falls within range of the Indiana bat, piping plover, and clubshell mussel, Federally-listed endangered species. An endangered species is any species that is in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered in the foreseeable future. A candidate species is a species for which the USFWS has sufficient information on their biological status and threats to propose listing them as endangered or threatened under the Endangered Species Act, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

The Federally-listed species discussed above are potentially present in the restoration area boundaries for both Alternative B and C. The following sections provide additional information on Federally-listed species.

4.2.2.1 Birds

Piping plover (*Charadrius melodus*) habitat includes sand or pebble beaches with sparse vegetation along the shore of Lake Erie. The piping plover was designated as endangered in the Great Lakes watershed in December 1985. The decline in piping plover populations has been linked to natural and human caused factors such as high water levels, eroding beaches, and commercial and residential beach front. Critical habitat for the piping plover was designated in 2001 at Headlands Dune in neighboring Lake County and Sheldon Marsh in north central Ohio's Erie County. Critical habitat is an area that is essential for the conservation of a threatened or endangered species that may require special management and protection.

A bald eagle (*Haliaeetus leucocephalus*) nest has been documented in southern Ashtabula County at Rock Creek. Bald eagles build large stick nests lined with soft materials such as grass, leaves, and Spanish moss. Nests are used for several years by the same pair of eagles, with the birds adding materials each year. The bald eagle was designated as endangered in the lower 48 states in March of 1967 due to declining populations resulting from chemical usage, shooting and persecution of individual birds, and the loss of nesting habitat due to development along the coast and near inland rivers and waterways. After years of protection, decrease in chemical usage in the United States, and education against shooting eagles, there has been an increase in eagle populations. The bald eagle was reclassified as threatened in 1995. In 2007, the bald eagle was de-listed, but is protected under various Federal statutes.

4.2.2.2 Mammals

The Indiana bat (*Myotis sodalis*) was designated as endangered throughout its range in March of 1967. Limestone caves are used for winter hibernation. The decline of this species has been attributed mainly to human disruption and commercialization of roosting caves. During the summer months, the bats roost in trees which have exfoliating bark, and dead or live trees with split tree trunks and/or branches, and cavities (that may be used as maternity or male roost areas). Stream corridors, riparian areas, and upland woodlots provide forage sites.

4.2.2.3 Aquatic Organisms

The clubshell mussel (*Pleurobema clava*) was designated as endangered throughout its entire range in January of 1993. Impacts to this species include runoff and channelization, domestic and commercial pollution, in-stream sand and gravel mining, impoundment, and zebra/quagga mussel infestation. These mussels occur in small rivers and streams in clean sweep sand and gravel. They have been found to bury themselves in clean, loose sand to a depth of 2-4 inches. The fish host species for the larvae is the striped shiner. This mussel was last observed in southern Ashtabula County, Wayne Township, in the Pymatuning Creek watershed by ODNR in August of 1993.

4.2.2.4 Reptiles

The eastern massasauga (*Sistrurus catenatus*) was elevated to Federal Candidate status in 1999. Destruction and modification of habitat is the main threat to this species. The massasauga is a small to medium-sized snake that inhabits various wetland types as well as dry, well-drained

sandy uplands. This snake has been previously documented in Ashtabula County (2003 is the latest observation recorded by ODNR in the County).

4.2.2.5 State-Listed Species

In addition to Federally-listed endangered and threatened species, the state of Ohio Department of Natural Resources Division of Natural Areas and Preserves maintains a database of rare plants and animals. The following general listing categories are used: (1) *endangered* - a native species or subspecies threatened with extirpation from the State: this danger may result from one or more causes, such as habitat loss, pollution, predation, interspecific competition or disease; (2) *threatened* - a species or subspecies whose survival in Ohio is not in immediate jeopardy, but to which a threat exists: continued or increased stress will result in its becoming endangered; and, (3) *species of concern* - a species or subspecies which might become threatened in Ohio under continued or increased stress, or a species or subspecies for which there is some concern but for which information is insufficient to permit an adequate status evaluation. In Ashtabula County, there are 32 endangered, 34 threatened, and 13 species of special concern. Section 4.2.3 discusses some of these and other Ohio species. The Ohio Natural Heritage Database includes the following state threatened and endangered fish, wildlife, and plants that could be found in the Ashtabula River watershed: barn owl (*Tyto alba*), burbot (*Lota lota*), Great Lakes crayfish (*Orconectes propinquus*), mourning warbler (*Oporornis philadelphia*), sora (*Porzana carolina*), spotted turtle (*Clemmys guttata*), Virginia rail (*Rallus limicola*), American beach grass (*Ammophila brviligulata*), sea rocket (*Cakile edentula*), and inland beach pea (*Lathyrus japonicus*).

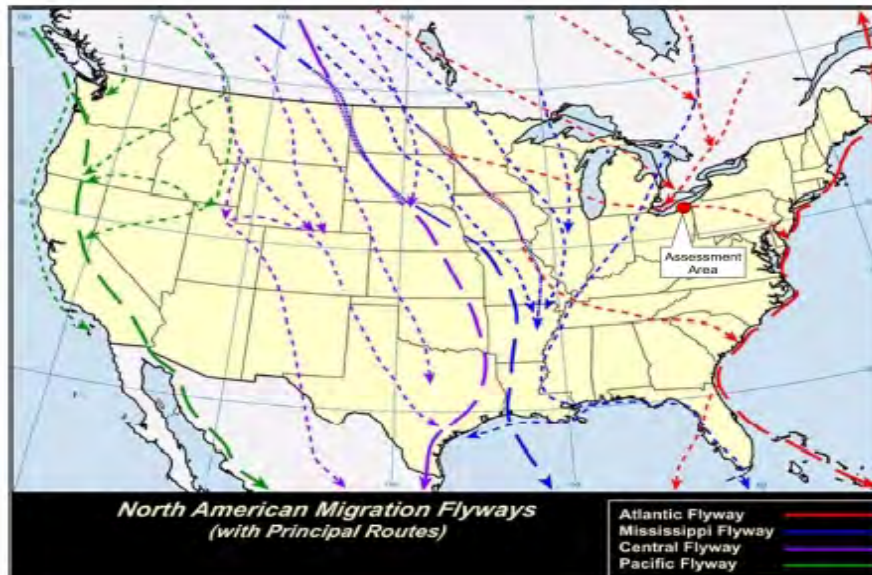
4.2.3 Other Fish and Wildlife Species

The following section provides a general list of fish and wildlife found in the Ashtabula area. Additional species may be found. The Ashtabula River and Harbor contain a variety of habitats and a diverse assemblage of fish and wildlife species, which have been exposed to and/or injured by hazardous substances. The Ashtabula Harbor is located on both the Atlantic and the Mississippi flyways, with over three million ducks and geese using this corridor (see Figure 4). Many migratory bird species nest on the outer breakwalls and wetlands near the river. These include, but are not limited to, the osprey (*Pandion haliaetus*), wood duck (*Aix sponsa*), Canada goose (*Branta canadensis*), common merganser (*Mergus merganser*), great blue heron (*Ardea herodias*), cliff swallow (*Hirundo pyrrhonta*), tree swallow (*Tachycineta bicolor*), Caspian tern (*Sterna caspia*), Forster's tern (*Sterna forsteri*), common tern (*Sterna hirundo*), mallard (*Anas platyrhynchos*), black duck (*Anas rubripes*), lesser scaup (*Aythya affinis*), and kingfisher (*Ceryle alcyon*). Numerous additional species of migratory neotropical songbirds inhabit the area seasonally. Bobcat (*Lynx rufus*) and black bear (*Ursus americanus*), both State-listed species, were documented in Ashtabula County in 2000. Smaller mammals likely to use the Ashtabula area include opossum (*Didelphis virginiana*), eastern cottontail rabbit (*Sylvilagus floridanus*), eastern chipmunk (*Tamias striatus*), woodchuck (*Marmota monax*), eastern gray squirrel (*Sciurus gireus*), red fox (*Vulpes fulva*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*).

Fish species in, or seasonally using the Ashtabula River and Harbor include, but are not limited to, least brook lamprey (*Lampetra aepyptera*), northern bigeye chub (*Notropis amblops*), rosyface shiner (*Notropis rubellus*), mimic shiner (*Notropis volucellus*), spottail shiner (*Notropis*

hudsonius), emerald shiner (*Notropis atherinoides*), black redhorse (*Moxostoma duquesnei*), silver redhorse (*Moxostoma anisurum*), white sucker (*Catostomus commersoni*), rainbow darter (*Etheostoma caeruleum*), Johnny darter (*Etheostoma nigrum*), log perch (*Percina caprodes*), walleye (*Stizostedion vitreum*), yellow perch (*Perca flavescens*), white bass (*Morone chrysops*), smallmouth bass (*Micropterus dolomieu*), pumpkinseed (*Lepomis gibbosus*), white crappie (*Pomoxis annularis*), common carp (*Cyprinus carpio*), brown bullhead (*Ictalurus nebulosus*), alewife (*Alosa pseudoharanguis*), rainbow smelt (*Osmerus mordax*), freshwater drum (*Aplodinotus grunniens*), lake sturgeon (*Acipenser fulvescens*), coho salmon (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*). Rainbow smelt (*Osmerus mordax*), rainbow trout (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*) and Chinook salmon (*Oncorhynchus tshawytscha*) are anadromous fish species. Great Lakes populations of lake trout (*Salvelinus namaycush*), yellow perch (*Perca flavescens*), lake sturgeon (*Acipenser fulvescens*), walleye (*Stizostedion vitreum*), and forage fish are nationally significant fish stocks pursuant to the Great Lakes Fish and Wildlife Restoration Act. Four fish species of Special Concern in Ohio have been listed in the Ashtabula River lacustruary. These are the Great Lakes muskellunge, blacknose shiner, lake sturgeon, and the northern brook lamprey. In addition, a variety of reptile and amphibian species are potentially present at Ashtabula, including snapping turtle (*Chelydra serpentina*), green frog (*Rana clamitans*), and eastern milk snake (*Lampropeltis triangulum*) (U.S. FWS 2001).

Figure 4: North American Migration Flyways – Atlantic flyway through Ashtabula County, Ohio (map modified from <http://birdnature.com/allflyways.html>)



4.3 Land Use

The Ashtabula area is comprised of a mix of agricultural, residential, industrial, and undeveloped land. Approximately 75% of land use in Ashtabula County is agricultural/rural. Less than ten percent was residential in 1980, with the City of Ashtabula the only major urbanized area. Aerial photos comparing overall land use in the Fields Brook and Ashtabula River area between 1938 and 1994 is presented in Appendix B.

4.4 Cultural Resources

Historically, along the banks of the Ashtabula River, there were large conical mounds in which human skeletons were found. The mounds have since been destroyed (Ashtabula River Partnership 2001). As of November 1, 2003, the County of Ashtabula contains 36 properties listed on the National Register of Historic Places, of which nine are in the City of Ashtabula.

4.5 Local Socioeconomic Conditions

According to the U.S. Census Bureau, Ashtabula County and the City of Ashtabula had 102,728 and 20,962 people respectively in 2000. The City of Ashtabula is the only major urban center in the watershed. There are several parks in the City of Ashtabula area. Agriculture and rural areas can be found throughout the remainder of the drainage basin. Ashtabula Harbor is located at the mouth of the Ashtabula River on the south shore of Lake Erie, and is an important commercial harbor on Lake Erie. Land use in the Harbor area includes industrial, commercial, residential, park, public use, and marina. Commodities such as iron ore, coal, other bulk commodities, and general cargo transit the Harbor. Approximately 4.0 million tons of ore and 6.0 million tons of coal are transported per year (Ashtabula River Partnership 2001).

SECTION 5

ENVIRONMENTAL CONSEQUENCES

5.1 Alternative A: No Action

5.1.1 *Habitat Impacts*

Under Alternative A, no habitat would be restored, enhanced, or preserved beyond what the Trustees are currently doing within mandates, policies and restricted budgets. Loss of habitat due to development and other sources of environmental degradation not related to hazardous substance releases is expected to continue to occur. The public would not be compensated for injuries to natural resources from the releases of hazardous substances into the environment.

5.1.2 *Biological Impacts*

Fish and wildlife harmed by releases of hazardous substances into the environment would not be restored, rehabilitated, replaced and/or the equivalent acquired. Populations of fish and wildlife species that rely on wetlands for spawning and nurseries would not increase sufficiently to compensate for past losses.

5.1.3 *Listed, Proposed, and Candidate Species*

Negative impacts to listed species would not be reduced under this Alternative.

5.1.4 *Cultural Resources*

No cultural resources have been identified.

5.1.5 *Environmental Justice*

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 Federal Register 7629 (1994)), directs Federal agencies to incorporate environmental justice in their decision making process. Federal agencies are directed to identify and address as appropriate, any disproportionately high and adverse environmental effects of their programs, policies and activities on minority or low-income populations.

Under the No Action Alternative, wildlife viewing and environmental education opportunities would not improve through enhancement projects. While affluent individuals can afford travel and pay for alternatives, low-income individuals are less capable of doing so.

5.1.6 *Socioeconomic Impacts*

This Alternative would not result in any positive indirect impacts on the local economy. This Alternative would not result in additional lands that could provide increased recreational opportunities and related economic development in the area.

5.1.7 *Cumulative Impacts*

If this Alternative was implemented, the cumulative impacts would be adverse to the environment. The exclusive reliance on regulations and policies do not necessarily provide for long term preservation of valuable wetland and upland habitats. The upper watershed of the Ashtabula River includes many different habitats, such as flood plain forests, dry upland forests, and hemlock ravines. Numerous palustrine emergent and forested wetland areas are located throughout the Ashtabula area, including Ashtabula Township. Deep open water fisheries exist inside and outside the stone breakwaters of Ashtabula Harbor. Birds use the shoreline along Ashtabula Harbor as Lake Erie migration corridor habitat. Impacts to these and other resources would continue due to historical and on-going development. No fishery resource enhancement projects would be implemented under the No Action Alternative, thus further impacting the fishery. The loss and degradation of coastal and riparian wetlands would contribute to the continued instability of the fish community in the Ashtabula River and Harbor. The continued loss of habitat could also adversely affect migratory birds that use the area for resting grounds, and nesting area for those species that remain for the nesting season.

5.2 *Alternative B: Natural Resource Based Restoration (Preferred Alternative)*

5.2.1 *Habitat Impacts*

Preserving, restoring or enhancing riparian, wetland, flood plain and upland habitats improves ecological functions that are essential for many fish and wildlife species. In addition, habitat restoration and preservation also improve public use and enjoyment of these resources. Benefits of aquatic and near-shore habitat improvements or enhancement would include improved water quality, reduced sediment loadings, restored habitat for fish and wildlife species, and increased ecological productivity. Improving the quality of vegetation and habitat for fish and birds would provide similar, though not the same ecological functions as those injured by hazardous

substances. These and other long-term benefits outweigh any adverse impacts associated with specific habitat restoration or enhancement methods.

Under Alternative B, there would be minimal short-term impacts to habitat due to the manipulation of soil required to complete wetland and aquatic habitat restoration and enhancement projects. Some permanent impacts could occur if habitat is destroyed to construct trails, boat ramps, or other public use facilities. However, these same projects would also be directed to control and monitor human impacts on those resources.

5.2.2 *Biological Impacts*

The restoration alternatives would benefit many different species of fish and wildlife found in the area. Preservation, reestablishment and enhancement of wetland, flood plain, riparian, associated upland and aquatic habitats would benefit such species as waterfowl, rails, terns, songbirds, osprey, mink, beaver, and northern pike. Fishery resource enhancement projects would benefit species such as the black redhorse, rock bass, and smallmouth bass leading to the development of a balanced, healthy fish community. Through the habitat quality improvement projects there would be an increase in shallow waters and beds of submergent and emergent vegetation providing habitat for migrating waterfowl, feeding areas for shorebirds, waterbirds and many species of fish found in the area. There would be minimal negative impacts to biological resources from human disturbance in relation to use of preserved areas and natural resource based public use projects. The public use projects would also protect and potentially minimize human disturbance to fish and wildlife by controlling human impacts on those resources.

5.2.3 *Listed, Proposed, and Candidate Species*

Federal and State-listed or endangered species would receive further protection and aid in the recovery of the species if this Alternative was implemented. Wetland, flood plain, riparian, associated upland and aquatic habitat preservation would most likely benefit bald eagles, eastern massasaugas, and Indiana bats. Protective measures (Appendix A) would be taken during implementation of any projects. Adherence to the restrictions should provide for no adverse effects on the listed species.

5.2.3.1 Birds

Bald eagle nesting and prey species could be directly or indirectly reestablished, enhanced, or preserved through the restoration alternatives. Alternative B could include protection or acquisition of habitat needed by the piping plover for nesting.

5.2.3.2 Mammals

The Indiana bat may use stream corridors or uplands restored or acquired under Alternative B. State-listed endangered species such as the black bear or the bobcat may use lands restored or acquired under Alternative B.

5.2.3.3 Reptiles

Populations of the federal candidate species eastern massasauga snake, and the State-listed (threatened) spotted turtle (*Chlemmys guttata*), have been affected by habitat fragmentation and encroachment throughout their range. These species may benefit from projects involving restoration of habitats such as wetlands and associated uplands.

5.2.3.4 Aquatic Organisms

The least brook lamprey, rosyface shiner, big eye chub, mimic shiner, and black redhorse are pollution sensitive State-listed declining species, which are found in the Ashtabula River. The Ashtabula River is one of the last rivers in Ohio that supports a strong population of big eye chub. Protection of riparian forests and aquatic resources will help maintain the presence of these species. The clubshell mussel and other mussel species [i.e. State-threatened black sandshell (*Ligumia recta*)] require clean waterways. Mussel populations may return to surrounding waterways once aquatic and near-shore habitat restoration projects improve overall water quality in the area.

5.2.3.5 Plants

Although there are no known Federally-listed plant species, there are many State-listed plant species within Ashtabula Township and Ashtabula County. Per the Ohio Department of Natural Resources Natural Heritage database, there are 26 State-listed endangered and 30 State-listed threatened plant species in Ashtabula County. These species include American beach grass (*Ammophila brvigulata*), deer's tongue arrowhead (*Sagittaria rigida*), inland beach pea (*Lathyrus japonicus*), northern blue-eyed grass (*Sisyrinchium montanum*), Schweinitz' umbrella sedge (*Cyperus schwein-itzii*), and sea rocket (*Cakile edentula*). Wafer ash (*Ptelea trifoliata*) is a dune shrub found along Lake Erie that is otherwise rarely found east of Cleveland. The giant swallowtail butterfly is often found in association with the wafer ash.

5.2.4 Cultural Resources

Projects covered under this document such as plugging drainage ditches, breaking tile systems, stabilizing stream banks, acquiring wetlands, and development for public uses or other eventual development on acquired lands have the potential to affect properties meeting the criteria for the National Register of Historic Places and other cultural resources. The Trustees are in the process of determining specific areas for wetland restorations, stream bank stabilization, and land acquisition. When these project areas have been determined, and prior to making final decisions about these projects, the Field Supervisor, Reynoldsburg Ecological Field Office, will initiate consultation with the Ohio State Historic Preservation Officer and, with the assistance of the USFWS Regional Historic Preservation Officer, will complete the Section 106 process as described in 36 Code of Federal Regulations Part 800.

5.2.5 Environmental Justice

Wetland, flood plain, riparian and upland preservation would involve transactions with willing landowners. No minority or low-income populations would be displaced or negatively affected in any way. While the primary purpose of the restoration of this land is for fish and wildlife,

portions of the acquired properties may be used by the public for active and passive natural resource based recreational and educational activities, such as fishing and/or wildlife viewing. Aquatic habitat improvement would also enhance recreational opportunities in and around the Ashtabula River and Harbor.

5.2.6 *Socioeconomic Impacts*

The overall quality of life for the surrounding communities would improve with the restoration of the area. Protection of wetlands, riparian, flood plains and uplands would provide wildlife viewing, fishing and hunting, and help create positive economic impacts on the local economy. Aquatic habitat improvements or enhancements would provide more opportunities for public enjoyment of natural resources.

Land acquisition procedures would involve transactions with willing sellers who would be paid fair market value. There would be little or no impact on the market price or on landowners in the area who choose not to sell. There would be minimum effects on the local economy and tax base because the areas identified for preservation are currently undeveloped.

5.2.7 *Elements Common to All Impacts*

Other impairments to the ecosystem such as pollution associated with development would continue to affect the area where restoration projects would be implemented. These additional sources of impact may also inhibit the ability of the natural resources to fully recover or may negatively impact other restoration projects undertaken by the Trustee Council.

5.2.8 *Cumulative Impacts*

Cumulative impacts from habitat restoration or enhancement implemented under Alternative B would positively affect the region as a whole. Despite the existence of laws and regulations designed to minimize wetland and aquatic habitat losses and impacts, threats to wetlands and aquatic habitat from indirect impacts, cumulative small scale impacts, or surrounding land use changes still exist. Partnering with various State and Federal programs (EPA's Section 319 Clean Water Act State Grants, National Coastal Wetlands Conservation Grants, etc.) that already contribute to improving the health of the ecosystems and watersheds will aid in restoring more habitats and increasing fish and wildlife populations.

Migratory birds would benefit from this Alternative because there would be more undisturbed areas for spring and fall migration resting and feeding stopovers, as well as nesting habitat for other bird species. This Alternative would contribute to the stabilization of fish communities by implementing appropriate fishery resource projects such as restoring fish spawning and nursery habitats.

5.3 *Alternative C: Augmentation of Human Use Related Natural Resource Services in the Ashtabula Watershed and Adjacent Lake Erie*

5.3.1 *Habitat Impacts*

Under this Alternative there would be no improvement of habitats for fish and wildlife. Construction of structures to improve human access may actually result in habitat loss and subsequent losses in biological productivity.

5.3.2 *Biological Impacts*

Under this Alternative biological productivity would not be increased, and fish, birds, and other wildlife would not benefit. The potential loss of habitat may likely result in decreases in biological productivity and increased ecosystem fragmentation.

5.3.3 *Listed, Proposed, and Candidate Species*

No benefits would be derived by listed, proposed, or candidate species.

5.3.4 *Cultural Resources*

Projects covered under this document have the potential to affect properties meeting the criteria for the National Register of Historic Places and other cultural resources. With the exception of the CDM Property, specific project sites have not been determined. When these project areas have been determined, and prior to making final decisions about these projects, the Field Supervisor, Reynoldsburg Ecological Field Office, will initiate consultation with the Ohio State Historic Preservation Officer and, with the assistance of the USFWS Regional Historic Preservation Officer, will complete the Section 106 process as described in 36 Code of Federal Regulations Part 800.

5.3.5 *Environmental Justice*

Land acquisitions and other activities would involve transactions with willing landowners. No minority or low-income populations would be displaced or negatively affected in any way. Provision of fishing piers and other structures could improve access for lower income individuals.

5.3.6 *Socioeconomic Impacts*

The overall quality of life for the surrounding communities would improve with the restoration of the area. Augmentation of human use related services would help create positive economic impacts on the local economy.

5.4 Summary of Environmental Consequences for Each Alternative

Table 2: Comparison of Alternative A, B & C Environmental Consequences

Attributes	Alternative A No Action	Alternative B Natural Resource Based Restoration (Preferred Alternative)	Alternative C Augmentation of Human Use Related Natural Resource Services
Wetlands	Expected continued net loss of habitat	Increase of wetland habitat	Expected continued net loss of habitat
Uplands associated with wetlands	Expected continued net loss of habitat	Increase of upland habitat associated with wetlands	Expected continued net loss of habitat
Aquatic and near-shore habitat	Expected continued degradation and loss of habitat	Increase of aquatic habitat	Expected continued degradation and loss of habitat
Fish resources	Expected populations would remain unbalanced for a greater length of time	Expected increase diversity of fish community and populations	Populations would remain unbalanced for a greater length of time
Wildlife resources	Expected continued harm and decrease of numbers	Expected increase in populations	Expected continued harm and decrease of numbers
Listed threatened or endangered species	Expected negative impacts would continue	Expected to provide further recovery of species in the area	Expected negative impacts would continue
Cultural resources	N/A	Adverse impacts are possible	Adverse impacts are possible
Surface water	Expected to remain degraded due to sediment and nutrient loading and historic pollution in sediment	Expected increase in surface water quality	Expected to remain degraded due to sediment and nutrient loading and historic pollution in sediment
Environmental justice issues	No opportunities for increased quality of life	Expected increased quality of life in Ashtabula Township/County	Expected increased quality of life in Ashtabula Township/County
Socioeconomic issues	Expected local economy would remain the same or decrease due to continued injury without restoration	Local economy could potentially increase due to restoration	Local economy could potentially increase due to restoration
Recreational use Environmental education and resource enjoyment	No enhancement or increase of low impact recreational opportunities or environmental education	Increase opportunities for wildlife/bird viewing, fishing as well as enhancement of understanding of the ecosystem	Increased opportunities for fishing
Cumulative impacts	Potential decrease in populations of migratory birds, continued degraded fishery and continued loss of wetland and associated upland habitat in the EA area	Expected increase populations of migratory birds and greater diversity in the fish community; some ecosystem functions are to be restored or compensated	Potential decrease in populations of migratory birds, continued degraded fishery and continued loss of wetland and associated upland habitat in the area

SECTION 6

CONSULTATION AND COORDINATION WITH THE PUBLIC AND OTHERS

6.1 National Historic Preservation Act Compliance

The USFWS' Project Leader for Reynoldsburg Ecological Services will provide the State Historic Preservation Officers with this Final RP/EA as part of the public review and comment process.

6.2 Endangered Species Act Compliance

This Final RP/EA complies with Section 7 of the Endangered Species Act (ESA) of 1973 as amended, 16 U.S.C. § 1531, *et seq.*, and its implementing regulation (50 C.F.R. 402) (Appendix A).

6.3 Public Participation

Public review of the Final RP/EA is an integral component of the assessment and restoration planning process. Through the public review process, the Trustees sought public comment on the actions proposed to restore injured natural resources or replace lost resource services as detailed in Section 7.

SECTION 7

PUBLIC COMMENT ON DRAFT RP/EA

This section summarizes public comments received on the Initial Restoration Plan and Environmental Assessment (RP/EA), and provides the Trustees' responses to the comments. The RP/EA was released to the public on March 25, 2008. Comments were received both during the public meeting held on April 22, 2008 and during the public comment period through April 30, 2008.

In total, 36 comments were received on the draft RP/EA. The commenters included both private citizens and those representing various organizations with an interest in the Ashtabula River and Harbor RP/EA (Ashtabula Lighthouse Society; Ashtabula Marine Museum; Ashtabula River Partnership; Ashtabula Township Park Commission; and Western Reserve Land Conservancy). The Responsiveness Summary does not repeat each comment verbatim. Rather, the comments are summarized and grouped into categories. Copies of the original comments are provided in Appendix C of the RP/EA.

Overall, the comments fell into four categories:

- General comments on the Ashtabula RP/EA and/or the natural resource damage assessment (NRDA) process
- Comments on Alternative B (Natural Resource Based Restoration)
- Comments on Alternative C (Augmentation of Human Use Related Natural Resource Services)
- Comments on both Alternative B and Alternative C

I. General comments on the RP/EA for Ashtabula River and Harbor and/or NRDA process:

1. **Comment:** *One commenter questioned why the public hearing was not held in the City of Ashtabula (at Kent State University). The commenter stated that the citizens of Ashtabula had suffered from (Ashtabula River and Harbor) pollution as cancer deaths in East Ashtabula were much higher than normal.*

Response: The Trustees recognize the interest of the Ashtabula City residents in the Ashtabula River restoration, and the Trustees have been committed to public outreach and involvement of the citizens of the Ashtabula area throughout the natural resource damage assessment (NRDA) process. The Trustee representatives attempted to schedule the RP/EA meeting at the Kent State University branch campus, but a room of sufficient size was unavailable during the time period that the public meeting was planned. As a result, the meeting was held at Lakeside High School, which is also within the City of Ashtabula. The Trustees met the public involvement requirement for the draft plan pursuant to the federal regulations (43 CFR Part 11).

Questions relating to excess human cancer risk in the Ashtabula area are beyond the scope of the RP/EA, which is focused on the restoration of injured natural resources. To the extent that the commenter has concerns over cancer risks associated with contamination in the Ashtabula River, such concerns may be presented to the Ohio Department of Health (contact Dr. Robert Frey, at 614-466-1069).

2. **Comment:** *One commenter felt that the public and elected representatives in Ashtabula County should participate in NRDA settlement negotiations. Another commenter also expressed concerns regarding the lack of public input in the NRDA settlement negotiations, which he understood to be a “barter style settlement,” as opposed to a financial settlement. This commenter felt the Trustees would “roll over and settle for just a slap on the wrist,” and that the Trustees had made up their minds on the alternative to be implemented prior to the meeting and that the meeting was only a formality.*

Response: Public comments are not a formality. The regulations⁴ provide for and encourage public involvement at appropriate stages in the NRD process. The Trustees provided the opportunity for public comment on the November 2002 Assessment Plan, as well as this RP/EA. Specific studies⁵ conducted during the assessment were also made available to the public. After receipt, the Trustees carefully consider all public input, including that from elected officials, prior to recommending or selecting natural resource restoration projects. The Trustees also respond to all public comments and as appropriate, explain the rationale if the suggestion(s) made by the commenter(s) was not adopted. Although settlement negotiations are typically confidential, with participation limited to representatives of the parties to the proceeding or proposed proceeding, if the Trustees reach agreement with potentially responsible parties on terms of a proposed settlement of natural resource damage claims relating to the Ashtabula River, the public will have an opportunity to comment on any proposed settlement, and the United States and the State of Ohio will

⁴ 43 CFR 11.81.

⁵ The studies are: PCBs and HCBs in Ashtabula river water, January 30, 2004; Fish Consumption Advisory Report, December 2005; Fish Health Study, July 2006. See: <http://www.fws.gov/midwest/AshtabulaNRDA/>.

consider and respond to any comments received, before the settlement is presented to the court for consideration.

Detailed discussion of the proposed settlement terms is beyond the scope of this Responsive Summary on the RP/EA (as well as being premature, since the parties have not reached agreement on proposed settlement terms at this point). The Trustees are committed to ensuring adequate compensation to the public for injured natural resources in the Ashtabula River, and will not enter into a proposed settlement unless they believe it provides such compensation.

3. **Comment:** *One commenter complained about the Norfolk Southern Coal Terminal impacts on the environment, including filling wetlands, blocking access to the waterfront and emitting “chronic coal dust emissions”. This commenter inquired about the status of negotiations with Norfolk Southern and whether the company had opted out of settlement (negotiations). The commenter also stated that he has (as an individual) established ponds to replace habitat allegedly destroyed by Norfolk Southern and other coal terminal operators. Two commenters also expressed concerns about dust and noise from Norfolk Southern coal operations in the lower river and felt it conflicted with Ashtabula’s designation as a scenic river.*

Response: Regulatory compliance concerns relating to coal pile operations or filling of wetlands are outside the scope of this RP/EA⁶. Any specific questions on Norfolk Southern coal pile operations may be addressed to Ohio EPA’s Division of Air Pollution Control; questions regarding filled wetlands and surface water issues may be addressed to Ohio EPA’s Division of Surface Water (both at 330-963-1290).

The Trustees’ understanding is that the scenic river designation does not extend to the lower river in the area of the coal piles. Questions regarding the scenic river designation may be addressed to the Ohio Department of Natural Resources (ODNR, attention, Assistant Scenic River Manager at 440-992-5845).

The status of settlement negotiations undertaken by the Trustees is outside the scope of the RP/EA. However, the Trustees are engaged in discussions with representatives of various potentially responsible parties, including Norfolk Southern, regarding natural resource damage claims.

4. **Comment:** *One commenter stated that the method used to evaluate the loss of natural resources was biased against Alternative C and that the Trustees “should come up with a new approach that recognizes that compensating the public for the loss of their natural resources is...as important and...deserving...as restor(ing) the resource.” He believed that the companies were “essentially” paying “punitive damages...at this point.” This commenter suggested using weighted factors that support “both...objectives of compensating the public and restoring the resources.” Other commenters concurred that the methodology was biased to “fish & game” and placed “little or no value on human use.”*

⁶ However, if restoration projects are proposed in the vicinity of the coal piles, the Trustees will evaluate the impact of the coal piles, if any, on the ability of a restoration project to achieve its objectives.

Response: Under CERCLA ⁷, natural resource damage settlements can only be used to “restore, replace, or acquire the equivalent” of trust resources injured, destroyed, or lost as a result of the release of hazardous substances. The natural resources injured in the Ashtabula area are the surface waters of the River and Harbor, the fishery, and avian resources. Thus, the Trustees are required by law to evaluate the projects based on their ability to “restore, replace, or acquire the equivalent” of the surface waters, fishery and avian resources injured in the Ashtabula River and Harbor.

The NRDA regulations⁸ require that the Trustees consider ten factors when evaluating the restoration options. The ten factors are: technical feasibility; the relationship of the expected costs of the Alternative to the expected benefits; cost-effectiveness; the results of actual or planned response actions; the potential for additional injury resulting from proposed actions; the natural recovery period; ability of the resources to recover without alternative actions; potential effects of the action on human health and safety; consistency with relevant Federal and State policies; and compliance with applicable Federal and State laws. (See Section 2.4 of this RP/EA for additional information.) Additionally, the Trustees identified four priorities (relationship of the restoration projects to the injuries; quality of restoration opportunities; ecological function; and cost and cost-effectiveness) as key in selecting appropriate restoration projects (See 3.2 of this RP/EA for additional information). Although human use was not explicitly weighted as a factor, it was considered when evaluating the Alternatives. Restoration projects carried out under the NRDA are intended to compensate for loss of services including fishing, bird watching and other active and/or passive recreational activities.

When both Alternative B and Alternative C were evaluated with respect to the ten regulatory factors and four restoration plan priorities, the Trustees concluded that Alternative B is the preferred option. Alternative B enhances ecosystem functionality and public use, and meets the objective of restoring the injured natural resources (See Section 3.5 of this RP/EA for additional information). Alternative C is focused solely on enhancement of human use services.

Finally, the purpose of the NRDA is to seek compensation for losses resulting from injuries to Trust resources; punitive damages are not a part of the NRDA process. NRDA settlements thus do not represent a fine or punitive payment, but instead are meant to restore, replace, and/or acquire the equivalent of the injured resource or resource services.⁹

5. **Comment:** *One commenter noted that Alternative A would not help restore the beneficial uses of the Ashtabula River nor help to delist the river as an area of concern.*

Response: The Trustees concur with the comment. However, the Trustees are obliged by

⁷ Section 107(f)(1) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9607(f)(1).

⁸ See 43 CFR §11.82.

⁹ Responsible parties are required to compensate the public for “injury to, destruction of, or loss of natural resources...resulting from such a release [of a hazardous substance].” CERCLA § 107(a)(4)(C), 42 U.S.C. §9607(a)(4)(C).

the National Environmental Policy Act (NEPA)¹⁰ to present a “no action” alternative; hence, Alternative A was presented as required.

6. **Comment:** *One commenter asked whether NRDA monies had been awarded for the beach cleaner acquired by the City of Ashtabula; he believed the beach cleaner had been used to eliminate some of the threatened and endangered species in the Walnut Beach area.*

Response: No NRDA funds were expended for the beach cleaner; it is the Trustees’ understanding that it was purchased with private funds. Concerns regarding elimination of threatened and endangered species may be addressed to ODNR, Division of Natural Areas and Preserves, North Regional Manager (Gary Obermiller at 440-839-1561).

7. **Comment:** *(Fields Brook funds use) Two commenters asked “why hasn’t the portion of the Fields Brook settlement funds that is still available been set aside for Ashtabula Township (Brockway property) human use (capitalized) and left out of this equation.”*

Response: A separate restoration plan has been developed for Fields Brook, and accordingly, discussion of the Fields Brook settlement proceeds is outside the scope of this RP/EA. However, the Trustees may use the available Fields Brook NRDA funds for restoration projects in the Ashtabula watershed, as described in the “Final Natural Resource Restoration Plan & Environmental Assessment for the Fields Brook Superfund Site.” A copy of that plan is available at <http://www.fws.gov/midwest/AshtabulaNRDA/>. It may also be obtained by calling Regan Williams at 330-963-1210 or Dave DeVault at 612-713-5340.

8. **Comment:** *One commenter asked for a detailed map of the area displaying specific locations of the injured habitat; areas dredged; and targeted (wetlands) restoration. The commenter requested that the map should include privately owned property and man-made structures as well as terrain elevations, wooded areas and other habitat features and be provided on-line (web access) as an adobe document.*

Response: Once an NRDA settlement has been reached and restoration projects have been identified, the Trustees will provide as much detailed information as possible on an Ashtabula NRDA internet site, so that information regarding the restoration projects is readily accessible by the public.

II. Comments on Alternative B (Natural Resource Based Restoration)

II (a). Support for Alternative B:

9. **Comment:** *Several individual commenters and commenters representing various organizations (Ashtabula Township Parks Commission; Ashtabula River Partnership; and Western Reserve Land Conservancy) expressed support for Alternative B as the plan that would best protect and/or restore natural resources in the Ashtabula area.*

Response: The Trustees agree that Alternative B would protect and restore natural resources in the area and would best meet the requirement that any settlement be used to restore, rehabilitate, replace, and/or acquire the equivalent of trust resources injured, destroyed, or lost as

¹⁰ 42 U.S.C. §4321 *et seq.*

a result of the release of hazardous substances.

10. **Comment:** *Commenters noted that the lower Ashtabula River had been designated as an Area of Concern (AOC) by the International Joint Commission (IJC) and that the Ashtabula River Partnership (ARP) had been formed to facilitate dredging of contaminated sediment from the river. The implementation of Alternative B (along with the completion of the dredging project) was critical to accomplish the delisting of the AOC. The six beneficial use impairments (BUIs) (restrictions on fish and wildlife consumption; degradation of fish and wildlife populations; fish tumors and other deformities; benthic degradation; restriction on dredging activities; and loss of fish and wildlife habitat) identified in the Ashtabula AOC needed to be addressed to accomplish de-listing. They believed that Alternative B with its focus on habitat restoration and protection would help address the BUIs and thus further the goal of de-listing the Ashtabula River as an AOC and remove a stigma.*

Response: The Trustees support the objective of de-listing of the lower Ashtabula River as an AOC and believe that the restoration projects, when implemented, will advance this goal.

11. **Comment:** *The Ashtabula Township Park Commission (ATPC) represented by their Chairman supported the acquisition and restoration of land within the Ashtabula River watershed, and indicated the ATPC's willingness to hold title to properties that are within Indian Trails Park or could be added to the Park system. As the stewards of Lakeshore Park and Indian Trails Park in Ashtabula and current owners of the CDM property, the ATPC has developed a Master Plan to enhance active and passive uses of ATPC holdings. The goals in this Master Plan and the ATPC mission to permanently preserve water quality, recreational value and natural resources of the River and its watershed coincide with many of the RP/EA objectives. The ATPC is therefore willing to help meet the RP/EA goals. Further, as ATPC is a public entity, any expenditure of public monies and success of the restoration plans could also be easily monitored in the ATPC holdings. Finally, the ATPC has been working with the Ohio Department of Natural Resources and supports the designation of the Ashtabula as a scenic river.*

Response: The Trustees have worked with the ATPC in the past and are willing to work with them in the future on projects that, by restoring natural resources and providing enhanced public access, will benefit the Ashtabula area and local community.

12. **Comment:** *One commenter noted that Alternative B would also enhance the local economy by promoting nature-based tourism, and improving boating access and fishing opportunities. Another commenter stated that while he understands public interest in using funds for an economic stimulus project, the "long term economic stimulus...from the fisheries and eco-tourism will be an on-going revenue stream for the community." This commenter emphasized the positive connection between green space and property values and noted that there should not be a struggle between economic stimulus and restoration projects since the goals were identical; if a "vibrant" fishery could be restored and the riparian corridors protected, then this fishery would fund and finance continued economic development.*

Response: The Trustees' focus is on restoring, replacing, and/or acquiring the injured natural resources, so economic impacts were not explicitly evaluated in this RP/EA. The

Trustees concur that there is research in coastal areas and riverine systems cited in peer-reviewed publications that indicates that aquatic habitat restoration and protection (including of the riparian zone) has led to increased economic benefits. Research in the Great Lakes also indicates that property values have increased as a result of sediment remediation and associated natural resource improvements. The Trustees thus anticipate that implementing Alternative B will provide both environmental and economic benefits to the local community.

13. **Comment:** *One commenter noted that the local fishery would be greatly enhanced by restoring and creating wetlands in the watershed. The commenter also noted that absent post-remedy restoration, the river might require several decades to recover. One commenter discussed historic impacts on the Ashtabula River and recommended protection of wildlife resources in the area. Specific suggestions ranged from fish stocking to litter control. Another commenter stated that the actions to provide fish habitat under Alternative B would need to be implemented before pursuing Alternative C (promoting fishing).*

Response: The Trustees believe that projects to promote healthy fish population(s) in the Ashtabula River and Harbor are an important part of NRDA restoration. The Trustees agree that creation and/or restoration of wetlands have the potential to enhance the local fishery. The Trustees also concur with the scientific premise that absent post-remedy restoration, the ecosystem may not achieve full ecological functionality or will take substantially longer to recover. The specific suggestions provided will be considered when individual restoration projects are evaluated.

14. **Comment:** *One commenter asked “what are the acres that (the Trustees) want to see restored” (under Alternative B).*

Response: Generally, the Trustees are focusing on restoring, replacing and/or acquiring wetlands, riparian habitat and ecologically associated uplands in proximity to the Ashtabula River and Harbor. The number of acres to be acquired and restored will depend on the ecological functionality and services provided by the particular restoration project(s), which is not known at this point. Overall, the Trustees propose to restore, replace and/or acquire sufficient habitat acreage to compensate for injury to natural resources.

15. **Comment:** *One commenter requested that the restoration plan specifically address the Gulf Area, and asked whether it could be made into a Federal Park to support year-round recreation.*

Response: Creation of a National Park is beyond the jurisdiction and authority of the Trustees. The Trustees recognize that the Ashtabula River Gulf Area in the Indian Trails Park System is a significant natural and cultural resource. As noted in the response to comment #15, the Trustees are willing to work with the ATPC on restoration projects in the area.

16. **Comment:** *Another commenter supported the restoration plan for the CDM (Brockway) property area, and suggested connecting it to the Indian Trails Parks system (Greenways Trail) to provide enhanced public access and encourage tourism; a small educational center or kiosk could be added to augment educational opportunities. Two commenters asked how*

much money had been awarded to the ATPC for the CDM property acquisition, and what other monies were awarded from the (NRDA) source.

Response: In accordance with the Final Natural Resource Restoration Plan & Environmental Assessment for the Fields Brook Superfund Site, the Brockway (also known as CDM) property was purchased for \$275,000 by the ATPC with funds provided from the Fields Brook NRDA settlement; no other NRDA funds have been expended on the property to date. These funds were provided under a Cooperative Agreement between the ATPC and the U.S. Fish and Wildlife Service. Thus, the property has already been incorporated into the Indian Trails park system. Future plans call for construction of a boardwalk, which could be connected to the existing trail system; some type of educational kiosk may also be possible.

17. **Comment:** *Two commenters preferred Alternative B, but supported only the acquisition of the Walnut Beach area as having the greatest potential for eco-tourism and preservation of threatened and endangered species. They believed that removing the coal pile would address a fire hazard and along with removal of Phragmites, help restore natural fauna and flora in the area. Another commenter also suggested acquiring dune lands and swales in and around Walnut Beach, and improving public access to that area.*

Response: The Trustees concur that the Walnut Beach area has tremendous ecological potential, if restored. Pursuant to the Final Natural Resource Restoration Plan & Environmental Assessment for the Fields Brook Superfund Site, the Trustees previously selected a restoration project for the Walnut Beach area, to be funded from the Fields Brook NRDA settlement. The Trustees put substantial effort into the design(s) of a project to eliminate invasive plants and establish native vegetation in the Walnut Beach area. The Fields Brook natural resource restoration account still has sufficient funds to undertake the Walnut Beach restoration project. However, implementation of the project will require a Cooperative Agreement between the City of Ashtabula and the U.S. Fish and Wildlife Service in order to transfer funds for the work, provide access to the project area, and address other legal issues.

In summary, the Trustees would like to move forward with projects at Walnut Beach, and look forward to cooperation and participation from the City of Ashtabula to make the project(s) possible.

18. **Comment:** *Another commenter cited the importance of acquiring, restoring and rehabilitating habitat closest to the mouth of the Fields Brook and downstream to the harbor, and specifically supported the 5 ½ Slip and adjoining peninsula projects as “prime candidates”.*

Response: The Trustees concur that restoring the 5 ½ Slip and adjoining peninsula would provide valuable riparian, upland and possibly wetland habitat in some of the only “soft” shoreline area(s) in the lower river. Accordingly, discussions regarding potential restoration projects are occurring with property owner(s) in this area.

19. **Comment:** *One commenter wanted the “armored” river bank (for the 1st mile from the mouth at Lake Erie) to be returned to a natural state and accessible to the public.*

Response: The Trustees do not presently have plans for stream bank restoration downstream of the Fifth Street Bridge because, as the commenter points out, the entire reach is armored and this portion of the river is a commercial navigation channel. The Trustees are therefore focusing on areas further upstream, where there is more potential for establishing quality shallow stream bank habitat.

20. **Comment:** *One commenter would like Strong Brook restored to serve as a natural spawning area for Lake Erie fish species.*

Response: The Trustees believe that the possibility of on-going injury in specific areas should play a role in project selection. For most of its length, Strong Brook is a culverted storm sewer and has recently been found to be contaminated with polychlorinated biphenyls (PCBs). Ohio EPA and U.S. EPA have been working to address the PCB sources, and to ensure that the Brook does not present a threat of recontamination to the Ashtabula River. Restoration options are thus limited in Strong Brook and the Trustees are not, at this time, considering any restoration projects in Strong Brook.

21. **Comment:** *One commenter asked why restoration projects could not be conducted in the Fields Brook area, particularly since cleanup had already been accomplished in this area.*

Response: Fields Brook is a Superfund Site with ongoing remedial activities. Additional sources of contamination in Fields Brook have been discovered post-remedy, and efforts are still on-going to address these sources. Accordingly, implementation of restoration projects along the Brook could interfere with remedial projects and could, potentially, result in additional releases of hazardous substances. Nonetheless, the Trustees, along with Ohio EPA's Division of Surface Water, evaluated the ecological habitat in the Fields Brook to identify potential opportunities for restoration. The Trustees determined that no restoration opportunities were available directly on the Brook. The Trustees noted that the Brook itself has been remediated under U.S. EPA oversight to maximize ecological functionality. In the lower reaches, Fields Brook is a primarily industrialized area with minimal opportunities for restoration; in the upper reaches, good quality ecological habitat is already present, and restoration is not necessary. Therefore, the Trustees chose to use the Fields Brook NRDA settlement funds to implement projects elsewhere in the Ashtabula area.

II (b). Opposition to Alternative B

22. **Comment:** *One commenter pointed out that there were limited actions that could be taken to restore the damaged portions of the Ashtabula River and the watershed. The commenter noted that much of the riverbank from the 24th Street Bridge downstream, as well as most of the immediate area of the Lake Erie shoreline to the east and west of the river mouth is industrialized and/or owned by private entities that would not be amenable to restoring fish habitat in the area.*

Response: The Trustees agree with the commenter that much of the riverbank and shoreline is industrialized and/or owned by private entities, and therefore restoration potential is limited downstream of the 24th Street Bridge. Because of these circumstances, the Trustees have determined that habitat protection through acquisition or other conservation measures will meet restoration objectives. There may be opportunities in this area to restore valuable

habitat, such as the restoration of the 5 ½ Slip and other projects. The Trustees are in the process of identifying and evaluating these restoration opportunities.

23. **Comment:** *One commenter felt that if the river was cleaned up, fish would return on their own (i.e., restoration was unnecessary).*

Response: The Trustees agree that some natural recovery will occur, but natural resource restoration projects can increase the rate and extent of that recovery. Restoration and protection of existing wetlands and riparian habitat, as well as creation of new wetlands and fish spawning and nursery areas will increase the overall biological productivity of the Ashtabula River. This will result in an improved fishery, and partially compensate the public for past losses. Implementation of Alternative B will also ensure that natural areas will be preserved, that otherwise could be lost to development. The Trustees will weigh both the short-term and long-term costs and benefits of each restoration action to determine if specific/individual proposed restoration plan(s) will help return the river to ecological functionality.

III. Comments on Alternative C (Augmentation of Human Use Related Natural Resource Services)

III (a). Support for Alternative C

24. **Comment:** *Several commenters supported enhanced human access to the waterfront. The commenters generally believed that Alternative C would provide immediate benefits in the form of access to and appreciation for the harbor area and lighthouse by both current and future generations. Specific projects supported by the commenters include improvements to the Breakwall Lighthouse, walkway(s) to the Lighthouse and along Walnut Beach; an interpretative educational center at Walnut Beach; and canoe launches and providing handicapped access in the form of ramps on fishing piers and walkways. In general, commenters' opinions were divided on whether (i) a portion or (ii) all of any settlement should be spent on Alternative C. One commenter suggested, at a minimum, funding a feasibility study for Lighthouse/Walnut Beach access projects.*

Response: The Trustees carefully considered the projects proposed by some local community members and organizations. These projects have been designated as Alternative C under the RP/EA. In their analysis, the Trustees evaluated the nexus between those projects and the statutory¹¹ and regulatory¹² requirements that projects restore, replace, and/or acquire the equivalent of the resources injured from release(s) of hazardous substances into the environment. The Trustees determined that, although projects under Alternative C could potentially provide economic and educational benefits to the Ashtabula area, those projects are not nearly as favorable to the restoration of impaired resources as the types of projects selected by the Trustees. Additional responses on the specific projects are provided below, and in Response # 27.

¹¹ Section 107(f)(1) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9607(f)(1).

¹² 43 C.F.R. § 11.81.

- The Breakwall lighthouse project, as proposed to the Trustees, includes improvements to the lighthouse, construction of a walkway to the lighthouse, and construction of a transient boat dock. Construction of the walkway and the transient boat dock could provide fishing access, and therefore, provide services similar to those lost due to fishery injuries. Based on information presented by the consultant to the City of Ashtabula in a November 15, 2006 meeting with the Trustee representatives, the estimated cost of the project is around \$8,000,000.¹³
- The Trustees believe that the estimated cost and benefits of the Breakwall Lighthouse project are not nearly as favorable to the restoration of impaired resources as the types of projects selected by the Trustees – which include protection and restoration of important habitat units, direct streambank restoration, in-stream aquatic habitat restoration, restoration of ecologically significant hydraulically connected wetlands, and increased public access to resources for ecologically sensitive use and enjoyment. The Trustees strongly believe that these types of projects will more directly address injuries caused by hazardous substances through water quality improvements, increased productivity of fishery and avian resources, and enhanced fishing and recreational opportunities for the public. For these reasons, the Trustees have not selected Alternative C as the Preferred Alternative.
- The Trustees will consider incorporating canoe launches into the proposed restoration plans under Alternative B, to the extent feasible.

25. **Comment:** *Two commenters cited the Fox River settlement as an example of how projects could be tailored to meet the needs of the ecosystem while expanding public access; one of these commenters provided drawings and maps supporting a more expansive set of projects.*

Response: The Trustees believe that projects which include habitat restoration, wetland creation, riparian protection, boat launch facilities and trails will help restore natural resources in the Ashtabula River ecosystem and expand public access. Thus, the projects proposed for the Ashtabula NRDA are consistent with restoration projects in other NRDA settlements including Fox River, although on a scale that is consistent with the available funds, restorations opportunities, and impacts at the respective sites. Specific suggestions to balance ecological restoration with human use will be considered when individual projects are implemented.

26. **Comment:** *Two commenters wanted a portion of any monetary settlement to be used to help revive the tourism industry.*

Response: The Trustees have a legal obligation under CERCLA to ensure that restoration funds are used only for appropriate restoration projects. The Trustees are not permitted to provide NRDA funds to revive the tourism industry. However, the Trustees anticipate that the enhancement of ecological habitat proposed in Alternative B will result in improvements to the fishery and avian resources that may lead to increased tourism in the area.

¹³ The \$8,000,000 cost estimate is based on information provided by the City of Ashtabula consultant in the November 15, 2006 meeting with the Trustee representatives.

27. **Comment:** *Two commenters supported the educational center at Walnut Beach, stressing that the youth and future generations needed to be educated so that the problems (contamination in the river) would not occur again. Another commenter felt that future generations should be taught conservation and ecology at the Lake.*

Response: The natural resource damage provisions of CERCLA provide that recovered damages are to be used “only to restore, replace, or acquire the equivalent” of injured natural resources. Specific restoration projects can, and have at other sites, included environmental education as a component of natural resource protection and restoration. However, environmental education projects cannot and should not be implemented in lieu of available and appropriate projects to directly restore, rehabilitate, or replace impaired public natural resources. The proposed educational facility at Walnut Beach is estimated to cost \$2,250,000.¹⁴ As illustrated in the proposed restoration plan, the Ashtabula River watershed offers numerous opportunities to address hazardous substance impacts to natural resources through habitat acquisition and protection in the riparian corridor, direct streambank restoration, in-stream aquatic habitat restoration, the re-establishment of ecologically important hydraulically connected wetlands, along with the provisions for increased public access to resources for ecologically sensitive public use and enjoyment. Additionally, the Trustees may be able to incorporate cost-effective interpretive signage promoting environmental education into some of the projects proposed under Alternative B, to the extent possible. The Trustees believe that these types of projects will provide more cost effective, more appropriate, and more demonstrable benefits to the injured resources than the construction of an education facility at Walnut Beach.

III (b). Opposition to Alternative C

28. **Comment:** *One commenter stated that Alternative C would be a waste of the funds as the walkway could be destroyed by conditions in the area; the commenter expressed concerns about personal safety if the walkway was used in bad weather. One commenter was of the opinion that Alternative C would “likely create a maintenance nightmare for future generations.” One commenter pointed out the difficulty of maintaining break wall walkways and learning centers and the long term stewardship and (financial) commitment necessary for such enterprises.*

Response: The Trustees plan to spend settlement funds on projects that will provide natural resource and public use enhancement services to offset the loss of similar services resulting from injuries to natural resources. Specific restoration projects should meet the regulatory criteria in 43 C.F.R. Part 11, and the criteria identified in the Restoration Plan.

29. **Comment:** *Two commenters felt that Alternative C projects would not benefit the natural environment or, while “admirable public works projects” would not help to repair injuries to the environment.*

Response: The Trustees concur that the projects proposed under Alternative C will not provide natural resource and public use enhancement services to offset the loss of similar

¹⁴ The \$2,250,000 cost estimate is based on information provided by the City of Ashtabula consultant in the November 15, 2006 meeting with the Trustee representatives.

services resulting from release(s) into the environment. Specific restoration projects should meet the criteria outlined in the Restoration Plan and the regulatory and statutory objectives, including the cost-effectiveness of the project(s). The Trustees believe that the projects proposed in Alternative B for natural resource based restoration will maximize the benefits from NRDA restoration, including the restoration of lost services.

30. **Comment:** *One commenter urged the Trustees to “think ahead” and consider how long a restroom facility would last, versus the “once-in-a-generation opportunity” to restore the river, and the lasting impacts from such a restoration.*

Response: The Trustees evaluated all of the alternatives for long-term benefits (in terms of restoring injured natural resources) as required by the regulations and concluded that Alternative B would best achieve this objective.

IV. Comments on both Alternative B & Alternative C

31. **Comment:** *Some commenters believed that while restoring the ecosystem was important, any settlement of the natural resource damages should be divided between Alternative B and Alternative C. Commenters were divided on how much of the settlement should focus on Alternative B versus Alternative C; opinions ranged from the “primary portion” to 50% or an “appropriate weight” going to Alternative B. One commenter said that since “100% of the clean-up was done in the City of Ashtabula...there (should) be more projects within the city limits.”*

Response: Please see previous responses to comments, including Comment # 24, on the Trustees’ ability to fund projects under Alternative C.

The Trustees have selected restoration projects that maximize the benefits to the ecological community, and compensate for lost services to the public, in a cost-effective manner. The criterion of cost-effectiveness is a tool to evaluate the proposed benefits of a project versus its expected cost. In proposing projects, the Trustees carefully considered the ecological functionality of the Ashtabula River and Harbor, and the benefits that the projects provide to the ecosystem. Ecological functionality is not bound by city limits; thus, even projects that are outside city limits can provide significant improvements to the Ashtabula River and Harbor’s natural resources and services. Projects that provide the maximum environmental benefit to natural resources and accompanying lost services, at the most reasonable cost, have been selected as the Preferred Alternative.

SECTION 8

AUTHORS AND REVIEWERS

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Twinsburg, OH 44087

SECTION 9

REFERENCES CITED

1. Ashtabula River Partnership. 2001. Preliminary Final Comprehensive Management Plan.
2. Fields Brook Consent Decree. 1999. *United States v. GenCorp, Inc. et al.*, Case no. 5:89-CV-1866, U.S. District Court, N.D. Ohio, E.D. (2 Consent Decrees) July 7, 1999.
3. U.S. Fish and Wildlife Service. Sept. 1987. Preliminary Natural Resource Survey, Fields Brook Site, Ashtabula County, Ohio.
4. U.S. Fish and Wildlife Service. 2001. Pre-Assessment Screen for the Ashtabula River and Harbor.

APPENDIX A
USFWS Intra-Service Section 7 Biological Evaluation Form

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USFWS Intra-Service Section 7 Biological Evaluation Form

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USFWS Intra-Service Section 7 Biological Evaluation Form

Intra-Service Section 7 Biological Evaluation Form
Region 3

Originating Person: David De Vault Date Submitted: 11/14/2007

Telephone Number: 612-713-5340

I. Service Program and Geographic Area or Station Name:

U.S. Fish and Wildlife Service, Reynoldsburg, OH Field Office
NRDA: Ashtabula River and Harbor Environmental Assessment and Restoration Plan

II. Flexible Funding Program (e.g. Joint Venture, etc) if applicable:

Restoration based settlement for NRDA claims for injuries to natural resources at the Ashtabula River and Harbor site.

III. Species/Critical Habitat:

Indiana bat (*Myotis sodalis*) E
Clubshell mussel (*Pleurobema clava*) E
Piping plover (*Charadrius melodus*) E
Eastern massasauga (*Sistrurus catenatus catenatus*) C

Bald eagle (*Haliaeetus leucocephalus*) (protected under Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act)

IV. Location: Location of the project including County, State and TSR (township, section & range):
Ashtabula River, Ashtabula County, OH.

V. Project Description: Describe proposed project or action or, if referencing other documents (e.g. the Grant Proposal), prepare an executive summary (attach additional pages as needed):

This is a settlement of claims brought by U.S. FWS and Ohio EPA for injuries to natural resources in and around the Ashtabula River and Harbor resulting from unpermitted releases of hazardous substances. The project will consist of acquisition, restoration, and protection of riparian and wetland habitat in the Ashtabula River watershed. Properties will be acquired from willing sellers and transferred to local public entities. Restoration will include controlling exotic species, planting native species and, possibly, restoring hydraulic connections of historically connected wetlands with the Ashtabula River. All acquired properties will be protected by Environmental Covenants. Specific project plans are not available at this time.

VI. Determination of Effects:

(A) Description of Effects: Describe the effects of the action(s) on the species and critical habitats listed in item III. For each section 7 determination made below, attach an explanation of such determination for all applicable species or critical habitat. Documentation should justify your determination.

A number of federally listed threatened or endangered and candidate species would receive further protection if the proposed action is implemented. Wetland, associated upland and aquatic habitat preservation would most likely benefit the bald eagle, Indiana bat, piping plover, and eastern massasauga. The clubshell mussel does not occur within this watershed, therefore this project will have no effect on this species.

Projects implemented through the Restoration Plan and Environmental Assessment are not likely to adversely affect federally listed species and critical habitat and are not likely to jeopardize candidate species because: 1) there will be coordination with the U.S. Fish and Wildlife Service prior to implementing any on-the-ground work; 2) avoidance measures (below) will be implemented to eliminate any potential adverse effects; and 3) if the restoration plan is changed or avoidance measures cannot be adhered to for a particular project, the U.S. Fish and Wildlife Service will be coordinated with prior to conducting further work.

Avoidance of Adverse Effects to Listed Species

To assure that listed species will not be adversely affected, or proposed species are not jeopardized, the Trustees will require the following guidelines to be observed as restoration projects are implemented.

Indiana bat- Indiana bat habitat generally includes:

- (1) dead or live trees and snags with peeling or exfoliating bark, split tree trunk and/or branches, or cavities, which may be used as maternity roost areas;
- (2) live trees (such as shagbark hickory and oaks) which have exfoliating bark;
- (3) stream corridors, riparian areas, and upland woodlots which provide forage sites.

Substantial tree cutting and impacts to suitable habitat will be avoided and minimized. If suitable habitat, as described above, is proposed to be cleared, coordination with the U.S. Fish and Wildlife Service will be implemented. The Trustees will consider restoration activities subject to U.S. Fish and Wildlife Service guidelines and further Section 7 consultation, including formal consultation on occupied sites.

Piping plover- Plover habitat includes sand or pebble beaches with sparse vegetation along the shore of Lake Erie. Restoration projects on sites occupied, or that contain suitable habitat for this species will be coordinated with the U.S. Fish and Wildlife Service and will include provisions not to degrade essential habitat. The Trustees will consider restoration activities subject to U.S. Fish and Wildlife Service guidelines and further Section 7 consultation, including formal consultation on occupied sites.

Bald eagle- Any project within Kingsville or Rock Creek Townships will be coordinated with the U.S. Fish and Wildlife Service to ensure that no disturbance will take place during critical periods a half mile from any known nesting sites. The Trustees will consider restoration activities subject to U.S. Fish and Wildlife Service guidelines and further Section 7 consultation, including formal consultation on occupied sites.

Eastern massasauga- The massasauga is often found in or near wet areas, including wetlands, wet prairie, or nearby woodland or shrub edge habitat. This often includes dry goldenrod meadows with a mosaic of early successional woody species such as dogwood or multiflora rose. Wet habitat and nearby dry edges are utilized by the snakes, especially during the spring and fall. Dry upland areas up to 1.5 miles away are utilized during the summer, if available. In occupied sites, restoration projects must avoid actions that favor vegetation succession from open to closed canopy, modify or destroy any upland or wetland connections between wetlands, or drain, flood or otherwise modify hydrology permanently or seasonally.

The above discussion of avoiding adverse effects applies to restoration project sites where listed, proposed, or candidate species are known to occur, or where it is necessary to assume they are present. On these sites actions that adhere to the above restrictions should not adversely affect listed species. To comply with Endangered Species Act section 7(a) and to determine whether listed and proposed species may be affected, project specific review must occur. On sites where surveys or other current information provides certainty that federally listed species are not present, actions that are determined to have no effect on listed species may proceed without additional section 7 contact with appropriate U.S. Fish and Wildlife Service Ecological Services Field Offices. Projects on occupied sites that are determined to benefit listed species, that is, not likely to adversely affect species, need field office concurrence. Early coordination with the Reynoldsburg, OH Field Office

is advisable where any uncertainty exists.

(B) Determination: Determine the anticipated effects of the proposed project on species and critical habitats listed in item III. Check all applicable boxes and list the species associated with each determination.

Response requested

"No Effect" This determination is appropriate when the proposed project will not directly or indirectly affect (neither negatively nor beneficially) individuals of listed/proposed/candidate species or designated/proposed critical habitat of such species. List species applicable to this determination (or attach a list): Clubshell mussel

Concurrence
(optional)

"May Affect but Not Likely to Adversely Affect species/critical habitat" This determination is appropriate when the proposed project is not likely to adversely impact individuals of listed species or designated critical habitat of such species. List species applicable to this determination (or attach a list): Indiana bat, piping plover, eastern massasauga, bald eagle

Concurrence

"May Affect and Likely to Adversely Affect species/critical habitat" This determination is appropriate when the proposed project is likely to adversely impact individuals of listed species or designated critical habitat of such species. List species applicable to this determination (or attach a list):

Formal
Consultation

"Not Likely to Jeopardize candidate or proposed species/critical habitat" This determination is appropriate when the proposed project is not expected to jeopardize the continued existence of a species proposed for listing or a candidate species, or adversely modify an area proposed for designation as critical habitat. List species applicable to this determination (or attach a list):

Concurrence
Informal Conference
optional

"Likely to Jeopardize candidate or proposed species/critical habitat" This determination is appropriate when the proposed project is reasonably expected to jeopardize the continued existence of a species proposed for listing or a candidate species, or adversely modify an area proposed for designation as critical habitat. List species applicable to this determination (or attach a list):

Formal Conference

Signature Date
[Supervisor at originating station] 11/26/07

Reviewing Ecological Services Office Evaluation (check all that apply):

A. Concurrence Nonconcurrency _____
Explanation for nonconcurrency:

B. Formal consultation required _____
List species or critical habitat unit

C. Conference required _____
List species or critical habitat unit

Signature () [Reviewing ES Office Supervisor]

Date 11/26/2007

Name of Reviewing ES Office

Reynoldsburg, OH

APPENDIX B

AERIAL PHOTOS OF ASHTABULA 1938 AND 1994

APPENDIX B

AERIAL PHOTOS OF ASHTABULA 1938 AND 1994

**Aerial Photo North East Ashtabula County -
Fields Brook/Ashtabula River 1938
(Woodward-Clyde Consultants)**



**Aerial Photo North East Ashtabula County – Fields Brook/Ashtabula River -1994
(www.Terraserver.com)**



**APPENDIX C1 and C2
PUBLIC COMMENTS ON THE INITIAL
NATURAL RESOURCE RESTORATION PLAN & ENVIRONMENTAL ASSESSMENT
FOR THE ASHTABULA RIVER AND HARBOR SITE AND TRANSCRIPT OF PUBLIC
MEETING**

**APPENDIX C1 and C2
PUBLIC COMMENTS ON THE INITIAL
NATURAL RESOURCE RESTORATION PLAN & ENVIRONMENTAL ASSESSMENT
FOR THE ASHTABULA RIVER AND HARBOR SITE AND TRANSCRIPT OF PUBLIC
MEETING**

**APPENDIX C1
PUBLIC COMMENTS ON THE INITIAL
NATURAL RESOURCE RESTORATION PLAN & ENVIRONMENTAL
ASSESSMENT FOR THE ASHTABULA RIVER AND HARBOR SITE**

(ALPHABETIZED) LIST OF COMMENTERS

1. Astorino, Mark
2. Bacon, Mr.
3. Barton, Neil & Susan
4. Beacon, Ken (emailed as Matthew Cuthbert)
5. Bennett, Ward
6. Clark, Duane
7. Corbissero, Carmen (Lefty)
8. Eames, Leonard [Co-Chair, Ashtabula RAP]
9. Farber, Natalie [RAP Coordinator, Ashtabula River Partnership]
10. Frisbie, Bob & Anne [President & Treasurer, Ashtabula Marine Museum]
11. Goode, Paul & Pat
12. Greicius, Lorna
13. Grippi, Kevin
14. Hale, Dennis & Barbara
15. Hanneman, Mark
16. Hill, Scott [Western Reserve Land Conservancy]
17. Jacobs, Sanford
18. Joseph, Brett
19. Keenan, John
20. Kinney, Kathleen
21. Lichtkoppler, Frank [member, Ashtabula River Partnership]
22. Mosier
23. Panzarella, Loretta
24. Penna, Michael
25. Rabeneck, Karl
26. Rapose, Ann
27. Tucker, Earl B.
28. Santiana, Joe [President, Ashtabula Lighthouse Society]
29. Schmidt, Philip
30. Slaviero, Jack
31. Timonere, Tom
32. Tobias, Thomas A
33. Tucker, Earl B.
34. "Unnamed" [handwritten on Star Beacon story clipping]
35. Wayman, Mike [Chairman, Ashtabula Township Park Commission]
36. Wright, Paul E. Jr.

1

Mark J. Astorino
Ashtabula, Ohio 44004

RECEIVED
MAY 02 2008
OHIO EPA NEDO

April 28, 2008

Mr. Regan S. Williams
Division of Emergency & Remedial Response
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

Re: Draft Natural Resource Restoration Plan & Environmental Assessment for the
Ashtabula River and Harbor Site

Dear Mr. Williams,

I am writing as a resident of Ashtabula, Ohio, in particular support of restoration
Alternative C, as outlined in the above captioned plan.

While it is true that the affected area(s) have suffered great natural resource injury, what
is also true is the resulting devastating impact on the local economy and the associated
health risks that ensued for over a decade.

True reparation and true justice to those who live in the community are not simply to
fund "fish" projects. What is also required are results that are tangible and visible, and
that create a sense of reparation, while at the same time supportive of the natural habitat.
This is evidenced by the project in Fox River, which I am sure you are familiar.

In closing, I implore your support for Alternative C and I will indeed pray for the same.

Sincerely yours,

Mark J. Astorino

From: NEIL N BARTON <
 To: <re
 Date: 4/27/2008 11:26:14 AM
 Subject: Ashtabula breakwall walkway project

Dear Mr. Williams,

April 27, 2008

My name is Neil Barton. I write this letter to you on behalf of my wife and myself with the hopes and expectations that it will and should sway and convince you that the distribution of the settlement funds should absolutely included the Ashtabula breakwater walkway project. I address this opportunity from a unique perspective that is different in a real sense than most people could not have. Not necessarily better but indeed different. Having served in the Coast Guard I had the distinct privilege of spending two years of that time on the Ashtabula lighthouse at a time when it was being maned by the Coast Guard personnel. I came to know not only the lighthouse like the back of my hand but also the surroundings, the people, the fishermen, the traffic, the boats, the water and its environment. Presently my wife and I are members of the Ashtabula Marine and Coast Guard Musieum and also the Ashtabula Lighthouse Preservation And Restoration Society. It is my most firm belief that it has been adaquately demonstrated that man and nature do not and cannot live in separation from each other and therefor have a direct and constant impact upon each other. In this case the beneficial consideration of the fish can best be accomplished by the inclusion of man and his environment, which is inextracably involved with the fish and the man's habits when it comes to his desire and need to fish. A mans involvement with fish and fishing enhances his concern for and about the fish. This can only be good for the fish. The more positive involvement of man the more good for the fish. This is not only a truism for now but obviously includes future generations.

All this brings us to how the Ashtabula water walkway would be the perfect solution for man and fish living in beneficial and mutual harmony. If you are not familiar with the Ashabula area, its harbor, its waterfront, its beaches, its breakwater, and its lighthouse (which is in process of restoration), a simple examination will reveal that it is rich with history and has always been a vital part of its economy and its people in general. There has never been a time when the breakwater has not been an item of great necessity and fascination with all who are aware of its presence. Many have and still do walk the breakwater for fishing and excursion. Because of the somewhat present ruggedness required of the challenge to do so, this can be accomplished only by the harty and the adventureous. The proposed walkway would dramatically and emphatically change this. The proposed walkway would now be accessable and available to almost everyone. With periodic fishing areas running out for a mile and benches for strollers we would witness the entire area come alive as never it has dreamed before. The positive impact on the economy could only be a boon to the entire area. There would be nothing else like it.

With the education center on the beach more people than ever would be exposed to the nature surrounding them and their environmental impact with the water, the fish and their involvement with them. A hightened awareness of this can only be good for the fish and man and the wildlife in general. Again, you can't involve one without involving the other. For the sake of the fish and mankind, who are destined to live with each other, we emlore you to give due consideration to make this a reality. We see this as your responsible debt to both the fish and the people of this area. This is a very rare, one time opportunity, to resolve the deserving need of many; the water, the fish, mankind and the furture of all of them. We ask you to be so understanding, appreciative, compassionate and emphatic that you too would insist that it must be done. You will never know just how many will be forever grateful for your foresight.

We thank you for your honest and forthright consideraton, Neil and Susan Barton

CC: Bob Anne Frisbie

From: "Matthew Cuthbert"
To:
Date: 4/29/2008 5:03:32 PM
Subject: Natural Resource Restoration Plan & Environmental Assessment for the Ashtabula River and Harbor

Dear Mr. Williams et al,

This e-mail contains questions and comments on the Restoration of the Ashtabula River and Harbor project. First the questions:

1. Previous monies were awarded to the Ashtabula Township Park Commission for the acquisition of land along the Ashtabula River inside the City of Ashtabula. What were the total monies awarded for that project?
2. What other monies were awarded from that source?
3. How much money is still available from that source?
4. The City of Ashtabula acquired a Beach Cleaner they have used to eliminate some of the threatened and endangered species along the beach area of Walnut Beach. Were any monies used from any funds associated with the Ashtabula River Project for the acquisition of the Beach Cleaner?

In reference to the Draft Natural Resource Restoration Plan & Environmental Assessment for the Ashtabula River and Harbor Site I offer the following comments:

I prefer Alternative B. However, unless the acquisition of land is near the Walnut Beach area I am opposed to it. The land near Walnut Beach has the greatest potential for eco-tourism and would reap the greatest reward via the preservation of threatened and endangered species. Also, the elimination of the various invasive plant species, most notably *Phragmites australis*, would not only secure the area by safely removing a fire hazard from nearly 100,000 tons of coal stored next to it, but it would go a long way to restoring the area for native flora and fauna.

I wrote a proposal for this purpose during the time that resulted in the

award of the Brockway property to the Ashtabula Township Park Commission. You may review it as a further comment on this money.

In closing, I would like to remark on three individuals that attended the trustees meeting on Tuesday, April 22, 2008 at the Lakeside High School.

Phil Schmidt has been against restoring the area near Walnut Beach to preserve native plants nearly since the beginning. When the Ashtabula City Park Board, of which I was an officer, utilized the Sam Wharram Nature Club, of which I was also an officer, to clean-cut, the invasive tree species, notably the Aspens, he was the only person in the entire city to complain. He has personal issues with Jim Bissell and the Cleveland Natural History Museum. When I wrote the city's first proposal, I utilized both the Cleveland Museum of Natural History in conjunction with Jim Bissell and the Holden Arboretum.

Kevin Grippi has bounced from project to project and from group to group in effect "building a resume." His interests in this project, or any other, are purely self-serving. He knows little about habitat restoration and cares even less. I was offended that he pressured the trustees by opining, "We need a break," which appeared as the Star-Beacon's headline the day following the trustee's meeting at Lakeside.

Tony Cantagallo, Ashtabula's City Manager, is at the center of a hostile regime with his own ideas for Walnut Beach. If possible, he knows even less and cares even less than Mr. Grippi about eco-tourism and habitat restoration. His goal is legacy building, instead of moving forward with a plan (mine) that would benefit nature and people alike. His ideas are ill conceived and shortsighted.

Thank you for the opportunity to comment and ask questions. I look forward to your answers from your earliest convenience.

Yours,

Ken Beacon

#5

RECEIVED

APR 28 2008

OHIO EPA NEDO

Apr. 24, 2008

Dear Mr. Williams,

As a resident and local business owner for over 54 years I recommend Plan C for the final Ashtabula River clean up phase. The more people can get involved in the wonderful resource of the river and lake the better. The industry the polluted our river and lake is now all gone. We only have the river and lake as a resource now. Up stream is very shallow so it has a very limited use. North of W 24 st. is where boaters and fisherman spend their time and money. A walkway on the break wall would be a huge tourist attraction. People could fish without a boat. Walkers could enjoy the view. I think the people aspect of this project should be emphasized the most. Different plants won't change a thing.

Yours truly,

Ward Bennett

#6

RECEIVED

APR 28 2008

OHIO EPA NEDO

OHIO EPA,
Dear Ohio Division of Wildlife,

I am writing concerning the settlement from all the pollution damage created by the chemical industries and other industries that contaminated Lake Erie, Ashtabula River and Fields Brook and other streams in this area during the 50's, 60's, 70's, 80's and 90's. I remember as a boy, Fields Brook was full of brook trout and other trout & fish. Also the Ashtabula River, Lake Erie was teeming in the 50's with lake trout, blue fish, pickerel, bass both small and largemouth, northern pike, muskell, yellow and white perch, gambou perch also, sturgeon, smelt, creek chubs, and probably even native trout. I remember my father use to have an old thermore with all the Lake Erie fish on it. He bought it in the 50's. So I would like to see ^{the} fish that were in the lake and streams restored to what it was in the 50's. On any night you could go along the Lake night or day and see fisherman's boats as far as the eye could see. This is because the fishing was great. Some of the same fish mentioned above still exist in places like the Hartstown Swamp Lake (pickerel, namely) and other lakes in the area. As I understand it in ancient times these were part of Lake Erie. So check it out! Also I've heard some places still exist in Canadian waters. Also check some of the old ponds around here as I know some fisherman stocked their ponds in the 50's. Yes there were a lot of excesses back then too, not all of them by industry. There was some waste of fish resources too because fish were so plentiful. Some people used them for garden fertilizer. That must never be allowed to happen again. Whether it be by industry or commercial fishing or the average Joe on the street who recreationally fishes or the commercial shipping interests that dump their bilges full of sea

(next page)

Lamprea. They should replace 10X the fish
Destroyed. In 1950's terms that would be millions
of fish of different species. Where some are extant
replacements could be used and encouraged. Even
the accidental Golden Trout should be encouraged
as they seemed to thrive in Cowels Creek and the
Lake. More of Arcola Creek and Wheelers Creeks
should be opened to public access thru parks
and stocked with various types of trout. Especially
since Arcola suffered a chemical spill at its peak
fishing period that killed most of its fish. Cranby
Land owners who oppose fisherman should be
bought out, but at the same time fisherman who
don't respect the resource or water or property rates
should be dealt with harshly as well as litter bugs.
On all streams as well. aka Pop Cans, Lines, Wrappers
Garbage and what have you should be banned. Respect the
Resource signs erected at the parking lot or near the stream.
Also containers for broken line instead of littering. Also
line should be biodegradable but strong. All others should be
banned. Again Respect the Stream & Nature. Also Respect the
Resource and protect it from over hunting and over fishing.
I fear that has been done already here in the state with
our deer population and some of our fish (Walleye)
in Lake Erie. I suggest a 5 year moratorium to allow population
s to recover. After all I am a sportsman and many friends
who come out of state prize our wildlife here in Ohio
for its record sizes and quantity. We would lose their
attention if they always come up empty. Imagine the
economic loss of that to the state and Northern Ohio
which is already hurting. I urge the State to use this time
to obtain new game lands in vast tracts to restore habitat
for the deer. Especially along Ohio's eastern border where

in PA Deer are plentiful. They would enter Ohio more if there were protected Game Lands in Ashland and Trumbull Counties, also Southwestern Ashland and Geauga and Southern Lake Counties where their terrain is ideal for all wildlife and crosses the Grand River. A concentrated cleanup of the Grand and restoration of its Dam and spillway and its fish ladder repaired wouldn't hurt either. Right now the fish can't get up stream because of the broken ladder, also there's too much silt and debris behind the Harpersfield Dam. It needs a good dredging above the Dam & logs removed from Dam as well as the repair. Also an old water plant needs either restored or its canal opened and dredged or removed all together and added to the park. Also north side or east should be parks for canoe access - Boat access with same above rules of respect. The Resource and Heavy Various Fish stocking: Namely Various Trout, Muskies, Bass (small & large), Perch, Northern, Walleye, Crappie you name it. In short I want to see the Grand crawling with fish as well as local streams and Lake Erie. In short I want that tourist to thoroughly be able to enjoy his visit as long as he respects the Resource or contributes to its further improvement and doesn't abuse the privilege. Leave the Boon at home. Don't litter the resource with beer cans & trash.

Please ODNR Do it Right! Don't Wait till all of Ohio my beautiful Ohio is wall to wall concrete & houses to try and restore what is already will be lost. Buy the Game Lands Now & Don't allow them to cover Ohio in concrete completely. I'm for progress as long as it respects the Resource and the God who made it and the state's matter. Remember the Wildlife were here first and were supposed to share this planet with them and they are here for our enjoyment.

also I want to remind the state EPA to do a better job of tracking down these private small dumps that may or may not contain chemical contaminants as well. Some of them may have been buried and forgotten about and could cause health problems to us and the wildlife. Dig a little deeper, question a little longer and ask the right questions of the right people and don't take it on surface.

on the settlement as I said I want a thorough cleanup as in ^{the} Plan with replacement & restoration of all species lost as I stated. I want to see access also to those resources with the proviso mentioned in C. I would like to see the boat rental & launch ^{rooms} restored at Lake Shore Park also its boat dock similar to Conneaut. Also one at Geneva State Park. More fisherman access at this park also closer parking to water again similar to Conneaut. Also restoration of all contaminated rivers & streams with their fish restored 10 fold. I know they will say it is too expensive, but they didn't worry or think when they polluted them. All they thought about was chalking \$ money they would make. They didn't even think about people's health. They simply didn't care. So let this be a lesson to them not to pollute anymore & respect the resource. Restore what was made. Oh and dredge the Ashtabula River all the way to Main Avenue for more boating access & docks. Replace East 24th bridge with a lift bridge & maybe main again for the above reason and the economy could use the lift. I hope to see more fish like the one in the star beacon photo more numerous and plentiful in Lake Erie. The Grand, Arcola, Wheeler Creeks, Cowled creek, and Conneaut Creeks of all species. Also in Pymatuning-Harts Town-Shenago Watershed. By the way the settlement should include EPA an New York Water which also for their pollution companies parts in the destruction of Lake Erie.

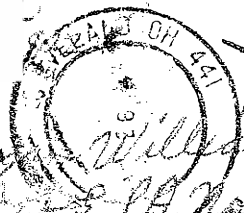
Sincerely,

D

P.S. Restore Huge amounts of Bait fish first like the smelt, Creek Chubs, minnows, Sun fish, Bluegill, Cats, sheepshead and any other small fish before adding the major fish. Like Lake Trout, Sturgeon, Gar, Walleye, Bass Both Small & Large, King Salmon, Steelhead-Rainbow Trout, Brown Trout, Dolly Varden Trout, Brook Trout, Golden Trout, Blue Pike (if I can't find), Pickrel, Atlantic Salmon, Pacific Salmon, Chinook Salmon, Northern only after major fish are established, Muskies, Perch, Both White & Yellow, Strippers, Rock Bass, Black Bass, Crappies and any other major fish that could tolerate Lake Erie and not destroy other parts of the fishery or imbalance it.

P.S. Would love to see Pickrel and Blue Pike Back if you can find them. Check as I suggested! Also go back and see what was formerly in Lake Erie and try to re-introduce those species if available. You would have to do several nettings at Hartstown, Canada Lake Erie streams with their permission, and the various ponds & lakes in this area ~~near~~ ^{near} I 90 near Connecticut. I'm told there might be some in there from years ago on the left line & one pond owned by the city of Connecticut. These ponds were built when I 90 was built in the 60's. Liked said previously fisherman placed their catches in those ponds hoping someday to have good fishing in the ponds. Some of them may I'm told be Blue Pike or Pickrel. Please let me know if you find anything or if I've been of any help. Here's Hoping We Have Good Fishing Again!

1992



Willoughby
Chief S.A. Northeast District Office
240 East Ataroga Road
Twinsburg, Ohio 44087

#7

Mr. Regan Williams
April 30, 2008
Ohio EPA's Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio, 44087

Dear Sir:

I was born at 427 East 16th. Street, Ashtabula ,Ohio, on 11/18/34, located on the south side of Fields Brook, swam and fished in fields brook and the Ashtabula River as a young Boy. Was devastated by the demise of Fields Brook and the Ashtabula River, in 1968 World Book Encyclopedia states: 5 Chemical Industries pour waste into Fields Brook turning it white or sometime green or red, one of the most polluted streams in the United States.

I'm appalled that the Public Hearing was not held in the City of Ashtabula like all the other hearings that were at Ashtabula Kent State, it's almost like you did not want a lot of people to attend because your minds are made up to were this money is going, that is sad for the City of Ashtabula.

The Citizens of Ashtabula have suffered because of this pollution, the cancer deaths in East Ashtabula have been much more than normal, in fact a study was done in the 1980's stated that fact.

I feel this money should be given to the City of Ashtabula or the Ashtabula City Port Authority for the walkway on the Walnut Beech Breakwater. 90% of the residents of Ashtabula County do not have boats so they could use this Breakwater, which ever 30 or 40 yards would be a plate form with a bench to fish from. I'm sure a lot of people would like to through a line into Lake Erie , catch a Walleye, Perch, Bass, or whatever. This concept would be a boom to the City of Ashtabula and Ashtabula County.

Sincerely

Carmen(Lefty) Corbissero
Ashtabula ,Ohio 44004

cec
file

Mr. Regan Williams
Ohio EPA's Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio, 44087

April 30, 2008

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Sincerely

Carmen(Letty) Corbissero
2943 West 13 th. Street
Ashtabula ,Ohio 44004

cec
file

8

From: leonard eame.
To: Regan Williams
Date: 4/28/2008 6:22:37 PM
Subject: NRDA Comments

Dear Sig,

After reviewing the draft restoration plan it is evident alternative "B" is the only choice plausible. To acquire, restore and rehabilitate habitat closest to the mouth of Fields Brook and downstream to the harbor is of the utmost importance. The 5 1/2 slip and the peninsula adjoining it are prime candidates to help accomplish the goals of the NRDA doctrine.

While breakwall walkways and learning centers are admirable "public works projects" they have little to do with repairing injuries to the environment. They also would be difficult to maintain and require a stewardship hereto for not mentioned by proponents. I commend the hard work and intelligent planning so far displayed by the trustees and ask that you stick to the letter of the law so to speak and not be swayed by public pressure to commit to projects that would only be short term in the scheme of Mother Nature.

Let your guidance be what is best for the environment in the long run, and the human aspects will follow in due time. This project has been ongoing for 25 years or more and it is apparent that humans structures like political careers are only blips in time, the better for nature is the better for mankind.

Respectfully submitted, Leonard E. Eames
Co-chair, Ash. River Remedial Action Plan

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

From: Natalie Farber
To: Williams, Regan
Date: 4/30/2008 5:32:43 PM
Subject: NRDA Plan Comments

Sig.

After reviewing the Trustees' draft Ashtabula River Restoration of Natural Resources Plan, I am offering a couple brief comments, as below:

As the Ashtabula River RAP Coordinator, I definitely and wholly support Alternative B to the exclusion of all other Alternatives. Ohio EPA partnered with the Ashtabula community 20 years forming a Remedial Action Plan (RAP) Advisory Council whose focus and intention was remedial excavation and disposition of contaminated sediments in the Area of Concern (AOC) designated as the lower two river miles — all remedial work which was completed in 2007. The current RAP focus is upon delisting each of the 6 (14 total) Beneficial Use Impairments (BUIs). All 6 BUIs in the Ashtabula AOC are related to contaminated sediments, e.g., do-not-eat-all fish consumption advisory, degraded fish & wildlife populations, fish tumors & deformities, degraded benthos, dredging & disposal restrictions, loss of fish & wildlife habitat. Dredging the lower two miles and removing 60 years of highly contaminated sediments was the very best remedy, however very tough on the river bed physical structure and existing biota, fish, birds, aquatic insects. Among all the Restoration Alternatives listed therein, Alternative B is not only the best idea but critical to restoring, replacing, rehabilitating the AOC's injured and damaged resources. Perhaps more relevantly, Alternative B directly speaks to the AOC Delisting Strategy, e.g.:

- a) With acquisition of coastal areas and riparian areas in the AOC and also within the upper watershed, the lower AOC may be directly restored, enhanced, and protected post-remedy - all of which was envisioned by RAP Advisory Council 20 years ago. ;
- b) The local fishery will be greatly enhanced, especially by restoring existing wetlands at the CDM property and creating new ones where hydric soils and hydrologic regimes are present and complimentary. Once the entire watershed undergoes more restoration and rehabilitation, the human community can similarly reap benefits, as they so choose and desire, in the local economy, tourism, culture, ecology, social fabric.
- c) By far, the most important value of Alternative B's implementation is the rapid restoration, replacement, and rehabilitation that will undoubtedly occur, than if the AOC is simply left to recover on its own post-remedy. Frankly, that scenario will likely require another 50-60 years! An otherwise lengthy restoration timeframe (if no Alt B) stems from RAP members directly observing in 1999 the resumption of large perch, bass, shad, walleye spawns in the AOC. And then in 2000, the return of Great Blue Heron and White Egret actively wading and fishing near the 5 ½ slip peninsula. RAP members excitedly remarked that none of these populations had been much in evidence throughout the AOC since after Fields Brook and river industry commenced in earnest 60 years ago, followed soon after by widespread and prolonged natural resource damages.

I hope these remarks are helpful to you. If you wish to discuss or have questions, I may be reached at

Natalie Farber
Ashtabula RAP Coordinator
(614) 644-2143

Natalie Farber
Environmental Scientist
Ashtabula River RAP/NPS Unit
(614) 644-2143

(614) 644-2745 FAX

From: "Fri
To: <
Date: 4/28/2008 12:37:52 AM
Subject: Comments

Dear Mr. Regan Williams, Ohio EPA Northeast District Office

It was evident at the meeting on April 22nd 2008 that the Trustees had their minds made up that option "B" was the only one they supported. As Mr. Phil Schmidt of Geneva mentioned in his comments to the Trustees, each idea presented needs to be weighed as it is placed on the chart so all ideas receive the same value. Those that were presented to the selection process at present seem to all show a bias to the "Fish & Game" and little or no value to "Human Use"!

Many of us that attended felt the fish and river should get the bulk of the attention, and the "Human Use" part of the project should also get a helping hand. The polluted river was vacated by many of the polluters who left town with their profits and we on the other hand are still here! Signs stating the river was polluted chased who knows how many people, industries and potential industries, away thus leaving those of us who are still living or visiting here the "economic losers"! The pollution has killed or is slowly killing who knows how many "HUMANS" and fish.

If the City of Ashtabula and the interested citizens of Ashtabula County could use a portion of the Ashtabula River and Harbor monetary settlement to revive an industry that is slowly being cultivated in the county, "Tourism", maybe the constant reminder of economic depression would be significantly lessened! We feel that if we are given equal opportunity and a portion of the settlement money to apply towards our suggested projects (Option "C" - The Interpretive Center at Walnut Beach & The Break Wall Walkway to the Ashtabula Lighthouse); we could make the Tourism Industry come true for the area.

EVERY person who hears about the Walkway Project says, "That is a great idea and people would come from all over to be that close to the water, the sport fishing and the lighthouse too!"

My only question now is why hasn't the portion of the Fields Brook settlement funds that is still available been set aside for the Ashtabula Township (Brockway property) HUMAN USE and left out of this equation?

Thank You for considering our request for a portion of the funds to assist in the HUMAN USE portion of the project!

Bob Frisbie - Director

Anne Frisbie - Treasurer

Ashtabula Marine Museum

P.O. Box 1546

1071 Walnut Blvd.

Ashtabula, Ohio 44005-1546

E-mail Address:

Website: ashtabulamarinemuseum.org

From: "paul goode"
To: <re
Date: 4/29/2008 9:34:34 PM
Subject: river remediation

Mr. Williams,

My wife and I attended the meeting at Lakeside H.S. last week and briefly spoke with you afterwards. I am writing to put in my 2 cents on the matter of designation of resources to further correct deficiencies caused by the Ashtabula River pollution.

Neither of us can claim any proficiency or training directly related to the clean-up matters. Neither of us are native Ashtabula Countians! However, we have, I believe, lived closer than anyone else to the river (1084 Walnut Blvd.) for 35 years, and have observed the "fits and starts" related to residential, economic, and aesthetic realities of life at the lower Ashtabula River.

Economic realities in the Harbor, once responsible for sustaining livelihoods, traditions, culture, have changed here as elsewhere in the "rust belt" We are left only with the coal dock exercising its environmental and aesthetic stranglehold over the entranceway to a river being proposed as a "scenic river"! Only today I received a response from Sen. Latourette's office saying the NS dock operators refused to meet with area residents about our dust and noise concerns.

We agree with the principle that further remediation resources should be principally directed toward further river reconstruction, improving public access and contingent properties. But, given the harmful effect of the river pollution on the human community of the Harbor, it would not be misplaced justice to urge direction of some resources to a project such as the Lighthouse/Walnut Beach Access. At a minimum, funding for a feasibility study for this or other such projects would begin to address this aspect of community damage.

Thanks for the efforts you have already put into the river cleanup and for the opportunity to offer these views.

Respectfully,
Paul & Pat Goode

From: "Lorna Greicius"
To: <reg
Date: 4/22/2008 8:13:34 AM
Subject: Lakeside H.S. meeting

Dear Trustees,

This letter is in regard to the meeting slated for this evening at Lakeside High School in Ashtabula Ohio.

I am unable to attend this meeting however; I would like to add my voice to those of many who believe that the plan submitted to you by our city government, concerning the settlement of the companies responsible for the pollution of our river and harbor. I understand that you have determined that the proposed plan to build a walkway out to our lighthouse in conjunction with an interpretative educational center at Walnut Beach do not meet your requirements. Although the city and county would benefit greatly by the implementation of these two projects, as an educator, I strongly believe the environment and habitat of wildlife would also benefit. By instilling in our children, a respect and wonder for this vital area in our county, they, as future caretakers, would help to insure its safe keeping for many generations to come. Our lighthouse is a national treasure and its history is also the history of the harbor. By providing a "bridge" to the past, with the instillation of a walkway, we are also promoting a secure path and a strong "light" for the future. Without an appreciation of this river, its history, and those who came before, the next generation will not protect or value this area.

As an environmental activist, I am well aware of the consequences this disaster has had on the wildlife and water in this area. However, this pollution occurred over many years and has also had a devastating effect on human lives. Although, I was not raised in this county, I have taught students here for over thirty years. These children need to feel a sense of pride in their history as well as an appreciation for all the beauty that surrounds them.

Please consider these two projects to be worth of your attention and support.

Thank you

Sincerely,

Lorna Greicius

From: "barb.hale" <
To: <
Date: 4/22/2008 9:15:22 AM
Subject: Meeting in Ashtabula

Dear Trustees,

As we are unable to attend the important meeting at Lakeside High School in Ashtabula this evening, we would still like to voice our opinion. We feel that a walkway to the Ashtabula Lighthouse and an educational center at Walnut Beach will greatly instill our future generations with the respect this historic area deserves. The environment and habitat for wildlife would also benefit in the future because a greater interest would be shown in this area, ensuring its appreciation for many generations to come. Please consider these projects to be worth your attention and support.

Thank you.
Dennis & Barbara Hale

From: "Scott Hill"
To: <Dave_De
"Sheila Abral
Date: 4/23/2008 2:44:25 PM
Subject: Ashtabula River Public Meeting

I wanted to thank you all for your time in the hot seat last night. The City of Ashtabula is in the middle of an extremely serious financial down turn and it was apparent in last nights meeting that many of the citizens are interested in using the funds for an economic stimulus project. I can certainly understand this perspective, but the long term economic stimulus that will come from the fisheries and eco-tourism associated with a vibrant healthy river will be an ongoing revenue stream for the community. Please let me know if there is anything that I can do to assist in the decision making process for the restoration of the natural resources on the Ashtabula River.

Thank you for all your good work,

Scott Hill

Eastern Field Director

Western Reserve Land Conservancy
P.O. Box 314
Novelty, OH 44072
Ph: 440-729-9621
Fax: 440-729-9631
sh
wa

The sender of this message represents only the legal interests of Western Reserve Land Conservancy; therefore, any information contained herein, including any attachments or enclosures, relating to tax treatment or other transactional details is strictly informational and is not written or intended to be relied upon, and cannot be relied upon, by any other party as legal or tax advice.

#17

SANFORD JACORS

RECEIVED

APR 28 2008

OHIO EPA NEDO

April 26, 2008

Ohio EPA
Northeast District Office
Att'n: Regan Williams
2110 East Aurora Road
Twinsburg, Ohio
44087

Dear Mr. Williams:

I am sending this letter to express my concern that the "human factor" be given appropriate weight along with "fish and habitat" in the plan to restore the Ashtabula River environment. My wife and I spend part of the each spring and summer at the Lake in Saybrook Township and have become familiar with the River and the surrounding area. That is why I am writing on this subject.

The damage caused by those responsible for the degradation of the Ashtabula River and the surrounding area has touched and continues to impact the habitat for fish, birds, game and humans in the area. As you look for the best solutions to overcome this tragedy, I ask that you give strong weight to a multifaceted approach; one that works on the fish and habitat restoration, but also one that works to restore the human physical and psychological wellbeing of the community.

A program that would incorporate some of the steps proposed in Plan B and also some of the steps in Plan C would be an appropriate compromise. In Plan C the creation of the western portion of the walkway including the ramps for handicapped persons and the fishing piers could, once again, bring humans close to the beauty and miracles of the waters from which they have been denied much too long due to this tragedy.

I would greatly appreciate your consideration of these thoughts in arriving at a reasonable conclusion.

Very truly yours,



Dear Mr Williams,

I am writing to increase your awareness of the Ashtabula river watershed and potential projects beneficial to habitat restoration.

The river bank is completely armored for the first mile inland from the mouth at lake Erie. A Norfolk and Southern coal dock employee spoke of witnessing a deer and skunk swimming to the point of exhaustion after being washed downstream and trapped by the vertical walls. He was successful in saving both of the critters. These vertical walls, and the developers who installed/maintain them, also block human access to this natural resource. Can we take any action to return a portion of the natural riverbank?

My neighbors have allowed me access to their property to establish a wildlife corridor linking the lakefront wetland with the Ashtabula River. This winter I removed Norway maples, tree of heaven and other invasives. I have also discovered the water table is one foot below ground level on the lowest portion of my property. I will soon dig a small pond with a shovel! This will establish a watering hole for the birds, deer, raccoons, etc, which frequent this area. This "pond" will replace one of many destroyed by Norfolk and Southern and other coal terminal operators. I am not looking for any recognition here but would like to demonstrate how one unfunded individual, working alone, can impact the Ashtabula watershed. It is frustrating to see the time and monetary resources wasting away while action could be taken.

The most cursory observation of the watershed would reveal the presense of Strong Brook, the first tributary on the West bank of the Ashtabula river. I have seen many reports of communities restoring streams to a more natural state. Strong brook offers no vertical blocks to fish migration and could be revived to a natural spawning area for lake Erie fish species. This stream runs through the west harbor, very close to "Ground Zero" the contaminated river.



April 25, 2008

Comment on Ashtabula River & Harbor

To Whom It May Concern:

I am sorry I was unable to attend the recent public meeting on Tuesday. I am very much in favor of Plan B.

The Kevin Grippi comment which made headlines in the Star Beacon was very offensive to me. I believe that it is the environment that "needs a break" from us. The potential availability of funds for this project is a testament to the sorry job we have done in the past with protecting our local environment.

I am a property owner in Ashtabula Township with a parcel that extends to the center of the Ashtabula River. For twenty years I have picked up garbage that has been left by individuals, usually on ATVs or in 4 wheel drive vehicles, who have driven up river from State Road and have "camped", and I use the term loosely, along the river. Garbage typically consists of beer cans, food tins and wrappers, even underwear, baby diapers, and used condoms. People have also "washed" their cars and dumped the ashtrays and other refuse etc. on the bank. A little further down the river people dump construction debris etc. Fortunately for me they don't feel the need to drive further up river.

People have the mistaken belief that anything with running water belongs to the public and it is free to abuse. I don't think these citizens are contributing local tourism dollars. (I have a neighbor who has retired now and patrols the river bottom, on his ATV unfortunately, and the amount of abuse has decreased. He can be pretty scary)

ATV and other traffic in the shallow river bed in the summer tears up the river bed and I frequently find dead or dying creatures that have been crushed in the river rocks, snakes, mud puppies etc. We need more restoration and fewer uneducated people in the Ashtabula River basin. Noise pollution from these vehicles is a whole other issue. The sound of ATVs is greatly magnified by the walls of the river basin they are in. It is very loud and offensive up along the river ridges where I live.

I have never had an issue with people who enjoy walking/hiking, picnicking quietly on my property but the river needs protection. I have always granted the requests of persons who take the trouble to request permission to fish from my property.

I had once considered donating my small piece of river bottom to an entity that would preserve and protect it but I don't think there is one.

Kathleen Kinnev

Ashtabula OH 44004

From: "Lichtkoppler, Frank" < >
 To: "Matthew Smith" < >
 Date: 4/22/2008 11:46:55 AM
 Subject: Ashtabula NRD restoration plan public meeting

Matt & Sig;

I plan to present the attached at the meeting tonight. I think we need to refocus on removing the Area of Concern designation and alternative B will help to do just that. Building nature centers and walkways on the breakwall is putting the cart before the horse.

Frank

><> ><> ><> ><> ><> ><>

Frank R. Lichtkoppler
 Extension Specialist, Sea Grant

Painesville, Ohio 44077

PH 440 / 350-2267

Cell 440 / 364-5946

FAX 440 / 350-5928

<>< <>< <>< <>< <>< <><

From: Matthew Smith [mailto:
 Sent: Monday, April 21, 2008 2:40 PM
 To: T
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 Ande man;
 Natha
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 Leunt
 Subject: [SPAM] Ashtabula NRD restoration plan public meeting
 Importance: Low

This is a reminder about the public hearing that is being conducted by

the Ashtabula NRD Trustee's on Tuesday April 22nd at 7:00 pm.

Attached is the public announcement in a recent paper. Comments will be received about the plan. I know that there will be opposition to the plan at the hearing and those in opposition will be making public statements.

It would be great for you to review the plan at the web site below and show up and voice your support for the restoration plan.

<http://www.fws.gov/midwest/AshtabulaNRDA/>

One of the arguments is that the plan only addresses natural resources and not public use. This is not so. Most if not all of the actions in the current plan will benefit public use.

- Restoration of habitat in the harbor would increase fish spawning habitat, which will benefit fishing. How many fishing charters are based in the Ashtabula Harbor?

- Protection of the wooded riparian river buffers and wetlands will protect the water quality of the river thus protecting the Ashtabula fishery. Steelhead fishermen come from all over the country to fish the Ashtabula River from Indian trails/Cedarquist park to the Haddock ford, from October to April.

Anyways this is just a very brief description of how this plan not only focuses on Natural Resource restoration and protection, but the plan will have a side effect of protecting, providing, and creating human use of the Natural Resource.

Please plan on attending and voicing your support of the plan and the need for natural resource restoration and protection. If you can not attend please send a letter voicing your support of the plan to Ohio EPA by way of Regan Williams as listed in the attached announcement.

Matthew Smith

Ohio Department of Natural Resources

Assistant Scenic River Manager

3441 North Ridge West

Ashtabula, Ohio 44004

Office: 440-992-5845

Fax: 440-992-2474

www.dnr.state.oh.us/dnap

OEPA Community Meeting on the Restoration of the

Ashtabula River and Harbor

April 22, 2008 7:00 PM Lakeside High School,

6600 Sanborn Road, Ashtabula

Hello;

My name is Frank Lichtkoppler. I have been working with the Ashtabula Remedial Action Plan Council (RAP) since 1988. I am a founding member of the Ashtabula River Partnership (ARP) and have worked with the ARP since it was formed in late 1994.

In the early 1980's the International Joint Commission declared the Ashtabula River and Harbor a Great Lakes environmental Area Of Concern (AOC) because pollution of the river had impaired the beneficial use of the River.

The Beneficial Uses Impairments documented for the Ashtabula River and Harbor include:

- 1) Restrictions on fish and wildlife consumption
- 2) Degradation of fish and wildlife populations
- 3) Fish tumors or other deformities

4) Degradation of benthos (bottom habitat)

5) Restriction on dredging activities

6) Loss of fish and wildlife habitat

This designation of the Ashtabula River and Harbor a Great Lakes environmental Area of Concern helped to spur on the work of the local Ashtabula Remedial Action Plan Council (RAP). Under the threat of Superfund the Ashtabula River Partnership (ARP) was formed to focus on and find a better way to dredge the contaminated sediments from the Ashtabula River and Harbor. After many years of work this environmental dredging is almost complete. When it is finished it will provide increased commercial and recreational access to the Ashtabula River. However, the environmental restoration and elimination of the beneficial use impairments remains to be accomplished. Natural resource restoration and protection is needed in order to de-list the Ashtabula River from the IJC list of Areas of Concern.

Damages to fish and wildlife populations and habitat in the Ashtabula River and Harbor have been documented and three Natural Resource Restoration alternatives have been proposed.

Alternative A (No action) will do nothing to help restore the beneficial uses of the Ashtabula River and will not help us to de-list the river as an Area of Concern. With Alternative A there will be no increase in public access to Ashtabula River resources and no restoration of those resources.

Alternative C (Human Use) will provide for increased public access and increased public education on the natural resources of the Ashtabula River but those resources will not be restored or improved under Alternative C. This alternative will not help us to remove the Area of Concern stigma from the Ashtabula River and Harbor.

Alternative B (Habitat Restoration and Protection) will: 1) enhance and preserve riparian, flood plain and upland habitat; 2) it will enhance, reestablish and preserve wetlands; and, 3) it will improve the aquatic habitat. These actions will help to eliminate the beneficial use impairments on the Ashtabula River and help us to remove the Ashtabula River from the list of Great Lakes Areas of Concern. This restoration and protection of fish and wildlife habitat will also provide for increased access to the natural resources of the Ashtabula River and

Lake Erie. Alternative B is the only alternative that will increase wetland habitat, increase aquatic habitat, increase fish species diversity, increase fish populations, increase wildlife populations, and improve surface water quality.

Alternative B will help to remove the IJC Area of Concern designation and all the negative publicity and adverse media attention that is associated with that designation. Alternative B will also help to increase the quality of life in the community, increase opportunities for wildlife enjoyment and bird watching, improve fishing (by removing the restrictions on fish consumption) and enhance the local economy via increased nature based tourism, improved boating access and improved fishing opportunities.

Thank you for the opportunity to comment on the Draft Natural Resource Plan.

Frank Lichtkoppler

April 22, 2008

#22

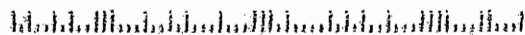
Ashtabula OH 44004



Ohio CPA - N. E. District Office
2110 East Aurora Road
Twinsburg OH 44087

Attn: Regan Williams

924 0013



Ohio EPA, N.E. District Office
2110 East Aurora Road
Twinsburg, OH 44087

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APR 15 2008

Attn: Regan Williams:

OHIO EPA NEDO

Dear Mrs. Williams,

I am in hopes that the restoration plan for the River + Harbor area will also include the gulf which could be made into an interesting and useable Federal Park.

Our gulf is a God given gift which has been ignored and abused for many years. When I was a kid, the WPA or CCC started to work & improve this area, stairs were built to access the ability to get to the bottom easily; an observation deck; benches, area cleared to picnic. The WWII came along, everyone left and no one had been back since.

I think the Gulf could be a year round recreational center. The River dredged to help fish & fishermen, but people could canoe, or tube along the way. Winter ski, sled, toboggan run; trails for walkers & hikers, ice skaters.

Our town, for the most part, was a 2 horse town with the main source of good jobs

Coming from the Railroads and blocks. When they left and the Chemical Companies came in and made our lake and river toilets. Contaminated the soil and the water. I am under the impression that our County is on the E.P.A.'s Superfund list for contamination. No business will bring good paying jobs to build on contaminated soil. The Gulf maybe the only area not having soil contamination.

What can be done to make our Gulf into a Federal Park? Other states have made parks out of grazing land with a horse trough - we have this marvelous piece of land that could really be made into a tourist attraction. What steps need to be done to make a dream reality?

Hoping for the best, I remain

yours truly,

Ashtabula OH 44004

From: Loretta Panzarella <
To: <regan.w Loretta Panzarella <
Date: 4/22/2008 12:07:41 PM
Subject: Lakeside High School Meeting/4/22/08 Ashtabula, Ohio

Dear Trustees,

This letter is in regard to the meeting slated for this evening at Lakeside High School in Ashtabula, Ohio. I am unable to attend this meeting however, I would like to add my voice regarding the proposed plan to build a walkway out to the lighthouse. The city and county would benefit greatly by the implementation of this project. Our lighthouse is a national treasure and its history is also the history of the harbor. By providing a "bridge" to the past, with the instillation of a walkway, we are also promoting a secure path and a strong "light" for the future. Without an appreciation of this river, its history and those who came before, the next generation will not protect or value this area. Our children need to feel a sense of pride in their history as well as an appreciation for all the beauty that surrounds them. In our "throw away" society we need to work to keep our wonderful old buildings. Please consider this project to be worth your attention and support. Thank you.

Sincerely,
Loretta Panzarella

#24

From: michael penna
To: Regan William:
Date: 4/21/2008 5:59:00 PM
Subject: RE: Ashtabula Harbor Public Meeting

I have read the draft document and EA for the project and I agree with Alternate B: Natural Resource Based Restoration.

Alternate C is ludicrous and would be a colossal waste of money. Lake Erie would destroy the walk before it was completed. I could just imagine people getting stranded in a storm. Whoever came up with that brainstorm should get a lobotomy.

> Date: Mon, 21 Apr 2008 08:54:34 -0400> From: > To:
Subject: Re: Ashtabula Harbor Public Meeting> > Mr. Penna:> The link should be correct but I have attached the document for you.> > We normally use the KSU Ashtabula campus for these meetings but the facility was completely booked through April with various other events. Lakeside was a last resort.> > Regan> > Sig Williams> Environmental Scientist> Ohio EPA> Div. of Emergency and Remedial Response> 2110 East Aurora Road> Twinsburg, OH 44087> 330-963-1210> 330-487-0769 (fax)> > >>> michael penna 4/21/2008 8:36 AM >>>> > I saw the notice for the Ashtabula Project in the Plain Dealer this morning. I am very much thankful for the project. I could not access the project data on the link that was provided in the paper. Could you please send me the correct link?> > You chose to have the meeting at Lakeside High School. Were you aware that this school is not located in the City or even close to the project area? You may want to think about this for future meetings. You may get more participation from City residents.> > Thank you> > Michael Penna> Ashtabula, Ohio 44004>



KARL RABENECK

April 26, 2008

Regan Williams
Ohio EPA Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Dear Mr. Williams

The Restoration of Natural Resources Plan for the Ashtabula River, that has been proposed does not address the lack of public access at the mouth of the Ashtabula River.

With docks and shipping facilities lining the river, any Restoration Plan should deliver more than a single canoe launch up river for the citizens of Ashtabula County.

The Natural Resources Trustees should demand that the offending companies provide funds to fix the walkway to the Ashtabula Lighthouse to give citizens access to the river.

Hundreds of people could use this walkway every day to view the river, the restored wetlands and the harbor.

The walkway could also be used for fishing and as a passage to visit the restored historic Ashtabula Lighthouse.

Please take this community need into consideration!

Karl Rabeneck

From: "Kathryn Rapose"
To: <I
Date: 4/29/2008 1:28:23 AM
Subject: Natural Resource Restoration Plan Ashtabula River and Harbor

To Whom It May Concern:

I strongly urge the natural resource trustees to follow through in carrying out Alternative B, Natural Resource Based Restoration for the Ashtabula River and Harbor.

This is the plan that truly addresses the long term needs of Ashtabula and the environment. I have been involved at the local level in trying to preserve and enhance the natural beauty of Walnut Beach and the Ashtabula River. At the county level, I helped to write the Greenspace chapter of the Ashtabula County Land Use Plan.

Those of us active in trying to preserve the natural beauty of our area have long hoped that funds from the Ashtabula River clean up would provide an opportunity to restore habitat and leave a better environment for future generations.

Alternative C has been pushed by the politically connected claiming to enhance the human environment. It does nothing to help the natural environment it claims to want to make accessible to humans. It is more likely to create a maintenance nightmare for future generations.

Please do not turn this opportunity into pork barrel projects. Instead stick with alternative B and restore and rehabilitate Ashtabula's natural treasures.

Thank you,

Ann Rapose

Ashtabula, Ohio 44004

--- Katherine Rapose

-- provider of the Real Internet.

RECEIVED

APR 29 2008

OHIO EPA NEDO

Jack Slaviero
P.O. Box 378
Kingsville OH 44048-0378

CLEVELAND OH 441

APR 20 2008 PM



Chlorera
ONE CLYDE PROXIE COB

REGAN WILLIAMS
OHIO EPA NORTHEAST DISTRICT OFFICE
2110 E. AURORA ROAD
TWINSBURG, OHIO 44087



44087



Jack R. Slaviero
PO Box 378
Kingsville, OH 44048
1756-17-830 - 10362



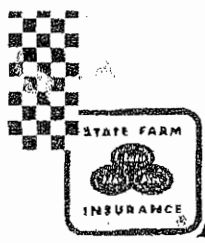
DEAR REGAN WILLIAMS,
HELLO! I'M A MALE AND WILL BE 68 YRS OLD THIS YEAR. I'M NOT MUCH FOR WRITING BUT I READ THE ARTICLE IN THE STAR BEACON ABOUT THE POSSIBLE THREE CHOICES THAT COULD TAKE PLACE FOR THE ASHTABULA RIVER AND HARBOR RESTORATION. IF I WERE A SOMEBODY AND HAD A SAY SO, I WOULD BUILD A WALKWAY FROM WALNUT BEACH TO THE LIGHTHOUSE. HOW WONDERFUL THAT WOULD BE. I'M BETTING UP THERE IN YEARS AND THAT WOULD BE TERRIFIC EXERCISE WALKING OUT TO THE LIGHTHOUSE, NOT ONLY THE WALK BUT TO OBSERVE THE BEAUTY OF LAKE ERIE WITH THE GULLS PLUS THE OTHER BIRDS AND TO CHAT WITH OTHERS ON THE WALKWAY WOULD BE A REAL TREAT. I ALSO LOVE TO FISH AND TO WALK OUT AWAYS AND CATCH A PERCH DINNER AND I MIGHT ADD IS MY FAVORITE MEAT, LAKE ERIE PERCH, WOULD BE GREAT. THANKS FOR LISTENING. YOU BUILD IT THEY WILL COME.
GOD BLESS.

SINCERELY,

Jack Slaviero

#30

#31



ATTN: Mr. Williams

RE: WALNUT BEACH
PROTECT

FAXING: 330-487-0769

FROM: TOM TIMONERE
STATE FARM INSURANCE
ASHTABULA, OHIO 44004



QUESTIONS, PLEASE CALL: 440-992-7400

PLEASE ASK TO SPEAK WITH:

OR FAX QUESTIONS TO: 440-992-5816

Tom Timonera

To: www
Subject: Walnut Beach project

Sir: as a lifelong resident of Ashtabula, and a non-practicing attorney, I recommend you seriously consider the implications of any plan that denies the human access to the waterfront and break wall along the Walnut Beach area. Similar projects have been done elsewhere, as Mr. Catagalo advised, and the proper protection of our environment should never ignore the essential human needs of our its inhabitants. A balance can be provided, with proper planning and discipline. The beauty and desirability of our waterfront and its lighthouse has been too long ignored. Don't let legalistic thinking or misguided policymaking stand in the way of true progress enhancing the interests of all our citizens. Thank you for listening to those representatives at the recent meeting. Now let the taxpayers of Ashtabula benefit from their tax dollars and dreams of a better life. Tom Timonera

R. J. Timonera

#33

RECEIVED

APR 29 2008

OHIO EPA NEDO

Earl B. Tucker
Ashtabula, Ohio 44004
(440) 964-5085

Regan Williams
Ohio EPA NEO District Office
2110 East Aurora Rd.
Twinsburg, Ohio 44087
(330) 487-0769

Mr. Williams,

After attending the OEPA meeting at Lakeside High School the other night I wanted to have my thoughts entered into the record concerning the proposed settlement and restoration work for the Ashtabula River Project.

I found the trustee's proposals most unsatisfactory and feel that not enough weight has been given to the educational and economic needs of our community in balance to the ecological concerns. In fact, I feel as though the trustees have already made up their minds on this issue and this meeting was nothing more than a pro-forma action to show that they were going through the motions.

I wholeheartedly agree that the primary portion of the proposed settlement should go to the restoration of the waterway; uplands land issues and wildlife restoration. I do however feel that more consideration should be given to compensation for the people of Ohio for the loss of use of the Ashtabula River, it's byproducts and it's ecosystem. This is especially true when you consider the limited number of things that can be done to restore the damaged portion of the Ashtabula River and/or its damaged watershed.

There are several issues and comments that were made during this meeting that I would like to address.

My first issue is the lack of direction and public input into any proposed settlement. The trustees gave me the impression that they are seeking some form of barter style settlement with the companies involved, as opposed to a financial settlement. I would venture that the average citizen is not equipped to conceptualize the reasoning behind seeking such a style of settlement, and while this may seem attractive to your group, it leaves a very bad taste in the mouths of many people. These companies essentially broke the law by polluting Field's Brook, the Ashtabula River Watershed, the Ashtabula River itself and Lake Erie. The economic, health and ecological issues that these actions may have caused are very large and deserving of a great deal of restitution. When this issue is considered you are not just talking about the City of Ashtabula, the Ashtabula River and it's watershed alone. We are also speaking of Lake Erie and the residents of the adjoining states that take their water from the lake and partake of its bounties. I know that the companies involved are going to cry, "Poor us! We cannot afford to do all of this." To that I say, "Too Bad! You created the damage, with reckless disregard to the potential consequences, knowing full well that these wastes were harmful. Now it is time to repair and compensate those who have been damaged by these actions." The words of the Trustees appear to many of us as though the State is going to roll over and settle for just a "slap on the wrist" type of settlement. This cannot be allowed! I would suggest that additional public input should be considered into the settlement process as well as seeking additional public opinion as to what projects should be considered as the result of seeking such a settlement style.

Another issue I have involves the statement made concerning the rehabilitation and restoration of the Field's Brook area. When asked if restoring this area was going to be part of the proposed projects list, the trustees commented that this was not being considered due to the possibility of further contamination of the downstream areas. If the site has been cleaned up why is there a concern over this? If the clean up has been accomplished, it seems to me that it should already be safe for use or have we once again been misled by the state? If I understand your mandate correctly, the restoration of this area as a part of the watershed and uplands ecosystem would be essential to the proposed settlement and the eventual restoration of the river itself. I think that this area needs further consideration.

The trustees also mentioned the purchase of a portion of the property owned by Mr. Brockway, just to the south of 24th St. The idea was to restore that

land into a wetlands area and provide a nature walkway, canoe access/launch area, possible restroom facilities, additional fishing access and the re-vamping of the existing parking area. I view this as an acceptable project in that it meets the mandates of the trustees and will enhance the areas involved, ecologically and at the same time provide for expanded public use an access of the Ashtabula River. The property has been placed under the stewardship of the Ashtabula Township Parks. I would propose that this purchase should be tied into the existing Indian Trails Metro Parks system. In addition to this I would suggest that it, in turn, be connected to the Greenway Trail system which would enhance public access and usage as well as providing continuity to the existing parks infrastructure. A small educational center or kiosk might also be apropos to this project to enhance educational opportunities and assist the public in educating themselves about the restoration process. Tourism and public use would also benefit greatly from this.

Also mentioned were possible projects to enhance the fish habitat of the river along the damaged riverfront as well as fishing access. I see this as a worthy proposal but very tenuous in its ability to be completed without great complications. The predominate portion of the riverbanks along both sides of the Ashtabula River, from 24th St and on downstream are privately owned and already occupied by marinas, the railroads, and other industrial concerns. I hardly think that these entities are going to allow you to impeded the waterways with new fish habitat and allow the public to use their properties to have additional access to the river and it's resources. Yes, some things can be done to restore things, but the predominate portion of the damages to the river cannot be restored in these areas due to current usage and industrialization. Somewhere we also have to consider allowing Mother Nature to heal herself as we have with the long-term restoration of the Great Lakes fisheries and ecosystem. We can help it along but to much interference on our part will lead to another form of damage that may well be just as bad as the damage we are now trying to repair.

The same can be said for the immediate area of the Lake Erie shoreline to the East and West of the river mouth. With the exception of Lakeshore Park and Walnut Beach, private entities or industrial concerns own almost all of the shoreline that could be added to this restoration project.

I would propose that another viable project for the trustees to work on might be the acquisition of the dunes lands and wetlands in and around Walnut

Beach. As there are very few such sites left along Lake Erie, in Ohio, this area would be an ideal plot for restoration and rehabilitation. There is already a small nature trail through the marsh areas and the dunes are in desperate need of restoration. The building of a nature center, acquisition and restoration of the ecological assets and public access facilities would also enhance public use, tourism and help educate the public about the ecosystem and the restoration process. If this project were joined to the Indian Trails and Greenway Trail systems it could become the glowing terminus of a countywide nature and educational tool that would enhance tourism, public access to natural areas and educate them on restoration activities throughout the area. To my way of thinking this suggestion attempts to meet both the ecological needs of your mandate while at the same time doing something that is much needed for this community.

As a member of the Ashtabula Lighthouse Restoration and Preservation Society, the break wall walkway is a project that is dear to my heart. Unfortunately, as I understand your mandate this project does not totally fit into the guidelines that you have to consider. However, I do feel that your consideration of my proposal listed above would greatly aid in the acquisition of the additional funding that this project would need. This walkway would greatly enhance public access to the Lake, the Ashtabula River and its resources as well as grant easy access to the Ashtabula Lighthouse for all people.

Yet another subject that was introduced was the Fox River Settlement in the Green Bay, Wisconsin area. I do realize that the area involved and the settlement are not on a par with the Ashtabula River Project but this particular case does present an excellent example of how many projects can be tailored to meet the needs of the ecosystem and at the same time expand public use and access, provide for expanded tourism which will enhance the communities involved, economically and educationally. I fail to see why the Trustees of this project cannot use this as an example of what can be done when people have the vision to merge the needs of nature and the community together for the betterment of all.

Attached to this letter are several drawings and maps that I feel represent the points that I have made above.

Map #1= this map shows a general overview of the area involved. The areas in light green indicate already existing parks within the damaged areas. Dark

green indicates areas that I feel should be developed under the auspices of the trustees and the subsequent settlement now under negotiation. The purple areas indicate river and lakeside shorelines that are already in use or privately held and thereby cannot be considered for much restoration. The dark blue areas indicate the Field's Brook Uplands area, which should also receive the attention of the trustees. The light gray area represents the proposed Break wall walkway to the Ashtabula Lighthouse.

Map #2= this map indicates the already purchased property south of 24th St. In addition to the already mentioned plans of the trustees (canoe access, walkway, fishing access and picnic area) I would add restrooms and a small interpretative center or informational kiosk about the restoration and clean-up projects as well as ecological information. This should also be attached, (through hiking and/or paved trails to the Indian Trails and Greenway Trail.

Map #3= this map indicates my proposals for the development of a Walnut Beach Conservation Area which would include the previously proposed Interpretative Nature and Learning Center, a re-vamped nature trail/walkway, revitalized dunes habitat, restrooms, parking and picnic facilities and a small boat and canoe access point for that area.

Drawing #1= gives an example of the proposed Break Wall Walkway project. This could easily be accessed through the proposed conservation area.

Drawing #2= this shows a representation of the proposed Interpretative Nature and Learning Center That I would like to see included into the Walnut Beach Conservation Area.

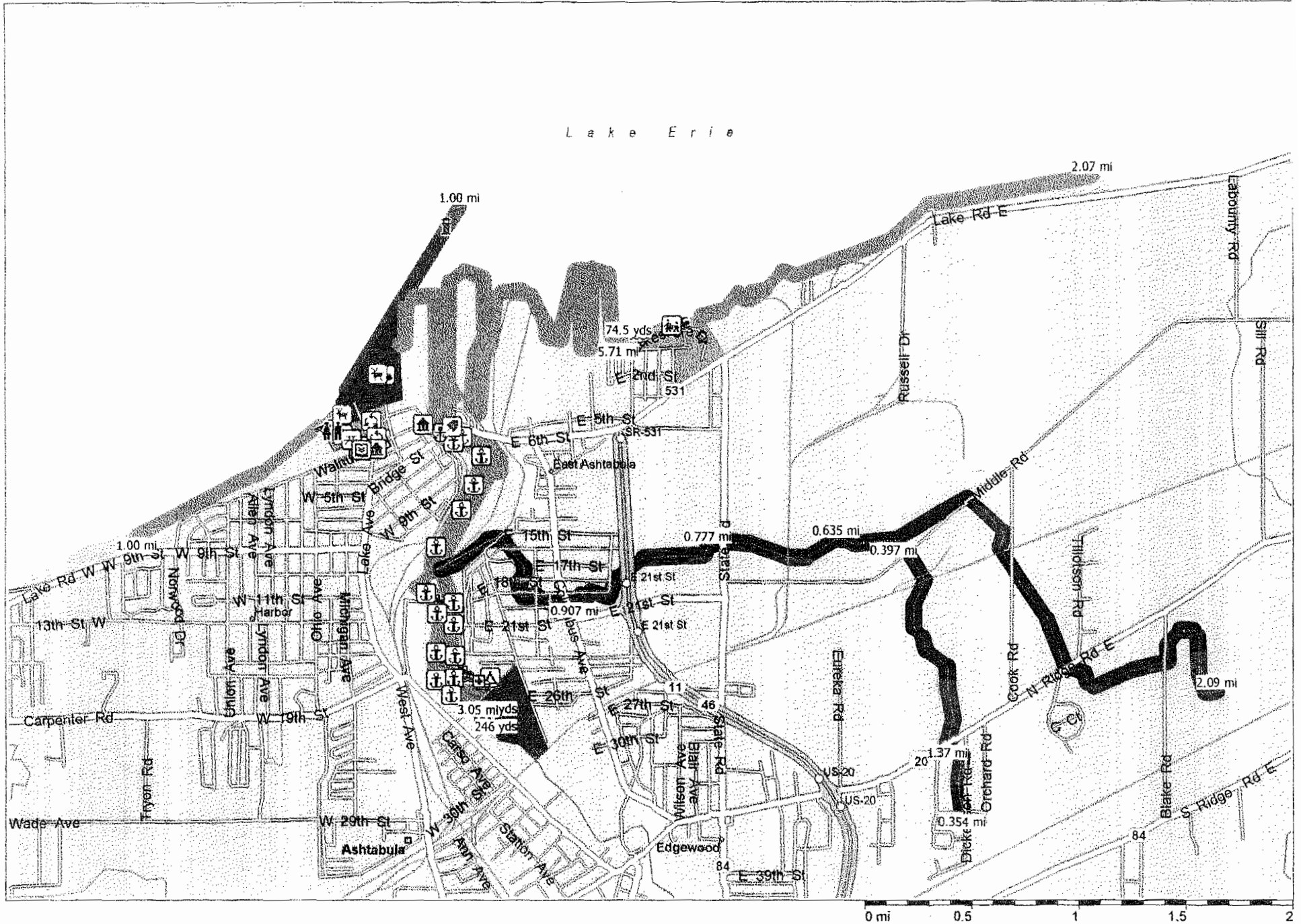
In summation I would ask that the trustees present a more balanced set of proposed projects that more effectively blend the needs of this area's ecology, economy, and educational needs. We would also ask that the public be more included in what sort of settlement is going to be agreed upon. We are not asking you to ignore the ecological mandate that you have been working from, but the trustees need to be more aware of the needs of the community that they are trying to help. The river was not the only resource damaged through this ecological disaster. Our public use of this resource and our economy and in some cases our health, was damaged also and they deserve just compensation, as does the river itself. The Trustees need to have a greater vision for this project, rather than the narrow one which they have

presented tonight. Something that considers the, "needs of the many, and not just the fish (the few)."

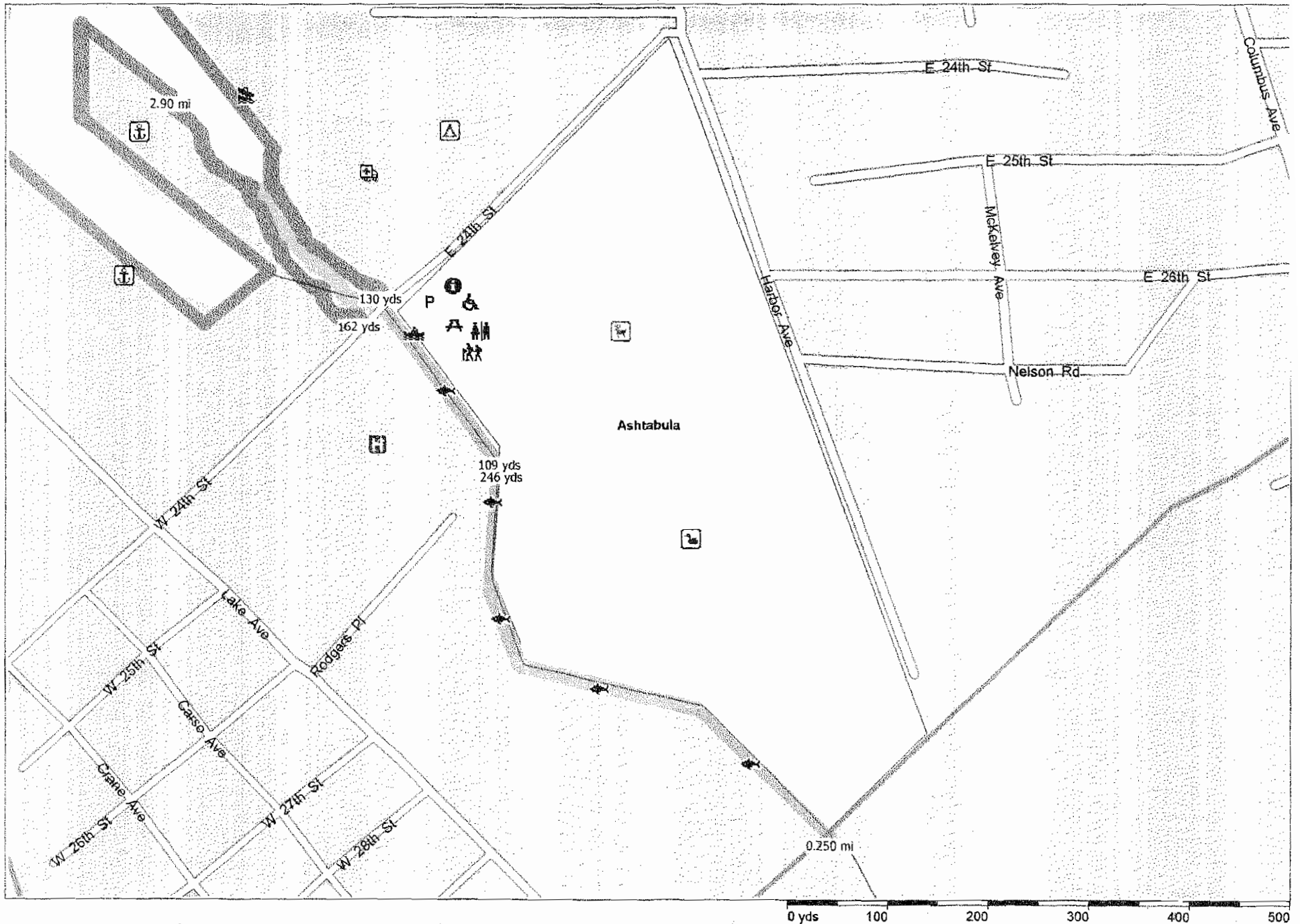
Thank You,

Earl B. Tucker

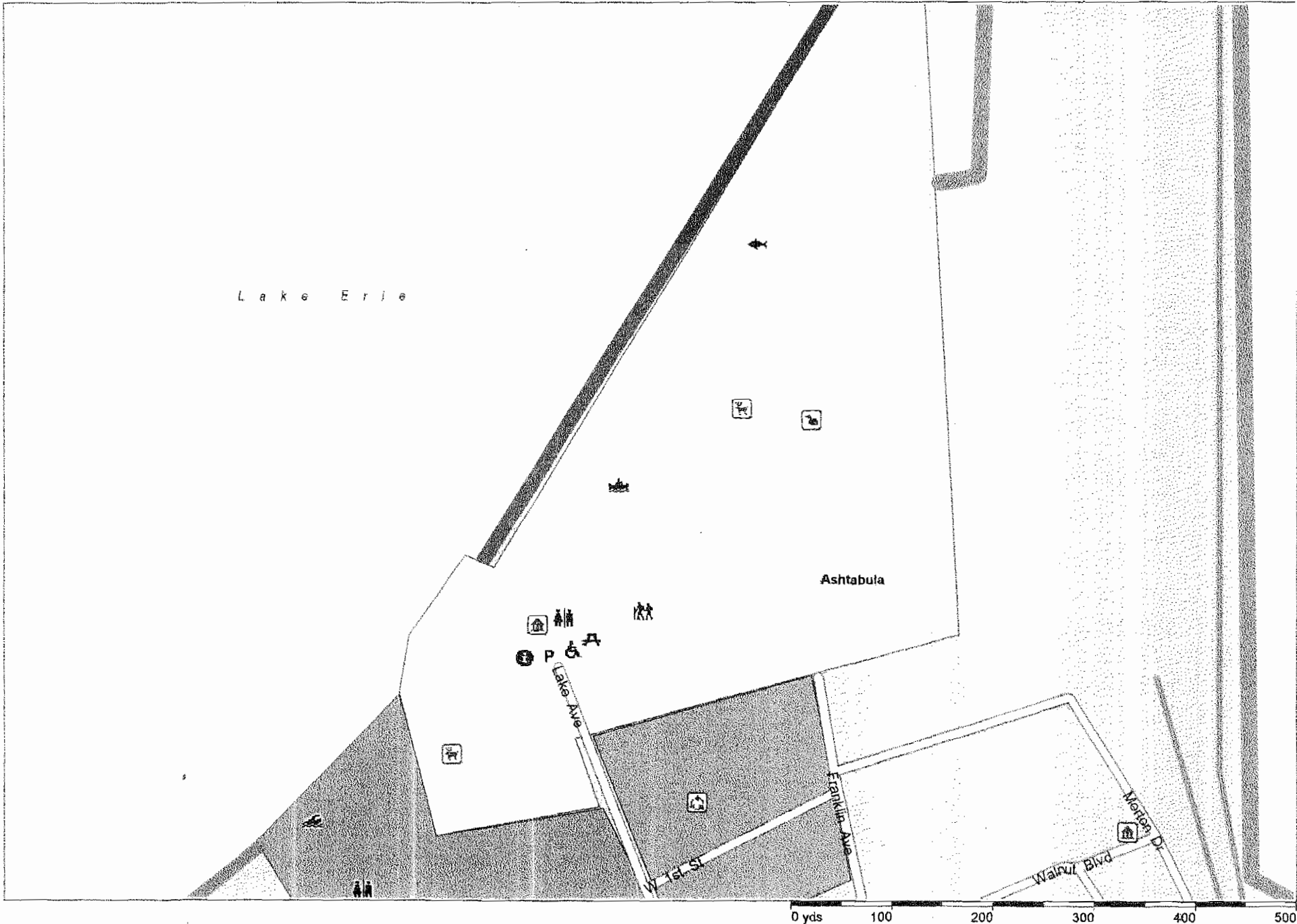
East Ashtabula, Ohio, United States

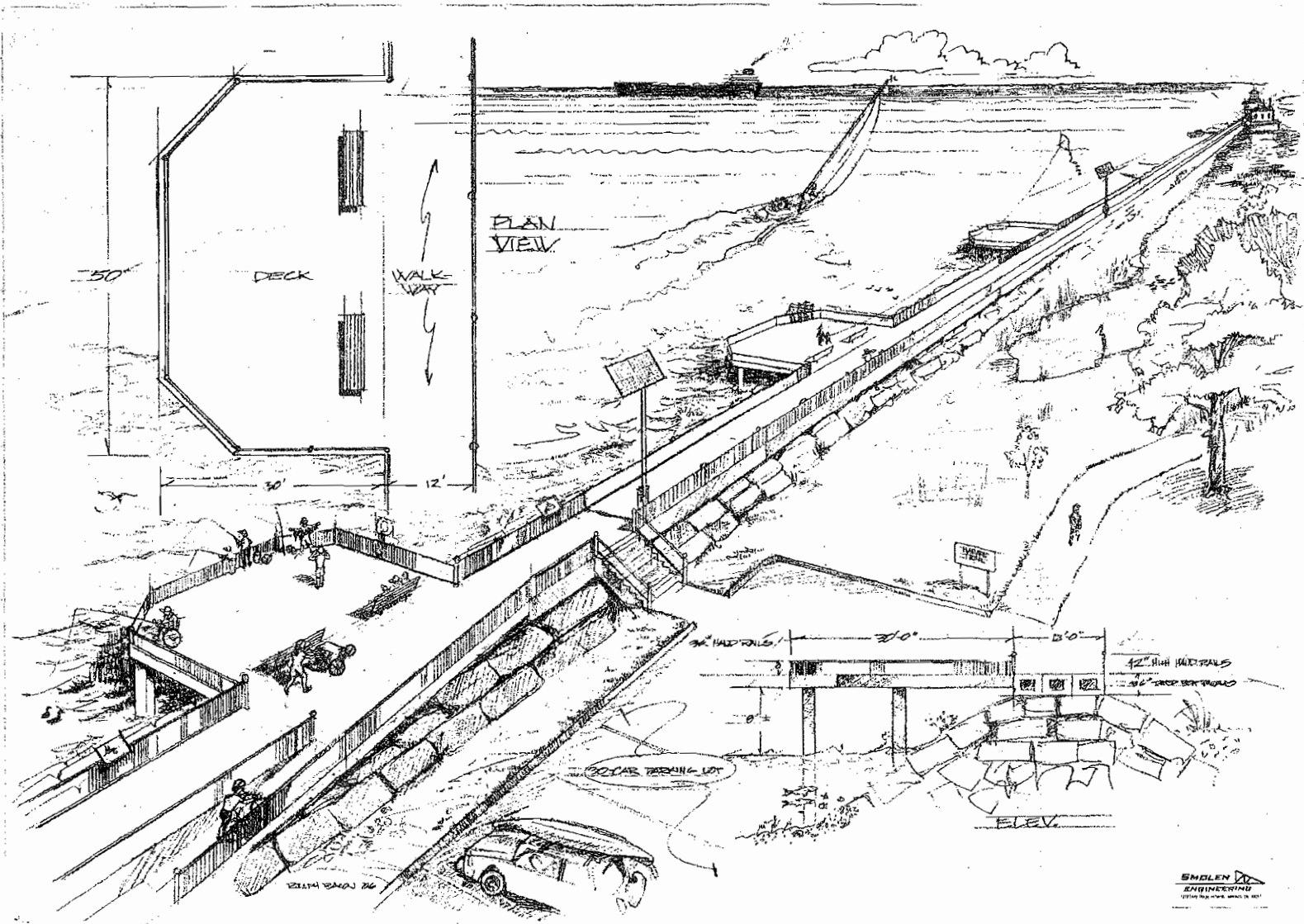


Ashtabula, Ohio, United States



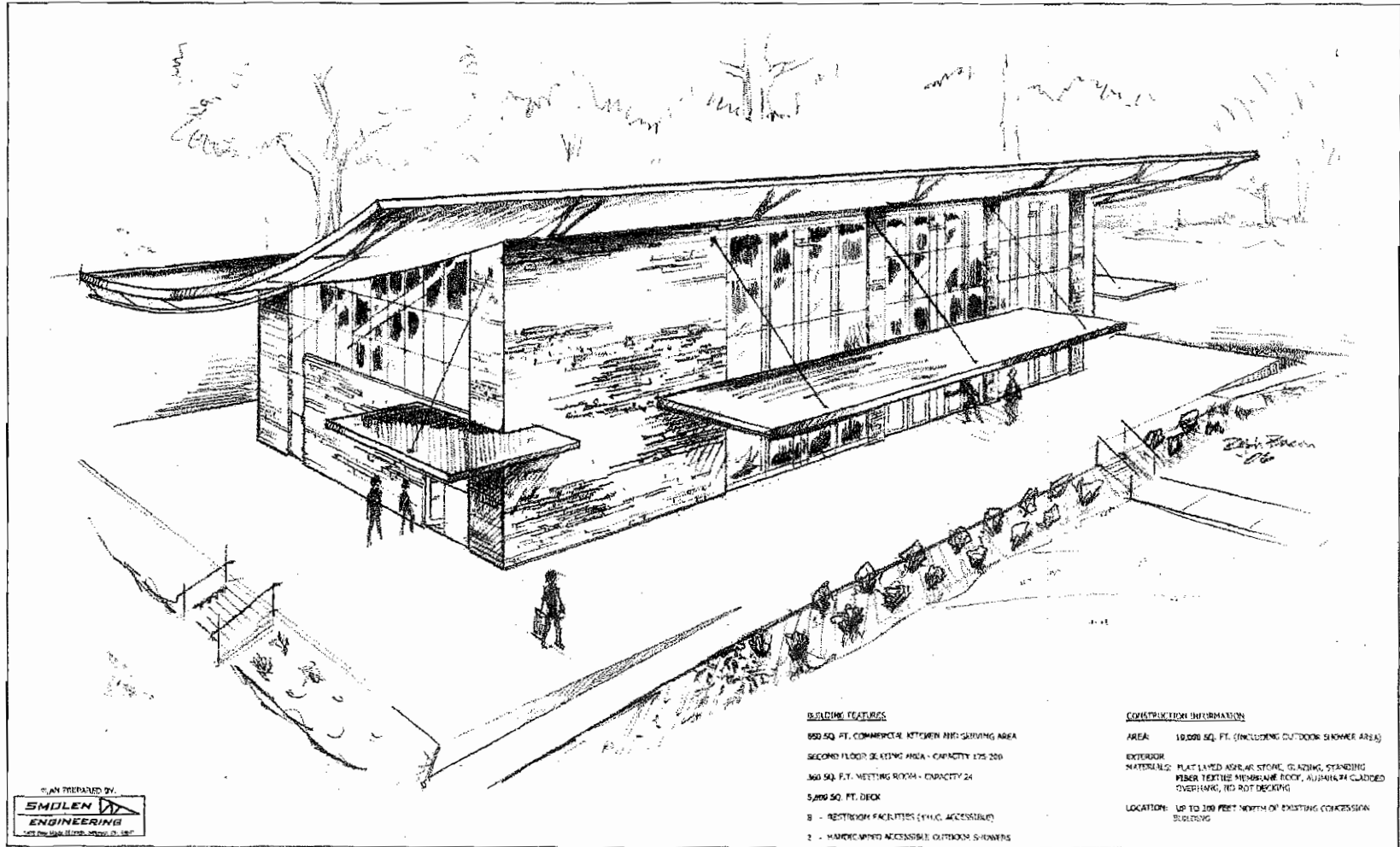
Ashtabula, Ohio, United States





SMOLEN
ENGINEERING
10000 10th Street, NW, Seattle, WA 98148

PROPOSED
 WALNUT BEACH INTERPRETATIVE NATURE & LEARNING CENTER
 ASHTABULA, OHIO



PLAN PREPARED BY:
SMOLEN ENGINEERING
1425 N.W. 10th St., Ft. Lauderdale, FL 33304

BUILDING FEATURES

- 850 SQ. FT. COMMERCIAL KITCHEN AND SERVING AREA
- SECOND FLOOR DECKING AREA - CAPACITY 175-200
- 360 SQ. FT. MEETING ROOM - CAPACITY 24
- 5,000 SQ. FT. DECK
- 8 - RESTROOM FACILITIES (4 M.C. ACCESSIBLE)
- 2 - HANDICAPPED ACCESSIBLE OUTDOOR SHOWERS

CONSTRUCTION INFORMATION

- AREA: 10,000 SQ. FT. (INCLUDING OUTDOOR SHOWER AREA)
- EXTERIOR MATERIALS: FLAT LAYED ASH LAR STONE, GLAZING, STANDING FIBER FORTHEE MEMBRANE ROCK, ALUMINUM CLADDED OVERHANG, NO ROT DECKING
- LOCATION: UP TO 200 FEET NORTH OF EXISTING CONCESSION BUILDING

'WE NEED A BREAK'

#34



Proponents of walkway on the breakwater present case to trustees

By CARL E. FLETCHER
Lakeland Staff

Fish and wildlife, and people, are struggling to the former inhabitants of a plan to restore the shell resources on the Lakeland pier.

The U.S. Environmental Protection Agency (EPA) and U.S. Fish and Wildlife Service awarded some plans during a community meeting at Lakeland High Tuesday evening. The plan proposed fish habitat, a shell beach, and a shell walkway.

The plan also includes a shell walkway, a shell beach, and a shell walkway. The plan also includes a shell walkway, a shell beach, and a shell walkway.

By CARL E. FLETCHER

ORIG EPA SEEKS PUBLIC COMMENT

The U.S. Environmental Protection Agency (EPA) is seeking public comment on a plan to restore the shell resources on the Lakeland pier. The plan includes a shell walkway, a shell beach, and a shell walkway. The plan also includes a shell walkway, a shell beach, and a shell walkway.

Case

From Page A1

parties (PRPs), those parties will implement projects that restore, replace, rehabilitate and/or acquire the equivalent of the natural resources injured at the site and/or the services those resources provide.

Trustees are appointed and authorized to act on the public's behalf in assessing the injuries, negotiating with the PRPs and recovering damages. They are the OEPA, the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration, in cooperation with the Ohio Department of Natural Resources.

Throughout the evening, representatives of the trustees stressed that no agreement has been reached and a "pot of money" filled by the PRPs does not exist.

"We don't know what is going to transpire in negotiations at this point. We don't have a final settlement," said Kelly Kabayza of the U.S. Department of the Interior.

Trustees were straightforward in their preference for Alternative B, which emphasizes projects that restore natural resources in the river's watershed while providing enhanced ecosystems and public use. The broad range of projects could include:

■ Acquisition protection of natural areas through purchases;

■ Invasive species removal; planting of native species;

■ Restoration of Ashtabula Township Parks Commission property near the East 24th Street bridge (property acquired with Fields Brook settlement funds); and

■ Fisheries enhancement projects.

The other options are to do nothing and Alternative C, which emphasizes human-use-related services. This project calls for construction of a walkway to the lighthouse, restrooms and transient boat docks. The walkway would provide access to active recreation, including fishing. Further, construction of an interpretive educational center at Walnut Beach would enhance public education through displays on Lake Erie and other topics.

That alternative does not provide a good fit with the legal language that constrains the trustees' decision. The language specifies that the settlement may require implementation of projects to "restore, replace, rehabilitate and/or acquire the equivalent of the resources injured and/or the services those resources provide."

"When it comes to projects — what we can really do — we have to evaluate it based on that language ...," said Regan "Sig" Williams with OEPA's Northeast District Office.

Williams presented a chart comparing the three plans and how they line up with the actions specified by law. The natural-resources-based restora-

tion plan lined up on all counts, while the human-use plan lined up completely on only one category.

However, proponents of the Walnut Beach plan latched onto the "lost services" language and emphasized the human impact inflicted upon city residents as a result of the polluted river and harbor. They urged the trustees to place a greater weight on that impact in devising their charts.

"We suffered a lot of serious health problems here," said Phillip Schmidt of Geneva. "We've had big losses."

The proponents suggest that building a walkway would be a way to compensate for not only past losses but also salvage an economy that has been suffering ever since industries made their exit.

"The jobs have left, and we have nothing left to do," said Joe Santiana, president of the Ashtabula Lighthouse Restoration and Preservation Society. "The only thing we can rely on is to boost our tourism."

Robert Frisbie, president of the Ashtabula Marine Museum, suggested that an educational center at Walnut Beach could help current and future generations learn about the history of habitat destruction on the river and, thereby, create a groundwork for protection through awareness.

"I still believe the human portion of it is being ignored," Frisbie said.

Ashtabula City Manager Tony Cantagallo pointed out that a restoration plan

in Green Bay, Wis., included construction of a five-mile trail and multi-purpose building. Kabayza countered by pointing out that the settlement was much larger than Ashtabula's will be and the human-use components were a small percentage of the overall plan. Alternative C would require much of the money be used for human-use projects unless the funding were used to leverage grants.

Trustees note that habitat improvements under Alternative B would help boost tourism by providing fish for anglers and increased public-access points upstream. These natural areas can be used for educational programs, as well. The West 24th Street property would receive a boardwalk, canoe launch and gravel parking area under the plan.

Trustees will continue to receive comments from the public through Wednesday. Those comments will be included in a Final Restoration Plan, which should be released after June 30. Implementation of the plan could begin by late summer or early fall of this year.

Kevin Grippi, a proponent of Alternative C, thanked the trustees for their hard work but also urged them to develop a plan that would strike a better balance.

"Go back and sharpen your pencils, find more human-use projects," he said. "Right now, we need a break."

April 2008

Regan Williams, Ohio EPA Northeast District Office

The Ashtabula Township Park Commission (ATPC) is stewards of Lakeshore Park and Indian Trails in Ashtabula, Ohio. The first lands purchased by the ATPC were along the Ashtabula River in 1908 and more lands were purchased and donated through the years. The NRD Trustees are familiar with the ATPC since working together to acquire the CDM property with funds from the Fields Brook NRD settlement fund.

The ATPC offers and welcomes the opportunity to assist in the Natural Resource Restoration Plan for the Ashtabula River. Indian Trails Park with 405 acres of public land, offers many ways in which to meet the goals set forth in the Restoration Plan along with NRDA regulations.

As Indian Trails is the largest public holding in the Ashtabula River Watershed it seems important to use some of the funds to enhance, restore and replace natural resources in the park that have been damaged. The CDM property lies within the city limits and ward 2. It is easily accessible and offers many unique opportunities described in the restoration plan (3.21.3). With its location, it makes a great place to fish the Ashtabula River. Many fish enhancement projects could be accomplished at the CDM property and other areas of Indian Trails. Fishing in Indian Trails has been and is increasing in popularity.

There may be parcels of land adjacent or near Indian Trails that could be acquired and added to the park holdings that meet the goals defined in 3.21.1. By adding these lands to the park would guarantee that they are preserved, protected and in public hands for perpetuity. The ATPC could possibly hold titles to other parcels not necessarily adjacent to Indian Trails.

Indian Trails offers many park uses including active and passive uses. Passive uses include nature photography, bird watching, botany and environmental education. The park, if funds were available could enhance this valuable resource for local residents and visitors to enjoy. Some of the goals described in the restoration plan are also listed in the ATPC's master plan.

As Indian Trails is a public park, if monies were spent in the park it would assure that the success of the projects could be monitored and evaluated with ease. Projects within Indian Trails would definitely improve outdoor recreational opportunities and enhance public awareness all year long for many who live in and visit Ashtabula. Some of the projects that are of interest would not and could not be implemented without outside funding sources such as funds from the NRD settlement.

As stated, the Park Commission is available and ready to work with the NRD Trustees to implement any projects that may be funded. For further information about the ATPC or to view the Indian Trails master plan, please visit the park website at www.lakeshoreparkashtabula.org or contact Park Commission chairman, Mike Wayman at 440-969-3188.

#36

Negan Williams
Ohio EPA Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

April 23, 2008

Dear Sir:

I would like to first thank you for coming to Ashland High School and making a presentation and answering questions Tuesday night. I am writing this letter in appeal to you and the other Trustees to consider a fourth alternative. Alternative B was heavily weighted (approx. 80%) toward restoration and repair of the ecosystem defined as the area surrounding the approximate 1 mile section of the river up to Pecks Brook with a small inclusion for improvements for public use. Alternative C is a polar opposite of Alternative B where it is heavily weighted toward Human Use with a small inclusion for restoration and repair to the defined ecosystem. I would like to propose a fourth alternative where 50% would be used to restore and repair the defined ecosystem and 50% would be used for Human Use. I believe that the number one priority is to repair the damage to the ecosystem. I also believe that humans are part of the defined ecosystem that needs to be restored and repaired. I would like to see the money used to complete as much as the proposals in Alternative B while also include the walkway to the lighthouse along with any other items proposed in Alternative C that available monies would include. A compromise might be to put the Interpretive Educational Center in a section of the lighthouse. This would give more people a chance to visit the lighthouse while learning. At the same time it may also make the lighthouse accessible to school children. By not constructing a building at Walnut Branch for the center, this could free up money to do more ecosystem repairs. There would be more opportunities for compromise in both Alternatives that would develop the fourth alternative I wish to see considered. An alternative that is evenly weighted for the entire ecosystem (including humans) may also provide some checks and balances. The citizens of Ashland County will have some deliverables they can quantify and interact with that will also help them to become aware of the ecosystem and to help them realize that humans are a part of this system and to be more conscious of the part they play in it and maybe they should pay more attention to what is going on by reporting any potential damage before it gets out of hand. Thanks for taking the time to review my comments. Good luck with this project.

Sincerely,

Paul E. Wright, Jr.

GENEVA, OHIO • 44041
PHONE: 978-466-7218



APPENDIX C2
PUBLIC COMMENTS ON THE INITIAL
NATURAL RESOURCE RESTORATION PLAN & ENVIRONMENTAL
ASSESSMENT FOR THE ASHTABULA RIVER AND HARBOR SITE
Transcript of the April 22, 2008 Public Meeting

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OHIO ENVIRONMENTAL PROTECTION AGENCY
PUBLIC HEARING

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In Re: :
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Ashtabula River :
Restoration of :
Natural Resources :
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Transcript of proceedings before the
Ohio Environmental Protection Agency, taken at
Lakeside High School, 6600 Sanborn Road, Ashtabula
Ohio, on Tuesday, April 22, 2008, commencing at
7:00 p.m.

APPEARANCES:
Caroline Markworth, Ohio EPA, Hearing Officer
Regan "Sig" Williams, Ohio EPA
Sheila Abraham, Ohio EPA
Mark Navarre, Ohio EPA
Dave DeVault, U.S. Fish and Wildlife Service
Kelly Bakayza, U.S. Department of Interior

PROCEEDINGS

1
2 MS. MARKWORTH: Did you have a
3 question, sir?

4 MR. GRIPPI: Yes. Kevin Grippi,
5 , Ashtabula, Ohio. I have
6 two questions. Maybe I'll have more later on,
7 but I'll start with two questions.

8 First question is, City of Ashtabula
9 took a tremendous beating through the
10 industrial revolution as far as accepting the
11 effluent from the plants and the damages that
12 you talked about. It seems to me that the
13 list of projects are really light as far as
14 being located in the city of Ashtabula. Why
15 are more projects not in the city of Ashtabula
16 proper? That's my first question.

17 The second question is, it seems like
18 the classifications between Alternative A and
19 Alternative B are really locked in, very
20 segregated. Is there any way that you could
21 consider sort of commingling some of the
22 projects and moving maybe something from
23 Alternative A and Alternative B? Just seems
24 like everything's really locked in. Those are
25 my two questions for now.

1 MR. NAVARRE: I'll offer an initial
2 response and others can add to it. On your
3 first question, Mr. Grippi, about the
4 distinction between the city and the township,
5 right, and the location of projects? I mean,
6 some of the properties that we've considered
7 for the restoration opportunities are within
8 the city limits. Others are just south of the
9 city limits in the township, but all are in
10 the Ashtabula River corridor. And our focus
11 is not so much on a political geographic
12 distinction so much as an ecological one.
13 We're trying to develop projects that will
14 benefit the Ashtabula River and the Ashtabula
15 River corridor and the river watershed. And
16 so it's primarily the damage from Fields Brook
17 into the Ashtabula River, that concentration
18 is where most of the damage occurred. And
19 we're focused on projects that are in that
20 vicinity that will help restore that
21 watershed, regardless of whether it's in the
22 city or the township.

23 MS. ABRAHAM: Just to add to that.
24 Mark talked about geopolitical divisions, but
25 what you have to remember, I think what I'd

1 like you to remember, that anything that we do
2 by way of restoration of the Ashtabula
3 watershed will ultimately benefit the city and
4 township and everybody else. You will have
5 ecotourism. You will have more dollars
6 flowing in from economic benefits. So I'd
7 like us to work together to bring the best
8 value to the people of Ashtabula as a whole
9 and not look at just township and city, but at
10 the watershed as a whole.

11 Kevin had a second question.

12 MR. NAVARRE: The only thing I'll
13 add to the first point is that the other piece
14 of this that we try to consider is when a
15 property is acquired and preserved in its
16 natural state we need a steward to manage
17 that. The Ohio EPA doesn't perform that
18 role. The Department of Natural Resources
19 does not perform that role. And U.S. Fish and
20 Wildlife Service doesn't perform that role.
21 It has to be a local entity.

22 For example, one of the organizations
23 that we've worked with on the Brockway
24 property with Fields Brook natural resource
25 damage monies is the Ashtabula Township Park

1 Commission. When we acquired that property we
2 transferred it subject to an environmental
3 covenant to preserve it perpetuity, and now
4 the Township Parks Commission, represented
5 tonight by Mike Wayman, will manage that
6 property in perpetuity.

7 So one of the considerations we have to
8 factor into this is an end-use land steward
9 for properties that are acquired to benefit
10 the watershed.

11 MR. GRIPPI: May I ask, what
12 percentage of Alternative B projects are in
13 the city of Ashtabula?

14 MR. NAVARRE: I don't know.

15 MR. GRIPPI: Just approximately.

16 MS. ABRAHAM: I don't think we can
17 answer that because we don't have a complete
18 understanding, a full list of all the
19 projects; we're still working through those.
20 And as those projects become known and become
21 available, we will put out an addenda. You
22 and everybody will know what we're doing. It
23 will be done in the public arena. But at this
24 point we really can't answer your question
25 honestly.

1 MR. WILLIAMS: But in the case of
2 the Brockway property, even though that one is
3 in --

4 MR. GRIPPI: It's not in the
5 city.

6 MR. WILLIAMS: It's our
7 understanding it is within the city limits.
8 It's now held -- the property is held by the
9 Ashtabula Township Park Commission.

10 MR. GRIPPI: It's not in the city
11 of Ashtabula.

12 MR. WILLIAMS: That's what our
13 understanding is; it is within the city
14 limits.

15 MR. DEVAULT: I think, Kevin, the
16 bottom line, to answer your question, is --

17 MR. WILLIAMS: There are others
18 too.

19 MR. DEVAULT: There just isn't a
20 lot of space along the Ashtabula River within
21 the city limits. I mean, that's primarily
22 marinas and docks.

23 MR. WILLIAMS: But there is more
24 than just the Brockway property.

25 MR. SMITH: I would be able to

1 answer that also. The Brockway property, if
2 you go down there any given day, people walk
3 from the city and all around that area down to
4 that property and they go fishing all the
5 time. Once that property is, if it gets
6 rehabilitated even more to provide fishing
7 access for people in the city limits right
8 downtown, and in that whole area both on the
9 city and township side who walk to those areas
10 will be able to walk down there now and have
11 fishing opportunities even more.

12 MR. GRIPPI: Matt makes my point
13 exactly. We need those kinds of places within
14 the city limits.

15 MR. SMITH: But it's right there;
16 right next to the hospital.

17 MR. NAVARRE: I'll try with that
18 one too. I think one of the things that we
19 have right now is there is somewhat of a plan
20 between the two. By that I mean there are
21 some human-use benefits associated with
22 Alternative B projects. For example, Sig
23 mentioned enhancing the Brockway property that
24 was acquired with Fields Brook monies in terms
25 of adding things like a boat launch and access

1 for recreational opportunities, as well as
2 enhancing it's ecological property as a
3 wetland. So it's not just an ecological
4 benefit associated with improving the Brockway
5 property project. It's also a human-use
6 benefit associated with that too.

7 The difficulty we found with these six
8 criteria in the chart in evaluating the
9 Alternative C projects is that there is, as
10 Sig explained, there's less ecological benefit
11 associated with that; it's almost entirely
12 human use. And because of the statutory
13 requirement, the federal superfund statute,
14 the Natural Resource Damage Provision that
15 requires monies to be used by the trustees to
16 restore, replace or acquire the equivalent of
17 the natural resources damaged, the criteria
18 are then developed based on that statutory
19 mandate that we have to follow. So we are
20 sort of limited that way.

21 MR. GRIPPI: May I ask a follow-up
22 question?

23 MR. NAVARRE: Yes.

24 MR. GRIPPI: Getting back to my
25 city of Ashtabula limits. Can you tell the

1 group, what percentage of restoration activity
2 is going on within the city of Ashtabula as
3 opposed to outside of the corporate limits?
4 I'm curious.

5 MR. NAVARRE: When you say
6 restoration activities, do you mean sediment
7 dredged?

8 MR. GRIPPI: Clean-up activities.

9 MR. WILLIAMS: I believe all of it.
10 All of the Legacy Act project from basically
11 Jack's Marina down to the 5th Street bridge
12 and the water project from the 5th Street
13 bridge, 1,900 feet downstream. I'm quite sure
14 all of that is within the city.

15 MS. MARKWORTH: Ma'am, did you want
16 to ask your question?

17 MS. SCHMIDT: Cathie Schmidt,
18 Geneva, Ohio. This idea of restoration, if
19 harm has been done, actually your clean-up and
20 dredging and all is considered part of
21 restoration or cut that into sections? Is
22 that separate from restoration?

23 And also, just to point out that in the
24 no-action, if you've cleaned up the area
25 nature tends to take some action, because your

1 restoration -- have you done some harm by
2 clean-up? So are you restoring for that, not
3 just the harm done from factories?

4 MR. WILLIAMS: I can at least take a
5 shot at part of that. Yeah, there actually is
6 some harm done by the clean-up itself. It's
7 unavoidable. We're going to go in there with
8 a dredge and cut out what was once one or two
9 feet deep at the root of aquatic plants
10 growing and providing some kind of nursery
11 habitat for fish and aquatic invertebrates.
12 You go in there and dig that down to a 16- or
13 18- or 20-foot channel you've lost resources;
14 you've injured a resource. So that is
15 actually taken into account in the Legacy Act
16 project itself.

17 There's a component of that project
18 which has not been done yet, which is in the
19 planning stage, we hope to have it implemented
20 before too long, to actually mitigate for
21 injuries caused by the remedy itself, the
22 clean-up itself. That would involve probably
23 some form of creation of a new shallow fish
24 habitat along the bank of the river within the
25 remediation areas. Details of that haven't

1 been worked out yet, and how much money we'll
2 have available hasn't been worked out yet.
3 But it will be along the same lines as the
4 kind of restoration projects the trustees are
5 looking at for the settlement of the NRD
6 claim, but they will be done as part of the
7 Legacy Act as mitigation. It's really the
8 same thing, mitigation and restoration, just
9 under a different program. I don't know if
10 I've answered all of your questions or not.

11 MS. ABRAHAM: No. The one part of
12 the question was what's the distinction
13 between clean-up and restoration.

14 MR. NAVARRE: Mrs. Schmidt, there
15 is a definite distinction between those two.
16 And all of the work that's been done to date,
17 with the exception of the Fields Brook natural
18 resource damage settlement and the Brockway
19 property, but all of the clean-up work, the
20 dredging work that's been done to date has
21 been remediation of the Ashtabula River or the
22 damage caused. And so what we're engaged in
23 now is the restoration component, the Natural
24 Resource Damage Restoration component of that
25 that follows. And it's necessary for that to

1 come after the fact. It has to be a two-stage
2 process, otherwise we can't factor in all the
3 damages, as a result of both the injury caused
4 and the remediation work done, as Sig
5 mentioned, the dredging of the harbor and the
6 disposal of the contaminated soil.

7 MR. WILLIAMS: The remediation
8 really is to address the contamination in the
9 river, the contamination which has caused the
10 injuries. The NRD restoration is over and
11 above clean-up and is intended to actually
12 restore those injured resources to the extent
13 possible, and compensate the public for the
14 lost services related to those injuries.

15 MS. MARKWORTH: Question back there.

16 MS. CONJER: Yeah. My name is
17 Jacqueline Conjer from Ashtabula. On your
18 screen you showed about improving upland
19 habitat and restoring it. Is that strictly
20 within the Ashtabula River limitations or does
21 that also include Fields Brook?

22 MR. DEVAULT: At this point we're
23 looking at projects along the Ashtabula River
24 proper.

25 MR. WILLIAMS: We're not

1 contemplating, at this time at least, any
2 restoration or acquisitions outside of the
3 Ashtabula watershed. The regulations don't
4 require that, but it's always a preference to
5 try to be as close to the actual injury as
6 possible. And everything that we're
7 considering at this time is within the actual
8 river watershed.

9 MS. ABRAHAM: Is there a reason why
10 you asked the question? Do you know of any
11 particular property along Fields Brook that
12 you think --

13 MS. CONJER: No, I was just
14 curious. You acknowledge that it drains into
15 the Ashtabula River, so to me that's kind of a
16 tributary of the Ashtabula River, so it would
17 seem like, wouldn't you use the term upland
18 habitat? Maybe that's part of it.

19 MR. DEVAULT: One of our concerns
20 all along supplied to the Fields Brook
21 settlement also is actually trying to do
22 restoration work in the area of Fields Brook
23 that's been remediated, could cause more
24 contaminate release problems. And it's just
25 an area where we prefer to avoid if we can.

1 MR. WILLIAMS: We thought there were
2 limited really opportunities to do restoration
3 on Fields Brook itself, that's why the
4 Brockway property is done as part of the
5 Fields Brook NRD restoration. It was on the
6 river rather than on the Fields Brook.

7 MS. CONJER: So you're saying it's
8 basically already been done with Fields
9 Brook?

10 MS. ABRAHAM: No, we bought --

11 MR. WILLIAMS: We've gone outside of
12 the immediate Fields Brook to the Ashtabula
13 River. It was within the assessment area
14 though.

15 MS. ABRAHAM: We bought the
16 property with part of the Fields Brook Natural
17 Resource Damage Fund, but the work that
18 remains to be done we hope will get done using
19 some of the Ashtabula River settlement money,
20 we hope.

21 MS. MARKWORTH: We're going to go
22 right here.

23 MR. JOSEPH: Just another
24 clarifying question regarding the scope.

25 MS. MARKWORTH: Sir, could you state

1 your name and speak up a little bit?

2 MR. JOSEPH: Sure, Brett Joseph.

3 My clarifying question has to do with how
4 you're defining the relevant ecosystem, which
5 you referred to starting the ecosystem
6 functioning. Ecosystems can be defined
7 according to various levels of scale,
8 everything from the whole world to some
9 microsystem within a garden patch or something
10 like that. I'm just curious as to how -- is
11 it the watershed? Is it the tributaries or
12 just the main stem? What is the relevant
13 ecosystem for purposes of preservation
14 planning?

15 MR. DEVAULT: Our preference is,
16 and it always is, to address the area where
17 the injuries have actually occurred. And so
18 in this case, I mean, we strongly prefer
19 projects within the Ashtabula watershed. And
20 we strongly prefer projects more toward the
21 northern end of that. But that's not cast in
22 stone.

23 MR. JOSEPH: I guess the term
24 ecosystem, how is that being defined?

25 MS. ABRAHAM: Matthew maybe will be

1 able to help with some of this. But we were
2 looking at it as a watershed level. We're not
3 looking at the (indiscernible) just
4 watershed. Matthew, would you like to add to
5 that?

6 MR. SMITH: Matthew Smith, Ohio
7 Department of Natural Resources, Scenic Rivers
8 Program. I think the trustees have always
9 looked at mostly starting at the base of where
10 the problem was and work out through the
11 watershed as projects became available. No
12 consideration has been looked at outside of
13 the watershed itself, so that is the
14 ecosystems that has been looked at.

15 MS. MARKWORTH: In the blue shirt and
16 then the white.

17 MR. CONTAGALLO: My name is Tony
18 Cantagallo. I am the City Manager for the
19 city of Ashtabula. I have a question. When
20 you conducted your settlement agreement in Fox
21 River, Wisconsin, I notice that you built a
22 2,156 square foot multipurpose building/marsh
23 overlook platform, five miles of trails, and
24 460-acre village park house and waterfowl
25 preserve on the shore of Green Bay in the

1 village of Howard. The multipurpose building
2 will have an activity room for nature-related
3 education exhibits and programs, small
4 greenhouse and other areas needed for
5 preserved management and upkeep. Is that
6 Alternative C in Wisconsin or did it rise
7 above of C?

8 MR. DEVAULT: Much like what we're
9 proposing here, it was on the Green Bay Fox
10 River settlement. And I should point out that
11 was an interim settlement. That case hasn't
12 settled.

13 MR. CANTAGALLO: You took down the
14 greenhouse and everything afterwards?

15 MR. DEVAULT: Let me finish. There
16 was a fairly small component that was directed
17 toward human use, much like building
18 boardwalks and canoe launches and stuff here.
19 And so that's exactly what you're talking
20 about there.

21 MR. CANTAGALLO: My follow-up
22 question --

23 MR. DEVAULT: I should point out
24 that was a \$60,000,000 partial settlement that
25 was being worked with there, so we've got some

1 difference in scale.

2 MR. SMITH: Also, if I may
3 comment to that too. I think part of that Fox
4 River plan, they deemed that no more than 10%
5 of the total -- in that one plan, that no more
6 than 10% of all the settlement monies could be
7 applied towards infrastructure-type
8 activities. So even though all the Fox River
9 has some of these projects in there, it
10 doesn't total more than 10% of the total
11 monies used.

12 MR. CANTAGALLO: My second question
13 is, how much money has the NRD spent catching
14 fish in the river and eviscerating them to
15 determine how much toxicity they have?

16 MS. BAKAYZA: You know what,
17 Mr. Cantagallo, I can tell you I don't know
18 the exact amount of money, but I can tell you
19 that we can respond to that. That's
20 considered assessment costs, which is a
21 separate category under any potential
22 settlement, aside from the restoration. So
23 the trustees would be recovering assessment
24 costs and then there would be money that's
25 recovered for restoration. And we do have

1 that information, but I don't have it off the
2 top of my head.

3 MS. MARKWORTH: You might want to
4 fill out a blue card and when we take comments
5 you --

6 MR. CANTAGALLO: Would you say the
7 number is over a million dollars?

8 MS. BAKAYZA: I really -- I
9 honestly can tell I don't know, because you're
10 asking a very specific question.

11 MR. CANTAGALLO: If you could get me
12 that number I'd appreciate it.

13 MS. BAKAYZA: Right. Relative to a
14 very specific assessment activity, because
15 there were a lot of things done to assess the
16 river and the natural resources.

17 MS. MARKWORTH: Again, if you could
18 fill out a blue card when we're taking
19 comments, that will be responded to in the
20 responsiveness summary in writing.

21 MS. BAKAYZA: We can specifically
22 respond to it.

23 MR. DEVAULT: I think it is
24 important to be clear that not only are we
25 recovering damages for the injuries to the

1 natural resources, we are also recovering
2 those assessment costs from the responsible
3 parties.

4 MS. ABRAHAM: They are two separate
5 parts in a way. What we recover for projects
6 will be spent on the projects; what we recover
7 for assessment costs will be going to fund the
8 way we pull for our assessment costs for the
9 future.

10 MR. CANTAGALLO: Then just one other
11 question. How would the toxicity in the fish
12 today give you any information regarding the
13 toxicity that was in the fish yesterday? In
14 other words, when this toxic substance was put
15 in the river over the last 50 years, what
16 would you learn from the fish today?

17 MR. DEVAULT: You would learn the
18 condition of the fish today. I guess I don't
19 really understand your question.

20 MS. ABRAHAM: Mr. Cantagallo, one
21 of the things as trustees --

22 MR. CANTAGALLO: That was kind of an
23 underwhelming answer.

24 MS. ABRAHAM: One of the things as
25 trustees we're required to do is start this

1 process. The first thing we have to do is we
2 have to prove that an injury occurred. And to
3 prove that an injury occurred there are very
4 specific regulations and we follow those
5 regulations. And one of those things is you
6 have to demonstrate in fish tissue that there
7 is X, Y and Z, chemicals, different kinds of
8 chemicals. You have to demonstrate that these
9 specific things happened to the fish. And
10 until we do all that we can't document that
11 there was an actual injury. Once we document
12 there's an injury, then we move through the
13 process and say, okay, now what do we do to
14 make that injury whole?

15 So to ask, that's the initial first
16 step in the process. And I understand what
17 you're saying, and clearly there could have
18 been injury, far greater injury, many, many
19 years ago when things were spewing out of
20 Fields Brook and other places and larger
21 quantities. Unfortunately I wasn't alive
22 then. I couldn't go back -- we can't go back
23 and recreate it. We are doing the best to
24 collect the data that we are mandated to
25 collect to pull all together what we need to

1 restore the resources.

2 MR. CANTAGALLO: The gentleman from
3 Ohio EPA said that the river is what's being
4 considered for the rehabilitation that you're
5 looking at, because that's where the greatest
6 amount of all the toxicity was. So does that
7 mean that you're not going to spend any money
8 at all doing anything by way of restoration of
9 Walnut Beach?

10 MS. ABRAHAM: No, it doesn't.
11 Dave, Sig, would you like to answer that
12 question?

13 MR. DEVAULT: No, it absolutely
14 doesn't.

15 MS. ABRAHAM: Sig, would you like
16 to answer that, or Dave?

17 MR. CANTAGALLO: If there was no
18 toxicity at Walnut Beach, then the obvious
19 conclusion would be there would be no need for
20 you to spend any funds at Walnut Beach. Would
21 that be correct or is my own logic eluding
22 me?

23 MR. WILLIAMS: No, it would not be
24 necessarily correct. I mean, we pointed out
25 throughout the presentation that we looked at

1 near-shore areas at the mouth of the river in
2 both directions within the watershed, up the
3 river. We have a preference for doing
4 restoration work in areas where the injuries
5 occur, but there are not always that many
6 opportunities available right in the area
7 where the principal injuries occur.

8 So we looked at expanding out a little
9 bit like near near-shore areas like Walnut
10 Beach where there were, we felt, a rare type
11 of habitat that only exists in a couple places
12 in Ohio, the Doonspell (phonetic) habitat, and
13 we developed a restoration plan in cooperation
14 with the city park board and others and tried
15 to implement it at Walnut Beach using Fields
16 Brook restoration funds.

17 MR. CANTAGALLO: So you could still be
18 using weed killer at Walnut Beach to get rid
19 of the phragmites, is that correct?

20 MR. WILLIAMS: Well, if we were
21 going to do invasive species control, that's
22 probably the method that would be, because I
23 don't believe there's ever been another method
24 found that works.

25 MS. MARKWORTH: We're going to go

1 ahead with this gentleman's question.

2 MR. SANTIANA: My name is Joe
3 Santiana. I'm President of the Ashtabula
4 Lighthouse Preservation and Restoration
5 Society. I have two questions. Is the EPA
6 genuinely going to listen to the people in
7 this room as far as what we feel would be the
8 most beneficial from that fund for the city of
9 Ashtabula and our lakefront?

10 The second question is, is all of the
11 money in that fund, all of it, going to go
12 into the Ashtabula area or will some of that
13 fund be taken out of this area?

14 MR. DEVAULT: Let's start with your
15 last question first. First of all, there is
16 no fund, quote, unquote, fund. The
17 negotiations we are having with the
18 responsible parties are based on the company's
19 actually implementing restoration projects in
20 the area. So there is no bank account
21 someplace that we can draw. I'm trying to
22 remember the first half.

23 MR. NAVARRE: First question is
24 will we listen?

25 MR. DEVAULT: Yes. Will we listen?

1 The answer is obviously yes or we wouldn't be
2 here. But when it comes to projects and what
3 we can really do, we have to evaluate it based
4 on that language in the federal regulation
5 that says that we need to restore, replace or
6 acquire the equivalent of the injured
7 resources or services they provided. That's
8 why you saw us evaluating like the lighthouse
9 walkway based on it providing fishing access.
10 That is one of the services that -- I mean,
11 the fishery was severely injured in Ashtabula
12 for 30, 40 years, so that is a service that
13 could provide. But when you start looking at
14 it from a cost-benefit approach, you know,
15 we'll listen. I don't know how far we can
16 go.

17 AUDIENCE MEMBER: I didn't catch the
18 lady's name between Dave and Sheila.

19 MS. BAKAYZA: Kelly Bakayza.

20 AUDIENCE MEMBER: And from where?

21 MS. BAKAYZA: The United States
22 Department of the Interior.

23 AUDIENCE MEMBER: Is the Department of
24 Justice still involved?

25 MS. BAKAYZA: Oh, yes.

1 AUDIENCE MEMBER: My question is,
2 20-some years ago, I guess, now when we
3 started this project, and now it looks like
4 there is a pot of gold, but there isn't, we
5 know that, there were about 20 impaired uses
6 on the river. Are those directly related to
7 these projects when we wrote stage one of the
8 RAP, and I think it it was in '88?

9 MS. BAKAYZA: Stage one was
10 published in 1991.

11 AUDIENCE MEMBER: And the impaired
12 human uses then and the ecosystem, the
13 impairments of the ecosystem, those are what
14 we built to clean up upon. Is that what
15 you're going to focus, is that really the
16 focus?

17 MR. DEVAULT: I think between the
18 Legacy Act project and the restoration, and I
19 don't have the impaired uses at Ashtabula
20 memorized, I mean, it's going to be things
21 like contaminated sediments and fish
22 consumption advisories.

23 AUDIENCE MEMBER: We couldn't fish, we
24 couldn't swim, we couldn't do this and we
25 couldn't do that.

1 MR. DEVAULT: I think between the
2 two we're going to get a lot of that. I mean,
3 contaminated sediments are not only an
4 impaired use themselves, they also caused a
5 lot of the other impaired uses. So that's
6 been dealt with by the Legacy Act Project.
7 We're going to go in and try to increase the
8 biological productivity of the area by
9 improving habitat, which is going to improve
10 the fishery, reduce sedimentation. And so I
11 think a lot of them, it's not 100%.

12 AUDIENCE MEMBER: So in essence, from
13 Fields Brook to really where the clean-up ends
14 with the Legacy Act, is about a mile long.
15 Everybody thinks that you should be working
16 outside of that mile stretch. And we always
17 thought the focus should be cleaning up and
18 restoring within the damaged area. Is the
19 focus still there, even though there's the
20 Keester Marina, the yacht club, the railroad,
21 all the property really is owned there by
22 industry or private homes?

23 MR. DEVAULT: That's problematic,
24 and that's one of the reasons we're looking at
25 it from a watershed perspective, because, you

1 know, we're not going to build a wetland in
2 Keester's Marina. So we're limited by space
3 in that specific geographic area.

4 AUDIENCE MEMBER: But you start there
5 and then you go outside.

6 MR. DEVAULT: To the extent we can,
7 we are looking at some projects in the actual
8 area that was part of the Legacy Act.

9 MR. WILLIAMS: The Legacy Act
10 certainly is -- the long-range goal of the
11 Legacy Act is delisting of AOC, and that's
12 based on those lost or impaired beneficial
13 uses, reestablishing those beneficial uses.

14 AUDIENCE MEMBER: That's why I can't
15 get to in my mind between the NRDA monies and
16 then the actual clean-up monies, whether or
17 not your focus was still with those
18 impairments that we used as leverage to get
19 this thing started?

20 MR. DEVAULT: Our focus is the
21 injuries. And I mean, the injuries that
22 occurred were fish injuries, severely degraded
23 fishery, degradation of habitat, degradation
24 of benthos.

25 MS. FARBER: I'm Natalie Farber

1 with Ohio EPA. And I have worked with this
2 community as the River Rap Coordinator. And
3 there is six beneficial use impairments among
4 14 total possible, that there are six assigned
5 to this area, as Dave was touching on.
6 They're all related to the contaminated
7 sediments pretty much. It involved fishery
8 too, fish consumption and advisory,
9 degradation of habitat, not only of the fish
10 habitat, but also wildlife habitat. There's
11 also reduced population of wildlife and
12 fishery and degradation of benthos, or the
13 bottom of the river bed. And, of course,
14 there was the restriction of dredgings. So
15 there's six of those.

16 And really between the Legacy Act and
17 this other piece, this restoration piece, the
18 natural resource damage restoration plan,
19 those both together fit very well to address
20 all of those pieces and directly will
21 complement and address the area of concern
22 delisting.

23 MS. MARKWORTH: Sir, go ahead.

24 MR. GRIPPI: Dave, you mentioned
25 earlier that you'd be willing to look at the

1 project from the cost benefit. Within
2 Alternative C, the walkway to the lighthouse
3 would be eligible for transportation
4 enhancement money for ODOT to pay up to 80% of
5 the construction costs. Are there any
6 examples of projects within Alternative B
7 where you can leverage the trustees' money for
8 outside funds to make even better projects or
9 bigger projects?

10 MR. DEVAULT: Again, as I said
11 before, the trustees don't have any money.
12 These would be projects that would be
13 implemented by the responsible parties, by
14 actual companies themselves.

15 MR. GRIPPI: Are you going to
16 leverage their money for money to improve --

17 MR. DEVAULT: I can't leverage
18 their money. I'm sure they may be trying to
19 leverage their money.

20 MS. ABRAHAM: Matthew, you have a
21 comment?

22 MR. SMITH: I could say that if
23 something came up with the project where there
24 were monies available, maybe a grant was
25 applied for, and then you can do that, then

1 you could use -- they could match a part of
2 that amount if they were looking at a project
3 and they said, "Listen, we want to go half and
4 half on this project, or we want to go 60/40,
5 depending on" -- I'm sure that could be
6 something that would be worked out.

7 MR. GRIPPI: Matt, you don't
8 believe that ODNR has those funds in place for
9 this project as an alternate, do you?

10 MR. SMITH: Go to the website.
11 ODNR has all types of projects that they do
12 the work on and they do fund different
13 activities.

14 MS. MARKWORTH: Sir, down here.

15 MR. FRISBIE: Bob Frisbie. I'm the
16 Director of the Ashtabula Marine Museum, short
17 name; long name, Great Lakes Marine and Coast
18 Guard Memorial Museum. I'm also the historian
19 for the Ashtabula lighthouse, and under the
20 Restoration and Preservation Society of the
21 lighthouse.

22 We don't want this to happen again, all
23 of us, I know. So why not delve into a little
24 bit more of the learning curve. We had a lot
25 of people come to town in the early days.

1 They obviously thought that it was easy to
2 pour that stuff into the water and run it down
3 to the river and put it in the lake and
4 nobody's going to worry about it.

5 Today we've got youth that aren't being
6 trained in a lot of functions in their
7 schools. They're cutting curriculums and this
8 sort of thing. So I think that if we use the
9 learning center at the Walnut Beach as a
10 possible training facility for the people that
11 come to our town from other areas, not only to
12 do business here, but also to visit and
13 understand what we went through trying to have
14 this happen, I think the learning center and
15 interpretive center there would be an
16 excellent function to have that happen. I
17 don't hear that being said in your comments.

18 I can understand your specific use in
19 most cases is about the fish. They were there
20 drinking the water, creating the disease
21 within their bodies because of that, but so
22 were the people of Ashtabula. They were there
23 drinking the water out of the lake that came
24 down the river. They were the people that
25 were involved in this.

1 So my feeling is, or my question I
2 think in that respect is, why not give that a
3 little bit more credibility on your Option C
4 and possibly put it into the B? And along
5 with that, because I'm involved in the
6 lighthouse with the museum, we have an awful
7 lot of individuals that come here that want to
8 spend time at the lake, at the business of
9 tourism, and we aren't hearing anything about
10 the tourism; I hear a little bit of that.

11 But my focus, I think, would be to try
12 and get you to understand that there is very
13 little places, because of something that
14 gentleman just made comment of, and I think
15 you also, most of the lakeshore area and the
16 river shore area is owned by some individual
17 or some industry. So there is no way to get
18 into the fish and do your fishing. Once you
19 clean it up, we have nice clean fish, nobody
20 can get to them. Yes, they're going to feed
21 the lake, and yes, that's the beauty of this
22 thing, but we always have these people in the
23 area who would like to go fishing.

24 The walkway out there with its present
25 design gives a lot of walkway space to get

1 people out there. Once they're out there they
2 can fish off of these little extentions off of
3 that to be able to get to that. I didn't hear
4 much about that, so if you could kind of
5 comment on those two particular projects I
6 would be interested to hear that.

7 MS. ABRAHAM: I guess I'll start.
8 Mr. Frisbie, we hear you. Unfortunately our
9 hands are somewhat tied by the regulations.
10 And if we had the ability to fund everything
11 that everybody wanted, believe me, we would do
12 it. Unfortunately, we're constrained first by
13 the regulations, which say we have to focus on
14 the injuries to the natural resources. And
15 that is a limited factor.

16 And the second thing is, Dave talked
17 about restoration projects. There are a
18 number of restoration projects that could
19 happen all along the length of the river. And
20 we are trying to get the most that we can to
21 benefit the people of Ashtabula, not just the
22 city, but all of Ashtabula. And we're trying
23 to put in wherever we can fishing access,
24 trails, enhancements, small canoe launches.
25 If there is something in the Ashtabula

1 Township Parks Commission that we can help
2 enhance, we are working on all those things to
3 improve access for the people of Ashtabula.
4 But I want to be really clear, the cost of the
5 projects as they were presented to us doesn't
6 allow us to fully fund them.

7 Now, Mr. Cantagallo would be a really
8 good person for you to talk to, so maybe
9 working with him you can tap into other
10 sources of funding to be able to build those
11 kind of things that you're talking about. I
12 mean, you have some great local leadership; I
13 encourage you to talk to him and talk to some
14 other people. Mr. Grippi is clearly
15 enthusiastic. Set up a community
16 organization. We will help in whatever way we
17 can. Matthew will direct you to some sources
18 of funding, but we can't -- we were unable to
19 focus exclusively or to a large extent on
20 those kind of projects in this process.

21 MR. FRISBIE: I guess Mr. Grippi
22 alluded to it, if there is another funding
23 that we come up with, and there is a chance
24 that you folks could give us the additional
25 money to work on getting the major amount of

1 money, or something like this, is that within
2 your responsibility or within your area of
3 taking care of the projects?

4 MR. DEVAULT: Again, and we're
5 still in the negotiations stage, so none of
6 this is final, but what we're looking at is a
7 settlement where the responsible parties would
8 actually implement these projects.

9 MR. FRISBIE: So they would be the
10 in-charge person for -- so if we, for lack of
11 a better way, if we went to all of these
12 groups that are giving the money for their
13 problem that they created, or supposedly
14 created, then these people could come back to
15 you and say, "We're going to spend all this
16 money on "X" number of projects," and this
17 would be where you would go?

18 MR. DEVAULT: Not exactly.

19 MS. ABRAHAM: We'd still have to
20 look at the benefit to the resources. We
21 still have to make sure the injured resources
22 are made whole to some extent. Then we try
23 and factor in whatever else is possible. It's
24 not something that we can promise because
25 we're in the middle of settlement

1 negotiations, that's why we have our lawyers
2 here.

3 MR. WILLIAMS: The trustees are
4 responsible for the selection of the
5 restoration projects. The responsible
6 parties, if we come to this agreement, will be
7 responsible for implementing those projects
8 under our oversight and approval.

9 MR. FRISBIE: So they really don't
10 have any say-so in where their money is being
11 spent other than to say that they will spend
12 it?

13 MR. NAVARRE: Right. Ultimately we
14 have to decide how that money is spent. It's
15 our obligation as the trustees to spend it on
16 that limited frame work of restoring,
17 replacing or acquiring the equivalent of the
18 resources damaged. I think that's the
19 frustration I'm sensing from some of you
20 tonight, is that we don't have the latitude to
21 spend natural resource damage monies on
22 economic development projects or an
23 educational project because we're limited to
24 spending on a natural resource damage
25 restoration project. Essentially the federal

1 statute requires us to limit how we spend that
2 money to a natural resource damage restoration
3 project.

4 In his presentation Sig mentioned that
5 we're compensating for damage to the resource
6 and also damage to the lost use of that
7 resource to the public. So there is some
8 flexibility in terms of considering a project
9 such as the lighthouse breakwall project that
10 would provide enhanced fishing opportunities.
11 That's a link to compensating for the lost use
12 of that fishery resource, but I think we're
13 somewhat constrained by that. And if we
14 reached a settlement that included nothing but
15 restoring or improving the lighthouse, the
16 access to the lighthouse and installing
17 fishing piers, I think that would be contrary
18 to the statute.

19 MR. FRISBIE: I can understand
20 that.

21 MS. ABRAHAM: Can I just clarify
22 one thing? We are here as trustee
23 representatives. The actual trustees are the
24 Director of the Ohio EPA and the Director of
25 the Fish and Wildlife Service. So it's a

1 level much higher than us. They will make the
2 ultimate decision; we just recommend. We're
3 the grunts who do the work.

4 MR. JOSEPH: Just some further
5 clarification, because there are some
6 subtleties in the language here that are
7 used. I just want to understand, one thing
8 that between Alternative B and Alternative C,
9 where Alternative B refers to stating it
10 focuses directly to restore resources with the
11 implication that another alternative would
12 indirectly restore them. Then it refers to
13 providing enhanced ecosystem and public-use
14 services. When we get to Alternative C, the
15 terms slightly change, talks about human-use
16 services lost through injury, seemingly more
17 compensatory. I don't see a reference here to
18 indirectly or even restoring.

19 Then he get to the table between
20 Alternative B and Alternative C. I'm just
21 looking right down the line here at
22 Alternative C, whether it will rehabilitate
23 wetlands, flood plains, riparian or associated
24 wetland habitat. No. Improve aquatic habitat
25 and near-shore habitat. No. Provide for

1 enhancement of abundance and diversity of
2 self-sustaining fish populations? No.
3 Preservation of wetlands, flood plain,
4 riparian and associated upland habitat. No.
5 Then you get to the last point, improve
6 outdoor recreational opportunities/enhance
7 public awareness. Both of them say yes.

8 My question is, and Alternative C is
9 titled, "Augmentation of Human Use Related to
10 Natural Resource Services". It is not
11 restoring any of those natural resource
12 services in terms of the ecosystem functioning
13 itself.

14 What are these human uses related to?
15 I mean, other resources elsewhere? That's
16 what I don't get. It seems that it's not
17 indirect restoration, it's just a difference
18 between actually restoring the resources
19 versus compensating for human uses that were
20 maybe lost by this generation. But this is a
21 multigenerational problem in the make. I'm
22 just wondering whether a pot of money to
23 compensate -- to spend on certain projects
24 that would benefit the public right now would
25 necessarily provide the kind of lasting

1 restoration of the underlying resource
2 functioning that is what ultimately sustains
3 those human uses, including fishing access and
4 so forth. So that's what I want to
5 understand, is whether Alternative C actually
6 meets the purposes of restoration.

7 MR. DEVAULT: I think that's the
8 reason, what you just said, which I could
9 never repeat. I mean, that's the reasoning.
10 It's not the preferred alternative. That's
11 the reason Alternative B is, because that does
12 restore the underlying ecological system that
13 will support the future services and uses of
14 the resources.

15 MS. ABRAHAM: You said that very
16 eloquently.

17 MS. MARKWORTH: We're going to go to
18 the comment period. If you have more
19 questions afterwards, we'll be around and you
20 can ask them individually.

21 Go ahead, sir.

22 MR. SCHMIDT: Just a couple quick
23 ones first. Phil Schmidt, I live in Geneva.
24 My wife and I both enjoy the outdoors and
25 nature and we're quite active in advocating

1 benefits for disabled and elderly people. But
2 I'd just like to get a little better
3 understanding of what's what here.

4 Now, do all the states have to
5 basically conduct their NRD programs under the
6 same federal guidelines and restrictions and
7 in essentially the same manner?

8 MS. ABRAHAM: Yes.

9 MR. SCHMIDT: And then if that's
10 so, then what was done at the Fox River
11 project is potentially something we could have
12 similar things done here. Is that not right?

13 MS. BAKAYZA: The Fox River project
14 was an interim settlement, that is a huge
15 monetary settlement that --

16 MR. SCHMIDT: I don't understand
17 that stuff. Just tell me, can we do what was
18 done at Fox River or not?

19 MR. DEVAULT: Frankly, no. And
20 it's because the settlement here isn't going
21 to be as large. The injuries weren't as
22 great. The geographic area for Fox River
23 included not only the Fox River, but all of
24 Green Bay and a small portion of Lake
25 Michigan. So you're talking about a huge

1 settlement there.

2 MR. SCHMIDT: Did they just
3 negotiate a better settlement? Because when
4 you talk about what we lost here, that
5 Ashtabula River was filthy and it dumped out
6 into the lake and people took the drinking
7 water out of the lake. People around Fields
8 Brook, we suffered a lot of serious health
9 problems here. We lost our fishing rights. I
10 tried to run a sailboat up the river and it
11 went aground the first time I went around with
12 it. We have big losses. And is there any
13 dollar value yet established for this
14 settlement for here?

15 MS. BAKAYZA: We're still in
16 negotiations.

17 MR. SCHMIDT: So you can negotiate
18 more money maybe. That you may be able to do,
19 maybe not. I don't want to abuse my privilege
20 here, but I do believe too that the NRDA
21 pretty much specifically says that there is
22 two types of compensation that are supposed to
23 be done. One is to restore the initial injury
24 resources, and the other is to compensate the
25 public for the loss of those resources and the

1 damages they incurred.

2 And the last thing I'd like to point
3 out is, I question completely your approach to
4 evaluating these alternatives, because they're
5 not -- I understand where you folks come
6 from. You're going to be biased to protecting
7 the natural resources, but from those of us
8 who sit here in Ashtabula County, and I'm sure
9 for citizens in Ashtabula city especially, we
10 feel you should at least give equal weight.
11 And those boxes at the end of your chart
12 should be weighted boxes so that in the end
13 there's at least equal weight given to the
14 losses that the people have suffered here and
15 their compensation.

16 And I would like to see it be such that
17 the elderly and the disabled, those people
18 that went through years and years of the loss
19 of those rivers are now old. They can't walk
20 around; they can't canoe up the river. They
21 can't get at it because you're not going to
22 get public access to it. And they like to
23 just go somewhere on a smooth surface that
24 they can maybe walk, in a difficult way, but
25 have easy access to it, go around in

1 wheelchairs, sit there and watch the sunset
2 and watch the lake and listen to the waves.
3 There's a lot of really good enjoyment you can
4 get from just being able to have good access
5 to the lakefront, see the sunsets and enjoy
6 it.

7 And I think you need to go back and
8 redo your table so that it's equally
9 representative of both of those two things
10 that this settlement is supposed to go over.

11 MS. MARKWORTH: Sir, that might be a
12 comment that you want to put in to be
13 responded to. Go ahead.

14 MR. GRIPPI: I have two more
15 questions. What role did the Ohio Attorney
16 General's office have with the NRD trustees?
17 And also, this one's for Dave, can you quickly
18 summarize the current state of the natural
19 damages on the river; how are the fish doing
20 right now?

21 MR. NAVARRE: I'll answer the first
22 question because I'm with the Ohio EPA. The
23 Ohio Attorney General's office represents us
24 if we are not able to negotiate a settlement
25 and went to court, the same way that the

1 Department of Justice would represent the Fish
2 and Wildlife Service in court. So we're
3 working with them as we continue to try to
4 negotiate a settlement.

5 MR. DEVAULT: We're onto fish.
6 Well, the way we evaluate that is we compare
7 the fish in one area to a comparable area that
8 isn't contaminated. In this case we've looked
9 at Ashtabula versus Conneaut, because Conneaut
10 has a lot of the same features as Ashtabula,
11 except that it isn't particularly
12 contaminated. You have about half the number
13 of native fish species that you would expect
14 to be in Ashtabula. You have about half the
15 number of individual fish in Ashtabula. The
16 fish you do have have impaired immune systems.
17 They have extremely high incidences of
18 parasite, again, probably as a result of the
19 impaired immune systems. They have a lot of
20 reproductive malfunction within the fish in
21 the river. So the fish are pretty screwed up
22 in Ashtabula.

23 Now, hopefully this -- now that the
24 dredging is completed, you've taken away the
25 cause, things should improve.

1 MS. MARKWORTH: Go ahead, sir.

2 MR. HILL: Scott Hill, Western
3 Reserve Land Conservancy. I'm also a citizen
4 of Orwell Township. I just have a question in
5 terms of, I'd like to know if you have any
6 benefit cost analysis data on the cost of
7 restoration versus say the preservation of
8 riparian barriers upstream?

9 MR. DEVAULT: I think it just makes
10 sense that preservation is going to be far
11 less expensive than restoring something. I
12 don't know where you're going with that.

13 MS. ABRAHAM: What we did to
14 evaluate the cost benefit analysis -- to do
15 the cost benefit analysis from an ecological
16 standpoint, NOAA, the National Oceanic and
17 Atmospheric Administration, has a model called
18 the HEA, Habitat Equivalency Analysis model,
19 and we use that and it's a little complicated,
20 but we use that to generate an ecological
21 currency. Then we looked at the acreage and
22 what we spent on a particular project, and so
23 that's how we evaluated the ecological cost
24 benefit.

25 MR. HILL: Is it basically a

1 biological diversity formula?

2 MR. DEVAULT: It's a compounded-
3 interest calculation essentially.

4 MS. ABRAHAM: Are you thinking
5 about Ohio EPA's indices?

6 MR. HILL: Yes.

7 MS. ABRAHAM: Ohio EPA has a number
8 of biological indices, and we actually did
9 some of those. We did those in Ashtabula and
10 in Conneaut to do this comparison that Dave is
11 talking about. So we evaluated from that
12 point also, but for the cost benefit we
13 actually took a look at the ecological
14 currency.

15 MS. MARKWORTH: Before I get to your
16 question, does anybody have a blue card or
17 need a blue card? I'm going to go ahead and
18 collect them as we ask your last question.

19 AUDIENCE MEMBER: You mentioned
20 numerous times tonight the Brockway property
21 that you had purchased. Where is the
22 property? How many acres and what did you pay
23 for it?

24 MR. DEVAULT: 37 acres. It's just
25 across from the hospital. It's 37 acres.

1 There's approximately a six-acre wetland on
2 it. And Mr. Brockway would prefer that we
3 call it the CVM property. He's concerned that
4 people may think he sold his marina, which he
5 hasn't.

6 AUDIENCE MEMBER: It's not public
7 knowledge?

8 MR. DEVAULT: I mean, that's where
9 it is. We paid -- I'm not exactly sure, but
10 between 250,000 and 270,000. Mike would know;
11 Mike actually paid it.

12 MR. WILLIAMS: It's the undeveloped
13 portion of the Brockway property just south of
14 24th Street on the east side of the river
15 across from the hospital.

16 MS. MARKWORTH: We're going to go
17 into the public comments and we'll ask
18 questions afterwards.

19 MR. BREWER: Can I ask one more
20 question?

21 MS. MARKWORTH: Okay.

22 MR. BREWER: Rick Brewer,
23 Painesville, Ohio. It seems to me by the way
24 negotiations have taken place and the projects
25 that you have chosen that you are near a

1 tentative settlement of some sort. And the
2 public has no input at all, is that correct?

3 MR. NAVARRE: Well, tentative
4 settlement, we are still negotiating with the
5 responsible parties.

6 MR. BREWER: Will the public have
7 any input as to those projects?

8 MR. NAVARRE: I think the
9 opportunity for the public for real input is
10 now. There will also be an opportunity, if we
11 reach a settlement, to comment on the consent
12 decree that's lodged in federal court. But I
13 think the realistic, genuine opportunity to
14 comment on the restoration plan and the
15 projects that comprise it is now. This is the
16 genuine opportunity to do that, not to wait
17 until and if we reach a settlement that's
18 lodged in federal court.

19 MR. BREWER: May I ask a follow-
20 up? Dave, you referred to the fact that the
21 Fox River partial settlement is \$60,000,000.
22 Matthew said only 10% of that could be used
23 for recreation and human use. We would need
24 to know to compare the two what this project
25 was worth.

1 MS. BAKAYZA: What what project is
2 worth?

3 MR. BREWER: What the settlement
4 you're going to negotiate is worth in
5 dollars. And we're not hearing anything about
6 that because you say there's no pile of money
7 on the one hand. And on the other hand, some
8 of my dollars are going to go into the project
9 before it's done and we would need to know
10 that in order to see whether we would have any
11 entitlement to 10% or whatever it is that Fox
12 River got.

13 MS. BAKAYZA: Let me just clarify
14 one thing. First of all, for those of you
15 that have a question with respect to
16 educational facilities, because I hear that
17 this is a recurring theme, I would encourage
18 you to put your questions down on paper so
19 that we can formally respond to them. I at
20 this point am not prepared to -- I mean, we've
21 done some research on this. I'm not the
22 attorney on the Fox River case, so I would
23 like to make sure that factually I have all
24 the information that I would need to be able
25 to respond to what specifically was done.

1 MR. BREWER: I can give you this
2 if you like.

3 MS. BAKAYZA: But I can't read that
4 right now, sir. But I'm just saying, I would
5 just like to be able to respond, so if you put
6 your questions down we're definitely going to
7 respond to them. I just can't answer
8 something specific right now about another
9 case in another state which I'm not the
10 attorney that had negotiated the settlement or
11 what have you. So it's not to say what's
12 similar and what's dissimilar because I don't
13 have that familiarity with it. So if you
14 could put them down I would really appreciate
15 that so we can get those responses to you.

16 With respect to this, I think the
17 second question that you said was, what Dave
18 is trying to say is right now we are in
19 settlement negotiations. There is no, quote,
20 unquote, pot of money. We are negotiating to
21 have restoration projects completed by the
22 responsible parties. We don't know what's
23 going to happen or what's going to transpire
24 and we're actually in negotiations at this
25 point. So I don't think that we're trying to

1 hide the ball, we just don't know where we
2 are. We don't have a final settlement.

3 MR. DEVAULT: Before we could tell
4 you what this settlement is going to be worth
5 in dollars we would have to have completed
6 it.

7 MR. BREWER: At that point there
8 would be no public input.

9 MS. BAKAYZA: Your public input is
10 right now. I think that we're actually -- we
11 want to hear from you because we're in
12 negotiations so that we can make a very
13 informed decision about what we want to do.
14 And that's why we're actually holding this
15 meeting prior to the finalization of the
16 consent decree because, in a lot of instances,
17 I've got to be honest with you, you don't have
18 the restoration plan come out until after the
19 settlement's already been done. We were
20 trying to take a very proactive approach in
21 terms of trying to get public comment prior to
22 filing the consent decree. So I think this is
23 a great opportunity for you to make any
24 comments that you would like so that we can
25 respond to them and consider them. And that's

1 purposely why we held this meeting prior to
2 finalizing anything.

3 MS. MARKWORTH: Are there any more
4 blue cards that anyone would like to turn in?

5 AUDIENCE MEMBER: Since you folks seem
6 to think project B or plan B is what you would
7 recommend, you must have some idea what it's
8 going to cost. So what do you think it's
9 going to cost? I mean, because if you're
10 negotiating with industry then you ought to
11 have some idea what you expect to get from
12 them to cover your plan B.

13 MR. NAVARRE: Sheila Abraham
14 explained earlier the use of something called
15 the Habitat Equivalency Analysis, the
16 so-called HEA model, and that's based on
17 substituting an alternative currency for
18 dollars.

19 AUDIENCE MEMBER: Which means what?

20 MR. NAVARRE: Which means that from
21 an ecological standpoint we tried to evaluate
22 the number of acres of habitat that were
23 damaged as a result of the industrial
24 activities in the Fields Brook corridor.

25 AUDIENCE MEMBER: You must have some

1 idea of cost.

2 MR. NAVARRE: I'm saying that we
3 focused on an approach that substituted acres,
4 damaged habitat, for dollars, because we were
5 trying to come up with a settlement model that
6 would replace those damaged acres with
7 restored acreage.

8 Settlements can take a variety of
9 forms. A simple approach, and the one that
10 we're customarily used to in western society,
11 is to negotiate in dollars. But sometimes
12 it's difficult to do that when the parties are
13 not willing to pay what you feel in dollars
14 you're entitled to. And I can tell you that
15 after completing a between 50 and \$60,000,000
16 dredge Great Lakes Legacy Act project to clean
17 up that river, these responsible parties, this
18 group of companies, and the amount of money
19 that they contributed, along with federal
20 grant monies and state monies and so forth, I
21 think feel like that it's going to be very
22 difficult for them to produce more dollars
23 towards this resolution.

24 So we approached it differently. We
25 approached it in terms of the amount of

1 acreage that we would require to be restored
2 in order to compensate. That's in process.
3 There is not a dollar figure attached to that;
4 we're negotiating in terms of restored acres.
5 That's why I can't give you an answer in
6 dollars because I can't put a cost number on
7 it for you. It's about trying to restore the
8 damaged resource in terms of damaged habitat
9 and acreage.

10 MS. MARKWORTH: We're going to move
11 on to get your comments on the record. We've
12 seen some people leave and we want to make
13 sure people have the opportunity. If you'd
14 like to stay when we're done with the comments
15 you're welcome to and talk to our panel and
16 they can answer your question for you.

17 Are there anymore blue cards? I'll go
18 ahead and call the first name. Again, you
19 could -- with the public comments you have
20 five minutes to state your comment. You do
21 have the opportunity to submit comments in
22 writing again up to the 30th. And there is
23 information on the agenda for submitting your
24 comment. You can submit one card for your
25 comments

1 And the first person is Frank
2 Lichtkoppler.

3 MR. LICHTKOPPLER: My name is Frank
4 Lichtkoppler. I'll give you a copy of this
5 stuff. I've been working with the Ashtabula
6 Remedial Action Council (RAP) since 1988. I
7 am a founding member of the Ashtabula River
8 Partnership (ARP) and have worked with the APR
9 since it was formed in late 1994.

10 In the early 1980s the International
11 Joint Commission declared the Ashtabula River
12 and Harbor a Great Lakes environmental Area of
13 Concern because the pollution of the river had
14 impaired the beneficial use of the river. The
15 Beneficial Uses Impairments that were
16 documented for the Ashtabula River and Harbor
17 include: Restrictions on fish and wildlife
18 consumption; degradation of fish wildlife
19 populations; fish tumors or other deformities;
20 degradation of benthos (bottom habitat);
21 restriction of dredging activities; loss of
22 fish and wildlife habitat. I looked it up
23 today.

24 This designation of the Ashtabula River
25 and Harbor and Great Lakes environmental Area

1 of Concern helped to spur on the work of the
2 local Ashtabula River Remedial Action Plan
3 Council. Under the threat of a Superfund the
4 the Ashtabula River Partnership was formed to
5 focus on and find a better way to dredge the
6 contaminated sediments from the Ashtabula
7 River and Harbor. After many years of work
8 this environmental dredging is almost
9 complete. When it is finished it will provide
10 increased commercial and recreational access
11 to the Ashtabula River. However, the
12 environmental restoration and elimination of
13 the beneficial use impairments remains to be
14 accomplished. National resource restoration
15 and protection is needed in order to delist
16 the Ashtabula River from the IJC list of areas
17 of concern.

18 Damages to the fish and wildlife
19 populations and habitat in the Ashtabula River
20 and Harbor have been documented and three
21 Resource Restoration alternatives have been
22 proposed. Alternative A, no action, will do
23 nothing to help restore the beneficial uses of
24 the Ashtabula River, and will not help us to
25 delist the river as an area of concern. With

1 Alternative A there will be no increase in
2 public access to Ashtabula River resources and
3 no restoration of those resources.

4 The Alternative C, I call human-use
5 alternative, will provide for increased public
6 access and increased public education on the
7 natural resources of the Ashtabula River, but
8 those resources will not be restored and
9 improved under Alternative C. This
10 alternative will not help us remove the area
11 of concern stigma from the Ashtabula River and
12 Harbor.

13 Alternative B, habitat restoration and
14 protections, will enhance and preserve
15 riparian, flood plain and upland habitat; it
16 will enhance, reestablish and preserve
17 wetlands; it will improve the aquatic
18 habitat. These actions will help to eliminate
19 the beneficial use impairments on the
20 Ashtabula River and help us to remove the
21 Ashtabula River from the list of Great Lakes
22 Areas of Concern.

23 This restoration and protection of fish
24 and wildlife habitat will also provide for
25 increased access to the natural resources of

1 the Ashtabula River and Lake Erie.

2 Alternative B is the only alternative that
3 will increase the wetland habitat, increase
4 aquatic habitat, increase fish species
5 diversity, increase fish populations, increase
6 wildlife populations, and improve surface
7 water quality.

8 Alternative B will help to remove the
9 IJC Area of Concern designation and all the
10 negative publicity and adverse media attention
11 that is associated with that designation.

12 Alternative B will also help to increase the
13 quality of life in the community, increase
14 opportunities for wildlife enjoyment and bird
15 watching, improve fishing by removing the
16 restrictions on fish consumption, and enhance
17 the local economy via increased nature-based
18 tourism, improved boating access and improved
19 fishing opportunities.

20 I'd like to thank you for the
21 opportunity to comment on this draft natural
22 resource plan. I do have a question. What
23 are the acres that you want to see restored?
24 You talked about coming back in acres.

25 MS. MARKWORTH: Sir, we can answer

1 afterwards. We're just taking the public
2 comments right now.

3 Next, Brett Joseph.

4 MR. JOSEPH: Thank you. I'm not
5 going to take the whole five minutes. I have
6 a couple comments, but I do want to mention
7 again, my name is Brett Joseph. My ancestors
8 were longshoremen in Ashtabula Harbor a couple
9 generations ago, probably right at the
10 beginning of the period when some of the harm
11 was being done. It is personal for me. I
12 live in Conneaut. I live on Kayan (phonetic)
13 Creek right now, and an area that has recently
14 undergone land acquisitions and so forth to
15 restore ecological connectivity and we're
16 seeing the benefits of that. I would love to
17 see that in the Ashtabula River as well.

18 Also, just to mention that I spent 15
19 years of my life in the area of coastal zone
20 protection and coastal zone enhancement, so
21 I've very sensitive to issues of beach access
22 and human uses and so forth. But what I want
23 to convey in my comment is to paraphrase
24 Einstein, "We can't solve problems of the past
25 by at the same time thinking what created them

1 in the first place."

2 There's a little bit of a sense of that
3 in the way the alternatives are laid out
4 here. You're seeing it in the comments
5 today. I urge you not to fall into the trap
6 of making the choice between protecting the
7 resources and benefiting the people who depend
8 on those resources. I know that all of the
9 alternatives have a little of both. There is
10 a sense, particularly between B and C, that
11 one is really more for the resources, resource
12 restoration, where as the other is really
13 benefiting the people. And I think that's old
14 thinking. That's a false dichotomy and I urge
15 you to try to move beyond that in the ultimate
16 choice of alternatives.

17 The context here is a multi-
18 generational context, that's why I was
19 speaking about my ancestors. We need to think
20 as, say, the seventh generation down the
21 line. We need to think ahead of the projects
22 that are selected today. Are they going to
23 depreciate? A restroom facility, how long is
24 that going to last? Yeah, it will benefit
25 people for a while, but restoring a river,

1 that's going to have a lasting impact,
2 particularly when you talk about hydrological
3 connectivity. It took a long time for the
4 resource to get damaged and here's an
5 opportunity, perhaps once, definitely once-
6 in-a-generation opportunity, to restore these
7 essential functions of the ecosystem.

8 Have you ever seen those aerial photos
9 of the shore land of Lake Erie, particularly
10 ones from the satellite? You see that big mud
11 slur that comes out of the mouths of all the
12 rivers. That really in one picture tells the
13 whole story, showing that sediment washing
14 downstream. You see that all over. And the
15 only way to address that kind of impact and
16 longterm damage and longterm alteration of the
17 system is to start connecting those components
18 of the watershed, the riparian areas, the
19 tributaries, and so forth, and the fisheries
20 as well, all depend on those connections.

21 And finally, just to use one further
22 illustration, I think we often view
23 compensation as being in lieu of the resource
24 that was lost. Well, restoration, the whole
25 concept restoration and the reason it's

1 written into law, is that when it's possible
2 to restore, I mean, nature does heal, but
3 sometimes it needs a little bit of
4 assistance. And I urge you not to go with the
5 prosthetic. I mean, if you lost a leg and you
6 had the ability to regenerate that leg, we
7 would all prefer to have the natural leg back
8 rather than the prosthesis. Unfortunately we
9 can't do that, but in nature, nature has an
10 amazing regenerative capacity. It will never
11 be perfect, it will never be exactly like it
12 was, that's not what I'm saying.

13 I'm saying it's false dichotomy to say
14 it's either compensate by creating a sum of
15 money for some other project elsewhere versus
16 taking measures that are really cost
17 effective, because it really doesn't take that
18 much to be able to record the connectivity, do
19 some planting, control the species. That can
20 go a long way for a long time. Thank you.

21 MS. MARKWORTH: Bob Frisbie.

22 MR. FRISBIE: Bob Frisbie. I'd
23 like to just let you know that I still believe
24 that the human portion of it is being ignored
25 to some extent, and that the learning

1 capabilities need to be given out to the youth
2 and the future generations so that we don't
3 have these problems again. And one of the
4 ways we could do that would be this.

5 The second portion of my comment is
6 that the walkway providing an access to the
7 lake to the fishermen, not only, as some have
8 mentioned, for the people who are disabled,
9 myself included, to be able to get to the lake
10 to get on this type of an arrangement and be
11 able to get to the lake, drop a line in, and
12 actually get experience to actually see healed
13 fish being brought to the surface.

14 So I believe that your ecosystem
15 repairs are very important, not to be left
16 out, but if you can see your way to look into
17 assisting, if not providing, the funds for
18 these items, to look at both of those items in
19 the future.

20 MS. MARKWORTH: Philip Schmidt.

21 MR. SCHMIDT: Could I delay for a
22 little bit?

23 MS. MARKWORTH: Sure. John Keenan.

24 MR. KEENAN: There's like an
25 elephant in the living room I'd like to bring

1 up here. The most visible and ongoing
2 environment impact is the Norfolk and Southern
3 Coal Terminal. This company has blocked
4 access to the lakefront wetlands. They've
5 filled wetlands and built permanent structures
6 on these areas. What else have they done?
7 They are using these filled wetlands to claim
8 status as an upland owner and lay claim to the
9 lakeshore sand deposits. They continue with
10 chronic coal dusty emissions.

11 I'd like to know the status with you
12 folks. I understand they're in separate
13 negotiations with Norfolk and Southern.
14 That's the most visible and ongoing
15 environmental impact in that area, is the
16 Norfolk and Southern Coal Terminal. No matter
17 what you do in that area that's the elephant
18 in the living room, I think. And how did they
19 opt out of the settlement? I don't understand
20 that. If you could explain that. Thank you.

21 MS. MARKWORTH: Mark Hanneman.

22 MR. HANNEMAN: Much of what I have
23 to say has been said. Both Alternatives B and
24 C have merit. Clearly I don't foresee any
25 settlement option that's going to allow for

1 all. I look at it though, it's in
2 chronological order. A, we've seen no action
3 for a long time. B, we need to get these
4 things done before we can actually pursue
5 Alternative C. If you want people to fish you
6 have to have fish. If you want to have fish
7 in the harbor you have to provide a habitat
8 for them. It's rather simple. Like you said,
9 nature does take its course and will allow
10 healing, but we do have to supply a little
11 help. So that's all I have.

12 MS. MARKWORTH: Joe Santiana.

13 MR. SANTIANA: Like I said before,
14 I'm the President of the Ashtabula Lighthouse
15 Society. Some of the things have already been
16 said. When you dredge the river and you
17 dredge Fields Brook, which I own a house where
18 Fields Brook runs through and water runs clean
19 again, the fish will naturally come back.
20 Throwing millions of dollars into certain
21 types of habitat for the fish which they'll do
22 naturally.

23 This area was a large industrial area
24 at one time and everybody depended on it for
25 jobs. Now the industry has left and left

1 their pollution behind. We don't have that
2 much left here. We would like to see money,
3 and I'm not speaking for everybody, we would
4 like to see this money have the greatest
5 impact to improve our area.

6 Now, there's nothing wrong with a
7 habitat for fish and everything else, but
8 there's also a habitat for the humans who are
9 still living here. I think it's very
10 important -- we stand behind the breakwall
11 walk that's going to be at the end of the
12 Greenways trail. This will bring thousands of
13 tourists to Ashtabula, and improvement of
14 Walnut Beach.

15 The jobs have left so there's nothing
16 else to do as far as bringing in new things.
17 So the only thing we can rely on is trying to
18 boost our tourism in this area. And Bob
19 mentioned a lot of things, and other people,
20 tonight in speaking,

21 So our organization, and we talked to
22 hundreds of other people, we all feel the
23 same, we should have part -- the public and
24 the elected politicians in Ashtabula County
25 should have had a part in the negotiations for

1 this money. This shouldn't have been kept
2 silent. I mean, as long as the money is going
3 to spent in this area, we want it to have the
4 greatest impact on this area, possible
5 impact.

6 And fishing access, that was one of the
7 things that was destroyed when a lot of these
8 industries came in here and things had to
9 develop along the river at that time.

10 Somebody had just spoke about it, there's no
11 fish to catch. There are fish out there; they
12 weren't going to come into a dirty river and
13 swim upstream. Once the river is cleaned up,
14 and over a period of time it will clean
15 naturally up on its own, the fish will come
16 back. But if you have no access to get there
17 and fish, you are wasting your time with the
18 money if people can't get to it. That's all I
19 have to say.

20 MS. MARKWORTH: Mike Wayman.

21 MR. WAYMAN: My name is Mike
22 Wayman. I'm currently the Chairman of the
23 Ashtabula Park Commissioner. I'm also
24 currently the Chairman of the Ashtabula River
25 Watershed Steering Committee.

1 Part of the steering committee's
2 mission and goal is to preserve the water
3 quality, open space, the natural,
4 recreational, agricultural and scenic
5 resources of the Ashtabula River by uniting
6 residents, landowners, businesses and
7 communities in the stewardship and permanent
8 protection of the Ashtabula River and
9 Ashtabula River Watershed. So hopefully we're
10 not sitting here 50 years from now having the
11 same dialogue.

12 We are also working with the Ohio
13 Department of Natural Resources and scenic
14 river program, along with Matthew Smith, to
15 see if the upper Ashtabula River can receive
16 designation as a scenic river, which
17 ultimately will bring a sense of pride and
18 awareness to the Ashtabula River and hopefully
19 economic input.

20 As part of the Ashtabula Township Park
21 Commission I had offered, along with Indian
22 Trails, many opportunities to help meet the
23 goals set forth in the restoration plan. And
24 we offer to help in any way to meet your
25 goals. Thank you.

1 MS. MARKWORTH: Kevin Grippi.

2 MR. GRIPPI: Thank you for your
3 service. I know all of you have been coming
4 to Ashtabula County for years working on this,
5 and you're all wonderful public servants and
6 we're lucky to have you out here fighting for
7 these projects and our community. I think
8 quite often you guys just take too much of a
9 beating. I just want to acknowledge that
10 you're doing good and I appreciate what you're
11 doing.

12 I also want to remind you, and you've
13 been around Ashtabula, you know, this
14 wonderful building we're in today does not
15 represent our community. Ashtabula is a
16 desperately poor community that's spiraling
17 ever so down into the depths and we need a
18 break. We need you to go back and sharpen
19 your pencils and take a look at blending some
20 of the projects together and provide more
21 human-use projects that can benefit our
22 community now, not 20, 30, 40 years from now.
23 Hopefully when things turn around and the
24 environment mends itself and suburbs grow
25 their way out here, that's all great for the

1 future. Right now we need a break, and I'd
2 like you to consider that.

3 I'd also like you to give -- I know
4 we're not supposed to talk about geopolitical
5 lines, but you need to give fair consideration
6 to the fact that 100% of the damages were done
7 in the city of Ashtabula. 100% of the clean-
8 up -- I'm sorry, not the damages, the clean-
9 up, 100% of the clean-up was done in the city
10 of Ashtabula. And truly there has to be more
11 projects within the city limits of Ashtabula.
12 Thank you.

13 MS. MARKWORTH: Scott Hill.

14 MR. HILL: I work for a group
15 that does land conservation in 14 counties in
16 northern Ohio. I've been to about 20 meetings
17 in the last week with very much the same
18 topic. There seems to be an ongoing struggle
19 between the restoration problem and the
20 economic stimulus problem when there really
21 shouldn't be. The vast majority of our goals
22 are the same.

23 In northern Ohio the three counties
24 with the highest area of property values,
25 Medina, Lake and Geauga County, also have the

1 largest amount of green space. The economic
2 stimulus comes from having green space; it's
3 difficult to measure. But I will tell you
4 that the ten communities that have the highest
5 quality of living in our country all have very
6 active green space projects.

7 It is true you do need access to go
8 fishing, but without the fish it won't do a
9 lot of good. If you restore a vibrant
10 fishery, if you protect the riparian corridors
11 along your river, you will have a vibrant
12 fishery that can then fund and finance
13 continued economic development. There's no
14 question that economic stimulus is really the
15 driving force, especially in this community.
16 I don't think those two goals are divergent.

17 MS. MARKWORTH: Philip Schmidt.

18 MR. SCHMIDT: Thank you for giving
19 me the opportunity. I too would like to thank
20 you for what you do. You do have a difficult
21 job at times dealing with people like me. But
22 I didn't mean to come across as mean-spirited
23 or disparaging to you.

24 I'm just trying to point out that I
25 feel the method that was used to evaluate

1 these alternates was biased against
2 Alternative C and, therefore, it did not
3 fairly compare the two. The trustees I feel
4 should come up with a new approach that
5 recognizes that compensating the public for
6 the loss of their natural resources is just as
7 important and just as much deserving to be
8 done as it is to restore those resources.
9 That's not to say it's not important to
10 restore the resources, but it should also not
11 be lost; it's important. These are
12 essentially punitive damages that these
13 companies are paying at this point, while it's
14 to restore, to us, the losses that we incurred
15 for almost 50 years that they were making that
16 river so we couldn't really use it.

17 So companies came in here, most of
18 them, the responsible parties, and they
19 operated, they made profits, and certainly
20 they gave us income, some of us, but then when
21 the jig was up they took off and they've left
22 us as a very depressed area. And we are
23 striving to get back to where we're a strong
24 economy.

25 We also like our green space. A lot of

1 people living in Ashtabula County live here
2 because they like living in an open area and
3 not in an urban area, but it doesn't mean we
4 don't value the opportunity to go down and
5 enjoy either being by the lake or walking
6 along the shore or seeing a sunset.

7 And to me this Alternative C is not as
8 much an economic issue as it is one of getting
9 something out of it that I can enjoy
10 recreationally. And I feel it also is going
11 to be important for generations after us to
12 not only be told in school about conservation
13 and ecology down there maybe at the Walnut
14 Beach area, but also to be told in an
15 educational setting right there where they can
16 see about it and see about the lake.

17 So anyway, I feel the approach that
18 should be taken shouldn't simply be a table
19 with yes or no answers, relating to
20 prioritization factors that are biased to
21 restoring natural resources. But it should be
22 an approach that involves, A, weighted factors
23 that represent, when you total them all up,
24 both of these two objectives of compensating
25 the public and restoring resources. When you

1 look at these weighted factors that you list
2 on the left side of your table, they ought to
3 be equally weighted for both of those things.

4 And then, B, you should be giving the
5 responses, not just a yes or no answer, but
6 you ought rate them from one to ten
7 individually on each one of those
8 prioritization factors as to how well they
9 meet that factor. That's how businesses and
10 people and organizations go about trying to
11 sort stuff out. They don't make up a table
12 with just what I feel are biased factors and
13 then just answer yes or no and count up how
14 many yeses and how many nos. Some things are
15 a lot more important than others.

16 I think last of all, well, not last of
17 all but next to last, I would like to see that
18 consideration is given to how the projects
19 benefit the elderly and the disabled.

20 And last, I feel it's essential that
21 that final approach you take provides equal
22 money for both approaches. It is vitally
23 important to the public in this area to keep
24 the river in good shape. I don't think any of
25 us question that at all; we don't want to see

1 that go away. But it's also very important
2 for us to have access to that lake and to
3 build up that resource so that our children
4 and our grandparents will be able to go down
5 there and fish and boat and go to an
6 educational center and enjoy the beach and
7 wildlife there. Thank you.

8 MR. BACON: (Via blue card)

9 There is a dire need for a detailed map of the
10 area in question displaying the specific
11 locations of reparations, the injured
12 habitat: Specific locations of targeted
13 wetland restorations; exact areas dredged;
14 existing occupied, privately-owned property
15 and manmade structures should be involved,
16 also the Brockway property; terrain elevation,
17 wooded areas, et cetera, would also be
18 helpful. Said document should be created as a
19 pdf and made available online.

20 MS. MARKWORTH: Does anybody else
21 have a blue card they'd like to submit? I
22 just want to remind you that the public-
23 comment period is open until April 30th. At
24 the bottom of your agenda there is contact
25 information if you want to submit anything in

1 writing, any written comments or any
2 supporting materials. If you do have
3 additional questions, I invite you to come
4 down and speak to the folks that are here
5 tonight. They're here to talk to you and
6 answer your questions. Thank you for coming.

7 (Hearing concluded.)

8 - - -

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1 State of Ohio,)
2 County of Cuyahoga.) SS:
3

4 C E R T I F I C A T E

5 This certifies that the foregoing is a true
6 and correct transcript of the proceedings had
7 before the State of Ohio, Environmental
8 Protection Agency, at Lakeside High School,
9 6600 Sanborn Road in Ashtabula, Ohio, on
10 Tuesday, April 22, 2008, commencing at
11 7:00 p.m.

12
13 In Re:
14 Ashtabula Restoration of Natural Resources
15
16
17

18
19 _____
COURT REPORTER
20 FINCUN-MANCINI COURT REPORTERS
21 1801 East Ninth Street
22 Suite 1720
Cleveland, Ohio 44114
23 (216) 696-2272
24 (216) 696-2275 FAX
25

Appendix D

Scope of Work for ARCG II Restoration Workplans

I. Purpose

The purpose of this Scope of Work is to set forth the requirements for the Restoration Workplans to be developed by the ARCG II and submitted to the Trustees for review and approval pursuant to the Consent Decree.

II. Restoration Properties

1. Certain Restoration Properties have been identified and approved by the Trustees for acquisition and/or restoration by the ARCG II.
2. Additional Restoration Properties may be identified by either the Trustees or the ARCG II for acquisition and/or restoration by the ARCG II, upon approval by the Trustees.

Once any Additional Restoration Property has been identified, the Trustees will provide direction to the ARCG II on the elements to be included in any Specific Restoration Workplan.

III. Restoration Workplan Requirements (General)

The Restoration Workplans for each Restoration Property and each Additional Restoration Property shall include:

1. Topographic maps showing the location of the Property relative to all other Restoration Properties and the Ashtabula River and Harbor.
2. The total acreages of each Property, as well as an estimate from aerial photographs and GIS, or other mapping software, of the acreages of various habitat types existing on each Property.
3. A brief description of the ecological value of the Property and natural resource services provided by the Property. A brief description of wetlands and other features on the Property which may be enhanced through actions such as control of exotic and/ or invasive species, establishment of native species, or

establishment of hydraulic connections to the Ashtabula River and Harbor and a plan for implementation of such activities, including restoration performance measures, to enhance natural resource services provided by the Property. The Trustees may, at their discretion, require Workplan Supplements for such activities.

4. A brief description of trash and/or debris, if any, on the Property and a plan for removal of such.
5. Detailed Restoration Project cost estimates and an implementation schedule for items 4 and 5 above.

The ARCG II shall obtain all permits required for implementation of the Restoration Projects. The reasonable costs incurred by the ARCG II in the development of the general Restoration Workplans and the implementation thereof constitute Qualified Costs as defined in Section IV, Paragraph 4.y of the Consent Decree.

IV. Restoration Workplan Requirements (Specific)

- **Ashtabula Township Park Commission [formerly CDM] Property**

In addition to the General Requirements described above, the Restoration Workplan for the Ashtabula Township Park Commission (ATPC) [formerly CDM] Property shall include:

1. A detailed design for construction of a small (12 - 20 car) parking lot on the ATPC [CDM] Property with access from East 24th Street. The parking lot will be constructed of gravel or other pervious materials and will connect to a trail around the wetland and to the canoe launch described below.
2. A detailed design for construction of a canoe launch on the ATPC [CDM] Property in proximity to East 24th Street, including a pathway from the parking lot described above. All structures should be built with recycled materials and the pathway from the parking lot to the canoe launch should be constructed with pervious materials.
3. A detailed design for construction of a boardwalk running along the northern border of the approximately 6 acre wetland located on the ATPC [CDM] Property. The boardwalk should follow the upland border of the existing wetland and, to the extent possible, be constructed of recycled materials. Crushed stone or other pervious material should be used to provide a trail between the boardwalk and the East 24th Street parking lot. The boardwalk shall have at least one look-out point that shall include weather resistant signage

describing wetland plant and animal species and interactions, as well as benefits and services provided by wetlands.

4. A detailed design for removal of exotic and/or invasive species and replanting of native vegetation throughout the ATPC [CDM] Property, including the approximately 6 acres of wetland.
5. A detailed design of wetland restoration for the approximately 6 acre wetland. Cost estimates will be based on planting 10 tree species from Table 1, 10 shrub/sub-canopy tree species from Table 2, and 10 herbaceous wetland species from Table 3. The trees and shrubs will be planted to a design density of at least 500 individuals per acre. The herbaceous species will be planted at a design seed planting density of at least 18 pounds per acre. The detailed design of wetland restoration will incorporate the findings of a wetland delineation, performed by the ARCG II according to the up-to-date version of the 1987 Corps of Engineers Wetland Delineation Manual ([Technical Report Y-87-1](#)), on the approximately 6 acre wetland during leaf-out, optimally in late spring of 2010, and the planting requirements specified above, unless otherwise specified by the Trustees.

Table 1: Tree Species

Scientific Name	Common Name	Wetland Indicator Status ¹	Habitat
<i>Acer negundo</i>	Box Elder	FAC+	riparian forest
<i>Acer rubrum</i>	Red Maple	FAC	wet woods surrounding pool
<i>Acer saccharinum</i>	Silver Maple	FACW	wet woods surrounding pool and riparian forest
<i>Carya cordiformis</i>	Bitternut Hickory	FACU+	riparian forest
<i>Carya laciniosa</i>	Shellbark Hickory	FAC	wet woods surrounding pool
<i>Juglans nigra</i>	Black Walnut	FACU	riparian forest
<i>Platanus occidentalis</i>	Sycamore	FACW-	riparian forest
<i>Populus deltoides</i>	Cottonwood	FAC	riparian forest
<i>Quercus bicolor</i>	Swamp White Oak	FACW+	wet woods surrounding pool
<i>Quercus palustris</i>	Pin Oak	FACW	wet woods surrounding pool
<i>Quercus rubra</i>	Red Oak	FACU-	riparian forest
<i>Tilia americana</i>	American Basswood	FACU	riparian forest
<i>Ulmus americana</i>	American Elm	FACW-	wet woods surrounding pool
<i>Ulmus rubra</i>	Slippery Elm	FAC	riparian forest

¹ USDA. Interpreting Wetland Indicator Status. URL: <http://plants.usda.gov/wetinfo.html> (Site Visited: 12 Mar 2010)

Table 2: Shrub/Small Tree Species

Scientific Name	Common Name	Wetland Indicator Status	Habitat
<i>Asimina triloba</i>	Paw Paw	FACU+	drier areas of riparian forest
<i>Cephalanthus occidentalis</i>	Buttonbush	OBL	within pool
<i>Cornus sericea</i>	Red-Osier Dogwood	FACW+	at edge of pool
<i>Corylus americana</i>	American Hazelnut	FACU-	drier areas of riparian forest
<i>Ilex verticillata</i>	Winterberry	FACW+	at edge of pool and in wetter areas of riparian forest
<i>Lindera benzoin</i>	Spicebush	FACW-	in wetter areas of riparian forest
<i>Morus rubra</i>	Red Mulberry	FACU	drier areas of riparian forest
<i>Ptelea trifoliata</i>	Hop-Tree	FAC	drier areas of riparian forest
<i>Rosa palustris</i>	Swamp Rose	OBL	within pool
<i>Salix discolor</i>	Pussy Willow	FACW	at edge of pool
<i>Sambucus canadensis</i>	Common Elderberry	FACW-	at edge of pool
<i>Staphylea trifolia</i>	Bladdernut	FAC	riparian forest (near river)
<i>Viburnum prunifolium</i>	Blackhaw	FACU	drier areas of riparian forest
<i>Viburnum recognitum</i>	Northern Arrowwood	FACW-	at edge of pool

Table 3: Wetland Herbaceous Species

Scientific Name	Common Name	Wetland Indicator Status
<i>Glyceria striata</i>	Fowl Manna Grass	OBL
<i>Cinna arundinacea</i>	Wood Reed	FACW+
<i>Leersia virginica</i>	Whitegrass	FACW
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	FAC+
<i>Onoclea sensibilis</i>	Sensitive Fern	FACW
<i>Impatiens capensis</i>	Jewelweed	FACW
<i>Lysimachia ciliata</i>	Fringed Loosestrife	FACW
<i>Boehmeria cylindrica</i>	False Nettle	FACW+
<i>Mimulus alatus</i>	Sharpwing Monkeyflower	OBL
<i>Carex tribuloides</i>	Blunt Broom Sedge	FACW+
<i>Carex lupulina</i>	Hop Sedge	OBL
<i>Carex grayi</i>	Gray's Sedge	FACW+
<i>Carex crinita</i>	Fringed Sedge	OBL
<i>Scirpus polyphyllus</i>	Leafy Bulrush	OBL

6. Detailed cost estimates and an implementation schedule for items 1 through 5 above.

- **Additional Restoration Properties**

In addition to the General Requirements described above, the Restoration Workplan for any Additional Restoration Property shall include:

1. A detailed design for construction, if applicable.
2. A detailed design for removal of exotic and/or invasive species and replanting of native vegetation, if applicable. The design shall include restoration performance measures and, if applicable, shall be consistent with Ohio EPA's wetland monitoring program.
3. A performance monitoring plan, if applicable.
4. Detailed Restoration Project cost estimates and an implementation schedule for applicable items 1, 2 and 3 above.

The reasonable costs incurred by the ARCG II in the development of the specific Restoration Workplans and the implementation thereof constitute Qualified Costs as defined in Section IV, Paragraph 4.y of the Consent Decree.

V. Progress Reports

During the period of the development and implementation of the Restoration Workplans, the ARCG II shall submit brief (1 to 2 page) monthly progress reports delineating the status of the Restoration Projects. The Progress Report for each month shall be submitted by the 10th day of the following month. The frequency of the Progress Reports may be reduced as agreed to by the Trustees. The progress reports shall include:

1. Activities conducted during the period;
2. Problems encountered during the period;
3. Schedule variances and corrective actions, if necessary;
4. Projected activities for the next month;
5. Documents related to or appertaining to conservation agreements; and,
6. Status of permits, applications, and Qualified Costs.

VI. Deliverables

The following deliverables will be generated and submitted to the Trustee representatives for approval as per the schedule below. Note that some specific deliverables may be streamlined or waived at the discretion of the Trustees.

DELIVERABLE (UNLESS WAIVED BY THE TRUSTEES)	DUE DATE
Restoration Workplans	Due 90 days after the effective date of the Consent Decree for Restoration Properties acquired prior to the Effective Date of the Consent Decree; or due 60 days after Additional Restoration Properties have been acquired or identified.
Progress Reports	By the 10 th day of the subsequent month during the period of implementation of the Restoration Workplan(s), unless the due date is modified or the requirement is waived by the Trustees
Restoration Completion Report	In accordance with the Consent Decree, paragraph 22

Deliverables shall be submitted via electronic mail to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the ARCG II in writing:

- Dave Devault, U.S. Fish and Wildlife Service, dave_devault@fws.gov
- Kevin Tloczynski, U.S. Fish and Wildlife Service, kevin_tloczynski@fws.gov
- Sheila Abraham, Ohio EPA, sheila.abraham@epa.state.oh.us
- Regan Williams, Ohio EPA, regan.williams@epa.state.oh.us

Appendix E

Environmental Covenant Template

ENVIRONMENTAL COVENANT

This Environmental Covenant is entered into by _____ (Owner), the United States Fish and Wildlife Service (FWS), the National Oceanic and Atmospheric Administration (NOAA) and the Ohio Environmental Protection Agency (Ohio EPA) pursuant to Ohio Revised Code (ORC) §§ 5301.80 to 5301.92 for the purpose of subjecting the Property to the activity and use limitations set forth herein.

Background. The Ashtabula River, approximately 40 miles long, flows through the northeast quadrant of Ashtabula County to Lake Erie. The approximately 137 square mile watershed is located south of the city of Ashtabula, Ohio. Beginning in the 1940's, the sediments and associated floodplains became contaminated with a variety of contaminants, including volatile organic compounds (VOCs), semi-volatile organics, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), heavy metals and low-level radionuclides.

Fields Brook, a 3-mile tributary of the Ashtabula River, was designated a Superfund Site and placed on the National Priorities List (NPL) in 1983; the Remedial Investigation (RI) began in 1985 with a Record of Decision (ROD) issued in 1986.

Under an agreement with the United States Environmental Protection Agency pursuant to the Great Lakes Legacy Act, an agreement with the United States Army Corps of Engineers pursuant to the Water Resources Development Act, and separate agreements with the Ohio Environmental Protection Agency, the Ashtabula City Port Authority and the members of the Ashtabula River Cooperating Group II, contaminated sediment was dredged from a segment of the Ashtabula River in 2007 and 2008. A dedicated landfill was constructed for the contaminated sediment.

The Ashtabula River watershed and associated natural resources, including macroinvertebrates, fish and fish-eating birds, were substantially impacted as a result of the contamination.

Negotiations between the responsible parties and the natural resource trustees, i.e., the FWS, NOAA and Ohio EPA (Trustees), in conjunction with the United States Department of Justice and the Ohio Attorney General, resulted in a settlement filed in the United States District Court, Northern District of Ohio, Eastern Division, captioned United States v. Cabot Corporation, et. al., Case No. 10-CV, dated _____, 2010. The Administrative Record for this Site, including the Natural Resource Restoration Plan & Environmental Assessment for the Ashtabula River and Harbor Site (Restoration Plan), is maintained at Ohio EPA's Northeast District Office, 2110 East Aurora Road, Twinsburg, Ohio.

Now therefore, Owner, and the FWS, NOAA and Ohio EPA agree to the following:

1. Environmental Covenant. This instrument is an environmental covenant developed and executed pursuant to ORC §§ 5301.80 to 5301.92.

2. Property. This Environmental Covenant concerns an approximately ___ acre tract of real property, located _____, in _____, Ashtabula County, Ohio, identified as

permanent parcel number __-__-__-__, and more particularly described in Exhibit A attached hereto and hereby incorporated by reference herein (Property).

3. Owner. _____ (Owner), [located at] _____ currently owns the Property.

4. Holder. [*Owner, whose address is listed above, is the holder of the Environmental Covenant.*]

5. Activity and Use Limitations. As part of the Restoration Plan approved by the Trustees pursuant to the settlement filed in the United States District Court, Northern District of Ohio, Eastern Division, captioned United States v. Cabot Corporation, et. al., Case No. _:10-CV___, dated _____, 2010, Owner hereby imposes the following activity and use limitations on the Property and agrees to comply with such limitations:

- A. The Property shall be kept in its natural state, i.e., no building, billboards or other structures of any kind, either temporary or permanent, shall be placed or erected on the Property, unless otherwise expressly provided hereunder.
- B. There shall be no filling, excavating, or removal of top soil, sand, gravel, or rock, minerals or other materials on or at the Property, nor any building of roads or change in topography of the land in any manner, other than that caused by the forces of nature, except in accordance with the Restoration Plan approved by the Trustees pursuant to the settlement filed in the United States District Court, Northern District of Ohio, Eastern Division, captioned United States v. Cabot Corporation, et. al., Case No. _:10-CV___, dated _____, 2010.
- C. The control, management and eradication of animal or plant species on the Property must be pursuant to a Non-Native, Noxious or Nuisance Species Control Plan approved by the FWS, Reynoldsburg, Ohio Field Office. Methods must comply with the State and Federal requirements and manufacturer guidelines.
- D. No power or petroleum transmission lines may be constructed, nor any other interests in the Property shall be granted for this purpose. However, the Owner reserves the right to maintain and repair telephone, electric, water, wells, or other utility lines or mains on existing easements needed to provide for the needs of the Owner, successors or assigns. The area affected by the repair work shall be the minimum necessary to accomplish the task. Upon completion of all construction for such utilities, the area shall be restored to its previous state.
- E. No towers for communication or otherwise shall be constructed on the Property.
- F. No trees, ground cover or other vegetation shall be removed from the Property, except that which is necessary to: maintain foot paths and trails; restore natural habitat areas; promote natural vegetation; protect life and property; or comply with the Restoration Plan approved by the Trustees pursuant to the settlement filed in the United States District Court, Northern District of Ohio, Eastern

Division, captioned United States v. Cabot Corporation, et. al., Case No. :10-CV , dated , 2010.

- G. The Property shall at all times be kept free of garbage, trash, and machinery; and no other unsightly material shall be allowed to accumulate or be stored thereon.
- H. Use of vehicles for recreation, including snow mobiles, all terrain vehicles or other motorized vehicles, shall not be permitted on the Property.
- I. Hunting and trapping on the Property are prohibited without prior written consent of the FWS and Ohio EPA.
- J. Each and every other activity or construction that is inconsistent with the purpose of this Environmental Covenant or which may endanger, affect or impair the natural or scenic state of the Property is prohibited.
- K. The Property shall not be subdivided. The Owner, its successors or assigns shall notify the Trustees of any proposed transfer of the Property, or any portion thereof, at least ninety (90) days prior to any such proposed transfer. The Owner, its successors or assigns shall not transfer the Property, or any portion thereof, without the prior written consent of the Trustees.

6. Breach. If any event or action by or on behalf of a person who owns an interest in or holds an encumbrance on the Property, or any other person constitutes a breach of the activity and use limitations, Owner or Transferee shall notify the FWS, NOAA and Ohio EPA within thirty (30) days of becoming aware of the event or action, and shall remedy the breach of the activity and use limitations within sixty (60) days of becoming aware of the event or action.

7. Running with the Land. This Environmental Covenant, including the activity and use limitations set forth in paragraph 5 herein, shall be binding upon the Owner and all assigns and successors in interest, including any Transferee, and shall run with the land, pursuant to ORC § 5301.85, subject to amendment or termination as set forth herein. The term “Transferee,” as used in this Environmental Covenant, shall mean any future owner of any interest in the Property including, but not limited to, owners of an interest in fee simple, mortgagees, easement holders, and/or lessees.

8. Compliance Enforcement. In the event of a violation of this Environmental Covenant, a civil action for injunctive and/or other equitable relief may be maintained by the United States on behalf of the FWS and/or NOAA, or the Ohio Attorney General on behalf of Ohio EPA, or other parties authorized by law pursuant to ORC § 5301.91. Failure to timely enforce compliance with this Environmental Covenant or the activity and use limitations contained herein by any party shall not bar subsequent enforcement by such party and shall not be deemed a waiver of the party’s right to enforce this Environmental Covenant. Nothing in this Environmental Covenant shall restrict the Trustees from exercising their authority under applicable law.

9. Rights of Access. Owner hereby grants to the FWS, NOAA, Ohio EPA, the Ohio Department of Natural Resources, their agents, contractors, and employees, [and] the County of Ashtabula [, and the City of Ashtabula – if the property is located in the City] the right of access to the Property for implementation or enforcement of this Environmental Covenant.

10. Compliance Reporting. Owner or any Transferee shall submit to the FWS, NOAA, Ohio EPA, [and] the County of Ashtabula [and the City of Ashtabula], on an annual basis, written documentation verifying compliance with this Environmental Covenant.

11. Notice upon Conveyance. Each instrument hereafter conveying any interest in the Property, or any portion thereof, shall contain a notice of the activity and use limitations set forth in this Environmental Covenant, and provide the recorded location of this Environmental Covenant. The notice shall be substantially in the following form:

THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN ENVIRONMENTAL COVENANT, DATED _____, 20__, RECORDED IN THE DEED OR OFFICIAL RECORDS OF THE ASHTABULA COUNTY RECORDER ON _____, 20__, IN [DOCUMENT ____, or BOOK ____, PAGE ____].

Owner shall notify the FWS, NOAA and Ohio EPA within ten (10) days after each conveyance of an interest in the Property. Owner's notice shall include the name, address, and telephone number of the Transferee, a copy of the deed or other documentation evidencing the conveyance, and a survey map that shows the boundaries of the property being transferred.

12. Representations and Warranties. Owner hereby represents and warrants to the other signatories hereto:

- A. that the Owner is the sole owner of the Property;
- B. that the Owner holds fee simple title to the Property which is subject to the following interests or encumbrances: _____;
- C. that the Owner has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;
- D. that the Owner has identified all other persons that own an interest in or hold an encumbrance on the Property and notified such persons of the Owner's intention to enter into this Environmental Covenant; and,
- E. that this Environmental Covenant will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which Owner is a party or by which Owner may be bound or affected.

13. Amendment. This Environmental Covenant may be amended by consent of all of the following: the Owner or a Transferee; the FWS; NOAA; and the Ohio EPA, pursuant to ORC §

5301.90 and other applicable law. The term, “Amendment” as used in this Environmental Covenant, shall mean any changes to the Environmental Covenant, including the activity and use limitations set forth herein, or the elimination of one or more activity and use limitations when there is at least one activity and use limitation remaining.

This Environmental Covenant may be amended only by a written instrument duly executed by the Regional Director of the FWS, the General Counsel of NOAA (or his/her designee), the Director of Ohio EPA and the Owner or Transferee of the Property, as applicable. Within thirty (30) days of signature by all requisite parties on any amendment of this Environmental Covenant, the Owner or Transferee shall file such instrument for recording with the Ashtabula County Recorder’s Office, and shall provide a file and date-stamped copy of the recorded instrument to the FWS, NOAA and Ohio EPA.

14. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

15. Governing Law. This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the State of Ohio.

16. Recordation. Within thirty (30) days after the date of the final required signature upon this Environmental Covenant, Owner shall file this Environmental Covenant for recording, in the same manner as a deed to the Property, with the Ashtabula County Recorder’s Office.

17. Effective Date. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded as a deed record for the Property with the Ashtabula County Recorder.

18. Distribution of Environmental Covenant. The Owner shall distribute a file- and date-stamped copy of the recorded Environmental Covenant to: the FWS; NOAA; Ohio EPA; [*and*] the County of Ashtabula [*; and, the City of Ashtabula– if the property is located in the City*].

19. Notice. Unless otherwise notified in writing by or on behalf of the current owner, the FWS or Ohio EPA, any document or communication required by this Environmental Covenant shall be submitted to:

Regional Director
U.S. Fish and Wildlife Service
Region 3
1 Federal Drive
Fort Snelling, Minnesota 55111

Ashtabula River Site Coordinator
DERR
Ohio EPA
2110 East Aurora Road
Twinsburg, Ohio 44087

General Counsel’s Office for Natural Resources/NE
NOAA Office of General Counsel
55 Great Republic Drive
Gloucester, Massachusetts 01930

[Chairman
Ashtabula Township Park Commission
120 Manola Avenue
Ashtabula, OH 44004]

[Brenda Stephens, Administrative Assistant
Ashtabula Township Park Commission
120 Manola Avenue
Ashtabula, OH 44004]

The undersigned [representative of] Owner represents and certifies that [he/she] is authorized to execute this Environmental Covenant.

IT IS SO AGREED:

[_____] [Owner]

_____ [signature] [title]

Printed Name and Title

Date

State of _____)

) ss:

County of _____)

Before me, a notary public, in and for said county and state, personally appeared _____, [a duly authorized representative of _____], who acknowledged to me that [he/she] did execute the foregoing instrument [on behalf of _____].

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this _____ day of _____, 20__.

Notary Public

Date of My Commission Expiration

OHIO ENVIRONMENTAL PROTECTION AGENCY

Chris Korleski, Director

Date

State of Ohio)
) ss:
County of Franklin)

Before me, a notary public, in and for said county and state, personally appeared Chris Korleski, the Director of Ohio EPA, who acknowledged to me that he did execute the foregoing instrument on behalf of Ohio EPA.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this ____ day of _____, 20__.

Notary Public

Date of My Commission Expiration

U.S. Fish & Wildlife Service

Robyn Thorson, Regional Director, Region 3

Date

State of _____)

)

ss:

County of _____)

Before me, a notary public, in and for said county and state, personally appeared Robyn Thorson, a duly authorized representative of the FWS, who acknowledged to me that she did execute the foregoing instrument on behalf of the FWS.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this _____ day of _____, 20__.

Notary Public

Date of My Commission Expiration

National Oceanic and Atmospheric Administration

[name] [title]

Date

State of _____)

)

ss:

County of _____)

Before me, a notary public, in and for said county and state, personally appeared _____, a duly authorized representative of NOAA, who acknowledged to me that [he/she] did execute the foregoing instrument on behalf of NOAA.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this ____ day of _____, 20__.

Notary Public

Date of My Commission Expiration

This instrument prepared by:

Mark J. Navarre, Esq.
Supervising Attorney
Ohio EPA
50 West Town Front Street
Columbus, Ohio 43216

Appendix F

Trustee Memorandum of Understanding

DIV. OF EMERGENCY &
REMEDIATION RESPONSE

99 FEB 12 AM 10:20

RECEIVED

MEMORANDUM OF UNDERSTANDING

BETWEEN

**THE OHIO ENVIRONMENTAL PROTECTION AGENCY
AND
THE U.S. DEPARTMENT OF THE INTERIOR**

I. INTRODUCTION and AUTHORITY

This Memorandum of Understanding (MOU) by and between the Ohio Environmental Protection Agency (OEPA), and the United States Department of the Interior (DOI) is entered into to ensure coordination and cooperation, in assessment of injuries and planning and implementation of restoration or replacement of natural resources injured by releases of hazardous materials from the Fields Brook Superfund Site. The Trustees enter into this MOU pursuant to the authorities of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 *et seq.* and other federal and state laws and authorities including, but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.*, the Oil Pollution Act of 1990, 33 U.S.C. 2701 *et seq.*, and to the extent appropriate and elected for use by the Trustees, the Natural Resource Damage Assessment Regulations, as amended, 43 C.F.R. Part 11. The MOU is intended to facilitate coordination and cooperation among the Trustees in their assessment and monitoring of injuries to natural resources in connection with the Fields Brook Superfund Site and in the restoration of those natural resources.

The Trustees' responsibilities include, but are not limited to, the assessment, recovery, and administration of natural resource damages for: (1) injury to, destruction of, or loss of natural resources and natural resource services (hereinafter "injury" or "injured natural resources"); (2) restoration planning; (3) the costs of restoration, replacement, rehabilitation, and/or acquisition of equivalent (hereinafter "restoration" or "restore") of the injured natural resources; and (4) coordination of trustee concerns and activities associated with removal, remedial or corrective actions, or other response actions carried out by other federal and state agencies in an effort to abate and/or minimize continuing and residual injury, and to achieve or enhance restoration of injured natural resources.

II. PARTIES and ADVISORS

The Trustees specified in Section I have trusteeship over certain natural resources at, or related to the Fields Brook Superfund Site pursuant to Section 300.600 Subpart G of the National Contingency Plan (NCP), as amended, and other applicable laws. The Trustees have authority to act on behalf of the public to bring claims for natural resource damages against potentially responsible parties and to undertake restoration activities. However, nothing in this MOU is to imply, or operate in a manner, that any natural resource trustee with an interest in the Fields Brook Superfund Site, whether a party to this Agreement or not, is in any way abrogating or ceding any natural resource trustee responsibility or authority over natural resources which may have been affected by the Site. Such other trustees may be added to this MOU by amendment in accordance with section XI. The following officials, collectively referred to as the "Trustees", are parties to this MOU and act on behalf of the public as trustees for natural resources under this MOU:

A. Natural Resource Trustee Parties:

Director, Ohio Environmental Protection Agency or his delegated representative

and

Secretary of the Interior or his delegated representative(s) including:

Director, Office of Environmental Policy & Compliance (OEPC)

Regional Director, Region 3, U.S. Fish and Wildlife Service

B. Advisors

United States Department of Justice (DOJ), the Department of the Interior Office of the Solicitor (SOL), the Ohio Attorney General (OAG), the United States Environmental Protection Agency (USEPA), United States Department of Commerce through the National Oceanic and Atmospheric Administration (NOAA), the United States Coast Guard (CG), and Ohio Department of Natural Resources (ODNR).

III. EVENTS

This MOU is intended to address all releases, spills, or other incidents, occurrences, or events (hereinafter referred to as "events"), related to the Fields Brook National Priority List (NPL) Site (also known as the Fields Brook Superfund Site) which give rise to claims and/or potential claims for Natural Resource Damages. Locations covered by this MOU include the Fields Brook Superfund Site, Fields Brook, Ashtabula River, and their supporting or affected ecosystems including Lake Erie.

IV. PURPOSE

The Trustees recognize the importance of integrating and coordinating the assessment of damages for injuries to natural resources and seeking compensation for those injuries to natural resources and/or the services they provide, and restoration of those affected resources and/or services provided by those resources. The purpose of this MOU is to provide a framework for coordination and cooperation between the Trustees, and for the implementation of the activities of the Trustees in furtherance of their responsibilities as trustees for natural resources. The Trustees' activities will involve assessing damages for injuries to natural resources, seeking compensation for those injuries to natural resources, and using funds recovered as compensation to restore and/or replace the injured natural resources and/or the services provided by those natural resources.

V. ORGANIZATION OF A TRUSTEE COUNCIL

The Trustees recognize the importance of coordinating their efforts in order to meet their respective natural resources trustee responsibilities effectively and efficiently. Accordingly, there is hereby created to implement this MOU, a Trustee Council, whose membership shall include the Secretary of the Interior or his designated representative, and the Director of the Ohio Environmental Protection Agency or his designated representative. Each Trustee designating a representative to the Trustee Council shall also designate an alternate (see Appendix). Representatives to the Trustee Council shall fully coordinate Trustee activities among themselves and may seek advisory participation from NOAA, the United States Department of Justice, the Department of the Interior Office of the Solicitor, the State Attorney General or other legal advisors, as well as other trustees or governmental entities such as the U.S. Environmental Protection Agency and the Ohio Department of Natural Resources.

VI. DUTIES AND RESPONSIBILITIES OF THE COUNCIL

The Trustee Council representatives shall coordinate and authorize all Trustee activities and matters under this MOU in accordance with the decision making requirements contained in section VII. The Trustees through their representatives may take whatever actions they determine are necessary to fulfill their responsibilities under the Acts and applicable state Laws. It is expected that the representatives, in accordance with applicable laws and policies, may take the following actions, *inter alia*, to address the Trustees' natural resource responsibilities.

A. Conduct scientific and technical studies, sampling, and other activities relating to trust natural resources. These may include, but are not limited to, the assessment of natural resource damages for injury to trust natural resources which may have been lost, injured, or destroyed.

B. Seek compensation from responsible parties for the damages assessed by the Trustees and for the costs of planning and implementing the assessment.

C. In concert with attorneys for the Trustees, participate in negotiations with responsible parties.

D. Make all the necessary decisions for the management and administration of funds pursuant to Section VIII of this MOU in accordance with applicable law.

E. Supervise, manage, obligate, and arrange for disbursement of any money paid to the Trustees by, or on behalf of, responsible parties for the purpose of assessing, restoring, replacing, rehabilitating and/or acquiring the equivalent of the affected natural resources in accordance with applicable law.

F. Arrange for necessary contracts with professional consultants, technical or otherwise, that the Trustees determine are best qualified to provide services to the Trustees, in accordance with applicable law.

G. In consultation with the Ohio Department of Natural Resources and other Trustees or Advisors as necessary, oversee the development and the implementation of a plan for the restoration, replacement, rehabilitation and/or acquisition of equivalent resources for those trust resources, and/or the services provided by those resources, that were injured, destroyed, or lost.

H. Coordinate and integrate, to the extent practicable, natural resource trustee concerns and activities with removal, remedial or corrective actions, or other response actions carried out by other federal and state agencies in an effort to abate and/or minimize continuing and residual injury, and to achieve or enhance restoration of injured natural resources.

The duties of the Trustees' representatives to the Trustee Council shall include, but are not limited to: coordination and monitoring of the progress of the natural resource damage assessment process; scheduling of meetings and preparation of agendas for those meetings; acting as central contact point for their respective agencies (if applicable); and establishment and maintenance of records and relevant documents. Each Trustee Council representative will be responsible for informing the other Trustees of all pertinent developments on a timely basis.

VII. DECISION MAKING BY THE COUNCIL

The Trustees agree that decisions implementing this MOU shall require unanimous approval. In the event that unanimous agreement cannot be reached between voting Trustee Council representatives, the matter in dispute will be elevated to the Trustee officials having signature authority either to resolve the dispute or to establish a dispute resolution mechanism by which the dispute may be resolved. The Trustees further agree that decision making deliberations will focus upon the Trustees' mutual goal of assessing, restoring, rehabilitating, replacing and/or acquiring the equivalent of the affected natural resources, rather than upon control of respective trusteeship over those resources.

VIII. FUNDS

The Trustees, through their representatives, have agreed either to utilize the DOI's Natural Resource Damage Assessment and Restoration Fund or to establish, to the extent consistent with applicable law, a court registry account for purposes of receiving, holding, disbursing, managing, and expending all natural resource damage recoveries obtained or received by the Trustees relating to the natural resource injuries arising out of the events and any interest earned thereon. Such recovered funds shall be used for restoration activities conducted under this MOU to offset those injuries to natural resources and the services that they provide. Any damage recoveries for injury to natural resources at a Site obtained or received by or on behalf of any Trustee shall be deposited in accordance with the Site's Consent Decree(s) provisions for payment of natural resource damages, either into this account, or as otherwise directed specifically in the Consent Decree(s).

The Trustee Council representatives, in accordance with the decision making process outlined in Section VII, shall establish standards and procedures governing the joint use of all natural resource damages received by the Trustees for the purposes of restoring, replacing, rehabilitating, and/or acquiring the equivalent of natural resources injured and the lost services provided by such resources.

The Trustees further agree that monies for assessment and oversight costs shall be separated and advanced or reimbursed to each Trustee and advisors, as appropriate. This may include, but is not limited to, the reasonable unreimbursed costs jointly agreed upon, for the planning, conduct, evaluation, and coordination of all natural resource damage assessment activities pursued by the Trustee representatives. Monies for the payment of U.S. Department of the Interior's assessment costs shall be paid directly to the U.S. Fish and Wildlife Service's Natural Resource Damage Assessment and Restoration Fund (NRDAR) account number 14X5198 subactivity 9843. Monies for payment of the State of Ohio's assessment costs shall be paid to Treasurer, State of Ohio/Hazardous Waste Special Clean Up Account, sent to Fiscal Officer, Ohio EPA, with a copy to Fiscal Officer, DERR.

IX. CONFIDENTIALITY

The Trustees and their representatives agree that it is in the public interest that all scientific data arising out of their review of the injury to natural resources as a result of the Events be made public. Therefore, public sharing of scientific data will be the general policy of the Trustees.

However, all parties to this MOU recognize that some written or oral communications related to the assessment and recovery of damages for injury to natural resources may be undertaken in anticipation of litigation. Accordingly, oral and written communications and work product which are privileged attorney-client communications, attorney work product, or protected by other applicable privilege (or a combination thereof), and which are protected from disclosure under applicable Federal or State law, will be handled consistent with applicable law. They further agree that whenever a request for production of such a record is received pursuant to any applicable Federal or State law, a copy of the request will be forwarded for comment to the Trustee or Trustees to which the privilege applies or whose representatives originally generated or contributed the record requested. Nothing contained herein shall be construed as prohibiting or restraining the Trustees or the Trustee Council from agreeing to release any record or from responding to a request in accordance with applicable law.

X. RESERVATION OF RIGHTS

Except for the confidentiality agreement contained in Section IX, the parties understand that this document is not intended to create any further legal rights or obligations between the Trustees or any other persons not parties to this MOU.

XI. MODIFICATION OF AGREEMENT

Modification of this MOU must be in writing and approved by all Trustees currently parties to the MOU.

XII. TERMINATION

This MOU shall be in effect from the date of execution until termination by agreement of the Trustees. In the event any Trustee withdraws from the MOU, such withdrawal must be in writing at least thirty days in advance of the withdrawal. In the event of such withdrawal, this MOU remains in full force and effect for the remaining party or parties.

In the event of the withdrawal of any Trustee, or at the termination of this MOU, there shall be a full and complete accounting of all funds received, deposited, held, disbursed, managed, or expended pursuant to Section VIII of this MOU, or otherwise controlled in any joint account by the Trustees as a result of any occurrence.

XIII. LIMITATION

Nothing in this MOU shall be construed as obligating the United States, Ohio, or any other public agency, their officers, agents, or employees, to expend any funds in excess of appropriations authorized by law.

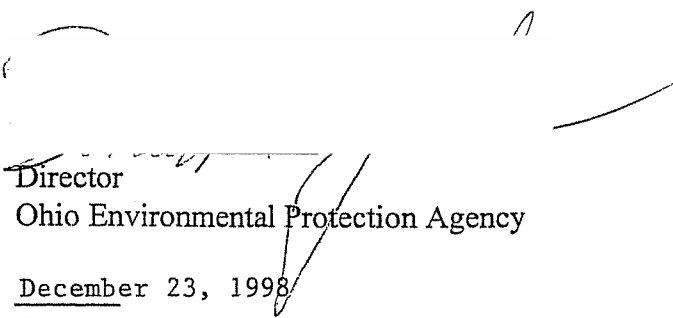
XIV. THIRD PARTY CHALLENGES OR APPEALS

The activities to be carried out in furtherance of the Trustees' rights and responsibilities contained in this MOU are subject to the availability of funding and are intended to be guidance for use and coordination by the Trustees. This MOU is not intended to create or authorize a basis for any third party claims, challenges or appeals to the actions of the Trustees.

XV. EXECUTION: EFFECTIVE DATE

This MOU may be executed in counterparts. A copy with all original executed signature pages affixed shall constitute the original MOU.

The effective date of this MOU shall be the date of the signature of the Trustee who is last to sign.


Director
Ohio Environmental Protection Agency

December 23, 1998

Date

Regional Director
U.S. Fish and Wildlife Service
U.S. Department of the Interior



6/10/98
Date

APPENDIX

Section V. of this MOU establishes the Trustee Council whose membership includes the Secretary of the Interior or his delegated representative (and alternate) and the Director of Ohio Environmental Protection Agency or his delegated representative (and alternate). The delegated representative and alternate of each agency are the following:

Secretary of the Interior

Delegated representative for U.S. Fish and Wildlife Service: Field Supervisor, Reynoldsburg, Ohio Field Office (presently Kent Kroonemeyer)

Delegated (alternate) representative for U.S. Fish and Wildlife Service: appointed by the Field Supervisor, Reynoldsburg, Ohio Field Office (presently William Kurey)

Director of Ohio Environmental Protection Agency

Delegated representative for the Director of Ohio Environmental Protection Agency: Environmental Specialist 3, Division of Emergency and Remedial Response, Ohio EPA Northeast District Office (presently Sheila Abraham)

Delegated (alternate) representative for the Director of Ohio Environmental Protection Agency: Fields Brook Site Coordinator, Division of Emergency and Remedial Response, Ohio EPA Northeast District Office (presently Regan Williams)

Appendix G

Railroads Restoration Project Workplan

ENVIRON



RESTORATION WORK PLAN

**Slip 5A Peninsula
Ashtabula, Ohio**

Prepared for:

Norfolk Southern Railway Company

Prepared by:

ENVIRON International Corporation

13801 West Center Street, Suite 1

Burton, Ohio 44021

October 15, 2009

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Acronyms and Abbreviations

ACM	Asbestos containing material
AVS-SEM	Acid volatile sulfide – simultaneously extracted metals
Biohabitats	Biohabitats, Inc.
CEC	Cation exchange capacity
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
cm	Centimeter
DOT	Department of Transportation
ENVIRON	ENVIRON International Corporation
ESL	Ecological Screening Level
GLLA	Great Lakes Legacy Act
H _z W	H _z W Environmental Consultants, LLC
M&M Plan	Monitoring and Maintenance Plan
mg/kg	Milligrams per kilogram
NSRC	Norfolk Southern Railway Company
OEPA	Ohio Environmental Protection Agency
PAH	polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyl
PPE	Personal protection equipment
SRV	Sediment reference value
SSL	Soil Screening Level
SVOC	Semi-volatile organic compound
TCLP	Toxicity characteristic leaching procedure
TEC	Threshold Effect Concentration
TSCA	Toxic Substances Control Act
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VOC	Volatile organic compound

1. INTRODUCTION

This restoration Work Plan describes natural resource restoration activities that will be undertaken by the Railroads pursuant to Section VII of the Consent Decree in *United States and State of Ohio, ex rel. Richard Cordray, Attorney General of Ohio v. Cabot Corp., et al.* (N.D. Ohio) that resolves specified claims relating to alleged natural resource damages at the Ashtabula River and Harbor Site. This restoration Work Plan provides for implementation of natural resource restoration projects in a portion of an area known as the “Slip 5A peninsula,” which is currently owned by Norfolk Southern Railway Company (NSRC). The restoration projects to be implemented by the Railroads pursuant to this restoration Work Plan occupy approximately 6.45 acres. In addition, the restoration area includes an additional area, up to approximately 0.70 acres, along the eastern edge of the northern part of the Slip 5A peninsula, where NSRC has authorized the United States Environmental Protection Agency (USEPA) and its contractors to create and enhance fish habitat as part of a habitat mitigation project that is a component of an Ashtabula River dredging project previously initiated pursuant to the Great Lakes Legacy Act (GLLA). See Figure 4. Apart from providing access to EPA and its contractors for purposes of implementing the GLLA habitat mitigation project, the Railroads’ only obligation with respect to the GLLA habitat mitigation area is to establish an Environmental Covenant. Due to the security requirements of the active bridge yard, the restoration area is at least 100 feet from the tracks. The Slip 5A peninsula is some of the only soft shoreline along this portion of the Ashtabula River. Therefore, the restoration of this ecological habitat can provide significant ecological value as a refuge area from heavy boat traffic and propeller wash. The limited human use of the restoration area presents an opportunity to enhance ecological uses.

This work plan describes the basis for restoration design, installation, monitoring and maintenance. Background information, including physical and ecological setting, historical land use and cleanup actions, and current soil and sediment conditions, is provided below.

1.1 Physical Setting

The restoration area is located within the Erie Lake Plains of the Central Lowland province. The Erie Lake Plains ecoregion is comprised of the approximately 3 to 5.5 mile wide stretch of land that lies immediately adjacent to Lake Erie. This ecoregion is characterized by lacustrine deposits. The restoration area is underlain by clay and sandy clay, less than 30 feet thick, overlying shale. According to the Soil Survey of Ashtabula County, Ohio, published by the United States Department of Agriculture, the restoration area is underlain by a single soil type, “Made land.” This soil type consists of areas of earth, fill, borrow pits, and of areas where much of the soil surface is

covered by streets, homes, factories, or docks. In all of these areas, the original soils have been greatly altered.

Bedrock in the vicinity consists of Devonian shales of the Ohio and Olentangy groups. The bedrock surface slopes to the north towards Lake Erie. According to the 1960 (photorevised 1988) Ashtabula North, Ohio quadrangle United States Geological Survey (USGS) 7.5 minute topographic map, the Slip 5A peninsula is sloping with an elevation of approximately 590 feet above National Geodetic Vertical Datum.

Ashtabula experiences seasonal temperature changes with an average temperature of 57 degrees Fahrenheit. Ashtabula County receives lake effect snow and is considered part of the Southeastern Lake Erie Snowbelt. The lake-modified climate of this area extends the annual growing season by several weeks in comparison to inland areas.

An aerial survey was conducted in 2007 to provide one foot contours of the Slip 5A vicinity. Kucera International, Inc. compiled these contours to national map accuracy standards using photogrammetric methods from aerial photography taken in April 2007 and ground-truthed by a ground survey crew in May 2007.

1.2 Historical Land Use

According to local historical resources, the Slip 5A peninsula has been owned by railroad entities since approximately 1873. Initially, the peninsula was utilized as a dock area for the loading and/or unloading of goods/products carried by marine vessels into the railroad cars located on the tracks. According to historic aerial photographs and topographic maps, railroad tracks were present across the entire length of the peninsula from before 1905 until some time between 1968 and 1971.

The Slip 5A peninsula was leased to the Acme Scrap Iron and Metal Company (1959 - 1977) and the Triad Salvage Company (1977 - 1988) as a ship salvaging yard. Approximately 40 vessels were completely or partially scrapped at the peninsula during that time. The Slip 5A peninsula has not been used for any ship salvaging or railroad activities since circa 1988.

1.3 Previous Site Remediation Activities

In May 1988, the USEPA initiated a Clean Air Act enforcement action addressing asbestos-containing material (ACM) on the Slip 5A peninsula. Two permitted ACM containment areas were created during a two-part Environmental Asbestos Decontamination Project, conducted from December 1988 to March 1989. In Phase IA, ACMs from rubble piles were dismantled and decontaminated. A general cleaning of ACMs from the surface in designated areas was conducted

in Phase IB. The two asbestos containment areas were covered with geotextile filter fabric (to prevent the migration or emission of ACM) followed by 24 inches of compacted soil cover.

Additionally, in April 1991 Conrail notified the USEPA Office of Pesticides and Toxic Substances Branch of a non-emergency collection and disposal of polychlorinated biphenyl- (PCB) containing capacitors and associated material, even though the quantities of PCBs released did not qualify for reporting under the Toxic Substances Control Act (TSCA) and/or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Selective soil excavation was conducted in targeted areas until soil sample PCB concentrations were below detection limits.

Directly south of the Slip 5A peninsula, along the eastern bank of the Ashtabula River, is an undeveloped piece of land that is referred to as the dredge spoil area. In 1993, the U.S. Army Corps of Engineers dredged approximately 35,000 cubic yards of sediment from the Ashtabula River in order to maintain enough depth to allow recreational boating. This material was placed in the dredge spoil area with the understanding the City of Ashtabula would be responsible for the disposal when a disposal facility for the larger remediation was established. The material was trucked to the confined disposal facility on State Road in early 2008.

1.4 Current Ecological Conditions

ENVIRON staff conducted a site visit on November 8, 2006 to develop a preliminary characterization of the Slip 5A peninsula and surrounding area. ENVIRON and Biohabitats, Inc. (Biohabitats) conducted an additional site visit on May 2, 2007 to collect additional technical input for the development of this Work Plan. Observations are described below.

The Slip 5A peninsula is located along the eastern shore of the Ashtabula River in Ashtabula, Ohio. The sole vehicular access to the Slip 5A peninsula is via the active Norfolk-Southern bridge yard facility. The southern limit of the peninsula is fenced with a 6 foot chain link fence. A single gate in the chain link fence allows access to a dirt/grass access road that is located approximately 10 feet from the bank and runs approximately halfway to the tip of the peninsula. This access road was likely created during the removal of an abandoned tugboat and is not regularly maintained. An "asbestos hazard" sign is posted on the entrance gate to the Slip 5A peninsula.

Several miscellaneous debris piles consisting of concrete blocks, metal scrap, tires, braided metal cable, plastic hoses, steel piping, abandoned rail siding, wood beams, and wood planks were observed throughout the peninsula. In addition, all of the banks are littered with miscellaneous debris deposited by the Ashtabula River during high water levels.

Portions of the peninsula shoreline have been modified (hardened) over time. The eastern tip of the peninsula is characterized by large rock slabs that provide erosion control and fish habitat. Additionally, portions of the eastern bank of the slip (adjacent to the bridge yard) contain miscellaneous concrete and scrap material along the shoreline.

At the southeastern extent of the Slip 5A peninsula, banks are very steep with a 3-6 foot, nearly vertical drop-off. This grade gradually decreases to a 2-3 foot drop near the mid-point of the eastern peninsula bank. A small (5-10 foot) riparian zone is located along the eastern bank of the Slip 5A peninsula. This riparian zone is characterized predominately by grasses at the southern extent and trees and shrubs at the northern extent. The western bank of the Slip 5A peninsula is characterized by a large levee that is located parallel to the Ashtabula River bank along the entire length of the peninsula. A small (5-10 foot) wooded riparian zone is located between the levee and the river. This riparian zone is limited in functionality due to the high slope along the levee.

Within the Slip 5A peninsula, several areas of raised elevation exist. In some areas, the raised topography is due to a historical remedial event (e.g., on-site consolidation and asbestos cap, scrap material consolidation). There are also low-lying areas within the peninsula that are characterized by standing water following rain events.

Overall, the plant community is characterized by a disturbed understory and canopy. The tree layer is dominated by black locust (*Robinia pseudoacacia*) and black willow (*Salix nigra*). Invasive species are a significant issue in the shrub stratum, crowding out native shrubs, tree saplings, and herbaceous plants. In the northern extent of the peninsula, Amur honeysuckle (*Lonicera maackii*) is becoming established. This exotic invasive shrub can quickly dominate the floodplain understory. Another invasive shrub, multiflora rose (*Rosa multiflora*) is also present, but with lower frequency. A small number of the invasive tree-of-heaven (*Ailanthus altissima*) has colonized the northern portion of the Slip 5A peninsula.

Significantly, much of the restoration area is dominated by a single grass species, identified as *Phragmites australis*. This invasive species forms dense, monospecific colonies that tend to exclude native species in the middle and southern portions of the peninsula. These areas are characterized by a few stands of mature trees and significant portions of *Phragmites*.

1.5 Current Soil and Sediment Conditions

Previous investigations have included chemical analyses of soils and sediments within and adjacent to the Slip 5A peninsula. Soil samples were collected from 0-2 feet and 2-4 feet intervals at 32 sample locations on the Slip 5A peninsula in April 2005 (Figure 1). Samples were analyzed for polycyclic aromatic hydrocarbons (PAHs), PCBs, metals, volatile organic compounds (VOCs), and

asbestos. The soil chemistry data were compared to Region 5 Ecological Screening Levels (ESLs) for soil (USEPA, 2003), Ecological Soil Screening Levels (SSLs) (USEPA, 2007) and background concentrations for metals in the eastern United States (Shacklette and Boerngen, 1984). Results of the soil screening indicated that five locations exceeded screening levels for naphthalene and/or benzo(a)pyrene in the subsurface (2-4 foot) soil. Additionally, multiple locations contained surface and/or subsurface soil metal concentrations in exceedance of screening levels. All sample locations with exceedances were evaluated to determine appropriate actions necessary to address potential ecological exposures. A site-specific determination was made that subsurface locations (2-4 foot) do not pose a significant risk to ecological receptors. Surface locations will be covered with clean soil to restrict the potential exposure pathway (discussed in detail in Section 2.3).

Detectable concentrations of PCBs were reported from only two soil sample locations, specifically locations 311 and 314 (Table 1). At location 314, PCBs were detected only in subsurface soil (1.4 milligrams per kilogram or mg/kg). However, at location 311, a concentration of approximately 20 mg/kg was reported for surface soil. Therefore, additional sampling was conducted in April 2007 to delineate the horizontal and lateral extent of PCBs in the vicinity of sampling location 311 (Figure 2). Samples were collected from 21 locations at 15-foot grid intervals north, east, and south of sample location 311. No samples were collected from the west of sample location 311 due to the presence of an asbestos cover area. Results from this sampling indicated that none of the sample locations approach PCB levels reported from surface soil at location 311 (Table 2). Therefore, soil excavation will be limited to sample location 311.

Soil sampling was also conducted in April 2007 to assess deeper subsurface soils in the proposed connected emergent wetland excavation area. Three locations were sampled at 4-6 feet and analyzed for PAHs, PCBs, and metals (Figure 1). Chemistry data from these three locations indicate that all contaminants of concern are below screening levels (Table 1).

Agricultural soil tests were conducted on samples collected from the Slip 5A restoration area to identify the existing pH and fertilizer requirements for the soil. Soil test sampling points are depicted on Figure 1, and test results are tabulated in Table 3. Samples were collected from a depth of 0-2 feet, 2-4 feet, and 4- 6 feet. Reported pH levels were similar between the depth intervals sampled. In general, soil pH was between 6.7 and 7.5 pH units, indicating that no soil amendments are necessary based on pH.¹

¹ The typical pH for eastern Ohio (subsoils derived from shale and sandstone) should be above 6.5 and below 7.0 (Ohio State University Extension, 2007).

Soil organic matter was also evaluated to determine soil fertility. A high soil cation exchange capacity (CEC) buffers the soil against changes in pH. A high CEC can also alter soil fertility by enhancing the binding of negatively charged organic matter with positively charged organic compounds to make micronutrients soluble and bioavailable to plants. Cation exchange is a major source of nutrients like K^+ , Ca^{2+} , and Mg^{2+} , as well as NH_4^+ and micronutrient trace metals like Zn^{2+} , Mn^{2+} , and Cu^{2+} (Ohio State University Extension, 2007). Soil organic matter at the Slip 5A peninsula ranged from 0.6 to 2.2% with the CEC ranging from 12.5 to 18.7 meq/100 g soil. These organic matter and CEC values indicate that no organic matter enrichment is necessary².

HzW Environmental Consultants, LLC (HzW) conducted sediment sampling in Slip 5A in April 2007. The top 10-15 centimeters (cm) of substrate was collected from 6 sediment sample locations (Figure 1, Table 4) and analyzed for PAHs, PCBs, metals, and acid volatile sulfide and simultaneously extracted metals (AVS/SEM). Results were screened against Ohio Environmental Protection Agency (OEPA) Sediment Reference Values (SRVs) for metals and against Consensus-based Threshold Effect Concentrations (TECs) for PAHs and PCBs. Sampling locations 2 and 3 exceeded SRVs for multiple metals. However, the AVS/SEM ratio at the site indicates that these metals are not bioavailable and, therefore, do not pose a significant ecological risk.

²In Ohio, typical soil organic matter ranges between 1 and 6% organic matter (Ohio State University Extension, 2007). The typical CEC for silty soils in Ohio is 6 to 20 meq/100 g soil (Ohio State University Extension, 2007).

2. CONCEPTUAL RESTORATION DESIGN

Restoration is intended to eliminate potential exposure pathways and to create emergent wetland, connected riparian streambank, and connected shrub habitat. Connected emergent wetlands are areas where soil is saturated with moisture either permanently or seasonally and are dominated by herbaceous plants that are adapted to flooding. Emergent wetlands are biologically diverse ecosystems that support a variety of wildlife including amphibians, reptiles, birds, and mammals. Connected riparian streambanks consist of vegetated corridors adjacent to stream channels. Riparian zones can support an assortment of trees along with other plants and in a healthy environment, the plants will be extremely diverse. Riparian zone widths are often simply defined by the vegetation, since plants requiring the wet soils characteristic of riparian zones usually differ from those in the surrounding areas. Riparian zones provide habitat for waterfowl, small mammals, and invertebrates. The connected shrub habitat is the upland area that extends above the riparian zone and is infrequently inundated. Otherwise known as the upland zone, it supports plant species dominated by shrubs that are not tolerant of flooding and that take advantage of better drainage. This habitat is valuable as refuge for wetland-related wildlife and nesting.

Restoration projects are commonly implemented to compensate for natural resource damages. The proposed restoration projects are presented in Figures 3 and 4, respectively. Details of the conceptual restoration described in the following subsections may be refined during the final design phase.

2.1 Restoration Objectives

The following restoration goals and objectives describe the main focus of the restoration projects.

Goal 1: Eliminate potential exposure pathways for soils exceeding relevant screening values.

- Objective 1.1. Removal of debris and scrap material from Slip 5A peninsula.
- Objective 1.2. Excavation and off-site disposal of PCB-contaminated soil (0-2 feet) in the vicinity of sample location 311.
- Objective 1.3. Placement of clean soil to eliminate exposure pathways for asbestos areas and certain soils.

Goal 2: Create connected emergent wetland habitat and a new hydraulic connector.

- Objective 2.1. Modify topography and vegetation to create a hydraulic connection between the Ashtabula River and Slip 5A.

- Objective 2.2. Install native vegetation to encourage wetland formation adjacent to the new hydraulic connection.

Goal 3: Enhance new and existing native plant communities through structural and species diversity.

- Objective 3.1. Targeted suppression of dominant invasive plant species including *Phragmites australis*, *Ailanthus altissima*, *Rosa multiflora* and *Lonicera* species.
- Objective 3.2. White-tailed deer (*Odocoileus virginianus*) exclusion from Slip 5A peninsula prior to supplemental planting and native species establishment.
- Objective 3.3. Install native overstory and understory tree species to establish canopy cover and to provide future large woody debris.
- Objective 3.4. Install native grasses, sedges, and small shrubs within the wetland and along banks.
- Objective 3.5. Install native shrub, grasses, and forb species in to supplement the connected shrub habitat.
- Objective 3.6. Enhance the connected riparian streambank adjacent to aquatic habitat by bank stabilization and planting native vegetation.

The goals and objectives of this restoration project are expected to enhance habitat diversity and condition (e.g., by providing shade, reducing siltation, and promoting ecosystem biological diversity), improve bank stability adjacent to Slip 5A, and stabilize floodplain soils along the bank.

2.2 Site Preparation

The existing access road will be maintained for construction activities. A staging area will be constructed at the southern end of the Slip 5A peninsula to provide areas onto which equipment, scrap, and excavated material can be placed prior to use or disposal. The staging area will be located on NSRC property and will be placed to minimize disturbance of habitat. Upon completion of construction activities, the staging area and access road will be removed. To the extent practical, staging areas and access roads for the GLLA mitigation project and the restoration work described herein will be coordinated to minimize potential construction impacts.

Mobilization will include: identifying and marking underground utilities, coordinating the planned site operations with NSRC personnel, procuring materials and equipment, constructing the staging area, and moving materials and equipment to the site. A pre-construction meeting will be held at the site prior to the commencement of construction activities. At this time, relevant personnel will review the project plan, permits, scheduling, and the site-specific health and safety requirements.

Prior to implementation of other restoration activities, the entire Slip 5A peninsula north of the existing chain link fence and the selected planting areas along the eastern shore of Slip 5A will be treated with approved herbicide(s) in an effort to reduce the dominance of invasive plant species on the site. Treatments will be consistent with species-specific recommendations developed by conservation organizations (e.g., The Nature Conservancy). It is anticipated that a minimum of two applications will be undertaken prior to land disturbance, including scrap and debris removal, PCB excavation, soil regrading, and vegetation planting. At least one application will be made during the late summer/early fall period in order to maximize translocation of herbicide materials into the root systems of target plants. Treatment methodology will be in the form of low-volume foliar sprays for herbaceous species and cut and treat stump applications for woody species. Woody and foliar debris generated by this site preparation will be left in-situ to aid in soil retention and nutrient recycling. Desirable native trees and vegetation selected for retention will be identified and flagged prior to invasive plant intervention.

The current heavy occupation of the site by whitetail deer poses a potential challenge to the establishment and long-term viability of a native plant community. Non-lethal methods will be employed in an effort to discourage deer from utilizing and remaining habituated to this site. These will include the removal of refugia/cover via invasive *Phragmites* and bush honeysuckle suppression and the closure and extension of the existing chain link fence across the base of the Slip 5A peninsula.

2.3 Soil Excavation

Miscellaneous scrap and debris are piled throughout the Slip 5A peninsula and the slip shoreline. The scrap and debris within the restoration area will be removed using standard construction equipment and, when practicable, manual labor. All scrap will be consolidated within the staging area prior to disposal in a landfill or reuse on NSRC property.

Excavation will be accomplished by removing soil to the specified depths to encompass the lateral and vertical extent of contaminated soil in the vicinity of sample location 311. It is anticipated that the vertical extent of excavation will include the top two feet of soil. The horizontal extent of the excavation is presented in Figure 3 and incorporates the results of the soil chemistry data collected in April 2007. The design documents will provide information on the vertical and horizontal excavation depths.

Excavation of soil will be performed using standard excavation equipment (e.g., backhoe). Land-based excavators contain an arm and bucket which are used to remove the soil in targeted area. Buckets may be either open scoops or two-sided (closed) clamshell buckets. Bucket size will be determined based on input from the contractor, production, and mobility. In either case, the

equipment operator lowers the bucket to the soil and scoops or digs the material into the bucket. The bucket of soil is then deposited into a truck bed for transport to the staging area. Dewatering is not anticipated based on the low water content of the soils. Excavated soils will be disposed of in accordance with the procedures described in Section 4.

As described in Section 1.5, additional areas in the Slip 5A peninsula (Figure 3) were selected to receive a soil cover to limit potential ecological exposure to surface soils. Soil for the cover material will be excavated from the proposed hydraulic connection and connected emergent wetland area. These soils will be placed in targeted areas and spread to at least a depth of one foot. Performance standards for the soil cover will be specified in the design documents. Following the placement of the clean soil, native vegetation will be installed as described in Section 2.6.

2.4 Hydraulic Connection and Connected Emergent Wetland Grading

A channel will be excavated to establish a new hydraulic connection between the Ashtabula River and Slip 5A (Figure 4). This component of the restoration plan will facilitate connected emergent wetland creation in the adjacent area and may increase the value of Slip 5A as a refuge for aquatic life in the heavily used Ashtabula River. The area immediately adjacent to the hydraulic connector will be excavated and graded to create a mosaic of emergent and forested wetlands. Soil excavated during the creation of the hydraulic connector and wetland areas will be placed on-site to enhance the upland connected shrub habitat.

The hydraulic connection will be created by removing targeted soil to approximately two feet below surface water elevation to create a connection between the Ashtabula River and Slip 5A. Soil removal to this depth should match the surface water elevations of the Ashtabula River and Slip 5A, creating the potential for free flow of water. It is anticipated that the hydraulic connection will be approximately four feet wide. The final depth and width of the connection will be refined during the final design phase. Excavation of soil will be performed using standard excavation equipment (e.g., backhoe) as described in Section 2.3. The excavated soil will be deposited into a truck bed for transport either to the staging area or to the nearest upland connected shrub area for use as clean cover.

Adjacent to the hydraulic channel, connected emergent wetland habitat will be created by removing targeted soil to approximately one foot below surface water elevation, creating a low-lying elevation with direct connection to the hydraulic connector. This targeted depth is based on Ohio wetland conditions which best support emergent vegetation (Sherman et al., 1996). The connected emergent wetland will have a width of approximately 20 feet and may be characterized by a very slight (target 4:1) slope or steeper slopes (3:1) with a terraced structure. The target width and slopes of the emergent wetland area incorporate the existing topography, proposed soil excavation depths,

and add diversity to the restored connected emergent wetland by providing varying levels of inundation to support a variety of wetland plant species. The final depth, slope, and width of the connected emergent wetland zone will be refined during the final design phase. Excavation of soil will be performed using standard excavation equipment (e.g., backhoe) as described in Section 2.3. The excavated soil will be deposited into a truck bed for transport either to the staging area or to the nearest upland area for use as clean cover.

2.5 Bank Stabilization

Bank stabilization measures (Figure 5) will be implemented near the created hydraulic connection and wetland area and along the targeted connected riparian streambank (Figure 4), to reduce the possibility of erosion. The specific locations requiring bank stabilization will be identified in the design phase. Erosion issues can be addressed by regrading the banks and planting soil-stabilizing vegetation. A 3:1 slope will be considered the target where adjacent land use and conditions permit (FISWRG, 1998). Where the 3:1 target is not attainable, erosion control matting may be placed to stabilize the slope until vegetation is fully established.

Self-launching rock may also be used in some of the riparian area immediately adjacent to Slip 5A. Self-launching rock is a general term for armoring with various size gradations of rock. By using small boulders, large rocks, cobble, and gravel, the larger structures can provide the firm foundation and force deflection while the smaller structures can move within the bank to fill holes and provide microhabitat complexity. Performance standards will be specified in the design document.

The proposed bank stabilization measures may require pre-construction notification of the U.S. Army Corps of Engineers and, as appropriate, a permit under Section 404 of the Clean Water Act and certification from OEPA pursuant to section 401 of the Clean Water Act.

2.6 Native Vegetation

Three planting zones (i.e., connected emergent wetland, connected riparian streambank, and connected shrub) will be determined based on elevation (Figure 4). Preliminary estimates indicate that the connected emergent wetland, connected riparian streambank, and connected shrub areas are approximately 1 acre, 1.83 acres, and 3.62 acres, respectively. Currently the Slip 5A peninsula is characterized by low plant diversity and high density of non-native species. Enhancing the native vegetation along the riparian corridor will increase filtration of surface water runoff; decrease erosion, contaminant, and nutrient loading; and enhance overall stream water quality. The plant community in each zone will be established using selected grasses, forbs, shrubs, and understory and overstory trees. Tables 5 and 6 provide example herbaceous seed mixes and tree/shrub species compositions for each zone. The selection of plant species will be based on the following criteria:

- Species shall be native to northeastern Ohio;
- Species shall be geographically appropriate to the Ashtabula River and Harbor area;
- Species shall be adapted to the appropriate hydrologic regime and corresponding soil conditions; and
- Species shall be able to root and grow rapidly and, where appropriate, help stabilize the connected riparian streambank habitat.

Wetland species will be selected based on additional recommendations provided by OEPA (2007).

Plant material is available in a variety of forms, ranging from bioengineered cuttings to large saplings (FISRWG, 1998). A combination of tree sizes will be used in the installation in order to balance the higher growth rates and quicker establishment of smaller stock with the need for immediate visual impact. Insertion of “live stakes” (i.e., cuttings of certain species that can successfully form roots from branch tissues) will be utilized where appropriate to enhance tree growth along the steep primary stream bank. For example, various dogwood and willow species root rapidly from cuttings and can be planted in this manner.

Revegetation drawings and specifications will be developed prior to planting. The revegetation plans will illustrate planting zones and will include a planting schedule listing plant species, density, quantities, size, and form and specified in the design document(s). Initial review of the agricultural soil test results (Table 3) indicates that nitrogen and phosphorous amendments may be necessary.

Tree and shrub planting will most likely take place in the fall or spring, during the early root growth period. Transplant timing will be determined after consideration of seasonal rainfall/ice-melt variability to reduce the likelihood of washout, as flood events could occur before tree roots became established. To afford added support, trees may be staked and anchored with wooden stakes and biodegradable twine. The planting schedule will be coordinated with restoration activities in an effort to minimize physical disruption of the planting area. Performance standards will be specified in the design document. As described below, plant survival and condition will be periodically monitored. In the event that significant loss is identified, alternative species and/or propagation methods may be utilized.

3. MONITORING, MAINTENANCE, AND REPORTING

Compliance monitoring and general maintenance of the restoration area will be implemented following installation. A Monitoring and Maintenance Plan (M&M Plan) will be submitted to the Trustees for approval prior to construction completion. The M&M Plan will include the type of monitoring in each habitat zone (i.e., connected emergent wetland, connected riparian streambank, connected shrub), monitoring locations, monitoring data to be collected, any contingency actions to be considered, and required maintenance for the restoration area. Effectiveness and functionality of the restoration project will be determined based on stability of the hydraulic channel and establishment of native vegetation.

3.1 Compliance Monitoring

Compliance monitoring during the establishment phase will include surveillance of designated areas to address the following issues:

- *Plant Condition and Threats:* Individual specimens will be examined during the growing season to determine if there has been any damage from animals, insects, or disease. If significant threats are identified, preventative and/or curative measures will be undertaken. Care will be given not to contaminate the area with herbicides/pesticides. Any damage by trespassers will also be noted and addressed as appropriate.
- *Erosion:* During the inspections, erosion controls installed during restoration efforts will be monitored to ensure integrity. If significant erosion as specified in the M&M Plan is identified, correction measures will be undertaken.
- *Invasive Plant Control:* The presence of invasive plant populations will be visually monitored in conjunction with plant inspections. If significant impacts as specified in the M&M Plan are identified, appropriate intervention efforts will be undertaken.
- *Hydraulic Connection:* The hydraulic connection will be inspected and maintained for consistency with the design specifications, as specified in the M&M Plan, unless the Railroads demonstrate that maintenance of the long-term viability of the channel is not practicable.

Compliance monitoring will be conducted in Years 3 and 5 after restoration project installation or as specified in the M&M Plan to ensure that the ecological habitat has become established. Any need for corrective actions, such as replanting, additional erosion control, and protection against threats, will be determined by the data collected during the compliance monitoring of the establishment phase.

3.2 General Maintenance

Maintenance of the area will be performed annually for a period of five years to ensure that the ecological value of the project is maintained. General maintenance will include:

- Trash and debris removal;
- Maintenance of deer exclusion fencing;
- Maintenance of the soil cover; and
- Maintenance of the hydraulic connection, as appropriate.

3.3 Reporting

Reports will be provided to the Trustees after Years 3 and 5 after restoration project installation or as specified in the M&M documenting the results of the monitoring and maintenance activities, problems encountered, and any corrective actions taken. NSRC has no further reporting obligations beyond the Year 3 and Year 5 reports.

4. WASTE CHARACTERIZATION AND MANAGEMENT

Waste material generated at the site includes fluids generated during equipment decontamination; any disposable sampling equipment and personal protective equipment (PPE); solids removed during soil excavation in the vicinity of location 311; and any other wastes generated during the conduct of work. All wastes will be properly characterized, containerized, and labeled for disposal in accordance with applicable federal, state, and local regulations. Decontamination fluids and residual solids and fluids will be placed into Ohio Department of Transportation (DOT)-approved 55-gallon steel drums. Other solid waste will be placed into roll-off boxes or other suitable containers. Drums will be placed on plastic sheeting covering a staging area maintained on-site. Separate containers will be used for fluids and solids, and each container will be clearly labeled with the start date and contents.

A representative composite sample of each waste media type will be collected. Sample containers will be supplied by the analytical laboratory and will be certified as pre-cleaned. For fluids, numerous grab samples will be collected using a coliwasa or drum thief to ensure that a representative sample of sufficient volume is obtained from each container. If separate phases are present, each phase will be sampled separately. For solids, samples will be collected directly from each container for analysis of VOCs. For other analytes, at least three soil samples will be collected from different locations (e.g., top, middle, and bottom) and composited to ensure a representative sample is obtained from each container. Water and soil samples will be submitted to a certified laboratory for full Toxicity Characteristic Leaching Procedure (TCLP) analysis (SW-846 1311), including VOCs (SW-846 8240/8260), semi-volatile organic compounds (SVOCs) (SW-846 8270), metals (SW-846 6010), and mercury (SW-846 7470). PCB-Aroclors will also be analyzed by SW-846 3520/8082 for fluids and 3545/8082 for solids.

Once the fluids and solids have been characterized, an off-site disposal facility will be identified. A waste profile form and manifest will be completed and submitted to the disposal facility. A manifest will accompany each load of waste taken off-site. Each shipment of waste will be thoroughly tracked and recorded (e.g., number of loads, dates of shipment, media shipped, and containers shipped). Signed manifests will be obtained from the receiving facility.

No generation of waste soil or fluids is anticipated during installation or monitoring of the Slip 5A restoration components. Any soil dug as part of tree planting will be placed within the connected shrub zone of the restoration area.

5. PROJECT DELIVERABLES

The following reports will be prepared and submitted to the Trustees for approval as per the schedule below:

- A Preliminary Design Document, detailing construction specifications and establishing performance standards and schedules for the restoration activities described in Sections 2.2 to 2.6 of the Work Plan. These restoration activities include but are not limited to: creation and establishment of the hydraulic connection and emergent wetland, riparian, and upland areas; bank stabilization; installation of the clean soil cover system; and re-vegetation and planting of the wetland, riparian, and upland areas.
- A Final Design Document addressing Trustee comments on the Preliminary Design Document. If there are no Trustee comments on the Preliminary Design Document, the Preliminary Design Document will be re-titled and considered the Final Design Document.
- Progress Reports, in accordance with the schedule in the approved Final Design Document. At a minimum, monthly Progress reports are due during the implantation of the Work Plan and approved Final Design Document.
- A Construction Completion Report, including as-built drawings and topographical surveys, as necessary to document compliance with the design performance standards.
- A Monitoring and Maintenance Plan establishing compliance and long-term monitoring activities, schedule and reporting requirements, as specified in Section 3 of the Work Plan will be submitted to the Trustees for review and approval within 30 days after construction has been completed in accordance with the schedule established in the (final) Design Document.
- Periodic Reports, as established in the Monitoring and Maintenance Plan.
- A Restoration Completion Report as described in Section VII.28 of the Consent Decree, documenting that all restoration activities have been completed as required under Section VII of the Consent Decree.

DELIVERABLE	DUE DATE
Preliminary Design Document	Due 90 days after the effective date of the Consent Decree.
Final Design Document	Due 30 days after receipt of Trustee comments on the Preliminary Design Document or in accordance with an alternate schedule approved by the Trustees.
Progress Reports	In accordance with the schedule set forth in the approved Final Design Document. At a minimum, monthly Progress Reports are due during implementation of the Work Plan and approved Final Design Document.
Construction Completion Report	In accordance with the schedule set forth in the approved Final Design Document.
Maintenance and Monitoring Plan	Due 30 days after construction has been completed, in accordance with the schedule established in the approved Final Design Document.
Restoration Completion Report	Due 30 days after the final Maintenance and Monitoring Report.

6. REFERENCES

- FISRWG. 1998. Stream Corridor Restoration Principles, Processes, and Practices. Federal Interagency Stream Restoration Work Group.
- OEPA. 2007. Characteristic Ohio Plant Species for Wetland Restoration Projects v. 1.0. Ohio EPA Technical Report WET/2007-1. Ohio Environmental Protection Agency, Wetland Ecology Group, Division of Surface Water, Columbus, Ohio. Available online at www.epa.state.oh.us/dsw/wetlands/WetlandEcologySection.html.
- Ohio State University Extension. 2007. Ohio Agronomy Guide, 14th Edition. Bulletin 472-05. Available online at: <http://ohioline.osu.edu/b472/index.html>.
- Shacklette, H.T. and J.G. Boerngen. 1984. Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States. United States Geological Survey Professional Paper 1270. United States Government Printing Office, Washington D.C.
- Sherman, D.E., R.W. Kroll, and T.L. Engle. 1996. Flora of a diked and an undiked southwestern Lake Erie wetland. Ohio Journal of Science 96(1): 4-8.
- USEPA. 2003. Region 5 RCRA Ecological Screening Values. Available online at www.epa.gov/RCRIS-Region-5/ca/ESL.pdf.
- USEPA. 2007. Ecological Soil Screening Levels (Eco-SSLs). U.S. EPA, Office of Emergency and Remedial Response. Available online at: <http://www.epa.gov/ecotox/ecossl/>.

Table 1. Soil Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	297		298		299		300		301		302	303	
	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-4 feet	0-2 feet	2-4 feet
Sample Collection Date	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005
Polychlorinated Biphenyls (mg/kg)													
Aroclor 1016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1221	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1232	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1242	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1248	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1254	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Metals (mg/kg)													
Cadmium	<0.5	0.702	0.755	<0.5	<0.5	0.872	1.27	<0.5	<0.5	<0.5	0.875	0.743	0.733
Chromium	26.7	49.9	50	12.7	26.9	53.8	33.7	18.3	121	16.8	44.7	47	50.1
Copper	35.9	33	23.3	15.4	40.7	36.2	520	24.7	52.2	21.2	34.6	40.1	36.9
Lead	42.2	44.4	38	19.7	50.4	41.4	420	15.5	149	15.6	42.8	57.8	41.8
Nickel	24.6	29.7	25.1	16.7	24.8	31.7	37.3	32.2	152	30.1	30.5	29.1	39.1
Zinc	160	237	134	64.1	121	261	632	69.9	166	59.2	270	234	250
Mercury	0.384	0.562	0.278	<0.1	0.199	0.202	0.271	<0.1	<0.1	<0.1	0.213	0.214	0.251
Polycyclic Aromatic Hydrocarbons (mg/kg)													
Acenaphthene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Anthracene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)anthracene	0.228	0.422	<0.2	<0.2	<0.2	<0.2	0.462	<0.2	<0.2	<0.2	0.254	0.335	0.272
Benzo(a)pyrene	0.264	0.422	0.214	<0.2	<0.2	<0.2	0.393	<0.2	<0.2	<0.2	0.29	0.38	0.282
Benzo(b)fluoranthene	0.332	0.531	0.23	<0.2	<0.2	<0.2	0.536	<0.2	<0.2	<0.2	0.461	0.384	0.408
Benzo(ghi)perylene	<0.2	0.248	<0.2	<0.2	<0.2	<0.2	0.255	<0.2	<0.2	<0.2	0.221	0.216	0.201
Benzo(k)fluoranthene	<0.2	0.214	<0.2	<0.2	<0.2	<0.2	0.358	<0.2	<0.2	<0.2	<0.2	0.306	<0.2
Chrysene	0.293	0.412	0.211	<0.2	<0.2	<0.2	0.539	<0.2	<0.2	<0.2	0.358	0.437	0.386
Dibenz(a,h)anthracene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluoranthene	0.403	0.749	0.452	0.417	0.228	0.29	0.722	<0.2	<0.2	<0.2	0.406	0.85	0.351
Fluorene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Indeno(1,2,3-cd)pyrene	0.214	0.293	<0.2	<0.2	<0.2	<0.2	0.302	<0.2	<0.2	<0.2	0.209	0.24	<0.2
Naphthalene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenanthrene	<0.2	0.224	0.266	<0.2	<0.2	<0.2	<0.2	<0.2	0.214	<0.2	0.211	0.451	<0.2
Pyrene	0.332	0.605	0.316	0.214	<0.2	0.228	0.681	<0.2	<0.2	<0.2	0.376	0.622	0.335

Table 1. Soil Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	304		305		306	307		308		309		310	
	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet
Sample Collection Date	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005
Polychlorinated Biphenyls (mg/kg)													
Aroclor 1016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1221	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1232	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1242	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1248	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1254	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Metals (mg/kg)													
Cadmium	<0.5	<0.5	0.512	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.57	<0.5	<0.5	<0.5
Chromium	7.62	46.5	29.5	16	14.9	12.4	16.8	19.3	19.6	67.4	15.8	16.5	17.1
Copper	13.8	35.1	175	23.9	29	20.8	23.1	61.4	43.8	4680	30.5	29.5	22.9
Lead	21.8	26.5	516	14	39.2	11.2	15.6	53.1	45	1160	23.6	28.6	13.9
Nickel	7.39	28.7	28.5	27.1	11.4	23.2	30.6	31.4	31.2	47.2	28	29.3	32.1
Zinc	59.7	80.9	328	68.2	55.9	54.6	69.9	116	132	1190	75.7	91	64.5
Mercury	0.118	<0.1	1.37	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.317	<0.1	<0.1	<0.1
Polycyclic Aromatic Hydrocarbons (mg/kg)													
Acenaphthene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.212	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Anthracene	<0.2	<0.2	0.329	<0.2	<0.2	<0.2	<0.2	<0.2	0.314	<0.2	<0.2	<0.2	<0.2
Benzo(a)anthracene	0.361	<0.2	1.1	<0.2	<0.2	<0.2	<0.2	0.505	2.21	0.954	<0.2	<0.2	<0.2
Benzo(a)pyrene	0.436	<0.2	1.18	<0.2	<0.2	<0.2	<0.2	0.456	1.85	0.79	<0.2	<0.2	<0.2
Benzo(b)fluoranthene	0.473	<0.2	1.53	<0.2	<0.2	<0.2	<0.2	0.727	2.79	1.16	<0.2	<0.2	<0.2
Benzo(ghi)perylene	0.269	<0.2	0.761	<0.2	<0.2	<0.2	<0.2	0.27	1.11	0.8	<0.2	<0.2	<0.2
Benzo(k)fluoranthene	0.245	<0.2	0.605	<0.2	<0.2	<0.2	<0.2	0.268	0.871	0.551	<0.2	<0.2	<0.2
Chrysene	0.381	<0.2	1.26	<0.2	<0.2	<0.2	<0.2	0.635	2.24	0.845	<0.2	<0.2	<0.2
Dibenz(a,h)anthracene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.417	<0.2	<0.2	<0.2	<0.2
Fluoranthene	0.786	<0.2	2.41	<0.2	0.255	<0.2	<0.2	0.992	6.9	1.36	<0.2	<0.2	<0.2
Fluorene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.286	<0.2	<0.2	<0.2	<0.2
Indeno(1,2,3-cd)pyrene	0.322	<0.2	0.948	<0.2	<0.2	<0.2	<0.2	0.311	1.37	0.838	<0.2	<0.2	<0.2
Naphthalene	<0.2	<0.2	<0.2	<0.2	0.502	<0.2	<0.2	<0.2	0.344	0.342	<0.2	<0.2	<0.2
Phenanthrene	0.551	<0.2	1.71	<0.2	0.415	<0.2	<0.2	0.406	2.31	0.752	<0.2	<0.2	<0.2
Pyrene	0.59	<0.2	1.59	<0.2	<0.2	<0.2	<0.2	0.757	4.48	1.11	<0.2	<0.2	<0.2

Table 1. Soil Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	311		312		313		314		315		316	
	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet
Sample Collection Date	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005
Polychlorinated Biphenyls (mg/kg)												
Aroclor 1016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1221	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1232	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1242	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1248	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1254	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	19.7	3.07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Metals (mg/kg)												
Cadmium	2.98	5.25	1.33	<0.5	<0.5	<0.5	3.59	13.7	<0.5	<0.5	<0.5	<0.5
Chromium	32.3	46.4	63.9	14.7	18.9	19.4	72.9	347	19.3	19.9	12.9	16.9
Copper	156	504	151	23.1	23.6	24.3	205	556	18.7	42.7	17.6	23.9
Lead	893	449	806	13.5	15.5	14.7	906	423	12.5	17.1	12	14.8
Nickel	31.2	73.6	70.9	30.3	33.2	34.4	58.3	220	38.5	35.5	22	31.6
Zinc	462	853	521	69	89.1	72.7	846	923	77.7	84.9	57.1	81.8
Mercury	1.37	3.26	0.709	<0.1	<0.1	<0.1	0.521	4.05	<0.1	<0.1	<0.1	<0.1
Polycyclic Aromatic Hydrocarbons (mg/kg)												
Acenaphthene	0.276	0.483	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	0.492	0.203	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Anthracene	1.46	1.97	<4.0	<0.2	<0.2	<0.2	0.259	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)anthracene	4.79	3.87	<4.0	<0.2	0.767	<0.2	1.5	0.653	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	4.36	2.79	<4.0	<0.2	0.576	<0.2	1.7	0.562	<0.2	<0.2	<0.2	<0.2
Benzo(b)fluoranthene	5.92	3.9	<4.0	<0.2	0.8	<0.2	1.74	0.857	<0.2	<0.2	<0.2	<0.2
Benzo(ghi)perylene	2.49	1.42	<4.0	<0.2	0.37	<0.2	0.863	0.407	<0.2	<0.2	<0.2	<0.2
Benzo(k)fluoranthene	2.42	1.62	<4.0	<0.2	0.243	<0.2	0.793	<0.2	<0.2	<0.2	<0.2	<0.2
Chrysene	4.85	3.6	4.99	<0.2	0.745	<0.2	1.79	0.63	<0.2	<0.2	<0.2	<0.2
Dibenz(a,h)anthracene	1	0.568	<4.0	<0.2	<0.2	<0.2	0.299	<0.2	<0.2	<0.2	<0.2	<0.2
Fluoranthene	7.13	9.72	4.7	<0.2	1.76	<0.2	2.83	1.42	<0.2	<0.2	<0.2	<0.2
Fluorene	0.382	0.707	<4.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Indeno(1,2,3-cd)pyrene	3.02	1.73	<4.0	<0.2	0.404	<0.2	1.06	0.428	<0.2	<0.2	<0.2	<0.2
Naphthalene	0.668	0.832	<4.0	<0.2	0.291	<0.2	0.352	0.366	<0.2	<0.2	<0.2	<0.2
Phenanthrene	4.35	8.21	10.5	<0.2	0.665	<0.2	0.906	0.725	<0.2	<0.2	<0.2	<0.2
Pyrene	7.21	6.78	10.5	<0.2	1.32	<0.2	2.81	1	<0.2	<0.2	<0.2	<0.2

Table 1. Soil Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	317		318		319		320		321		322	
	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet
Sample Collection Date	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005
Polychlorinated Biphenyls (mg/kg)												
Aroclor 1016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1221	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1232	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1242	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1248	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1254	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Metals (mg/kg)												
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	13.5	13.3	14.2	14.1	19.8	18	19.5	15.4	19.9	14	57.5	15.8
Copper	152	22.1	21.8	23.1	44	23.1	43.9	13.1	37.3	13.8	40	11.5
Lead	51.1	13.5	14.6	14.5	56.5	13.1	67.3	8.93	53.5	9.74	57.8	8.54
Nickel	21.4	26.4	18.2	26.4	29.6	30.3	27.1	23.3	30	21.9	24.9	21.6
Zinc	101	63.8	72.7	61.6	126	61.3	126	68.3	119	54.9	106	62.8
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.106	<0.1
Polycyclic Aromatic Hydrocarbons (mg/kg)												
Acenaphthene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.225	<0.2
Acenaphthylene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Anthracene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.269	<0.2	<0.2	<0.2	0.47	<0.2
Benzo(a)anthracene	<0.2	<0.2	<0.2	<0.2	0.62	<0.2	1.33	<0.2	0.359	<0.2	1.29	<0.2
Benzo(a)pyrene	<0.2	<0.2	<0.2	<0.2	0.463	<0.2	1.31	<0.2	0.277	<0.2	1.3	<0.2
Benzo(b)fluoranthene	<0.2	<0.2	<0.2	<0.2	0.567	<0.2	1.58	<0.2	0.32	<0.2	1.39	<0.2
Benzo(ghi)perylene	<0.2	<0.2	<0.2	<0.2	0.32	<0.2	0.738	<0.2	<0.2	<0.2	0.765	<0.2
Benzo(k)fluoranthene	<0.2	<0.2	<0.2	<0.2	0.544	<0.2	0.785	<0.2	0.284	<0.2	0.778	<0.2
Chrysene	0.203	<0.2	<0.2	<0.2	0.6	<0.2	1.43	<0.2	0.333	<0.2	1.5	<0.2
Dibenz(a,h)anthracene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.245	<0.2	<0.2	<0.2	0.216	<0.2
Fluoranthene	0.258	<0.2	<0.2	<0.2	0.796	<0.2	3.02	<0.2	0.473	<0.2	3.32	<0.2
Fluorene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Indeno(1,2,3-cd)pyrene	<0.2	<0.2	<0.2	<0.2	0.387	<0.2	0.86	<0.2	0.209	<0.2	0.836	<0.2
Naphthalene	0.253	<0.2	<0.2	<0.2	0.299	<0.2	0.628	<0.2	0.217	<0.2	0.213	<0.2
Phenanthrene	0.245	<0.2	<0.2	<0.2	0.369	<0.2	1.43	<0.2	0.267	<0.2	1.7	<0.2
Pyrene	0.206	<0.2	<0.2	<0.2	0.73	<0.2	2.11	<0.2	0.421	<0.2	3.19	<0.2

Table 1. Soil Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	323		324		325		326		327		328	
	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet	0-2 feet	2-4 feet
Sample Collection Date	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005	June 2005
Polychlorinated Biphenyls (mg/kg)												
Aroclor 1016	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1221	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1232	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1242	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1248	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1254	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Metals (mg/kg)												
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.44	<0.5
Chromium	19.7	17.2	25.9	19.4	11.4	3.55	15.9	17.3	15.5	14.6	48.1	16.6
Copper	41.4	27.2	58.5	59.6	62.4	5.28	68.2	23.7	25.7	22.6	31.1	27.5
Lead	55.7	14.7	71.3	85.4	893	9.24	17.1	19.3	15.3	11.9	48.9	18.3
Nickel	25.6	29.8	28.9	24.6	26.7	4.65	26.6	32.2	27.7	25.7	31.8	33.8
Zinc	152	62.8	146	119	82.4	11.3	56.9	80.7	69.5	56.7	132	74
Mercury	<0.1	<0.1	0.107	0.119	0.15	<0.1	<0.1	<0.1	<0.1	<0.1	0.415	<0.1
Polycyclic Aromatic Hydrocarbons (mg/kg)												
Acenaphthene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Anthracene	<0.2	<0.2	0.622	0.251	0.299	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)anthracene	0.921	<0.2	2.73	1.58	2.38	<0.2	<0.2	<0.2	<0.2	<0.2	0.595	<0.2
Benzo(a)pyrene	0.944	<0.2	2.9	1.76	2.24	<0.2	<0.2	<0.2	<0.2	<0.2	0.58	<0.2
Benzo(b)fluoranthene	1.32	<0.2	3.1	1.79	3.35	<0.2	<0.2	<0.2	<0.2	<0.2	0.894	<0.2
Benzo(ghi)perylene	0.612	<0.2	1.5	0.88	1.43	<0.2	<0.2	<0.2	<0.2	<0.2	0.352	<0.2
Benzo(k)fluoranthene	0.495	<0.2	1.56	1.18	1.42	<0.2	<0.2	<0.2	<0.2	<0.2	0.28	<0.2
Chrysene	1.12	<0.2	3.03	1.83	2.83	<0.2	<0.2	<0.2	<0.2	<0.2	0.609	<0.2
Dibenz(a,h)anthracene	0.268	<0.2	0.59	0.332	0.589	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluoranthene	2.5	<0.2	5.14	2.57	10.1	<0.2	<0.2	<0.2	<0.2	<0.2	1.06	<0.2
Fluorene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Indeno(1,2,3-cd)pyrene	0.702	<0.2	1.82	1.05	1.72	<0.2	<0.2	<0.2	<0.2	<0.2	0.425	<0.2
Naphthalene	0.396	<0.2	0.478	0.356	1.09	<0.2	0.24	<0.2	<0.2	<0.2	0.24	<0.2
Phenanthrene	1.1	<0.2	2.29	0.683	2.65	<0.2	0.223	<0.2	<0.2	<0.2	0.529	<0.2
Pyrene	1.77	<0.2	4.27	2.24	4.53	<0.2	<0.2	<0.2	<0.2	<0.2	0.867	<0.2

Table 1. Soil Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	HB-01	HB-02	HB-03
	4-6 feet	4-6 feet	4-6 feet
Sample Collection Date	April 2007	April 2007	April 2007
Polychlorinated Biphenyls (mg/kg)			
Aroclor 1016	<1.0	<1.0	<1.0
Aroclor 1221	<1.0	<1.0	<1.0
Aroclor 1232	<1.0	<1.0	<1.0
Aroclor 1242	<1.0	<1.0	<1.0
Aroclor 1248	<1.0	<1.0	<1.0
Aroclor 1254	< 0.05	< 0.05	< 0.05
Aroclor 1260	< 0.05	< 0.05	< 0.05
Total Metals (mg/kg)			
Cadmium	< 0.3	< 0.3	< 0.3
Chromium	17.5	16.2	18
Copper	15.9	16.2	13.5
Lead	9.8	11.1	9.8
Nickel	24.1	25.4	24.8
Zinc	68	77.5	71.6
Mercury	< 0.1	0.036	0.019
Polycyclic Aromatic Hydrocarbons (mg/kg)			
Acenaphthene	< 0.01	< 0.01	< 0.01
Acenaphthylene	< 0.01	< 0.01	< 0.01
Anthracene	< 0.01	0.037	0.044
Benzo(a)anthracene	< 0.01	0.023	0.041
Benzo(a)pyrene	< 0.01	0.048	0.061
Benzo(b)fluoranthene	< 0.01	0.061	0.087
Benzo(ghi)perylene	< 0.01	< 0.01	0.052
Benzo(k)fluoranthene	< 0.01	0.034	0.038
Chrysene	< 0.01	0.06	0.071
Dibenz(a,h)anthracene	< 0.01	< 0.01	< 0.01
Fluoranthene	0.038	0.078	0.075
Fluorene	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	< 0.01	< 0.01	0.053
Naphthalene	< 0.01	0.018	0.032
Phenanthrene	< 0.01	0.044	0.059
Pyrene	0.031	0.066	0.068

**Table 2. April 2007 PCB Grid Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio**

Sample Location	PCBs (mg/kg) 0-2 feet	PCBs (mg/kg) 2-4 feet
SB-1	0.6	<0.04
SB-2	Debris on surface	<0.04
SB-3	0.3	0.42
SB-4	0.3	1.2
SB-5	2.4	5.5
SB-6	0.93	1.9
SB-7	0.21	<0.04
SB-8	2.8	<0.04
SB-9	0.92	1.4
SB-10	0.18	<0.04
SB-11	3.0	<0.04
SB-12	0.1	0.25
SB-13	0.09	<0.04
SB-14	<0.04	<0.04
SB-15	<0.04	<0.04
SB-16	<0.04	<0.04
SB-17	0.15	<0.04
SB-18	1.1	<0.04
SB-19	<0.04	<0.04
SB-20	0.4	0.18
SB-21	0.19	<0.04

Notes:

Grid was laid out parallel to or east of Location 311 to avoid nearby asbestos disposal area.

All measured PCBs are Aroclor 1254 with the exception of SB-17 which was Aroclor 1260.

Table 3. Agricultural Soil Test Results
Slip 5A Peninsula, Ashtabula, Ohio

Sample Location	Sample Depth	Soil pH	Organic Matter %	Nutrient Concentrations (lb/acre)				Cation Exchange Capacity (meq/100g)	Percent Base Saturation		
				Phosphorus P	Potassium K	Magnesium Mg	Calcium Ca		% K	% Mg	% Ca
HB-01	0-2 feet	7.4	0.6	15	95	261	5513	17.1	1.2	11.2	87.6
HB-01	2-4 feet	7.2	0.7	12	111	353	4919	18.7	1.3	13.8	80.1
HB-01	4-6 feet	7	1.2	23	80	364	2711	15	1.2	17.8	68
HB-02	0-2 feet	7.5	2.2	4	109	272	6552	17.2	1.4	11.6	87.1
HB-02	2-4 feet	7.5	1.4	3	111	236	5543	17	1.4	10.2	88.4
HB-02	4-6 feet	7.1	1.3	23	75	218	3346	15.7	1	10.2	79.7
HB-03	0-2 feet	7.3	1.8	3	123	171	4916	16.5	1.6	7.6	90.8
HB-03	2-4 feet	7.2	1.6	4	115	146	9674	17.1	1.4	6.2	87.5
HB-03	4-6 feet	6.7	1.2	12	95	154	2370	12.5	1.6	9.1	71.3

Table 4. April 2007 Sediment Chemistry Data
Slip 5A Peninsula, Ashtabula, Ohio

	SP1		SP2		SP3		SP4		SP5		SP6	
	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Polychlorinated Biphenyls (mg/kg)												
Arochlor 1016	< 0.14	RL	< 0.11	RL	< 0.13	RL	< 0.1	RL	< 0.1	RL	< 0.087	RL
Arochlor 1221	< 0.14	RL	< 0.11	RL	< 0.13	RL	< 0.1	RL	< 0.1	RL	< 0.087	RL
Arochlor 1232	< 0.14	RL	< 0.11	RL	< 0.13	RL	< 0.1	RL	< 0.1	RL	< 0.087	RL
Arochlor 1242	< 0.14	RL	< 0.11	RL	< 0.13	RL	< 0.1	RL	< 0.1	RL	< 0.087	RL
Arochlor 1248	0.19		0.27		0.38		0.3		0.39		0.36	
Arochlor 1254	< 0.14	RL	< 0.11	RL	< 0.13	RL	< 0.1	RL	< 0.1	RL	< 0.087	RL
Arochlor 1260	0.091	J	0.1	J	0.2		0.091	J	0.16		0.15	
Total Metals (mg/kg)												
Silver	< 2.1	RL	3.6		< 1.9	RL	< 1.6	RL	< 1.6	RL	< 1.3	RL
Arsenic	6.3		13.9		13.3		8.6		4.9		6.8	
Cadmium	0.29	B	1.5		0.55	B	0.54	B	0.21	B	0.2	B
Chromium	14.9		40.9		30.7		26.3		15		19.5	
Copper	30.1		87.5		59.4		45.9		24.2		25.3	
Lead	53.3		296		79.8		46.5		18		21.7	
Nickel	17.7		40.5		34.7		30		17.7		24	
Zinc	121		384		207		167		86.7		106	
Mercury	< 0.42	RL	0.38		0.17	B	0.13	B	0.058	B	0.12	B
Polycyclic Aromatic Hydrocarbons (mg/kg)												
Acenaphthene	< 0.028	RL	0.083		< 0.026	RL	< 0.021	RL	< 0.021	RL	< 0.018	RL
Acenaphthylene	< 0.028	RL	0.025		< 0.026	RL	0.04		< 0.021	RL	0.022	
Anthracene	< 0.028	RL	0.1		0.04		0.043		< 0.021	RL	0.19	
Benzo(a)anthracene	0.028		0.47		0.2		0.21		0.039		0.48	
Benzo(a)pyrene	< 0.028	RL	0.33		0.18		0.22		0.041		0.31	
Benzo(b)fluoranthene	0.041		0.61		0.28		0.35		0.077		0.39	
Benzo(ghi)perylene	< 0.028	RL	0.29		0.12		0.15		0.032		0.12	
Benzo(k)fluoranthene	< 0.028	RL	0.21		0.1		0.13		< 0.021	RL	0.16	
Chrysene	0.032		0.5		0.22		0.28		0.058		0.44	
Dibenz(a,h)anthracene	< 0.028	RL	0.08		0.038		0.043		< 0.021	RL	0.05	
Fluoranthene	0.057		0.92		0.3		0.45		0.097		1	
Fluorene	< 0.028	RL	0.074		< 0.026	RL	< 0.021	RL	< 0.021	RL	0.073	
Indeno(1,2,3-cd)pyrene	< 0.028	RL	0.26		0.11		0.14		0.025		0.13	
Naphthalene	0.028		0.21		0.19		0.073		< 0.021	RL	0.027	
Phenanthrene	< 0.028	RL	0.47		0.19		0.11		0.033		0.6	
Pyrene	0.044		0.77		0.3		0.42		0.082		0.67	
Acid Volatile Sulfide in Sediment (umoles/g)												
	54.4		19.2		26.5		7.1		8.5		6.9	
Simultaneously Extractable Metals (umoles/g)												
	3.2		7.4		3.8		1.9		2.4		2.1	
SEM - AVS (umoles/g)												
	-51.2		-11.8		-22.7		-5.2		-6.1		-4.8	
SEM/AVS Ratio												
	0.1		0.4		0.1		0.3		0.3		0.3	
Total Residue (% Solids)												
	23.6		30.6		25.9		31.6		32.1		37.7	

Notes:

RL = reporting limit; not detected

Results and reporting limits have been adjusted for dry weight.

B Estimated Result. Result is less than RL.

J Estimated result. Result is less than RL.

Simultaneously extractable metal result is sum of silver, cadmium, copper, nickel, lead, and zinc

Table 5. Example Tree and Shrub Species Composition of Planting Zones.
Slip 5A Peninsula, Ashtabula, Ohio

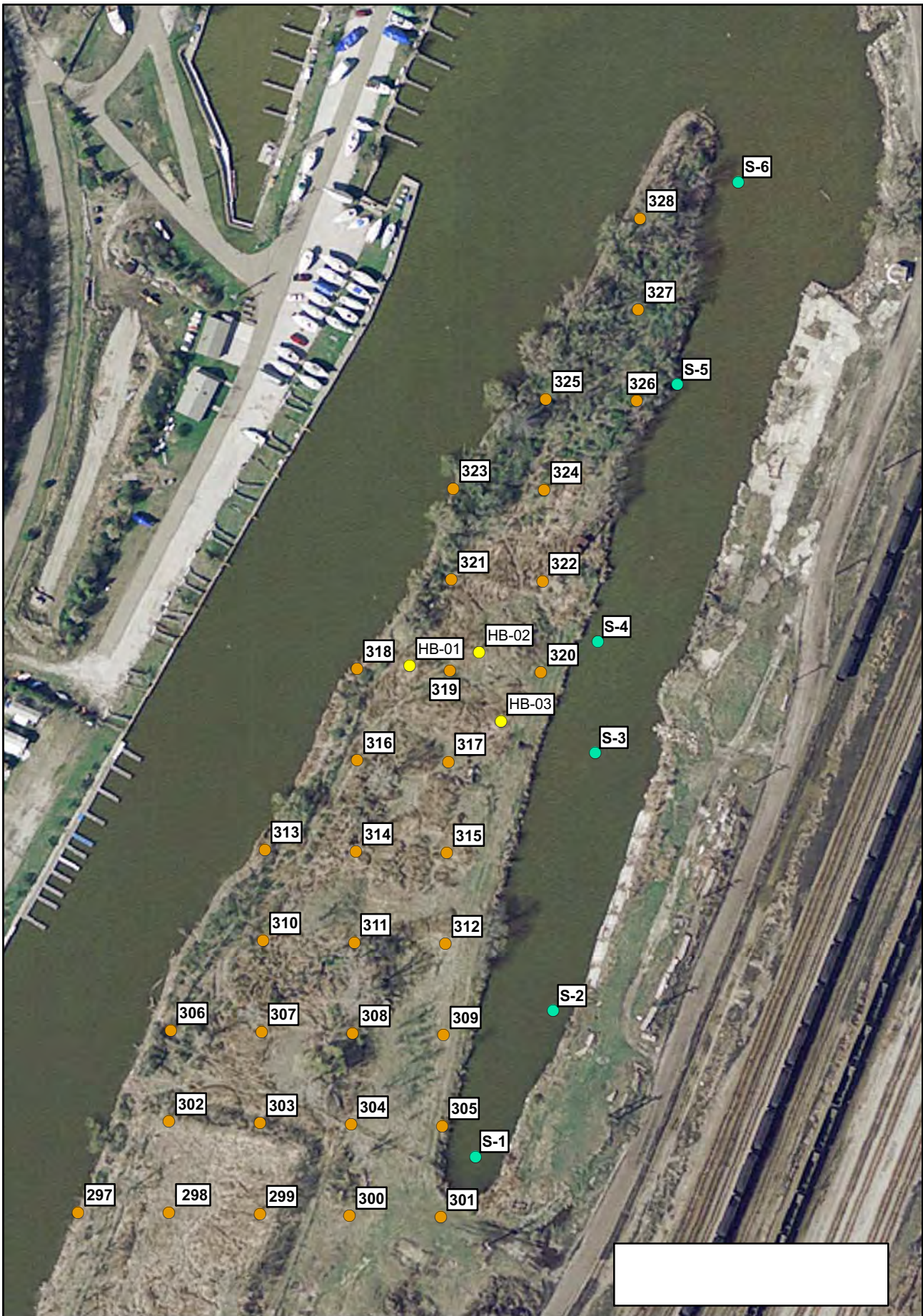
Planting Zone	Species	Common Name	Type
Connected Emergent Wetland	<i>Salix nigra</i>	Black Willow	Trees
	<i>Salix interior</i>	Sandbar Willow	Trees
	<i>Salix lucida</i>	Shining Willow	Trees
	<i>Cornus stolonifera</i>	Redosier Dogwood	Trees
	<i>Cornus amomum</i>	Silky Dogwood	Trees
	<i>Populus deltoides</i>	Eastern Cottonwood	Trees
	<i>Physocarpus opulifolius</i>	Common Ninebark	Shrubs
	<i>Cephalanthus occidentalis</i>	Buttonbush Shrubs	
	<i>Ilex verticillata</i>	Winterberry Shrubs	
	<i>Alnus serrulata</i>	Common Alder	Shrubs
	<i>Alnus incana</i>	Hazel Alder	Shrubs
<i>Rosa palustris</i>	Swamp Rose	Shrubs	
Connected Shrub	<i>Salix nigra</i>	Black Willow	Trees
	<i>Platanus occidentalis</i>	Sycamore Trees	
	<i>Acer negundo</i>	Boxelder Trees	
	<i>Celtis occidentalis</i>	Hackberry Trees	
	<i>Juglans nigra</i>	Black Walnut	Trees
	<i>Morus rubra</i>	Red Mulberry	Trees
	<i>Gleditsia triacanthos</i>	Honeylocust Trees	
	<i>Cercis canadensis</i>	Eastern Redbud	Trees
	<i>Crataegus phaenopyrum</i>	Washington Hawthorn	Trees
	<i>Crataegus crusgalli</i>	Cockspur Hawthorn	Trees
	<i>Populus deltoides</i>	Eastern Cottonwood	Trees
	<i>Ulmus americana</i>	American Elm	Trees
	<i>Quercus bicolor</i>	Swamp White Oak	Trees
	<i>Quercus palustris</i>	Pin Oak	Trees
	<i>Acer saccharinum</i>	Silver Maple	Trees
	<i>Carya cordiformis</i>	Bitternut Hickory	Trees
	<i>Nyssa sylvatica</i>	Black Tupelo	Trees
	<i>Ulmus rubra</i>	Slippery Elm	Trees
	<i>Cornus racemosa</i>	Gray Dogwood	Shrubs
	<i>Staphylea trifolia</i>	Bladdernut Shrubs	
<i>Sambucus canadensis</i>	American Elder	Shrubs	
<i>Ilex verticillata</i>	Winterberry Shrubs		
<i>Lindera benzoin</i>	Northern Spicebush	Shrubs	
Connected Riparian Streambank	<i>Salix nigra</i>	Black Willow	Trees
	<i>Platanus occidentalis</i>	Sycamore Trees	
	<i>Acer negundo</i>	Boxelder Trees	
	<i>Populus deltoides</i>	Eastern Cottonwood	Trees
	<i>Ilex verticillata</i>	Winterberry Shrubs	
	<i>Cephalanthus occidentalis</i>	Buttonbush Shrubs	
	<i>Cornus racemosa</i>	Gray dogwood	Shrubs
	<i>Physocarpus opulifolius</i>	Common Ninebark	Shrubs
	<i>Rosa palustris</i>	Swamp Rose	Shrubs
	<i>Sambucus canadensis</i>	American Elder	Shrubs
<i>Staphylea trifolia</i>	Bladdernut Shrubs		

Note:
Final species composition will be determined in the Final Design Document.

Table 6. Example Seed Mixes: Herbaceous Species
Slip 5A Peninsula, Ashtabula, Ohio

Planting Zone	Species	Common Name	Mix Composition	Type
Connected Emergent Wetland	<i>Carex comosa</i>	bristly sedge	0.39%	Sedge/Rush/Grass
	<i>Carex lurida</i>	bottlebrush sedge	1.51%	Sedge/Rush/Grass
	<i>Carex vulpinoidea</i>	brown fox sedge	2.27%	Sedge/Rush/Grass
	<i>Juncus effusus</i>	common rush	0.09%	Sedge/Rush/Grass
	<i>Leersia oryzoides</i>	rice cut grass	0.18%	Sedge/Rush/Grass
	<i>Scirpus acutus</i>	hard stemmed bulrush	0.39%	Sedge/Rush/Grass
	<i>Scirpus atrovirens</i>	dark green bulrush	0.09%	Sedge/Rush/Grass
	<i>Scirpus validus creber</i>	great bulrush	0.39%	Sedge/Rush/Grass
	<i>Acorus calamus</i>	sweet flag	0.39%	Forbs
	<i>Angelica atropurpurea</i>	great angelica	0.18%	Forbs
	<i>Asclepias incarnata</i>	swamp milkweed	0.18%	Forbs
	<i>Eupatorium maculatum</i>	spotted joe pie weed	0.09%	Forbs
	<i>Hibiscus palustris</i>	swamp rose mallow	0.39%	Forbs
	<i>Iris virginica shrevei</i>	blue flag iris	0.39%	Forbs
	<i>Peltandra virginica</i>	arrow arum	3.03%	Forbs
	<i>Pontederia cordata</i>	pickerel weed	0.39%	Forbs
	<i>Sagittaria latifolia</i>	common arrowhead	0.27%	Forbs
	<i>Sparganium eurycarpum</i>	common bur reed	1.51%	Forbs
	<i>Lolium multiflorum</i>	annual rye	9.84%	Sedge/Rush/Grass
	<i>Secale cereale</i>	winter rye	9.84%	Sedge/Rush/Grass
<i>Avena sativa</i>	seed oats	68.14%	Sedge/Rush/Grass	
	TOTAL LBS. SEED MIX			22.45
Connected Shrub	<i>Carex cephaloidea</i>	rough clustered sedge	1.14%	Sedge/Rush/Grass
	<i>Hystrix patula</i>	bottlebrush grass	3.03%	Sedge/Rush/Grass
	<i>Elymus villosus</i>	silky wild rye	1.14%	Sedge/Rush/Grass
	<i>Bromus pubescens</i>	woodland brome	1.52%	Sedge/Rush/Grass
	<i>Diarrhena americana</i>	beak grass	2.28%	Sedge/Rush/Grass
	<i>Geranium maculatum</i>	wild geranium	0.19%	Forbs
	<i>Podophyllum peltatum</i>	may-apple	0.05%	Forbs
	<i>Polygonatum canaliculatum</i>	smooth solomon's seal	0.38%	Forbs
	<i>Smilacina racemosa</i>	feathery false solomon's sea	0.38%	Forbs
	<i>Cryptotaenia canadensis</i>	honestwort	1.52%	Forbs
	<i>Campanula americana</i>	tall bellflower	0.19%	Forbs
	<i>Rudbeckia hirta</i>	black-eyed susan	0.19%	Forbs
	<i>Lolium multiflorum</i>	annual rye	9.86%	Sedge/Rush/Grass
	<i>Secale cereale</i>	winter rye	9.86%	Sedge/Rush/Grass
	<i>Avena sativa</i>	seed oats	68.28%	Sedge/Rush/Grass
		TOTAL LBS. SEED MIX		

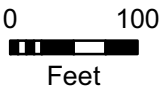
Note:
Final species composition will be determined in the Final Design Document.



Legend

VAP Soil
Sample
Locations

Data Sources:
CT Consultants
Plate of Survey
Control, Slip 5A.
06-01-05;
HZW Consultants,
Slip5AGrid.dwg

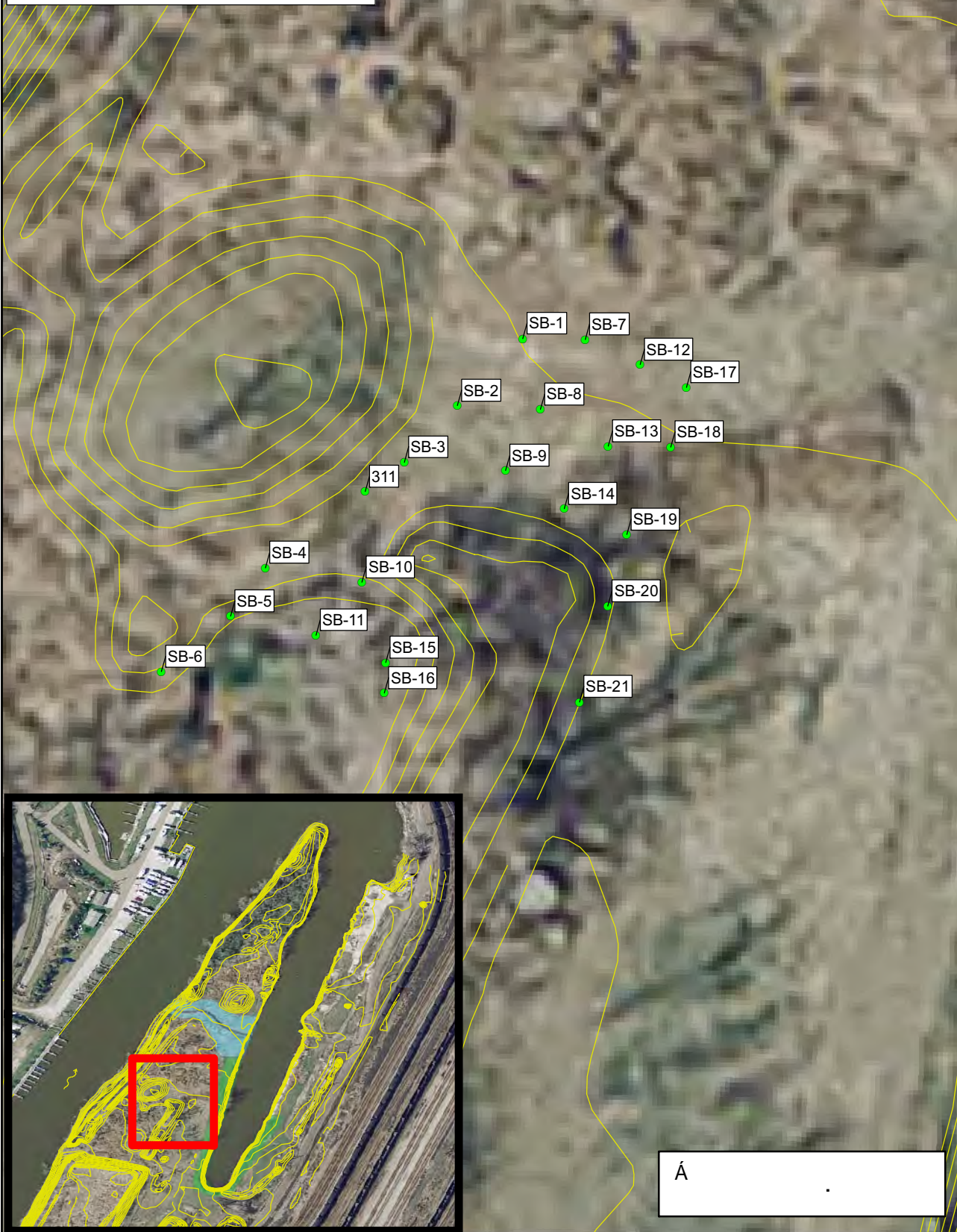


**Previous Soil and Sediment Sample Locations
Slip 5A
Ashtabula, Ohio**

Figure
1

Legend

- PCB Soil Samples April 2007
- 1-ft Contours



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Sample Location Grid at Location 311
Slip 5A
Ashtabula, Ohio

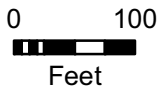
Figure
2

Legend

- Soil Sample Location
- PCB Contaminated Soil Excavation Limit
- Soil Cover
- Capped Asbestos Area
- Miscellaneous Scrap and Debris
- Hydraulic Connector
- Connected Emergent Wetland (1.0 acres)
- Connected Riparian Streambank (1.83 acres)
- Connected Shrub (3.62 acres)
- GLLA Restoration Area (0.7 acres)



Sample Data Source:
 CT Consultants
 Plate of Survey Control, Slip 5A.
 06-01-05








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**Proposed Primary Restoration of Slip 5A Peninsula
 Ashtabula, Ohio**

Figure 3



	Hydraulic Connector
	Connected Emergent Wetland (1.0 acres)
	Connected Riparian Streambank (1.83 acres)
	Connected Shrub (3.62 acres)
	GLLA Restoration Area (0.7 acres)

0 200 Feet

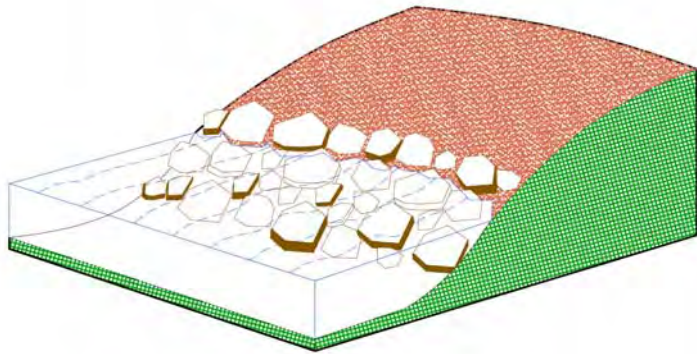
N

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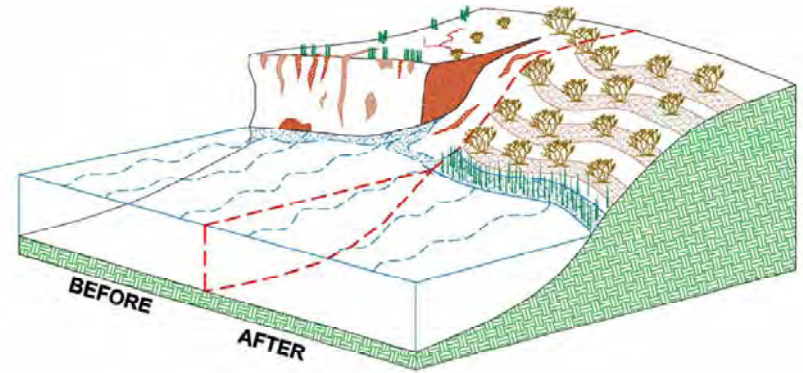
13801 West Center Street, Burton, Ohio 44021

Proposed Compensatory Restoration of Slip 5A Peninsula

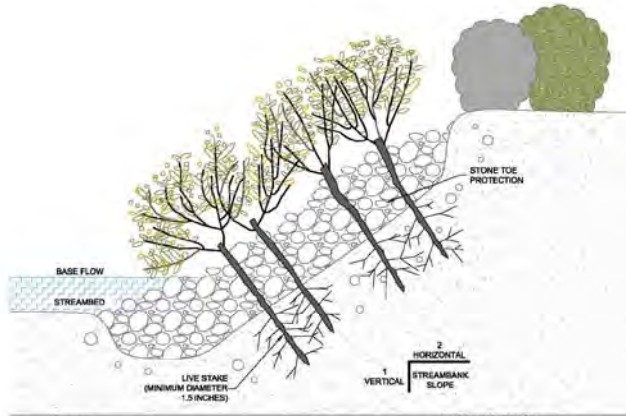
Figure 4



STONE TOE PROTECTION



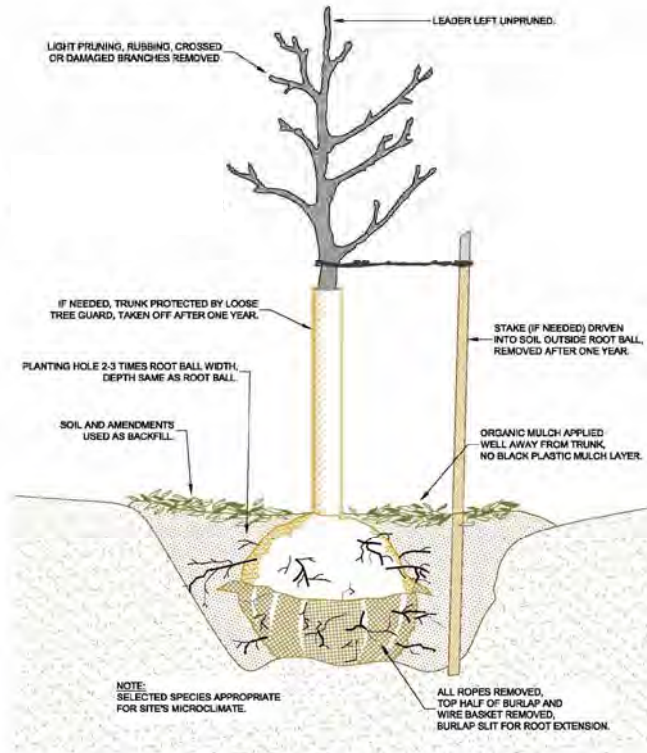
BANK REGRADING



NOTES: DRAWING NOT TO SCALE.

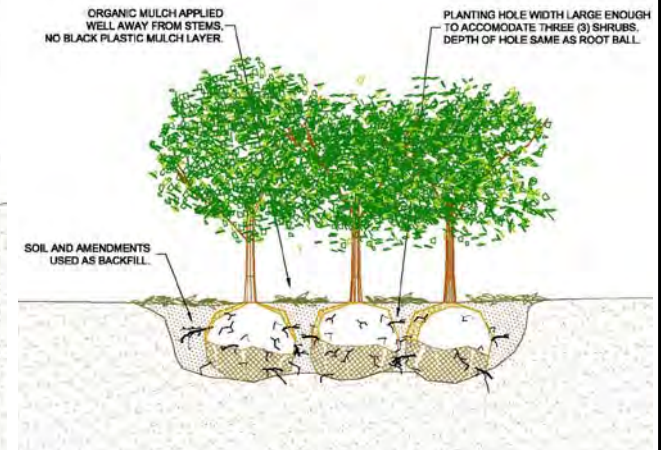
1. PLACE STONE TOE PROTECTION MECHANICALLY OR BY HAND ACROSS FULL HEIGHT OF BANK TO ENSURE UNIFORM DISTRIBUTION OF ROCK PARTICLE SIZES ACROSS DISTURBED AREA.
2. STAKES PLACED RANDOMLY BETWEEN ROCKS (ONE STAKE EVERY 2 TO 3 FEET) DURING OR AFTER ROCK INSTALLATION.
3. THE BOTTOM END OF CUTTINGS TO EXTEND INTO SOIL AND PROTRUDE SLIGHTLY FROM ROCKS. BULBS PLACED UPWARD WHEN PLANTED AND CUTTINGS TO REMAIN UNPRUNED.

JOINT PLANTING DETAIL



NOTE: SELECTED SPECIES APPROPRIATE FOR SITE'S MICROCLIMATE.

TREE PLANTING DETAIL



SHRUB PLANTING DETAIL

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Conceptual Design Schematics for Slip 5A Restoration Components

Figure 5