
HUDSON RIVER PCBs
SUPERFUND SITE

**Technical Memorandum: Identification of
Preliminary Candidate Sites**

**Facility Siting Update Report 1
June 2003**

Prepared for:



United States Army
Corps of Engineers



United States Environmental
Protection Agency

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Executive Summary

The identification of Preliminary Candidate Sites (PCSs) represents the second milestone in the U.S. Environmental Protection Agency's (EPA) facility siting process. This Facility Siting Update Report Technical Memorandum (technical memorandum) provides the results of detailed evaluation and screening used to identify the PCSs. The PCSs are those sites that are being recommended for further consideration in the facility siting process.

In February 2002, the United States Environmental Protection Agency (EPA) issued a Record of Decision (ROD) for the Hudson River PCBs Superfund Site (Site). The ROD calls for targeted environmental dredging of approximately 2.65 million cubic yards of PCB-contaminated sediment from the Upper Hudson River (approximately 40 river miles) in two phases over a six-year period and for monitoring natural attenuation of the PCB contamination that remains in the river after dredging.

The purpose of the facility siting process is to identify locations within the study area that meet the requirements of a sediment processing/transfer facility. In order to implement the cleanup of PCB-contaminated sediments, the EPA must identify locations within and near the Upper Hudson River for one or more facilities that can be used to transfer sediment from the edge of the river to a processing area, dewater the sediment, treat the water from the dewatering process, and transfer sediment (stabilized as needed) to a rail or barge for transport to a disposal facility. If a beneficial use of some of the dredged material is identified, then an appropriate transportation method (i.e., rail, truck, or barge) will be determined (USEPA 2002a). These specialized facilities are an important part of the cleanup and will be selected and constructed to safely handle the dredged material.

After evaluation, 24 PCSs were identified. The PCSs have been evaluated against the Group 1 facility siting criteria and selected property codes (see Figure ES-1 and Table ES-1). These sites are located throughout the facility siting study area, as follows:

River Section 1	4
River Section 2	1
River Section 3	7
Below River Section 3	12

The PCSs consist of 54 parcels, which are owned by 30 different owners. The shared characteristics of these sites are that most are located within 0.25 mile of the Hudson River shoreline, within 0.25 mile of a road, and within 500 feet of rail and are of sufficient area to allow for the construction and operation of a facility (approximately 10 acres or more). Some of the sites selected as PCSs were offered to EPA for consideration by interested landowners. Descriptions of each of the PCSs are provided in Section 4.

EPA's consideration of the PCSs will follow the process and criteria described in the *Hudson River PCBs Superfund Site Facility Siting Concept Document* (USEPA 2002). In addition, EPA will be conducting public forums and other public outreach to discuss and exchange information regarding this technical memorandum and upcoming steps in the facility siting process. These steps will include conducting a more detailed engineering review of each PCS, combined with ongoing public review in order to assess the suitability and impacts associated with each location.

Overview of Process

Database Development. A geographic information system (GIS) database specific to the Site was created through the acquisition and subsequent development of various datasets, including aerial photography. GIS is a routine computer application and data management tool that will assist in facilitating site evaluations and ensuring engineering accuracy while coordinating large amounts of information. GIS allows for careful and reliable analysis of data, while conducting evaluations in a neutral manner. The Group 1 facility siting criteria (river, rail, and road access; available space; proximity to dredge areas and utilities) and tax parcel/property classification codes provided by Washington, Saratoga, Rensselaer, and Albany counties were incorporated into the GIS database and used to locate, evaluate, and filter potential locations for the PCSs identification process.

Analysis of Parcel Data and Group 1 Criteria within the Study Area. Before the process of identifying PCSs could begin, a series of analyses were conducted to filter the counties' parcel data to fit the study area and then to filter for specific property codes and to characterize the study area relative to the Group 1 criteria to determine how to use the information in the evaluation and screening process.

The analysis of the parcel data indicated that there were 2,410 parcels within the study area that met the selected New York State Office of Real Property Services (NYSORPS) classification codes of vacant land, commercial, industrial, public services (i.e., power generation and transmission, waste disposal, pipelines, sew-

age treatment and water pollution control, etc.), or Hudson River Regulating District Land.

The characterization of the study area relative to the Group 1 criteria led to the understanding that initial parcel evaluations could be started using the combination of the following characteristics: within 0.25 mile of shoreline, within 0.25 mile of road, and within 500 feet of rail.

First Pass Analysis of Parcels. Parcels were initially identified by matching the selected property codes and the combination of the Group 1 criteria. These 475 parcels were then filtered to locate specific parcels and to determine the extent of relative agreement with the shoreline, rail, and road criteria. Numerous parcels were found to be small in area (i.e., generally < 1.0 acre) and/or appeared to be in locales that did not have similar property codes adjacent to the identified parcels. The parcels matching these characteristics were eliminated from further consideration, resulting in 151 parcels remaining after the “first pass” analysis was completed.

Second Pass and Additional Analyses: Identification of PCSs. The “second pass” evaluation was the first step in moving beyond looking at parcels and the start of focusing on identifying sites. Single parcel sites were identified first, due to the relative ease of acquisition, and then multiple parcel sites were also reviewed for suitability.

The result of the evaluation was the initial identification of 29 PCSs. Additional analyses were conducted upon determining that there was a relatively small number of initially identified PCSs within sections of the river where most of the material to be dredged is located (River Sections 1 and 2). Two additional PCSs were identified.

A number of other properties and areas were provided to EPA by interested landowners and were previously identified by EPA. These locations were also evaluated. Three locations were added to the list of PCSs, bringing the total to 34.

A more detailed database review and a windshield survey identified a combination of potentially problematic design characteristics among 10 of the sites. As a result, the 10 sites were removed from further consideration. Twenty-four PCSs are currently being recommended for further consideration.

Next Steps in the Facility Siting Process. Public forums will be held at two locations in June 2003 within the study area to provide the public the opportunity to become familiar with the PCS identification process and ask questions of EPA. Fact sheets will also be prepared to summarize the process. Following public review, the PCSs will be evaluated and screened against Group 1 and Group 2 criteria to identify Final Candidate Sites (FCSs). As indicated in the ROD, potential effects on properties near a sediment processing/transfer facility will be mini-

mized through careful siting and design. The Group 2 criteria include quality of life concerns and avoiding and minimizing impacts to local communities and other resources.

The public will have the opportunity to review the selected FCSs. Field investigations of each of the FCSs will follow the public review process. Group 3 criteria will be developed and the FCSs will be evaluated in order to develop a list of Recommended Site(s). The Recommended Site(s) list will be provided in the Draft Facility Siting Report and released to the public for review and comment. Upon finalizing the Facility Siting Report, a site, or sites, will be selected for the Phase 1 dredging activities. At some later date, a site, or sites, may be selected for Phase 2 dredging if additional sites are determined to be necessary. Site(s) selected for Phase 1 and Phase 2 dredging will be selected from the list of the Recommended Site(s).

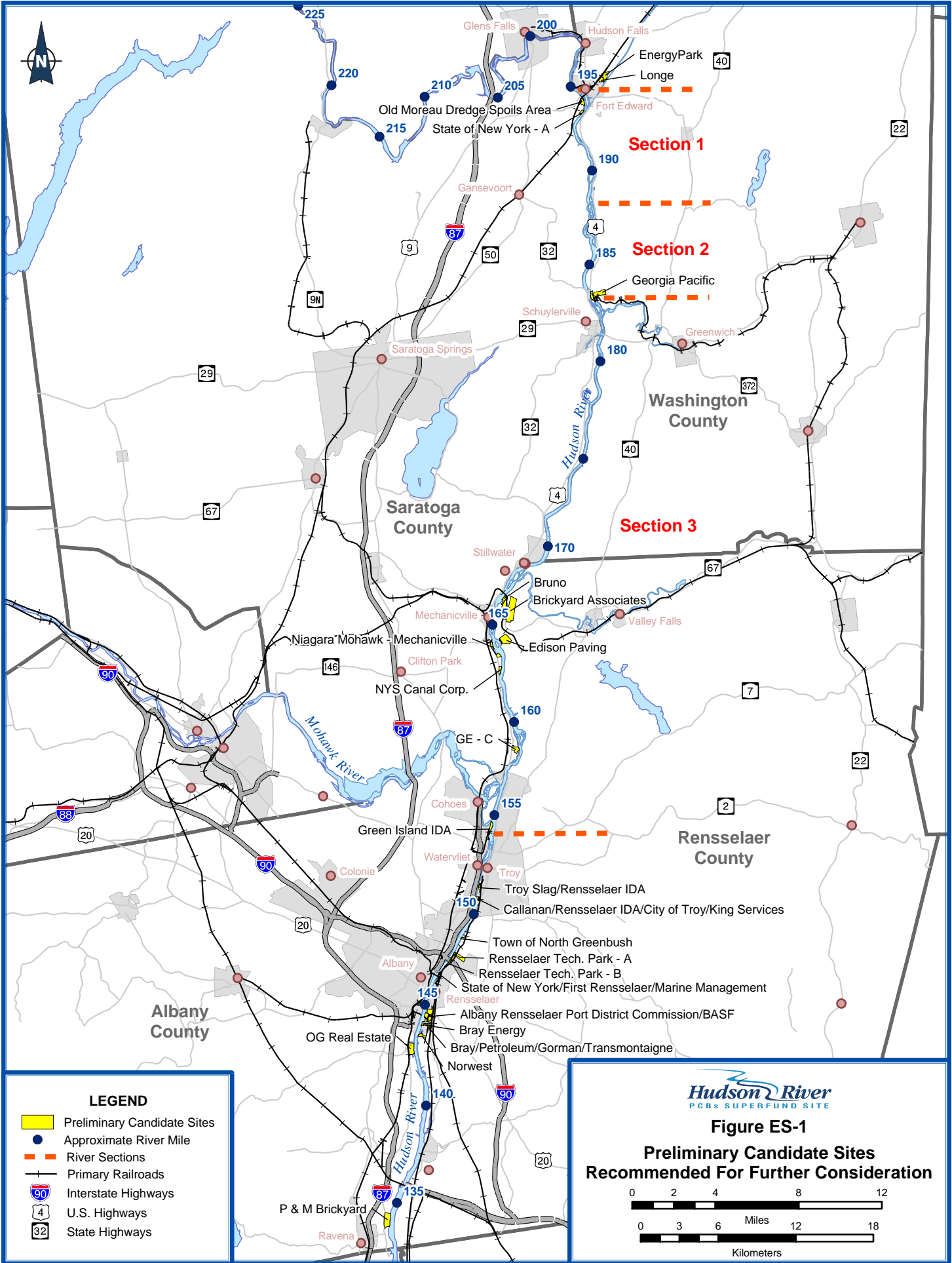


Table ES-1

PCs River Sections	Location	Approx. River Mile
River Section 1		
Energy Park (Champlain Canal)	Fort Edward, Washington County	195.1
Longe (Champlain Canal)	Fort Edward, Washington County	195.0
Old Moreau Dredge Spoils Area	Moreau, Saratoga County	193.8
State of New York (A)	Moreau, Saratoga County	193.2
River Section 2		
Georgia Pacific	Greenwich, Washington County	183.2
River Section 3		
Bruno	Schaghticoke, Rensselaer County	166.5
Brickyard Associates	Schaghticoke, Rensselaer County	166.0
Edison Paving	Schaghticoke, Rensselaer County	164.0
NIMO – Mechanicville	Halfmoon, Saratoga County	164.0
NYS Canal Corporation	Halfmoon, Saratoga County	162.4
General Electric (C)	Waterford, Saratoga County	159.0
Green Island IDA	Green Island, Albany County	154.4
Below River Section 3		
Troy Slag/Rensselaer IDA	Troy, Rensselaer County	151.4
Callanan/Rensselaer IDA/City of Troy/King Services	Troy, Rensselaer County	150.8
Town of North Greenbush	N. Greenbush, Rensselaer County	148.7
Rensselaer Tech Park (A)	Rensselaer, Rensselaer County	147.7
Rensselaer Tech Park (B)	Rensselaer, Rensselaer County	147.3
State of New York/First Rensselaer Marine Management	Rensselaer, Rensselaer County	146.7
Albany Rensselaer Port District/BASF	Rensselaer, Rensselaer County	144.3
Bray Energy	Rensselaer, Rensselaer County	144.0
Bray Energy/Petrol/Gorman/Transmontaigne	Rensselaer and E. Greenbush, Rensselaer County	144.0
Norwest	E. Greenbush, Rensselaer County	143.5
OG Real Estate	Bethlehem, Albany County	142.8
P&M Brickyard	Coeymans, Albany County	134.1

**Hudson River PCBs
Superfund Site**

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Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 2**

and

**UNITED STATES ARMY CORPS OF ENGINEERS
Kansas City District**

Table of Contents

Section	Page
1	Introduction 1-1
1.1	Background Information Supporting Facility Siting 1-1
1.2	Identification of Preliminary Candidate Sites..... 1-2
1.3	Purpose of the Technical Memorandum..... 1-5
2	Development of the Facility Siting Database 2-1
2.1	Digital Orthoimagery..... 2-2
2.2	Development of the GIS Component 2-2
2.3	Data Sources 2-3
2.4	Acquisition and Development of Siting Criteria Information 2-4
2.5	Facility Siting Database QA/QC..... 2-5
3	Preliminary Candidate Site Identification Process 3-1
3.1	Facility Siting Process Using Group 1 Siting Criteria and Parcel Data..... 3-1
3.1.1	Incorporating and Refining Parcel Data 3-2
3.1.2	Shoreline (River Access) 3-4
3.1.3	Rail 3-5
3.1.4	Roads 3-6
3.1.5	Available Area 3-6
3.1.6	Proximity to Dredge Areas 3-9
3.1.7	Utilities 3-9
3.2	Application of Group 1 Facility Siting Criteria 3-10
3.2.1	“First Pass” Analysis 3-10
3.2.2	“Second Pass” Analysis 3-12
3.3	Additional Analyses..... 3-13
3.3.1	Expansion of the Rail Criterion 3-13
3.3.2	Incorporation of Additional Property Classification Codes..... 3-14
3.4	Other Sites 3-14
3.4.1	Interested Landowner Properties 3-15
3.4.2	Previously Identified Areas..... 3-15
3.4.3	CSX Transportation Identified Sites..... 3-16
3.5	Evaluation of PCSs and Identification of Those Recommended for Further Consideration 3-16

Table of Contents (cont.)

Section		Page
4	Description of the Preliminary Candidate Sites	4-1
	4.1 Overview of the PCSs.....	4-1
	4.2 Site-specific Descriptions	4-2
5	Next Steps in the Facility Siting Process	5-1
6	References.....	6-1

Appendix

A	Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes	A-1
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List of Tables



Table		Page
3-1	Relative (Approximate) Percentages of NYSORPS Property Classifications Within Each of the Counties in the Hudson River PCBs Facility Siting Study Area	3-4
3-2	Summary of the Number of Parcels Located Within 0.50 Mile of the Hudson River Shoreline and Within Various Rail and Road Buffer Zones	3-11
3-3	Summary of the Numbers of Parcels Located Within 0.25 Mile of the Hudson River Shoreline and Within Various Rail and Road Buffer Zones	3-11
3-4	Initially Identified Preliminary Candidate Sites (PCSs) and Those Recommended for Further Consideration	3-17



List of Figures



Figure		Page
1-1	Hudson River PCBs Superfund Site Major River Sections, Upper Hudson River	1-3
3-1	Land Uses (per NYSORPS Property Classifications) within the Hudson River Facility Siting Study Area	3-3
3-2	Facility Siting Study Area	3-7
4-1	Preliminary Candidate Sites Recommended for Further Consideration	4-53
5-1	Next Steps in Facility Siting.....	5-2

List of Abbreviations and Acronyms

BTS	Bureau of Transportation Statistics
CADD	computer-assisted drafting and design
cy	cubic yards
DOQQs	orthophoto quarter-quads
ESRI	Environmental Systems Research Institute
FCS	final candidate site
FEMA	Federal Emergency Management Agency
FGDC	Federal Geographic Data Committee
GIS	geographic information system
NAD	North American Datum
NPS	National Park Service
NRCS	Natural Resources and Conservation Service
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYS DOS	New York State Department of State
NYSORPS	New York State Office of Real Property Services
PCBs	polychlorinated biphenyls
PCSs	preliminary candidate sites
QA/QC	quality assurance/quality control
RA	remedial action
RD	remedial design
ROD	Record of Decision
ROW	right-of-way
RR	railroad

List of Abbreviations and Acronyms (cont.)

RS	Responsiveness Summary
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UTM	Universal Transverse Mercator

1

Introduction

This technical memorandum has been prepared as the first Facility Siting Update Report, with the overall purpose of providing an update on the status of the facility siting process. This document announces those sites (i.e., Preliminary Candidate Sites [PCSs]) that are being recommended for further consideration as potential sites for a sediment processing/transfer facility. Identifying the PCSs is the first step in the process of finding suitable locations for one or more facilities.

EPA will be providing additional facility siting update reports as the facility siting process continues. The progress reports will provide the public with the opportunity to review the steps that EPA has taken in facility siting since the issuance of previous report(s). Specific discussion points will include evaluating and screening potential sites, site features and conditions, and the relative suitability of sites to meet the requirements of constructing and operating a sediment processing/transfer facility(ies).

1.1 Background Information Supporting Facility Siting

The Record of Decision (ROD) for the Hudson River PCBs Superfund Site (Site) was issued by the United States Environmental Protection Agency (EPA) on February 1, 2002. The primary objective of the remedy selected for the Hudson River PCBs Superfund Site is to protect public health and the environment from unacceptable risks due to PCB-contaminated sediments in the Upper Hudson River. As stated in the ROD, the remedial action (RA) includes dredging approximately 2.65 million cubic yards (cy) of PCB-contaminated sediments from three specific reaches of the Upper Hudson River, (i.e., River Sections 1, 2, and 3). River Sections 1, 2, and 3 extend from the former Fort Edward Dam to the Federal Dam at Troy (see Figure 1-1) (USEPA 2002).

The remedy for the Site is, in part, based upon the siting of one or more sediment processing/transfer facilities. The design and construction of one or more sediment processing/transfer facilities are therefore important components of the remedial design (RD) and RA. Each such facility will provide an area in which to transfer sediment from the edge of the river to a processing area, dewater the sediment, treat the water from the dewatering process, and transfer sediment (stabilized as needed by adding material to make it a proper consistency for transport) to rail or barge for transport to a disposal facility. If a beneficial use for some of the dredged material is identified, an appropriate transportation method (e.g., rail, truck, or barge) will be determined (USEPA 2002a).

As set forth in the ROD and the *Facility Siting Concept Document*, EPA's selection of the facilities will include public review throughout the facility siting process. EPA

recognizes that certain PCSs are in the vicinity of potentially sensitive areas, including residences. EPA plans to continue working with the potentially affected communities to assess and minimize impacts during the construction and operation of the facility(ies). Public review will be used throughout the RD phase, particularly through quality of life standards (for noise, light, and other impacts) and the community involvement program to establish the project performance standards and engineering controls (e.g., screening and noise control) that will minimize project impacts. As indicated in the ROD, these facilities are to be temporary and will be removed after completion of the active remedial operations. The parcels will then be restored in a manner that takes into account the anticipated future land use of the parcels, such as redevelopment for commercial or recreational use.

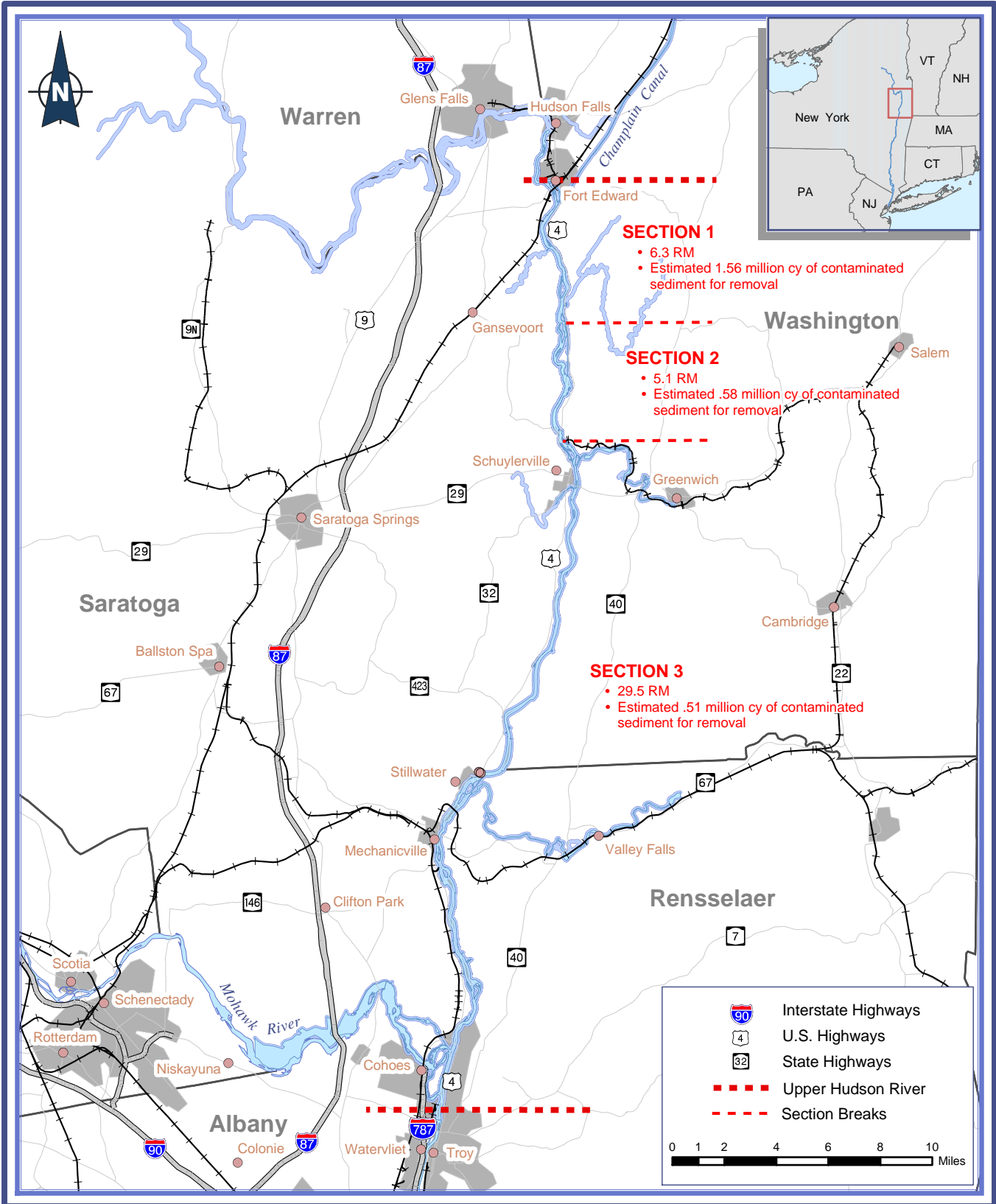
The first step in the facility siting process involved the preparation and issuance of the *Hudson River PCBs Superfund Site Facility Siting Concept Document* (Concept Document) (USEPA 2002). This document, issued in early December 2002, provided an overview of the facility siting process. The Concept Document presented the following:

- The purpose and objectives of facility siting;
- The established boundaries of the facility siting study area (study area);
- An overview of siting coordination and milestones;
- The facility siting criteria that will be used to evaluate potential locations for the siting of a sediment processing/transfer facility; and
- A summary of how the siting criteria are going to be applied over the course of the facility siting process.

Following issuance of the Concept Document, public availability sessions were held at the Hudson River Field Office on December 11, 2002, and at Sage College of Albany on December 12, 2002. These meetings provided the public with an opportunity to become familiar with the process EPA is using to site a sediment processing/transfer facility and to engage the EPA team with questions and comments.

1.2 Identification of Preliminary Candidate Sites

After the establishment of the facility siting process and determination of the siting criteria, the second milestone of the process was identifying the PCSs. This step has involved examining the entire study area, as presented in the Concept Document, in order to locate potentially suitable sites for a sediment processing/transfer facility. In brief, this process has involved assessing parcels relative to their suitability with the Group 1 criteria (i.e., river access, rail access, road access, available space, proximity to dredge areas and utilities) and compatibility with existing land uses (as determined by property classification codes). This assessment process was critical to the development and identification of the PCSs.



SOURCE: ECOLOGY & ENVIRONMENT, INC. 2002; ESRI 2002, USEPA 2002a;
Note: **cy** = Cubic Yards
RM = River Miles

**Figure 1-1: Hudson River PCBs Superfund Site
Major River Sections, Upper Hudson River**

The identification of PCSs involved evaluating the entire study area and other sites against the aforementioned Group 1 criteria and county parcel mapping. The sources of sites included:

- Facility siting process sites - sites that were identified by EPA as initial PCSs as a result of implementing the process presented in the Concept Document;
- Interested landowners - sites that were submitted to EPA by landowners that own property within the vicinity of the Hudson River;
- Previously identified areas - areas that were preliminarily identified by TAMS Consultants (now TAMS/Earth Tech, Inc.) for EPA in 1999 as having some potential suitability for constructing and operating a sediment processing/transfer facility; and
- CSX Transportation (CSX) - a list of sites provided by CSX (a rail transport company) to EPA.

1.3 Purpose of the Technical Memorandum

The purpose of this technical memorandum is to provide a description of the process that culminated in the identification of the PCSs and to provide an opportunity to review this process. This document presents the process as follows:

- Section 2 describes the sources of data, background information, and the procedures used to develop the facility siting database.
- Section 3 provides a chronology of the PCS identification process.
- Section 4 describes the PCSs that are being recommended for further consideration. Location maps, aerial photographs, and a summary of relevant site characteristics are presented for each site.
- Section 5 presents an overview of the next steps in the facility siting process.

2

Development of the Facility Siting Database

Data acquisition and literature review were conducted as part of the facility siting process in order to develop a facility siting database. The data considered during the facility siting process represent a broad array of information, including but not limited to information developed or summarized in previously issued EPA documents (e.g., the ROD, the Responsiveness Summary [RS]); environmental resource information; existing mapping; geologic features; a variety of infrastructure and settlement-related elements (e.g., municipal boundaries, utilities, land use); and other information that characterizes the Upper Hudson River.

The database for the facility siting process was developed to provide the foundation for an analysis of the geographic, engineering, and environmental relationships of the Upper Hudson River area relevant to this project. For instance, understanding issues such as river access, rail and road networks, proximities to locks and dams, locations and proximities to dredge areas, property classification codes, and locations of population centers are important to the facility siting process and have been incorporated into the geographical information system (GIS) database. This multi-layered database provides an interactive composite of the study area, presenting those features that may be determined to be either constraints or assets to the siting of a sediment processing/transfer facility.

The database for the facility siting task of the Site project area includes a comprehensive GIS component. GIS is a routine computer application and data management tool that will assist in facilitating site evaluations and ensuring engineering accuracy while coordinating large amounts of information. GIS is being used for a number of purposes for the project beyond facility siting, including tracking sediment sampling locations, which in turn will be used to determine dredging cut lines and, ultimately, to position the dredges as they work. The use of various datasets resulted from the efficient collection of a tremendous amount of information, which allowed for a careful and reliable analysis. Using a database in the facility siting process also ensures that all potential sites along the Hudson River are initially evaluated in a neutral manner applying the facility siting criteria presented in the Concept Document.

2.1 Digital Orthoimagery

New York State digital orthoimagery of the project area has served as a basis by which to examine the various vector datasets that were obtained for the master GIS database. Through the New York State Digital Orthoimagery Program, aerial photographs were taken of Rensselaer County in spring 2000 and of Albany, Saratoga, and Washington Counties in spring 2001. Photographs were available in either 1-foot pixel resolution for urbanized areas or 2-foot pixel resolution for rural areas. The 1-foot pixel resolution imagery was supplied in natural color, while the 2-foot pixel imagery was available in either panchromatic (black and white) or color infrared. All images were available in New York State Plane Coordinates - Eastern Zone, units in feet, North American Datum (NAD) 83. The New York State GIS Clearinghouse has a published horizontal accuracy of ± 4 feet for their 1-foot pixel resolution orthoimagery and ± 8 feet for their 2-foot pixel resolution orthoimagery.

Initially, 606 images were downloaded from the New York State GIS Clearinghouse Web site. During the initial download, it was noted that some images were not available for direct download due to the sensitive content of those images. A formal request was made to the New York State Office for Technology in November 2002 to acquire these images. This request yielded an additional 69 images. Thus, a total of 675 images, covering the entire study area, were acquired.

Two raster catalogs were compiled in order to organize the imagery and facilitate their use in the GIS software. One raster catalog consists of the images that were downloaded directly from the New York State GIS Clearinghouse Web site and a second raster catalog consists of the sensitive-content imagery. The sensitive-content imagery was put in the second raster catalog to ensure adherence to guidelines set forth by the New York State Office for Public Security regarding the distribution of images with sensitive content.

2.2 Development of the GIS Component

GIS technology was used to organize, map, and analyze the tremendous amount of geospatial data that was collected and developed for the study area. The GIS component was developed with the Environmental Systems Research Institute (ESRI) ArcGIS suite of software. The types of spatial data that were incorporated included:

- **Feature datasets:** a collection of points, lines, label annotation, and areas managed as feature tables (e.g., shoreline features, dredge areas, sample location points);
- **Raster datasets:** individual or multi-tiled images or grids (e.g., high-resolution aerial imagery, United States Geological Survey (USGS) Digital Elevation Models);

2. Development of the Facility Siting Database

- **Tables:** representing nongraphic objects (e.g., tax mapping and parcel ownership information);
- **Relationships:** a procedure for selecting records from one table/feature and locating records in a corresponding table/feature (e.g., relating tax parcel information to property classification codes); and
- **Spatial relationships:** relationships within feature datasets that are defined by topology and network design (e.g., calculating distances to rail, river, and road from specific parcels).

Each dataset was formatted according to the following procedure:

- The projection of each new dataset was determined and then converted to the recommended Hudson River Project projection, which is defined as Universal Transverse Mercator (UTM), Zone 18, units in meters, and Horizontal Datum NAD 83.
- ArcCatalog was used to create Federal Geographic Data Committee (FGDC) metadata (i.e., information about data such as the last time a dataset was updated, the organization responsible for collecting and updating data, contact information, etc.). Each field was filled out with the appropriate information. If the dataset was accompanied by metadata before the import, it was transferred over to the FGDC-compliant format.
- Each dataset was screened through a rigid quality assurance/quality control (QA/QC) phase in which the data was assessed against property classification codes, parcel information, and the Group 1 siting criteria. Results were documented in the metadata file.

2.3 Data Sources

Various sources were reviewed for the development of this database, including agency information, existing mapping, and reports prepared for previous Hudson River studies.

Specifically, portions of the original GIS database from the Feasibility Study (USEPA 2000), as well as other data sources, have been incorporated into this system to provide spatial data. Existing GIS data collected to date include datasets from the following sources: the New York State Department of Environmental Conservation (NYSDEC), EPA Region 2, the New York State Department of State (NYS DOS), the New York State Public Services Commission, the USGS, the National Park Service (NPS), the New York State Department of Health (NYSDOH), the United States Department of Agriculture (USDA), the Natural Resources and Conservation Service (NRCS), the Federal Emergency Management Agency (FEMA), the United States Fish and Wildlife Service (USFWS), ESRI, the Bureau of Transportation Statistics (BTS), local counties

2. Development of the Facility Siting Database

(Albany, Rensselaer, Saratoga, and Washington), Deskmap Systems, TAMS/Earth Tech, Inc. (formerly TAMS Consultants, Inc.), and the New York State GIS Clearinghouse.

The Hudson River Facility Siting GIS database now contains more than 100 unique datasets. As discussed in the Concept Document, the site selection process will involve the use of Group 1, Group 2, and Group 3 siting criteria. The selection of PCSs primarily involved the use of the Group 1 Criteria, with the parcel/property classification code data as a core layer of information. The sources used to represent the Group 1 criteria are described below:

- **Roads:** The original layer was based on the ESRI road layer database. Roads were corrected to the *2001 Annual Lot* of New York State-wide Digital Orthoimagery (New York State aerials).
- **Rail:** The original layer was based on the Deskmap Systems railroad database. Rail lines were corrected to the *2001 Annual Lot* of New York State-wide Digital Orthoimagery (New York State aerials).
- **Shoreline:** The original layer was based on the EPA layer from the Feasibility Study (USEPA 2000). Portions of the shoreline were corrected to the *2001 Annual Lot* of New York State-wide Digital Orthoimagery (New York State aerials).
- **Utilities:** The current layer is based on the NYS Public Service Commission data layers for major electric and gas transmission lines.
- **Dredging Area Locations:** The original mapping was based on the EPA layer of remediation areas and dredge areas to implement from the Feasibility Study, which was later updated to include the Dredge Management Cell information from the “Preliminary Draft Engineering Performance Standards Part 3: Dredging Productivity,” prepared for USACE-Kansas City, by Malcolm Pirnie, Inc. and TAMS Consultants, Inc. for the Productivity Performance Standards (unpublished).

2.4 Acquisition and Development of Siting Criteria Information

Numerous datasets were acquired and used in the PCS identification process. The incorporation of these datasets required a number of steps to allow for the consistency, integrity, and accuracy of the overall GIS database. Specifically, analyses were performed on the datasets that are related to each of the Group 1 facility siting criteria in an effort to prepare for the use of such data in the screening and evaluation processes involved in the PCS identification process.

Appendix A provides a detailed presentation of the acquisition, development, and integration of the data specific to:

2. Development of the Facility Siting Database

- County tax parcel/property classification information;
- Shoreline delineation and mapping;
- Rail resources;
- Road infrastructure; and
- Dredge area delineation and mapping.

2.5 Facility Siting Database QA/QC

An important factor in managing the GIS database is to account for data handling and tracking procedures. Routine uses of the GIS component include importing datasets into GIS, exporting and exchanging information, appending new data to existing datasets, and applying analytical procedures to datasets. These actions have been, and will be, logged through ESRI software.

ESRI's ArcCatalog is used not only to create FGDC-compliant metadata but also to enable the user to track process steps such as projections, merges, clips, or intersections. All formal FGDC-compliant metadata files that were developed via the import routine were stored in the same directory as each of the GIS datasets, along with pertinent 'readme.txt' files or Web links. When new GIS data were imported to the project GIS repository, standardized naming conventions were used to ensure that the most current dataset was being used for the analyses and map development tasks.

River access, rail, roads, and dredge areas were subjected to a detailed QA/QC analysis that involved the following:

1. Each dataset was compared to the NYS aerials. Areas that needed to be adjusted, added, or deleted were documented or labeled.
2. Standard error deviations in datasets were identified and noted in the QA/QC documentation.
3. Datasets were then passed through two tiers of critical evaluation—a GIS review and a technical review. All issues were reconciled and documented.
4. Complete FGDC-compliant metadata were created for the final datasets.
5. All QA/QC adjustments were documented to provide information on attribute-specific or location-specific changes that were made to each data layer and any observations regarding issues that could affect the accuracy of the data.

2. Development of the Facility Siting Database

The remaining Group 1 criterion (utilities) will be addressed on a site-by-site basis, as acquiring several detailed utility layers is not feasible for the entire study area.

A qualitative field verification of existing resources and mapping of the PCSs was conducted in March 2003 via a “windshield survey” of all sites that were readily observable from public roads.

3

Preliminary Candidate Site Identification Process

Identifying the PCSs involved examining specific characteristics within the study area to locate potentially suitable sites for one or more sediment processing/transfer facilities. Once areas were initially identified, they were examined more closely using the facility siting criteria in a filtering/screening process that enabled PCSs to be identified and other areas to be removed from further consideration.

3.1 Facility Siting Process Using Group 1 Siting Criteria and Parcel Data

After incorporating information into the database, the GIS database was used to quickly and efficiently review areas against the Group 1 criteria to ensure that 1) an adequate number of candidate sites was identified and 2) that a methodology was in place to efficiently reduce the number of potential sites to those demonstrating greater degrees of suitability. GIS also was used to make sure that potentially promising sites were not missed.

Using the GIS database described in Section 2, the process of identifying PCSs involved the following steps:

- Incorporating and refining parcel data (see Section 3.1.1)
 - Filtering the parcel data to fit the study area;
 - Filtering the parcel data within the study area to select for specific property codes;
- Characterizing the study area and analyzing and applying Group 1 criteria (access to the shoreline, rail, and road and the available area; proximity to dredge areas and utilities)
- Applying Group 1 criteria (see Section 3.2)
 - Conducting a “first pass” analysis and assessment of parcels;
 - Conducting a “second pass” analysis, resulting in the initial identification of 29 PCSs;

3. Preliminary Candidate Site Identification Process

- Completing additional analyses to validate the identification process, which resulted in the addition of two sites to the initial list of PCSs (see Section 3.3)
 - expansion of the rail zone;
 - incorporation of additional property classification codes;
- Analysis of other sites (see Section 3.4)
- Identification of PCSs recommended for further investigation (see Section 4.0).

3.1.1 Incorporating and Refining Parcel Data

In addition to the Group 1 criteria, tax parcel data provided by Saratoga, Washington, Rensselaer, and Albany counties established the foundation for determining the basic characteristics of parcels and became the core layer for analyzing the relative suitability of parcels compared to the Group 1 criteria listed above.

Specifically, the tax parcel mapping and information provided the following details for all parcels within the study area: location, approximate property boundaries, total area, property classification code (land use), and ownership information. The parcel data, therefore, enabled locations to be identified based on factors that otherwise would not have been available. For example, selecting a site solely on the locations of river, rail, and road would not provide insight as to available area, existing land uses of sites, the number of parcels that could be affected, or how many landowners might be affected.

Study Area Characterization

The tax parcel and associated property code information were critical in determining the potential “universe” of parcels within the study area. The information provided by the counties was initially modified to create an area that included municipalities adjacent to the Hudson River throughout the study area. This area included 153,178 parcels.

Analysis of Parcel Data for Use in the PCS Identification Process

A total of 29,794 parcels were found within the study area (0.5 mile inland from the river shoreline), which comprises 36,674 acres. The GIS system was used to identify parcels within the study area.

The relative percentage (in area) of the four counties within the study area is as follows: Saratoga County, 37%; Washington County, 28%; Rensselaer County, 23%; and Albany County, 12%. All parcels were identified by property class and classified by acreage. Next, the relative (approximate) percentages of total available acreage for each of the existing land uses (per property code) was calculated for the entire study area. Figure 3-1 presents a summary of the land use informa-

3. Preliminary Candidate Site Identification Process

tion within the study area and indicates what was available for consideration during the PCS identification process.

As indicated in Figure 3-1, agricultural (22.4%) and residential (24.4%) property codes account for approximately 47% of the total area within the study area, while industrial (4.6%) and commercial uses (9.5%) account for approximately 14%. Vacant lands comprised a relatively high 21.2% of the total. Table 3-1 presents similar information for each of the counties.

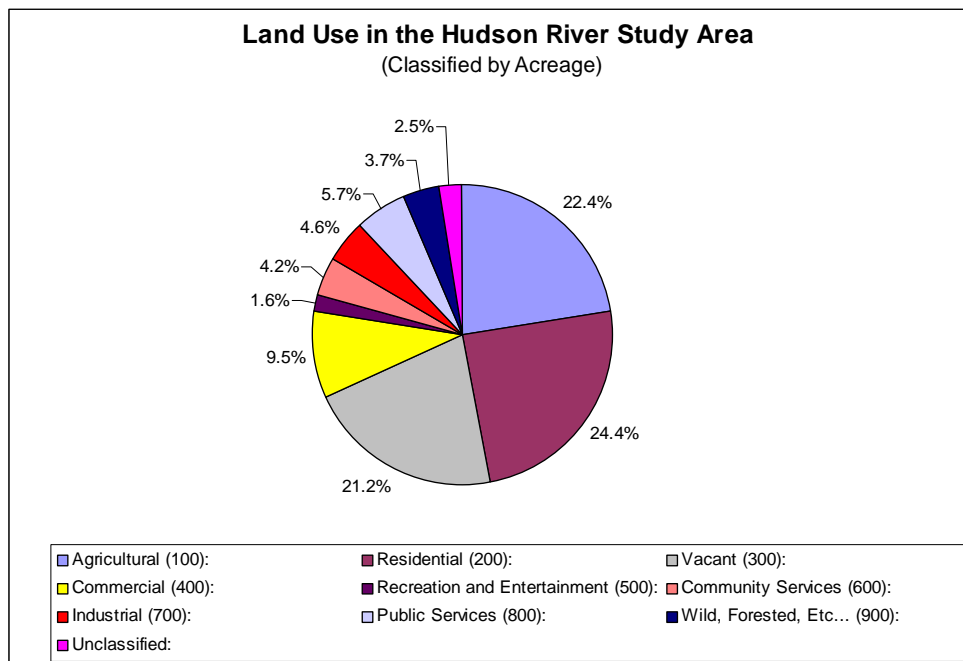


Figure 3-1 Land Uses (per NYSORPS Property Classifications) within the Hudson River Facility Siting Study Area

As indicated in the Concept Document and the ROD, the EPA intends to locate the facility(ies) in industrial or commercial areas. Accordingly, using GIS, specific property classification codes were selected within the study area. As indicated in Section 2, property classification codes from the categories of industrial; commercial; vacant; public services (i.e., electric/gas power generation and transmission; waste disposal; solid wastes; pipelines); and wild, forested, and conservation lands (i.e., one selected: Hudson River and Black River regulating district land) were selected as those that may include suitable land uses for the siting of one or more sediment processing/transfer facilities. The aerial photography was reviewed to confirm that the parcels of the selected property codes exhibited land uses that were industrial, commercial, vacant, etc. (See Table A-2). In this manner, the parcel information was used to assist in determining the potential availability of commercial and industrial locations. The parcel data also provided a framework from which to initially assess the proximities of specific parcels to the shoreline, rail, road, dredge areas, and utilities.

3. Preliminary Candidate Site Identification Process

Table 3-1 Relative (Approximate) Percentages of NYSORPS Property Classifications Within Each of the Counties in the Hudson River PCBs Facility Siting Study Area

		Counties Within Study Area			
		Washington	Rensselaer	Saratoga	Albany
Total # of Parcels		3,024	11,731	6,545	8,494
Total Acreage		10,093	8,287	13,733	4,561
Property Code Classifications	Property Class*				
Agricultural	100	47%	8%	20%	<1%
Residential	200	20%	26%	31%	14%
Vacant	300	14%	29%	25%	14%
Commercial	400	4%	16%	5%	21%
Industrial	700	4%	7%	4%	6%
Public Services	800	6%	6%	4%	10%
Wild, Forested, Conservation Lands, and Public Parks	900	3%	<1%	7%	2%
Community Services	600	2%	5%	3%	10%
Recreation and Entertainment	500	<1%	3%	1%	3%
Unclassified		<1%	<1%	<1%	20%

* NYS Office of Real Property Services

Further refinement of the parcel data to include only those property codes that would be potentially suitable for facility siting reduced the number of parcels in the study area to 2,410.

3.1.2 Shoreline (River Access)

Study Area Characterization

The character of the Hudson River shoreline varies throughout the study area, ranging from steep bluffs in the Hudson Falls area to low-lying floodplain areas containing wetlands in the lower portion above Federal Dam. Below Federal Dam, in the Albany and Troy areas, much of the shoreline has been armored with bulkheads and riprap to support port facilities and urbanized land uses near the river.

Analysis and Use in the PCS Siting Process

Initial analysis of the shoreline (relative to the parcel mapping) was conducted by simultaneously examining available parcels of the selected property codes within 0.25 mile and 0.50 mile of the shoreline. This examination demonstrated that increasing the distance from the shoreline from 0.25 mile to 0.50 mile resulted in an increase in the selection of parcels by approximately 20% - 25%. Ultimately, the 0.25 mile buffer was used because the number of parcels located within 0.25 mile of the river was determined to be a good foundation for initiating the analyses. Additionally, because dredged material will be transported to a sediment processing/transfer facility by barge or pipeline, analyzing parcels closer to the river

3. Preliminary Candidate Site Identification Process

(within 0.25 mile) was deemed more practical. Moreover, sites located closer to the shoreline would minimize potential impacts to local communities by reducing the distance of transport of material from the edge of the river to the active portions of a facility.

3.1.3 Rail

Study Area Characterization

Rail access varies widely across the study area. Rail lines occur at various locations within the study area, but there are portions of the study area in which no rail exists. Given EPA's determination in the ROD that processed sediments be transported by rail or barge, rail lines are a necessary component of the remedial action.

There are approximately 42 miles of existing, active rail lines in the study area. These existing rail corridors are present in three general areas. First, there are existing rail lines located in the northern half of River Section 1 (the former Fort Edward Dam [River Mile] (RM) 195.8 to the Thompson Island Dam (RM 188.5) [Figure 3-2]). These rail lines radiate out from the village of Fort Edward. From the village of Fort Edward, rail runs northerly to the village of Hudson Falls, along the east side of the Hudson River. Another rail line heads northeasterly from the village of Fort Edward, parallel to the Champlain Canal. A third rail line heads on a southerly and southwesterly course through the town of Moreau for approximately 2.5 miles and then extends beyond the study area.

The second general area where rail lines are accessible within the vicinity of the study area is located at the southerly end of River Section 2 (Thompson Island Dam to Northumberland Dam, near Schuylerville [Figure 3-2]). A single rail line terminates on the east side of the Hudson River, just north of the confluence of the Hudson River and the Batten Kill. The rail line heads in an easterly direction along the northern side of the Batten Kill in the town of Greenwich.

The third, and largest, general area containing existing rail is from the midpoint of River Section 3 (Northumberland Dam to the Federal Dam at Troy, Figure 3-2) to the southernmost extent of the study area. In this area, rail runs in a southerly direction along the west side of the Hudson River from the town of Stillwater to the downstream end of the Port of Albany and beyond. On the east side of the Hudson River, in the town of Schaghticoke, an existing rail runs for approximately 2 miles within the 0.5-mile-wide study area, and another line runs generally south from the city of Troy to the city of Rensselaer and beyond.

Analysis and Use in the PCS Siting Process

Analysis of the availability of parcels near the shoreline, rail lines, and roads indicated that, given the lack of rail in some portions of the study area, rail access appears to be a prominent and limiting factor in siting a sediment treatment/processing facility. Variable distances to rail (0.5 mile, 0.25 mile, 500 feet, 250

3. Preliminary Candidate Site Identification Process

feet) were examined simultaneously to understand the relationship between proximity to rail and the number of available parcels with the selected property codes. The rail criterion had the greatest influence on the number of available parcels, compared to shoreline and road access (see Section 3.2).

3.1.4 Roads

Study Area Characterization

Roads must be available or be able to be constructed to allow project personnel to enter and leave a facility. Additionally, as noted in the ROD, if a beneficial use of some portion of the dredged material is arranged, then appropriate transportation (i.e., rail, truck, or barge) will be determined. Roads occur throughout the study area. Major north-south running roads include: U.S. Route 4; State Route 32; County Road 29; County Road 113; County Road 127; and Interstate Route 787, (Figure 3-2). There are ten major east-west crossings of the river in the study area, including: U.S. Route 4, State Route 29, State Route 67, State Route 470, State Route 7, State Route 2, State Route 378, Interstate 90, and U.S. Routes 9 and 20 (Figure 3-2).

Analysis and Use in the PCS Siting Process

Analyses of the availability of parcels with respect to proximity to shoreline, rail, and road indicated that roads are not a limiting resource within the study area. Review of the parcel data showed that roads either bordered a majority of the parcels or there was direct access by roads onto parcels. For those relatively few instances where a major road did not bound parcels, smaller and/or property access roads typically intersected the parcels.

3.1.5 Available Area

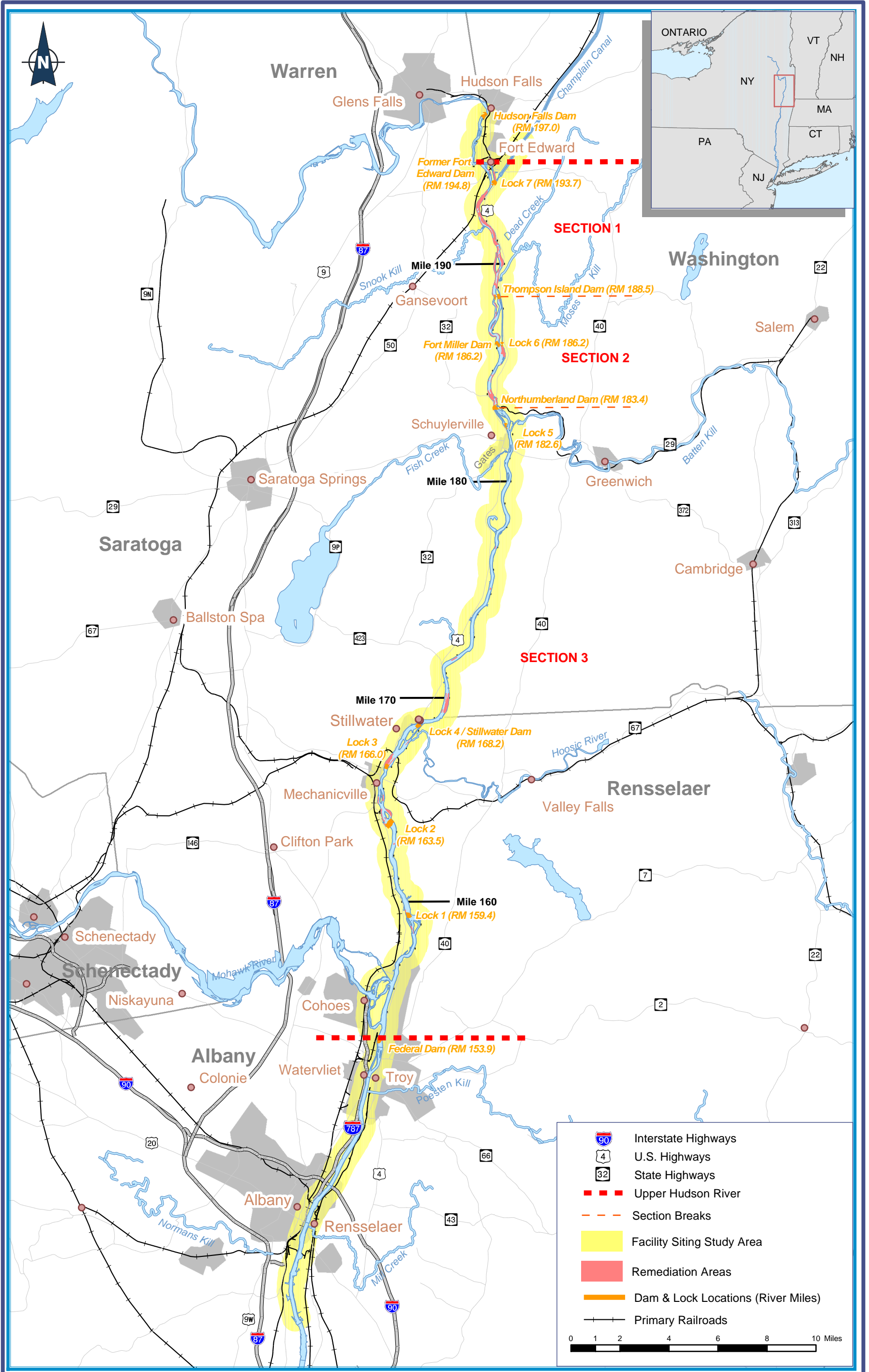
Study Area Characterization

Area is an important consideration for the siting of a treatment facility. Until design of a sediment processing/transfer facility has progressed, it is difficult to determine the area specifications that a facility might require. Therefore, for the purposes of identifying PCSs and as provided for in the Feasibility Study, a 10-acre minimum was used as a placeholder.

Parcels within the study area vary in size, from under an acre to more than 100 acres. Generally, the smaller parcels were found to be in those areas that have been more densely developed over time. Conversely, the larger parcels more commonly occurred in areas where development was more scattered or contained land uses that typically require larger areas (i.e., agricultural, gravel pits).

Analysis and Use in the PCS Siting Process

During the initial analysis of the parcel data (i.e., those parcels that met the property classification code requirement) a minimum area requirement was not immediately utilized. After examining single parcel sites, which can be acquired more efficiently, multiple parcel options were reviewed. Consequently, available area was determined by examining parcels individually and, where appropriate, as groups whose combined area may be sufficient to site a facility. Thus, "parcels"



SOURCE ECOLOGY & ENVIRONMENT, INC. 2002, ESRI 2002, USEPA 2002a
Note: RM = River Miles

Figure 3-2: Hudson River PCBs Superfund Site Facility Siting Study Area, Upper Hudson River

3. Preliminary Candidate Site Identification Process

and preliminary candidate “sites” are not equivalent terms (i.e., some PCSs are composed of more than one parcel).

3.1.6 Proximity to Dredge Areas

Study Area Characterization

The dredging information developed in the ROD was used to provide the total volume of contaminated sediments targeted for removal (2.65 million cubic yards[cy]) as well as the mapping that presented proposed dredging locations (USEPA 2002). A majority of the dredging volumes (approximately 80%) are located in River Sections 1 and 2. The remainder of the material occurs in River Section 3.

Analysis and Use in the PCS Siting Process

At this stage in the facility siting process, proximity to dredging areas was used to generally characterize PCS locations relative to the locations and volumes of the dredge areas rather than as a criterion for the identification of parcels.

3.1.7 Utilities

Study Area Characterization

This evaluation criterion incorporates a measure of the availability of electric, water, gas, and communication services necessary to operate a sediment processing/transfer facility. The study area was reviewed for the availability of utilities. Industrial and commercial developments typically have access to utilities and utilities usually are found along major roads and in the vicinity of major municipalities (i.e., villages and towns).

Analysis and Use in the PCS Siting Process

Due to the large geographic extent of the study area and the fact that utility information is generally available through DigSafely (<http://www.DigSafely.com>) and from public and private suppliers of exact site addresses, obtaining utility maps specific to the entire study area was determined to be impracticable and unnecessary. However, access to utilities is likely to be greater within areas of higher population density, areas near population centers, areas currently zoned commercial/industrial, and areas proximate to roadways. Therefore, the potential presence of or access to utilities was evaluated qualitatively after the PCSs were identified, based on a review of available information. In general, the following approach was used:

- Using aerial photography and parcel information, the likelihood of sites having access to utilities was evaluated relative to municipal boundaries and/or areas of higher population densities and to the presence of existing structures on site.

3. Preliminary Candidate Site Identification Process

- The potential for electric and communication services (i.e., telephone and cable) was also evaluated based on the presence of overhead power lines on nearby roads (if visible on aerial photographs) and the proximity of sites relative to residential, industrial, or commercial properties.
- The potential for water services was evaluated based on the presence of man-holes or catch basins on nearby roads (which indicate such municipal services are available); the proximity of sites relative to residential, industrial, or commercial properties; and the presence of municipal water or sewer company property (e.g., reservoirs) in the vicinity.
- Transmission lines/property information was readily available from the parcel information provided by the counties.

3.2 Application of Group 1 Facility Siting Criteria

3.2.1 “First Pass” Analysis

During the first pass analysis the GIS database was used to locate sites and subsequently screen them to determine those that best met the land use (i.e., property classification codes) and Group 1 criteria requirements.

Results: 475 parcels were initially identified as occurring within 0.25 mile of the shoreline, 0.25 mile of road, and 500 feet of rail (Table 3-3). These parcels were subsequently subjected to a secondary screening process to identify specific locations and to determine the relative agreement with the shoreline, rail, and road criteria. During the review of parcels it was found that there were numerous parcels that were small in area (i.e., generally < 1.0 acre), and/or appeared to be somewhat isolated from properties with similar property codes. The majority of these were located in densely populated areas in the vicinity of Albany and Cohoes. These latter parcels were eliminated from further consideration, which resulted in 151 parcels remaining after the first pass analysis was completed.

Supporting Information: The parcel layer provided the framework by which to spatially examine suitable locations and their characteristics (i.e., acreage, ownership, land use). Initially, the property classification codes were reviewed to determine appropriate land uses for locating a sediment processing/transfer facility. This resulted in the identification of 77 property classification codes (see Appendix A and Table A-2). Once these codes had been identified, all of the existing parcels that contained these codes were queried within the study area. This established the potentially suitable parcels relative to the selected property codes.

Next, the selected Group 1 criteria (access to the river, rail lines, and roads) were overlayed on top of the selected parcel information. The shoreline criterion was examined with a 0.5-mile-wide buffer and 0.25-mile-wide buffer. The road and rail criteria were examined using buffers of 250 feet, 500 feet, 0.25 mile, and 0.5 mile, for areas that were within 0.25 mile and 0.50 mile from the shoreline. The “intersect” method was used to locate parcels where specific buffers for these cri-

3. Preliminary Candidate Site Identification Process

teria intersected. Tables 3-2 and 3-3 list the numbers of available parcels within each buffer zone for shoreline, rail, and road. From that analysis it was determined that an adequate number of parcels were located within the 0.25-mile buffer. Similarly, the sites identified within areas more than 0.25 mile from shoreline and within 0.50 mile from shoreline did not clearly pose any distinct advantages over those that were identified within 0.25 mile of shoreline. Given the importance of locating a facility close to the river for barge loading and unloading, the 0.25-mile buffer was used to identify parcels and, later, the PCSs.

Table 3-2 Summary of the Number of Parcels Located Within 0.50 Mile of the Hudson River Shoreline and Within Various Rail and Road Buffer Zones

Road Buffers	Rail Buffers			
	0.5 Mile	0.25 Mile	500 feet	250 feet
0.5 mile (2,640 ft)	1,781	1,315	755	530
0.25 mile (1,320 ft)	1,686	1,245	728	511
500 ft	1,305	971	577	403
250 ft	1,028	774	485	336

Once the shoreline buffer was established, the rail and road buffers and selected parcels were further examined to select the appropriate buffers. The resulting numbers of parcels for each rail and road buffer within 0.25 mile of the shoreline is presented in Table 3-3. The maximum number of parcels selected was 1,052, which indicated that there were 1,052 parcels located within 0.25 mile of the Hudson River that had a road and a rail line within 0.5 mile of each of those parcels. The least number of parcels identified was 251, which was associated with the most restrictive criteria (250-foot road and rail buffers [see Table 3-3]).

Table 3-3 Summary of the Numbers of Parcels Located Within 0.25 Mile of the Hudson River Shoreline and Within Various Rail and Road Buffer Zones

Road Buffers	Rail Buffers			
	0.5 Mile	0.25 Mile	500 feet	250 feet
0.5 mile (2,640 ft)	1,052	781	477	336
0.25 mile (1,320 ft)	1,045	776	475	334
500 ft	980	730	441	303
250 ft	810	605	372	251

All of the parcels within 0.25 mile of the shoreline were classified according to the variable buffer zones and then examined spatially with GIS. Each of the buffers for rail and road were examined to determine how parcels were selected when the buffer was increased.

Road

It was apparent that increasing the road buffer from 0.25 mile to 0.5 mile did not substantially increase the number of suitable parcels. Most parcels within 0.25

3. Preliminary Candidate Site Identification Process

mile of the river had an access road or a main road adjacent to it. In addition, it was noted that by using the 0.5-mile road buffer, parcels that were located across the river from the road occasionally were selected. Because roads are abundant and because road access is relatively easy to obtain and/or construct, the 0.25-mile road buffer was selected.

Rail

The rail buffer was examined closely because it is critical that a site have some reasonable proximity to rail. Applying the 250-foot rail buffer with the selected shoreline and road buffer resulted in a relatively low number of parcels. After examining the 500-foot rail buffer (with 0.25 mile shoreline and 0.25 mile road), it was apparent that the number of parcels (475 [see Table 3-3]) was a reasonable starting point from which to begin the initial PCS identification process.

3.2.2 "Second Pass" Analysis

A second pass analysis was conducted to assess the relative suitability of the 151 parcels and to initiate the identification of PCSs. Up to this point in the PCS identification process, locations were identified and reviewed on a parcel basis only. The second pass evaluation was the first step in identifying sites. As indicated in Section 3.1.5, groups of parcels in some locations alone did not meet the 10-acre minimum guideline but when combined with adjacent parcels demonstrated relative suitability with the shoreline, rail, and road criteria.

Results: The second pass analysis resulted in the identification of 29 PCSs.

Supporting Information: A number of parcels were eliminated through the parcel-by-parcel analysis. A majority of the parcels that were eliminated exhibited a combination of the following characteristics:

- Active industrial areas - parcels containing currently active industrial properties, where it would be impractical to construct and operate a sediment processing/transfer facility and that may be difficult to acquire (e.g., General Electric [GE] active manufacturing properties, Irving Tissue, Scott Tissue, and others). However, this factor did not eliminate sites in some instances where there was adequate area on site that did not appear to be in active use.
- Small size - some parcels met the criteria but were 2 to 7 acres in size and adjacent parcels did not have similar property classification codes surrounding them.
- Proximity to dams and locks - if a site was small or located next to a dam, it was not considered because of complications with establishing a bulkhead; exceptions included areas that had adequate space to construct a bulkhead.
- Turbulent river conditions - aerial photography indicated that some parcels were close to areas of water turbulence, suggesting a shallow river channel or

3. Preliminary Candidate Site Identification Process

subsurface features (i.e., bedrock), and/or the parcel was downstream of a dam.

- Potential complexity of obtaining river access - based upon numbers of parcels, land uses, and/or roads that would have to be crossed.
- Potential complexity of obtaining rail access - based upon numbers of parcels, land uses, and/or roads/rail that would have to be crossed.

Some GE properties retained through this analysis appear to have potential access to corridors that could be developed from the shoreline to the property. In addition, an active GE parcel that appeared to have inactive space also was selected.

3.3 Additional Analyses

Additional analyses were conducted to ensure that potentially suitable sites close to the river had not been missed as a byproduct of the overall application of the siting criteria and use of GIS. In addition, the need for additional analyses was evidenced by the results of the first and second pass analyses: only five sites were identified as initial PCSs within River Sections 1 and 2. As noted earlier, approximately 80% of the total volume of dredge material is located within the upper two river sections. The additional analyses provided assurance that the use of GIS and the Group 1 criteria did not restrict the identification of potentially suitable sites.

Results: Two parcels were added to the PCS list, increasing the total number of PCSs to 31.

Supporting Information: The additional analyses included:

- Expanding the rail criterion to 0.25 mile (1,320 feet) and 0.50 mile (2,640 feet) with the same property classification codes and shoreline buffers (0.25 mile) and road buffers (0.25 mile) (see Section 3.3.1); and
- Incorporating additional NYSORPS classification codes (see Section 3.3.2).

3.3.1 Expansion of the Rail Criterion

This analysis was conducted specifically to determine if, by varying the rail buffer, additional locations within River Sections 1-3 that were relatively close to the river could be identified. Specifically, the analysis was performed to verify there were no parcels located along the river that were just beyond the previously applied 500-foot rail buffer used in the first and second pass analyses.

Three-hundred thirty (330) parcels were identified as occurring within the designated buffers. All but two of these parcels were eliminated from further consideration based upon the following factors. (A majority of the parcels exhibited a combination of these factors.)

3. Preliminary Candidate Site Identification Process

- Many parcels did not have direct river access.
- Some parcels were across the river from rail lines, which would require unloading dredged material, processing and dewatering the material, re-loading it back into barges, and then transporting the material across the river to a transfer facility, which was deemed not feasible for this evaluation.
- Examination of the parcels using aerial photography indicated that many sites appeared to be in active industrial or commercial use.
- Parcels were of smaller areas and were isolated from similar property classification codes.
- Because of the complexity of access to river and rail relative to the sites already identified as PCSs, some parcels did not show any greater degree of suitability with respect to the facility siting criteria.
- Parcels were located next to a dam or a lock.

3.3.2 Incorporation of Additional Property Classification Codes

NYSORPS classification codes were re-examined to identify additional codes that may have some potential suitability for the siting of a sediment processing/transfer facility. Twenty-eight property classification codes were added to the GIS database. These codes were largely associated with communications, transportation, special franchise, and other wild and forested land codes. The result of the analysis was the identification of 27 additional, previously unidentified parcels, which were predominantly linear, narrow utility and transportation corridors and right-of-way properties. Due to the lack of sufficient size and/or suitable parcel dimensions, no parcels were added to the PCS list.

3.4 Other Sites

A number of other possible sites were either provided to EPA or were previously identified by EPA. These sites were also analyzed relative to the set of criteria and property classification codes that had been established during the facility siting process (i.e., 0.25 mile shoreline; 500 feet rail; 0.25 mile road). These sites included the following groups:

- Interested landowners - properties that were submitted to EPA by landowners. Eight landowners submitted letters of interest to EPA, offering their properties for sale and/or lease for the purpose of constructing and operating a sediment processing/transfer facility.
- Previously identified areas - areas that were preliminarily identified by EPA (per TAMS) in 1999 as having some potential suitability for constructing and operating a sediment processing/transfer facility. In many cases, the list that

3. Preliminary Candidate Site Identification Process

was produced included the identification of general areas rather than specific sites. Thirteen areas were identified.

- CSX Transportation (CSX) - CSX is a rail transport company that carried out a preliminary investigation and provided EPA a list of sites that showed proximity to CSX rail lines and met some of the other Group 1 criteria. CSX identified sites by applying the river access and rail access criteria (defined buffer zones were not used). There were nine sites identified by CSX, all of which are below River Section 3.

Results: Three sites were added to the PCS list.

Supporting Information: See Sections 3.4.1, 3.4.2, and 3.4.3.

3.4.1 Interested Landowner Properties

As indicated above, EPA agreed to consider properties from interested landowners for the potential siting of a sediment processing/transfer facility. To date, EPA has received information from eight interested landowners. Each of the interested landowner properties was evaluated. Three properties had been selected as PCSs as part of the facility siting process. Two additional sites were maintained for further investigation and were added to the PCSs. The remaining three sites were eliminated from further consideration because they exhibited a combination of the following characteristics:

- Incompatible property classification code (residential);
- Small size (less than 8 acres);
- Located beyond the extent of the width of the study area (i.e., >0.50 mile from the shoreline);
- Potential complexity of gaining river access (i.e., crossing of residential neighborhoods, roads, rail, etc.).

3.4.2 Previously Identified Areas

In 1999, EPA conducted a cursory examination of properties from the Fort Edward area down to the Port of Albany to preliminarily identify potential locations for the siting of a sediment processing/transfer facility (TAMS Consultants, Inc., 2001). Thirteen areas were identified. In many instances, due to the preliminary scope of the study, large areas were identified rather than specific properties (i.e., the city of Troy, the Port of Albany, Thompson Island). In cross-referencing it was found that six of the areas previously identified had also been selected as PCSs. The remaining areas were assessed and were not included as PCSs for the following reasons:

- Incompatible property classification codes (residential, state park);

3. Preliminary Candidate Site Identification Process

- Potential complexity of gaining rail access, absence of direct and indirect rail access; and
- Active industrial/commercial sites lacking available space for additional development.

3.4.3 CSX Transportation Identified Sites

CSX conducted a cursory review of areas with the intent of locating potential sites for a sediment processing/transfer facility. Without assigning specific proximity limitations (i.e., 250 feet, 500 feet, etc.) on rail, CSX applied the rail and river access criteria to the southern portion of the study area where CSX rail service is available. This resulted in a list of nine potential sites. All of the sites are located below River Section 3.

Through the application of the selected Group 1 criteria and property classification codes, four of the CSX selected sites had been identified by the facility siting process and identified as PCSs. One of the sites is also a property that had been submitted by an interested landowner. The latter site and the remaining four sites were analyzed using the matrix of siting criteria (0.25 mile shoreline, 500 feet rail, 0.25 mile road) and property classification codes. The interested landowner-CSX location was retained for further investigation; the remaining four locations were eliminated for the following reasons:

- Incompatible property classification codes and land use (agricultural);
- Active industrial/commercial sites lacking available space for additional development;
- Potential complexity of gaining river access, absence of direct river access;
- Smaller size (less than 9 acres); and
- Potential complexity of gaining rail access beyond the 500-foot buffer.

3.5 Evaluation of PCSs and Identification of Those Recommended for Further Consideration

The current facility siting process identified 29 PCSs using selected property classification codes (primarily industrial, commercial, and vacant) and by applying specific proximity values (buffers) for shoreline (0.25 mile), rail (500 feet), and road (0.25 mile) access. The expansion of the rail buffer led to the addition of two sites, resulting in 31 PCSs. The subsequent analyses of the interested landowner properties, previously identified areas, and CSX sites increased the total number of PCSs to 34 (Table 3-4).

3. Preliminary Candidate Site Identification Process

Table 3-4 Initially Identified Preliminary Candidate Sites (PCSs) and Those Recommended for Further Consideration

Site	Approximate River Mile	Interested Landowner	Previously Identified Area	CSX	PCSs for Further Consideration
River Section 1					
Energy Park (Champlain Canal)	195.1	X			X
Longe (Champlain Canal)	195.0				X
Old Moreau Dredge Spoils Area	193.8		X		X
State of New York (A)	193.2				X
River Section 2					
Georgia Pacific	183.2		X		X
River Section 3					
Bruno	166.5				X
Brickyard Associates	166.0	X			X
Edison Paving	164.0	X			X
NIMO - Mechanicville	164.0				X
NYS Canal Corporation	162.4				X
Tironi	162.0				
General Electric (A)	159.8				
Waterford IDA	159.5		X		
General Electric (B)	159.0				
General Electric (C)	159.0				X
General Electric (D)	158.1				
Jersen-Casale	157.4				
American Refuel	154.5				
Green Island IDA	154.4		X		X
Below River Section 3					
City of Troy/Troy Slag/Oldcastle	151.8		X		
Troy Slag/Rensselaer IDA	151.4		X	X	X
Callanan/Rensselaer IDA/City of Troy/ King Services	150.8		X	X	X
Town of North Greenbush	148.7				X
Rensselaer Tech Park (A)	147.7				X
Rensselaer Tech Park (B)	147.3				X
State of New York/First Rensselaer Marine Management	146.7				X
Albany Rensselaer Port District/BASF	144.3		X		X
Albany Port District	144.2		X		
Bray Energy	144.0			X	X
Bray Energy/Petrol/Gorman/ Transmontaigne	144.0				X
Norwest	143.5	X		X	X
ABC Operating Company	143.5				
OG Real Estate	142.8				X
P & M Brickyard	134.1	X			X

3. Preliminary Candidate Site Identification Process

A more detailed database review and a windshield survey were used to remove 10 sites from consideration. The following potentially problematic design characteristics were common among the 10 sites.

- No direct river access;
- Gaining river access would involve additional negotiations for additional parcel acquisitions and/or river frontage leasing;
- Included currently active industrial/commercial sites without additional available space and/or the need to cross active areas to obtain river or rail access;
- Access to the river would involve crossing local roads, thus requiring additional road design and transfer of dredge material considerations;
- Access to the river would involve crossing multiple parcels, some of which have been identified as having incompatible property classification codes;
- Access from the river to the site would involve crossing both road and rail; and
- Road access design may be somewhat more complex due to proximity to existing industrial, commercial/retail, and residential areas.

Site-Specific Rationale for Removals

PCSs in River Section 3 Removed from Consideration.

- Tironi (RM 162.0, app.)
 - No direct river access.
 - Additional design considerations involving crossing US Highway 4 (US4) (i.e., designing for dredge material to go underneath the road via piping, over the road, relocation of US4, or the construction of a bridge along US4).
 - Due to the closeness of the road to the river, there may be additional requirements for in-river construction to assure the integrity and safety of dredge material handling while also maintaining safe traffic conditions on US4 through the immediate area.
 - Given available space and the composition of the site (one 11.1-acre parcel close to the river, one 30.5-acre parcel inland), the active processing area would have to be located within the inland parcel. This might require the movement of dredge material from the edge of the river, across US4, and

3. Preliminary Candidate Site Identification Process

then across the railroad right-of-way (ROW) before processing could occur.

- Potential for additional design elements needed for visual screening due to the fact that adjacent parcels are residential and the site parcel is relatively narrow.

■ GE-A (RM 159.8, app.)

- No direct river access.
- Additional design considerations involving crossing US4 (i.e., designing for dredge material to go underneath the road via piping, over the road, relocation of US4, or the construction of a bridge along US4).
- Road access design may be somewhat complex because the site is located in an area of industrial and commercial/retail businesses, which results in steady traffic flow along this portion of US4. Road design issues would also have to include maintaining levels of service and access to local parcels similar to current conditions.
- Potential complexity of design for obtaining river access - a number of parcels would be crossed (after crossing US4), some of which are residential, others that are listed as commercial, community service, public service, etc.
- Gaining river access would involve additional considerations of design and negotiations for additional parcel acquisitions and/or river frontage leasing.

■ Waterford IDA (RM 159.5, app.)

- No direct river access.
- Additional design considerations involving crossing US4 (i.e., designing for material to go underneath the road via piping, over the road, relocation of US4, or the construction of a bridge along US4).
- Road access design would be somewhat complex because the site is located in an area of industrial and commercial/retail businesses, which results in steady traffic flow along this portion of US4. The proximity to the site of the intersection of US4 and Schoolhouse Lane and the potential areas for transferring dredge materials to the site across the road increases the complexity of designing the transfer of dredged material and maintaining local traffic circulation, access, and safety.

3. Preliminary Candidate Site Identification Process

- Gaining river access would involve additional considerations of design and negotiations for additional parcel acquisitions and/or river frontage leasing.
- GE-B (RM 159.0, app.)
 - Active industrial-use site; the area that appeared inactive in the aerial photograph was found, upon closer examination, to contain a bermed land-fill/buried disposal cell.
- GE-D (RM 158.1, app.)
 - No direct river access.
 - Location would require both the crossing of road and rail to access the site from the river.
 - Additional design considerations would involve crossing US4 (i.e., designing for material to go underneath the road via piping, over the road, relocation of US4, or the construction of a bridge along US4).
 - Road access design would be somewhat complex because the site is located in an area of industrial, commercial/retail businesses, and residences, which results in steady traffic flow along this portion of US4.
 - Gaining river access would involve additional considerations of design and negotiations for additional parcel acquisition and/or river frontage leasing.
 - Complexity of design for obtaining river access - a number of parcels would have to be crossed (after crossing US4), some of which are residential, others that are listed as commercial, community service, public service, etc.
 - Closer examination indicated that a portion of the river frontage along the river is used for seasonal and recreational uses, which would increase the need for additional design elements (i.e., screening, subsurface piping, etc.) across the recreational use parcel.
- Jersen-Casale (RM 157.4, app.)
 - No direct river access.
 - Location of the site would require both the crossing of road and rail to access the site from the river.

3. Preliminary Candidate Site Identification Process

- Additional design considerations would involve crossing US4 (i.e., designing for material to go underneath the road via piping, over the road, relocation of US4, or the construction of a bridge along US4).
 - Road access design may be somewhat complex because the site is located in an area of industrial, commercial/retail businesses, and residences, which results in steady traffic flow along this portion of US4.
 - Due to the closeness of the road, there would likely be additional requirements for in-river construction to assure the integrity and safety of dredge material handling while also maintaining safe traffic conditions on US4 through the immediate area.
 - Given available space and the composition of the site (one 1.5-acre parcel close to the river, one 30.4-acre parcel inland), the active processing area would likely have to be located within the inland parcel. This might require the movement of dredged material from the edge of the river, across US4, and then across the railroad ROW before processing could occur.
 - Potential for additional design elements needed for visual screening (river-side parcel is narrow and adjacent parcels are residential).
 - Gaining river access would involve additional considerations of design and negotiations for additional parcel acquisitions and/or river frontage leasing.
- Am. Ref-Fuel (RM 154.5, app.)
 - Field examination of this site indicated that an office complex is currently under construction across most of the site. Additionally, the railroad tracks have been removed along the eastern property boundary.

PCSs Below River Section 3 Removed from Consideration.

- City of Troy-Troy Slag-Oldcastle (RM 151.8, app.)
 - Active industrial use.
 - Due to active use, space does not appear to be available for the construction and operation of a facility without affecting current operations.
- Albany Port District Commission (RM 144.2, app.)
 - Active industrial use.

3. Preliminary Candidate Site Identification Process

- Although the area is situated along the river, access to the river would require crossing active industrial areas to access the river.
 - Road and rail access design would be somewhat complex, or restrictive, as “meshing” with the existing operations of the port would have to be considered.
- ABC Operating Company (RM 143.5, app.)
- No direct river access.
 - Most direct line of access to the river would involve crossing active Port of Albany areas.
 - Location of the site would require crossing of road, rail, and canal/creek to access the site from the river.
 - Site is located adjacent to a small tributary (Normans Kill) to the Hudson River. Direct shoreline access along the creek would likely increase complexity of design and effort of construction due to extensive channel dredging and widening and modification of the confluence with the Hudson River.
 - Road access design may be somewhat complex because the site is located close to the Port of Albany, which results in steady traffic flow, including truck traffic, along this portion of US4.
 - Gaining river access may involve additional considerations of design and negotiations for additional parcel acquisition and/or river frontage leasing.

4

Description of the Preliminary Candidate Sites

The PCSs being considered for further investigation have been evaluated against the Group 1 siting criteria and with existing land uses in mind. As stated in the ROD, potential adverse impacts to properties near the sediment processing/transfer facilities will be minimized through careful siting and design of the facilities. EPA intends to locate one or more facilities in industrial or commercial areas. After remedial activities have been completed, the parcels will be restored in a manner that takes into account anticipated future uses (e.g., redevelopment for commercial or recreational use).

All of the PCSs are classified as having the selected property codes (see Table A-2), and most sites are located in areas that have been previously developed for a variety of commercial and industrial uses, including former dredge spoil disposal areas (i.e., Old Moreau Dredge Spoils Area and State of New York-A).

4.1 Overview of the PCSs

The 24 PCSs are located throughout the north-south range of the facility siting study area, with half of the sites occurring to the south of River Section 3 (Figure 4-1). The following provides the numbers of draft PCSs within each of the river sections (see Table 3-5).

River Section 1	4
River Section 2	1
River Section 3	7
Below River Section 3	12

The 24 sites consist of 54 parcels owned by 30 different owners. The overall characteristics of the majority of these sites relative to the Group 1 siting criteria are that most are located within 0.25 mile from the Hudson River shoreline, 500 feet of rail access, and 0.25 mile of road access and are of a sufficient area to support the construction and operation of a sediment processing/transfer facility (using the 10-acre minimum as the guide). Some of the properties submitted by interested landowners that have been identified as PCSs do not match entirely with these criteria but are being retained for further study because Group 1 criteria generally apply and because ease of acquisition may be a future consideration.

4. Description of the Preliminary Candidate Sites

The remainder of this section focuses on the PCSs by providing brief text descriptions of each site and site description sheets that include information regarding site location, parcel size, number of parcels, current owner(s), location relative to dredge areas within in each of the river sections, and other relevant information. Figure 4-1, located at the end of the site sheets, provides an overview graphic of all the PCS locations along the river and where they are in relation to each river section and in relation to each other. Figure 4-1 can be folded out to allow the reader to read site sheets and view the figure simultaneously.

Please note that the New York State aerial imaging of some of the PCSs is not included on the description sheets. As requested by the New York State Office of Public Security, the aerial photography can not be provided as they contain information that has been deemed sensitive.

4.2 Site-specific Descriptions

Several similar terms (site, parcel, and tract) are used throughout this section. To avoid confusing their usage, they are defined here as follows:

- **Site:** A defined area within the project study area that meets the siting process and criteria presented in Section 3.
- **Parcel:** A subdivision of a site that consists of all the property with the same ownership. A site may consist of one or more parcels, which may or may not be contiguous.
- **Tract:** A parcel may consist of one or more tracts, which may or may not be contiguous.

4. Description of the Preliminary Candidate Sites

Old Moreau Dredge Spoils Area Site

Description: The Old Moreau Dredge Spoils Area is owned by James River II, Inc. and is located in the town of Moreau. This site is approximately 31.6 acres in size and is located on the west side of the river, approximately at river mile (RM) 193.8. This site was used as a dredge spoils disposal area.

Road Access: Mill Site Road accesses the site from the south. The main road to the west, Reynolds Road, is approximately 895 feet from Mill Site Road.

River Access: The site has approximately 2,000 feet of shoreline frontage on the Hudson River, providing direct access to the river from the site.

Rail Access: Rail is present on site in the form of a short spur (1,340 feet long) that converges with the main rail line west of the site. Rail lines also run along the western boundary line of the site.

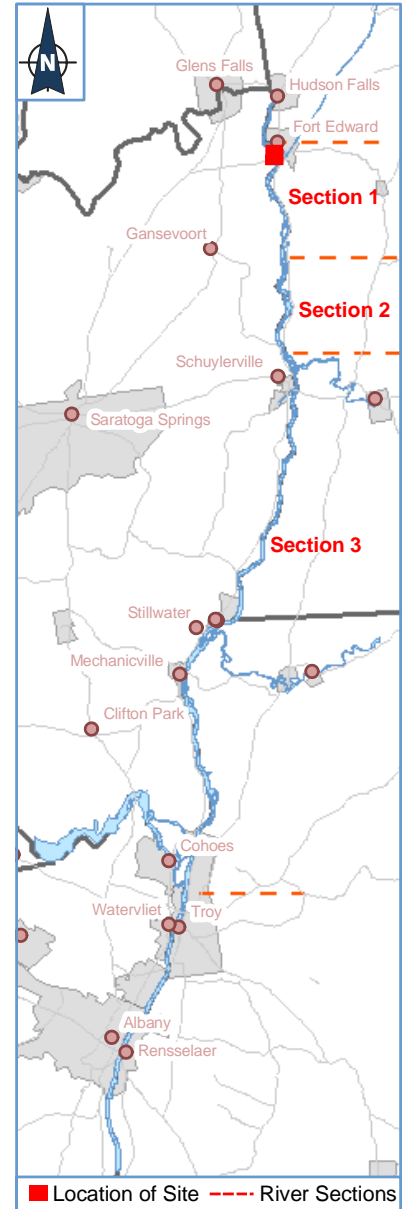
Surrounding Land Uses: Railroad right-of-way (RR ROW) is located north and west of the site, beyond which are vacant industrial and residential properties. South of the site is the Rogers Family Cemetery and the New Moreau Landfill. The Hudson River is to the east of the site.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 2.5 miles southeast of South Glens Falls.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on West River Road.
- **Water Service:** Moderate likelihood due to the presence of existing and former structures on site and presence nearby of a residential subdivision and the Tee Bird Country Club.
- **Natural Gas Service:** Moderate likelihood due to the presence of existing and former structures on site and presence nearby of a residential subdivision and the Tee Bird Country Club.
- **Communication Service:** High likelihood due to the presence of overhead power lines on West River Road, the presence of existing and former structures on site, and the presence nearby of a residential subdivision and the Tee Bird Country Club.
- **Electric and Communication Transmission Lines/Property:** Located within approximately 0.25 mile of the site.

OLD MOREAU DREDGE SPOILS AREA



Site Location: West River Road, Moreau, Saratoga County, NY
Acreage: 31.6
Number of Parcels: 1
Owner Name/Information:
 James River II, Inc.
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 15,921/1%
 Downstream - 1,546,315/58%

Section 2:
 Upstream - 0/0%
 Downstream - 525,850/20%

Section 3:
 Upstream - 0/0%
 Downstream - 561,919/21%

Number of Locks/Dams from Site:
 Upstream - 0
 Downstream - 6

Distance to Center of River Section (miles):
 Section 1 - 1.2 (Downstream)
 Section 2 - 7.9 (Downstream)
 Section 3 - 25.1 (Downstream)

Presence of Rail On Site (Y/N): Y
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 2,000
Presence of Road On Site (Y/N): Y
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Longe Site

Description: The Longe site is approximately 28.1 acres in size and is located in the town of Fort Edward, approximately 7,350 feet from the confluence of the Champlain Canal and the Hudson River, on the north side of the canal. The site is owned by Thomas Longe and is adjacent to a site that has been submitted by an interested landowner.

Road Access: The site is located approximately 770 feet east of Towpath Road across the RR ROW and approximately 350 feet west of the canal towpath/trail. The parcels that are crossed to gain access to the site by road include vacant industrial, single-family residential, and Canal Corporation property. There is an existing dirt road that could be improved to provide road access to the site.

River Access: This site is located north of the Champlain Canal and therefore does not directly front the Hudson River. Access to the Hudson River would be via the Champlain Canal, which is located approximately 400 feet east of the eastern site property boundary.

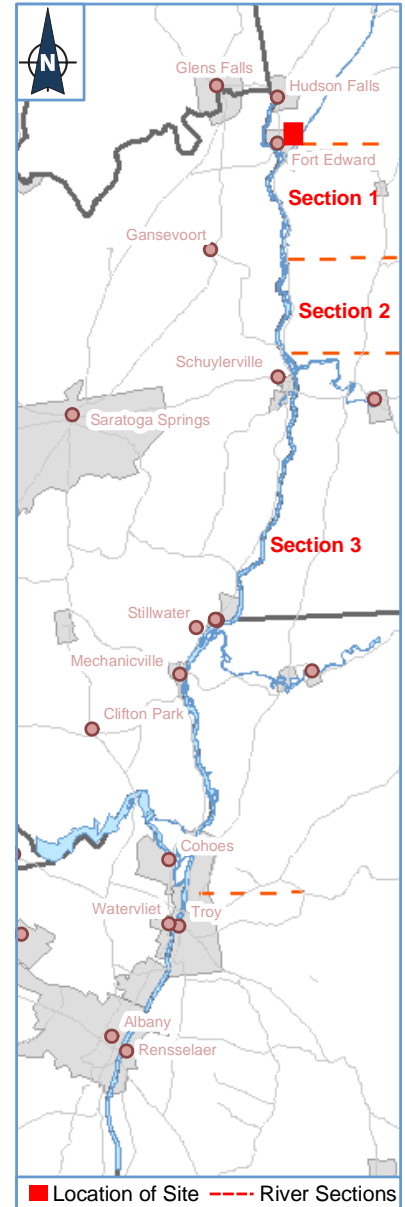
Rail Access: The site is adjacent to a rail line for approximately 1,560 feet. The rail line is located north-northwest of the site. There is no rail on site.

Surrounding Land Uses: The RR ROW is northwest of the property, beyond which are commercial, industrial manufacturing/processing, and warehouse distribution facilities. East of the site is vacant industrial land, west of the site is vacant agricultural land, and south of the site are several single-family residences and a vacant residential area.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in the village of Fort Edward in an area of relatively low population density but close to areas of higher population density.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines in nearby residential subdivision.
- **Water Service:** High likelihood due to the presence of manholes in nearby residential subdivision.
- **Natural Gas Service:** Moderate likelihood because the site is located near the Village of Fort Edward municipal limits.
- **Communication Service:** High likelihood due to presence of overhead power lines in nearby residential subdivision and proximity to the Village of Fort Edward municipal limits.



Site Location: Towpath Lane, Fort Edward, Washington County, NY

Acreage: 28.1

Number of Parcels: 1

Owner Name/Information:

Thomas F. Longe

Property Type/Land Use Code:

Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 0/0%

Downstream - 1,562,236/59%

Section 2:

Upstream - 0/0%

Downstream - 525,850/20%

Section 3:

Upstream - 0/0%

Downstream - 561,919/21%

Number of Locks/Dams from Site:

Upstream - 0

Downstream - 7

Distance to Center of River Section (miles):

Section 1 - 2.4 (Downstream)

Section 2 - 9.2 (Downstream)

Section 3 - 26.3 (Downstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 0

Edge of Property to River (ft): 370

River Frontage (ft): 0

Presence of Road On Site (Y/N): N

Edge of Property to Road (ft): 350

4. Description of the Preliminary Candidate Sites

Energypark Site

Description: This site was submitted by an interested property owner; the site is located in the town of Fort Edward, approximately 7,500 feet from the confluence of the Champlain Canal and the Hudson River and north of the canal. This site is north of and adjacent to the Longe site.

Road Access: Towpath Road runs along the northern boundary of the site. The canal towpath is 180 feet from the southern boundary of the site.

Rail Access: A rail line runs along the northern and northwestern property line and a rail corridor traverses the northern portion of the site. There is approximately 780 feet of adjacent rail line.

River Access: The site is approximately 225 feet north of the Champlain Canal.

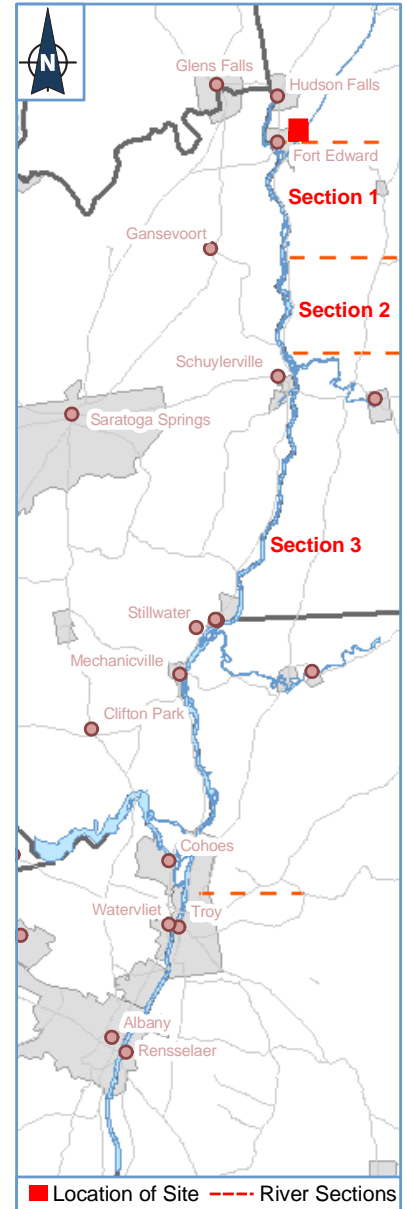
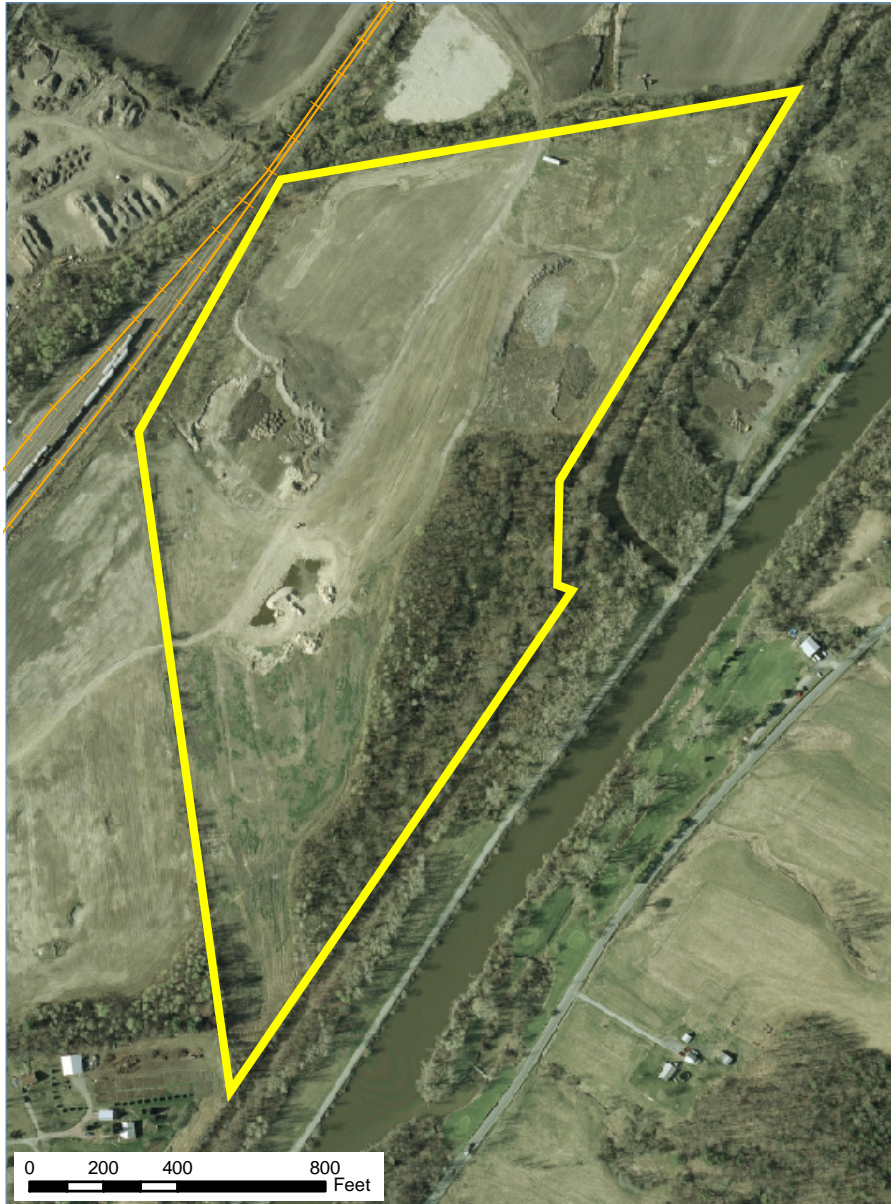
Surrounding Land Uses: The site is bordered by forested and vacant agricultural land to the north, including a single rural residential property on the far northern end. To the south is vacant industrial land and to the east is Canal Corporation property and the Champlain Canal. West of the site is the RR ROW and a business property owned by Environmental Soil Management Recycling.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density:

The site is located within the village of Fort Edward in an area of lower population density but close to areas of higher population density.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines in nearby residential subdivision.
- **Water Service:** High likelihood due to the presence of manholes in nearby residential subdivision.
- **Natural Gas Service:** Moderate likelihood because the site is close to the village of Fort Edward.
- **Communication Service:** High likelihood due to presence of overhead power lines in nearby residential subdivision and proximity to the Village of Fort Edward municipal limits.



Site Location: Towpath Lane, Fort Edward, Washington County, NY
Acreage: 50.9
Number of Parcels: 1
Owner Name/Information:
 Energypark Associates
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 0/0%
 Downstream - 1,562,236/59%

Section 2:
 Upstream - 0/0%
 Downstream - 525,850/20%

Section 3:
 Upstream - 0/0%
 Downstream - 561,919/21%

Number of Locks/Dams from Site:
 Upstream - 0
 Downstream - 7

Distance to Center of River Section (miles):
 Section 1 - 2.5 (Downstream)
 Section 2 - 9.3 (Downstream)
 Section 3 - 26.4 (Downstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 220
River Frontage (ft): 0
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 200

4. Description of the Preliminary Candidate Sites

State of New York – A Site

Description: This site is owned by the State of New York and is located in the town of Moreau. The site is approximately 13.8 acres and is located on the west side of the river approximately at RM 193.2. This site was used as a dredge spoils disposal area.

Road Access: West River Road parallels the southwest corner of the site and there is 500 feet of road frontage. A short access road off West River Road leads to the northwest corner of the site.

Rail Access: There is no direct rail access. A rail line is located 950 feet west of the site. Rail access would involve crossing West River Road and active agricultural property.

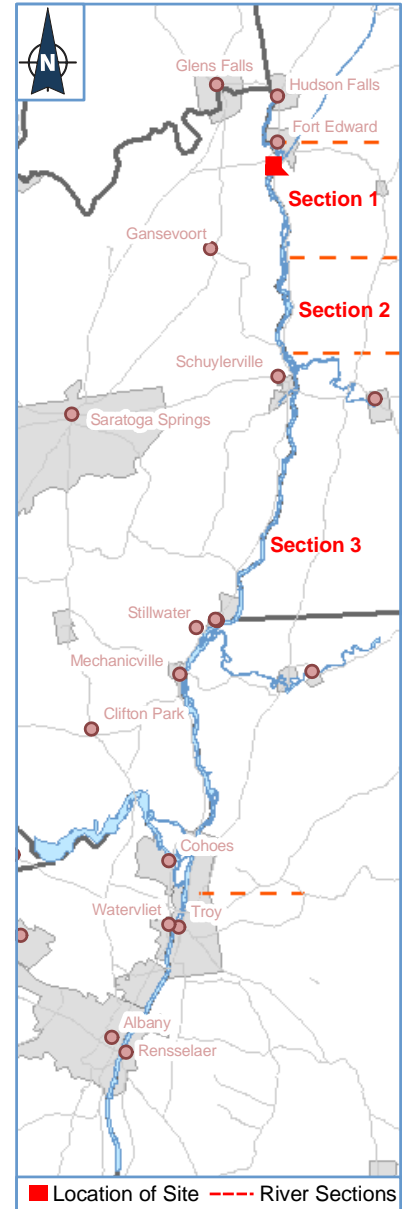
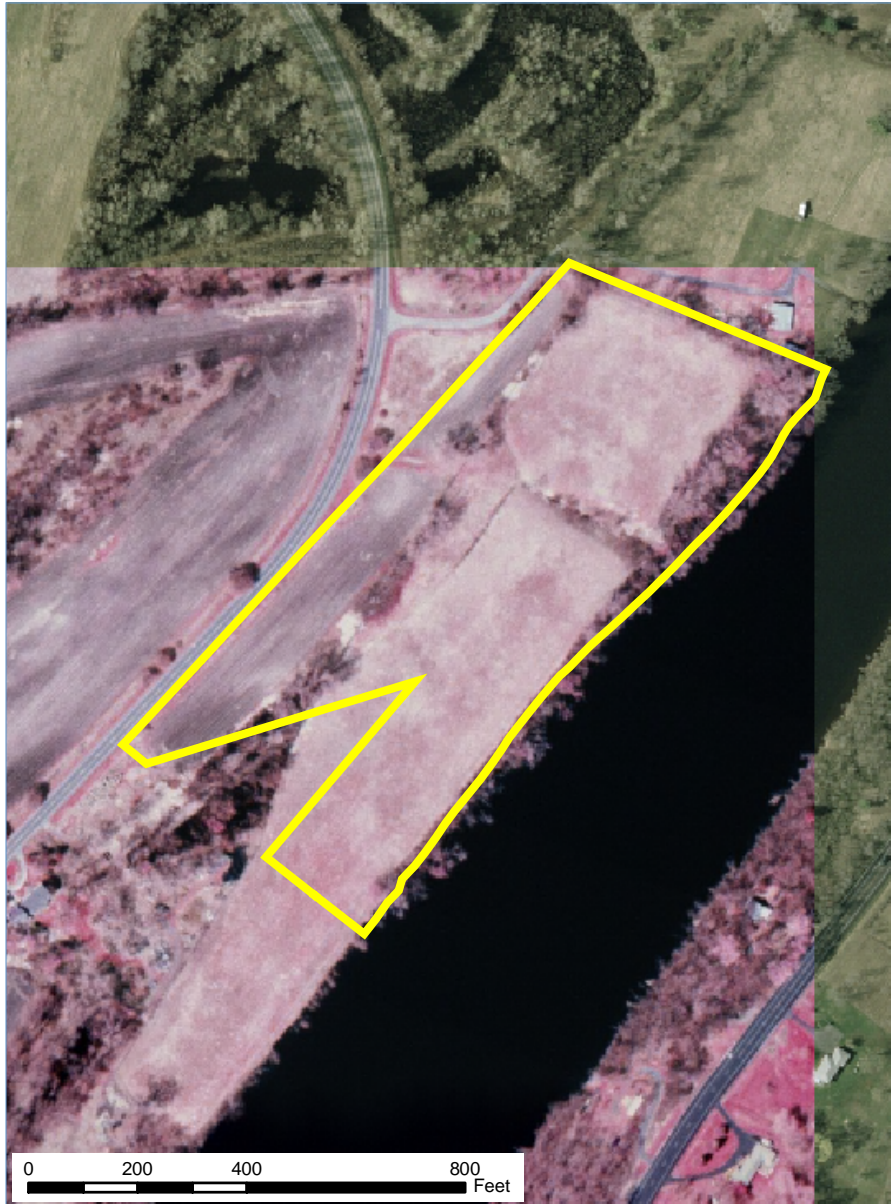
River Access: The site has 1,340 feet of river frontage and is located 1,200 feet downstream of Lock 7.

Surrounding Land Use: There are a variety of land uses around the site. The property to the north is owned by NYSDEC and is classified as a marina; to the west and south are large agricultural properties, each of which contains a smaller parcel of residential (single and two-family) property; and immediately to the east is the Hudson River.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 3 miles southeast of South Glens Falls.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on West River Road.
- **Water Service:** Low likelihood due to the lack of developed property in the immediate vicinity.
- **Natural Gas Service:** Low likelihood due to the lack of developed property in the immediate vicinity.
- **Communication Service:** High likelihood due to the presence of overhead power lines on West River Road.
- **Electric and Communication Transmission Lines/Property:** Located proximal to the site.



Site Location: West River Road, Moreau, Saratoga County, NY
Acreage: 13.8
Number of Parcels: 1
Owner Name/Information:
 State of New York
Property Type/Land Use Code:
 Hudson River and Black River Regulating District Land

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 90,453/3%
 Downstream - 1,471,783/56%

Section 2:
 Upstream - 0/0%
 Downstream - 525,850/20%

Section 3:
 Upstream - 0/0%
 Downstream - 561,919/21%

Number of Locks/Dams from Site:
 Upstream - 0
 Downstream - 6

Distance to Center of River Section (miles):
 Section 1 - 0.5 (Downstream)
 Section 2 - 7.3 (Downstream)
 Section 3 - 24.5 (Downstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 950
Edge of Property to River (ft): 0
River Frontage (ft): 1,340
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Georgia-Pacific Site

Description: This site is owned by Georgia-Pacific and is located in the town of Greenwich. The entire site is approximately 123 acres and is located on the east side of the river, approximately at RM 183.2. The site is considered one parcel but comprises a number of tracts due to the presence of roads and a backwater channel/slough that divide the property. The site is situated above and below the Northumberland Dam, and there appears to be an embayment or bulkhead along the shoreline to the north of the dam. A backwater channel, or slough, is present along the eastern edge of the riverfront tract.

Road Access: There is direct road access along County Road 113, and dirt roads are present within the site.

Rail Access: A rail corridor runs onto the riverfront tract for 200 feet and south of the larger inland tract for 670 feet. The at-grade crossing of County Road 113 appears to have been paved over.

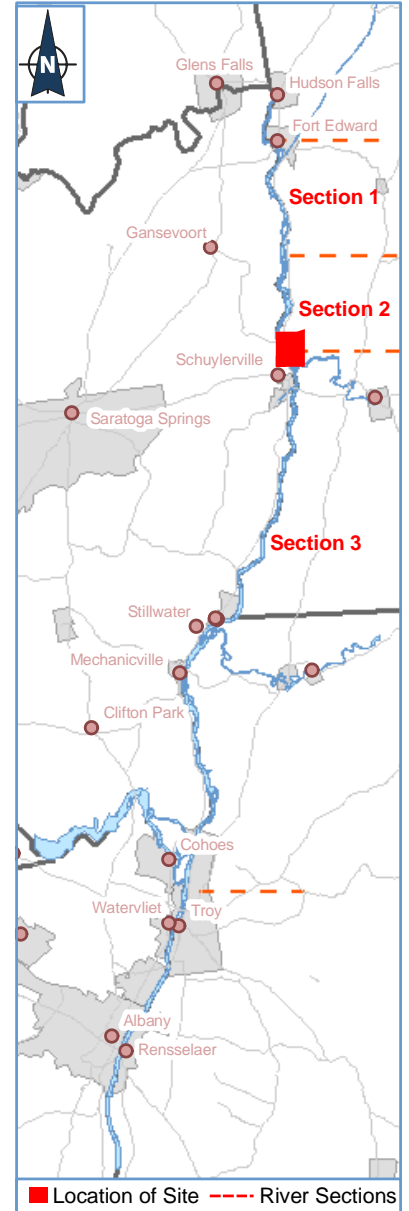
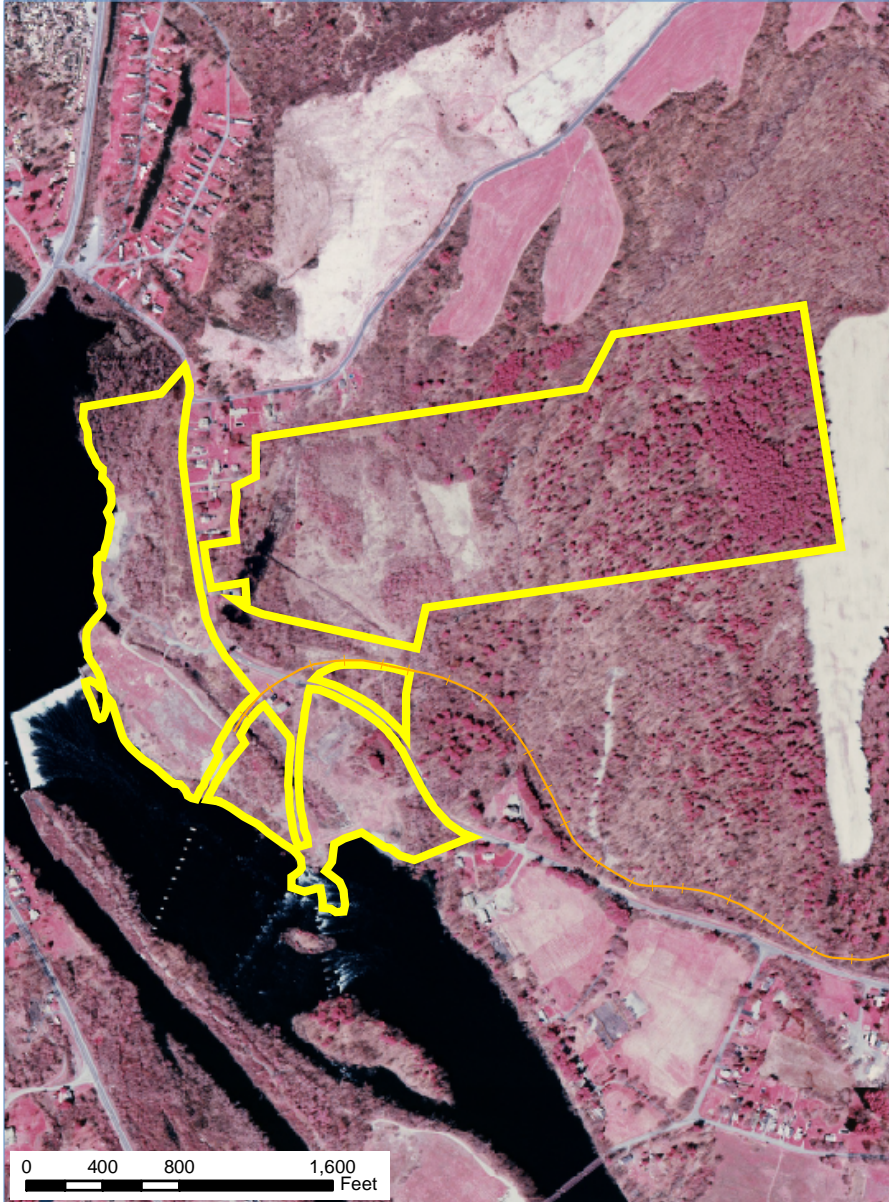
River Access: There is direct river access, with river frontage extending approximately 1,295 feet above the dam, as well as 185 feet of a dike and 350 feet of undeveloped land below the dam. Approximately 1,410 feet of shoreline below the dam is inaccessible because of rapids and pilings in the channel. The presence of the dam would likely influence site design and how trans-loading efforts would be conducted.

Surrounding Land Uses: The site is surrounded by rural residential and vacant agricultural land. Two residential parcels exist between the Georgia-Pacific tracts, near the southern end of the site. In addition, nine residential parcels are situated along County Road 113, between the riverfront tract and the inland tract. A trailer park is located north of the site across County Road 113, and residential and vacant lands are located south of the site. The School of the Adirondacks is located east of the southern portion of the site. East of the inland site is agricultural land.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 4 miles west-northwest of the village of Greenwich.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to proximity of school and residential area.
- **Water Service:** Low to moderate likelihood given that a school and residential areas are nearby and there is only scattered development of property in the vicinity.
- **Natural Gas Service:** Low to moderate likelihood given that a school and residential area are nearby. There is only scattered development of property in the vicinity.
- **Communication Service:** High likelihood due to proximity of school and residential area.
- **Electric Transmission Lines/Property:** Present within site boundaries.



Site Location: County Road 113, Greenwich, Washington County, NY
Acreage: 122.7
Number of Parcels: 1
Owner Name/Information:
 Georgia Pacific Corp.
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 0/0%
 Downstream - 561,919/21%

Number of Locks/Dams from Site:
 Upstream - 1
 Downstream - 5

Distance to Center of River Section (miles):
 Section 1 - 9.4 (Upstream)
 Section 2 - 2.6 (Upstream)
 Section 3 - 14.6 (Downstream)

Presence of Rail On Site (Y/N): Y
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 1,830
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Bruno Site

Description: This site consists of one parcel and is approximately 71.5 acres in size. The site is located in the town of Schaghticoke, on the east side of the Hudson River, approximately at RM 166.5. The site consists of one parcel comprising two tracts separated by a main road (Knickerbocker Road). The tract that fronts the river is approximately 26 acres, and the parcel to the east (the inland parcel) is approximately 45 acres. A rail line is located between the two tracts.

Road Access: Knickerbocker Road runs between the two parcels, providing direct road access to both tracts. An access road may exist on the inland tract.

Rail Access: There is direct rail access to/from the site. Rail bounds the eastern property line of the inland tract. There is approximately 3,830 feet of rail line.

River Access: There is direct river access to the site; the length of available, undeveloped river frontage is approximately 1,150 feet.

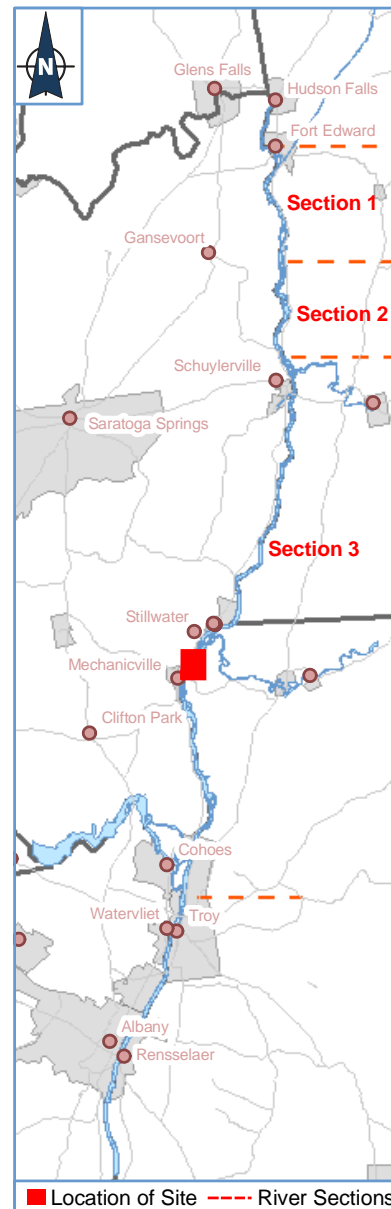
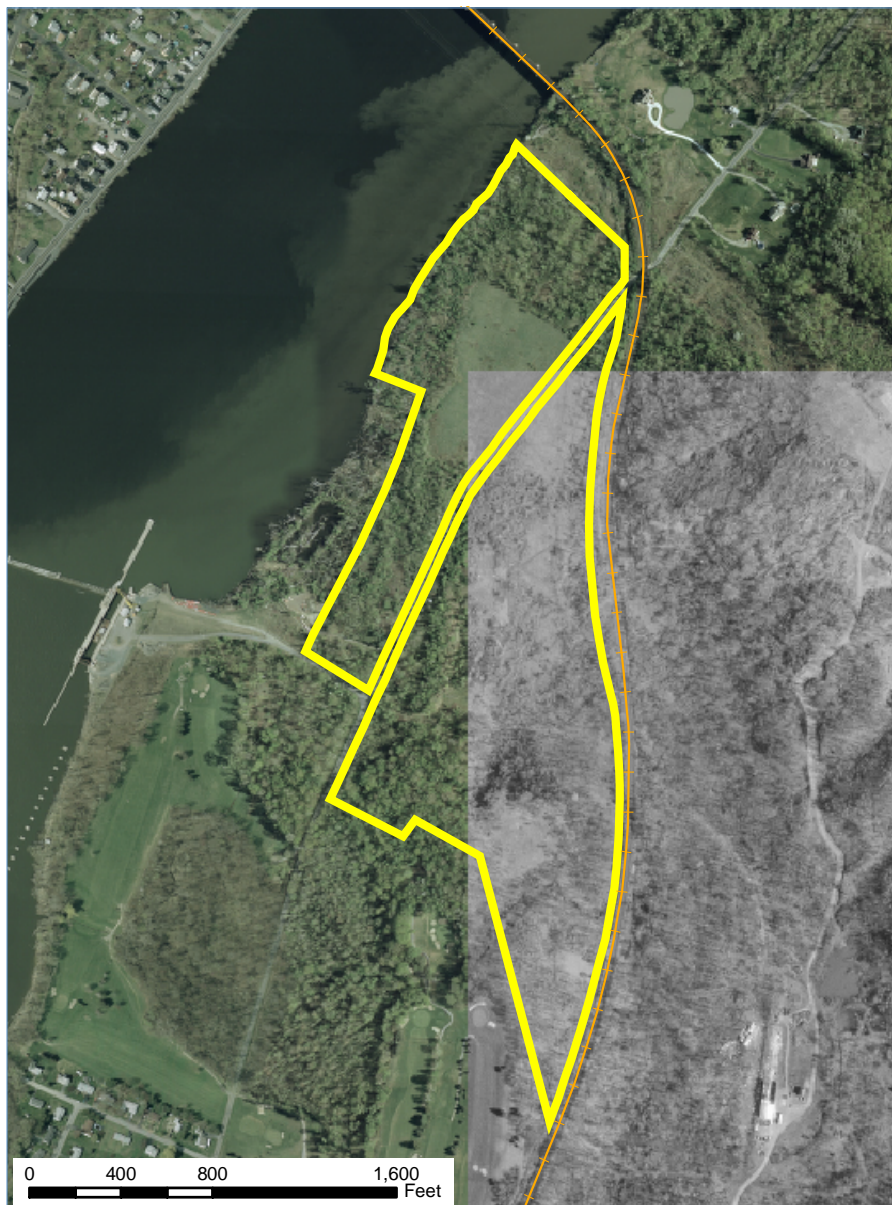
Surrounding Land Uses: A variety of land use types are present in the vicinity of this site: a New York State Electric and Gas Corporation transmission line corridor and large, single-family residential properties to the north; a rural, vacant lot adjacent to the tract along the river; and the Mechanicville Golf Course, which is located adjacent to and south of the inland tract.

Site Location Relative to Municipal Boundaries or Areas of Higher Settlement Density:

The site is located in an area of lower population density, approximately 4 miles west of the village of Schaghticoke.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on Knickerbocker Road.
- **Water Service:** Low to moderate likelihood given the presence of residences and the Mechanicville Golf Club nearby.
- **Natural Gas Service:** Low to moderate likelihood given the presence of residences and the Mechanicville Golf Club nearby.
- **Communication Service:** High likelihood due to the presence of overhead power lines on Knickerbocker Road.
- **Electric Transmission Lines/Property:** Located adjacent to the site boundaries.



Site Location: 750 Knickerbocker Rd., Schaghticoke, Rensselaer Cnty., NY

Acreage: 71.5

Number of Parcels: 1

Owner Name/Information:

John and Catherine Bruno et al.

Property Type/Land Use Code:

Other Rural Vacant Lands

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 282,694/11%

Downstream - 279,225/11%

Number of Locks/Dams from Site:

Upstream - 3

Downstream - 3

Distance to Center of River Section (miles):

Section 1 - 26.1 (Upstream)

Section 2 - 19.3 (Upstream)

Section 3 - 2.1 (Upstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 0

Edge of Property to River (ft): 0

River Frontage (ft): 1,150

Presence of Road On Site (Y/N): N

Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Brickyard Associates Site

Description: This is a single parcel located in the town of Schaghticoke and was submitted by an interested property owner. The site is approximately 254 acres and is located on the east side of the river, approximately at RM 166.0.

Road Access: A road runs generally north-south through the site. Access to the site is via Brickyard Road, which is 1,760 feet from the main road (Farm to Market Road).

Rail Access: There is direct rail access for approximately 1,650 feet on the western boundary of the site.

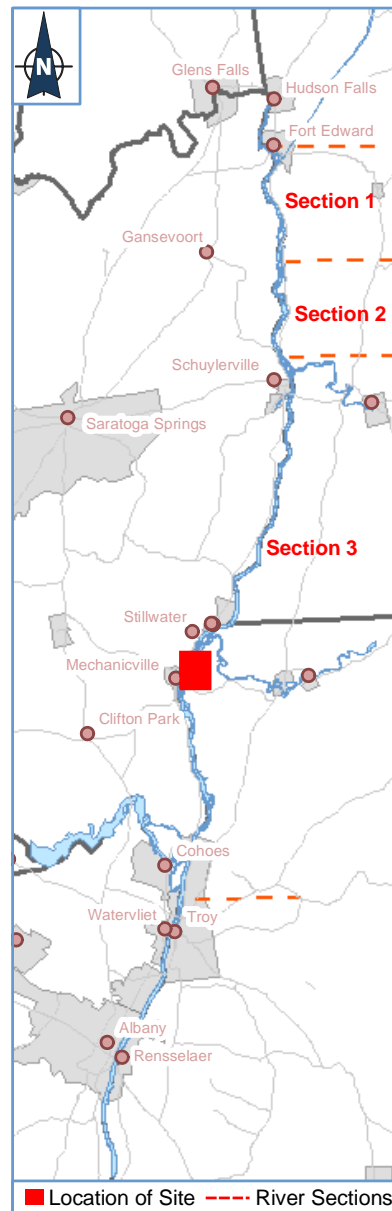
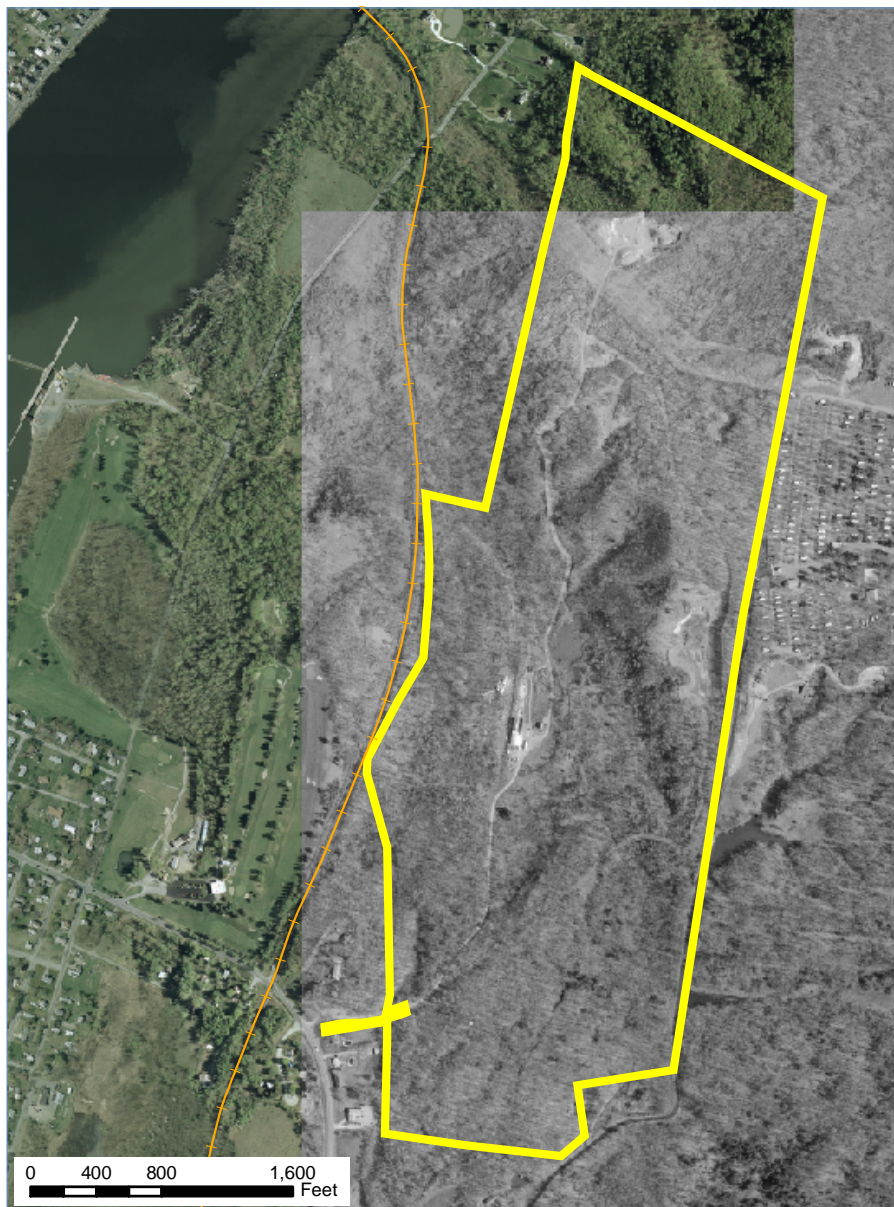
River Access: This site is approximately 1,190 feet from the shoreline of the river. Both road and rail would have to be crossed in order to obtain river access.

Surrounding Land Uses: There are a variety of land uses in vicinity of the site: large, single-family residences to the north and west; a large, wooded, single-family residential property directly to the north; a camping facility directly to the east; vacant land and the Mechanicville Golf Club to the west; and single-family residences and agricultural land to the south. An off-track betting facility is located just north of the southwest corner of the property.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 3.5 miles west of the village of Schaghticoke.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines on Farm to Market Road.
- **Water Service:** Low to moderate likelihood given the types of structures occurring on site and distances to residences, commercial business, and the Mechanicville Golf Club nearby.
- **Natural Gas Service:** Low to moderate likelihood given the types of structures occurring on site and distances to residences, commercial business, and the Mechanicville Golf Club nearby.
- **Communication Service:** High likelihood due to presence of overhead power lines on Farm to Market Road.
- **Electric Transmission Lines/Property:** Adjacent to and located within boundary of the site.



Site Location: 535 Brickyard Road, Schaghticoke, Rensselaer County, NY

Acreage: 253.6

Number of Parcels: 1

Owner Name/Information:

William M. Larned & Sons, Inc.

Property Type/Land Use Code:

Other Storage, Warehouse and Distribution Facilities

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 282,694/11%

Downstream - 279,225/11%

Number of Locks/Dams from Site:

Upstream - 3

Downstream - 3

Distance to Center of River Section (miles):

Section 1 - 26.6 (Upstream)

Section 2 - 19.8 (Upstream)

Section 3 - 2.6 (Upstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 0

Edge of Property to River (ft): 1,190

River Frontage (ft): 0

Presence of Road On Site (Y/N): Y

Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Edison Paving Site

Description: This site was submitted by an interested property owner and is located in the town of Schaghticoke, on the east side of the river approximately at RM 164. This relatively large site (181 acres) includes three parcels. It appears that one parcel has been used for the excavation and mining of sand/soil/gravel materials. There are relatively large, open water areas within this parcel, which were likely formed as borrow materials were excavated and water filled in over time from groundwater and/or direct precipitation and local runoff.

Road Access: Hudson River Road traverses the site near the shoreline, with only 6 acres of land situated between the shoreline and the road. Therefore, accessing the river from the rest of the site would involve crossing a major road. An on-site road runs from the river to the borrow areas, then to the abandoned agricultural property. Allen Road can provide access to/from the site. Allen Road, which can be accessed to the south, intersects Howland Avenue and then connects to a local major roadway (Farm to Market Road).

Rail Access: Rails front the eastern boundary of the abandoned agricultural parcel. There is approximately 4,060 feet of frontage with rail, which would provide direct rail access to/from the site.

River Access: The active industrial parcel has direct river access, with river frontage of about 1,110 feet. The Lower Dam and Lock 2 are located approximately 1,300 feet downstream of the southern property line.

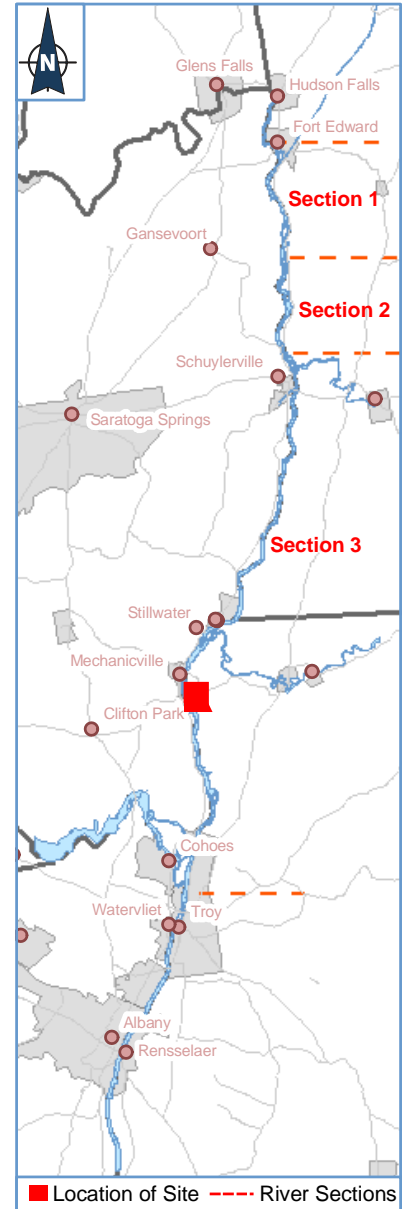
Surrounding Land Uses: There are a number of different land use types in the vicinity of this site: commercial distribution on two parcels to the south of the site; rural vacant land and crop fields to the north and west of the inland parcel; a quarry to the south-southeast; vacant and abandoned agricultural land to the east and south; residential property to the north and northeast (one parcel contains no structures) and at the southeast corner of the inland parcel; and land classified as agricultural to the east of the RR ROW.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 4.5 miles west of the village of Schaghticoke.

Presence of Utility Services/Infrastructure:

- **Electric Service:** Low likelihood due to lack of developed property in the vicinity.
- **Water Service:** Low likelihood due to lack of developed property in the vicinity.
- **Natural Gas Service:** Low likelihood due to lack of developed property in the vicinity.
- **Communication Service:** Low likelihood due to lack of developed property in the vicinity.
- **Electric Transmission Lines/Property:** A communications or other type of service tower may be present on the site.

EDISON PAVING



Site Location: River Road, Schaghticoke, Rensselaer County, NY
Acreage: 112.5
Number of Parcels: 2
Owner Name/Information:
 Edison Paving Corp.
Property Type/Land Use Code:
 Abandoned Agricultural Land; Sand and Gravel Mining and Quarrying

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 457,576/17%
 Downstream - 104,343/4%

Number of Locks/Dams from Site:

Upstream - 4
 Downstream - 2

Distance to Center of River Section (miles):

Section 1 - 28.6 (Upstream)
 Section 2 - 21.8 (Upstream)
 Section 3 - 4.7 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 645
Edge of Property to River (ft): 0
River Frontage (ft): 1,110
Presence of Road On Site (Y/N): Y
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Niagara Mohawk – Mechanicville Site

Description: This site consists of a single parcel of approximately 43 acres and is located in the town of Halfmoon. The site is situated on the west side of the river, approximately at RM 164.

Road Access: Main Street and Mechanicville Road bound the site to the west, and there appear to be site access roads on the upper and lower portions of the site.

Rail Access: A railroad spur to the American Tissue property is located 100 feet north of the site.

River Access: There is approximately 1,100 feet of usable riverfront.

Surrounding Land Uses: This site is surrounded by industrial, commercial, and rural vacant land, and several single-family residential properties are located to the west. The industrial areas north of the site are an electrical substation and the American Tissue manufacturing/processing facility.

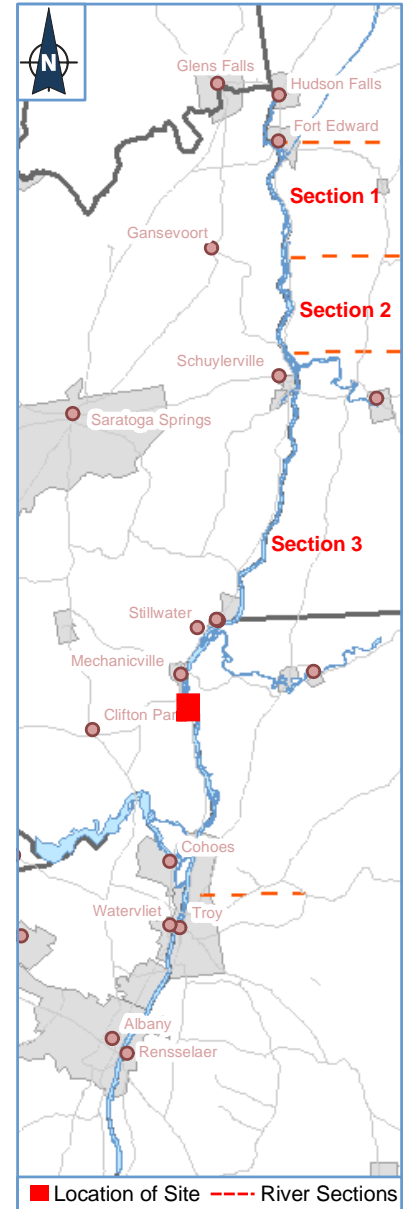
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 0.25 mile from the city of Mechanicville.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines on Hudson River Road and Mechanicville Road.
- **Water Service:** Moderate likelihood due to the presence nearby of car dealership, active industrial property (American Tissue Mills), and County of Saratoga Sewer District facility.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of car dealership, active industrial property (American Tissue Mills), and County of Saratoga Sewer District facility.
- **Communication Service:** High likelihood due to the presence of overhead power lines on Hudson River Road and Mechanicville Road.
- **Electric Transmission Lines/Property:** Adjacent to the site.

NIAGARA MOHAWK - MECHANICVILLE

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Site Location: Hudson River Road, Halfmoon, Saratoga County, NY

Acreage: 42.6

Number of Parcels: 1

Owner Name/Information:

Niagara Mohawk Power Corporation

Property Type/Land Use Code:

Electric Power Generation - Hydro

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 457,576/17%

Downstream - 104,343/4%

Number of Locks/Dams from Site:

Upstream - 4

Downstream - 2

Distance to Center of River Section (miles):

Section 1 - 28.6 (Upstream)

Section 2 - 21.8 (Upstream)

Section 3 - 4.7 (Upstream)

Presence of Rail On Site (Y/N): Y

Edge of Property to Rail (ft): 100

Edge of Property to River (ft): 0

River Frontage (ft): 1,100

Presence of Road On Site (Y/N): N

Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

New York State Canal Corporation Site

Description: This site is approximately 22 acres and is located in the town of Halfmoon, on the west side of the river, approximately at RM 162.4.

Road Access: The site is bordered to the west by State Route 4, and several dirt paths appear to be on the site.

Rail Access: Rail is not adjacent to the site. At the closest point, rail is located approximately 640 feet west of the site.

River Access: The site has 2,150 feet of river frontage. The shoreline is undeveloped except for a small dock on the southern end.

Surrounding Land Use: To the west is an interested landowner site that has not been identified as a PCS and to the east is the river. North of the site are several single-family residential properties, and to the south are several single-family residential and vacant residential properties.

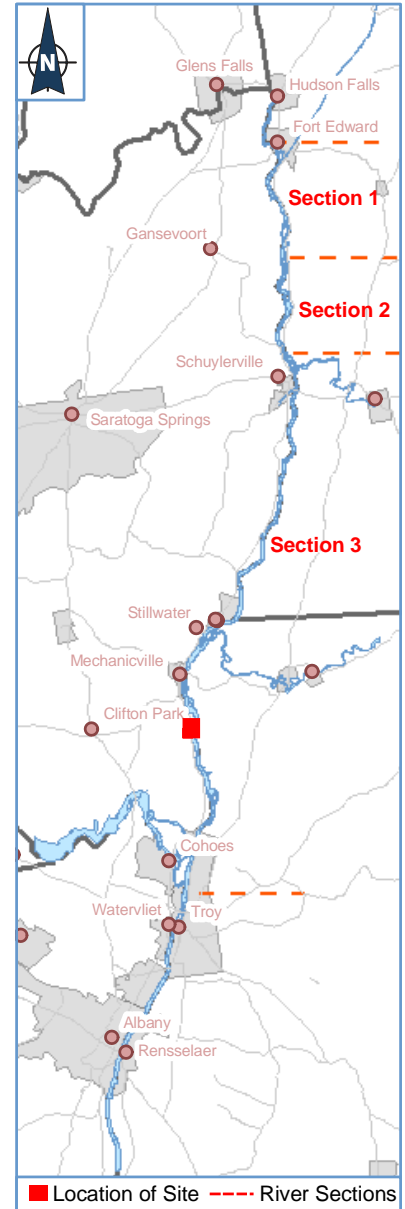
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density:

The site is located in an area of lower population density, approximately 3.4 miles west-northwest of the village of Greenwich.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on River Road.
- **Water Service:** Low to moderate likelihood given the proximity of a school and residential area and the general lack of developed property in the vicinity.
- **Natural Gas Service:** Low to moderate likelihood given the proximity of a school and residential area and the general lack of developed property in the vicinity.
- **Communication Service:** High likelihood due to the presence of overhead power lines on River Road.
- **Electric Transmission Lines/Property:** Adjacent to the site.

NYS CANAL CORPORATION



Site Location: Hudson River Road, Halfmoon, Saratoga County, NY
Acreage: 22.4
Number of Parcels: 1
Owner Name/Information:
 NYS Thruway Authority, NYS Canal Corp.
Property Type/Land Use Code:
 Other Rural Vacant Lands

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 537,462/20%
 Downstream - 24,457/1%

Number of Locks/Dams from Site:
 Upstream - 5
 Downstream - 1

Distance to Center of River Section (miles):
 Section 1 - 30 (Upstream)
 Section 2 - 23.2 (Upstream)
 Section 3 - 6.1 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 640
Edge of Property to River (ft): 0
River Frontage (ft): 2,150
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

GE Silicones – C Site

Description: This site comprises a single parcel owned by GE Silicones LLC. The site is approximately 49 acres and is located in the town of Waterford, on the west side of the Hudson River (RM 159.0).

Road Access: There is direct road access via Mechanicville Road, and Cherry Street accesses the site via Mechanicville Road.

Rail Access: There is no rail access. Rail access would require crossing Hudson River Road and one of the Waterford IDA parcels or GE property. The distance to a rail line would be approximately 1,000 feet using the Waterford IDA property and 1,180 feet using the GE property.

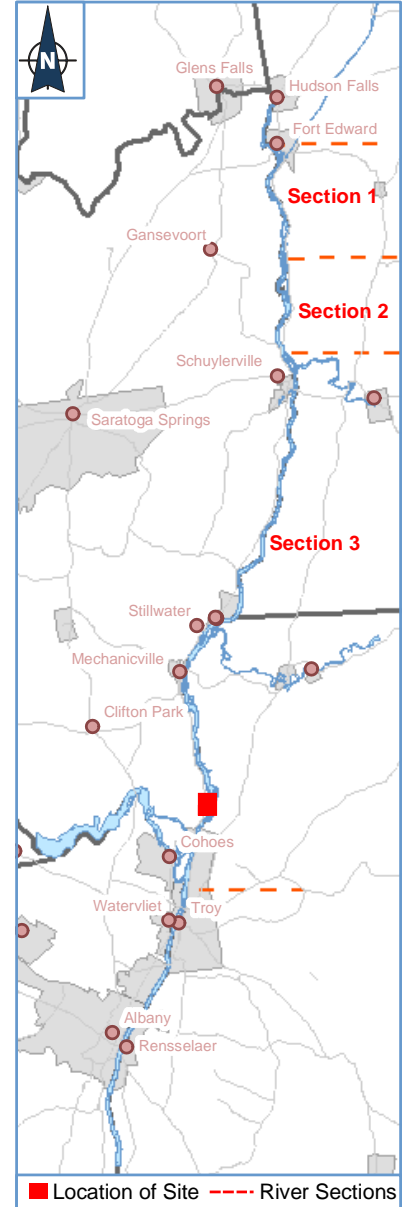
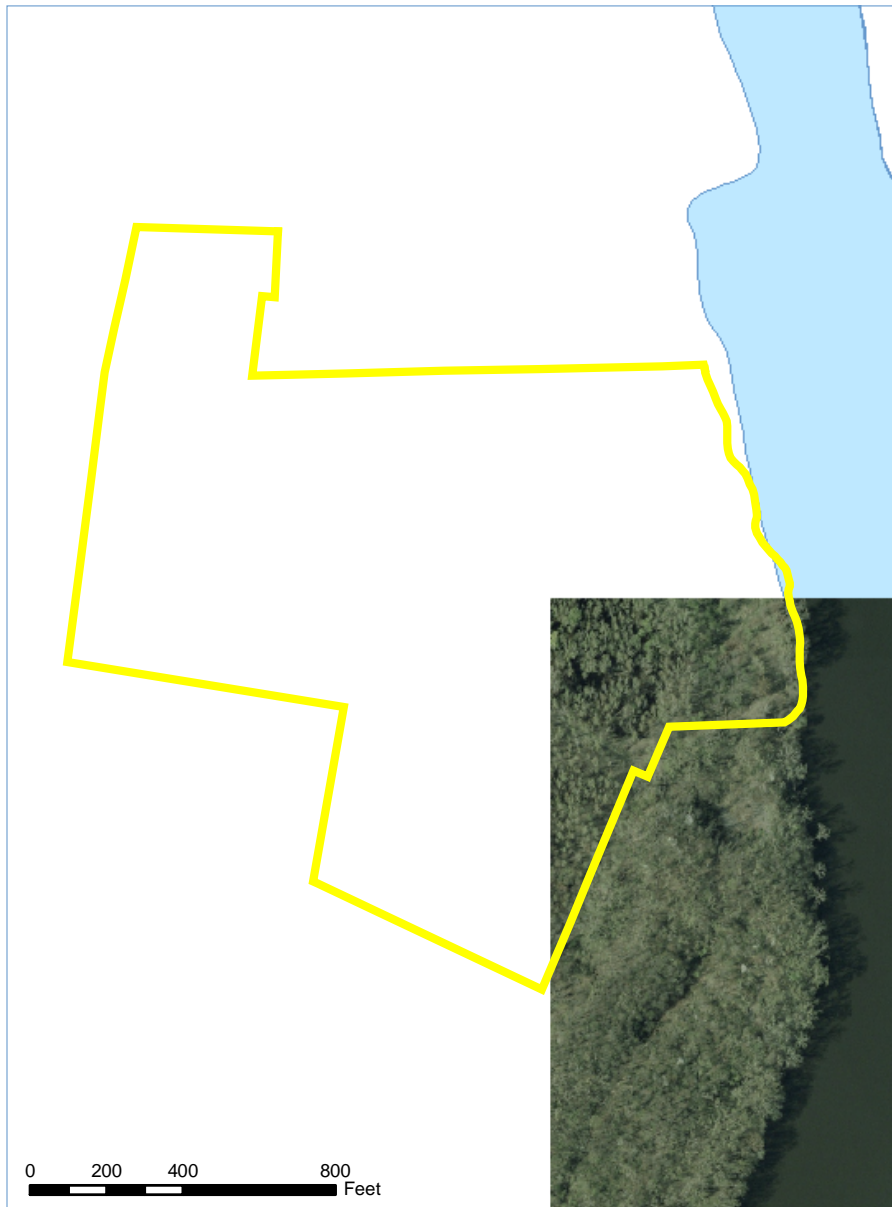
River Access: There is direct river access along 920 feet of undeveloped frontage.

Surrounding Land Uses: To the north of the site is a wastewater treatment facility; to the south and east is New York State Hudson River and Black River Regulating District property; to the southwest is a single-family residential property; and west of the site is a Waterford IDA industrial manufacturing property and a GE industrial property.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an industrial area of lower population density, approximately 1 mile north of the village of Waterford.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines on Hudson River Road and Mechanicville Road.
- **Water Service:** Moderate likelihood due to the presence of a existing on-site structure and nearby industrial and residential properties.
- **Natural Gas Service:** Moderate likelihood due to the presence of a existing on-site structure and nearby industrial and residential properties.
- **Communication Service:** High likelihood due to presence of overhead power lines on Hudson River Road and Mechanicville Road.
- **Electric Transmission Lines/Property:** Adjacent to the site.



Site Location: Hudson River Road, Waterford, Saratoga County, NY
Acreage: 49.1
Number of Parcels: 1
Owner Name/Information:
 GE Silicones LLC
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 6
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 34 (Upstream)
 Section 2 - 27.2 (Upstream)
 Section 3 - 10.1 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 1,180
Edge of Property to River (ft): 0
River Frontage (ft): 920
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

Due to the presence of "sensitive content," certain data/imagery is unavailable as directed by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Green Island IDA Site

Description: This site is approximately 44 acres and is located in the town of Green Island, on the west side of the river at approximately by RM 154.4. The site comprises one parcel (three tracts) and is owned by the Village of Green Island IDA. Some of the river frontage of the site is located adjacent to the Federal Dam, but a majority of the property is upstream.

Road Access: Delaware Avenue provides direct access to the site. Tibbits Street runs along the southern boundary of the site, and there are a number of local roads nearby. It appears that access to the site parallels the existing railroad tracks.

Rail Access: The site contains direct rail access and an on-site branched spur. The rail line is likely inactive, but tracks are present. There is approximately 2,590 feet of direct rail access on the site.

River Access: The site has direct river access but is located adjacent to the Federal Dam and across the river from the lock. There is approximately 1,450 feet of shoreline upstream of the dam that could be developed; there is additional shoreline along the confluence with the Mohawk River.

Surrounding Land Uses: This site is located on a peninsula and is relatively isolated from adjacent sensitive land uses. To the north and the east of the site is the Hudson River; to the west is the American Ref-fuel site, which is currently being developed for office space; and to the south is a public park, which is owned by the village of Green Island.

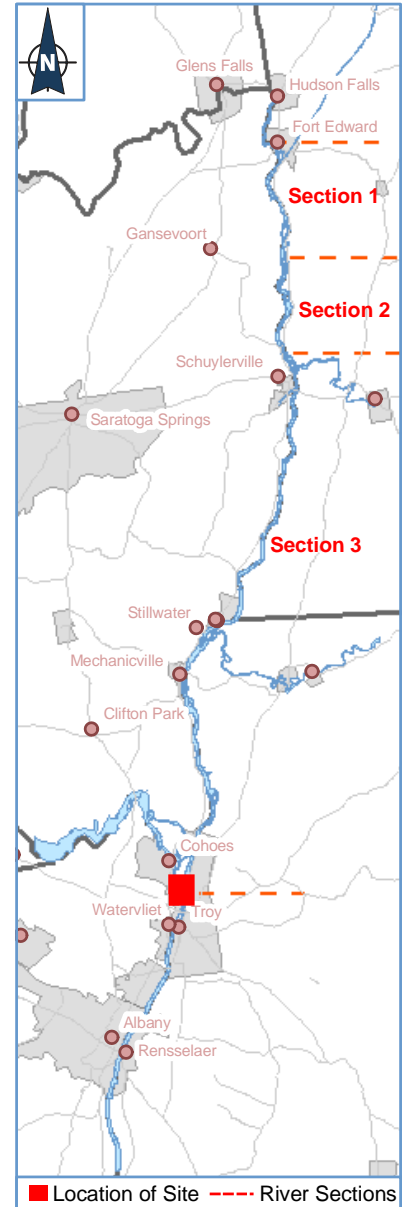
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density:

The site is located in the village of Green Island, in an area of lower population density but in the vicinity of areas of higher population density.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on Tibbits Street.
- **Water Service:** Moderate likelihood due to the presence nearby of industrial and residential properties.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of industrial and residential properties.
- **Communication Service:** High likelihood due to presence of overhead power lines on Tibbits Street.
- **Electric Transmission Lines/Property:** Proximal to the site.

GREEN ISLAND IDA



Site Location: Tibbits Avenue, Green Island, Albany County, NY

Acreage: 44.2

Number of Parcels: 1

Owner Name/Information:

Village of Green Island IDA

Property Type/Land Use Code:

Manufacturing and Processing

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 561,919/21%

Downstream - 0/0%

Number of Locks/Dams from Site:

Upstream - 6

Downstream - 0

Distance to Center of River Section (miles):

Section 1 - 38.2 (Upstream)

Section 2 - 31.4 (Upstream)

Section 3 - 14.3 (Upstream)

Presence of Rail On Site (Y/N): Y

Edge of Property to Rail (ft): 0

Edge of Property to River (ft): 0

River Frontage (ft): 2,360

Presence of Road On Site (Y/N): Y

Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Troy Slag/Rensselaer IDA Site

Description: This site is located in the city of Troy, on the east side of the Hudson River. The site comprises six parcels, totaling approximately 22.8 acres, and includes property owned by Troy Slag (five parcels) and the Rensselaer County IDA (one parcel). Land use on the site includes active commercial and industrial properties and vacant land, and it is located in an area that is predominantly industrial.

Road Access: Monroe Street runs adjacent to the north end of the site, and East Industrial Parkway runs into the site from Main Street to the south.

Rail Access: The site contains approximately 2,200 feet of direct rail access along the eastern boundary of the site. The rail line appears to be active.

River Access: The site has approximately 1,420 feet of undeveloped river frontage along the western site boundary.

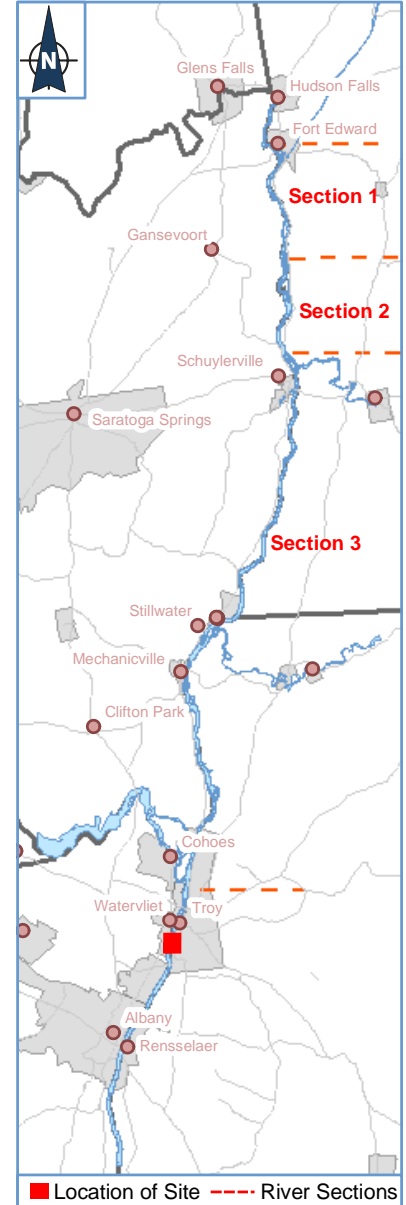
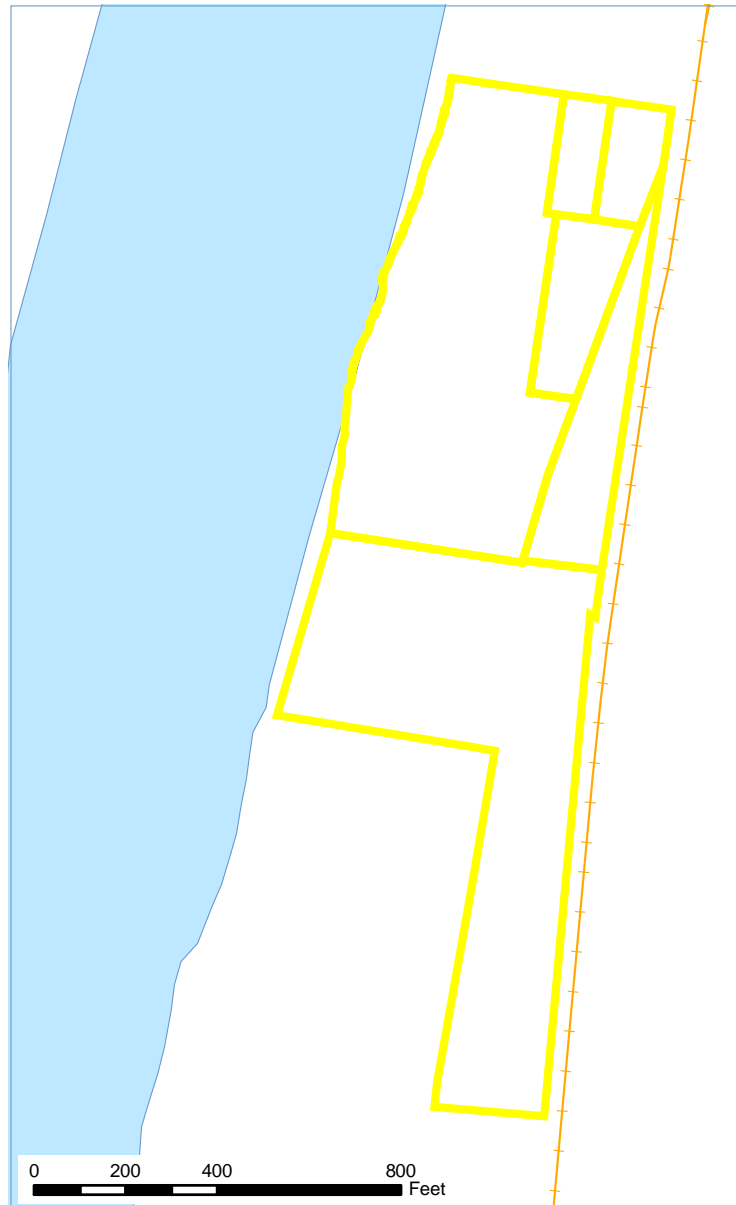
Surrounding Land Uses: Land use in the vicinity of the site is predominantly industrial and commercial facilities. To the north and south of the site are commercial storage, warehouse, and distribution facilities; to the east are industrial manufacturing/processing facilities and commercial storage/warehouse facilities, beyond which are single- and multiple-family residential properties; and to the west is the river.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area classified as industrial, but it is also within an area of higher population density in the city of Troy.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines on Monroe Street.
- **Water Service:** High likelihood due to the presence of manholes on Monroe Street and existing industrial facilities on site and on adjacent properties.
- **Natural Gas Service:** Moderate likelihood due to the presence of existing industrial facilities on site and on adjacent properties.
- **Communication Service:** High likelihood due to presence of overhead power lines on Monroe Street.
- **Electric Transmission Lines/Property:** Proximal to the site.

TROY SLAG/ RENSSELAER IDA



Site Location: Monroe Street / East Industrial Parkway, Troy, Rensselaer County, NY

Acreage: 22.8

Number of Parcels: 6

Owner Name/Information:

Troy Slag Products, Inc.; Rensselaer County IDA

Property Type/Land Use Code:

Manufacturing and Processing; Storage, Warehouse and Distribution Facilities; Vacant Land Located in Industrial Areas; Other Storage

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 561,919/21%

Downstream - 0/0%

Number of Locks/Dams from Site:

Upstream - 7

Downstream - 0

Distance to Center of River Section (miles):

Section 1 - 41.2 (Upstream)

Section 2 - 34.4 (Upstream)

Section 3 - 17.3 (Upstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 0

Edge of Property to River (ft): 0

River Frontage (ft): 1,420

Presence of Road On Site (Y/N): Y

Edge of Property to Road (ft): 0

Due to the presence of "sensitive content," certain data/imagery is unavailable as directed by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Callanan/Rensselaer IDA/City of Troy/King Services Site

Description: This site is approximately 21 acres and is located in the city of Troy, on the east side of the Hudson River (approximate RM 150.8). The site comprises five parcels and includes property owned by Callanan Industries (one parcel), King Services, Inc. (one parcel), the Rensselaer County IDA (one parcel), and the City of Troy (two parcels). The site contains long storage/warehouse-type buildings, a large storage silo, and various debris piles.

Road Access: Main Avenue runs along the northern boundary of the site, and two access roads traverse the site.

Rail Access: There is 1,100 feet of direct rail access and one spur along the eastern boundary of the site. The rail line appears to be active.

River Access: The site has approximately 1,120 feet of undeveloped river frontage along the western site boundary.

Surrounding Land Uses: Land uses in the vicinity of the site include a mixture of residential, commercial, and industrial uses. To the north of the site is an active Rensselaer County government parcel, and to the south are manufacturing and processing facilities. Recreational facilities (stadium, arenas, armories, field houses) are located near the northeast corner of the site.

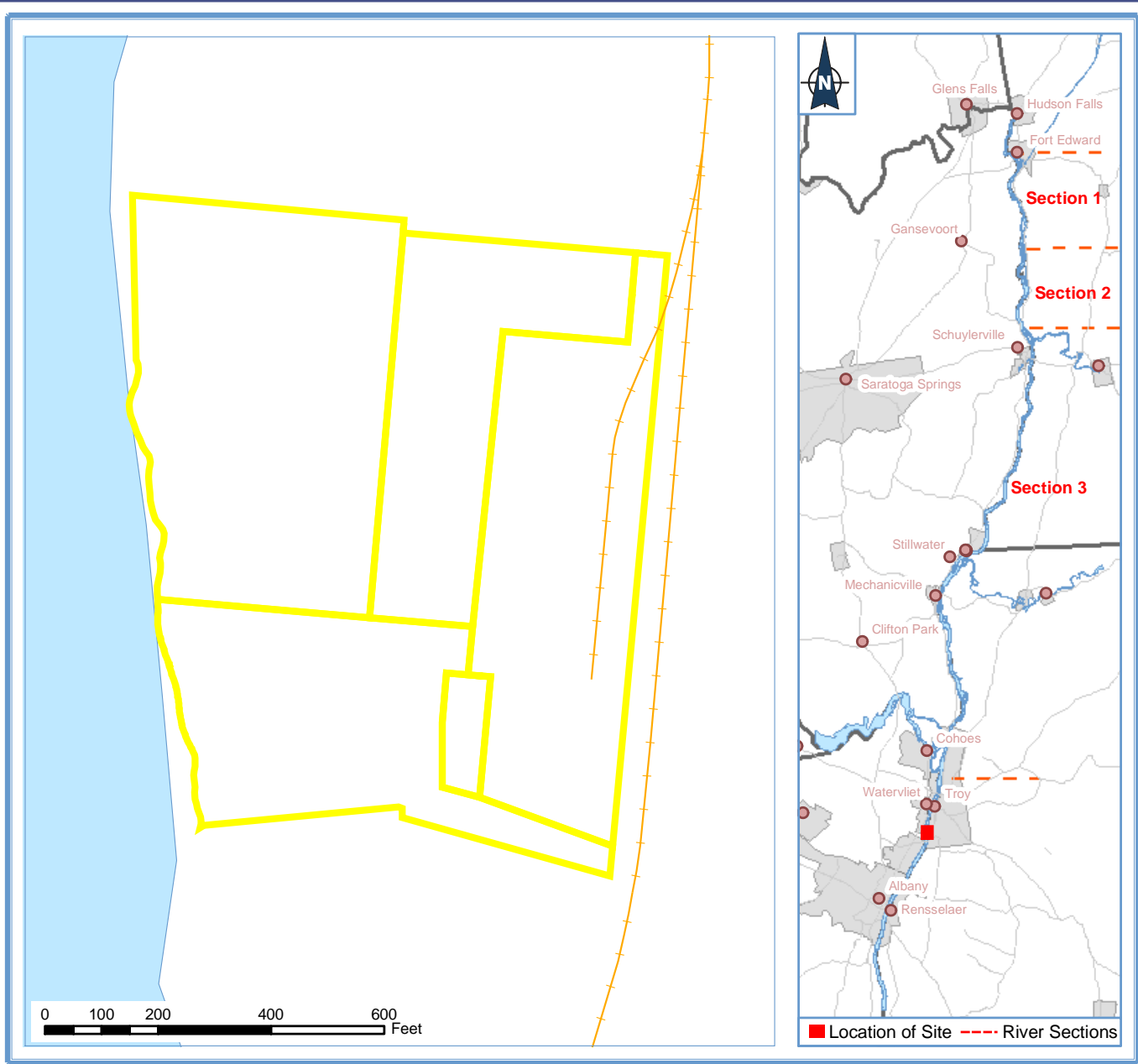
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of higher population density in the city of Troy.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines on Main Avenue.
- **Water Service:** High likelihood due to the presence of manholes on Burden Avenue.
- **Natural Gas Service:** Moderate likelihood due to the presence of industrial facilities on adjacent properties.
- **Communication Service:** High likelihood due to presence of overhead power lines on Main Avenue.
- **Electric Transmission Lines/Property:** Proximal to the site.

CALLANAN/RENSSELAER IDA/ CITY OF TROY/KING SERVICES

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Site Location: Main Street, Troy, Rensselaer County, NY
Acreage: 21
Number of Parcels: 5
Owner Name/Information: Callanan Industries, Inc.;
 Rensselaer County IDA; City of Troy; King Services, Inc.
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas; Other Storage, Warehouse
 and Distribution Facilities; Manufacturing and Processing
Dredge Areas (Volume CY/Relative Percentage) by Section
Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%
Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%
Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0
Distance to Center of River Section (miles):
 Section 1 - 41.9 (Upstream)
 Section 2 - 35.1 (Upstream)
 Section 3 - 17.9 (Upstream)
Presence of Rail On Site (Y/N): Y
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 1,120
Presence of Road On Site (Y/N): Y
Edge of Property to Road (ft): 0

Due to the presence of "sensitive content,"
 certain data/imagery is unavailable as directed
 by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Town of North Greenbush Site

Description: This site is approximately 8.4 acres and is located in the town of North Green Bush, on the east side of the Hudson River at approximately RM 148.7. This site comprises one parcel (two tracts) and is owned by the town of North Greenbush.

Road Access: There is direct road access to the site, but the road may be unimproved. It appears that a road would have to be constructed along or through a portion of the Rensselaer County property and would then cross Niagara Mohawk property to access the site from the north.

Rail Access: There is approximately 370 feet of direct rail access via the Town of Greenbush property along the eastern boundary of the site.

River Access: The site has approximately 400 feet of river frontage. The shoreline appears to be covered with riprap.

Surrounding Land Uses: The site is in a relatively undeveloped area, but it is also classified as industrial property by Rensselaer County. The site is abutted to the north by a Niagara Mohawk transmission line corridor, which appears to contain a high-tension line that crosses the river. Immediately north of the Niagara Mohawk property is a sewage treatment facility operated by Rensselaer County. To the east of the site are undeveloped and forested properties, and to the east and south is property owned by Rensselaer Polytechnic Institute.

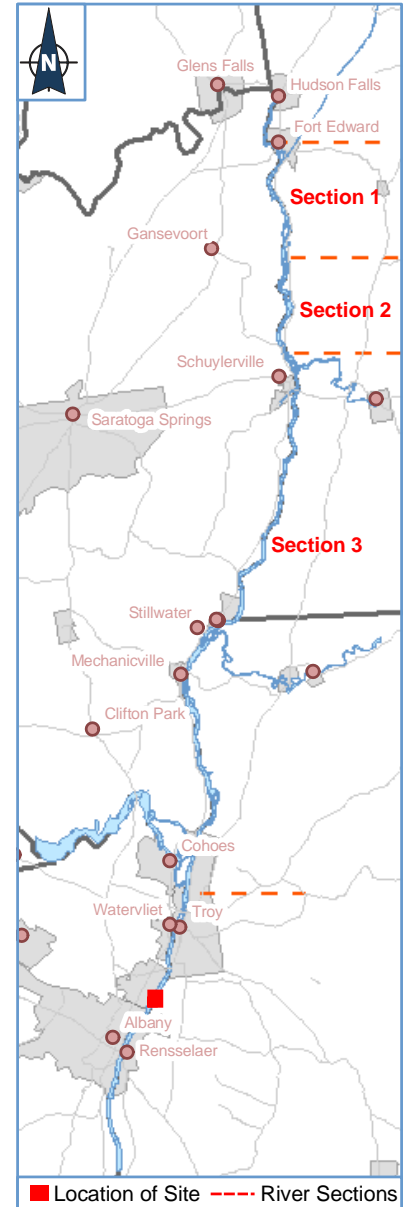
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density:

The site is located in an area of lower population density, approximately 0.75 mile north-northeast of the city of Rensselaer and 1 mile south-southeast of the city of Troy.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence directly to the east of developed property owned by Rensselaer Polytechnic Institute.
- **Water Service:** High likelihood due to presence nearby of developed property owned by Rensselaer Polytechnic Institute.
- **Natural Gas Service:** High likelihood due to presence nearby of developed property owned by Rensselaer Polytechnic Institute.
- **Communication Service:** High likelihood due to presence nearby of developed property owned by Rensselaer Polytechnic Institute.
- **Electric Transmission Lines/Property:** Adjacent to the site.

TOWN OF NORTH GREENBUSH



Site Location: River Road, North Greenbush, Rensselaer County, NY
Acreage: 8.4
Number of Parcels: 1
Owner Name/Information:
 Town of North Greenbush
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 43.9 (Upstream)
 Section 2 - 37.1 (Upstream)
 Section 3 - 20 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 50
Edge of Property to River (ft): 0
River Frontage (ft): 400
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 1,350

4. Description of the Preliminary Candidate Sites

Rensselaer Technology Park – A Site

Description: This site is approximately 80 acres, with the majority of the property located in the city of Rensselaer; a small area in the northern portion of the site is located in the town of North Greenbush. This site is on the east side of the river at approximately RM 147.7. This site comprises a single parcel (three tracts) and is owned by Rensselaer Technology Park. The site consists of vacant land located in a commercial area.

Road Access: There is no direct road access to the site except for an unimproved dirt road. The road runs parallel to the rail line and may be a railroad maintenance road. Interstate 90 runs along the south portion of the site, but there is no off-ramp at the site. Washington Avenue intersects Interstate 90 east of the site.

Rail Access: A rail corridor runs parallel to the river through a portion of the site. The rail frontage is approximately 2,380 feet in length.

River Access: The site has 2,335 feet of undeveloped river frontage.

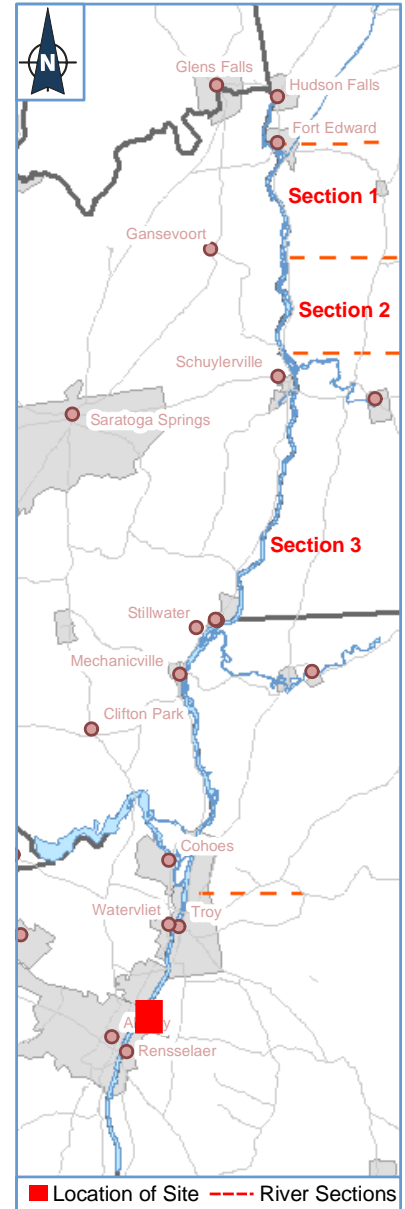
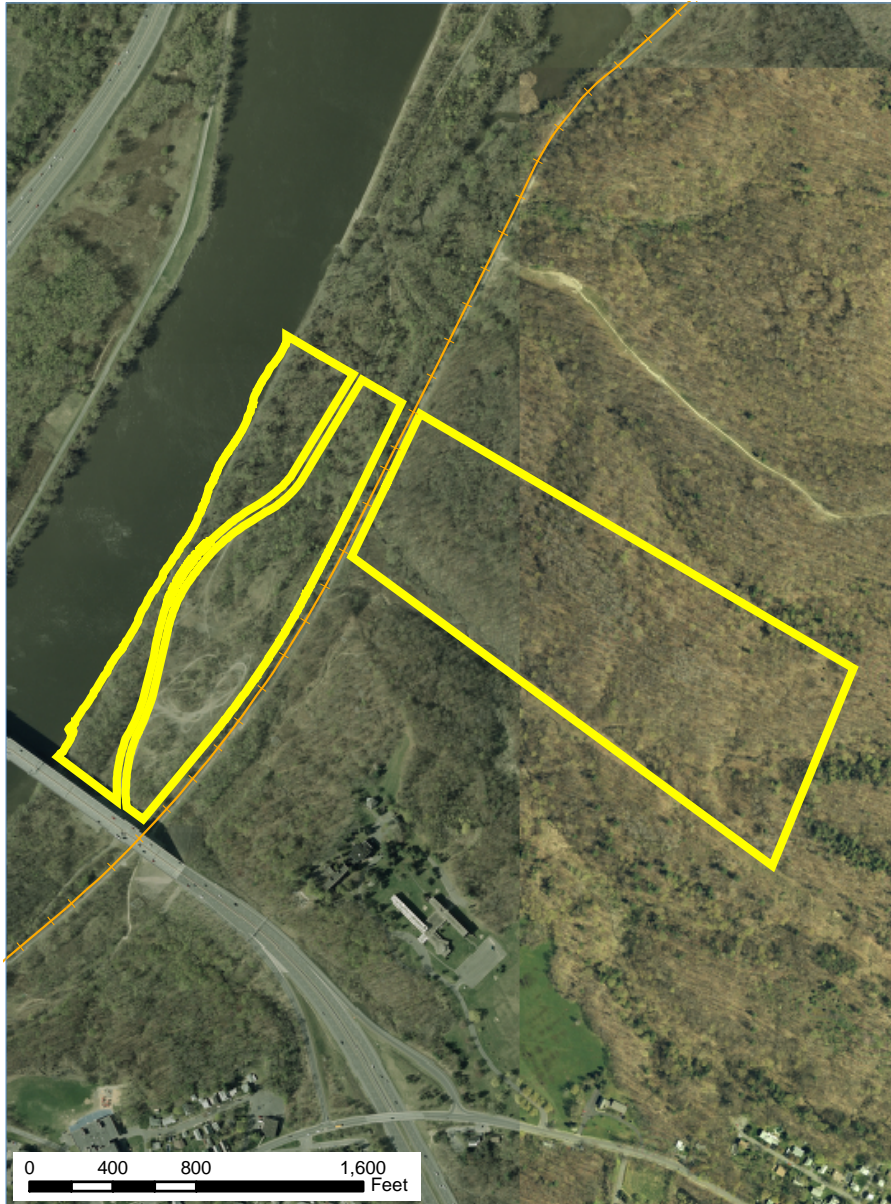
Surrounding Land Use: To the north is a commercial office building; to the east is more than 20 acres of vacant residential property; to the southeast are a religious seminary, a public service telephone communication property (land, buildings, and outside plant), and a RR ROW.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in the city of Rensselaer, in an area of lower population density but adjacent to areas of higher population density.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on Washington Avenue.
- **Water Service:** High likelihood due to the presence of catch basins on Washington Avenue.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of residential properties.
- **Communication Service:** High likelihood due to presence of overhead power lines on Washington Avenue.
- **Communication Transmission Lines/Property:** Adjacent to the site.
- **Electric Transmission Lines/Property:** Transmission lines are located on the southeastern side of the adjacent rail corridor.

RENSSELAER TECHNOLOGY PARK - A



Site Location: 24 River Front, Rensselaer, Rensselaer County, NY
Acreage: 79.8
Number of Parcels: 1
Owner Name/Information:
 Rensselaer Technology Park
Property Type/Land Use Code:
 Vacant Land Located in Commercial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 44.9 (Upstream)
 Section 2 - 38.1 (Upstream)
 Section 3 - 20.9 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 2,335
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

Rensselaer Technology Park – B Site

Description: This site is approximately 13 acres and comprises a single parcel (two tracts) owned by Rensselaer Technology Park. The property occurs on the east side of the river at approximately RM 147.3. The site is currently undeveloped, and there are no on-site structures. The site is a narrow strip of land measuring 310 feet wide and 1,990 feet long.

Road Access: There is no direct road access to this site except for an unimproved road, which connects to Forbes Road from the south. Interstate 90 runs along the northern portion of the site, but there is no off-ramp at the site. Forbes Avenue is located approximately 640 feet southeast of the site. A dirt road runs along the east side of the site.

River Access: The site has 1,990 feet of river frontage.

Rail Access: A rail line runs parallel to the east side of the site for approximately 2,050 feet.

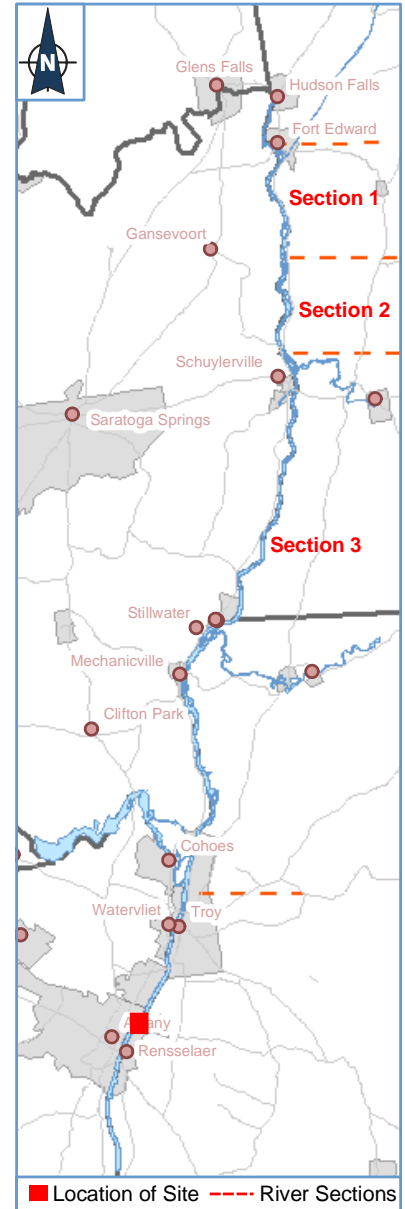
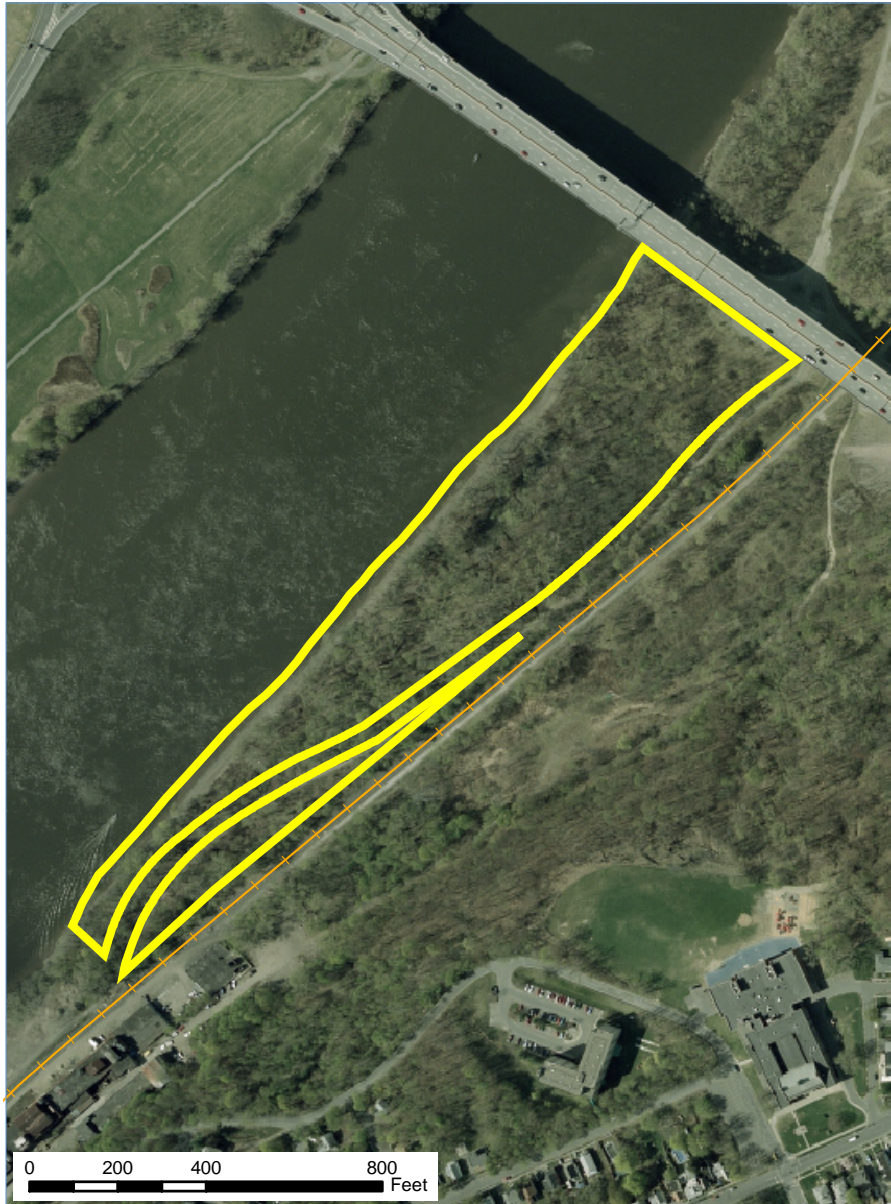
Surrounding Land Uses: To the north and south of the site are vacant, undeveloped commercial properties; to the east is the RR ROW beyond which are public service telephone communication facilities (land, buildings, and outside plant), a school (general, elementary, and secondary), and apartments.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in the city of Rensselaer, in an area of lower population density but adjacent to areas of higher population density.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to presence of overhead power lines on Washington Avenue.
- **Water Service:** High likelihood due to presence of catch basins on Washington Avenue.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of residential properties and schools.
- **Communication Service:** High likelihood due to presence of overhead power lines on Washington Avenue.
- **Communication Transmission Lines/Property:** Adjacent to the site.
- **Electric Transmission Lines/Property:** Transmission lines are located on the southeastern side of the adjacent rail corridor.

RENSSELAER TECHNOLOGY PARK - B



Site Location: 24 River Front, Rensselaer, Rensselaer County, NY
Acreage: 12.8
Number of Parcels: 1
Owner Name/Information:
 Rensselaer Technology Park
Property Type/Land Use Code:
 Vacant Land Located in Commercial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 45.3 (Upstream)
 Section 2 - 38.5 (Upstream)
 Section 3 - 21.4 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 1,990
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

4. Description of the Preliminary Candidate Sites

State of New York/First Rensselaer/Marine Management Site

Description: This site is approximately 16.6 acres and comprises 17 parcels. Owners include the State of New York, First Rensselaer Corporation, and Marine Management of the Hudson, Inc. The site is located on the east side of the river at approximately RM 146.7 and is undeveloped. There are no structures on the property. Portions of several parcels were formerly underwater.

Road Access: Tracy Street, a residential road, ends at the north edge of the site and provides the only road access to the site. Forbes Avenue connects to Tracy Street from the north. The site is separated from Broadway Avenue, which parallels the east side of site, by residences, residential vacant land, and industrial manufacturing and processing facilities.

River Access: The site has approximately 1,400 feet of river frontage. There are no structures directly along this portion of the shoreline.

Rail Access: There are 2,020 feet of direct access to rail. A rail line parallels the east side of the site, and a railroad bridge crosses the river immediately south of the site. A railroad yard is located south of the site.

Surrounding Land Uses: The site is in the midst of vacant commercial, industrial manufacturing, and single- and multi-family residential properties. To the north is a single-family riverfront house, beyond which is vacant commercial property; to the south are the RR ROW and a train station; and to the east are the RR ROW, industrial manufacturing and processing facilities, vacant residential and commercial properties, and single- and multi-family residential properties.

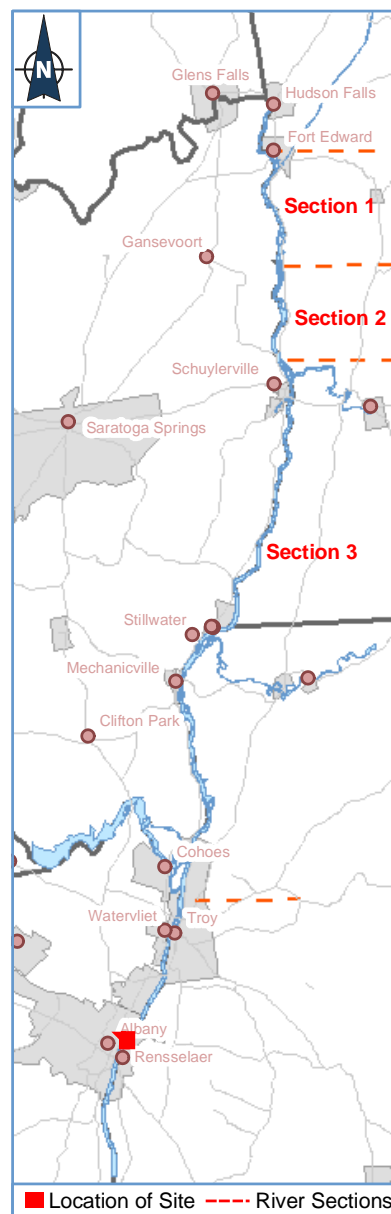
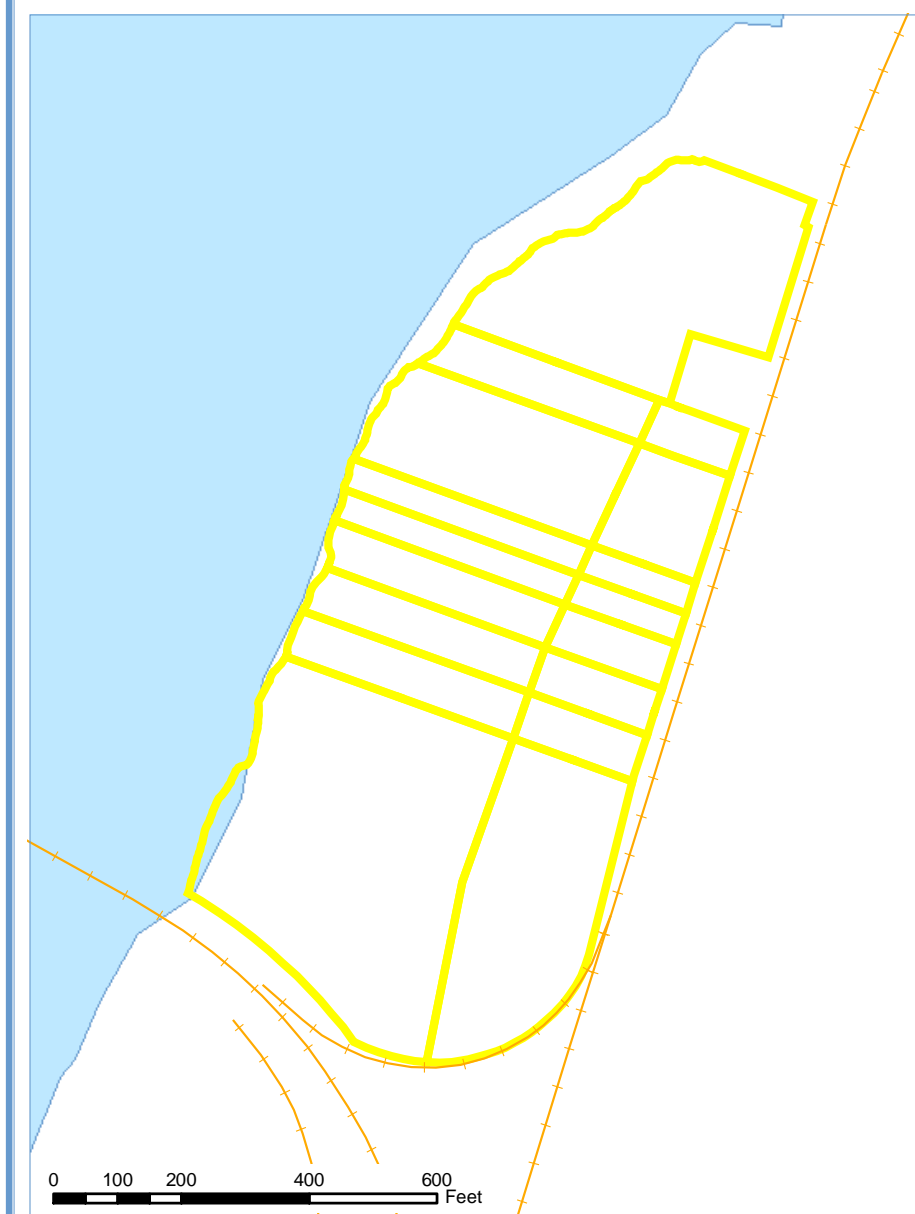
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of higher population density in the city of Rensselaer.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on Tracy Street.
- **Water Service:** High likelihood due to presence of manholes on Tracy Street and City of Rensselaer Water Works property nearby.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of residential properties.
- **Communication Service:** High likelihood due to the presence of overhead power lines on Tracy Street.

STATE OF NEW YORK/FIRST RENSSELAER/ MARINE MANAGEMENT

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Site Location: 2 -16 River Front, Rensselaer, Rensselaer County, NY
Acreage: 16.6
Number of Parcels: 17
Owner Name/Information: Marine Management of the Hudson, Inc.;
 State of New York; First Rensselaer Corp.
Property Type/Land Use Code:
 Vacant Land Located in Commercial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 45.9 (Upstream)
 Section 2 - 39.1 (Upstream)
 Section 3 - 22 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 1,400
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 120

Due to the presence of "sensitive content,"
 certain data/imagery is unavailable as directed
 by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Albany/Rensselaer Port District Commission/BASF Site

Description: This site is located within the city of Rensselaer, on the east side of the river at approximately RM 144.3. The entire site is approximately 122 acres, with a smaller area within the site that is approximately 34 acres that may be available for development. The site comprises two parcels separated by a road. The owner of the riverfront portion is Albany/Rensselaer Port District Commission. The inland portion is owned by BASF Wyandotte Corporation. A majority of the site is developed and includes an office building, loading docks, and multiple buildings on paved lots. A portion of the southeast end of the site remains undeveloped.

Road Access: Riverside Avenue runs through the south portion of the site and provides direct access. River Road runs parallel to the east side of the site.

River Access: The site has excellent riverfront access. There is an approximately 1,070-foot-long loading dock and an undeveloped mooring basin (approximately 1,280 feet long by approximately 420 feet wide) on the south end of the site.

Rail Access: A rail spur runs directly into the site, and two railroad lines run parallel to the east side of the site. There is approximately 2,525 feet of direct rail access.

Surrounding Land Uses: The surrounding land use is predominantly commercial and industrial properties, with multiple, single-family residential properties and a recreational property (a ball-park) north of the industrial manufacturing buildings north of the site. There is also a commercial strip consisting of trucking terminals; storage, warehouse, and distribution facilities; a large retail food store; and miscellaneous services. East of the site is a garage building and a RR ROW. Single-family homes and vacant residential properties are located east of the railroad. South of the site are industrial buildings and possibly a junkyard and industrial fuel terminals.

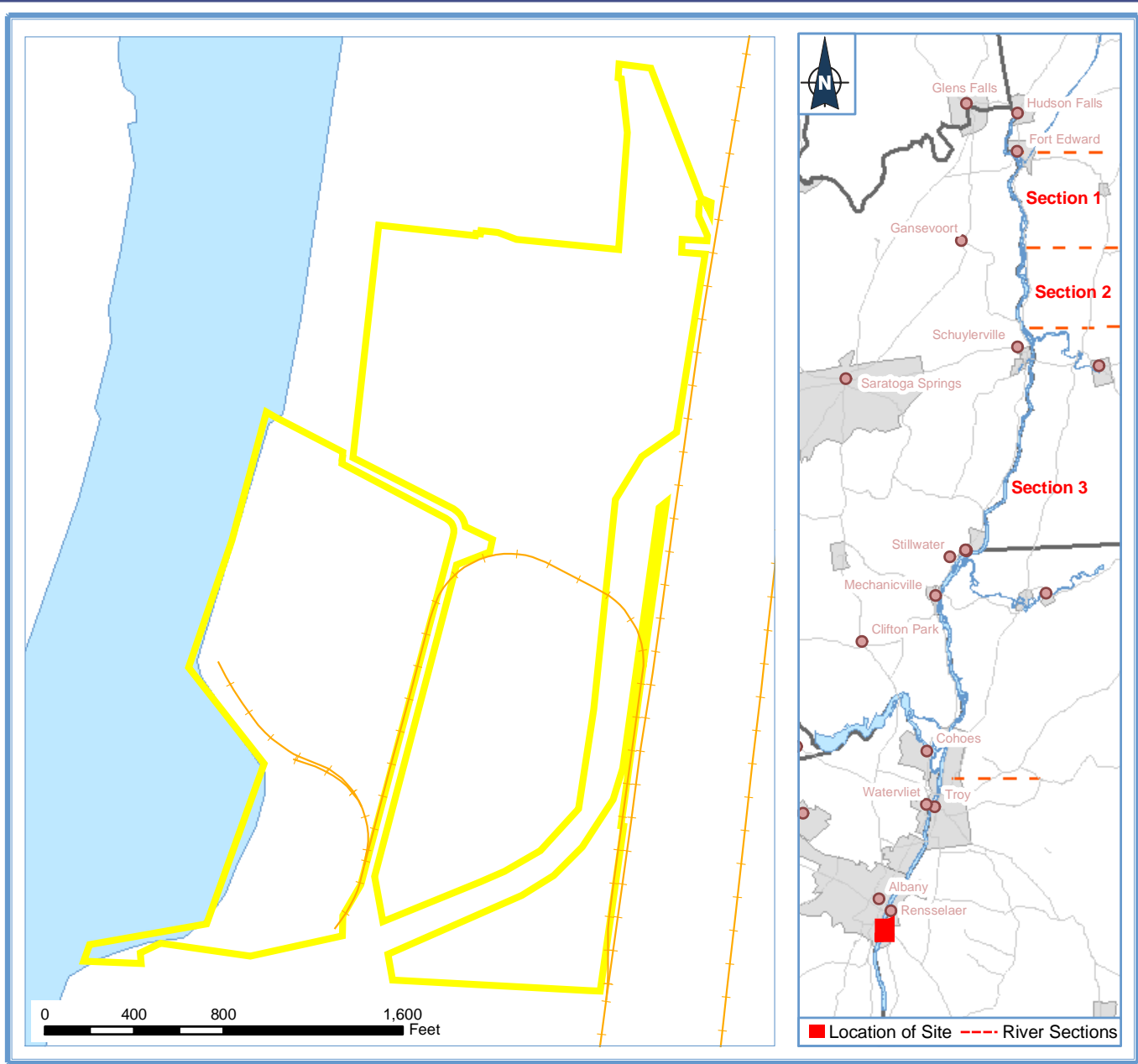
Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of higher population density in the city of Rensselaer.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on River Road.
- **Water Service:** High likelihood due to the presence of catch basins on River Road.
- **Natural Gas Service:** Moderate likelihood due to the presence of existing on-site structures and nearby industrial and residential properties.
- **Communication Service:** High likelihood due to the presence of overhead power lines on River Road.
- **Electric Transmission Lines/Property:** Proximal to the site.

ALBANY RENSSELAER PORT DISTRICT COMMISSION/BASF

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Site Location: 36 Riverside Ave., Rensselaer, Rensselaer County, NY
Acreage: 121.7
Number of Parcels: 2
Owner Name/Information:
 BASF Wyandotte Corp.; Albany-Rensselaer Port District Commission
Property Type/Land Use Code:
 Manufacturing and Processing; Piers, Wharves, Docks
 and Related Facilities

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):

Section 1 - 48.3 (Upstream)
Section 2 - 41.5 (Upstream)
Section 3 - 24.4 (Upstream)

Presence of Rail On Site (Y/N): Y
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 2,350
Presence of Road On Site (Y/N): Y
Edge of Property to Road (ft): 0

Due to the presence of "sensitive content," certain data/imagery is unavailable as directed by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Bray Energy Site

Description: This site is approximately 19 acres and comprises one parcel. The site is located in the City of Rensselaer, on the east side of the river at approximately RM 144.0. There is one owner, Bray Terminals, Inc. The site is classified gasoline, fuel, oil, liquid petroleum storage and/or distribution. The portion of the site closest to the river is developed and contains various buildings and petroleum storage tanks. The easterly portion of the site is undeveloped with no structures.

Road Access: There is direct access to Riverside Avenue, which bisects the property. An unimproved road also intersects the property.

River Access: There is direct river access to the site; the length of available river frontage is approximately 450 feet.

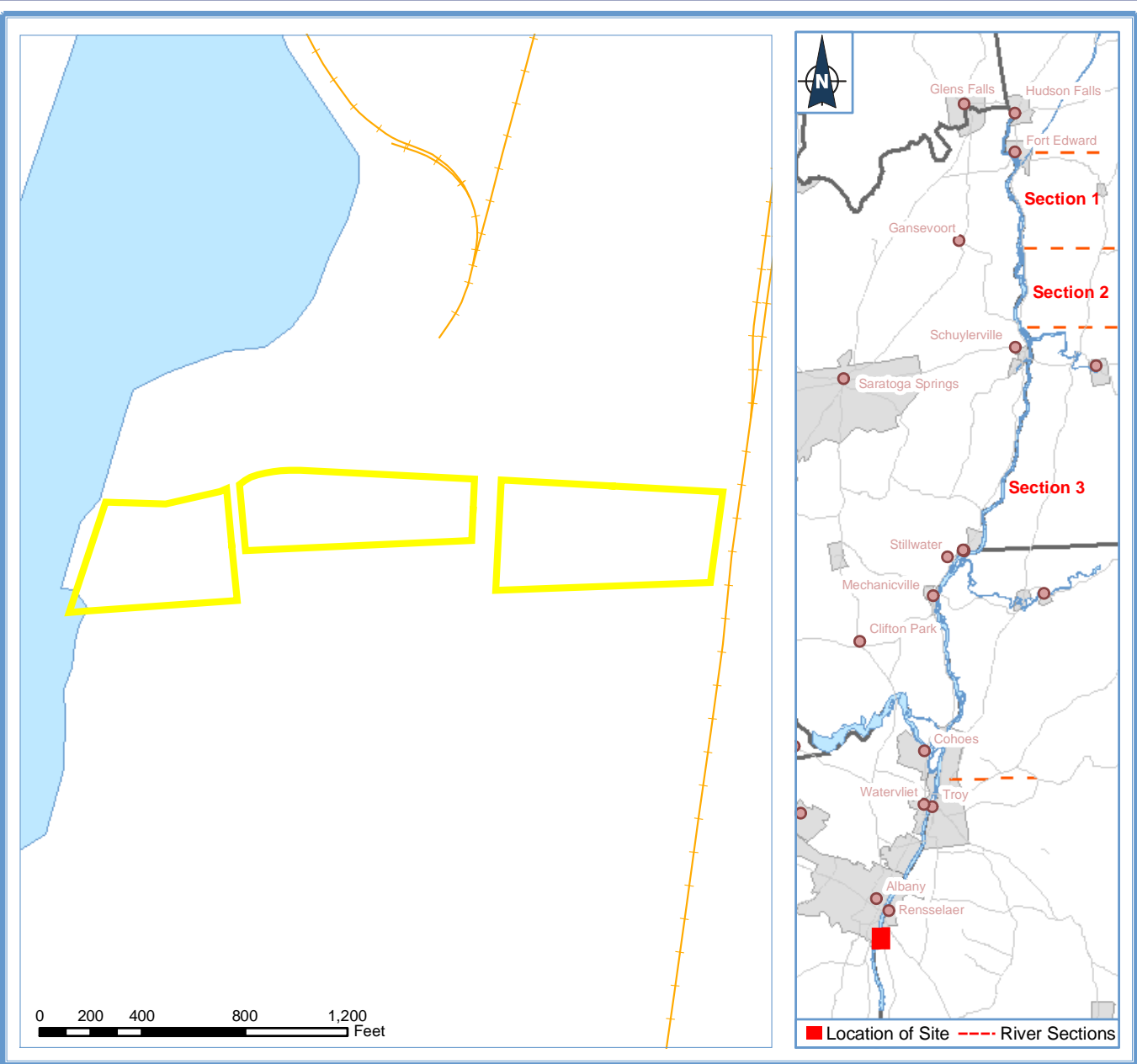
Rail Access: One thin linear parcel approximately 40 feet in width separates the site from direct railroad access.

Surrounding Land Uses: The majority of the site is surrounded by industrial and commercial properties, except for several vacant rural properties east of the site. To the north of the site are fuel/liquid petroleum storage and/or distribution facilities and vacant industrial land; to the east are vacant rural properties, vacant industrial land and storage, warehouse, and distribution facilities; to the south are fuel/liquid petroleum storage and/or distribution facilities, and to the west is the Hudson River.

Site location relative to municipal boundaries or areas of higher settlement densities: The site is located in an area of higher population density in the town of East Greenbush.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on Riverside Avenue.
- **Water Service:** Moderate likelihood due to the presence nearby of industrial and residential properties.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of industrial and residential properties.
- **Communication Service:** High likelihood due to the presence of overhead power lines on Riverside Avenue.
- **Electric Transmission Lines/Property:** Proximal to the site.



Site Location: 49 Riverside Ave., Rensselaer, Rensselaer County, NY
Acreage: 18.7
Number of Parcels: 1
Owner Name/Information:
 Bray Terminals, Inc.
Property Type/Land Use Code:
 Gasoline, Fuel, Oil, Liquid Petroleum Storage and/or Distribution

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 48.6 (Upstream)
 Section 2 - 41.8 (Upstream)
 Section 3 - 24.7 (Upstream)

Presence of Rail On Site (Y/N): N
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 450
Presence of Road On Site (Y/N): Y
Edge of Property to Road (ft): 0

Due to the presence of "sensitive content," certain data/imagery is unavailable as directed by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Bray/Petroleum/Gorman/Trans Montaigne Site

Description: This site is approximately 29 acres and comprises five parcels. The site is located in the city Rensselaer and town of East Greenbush, on the east side of the river (approximate RM 144.0). There are four owners: Bray Terminals, Inc., Petroleum Fuel and Terminals, Gorman Terminals LLC, and Trans Montaigne Terminal. The Gorman Terminals parcel is vacant industrial land. The site is undeveloped with no structures.

Road Access: Riverside Avenue runs approximately 770 feet west of the site, and there is an unimproved road adjacent to the western border of the site. This road connects with Riverside Avenue. River Road parallels the east edge of the site and is separated from the site by a rail line.

River Access: There is no riverfront access. The site is approximately 1,600 feet from the river.

Rail Access: The railroad runs parallel to the east side of the site. There are 1,650 feet of direct railroad access.

Surrounding Land Uses: The majority of the site is surrounded by industrial and commercial properties, except for several residential properties east of the site. To the north of the site is an industrial building and a junkyard; to the east are trucking terminals, auto sales facilities, residential houses and trailers, and abandoned agricultural land; to the south are vacant industrial properties with no structures; and to the west are fuel/liquid petroleum storage and/or distribution facilities (tank farms all along western edge).

Site location relative to municipal boundaries or areas of higher settlement densities: The site is located in an area of higher population density in the city of Rensselaer.

Presence of Utility Services/Infrastructure:

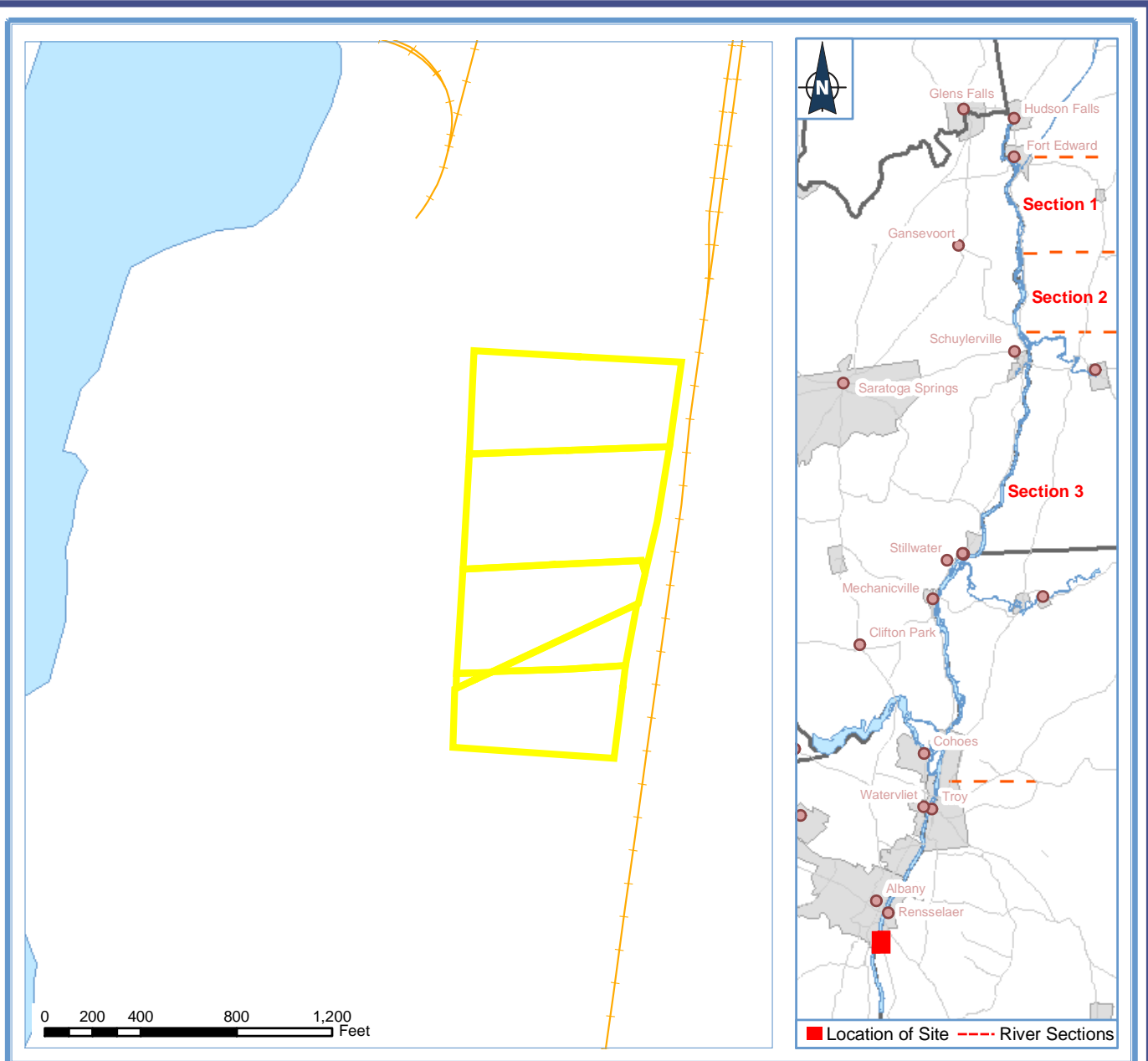
- **Electric Service:** High likelihood due to the presence of overhead power lines on Riverside Avenue.
- **Water Service:** High likelihood due to the presence of catch basins on River Road.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of industrial and residential properties.

Communication Service: High likelihood due to the presence of overhead power lines on Riverside Avenue.

Electric Transmission Lines/Property: Proximal to the site.

BRAY/PETROLEUM/GORMAN/ TRANSMONTAIGNE

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Site Location: 49 - 58 Riverside Ave, Rensselaer & East Greenbush,
Rensselaer County, NY

Acreage: 29.2

Number of Parcels: 5

Owner Name/Information: Transmontaigne Terminal;
Petroleum Fuel & Terminal; Gorman Terminals; Bray Terminal

Property Type/Land Use Code:

Vacant Land Located in Industrial Areas; Gasoline, Fuel, Oil,
Liquid Petroleum Storage and/or Distribution

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 561,919/21%

Downstream - 0/0%

Number of Locks/Dams from Site:

Upstream - 7

Downstream - 0

Distance to Center of River Section (miles):

Section 1 - 48.6 (Upstream)

Section 2 - 41.8 (Upstream)

Section 3 - 24.7 (Upstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 0

Edge of Property to River (ft): 980

River Frontage (ft): 0

Presence of Road On Site (Y/N): Y

Edge of Property to Road (ft): 460

Due to the presence of "sensitive content,"
certain data/imagery is unavailable as directed
by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

Norwest Site

Description: This site is approximately 30 acres and comprises one parcel. The site is located in the town of East Greenbush, on the east side of the river approximately at RM 143.5. There is one owner, Norwest Corporate. The site is classified vacant land located in industrial areas. The site is undeveloped with no structures.

Road Access: There is direct access to Riverside Avenue, which runs along the easterly side of the property.

River Access: There is direct river access to the site; the length of available river frontage is approximately 970 feet.

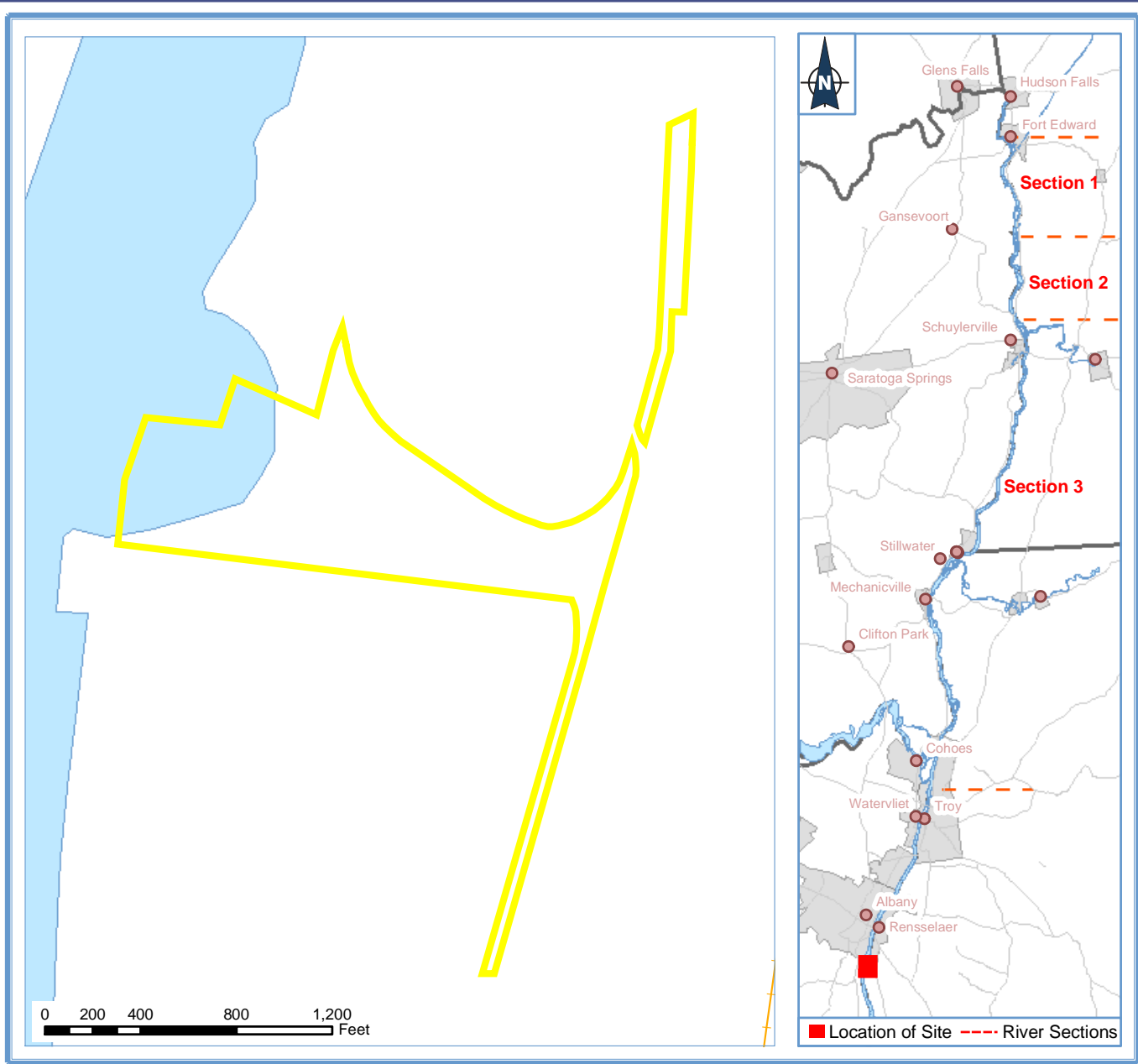
Rail Access: Rail is not adjacent to the site. At the closest point, rail is located approximately 860 feet east of the site.

Surrounding Land Uses: The majority of the site is surrounded by industrial and commercial properties. To the north of the site is an industrial building and a junkyard; to the east are trucking terminals, auto sales facilities, residential houses and trailers, and abandoned agricultural land; to the south are fuel/liquid petroleum storage and/or distribution facilities (tank farms all along western edge), and to the west is the Hudson River.

Site location relative to municipal boundaries or areas of higher settlement densities: The site is located in an area of higher population density in the city of Rensselaer.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on Riverside Avenue.
- **Water Service:** Moderate likelihood due to the presence nearby of industrial and commercial properties.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of industrial and commercial properties.
- **Communication Service:** High likelihood due to the presence of overhead power lines on Riverside Avenue.
- **Electric Transmission Lines/Property:** Proximal to the site.



Site Location: Riverside Avenue Extension, East Greenbush,
 Rensselaer County, NY

Acreage: 30.0

Number of Parcels: 2

Owner Name/Information:
 Norwest Corporate

Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 561,919/21%

Downstream - 0/0%

Number of Locks/Dams from Site:

Upstream - 7

Downstream - 0

Distance to Center of River Section (miles):

Section 1 - 49.1 (Upstream)

Section 2 - 42.3 (Upstream)

Section 3 - 25.2 (Upstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 850

Edge of Property to River (ft): 0

River Frontage (ft): 970

Presence of Road On Site (Y/N): N

Edge of Property to Road (ft): 0

Due to the presence of "sensitive content,"
 certain data/imagery is unavailable as directed
 by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

OG Real Estate Developers Site

Description: This site is approximately 94 acres and comprises two parcels. The site is located on the west side of the river at approximately RM 142.8. One of the parcels is owned by OG Real Estate Developers and the other is owned by Niagara Mohawk Power Corporation. Both parcels are vacant industrial land. The land is barren with some shrub vegetation and exposed surfaces.

Road Access: River Road and Old River Road parallel the western edge of the site but site access is limited as it is separated from the local roads by railroad tracks and parcels that parallel the roads. There is a small area in the southwest corner of the site that is adjacent to River Road.

Rail Access: The railroad directly borders the entire western edge of the site. There are approximately 3,370 feet of direct access.

River Access: There are approximately 2,500 feet of riverfront access.

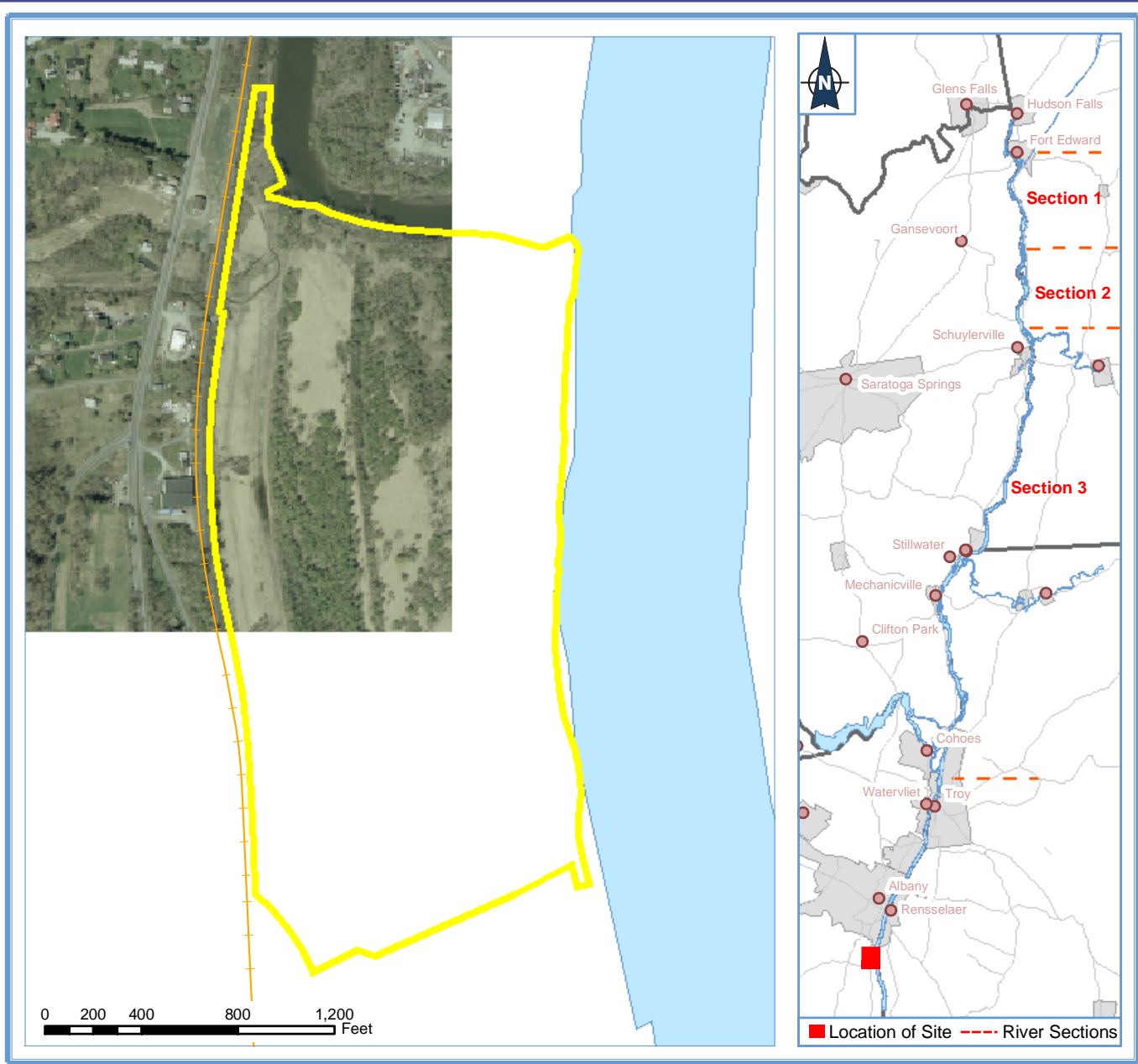
Surrounding Land Uses: Most of the site is surrounded by industrial property. To the north is Normans Kill (Island Creek), beyond which is vacant industrial property, other commercial storage and warehouse property, and industrial manufacturing and processing property; to the south are an industrial complex, barren land, a settling basin, and a large building with smoke stacks and large tanks; and to the west are several small parcels, including a single-family residence, vacant residential property, other commercial and storage property, warehouse property, an electric transmission and distribution property, and a RR ROW.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density:

The site is located in an area of lower population density, approximately 1.5 miles south of the city of Albany.

Presence of Utility Services/Infrastructure:

- **Electric Service:** High likelihood due to the presence of overhead power lines on River Road.
- **Water Service:** Moderate likelihood due to the presence nearby of industrial properties.
- **Natural Gas Service:** Moderate likelihood due to the presence nearby of industrial properties.
- **Communication Service:** High likelihood due to presence of overhead power lines on River Road.
- **Electrical Transmission Lines/Property:** Proximal to the site.



Site Location: River Road, Bethlehem, Albany County, NY
Acreage: 93.6
Number of Parcels: 2
Owner Name/Information:
 Niagara Mohawk Power Corporation; OG Real Estate Developers
Property Type/Land Use Code:
 Vacant Land Located in Industrial Areas

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:
 Upstream - 1,562,236/59%
 Downstream - 0/0%

Section 2:
 Upstream - 525,850/20%
 Downstream - 0/0%

Section 3:
 Upstream - 561,919/21%
 Downstream - 0/0%

Number of Locks/Dams from Site:
 Upstream - 7
 Downstream - 0

Distance to Center of River Section (miles):
 Section 1 - 49.8 (Upstream)
 Section 2 - 43 (Upstream)
 Section 3 - 25.8 (Upstream)

Presence of Rail On Site (Y/N): Y
Edge of Property to Rail (ft): 0
Edge of Property to River (ft): 0
River Frontage (ft): 2,500
Presence of Road On Site (Y/N): N
Edge of Property to Road (ft): 0

Due to the presence of "sensitive content," certain data/imagery is unavailable as directed by the NYS Office for Public Security.

4. Description of the Preliminary Candidate Sites

P&M Brickyard LLC Site

Description: The site comprises one parcel owned by P & M Brick, LLC. Total acreage of the site is 371 acres, of which approximately 116 acres are available for construction. The site is located on the west side of the river (approximately RM 134.1) and is currently an industrial brick manufacturing facility and clay mine. A large portion of the area is developed with buildings, a clay quarry, and other facilities used for manufacturing bricks. The rest of the site is undeveloped land.

Road Access: There is a site access road off State Route 144, which intersects the site. The access road is approximately 21,120 feet (~4 miles) from Exit 22 of Interstate 87.

Rail Access: There is no direct rail to the site. There is a CSX track lease for loading/unloading cars approximately 10,560 feet (~2 miles) north of the site.

River Access: The site has approximately 3,500 feet of frontage along the river. There is a wooden bulkhead along the shoreline, but it is in poor condition and appears to be vegetated. The site formerly had a channel running into the site from the river; this channel has been filled in.

Surrounding Land Uses: Surrounding land uses include an industrial cement company to the north, vacant industrial and commercial property to the west, and the Ravenna-Coeymans Yacht Club to the south.

Site Location Relative to Municipal Boundaries or Areas of Higher Population Density: The site is located in an area of lower population density, approximately 0.5 mile east of the village of Ravenna.

Presence of Utility Services/Infrastructure:

(The following detailed information regarding this site was obtained from “GE/PCB Proposed Site, P&M Brick LLC, Route 144, Coeymans, New York, 12045, Albany County”).

■ Electric Service:

- Supplied by Central Hudson Gas & Electric Corporation
- Line size servicing the site: 15 kV
- Distance to closest substation to service site: 3 miles
- Distance to next closest substation to service site: 10 miles

■ Water Service:

- Supplied by Village of Ravenna
- Size of line: 8 inches
- Pressure at site: approximately 60 psi
- System capacity: 1.4 million gallons per day (MGD)
- Average/peak utilization of water system: 0.75/1.3 MGD
- Excess capacity of water system: 0.4 MGD
- Wastewater/Sewer Service:
 - Supplied by Coeymans/Ravenna Water Pollution Control facility
 - Distance to closest sewer line to service site: 0.13 mile
 - Size of sewer line: 8 inches
 - Sewer expected to be extended as part of NYSDOT bridge replacement project

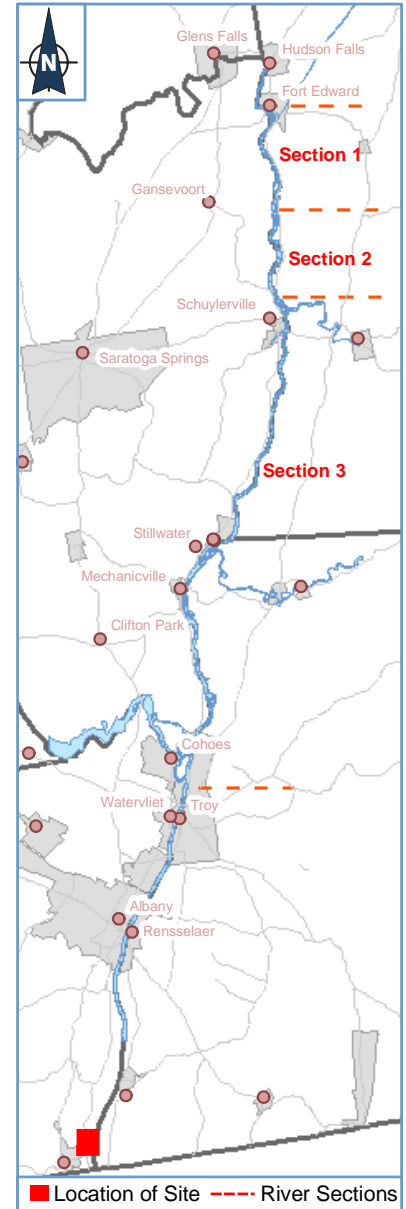
■ Natural Gas Service:

- Supplied by Central Hudson Gas & Electric Corporation
- Distance to closest gas line to service site: on site
- Line size servicing site: 4 inches

■ Communication Service:

- Supplied by State Telephone
- Service: direct buried
- Line: copper twisted pair

P & M BRICKYARD



Site Location: River Road, Coeymans, Albany County, NY

Acreage: 116

Number of Parcels: 1

Owner Name/Information:

P & M Brick, LLC

Property Type/Land Use Code:

Other Mining and Quarrying

Dredge Areas (Volume CY/Relative Percentage) by Section

Section 1:

Upstream - 1,562,236/59%

Downstream - 0/0%

Section 2:

Upstream - 525,850/20%

Downstream - 0/0%

Section 3:

Upstream - 561,919/21%

Downstream - 0/0%

Number of Locks/Dams from Site:

Upstream - 7

Downstream - 0

Distance to Center of River Section (miles):

Section 1 - 58.5 (Upstream)

Section 2 - 51.7 (Upstream)

Section 3 - 34.6 (Upstream)

Presence of Rail On Site (Y/N): N

Edge of Property to Rail (ft): 5000

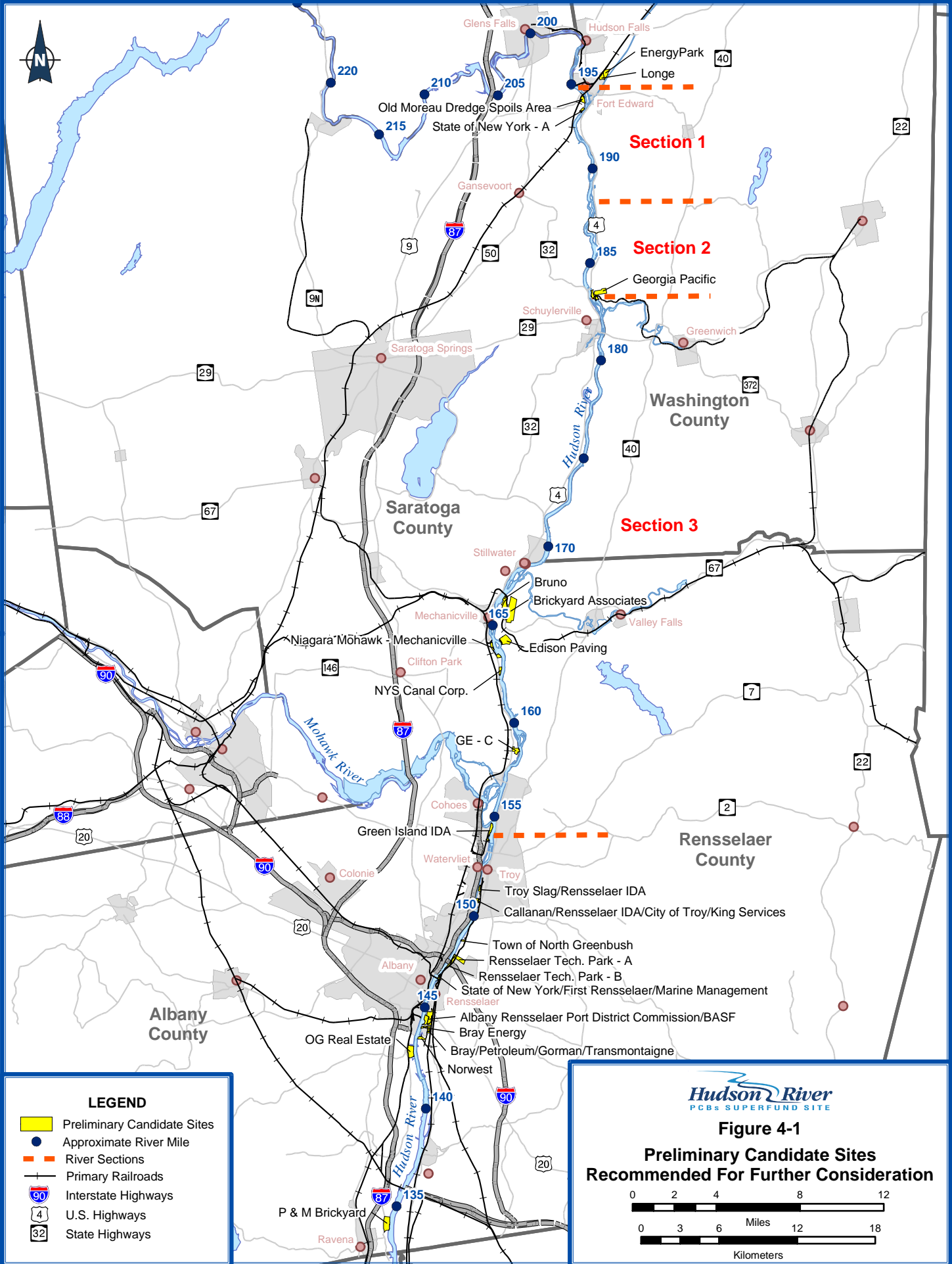
Edge of Property to River (ft): 0

River Frontage (ft): 3370

Presence of Road On Site (Y/N): Y

Edge of Property to Road (ft): 0

Due to the presence of "sensitive content," certain data/imagery is unavailable as directed by the NYS Office for Public Security.



5

Next Steps in the Facility Siting Process

The issuance of this Facility Siting Update Report (No. 1) marks an important step within the process of facility siting by summarizing the steps involved in the identification of the PCSs and making this information available to the public. Public forums will be held in June 2003 to provide interested citizens with the opportunity to familiarize themselves with the process of identifying PCSs and to ask EPA questions. It is important to note that while potential sites are now being identified for the construction and operation of one or more sediment processing/transfer facilities, additional evaluations will occur before sites are selected.

The following figure (Figure 5-1) summarizes the next steps in the facility siting process. After public review of the identification of the PCSs, both Group 1 and Group 2 siting criteria will be applied. Group 2 siting criteria, as presented in the Concept Document, include quality of life concerns and avoiding and minimizing impacts to local communities and other resources. Group 2 criteria are therefore intended to identify sensitive resources near a potential site; cultural resources; existing and historic land uses; documented rare or unique ecological communities; threatened and endangered species; floodplains and floodways; and wetlands. Group 2 siting criteria also include considering the geology and/or surface features of potential sites, the ease of purchasing land, and land ownership.

Once Group 2 criteria have been applied and additional sites have been filtered from further consideration, a list of Final Candidate Sites (FCSs) will be released for public review. Following that, Group 3 criteria will be developed from site-specific investigations and applied to develop a list of Recommended Site(s), which will be provided in the Draft Facility Siting Report released for final public review and comment.

Upon finalizing the Facility Siting Report, a site, or sites, will be selected for the Phase 1 dredging activities. At some later date a site, or sites, may be selected for Phase 2 dredging if additional sites are determined to be necessary. Site(s) selected for Phase 1 and Phase 2 dredging will be selected from the list of the Recommended Sites.

5. Next Steps in the Facility Siting Process

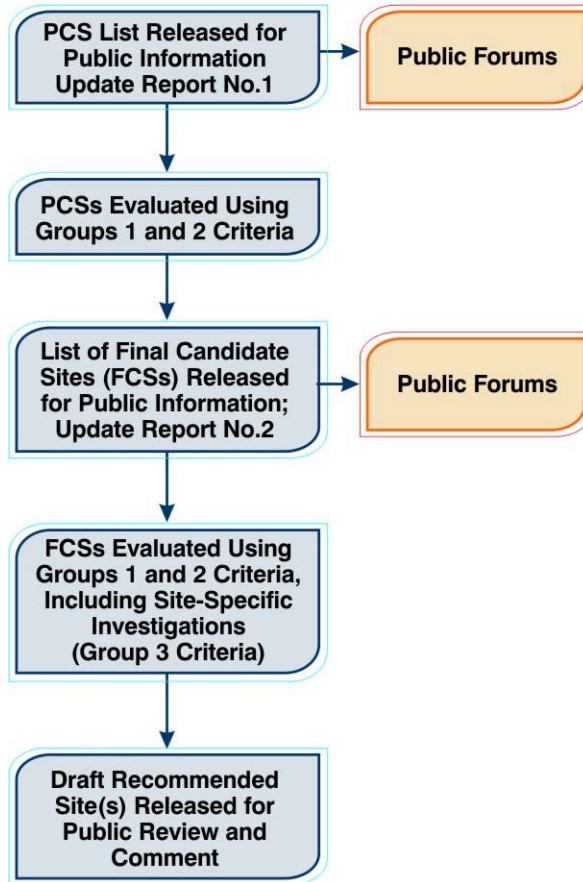


Figure 5-1 Next Steps in Facility Siting

6

References

TAMS Consultants, Inc., January 2001, Memorandum on Sediment Transfer and Processing Sites, New York, New York.

United States Environmental Protection Agency (USEPA), 2000, *Hudson River PCBs Reassessment RI/FS Phase 3 Report: Feasibility Study (FS)*.

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_____, 2002a, Record of Decision. Hudson River PCBs Site, New York, New York.

A

Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

A.1 County Tax Parcel/Property Classification Information

Tax parcel information in electronic format was received from each county in the study area (Rensselaer, Washington, Saratoga, and Albany). The electronic format consisted of ArcGIS files (shapefiles) or computer-assisted drafting and design (CADD) files converted to ArcGIS format. The shapefiles were projected to UTM Zone 18, NAD 83 (units in meters) to maintain consistency with all other datasets. The parcel information was from 2001 or 2002, depending upon which year it was last updated. Rensselaer County and Saratoga County data were last updated in 2002; Washington County and Albany County data were last updated in 2001.

The tax parcel data provided a number of different characteristics (attributes) of various parcels (i.e., area, perimeter, owner). Because the counties maintained different types of data in their parcel databases and used different naming conventions for their database fields, it was determined that key attribute data would be included in a merged parcel dataset. The individual municipal shapefiles for each county were merged together, and attribute table field names were changed (see Table A-1).

Table A-1 The *Parcel_ene* Database Field Names and Associated Field Names for Each County

Parcel_ene Field Name	Rensselaer County Field Name	Washington County Field Name	Saratoga County Field Name	Albany County Field Name
Area	Area	Area	-	-
Perimeter	Perimeter	Perimeter	-	-
Swiscode	-	Swiscode	(calculated)	Swis
Sbl	(concatenation)	Sbl	(calculated)	Pin_Sbl
Swis_sbl	-	Swis_sbl	Parcel_key	(concatenation)
Owner_1	Owner_1	(concatenation)	Own_name_1	Owner1
Owner_2	Owner_2	Ownersecon	Own_name_2	Owner2
Street	Street	(concatenation)	Street	Address1
Citystate	Citystate	(concatenation)	City_state	City_state
Zip	(concatenation)	Ownerzipco	(concatenation)	(concatenation)
Printkey	Taxmapid	Parprintke	Print_key	Print_key
Parcelno	Parcelnu	Parlocstno	Addrss_num	Loc_num
Parcelloc	Parcelloc	Parlocstna	Addrss_nam	Loc_name
Propclass	Crpropclas	Asspropcla	New_prop	Prop_class
Landav	Cryrland	Asslandav	Cu_land_av	-
Totav	Cryrtotal	Astute	Cu_total_a	-
Desc1	Descline1	Assdesc1	Narrat_1	-
Desc2	Descline2	Assdesc2	Narrat_2	-
Desc3	Descline3	Assdesc3	Narrat_3	-
Gis_acres	(calculated)	(calculated)	(calculated)	(calculated)

* (concatenation) indicates that several fields are being combined to attribute the data field

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

Parcels within the counties are assigned specific property classification codes. These property classification codes are based on the New York State Office of Real Property Services (NYSORPS) system, which developed the uniform classification system for use in assessment administration in New York State. The property classification codes indicate the land use classification for a given parcel. There are approximately 296 property code classifications provided by NYSORPS.

In order to satisfy the intention of EPA to site a sediment processing/transfer facility within areas that are currently coded as industrial or commercial, specific property classification codes were selected as being suitable for the sediment processing/transfer facility (see Table A-2). These codes were selected in order to focus the siting efforts in industrial, commercial, and vacant land areas and to therefore minimize the potential for impacts to residential and community-oriented land uses.

Table A-2 NYSORPS Classification Codes Selected for Use in the Preliminary Candidate Site Selection Process

Description
Vacant Land (NYSORPS Class 300)
Rural (Subclass 320)
Other Rural Vacant Lands (Subclass 323)
Vacant Land Located in Commercial Areas (Subclass 330)
Commercial Vacant Land with Minor Improvements (Subclass 331)
Vacant Land Located in Industrial Areas (Subclass 340)
Industrial Vacant Land with Minor Improvements (Subclass 341)
Urban Renewal or Slum Clearance (Subclass 350)
Public Utility Vacant Land (Subclass 380)
Commercial (NYSORPS Class 400)
Storage, Warehouse, and Distribution Facilities (Subclass 440)
Gasoline, Fuel, Oil, Liquid Petroleum Storage and/or Distribution (Subclass 441)
Bottled Gas, Natural Gas Facilities (Subclass 442)
Grain and Feed Elevators, Mixers, Sales Outlets (Subclass 443)
Lumber Yards, Sawmills (Subclass 444)
Coal Yards, Bins (Subclass 445)
Cold Storage Facilities (Subclass 446)
Trucking Terminals (Subclass 447)
Piers, Wharves, Docks and Related Facilities (Subclass 448)
Other Storage, Warehouse, and Distribution Facilities (Subclass 449)
Junkyards (Subclass 475)
Industrial (NYSORPS 700)
Manufacturing and Processing (Subclass 710)
Mining and Quarrying (Subclass 720)
Sand and Gravel (Subclass 721)

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

Table A-2 NYSORPS Classification Codes Selected for Use in the Preliminary Candidate Site Selection Process

Description
Limestone (Subclass 722)
Trap Rock (Subclass 723)
Salt (Subclass 724)
Iron and Titanium (Subclass 725)
Talc (Subclass 726)
Lead and Zinc (Subclass 727)
Gypsum (Subclass 728)
Other (Subclass 729)
Wells (Subclass 730)
Oil - Natural Flow (for production) (Subclass 731)
Oil - Forced Flow (for production) (Subclass 732)
Gas (for production) (Subclass 733)
Junk (Subclass 734)
Water used for Oil Production (Subclass 735)
Gas or Oil Storage Wells (Subclass 736)
Industrial Product Pipelines (Subclass 740)
Gas (Subclass 741)
Brine (Subclass 743)
Petroleum Products (Subclass 744)
Other Industrial Product Pipelines (Subclass 749)
Public Services (NYSORPS 800)
Electric Power Generation – Hydro (Old Property Class) (Subclass 811)
Electric Power Generation – Coal Burning Plant (Old Property Class) (Subclass 812)
Electric Power Generation – Oil Burning Plant (Old Property Class) (Subclass 813)
Electric Power Generation – Nuclear Plant (Old Property Class) (Subclass 814)
Electric Power Generation – Gas Burning Plant (Old Property Class) (Subclass 815)
Electric Transmission and Distribution (Old Property Class) (Subclass 817)
Gas Transmission and Distribution (Old Property Class) (Subclass 818)
Flood Control (Subclass 821)
Water Treatment Facilities (Subclass 823)
Waste Disposal (Subclass 850)
Solid Wastes (Subclass 851)
Landfills and Dumps (Subclass 852)
Sewage Treatment and Water Pollution Control (Subclass 853)
Special Franchise Property (Subclass 860)
Electric and Gas (Subclass 861)
Water (Subclass 862)
Pipelines (Subclass 868)
Electric and Gas (Subclass 870)
Electric and Gas Facilities (Subclass 871)

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

Table A-2 NYSORPS Classification Codes Selected for Use in the Preliminary Candidate Site Selection Process

Description
Electric Substation (Subclass 872)
Electric Power Generation Facility - Hydro (Subclass 874)
Electric Power Generation Facility - Fossil Fuel (Subclass 875)
Electric Power Generation Facility - Nuclear (Subclass 876)
Electric Power Generation Facility - Other Fuel (Subclass 877)
Electric and Gas Transmission Facilities (Subclass 880)
Electric Transmission Improvement (Subclass 882)
Gas Transmission Improvement (Subclass 883)
Electric Distribution - Outside Plant Property (Subclass 884)
Gas Distribution - Outside Plant Property (Subclass 885)
Wild, Forested, Conservation Lands, and Public Parks (NYSORPS Class 900)
Hudson River and Black River Regulating District Land (Subclass 950)

As presented in Table A-2, the primary property codes selected for use in the analysis included vacant; industrial; commercial; public services; and wild, forested, conservation lands, and public parks. A total of 77 sub-property codes were selected for use in identifying potential locations for PCSs.

A.1.1 Rensselaer County

Rensselaer County provided ArcView shapefiles for the towns of Schodack, East Greenbush, North Greenbush, and Schaghticoke, the cities of Rensselaer and Troy, and the village of Castleton-on-Hudson. The projection of these shapefiles was New York State Plane Coordinates – Eastern Zone, NAD 83 (units in feet). It should be noted that a small portion of the Town of Brunswick (approximately 350 feet in width) falls within 1 mile of the Hudson River but data were not received from Rensselaer County. The shapefiles that were received were already joined to NYSORPS data. The shapefiles were projected to UTM Zone 18, NAD 83 (units in meters) to maintain consistency with all other datasets. The individual municipal shapefiles were then merged together, and attribute table field names were changed, as indicated in Table A-1.

A.1.2 Washington County

Washington County provided ArcView shapefiles for all municipalities within the county. The projection of these shapefiles was New York State Plane Coordinates – Eastern Zone, NAD 27 (units in feet). The shapefiles were not joined to NYSORPS data. The real property data for all the municipalities were provided in a Microsoft Access database. The Access database contained a separate table for each municipality. Although shapefiles for all municipalities in Washington County were provided, for the purposes of developing the database for facility siting, the towns of Easton, Greenwich, Fort Edward, Argyle, and Kingsbury (i.e., municipalities within 2 miles of the Hudson River in the project area) were in-

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

cluded in the merged parcel dataset. The shapefiles provided by Washington County were joined to their respective real property data tables using the common data field *Swis_sbl*. The joined files were then exported to create a single shapefile that contained all the attribute data. The shapefiles were projected to UTM Zone 18, NAD 83 (units in meters) to maintain consistency with all other datasets. The individual municipal shapefiles were then merged together and attribute table field names were changed as indicated in Table A-1.

A.1.3 Saratoga County

Saratoga County ArcView provided shapefiles for all municipalities within the county. The projection of these shapefiles was New York State Plane Coordinates – Eastern Zone, NAD 27 (units in feet). The shapefiles were not joined to NYSORPS data. The real property data for all the municipalities was provided in a separate .dbf file with each shapefile. Although shapefiles for all municipalities in Saratoga County were provided, for the purposes of developing the database for facility siting, the towns of Halfmoon, Moreau, Northumberland, Saratoga, Stillwater, Waterford, and the city of Mechanicville (i.e., municipalities within 2 miles of the Hudson River in the project area) were included in the merged parcel dataset. The shapefiles provided by Saratoga County were joined to their respective real property data tables using the common data field *Parcel_key*. The joined files were then exported to create a single shapefile that contained all the attribute data. The shapefiles were projected to UTM Zone 18, NAD 83 (units in meters) to maintain consistency with all other datasets. The individual municipal shapefiles were then merged together and attribute table field names were changed as indicated in Table A-1.

A.1.4 Albany County

Albany County ArcView provided shapefiles for all municipalities within the county. The projection of these shapefiles was New York State Plane Coordinates – Eastern Zone, NAD 27 (units in feet). The shapefiles were not joined to NYSORPS data, and that data was not included in the initial delivery. A shapefile containing point features with real property attributes was received on February 4, 2003. In order to migrate attribute data from the point file to the parcel file, a spatial join was performed. Parcel polygons that contained only a single point feature were considered a match and the attribute data was copied to the parcel. A second join was conducted on the remaining unmatched parcels using the *Pin_sbl* field. Although shapefiles for all municipalities in Albany County were provided for the purposes of developing the database for facility siting, the towns of Colonie, Green Island, Bethlehem, the village of Menands, and the cities of Cohoes, Watervliet, and Albany (i.e., municipalities within 2 miles of the Hudson River in the project area) were included in the merged parcel dataset. The individual municipal shapefiles were then merged together and attribute table field names were changed as indicated in Table A-1.

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

A.2 Shoreline

The *Shoreline_ene* dataset is primarily based on the TAMS dataset *hydro_poly*, from the original Feasibility Study (USEPA 2000). This dataset was copied and renamed *Shoreline_ene* after it had been through the QA/QC process. The entire TAMS Hudson River dataset was checked against the high-resolution digital orthophoto quarter-quads (DOQQs) (NYS 2001 aerial photos) to determine how the TAMS shoreline compared to the shoreline in the aerials and to make corrections to the *Shoreline_ene* layer. In areas where *Shoreline_ene* varied from the aerial photographs, adjustments were made to match the shoreline evident in the aerial photography. It should be noted that, due to the angle at which the aerial photographs were taken, it is difficult to precisely determine shoreline in areas that are forested along the river. The height of the trees and the angle at which the aerial photographs were taken block a clear view of shoreline in the forested areas. Expected error is approximately ± 20 feet.

The *Shoreline_ene* layer used for the siting analysis did not include island features within the study area. Islands were generally not considered in the siting analysis because of the lack of rail lines and the presence of residential land uses on many of the larger islands. For mapping purposes, the islands were corrected to the aerials, where appropriate, and a new layer was created with shoreline and corrected islands polygons.

The original study area identified in the Concept Document did not include Hudson River tributaries because of the relatively narrow channels and shallow depths associated with most of the tributaries. However, the first two miles of the Champlain Canal were included in the siting process because a landowner had expressed interest in selling his property for the purposes of the construction and operation of a sediment processing/transfer facility.

A.3 Rail

The *Rail_ene* dataset was developed from a railroad centerline file that was purchased from DeskMap Systems. It is described as an accurate and comprehensive route system for the 50 United States and the District of Columbia. DeskMap Systems developed the railroad database for analysis, viewing, and mapping of railroad systems with associated information about the rail line that aids in the many types of transportation applications involving rail (e.g., market analysis, fleet management, planning, consultation, and emergency response). DeskMap Systems maintains that the US Railroad database has been developed through extensive industry research and is continually being updated to reflect all the rail currently in operation. The database consists of a graphical layer of data that represents all major and short line railroad companies. Topology was built within each state, and the rail lines were “edge matched” to provide the most accurate data available within and between states. Each rail line is linked to a database that

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

contains information about the ownership and usage of the rail lines. The rail information purchased from DeskMap Systems was last updated in January 2002.

All rail segments within 0.5 mile of the Hudson River were reviewed, using high resolution orthoimagery acquired from the New York State GIS Clearinghouse, to determine how the DeskMap Systems data compared with the aerial imagery. The positional accuracy of the DeskMap Systems data was variable, with the discrepancy ranging from less than 5 feet to more than 200 feet. This discrepancy was expected due to the advertised scale of the data (1:100,000 feet). In addition, the DeskMap data layer contained major active rail lines, but it did not contain rail spurs, sidings, or rail yards.

All rail lines within 0.5 mile of the Upper Hudson River, from the village of Fort Edward to the southerly end of the Port of Albany, were spatially adjusted. A new data field entitled “Adjusted” was added to the attribute table of the dataset. All rail segments that were rectified with the high-resolution orthoimagery were given a value of “1” in the “Adjusted” field. The *Rail_ene* dataset thus can be queried for this value to determine which rail segments were adjusted and which were not. A new data field entitled “Added” was added to the attribute table of the dataset. All rail segments that were added to the dataset were given a value of “1” in the “Added” field. Rail yards were identified by delineating the outermost main rail lines in a group (i.e., if four lines were in a rail yard, only the two outermost rail lines were delineated).

A.4 Roads

The *Streets_ene* dataset is a street centerline file extracted from the StreetMap USA dataset, which represents interstate highways, major roads, and local streets within the United States. A spatial query was executed on the StreetMap USA data to determine all street centerline segments located in Albany, Rensselaer, Saratoga, and Washington Counties. This subset of data was copied and renamed *Streets_ene* to indicate that it has been through the E & E QA/QC process. All street centerline segments within 0.5 mile of the Hudson River were reviewed using the high-resolution orthoimagery acquired from the New York State GIS Clearinghouse to determine how the StreetMap USA street centerline segments compared to the aerial imagery.

The *Streets_ene* layer was corrected to the high-resolution aerial imagery. Major roads within 0.5 mile of the Hudson River, from the village of Fort Edward to the southern end of the Port of Albany, were spatially adjusted. Initially, major roads were defined as Interstate Highways, State Routes, County Roads, East-West roads that crossed the Hudson River, and uninterrupted North-South roads within the 0.5-mile-wide buffer. After the initial pass, minor (i.e., smaller) roads were also included in the rectification process. Typically, these included minor roads that were immediately adjacent to the river and minor roads in primarily industrial

A. Description of GIS Database Development for Group 1 Facility Siting Criteria and County Tax Parcel Mapping and Property Classification Codes

areas. In high-density population areas, roads that were adjacent to the river or adjacent to industrial areas were adjusted. Not all street centerline segments were adjusted in noticeably residential neighborhoods in high-density population areas. The rectification process of the streets dataset did not include unpaved roads. The New York State GIS Clearinghouse has a published horizontal accuracy of ± 4 feet for their 1-foot pixel resolution orthoimagery and ± 8 feet for their 2-foot pixel resolution orthoimagery. It is estimated that the *Streets_ene* data layer has a horizontal accuracy of ± 10 feet.

A.5 Proximity to Dredging Areas

The dredging location database was created from the original *Preferred_channel* (channel dredging areas to implement), *Preferred_alt_channel* (remediation areas), and *Hot* (hot spot areas) layers completed by TAMS during the Feasibility Study (USEPA 2000). In addition to these layers, the Dredge Management Cell layer and associated dredging volume estimates from the “Concept Document for the Productivity Performance Standards” were used to develop the proposed dredging locations and associated dredging volumes (Malcolm Pirnie, Inc., in draft form).