

**Hudson River Superfund Site  
Facility Siting  
Data Summary Report  
Site-Specific Field Investigations of  
Final Candidate Sites**

**April 2004**

**Prepared for:**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2**

**and**

**UNITED STATES ARMY CORPS OF ENGINEERS  
KANSAS CITY DISTRICT**

**Prepared by:**



**Under contract with:**



**United States Army  
Corps of Engineers**

## Executive Summary

Site-specific field studies were conducted on the seven Final Candidate Sites (FCSs) as a component of the facility siting process for the Hudson River PCBs Superfund Site Project. The process of facility siting and the criteria used have been described in the *Hudson River PCBs Superfund Site Facility Siting Concept Document* (Ecology & Environment [E & E] 2002).

The field studies followed the procedures presented in the August 2003 *Hudson River PCBs Superfund Site Facility Siting Work Plans* (Master Work Plan). The scope of these studies was presented in the September 2003 *Addenda to the Hudson River PCBs Superfund Site Facility Siting Work Plans: Site-Specific Field Investigations of the Final Candidate Sites* (E & E 2003).

This Data Summary Report provides the findings of the field studies of each of the FCSs. The field studies involved several types of investigative activities within the identified boundaries of each of the FCSs. Intrusive field studies were not completed on the Bruno property (two parcels) and the State of New York parcel due to access restrictions. The following field studies were completed, as appropriate, at each FCS:

- Phase I Environmental Site Assessments (ESAs)
- Phase II ESAs and Baseline Sampling
- Geotechnical Assessments
- Utilities Assessments
- Survey of Terrestrial Archaeological and Architectural Resources (STAAR) - Phase I Investigations
- Wetland Assessments
- Floodplain Assessments
- Coastal Management Area Assessments
- Habitat and Threatened and Endangered Species Assessments.

Specifically, the field studies were conducted to:

- Develop more detailed knowledge of site features and conditions in order to characterize each FCS sufficiently to enable the United States Environmental Protection Agency (EPA) to recommend a group of sites to the Remedial Design Team;

- Identify and define the Group 3 site-specific siting criteria (as defined in the Concept Document); and
- Evaluate and screen the FCSs in order to select the Suitable Sites.

Table ES-1 identifies which of these field studies resulted in a recommendation for additional study as well as where site characteristics were identified during the field studies that may potentially pose limitations on facility design. Sites where additional study is recommended are identified with an “AS” under the appropriate investigation area. Sites where conditions or features were identified that may affect the design of the sediment processing/transfer facility are identified with a “DI” (design issue) under the appropriate investigation area. In summary, additional studies and/or design issues have been identified.

**Table ES-1 Summary of Site-Specific Field Investigations of the Final Candidate Sites**

	Energy Park/ Longe/ NYSCC	Old Moreau Dredge Spoils Area/NYSCC	Georgia Pacific/NYSCC	Bruno/Brickyard Associates/Alonzo	NYSCC/Allco/ Leyerle	State of NY/ First Rensselaer/ Marine Management	OG Real Estate
Phase I ESA							
Phase II ESA and Baseline Sampling		AS		AS		AS	
Geotechnical Assessment							
Utilities Assessment							
STAAR - Phase I Investigations	AS	AS	DI	AS	AS		
Wetland Assessment	DI	DI	DI	DI	DI		
Floodplain Assessment	DI	DI	DI	DI	DI	DI	DI
Coastal Management Area Assessment						AS	AS
Habitat and T & E Species Assessments				AS	AS	AS	AS

Key:

- NYSCC = New York State Canal Corporation.
- ESA = Environmental Site Assessment.
- STAAR = Survey of Terrestrial Archaeological and Architectural Resources.
- T & E = Threatened and Endangered.
- AS = Additional Study.
- DI = Design Issue.

ES-3

## List of Abbreviations and Acronyms

APE	Area of Potential Effect
ASC	Analytical Services Center
bgs	below ground surface
AST	aboveground storage tank
cfs	cubic feet per second
CLP	Contract Laboratory Program
CMP	Coastal Management Program
CRDL	Contract-required reporting limit
CWA	Clean Water Act
dbh	diameter at breast height
DPT	direct push technology
EDD	electronic data deliverable
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act/Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FCS	Final Candidate Site
FID	flame ionization detector
HRI	Historic Resource Inventory
ID	inner diameter
LWRP	Local Waterfront Revitalization Program
MCL	maximum contaminant level
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NWI	National Wetland Inventory
NYSCC	New York State Canal Corporation
NYSDEC	New York State Department of Environmental Conservation

## List of Abbreviations and Acronyms (cont.)

NYSHPO	New York State Historic Preservation Office
OD	outer diameter
PAH	polycyclic aromatic hydrocarbon
PCS	Preliminary Candidate Site
PID	photo-ionization detector
ppb	parts per billion
ppm	parts per million
PVC	polyvinyl chloride
QA/QC	Quality assurance/quality control
QAPP	Quality Assurance Project Plan
RD	Remedial Design
ROW	right-of-way
RPD	relative percent difference
SCS	Soil Conservation Service
SDG	sample delivery group
SPT	standard penetration test
SVOC	semivolatile organic compound
TAGM	Technical and Administrative Guidance Memorandum
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TIC	tentatively identified compound
TPH	total petroleum hydrocarbons
USACE	U.S. Army Corps of Engineers
VOC	volatile organic compound
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

## 1. Introduction

Site-specific field studies were conducted on the seven Final Candidate Sites (FCSs) as a component of the facility siting process for the Hudson River PCBs Superfund Site Project. The purpose of facility siting is to identify locations within the facility siting study area that meet the requirements for sediment processing/transfer facilities. The process of facility siting and the criteria used have been described in the *Hudson River PCBs Superfund Site Facility Siting Concept Document* (Ecology and Environment, Inc. 2002). The U.S. Environmental Protection Agency (EPA) identified the FCSs when issuing the Facility Siting Update (September 2003) for public review and hosting public forums on September 23 and 24, 2003 in Fort Edward and Troy, New York, respectively.

Specifically, the field studies were conducted to:

- Develop more detailed knowledge of site features and conditions in order to characterize each FCS sufficiently that the EPA could recommend a group of sites to the Remedial Design Team;
- Identify and define the Group 3 site-specific siting criteria (as defined in the Concept Document); and
- Evaluate and screen the FCSs in order to select the Suitable Sites.

The field studies followed the procedures presented in the August 2003 *Hudson River PCBs Superfund Site Facility Siting Work Plans* (Master Work Plan). The scope of these studies was presented in the September 2003 *Addenda to the Hudson River PCBs Superfund Site Facility Siting Work Plans: Site-Specific Field Investigations of the Final Candidate Sites* (Ecology and Environment, Inc.).

This Data Summary Report summarizes the findings of the field studies of each of the FCSs. The FCSs (see Figure 1-1) are:

- Energy Park/Longe/New York State Canal Corporation;
- Old Moreau Dredge Spoils Area/New York State Canal Corporation;
- Georgia Pacific/ New York State Canal Corporation;
- Bruno/Brickyard Associates/Alonzo;
- New York State Canal Corporation/Allco/Leyerle;
- State of New York/First Rensselaer/Marine Management; and
- OG Real Estate.

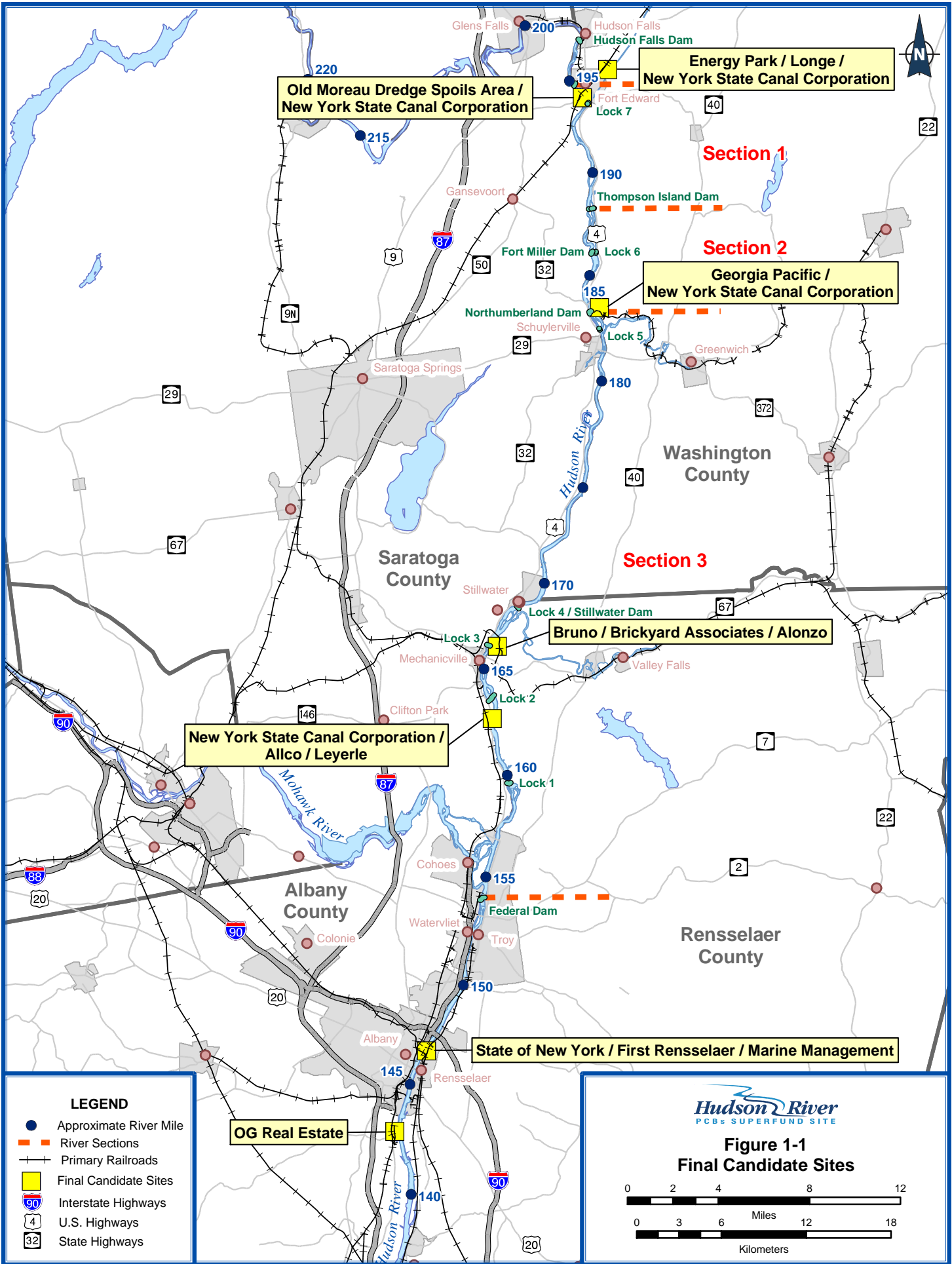
The field studies involved several kinds of investigative activities within the identified boundaries of each of the FCSs. Intrusive field studies were not completed on the Bruno property (two parcels) and the State of New York property (five parcels) due to access restrictions. The following is a summary of each task completed:

- **Phase I Environmental Site Assessments (ESAs).** These investigations included records searches, site reconnaissance visits, and interviews with those knowledgeable about each FCS. The information was used to develop summaries of potential environmental issues and to provide the basis for the work scopes of the Phase II ESAs.
- **Phase II ESAs and Baseline Sampling.** These were designed to provide an overall assessment of possible on-site constituents that may be present as a result of historic and/or current land uses. Based upon the potential environmental issues identified during the Phase I ESAs, multimedia samples (e.g., surface and subsurface soil, groundwater, and surface water) were collected and submitted for analytical laboratory testing.
- **Geotechnical Assessments.** Geotechnical assessments were performed to identify subsurface conditions that would significantly limit development of the FCSs. The assessments included characteristics of soil, depth to bedrock (if encountered within boring depths of 25 feet), and depth to groundwater via drilled soil borings. Subsurface soil samples were collected for geotechnical laboratory testing (e.g., moisture content, grain size analysis).
- **Utilities Assessments.** These assessments were performed to identify utilities at each FCS. The assessments included collecting information from the Public Service Commission, Dig Safely New York, and identified utility providers. Field observations also involved looking for on-site and nearby off-site utilities.
- **Survey of Terrestrial Archaeological and Architectural Resources - Phase I Investigations.** The purpose of this investigation was to continue the identification and evaluation of archaeological, architectural, and/or historical resources that are located on or in the vicinity of the FCSs. The investigation included data searches, review of aerial photographs, file searches, interviews, site reconnaissance, development of an initial assessment, and a Phase I investigation for each FCS.
- **Wetland Assessments.** Wetland assessments were performed to determine whether wetland resources occur within the boundaries of the FCSs. The assessments included data gathering, base map preparation, and field delineations.
- **Floodplain Assessments.** The purpose of the floodplain assessments was to determine the presence, extent, and locations of floodplains at each of the FCSs. These assessments involved a review of the Federal Emergency Management Agency's (FEMA) 100-year and 500-year floodplains, available flood insurance studies, and New York State Canal Corporation, National Weather Service, and U.S.



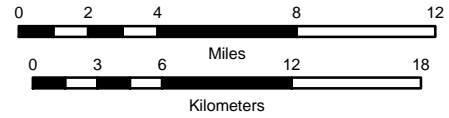
Geological Survey river stage data. Once the sites are selected for Phase 1 and Phase 2 dredging, EPA will perform the final floodplain assessment using the 500-year floodplain, which is considered the critical action floodplain and is used per CERCLA actions (EPA 1985).

- **Coastal Management Area Assessments.** These assessments were performed to maintain procedural compliance with the Coastal Management Program Policies of New York State. These assessments involved a review of the New York State Coastal Management Area boundaries relative to the boundaries of the FCSs.
- **Habitat and Threatened and Endangered Species Assessments.** These assessments were performed to identify and describe the existing habitats and endangered species in the vicinity of each FCS. The assessments involved data gathering and field surveys of existing habitats. Habitat identification and mapping followed the convention provided by the Ecological Communities of New York State (Edinger et al. 2002). This information will be integrated, as applicable, into the threatened and endangered species assessments, which have been conducted to maintain compliance with the Endangered Species Act of 1972. The potential impacts of facility siting on specific habitat types and threatened and endangered species will be assessed and this information will be integrated into the planning and evaluation process of facility siting.



**Hudson River**  
 PCBs SUPERFUND SITE

**Figure 1-1**  
**Final Candidate Sites**



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