



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT  
26 FEDERAL PLAZA, ROOM 16-406  
NEW YORK, NEW YORK 10278-0090

CENAN-OP-R

11 OCTOBER 2024

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Approved Jurisdictional Determination in accordance with the "Revised Definition of 'Waters of the United States'"; (88 FR 3004 (January 18, 2023) as amended by the "Revised Definition of 'Waters of the United States'; Conforming" (8 September 2023),<sup>1</sup> NAN-2024-00527-WOR.<sup>2</sup>

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.<sup>3</sup> AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.<sup>4</sup>

On January 18, 2023, the Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") published the "Revised Definition of 'Waters of the United States,'" 88 FR 3004 (January 18, 2023) ("2023 Rule"). On September 8, 2023, the agencies published the "Revised Definition of 'Waters of the United States'; Conforming", which amended the 2023 Rule to conform to the 2023 Supreme Court decision in *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023) ("*Sackett*").

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. For the purposes of this AJD, we have relied on Section 10 of the Rivers and Harbors Act of 1899 (RHA),<sup>5</sup> the 2023 Rule as amended,

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<sup>1</sup> While the Revised Definition of "Waters of the United States"; Conforming had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

<sup>2</sup> When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, the territorial seas, or interstate water that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).

<sup>3</sup> 33 CFR 331.2.

<sup>4</sup> Regulatory Guidance Letter 05-02.

<sup>5</sup> USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

as well as other applicable guidance, relevant case law, and longstanding practice in evaluating jurisdiction.

## 1. SUMMARY OF CONCLUSIONS.

- a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).
  - i. Hudson River, jurisdictional, Section 10/404
  - ii. Wetland A/AAA, jurisdictional, Section 404
  - iii. Wetland AA, jurisdictional, Section 404
  - iv. Wetland B, jurisdictional, Section 404
  - v. Wetland C, non-jurisdictional
  - vi. Wetland D – Pond 13, non-jurisdictional
  - vii. Wetland E – Pond 10, non-jurisdictional
  - viii. Wetland F, non-jurisdictional
  - ix. Wetland G, non-jurisdictional
  - x. Wetland H, non-jurisdictional
  - xi. Wetland I, non-jurisdictional
  - xii. Wetland J, jurisdictional, Section 10/404
  - xiii. Wetland K/L – Pond 7, non-jurisdictional
  - xiv. Wetland O, non-jurisdictional
  - xv. Wetland P – Pond 3, non-jurisdictional
  - xvi. Wetland Q/R, non-jurisdictional
  - xvii. Wetland S/T, non-jurisdictional
  - xviii. Wetland U, non-jurisdictional
  - xix. Wetland V, non-jurisdictional
  - xx. Wetland W, jurisdictional, Section 404
  - xxi. Wetland X, non-jurisdictional
  - xxii. Wetland Y, jurisdictional, Section 10/404
  - xxiii. Wetland Z, non-jurisdictional
  - xxiv. Wetland AB, non-jurisdictional
  - xxv. Wetland AC – Pond 15, non-jurisdictional
  - xxvi. Wetland AG, non-jurisdictional
  - xxvii. Wetland AI – Pond 16, non-jurisdictional
  - xxviii. Wetland AK – Pond 11, non-jurisdictional
  - xxix. Wetland AL, non-jurisdictional
  - xxx. Wetland AM, non-jurisdictional
  - xxxi. Wetland AN, non-jurisdictional
  - xxxii. Wetland ZZ, non-jurisdictional
  - xxxiii. Pond 1, non-jurisdictional

- xxxiv. Pond 2, non-jurisdictional
- xxxv. Pond 4, non-jurisdictional
- xxxvi. Pond 5, non-jurisdictional
- xxxvii. Pond 6, non-jurisdictional
- xxxviii. Stream 1, jurisdictional, Section 404
- xxxix. Stream 2, jurisdictional, Section 404
  - xl. Stream 3, jurisdictional, Section 404
  - xli. Stream 4, non-jurisdictional
  - xl.ii. Stream 5, non-jurisdictional
  - xl.iii. Ephemeral Stream 1, non-jurisdictional

## 2. REFERENCES.

- a. “Revised Definition of ‘Waters of the United States,’” 88 FR 3004 (January 18, 2023) (“2023 Rule”)
  - b. “Revised Definition of ‘Waters of the United States’; Conforming” 88 FR 61964 (September 8, 2023))
3. REVIEW AREA. Review area size 453.232 acres, 41.944179, -73.971548, City of Kingston and Town of Ulster, Ulster County, New York.
4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED. The Hudson River is located along the eastern portion of the project site.<sup>6</sup>
5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER.  
Waters on site flow roughly east, towards the Hudson River. Most of the waters on site are the result of former mining activities. Jurisdictional waters on site flow directly to the Hudson River. Non-jurisdictional waters on site do not.
6. SECTION 10 JURISDICTIONAL WATERS<sup>7</sup>: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with

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<sup>6</sup> This MFR should not be used to complete a new stand-alone TNW determination. A stand-alone TNW determination for a water that is not subject to Section 9 or 10 of the Rivers and Harbors Act of 1899 (RHA) is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established.

<sup>7</sup> 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as

Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.<sup>8</sup>

- A portion of the Hudson River is located along the eastern portion of the project boundary. The Hudson River is considered to be navigable under Section 10 of the Rivers and Harbors Act of 1899, and is tidally influenced.
- Wetland J flows directly into the Hudson River and is tidally influenced.
- Wetland Y flows directly into the Hudson River and is tidally influenced.

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the 2023 Rule as amended, consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the 2023 Rule as amended. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

- a. Traditional Navigable Waters (TNWs) (a)(1)(i): The Hudson River is a tidally-influenced TNW.
- b. The Territorial Seas (a)(1)(ii): N/A
- c. Interstate Waters (a)(1)(iii): N/A
- d. Impoundments (a)(2): N/A
- e. Tributaries (a)(3): Streams 1 and 2 flow through Wetland A/AAA, off site, then directly into the Hudson River. Stream 3 flows through Wetland J, then directly into the Hudson River.

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"navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

<sup>8</sup> This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.



- f. Adjacent Wetlands (a)(4): Wetland A/AAA directly abuts Streams 1 and 2, as described above. Wetland AA flows directly into Wetland Y, which then flows directly into the Hudson River. Wetland B flows off site, into an unnamed tributary to the Hudson River. Wetlands J and Y directly abut the Hudson River. Wetland W flows off site, into an unnamed tributary to the Hudson River.
- g. Additional Waters (a)(5): N/A

## 8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified in the 2023 Rule as amended as not “waters of the United States” even where they otherwise meet the terms of paragraphs (a)(2) through (5). Include the type of excluded aquatic resource or feature, the size of the aquatic resource or feature within the review area and describe how it was determined to meet one of the exclusions listed in 33 CFR 328.3(b).<sup>9</sup> N/A
- b. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the 2023 Rule as amended (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water):
- Wetland C is located approximately 117 feet from and 8 feet higher in elevation than Wetland A/AAA, the nearest waters of the United States, with no apparent continuous surface connection.
  - Wetland D – Pond 13 is located approximately 981 feet from and 96 feet higher in elevation than Wetland W, the nearest waters of the United States, with no apparent continuous surface connection.
  - Wetland E – Pond 10 is located approximately 2,500 feet from and 170 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
  - Wetland F is located approximately 2,700 feet from and 175 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
  - Wetland G is located approximately 60 feet from and 6 feet higher in elevation than Stream 2, the nearest waters of the United States, with no apparent continuous surface connection.

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<sup>9</sup> 88 FR 3004 (January 18, 2023)

- Wetlands H and I are located approximately 450 feet from and 35 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland K/L – Pond 7 is located approximately 78 feet from and 8 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland O is located approximately 765 feet from and 136 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland P – Pond 3 is located approximately 2,700 feet from and 160 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetlands Q/R and S/T are located approximately 1,900 feet from and 70 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland U is located approximately 1,019 feet from and 124 feet higher in elevation than Stream 3, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland V is located approximately 860 feet from and 110 feet higher in elevation than Stream 3, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland X is located approximately 126 feet from and 10 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland Z is located approximately 78 feet from and 14 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland AB is located approximately 148 feet from and 18 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland AC – Pond 15 is located approximately 232 feet from and 14 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland AG is located approximately 198 feet from and 16 feet higher in elevation than Stream 2, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland AI – Pond 16 is located approximately 216 feet from and 2 feet higher in elevation than Stream 2, the nearest waters of the United States, with no apparent continuous surface connection.

- Wetland AK – Pond 11 is located approximately 754 feet from and 88 feet higher in elevation than Wetland W, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetlands AL and AN are located approximately 200 feet from and 12 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland AM is located approximately 40 feet from and 12 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Wetland ZZ is located approximately 1,194 feet from and 82 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Pond 1 is located approximately 256 feet from and 20 feet higher in elevation than Wetland A/AAA, the nearest waters of the United States, with no apparent continuous surface connection.
- Pond 2 is located approximately 727 feet from and 38 feet higher in elevation than Wetland A/AAA, the nearest waters of the United States, with no apparent continuous surface connection.
- Pond 4 is located approximately 1,803 feet from and 42 feet higher in elevation than Wetland J, the nearest waters of the United States, with no apparent continuous surface connection.
- Pond 5 is located approximately 1,208 feet from and 28 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Pond 6 is located approximately 747 feet from and 88 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Stream 4 flows from Wetland E east, through Wetlands Q/R and S/T, ending before Pond 5. The eastern-most portion of Stream 4 is located approximately 1,800 feet from and 42 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- Stream 5 flows into the upper part of Wetland K/L and is located approximately 250 feet from and 15 feet higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.
- In direction of flow, Ephemeral Stream 1 terminates approximately 250 feet from and 14 higher in elevation than the Hudson River, the nearest waters of the United States, with no apparent continuous surface connection.

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SUBJECT: 2023 Rule, as amended, Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), NAN-2024-00527-WOR.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.
  - a. Site visit conducted on July 9, 2024.
  - b. "Wetland Delineation Report for Hudson Cliffs/Quarry Waters Project Route 32 & North Street Town of Ulster and City of Kingston Ulster County, New York", prepared by The Chazen Companies, dated January 26, 2021, and last revised March 21, 2024, including wetland data sheets, color, ground-level photographs and aerial photographs.
  - c. USDA Web Soil Survey as part of Wetland Delineation Report dated January 26, 2021, and last revised March 21, 2024.
  - d. USGS Kingston East, NY topographic map.
10. OTHER SUPPORTING INFORMATION. N/A
11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.



AQUATIC RESOURCES IN APPROVED JURISDICTIONAL DETERMINATION (AJD) AREA:

AQUATIC RESOURCES IN APPROVED JURISDICTIONAL DETERMINATION (AJD) AREA						
Resource ID	SIZE ON SITE	Centroid	Regulated by			
Area - Acres	Latitude	Longitude	USACE	NYSDCE		
Hudson River	514.1	41.98441	-73.95550	YES (USACE REG. 15)		
Wetland A/AAA	16.91	41.94663	-73.97978	YES	YES (Art. 26)	
NYSDCE Adjacent Area Wetland A/AAA	15.01				YES (Art. 26)	
Wetland AA	1.17	41.93961	-73.96194	YES (608)	NO	
Wetland B - Pond 12	0.68	41.95378	-73.97742	YES (608)	NO	
Wetland C	1.15	41.94855	-73.97642	NO	NO	
Wetland D - Pond 13	0.13	41.93436	-73.97358	NO	NO	
Wetland E - Pond 10	1.21	41.94935	-73.97193	NO	YES (Art. 15)	
Wetland F	1.76	41.94111	-73.97278	NO	NO	
Wetland G	1.53	41.94511	-73.97562	NO	NO	
Wetland H	1.29	41.94997	-73.98183	NO	NO	
Wetland I	0.48	41.94835	-73.98163	NO	NO	
Wetland J	0.24	41.95106	-73.98385	YES (608)	NO	
Wetland K - Pond 7	1.86	41.94139	-73.94781	NO	NO	
Wetland L	0.16	41.94011	-73.9715	NO	NO	
Wetland P - Pond 3	0.92	41.94847	-73.97263	NO	YES (Art. 15)	
Wetland Q/E	0.05	41.94508	-73.97008	NO	NO	
Wetland S/1	0.37	41.94506	-73.97183	NO	NO	
Wetland U	0.27	41.95296	-73.96408	NO	NO	
Wetland V	0.07	41.96778	-73.96767	NO	NO	
Wetland W	0.35	41.93636	-73.96772	YES (608)	NO	
Wetland X	0.12	41.97139	-73.969	NO	NO	
Wetland Y	0.13	41.94278	-73.96194	YES (608)	NO	
Wetland Z	0.12	41.94272	-73.97183	NO	NO	
Wetland AB	0.05	41.94278	-73.96444	NO	NO	
Wetland AC - Pond 15	0.05	41.94139	-73.96516	NO	NO	
Wetland AD	0.06	41.94444	-73.97444	NO	NO	
Wetland AI - Pond 16	0.02	41.94139	-73.971	NO	NO	
Wetland AJ - Pond 11	0.04	41.93439	-73.97183	NO	NO	
Wetland AL	0.09	41.9475	-73.97444	NO	NO	
Wetland AM	0.05	41.94272	-73.96308	NO	NO	
Wetland AN	0.01	41.94808	-73.96402	NO	NO	
Wetland AZ	0.09	41.94722	-73.96767	NO	NO	
Pond 1	5.53	41.94647	-73.97661	NO	YES (Art. 15)	
Pond 2	1.02	41.94711	-73.97539	NO	YES (Art. 15)	
Pond 3	2.38	41.94847	-73.97004	NO	YES (Art. 15)	
Pond 5	6.15	41.94408	-73.97034	NO	YES (Art. 15)	
Pond 6	0.24	41.94835	-73.96764	NO	YES (Art. 15)	
Length (Feet)	753			YES (608)	NO	
Perennial Stream 1 (Str 1)		Starting Centroid	41.94386	-73.98206		
		Ending Centroid	41.94314	-73.98056		
Perennial Stream 2 (Str 2)	383	Starting Centroid	41.94314	-73.98056	YES (608)	NO
		Ending Centroid	41.94494	-73.98269		
Perennial Stream 3 (Str 3)	729	Starting Centroid	41.94426	-73.97981	YES (608)	YES (Art. 15)
		Ending Centroid	41.9525	-73.98433		
Perennial Stream 4 (Str 4)	671	Starting Centroid	41.95097	-73.96394		
		Ending Centroid	41.94952	-73.97275		
Perennial Stream 5 (Str 5)	235	Starting Centroid	41.94861	-73.97133		
		Ending Centroid	41.94219	-73.96889		
Ephemeral Stream 1 (Eph 1)	335	Starting Centroid	41.94289	-73.96816		
		Ending Centroid	41.94289	-73.96816		

The following wetlands are outside of the AJD Area, and so not on AJD Table:  
Wetland M, Wetland N, Wetland AD/Pond 8 and Wetland AH/Pond 8

PROPERTY AREA = 507.923 ACRES  
+ 1.139 ACRES (PARCEL WEST OF N.Y.S. ROUTE 32)  
+ 11.920 ACRES (NEW LOT PURCHASE)  
TOTAL PROPERTY AREA= 520.465 ACRES TOTAL  
AS PER MAP REFERENCE NO.1

PROPERTY AREA: 520.465 ACRES  
PROJECT BOUNDARY/AJD AREA: 453.232 ACRES  
PROPERTY AREA NOT IN PROJECT BOUNDARY/AJD AREA: 67.233 ACRES  
WD1 AREA 1: 15.055 ACRES  
WD1 AREA 2: 4.425 ACRES  
WD4 SHEET: 47.753 ACRES

LEGEND:

EXISTING CONDITIONS:

- PROPERTY LINE NO PHYSICAL BOUNDS
- INTERIOR TAX PARCEL LINE
- ADJACENT PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- NYSDCE WETLANDS LINE
- NYSDCE ADJACENT AREA
- ACADE WETLANDS LINE
- TOP OF BANK REGULATED BY NYSDCE
- EXISTING STREAM
- EXISTING POND/LAKE
- EXISTING UNDERGROUND STORM LINE
- EXISTING WETLAND BOUNDARY FLAG

PROPERTY LINE NOTE:

PROJECT BOUNDARY LINES SHOWN ON THIS AQUATIC RESOURCES MAP ARE APPROXIMATE AND PER MAP REFERENCE NO.1, AND HAVE NOT BEEN FIELD VERIFIED. SEE MAP REFERENCE NO. 1 FOR ADDITIONAL BOUNDARY INFORMATION.

NOTES:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.  
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LOCATION OF EXISTING PROPERTY MARKERS NOT SHOWN OR CERTIFIED BY THIS SURVEY.  
EDGES OF INTERNAL ROADS, PONDS 1,2,4,5,6, THE EDGE OF WATER OF THE HUDSON RIVER, HIGH WATER LINE ARE PER MAP REFERENCE 2.

NORTH ORIENTATION IS NEW YORK EAST ZONE PER MAP REFERENCE NO.1

VERTICAL RELIEF: 2' CONTOURS SHOWN HERE ON ARE EXTRAPOLATED FROM USGS 2 METER DEM. RESAMPLED USING 845 FOCAL STATISTICS (AVERAGE VALUE OF SURROUNDING CELLS) FOR SMOOTHNESS. NAVD88 DATUM AND HAS NOT BEEN GROUND VERIFIED.

TIDAL DATUM NOTE:

THE US ARMY CORPS OF ENGINEERS REGULATES TO THE MEAN HIGHER HIGH WATER (MHHW) UNDER SECTION 404 OF THE CLEAN WATER ACT.  
THE US ARMY CORPS OF ENGINEERS REGULATES TO THE MEAN HIGH WATER (MHW) UNDER SECTION 10 OF THE RIVERS AND HARBORS ACT.  
TO IDENTIFY MHHW AND MHW ELEVATIONS AT THIS LOCATION, INTERPOLATIONS WERE PERFORMED BETWEEN HYDE PARK TIDAL STATION 8518051, TURKEY POINT TIDAL STATION 8518052 AND ALBANY TIDAL STATION 8518056 LOCATIONS AND DISTANCES BETWEEN STATION WERE GENERATED BASED UPON LATITUDE AND LONGITUDE PROVIDED ON THE NOAA BENCHMARK SHEETS. DATUM IS BASED UPON NAVD88 DATUM AT 2' (PROVIDED ON NOAA DATA SHEETS). TURKEY POINT DID NOT HAVE A NAVD88 RELATION SO NAVD88 DATA AT THIS LOCATION WAS CALCULATED.

BASED UPON THE INTERPOLATIONS, WE FIND THE MHHW AT THE SHOWN LOCATION AT SOUDNER TRUTH STATE PARK TO BE:  
USING HYDE PARK TO TURKEY POINT THE INTERPOLATED ELEVATION IS 2.40' NAVD88.  
USING HYDE PARK TO ALBANY THE INTERPOLATED ELEVATION IS 2.69' NAVD88.

BASED UPON THESE INTERPOLATIONS, WE FIND THE MHW AT THE SHOWN LOCATION AT SOUDNER TRUTH STATE PARK TO BE:  
USING HYDE PARK TO TURKEY POINT THE INTERPOLATED ELEVATION IS 2.10' NAVD88  
USING HYDE PARK TO ALBANY THE INTERPOLATED ELEVATION IS 2.27' NAVD88

TIDAL CHARTS FOR KINGSTON, HUDSON RIVER WERE UTILIZED FOR HIGH TIDE AND LOW TIDE TIMES. DATA WAS COLLECTED AT THESE TIMES AT TWO LOCATIONS ON THE FOLLOWING DATES:  
AUGUST 31, 2023 HIGH WATER LOCATION "A" AT 2:22PM: 2.90' NAVD88  
SEPTEMBER 07, 2023 HIGH WATER LOCATION "A" AT 8:18AM: 2.07' NAVD88  
SEPTEMBER 10, 2023 HIGH WATER LOCATION "A" AT 11:24AM: 1.84' NAVD88  
MEAN AVERAGE AT LOCATION "A": 2.27' NAVD88 (SAME AS HYDE PARK TO ALBANY INTERPOLATION)

AUGUST 31, 2023 HIGH WATER LOCATION "B" AT 2:22PM: 2.69' NAVD88  
SEPTEMBER 07, 2023 HIGH WATER LOCATION "B" AT 8:13AM: 2.08' NAVD88  
SEPTEMBER 10, 2023 HIGH WATER LOCATION "B" AT 11:16AM: 1.82' NAVD88  
MEAN AVERAGE AT LOCATION "B": 2.20' NAVD88

BASED ON THE INTERPOLATION ABOVE, THE FOLLOWING TIDAL DATUM ARE IDENTIFIED  
MHW: 2.27' NAVD88  
MHHW: 2.69' NAVD88

NOAA TIDES & CURRENTS DATASHEETS CAN BE FOUND AT THE FOLLOWING WEBSITE:  
<https://tidesandcurrents.noaa.gov>

WETLANDS NOTE:

WETLANDS SHOWN HEREON AS PER FIELD DELINEATION COMPLETED IN MAY OF 2020 BY CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. AND SURVEY LOCATION COMPLETED BY THIS OFFICE IN MAY OF 2020.

UPDATED WETLAND FLAGGING AND LOCATION OF A PORTION OF WETLAND E - POND 10' PER FIELD DELINEATION COMPLETED JANUARY 31, 2024 AND SURVEY LOCATION COMPLETED FEBRUARY 5, 2024 BY LABELLA ASSOCIATES.

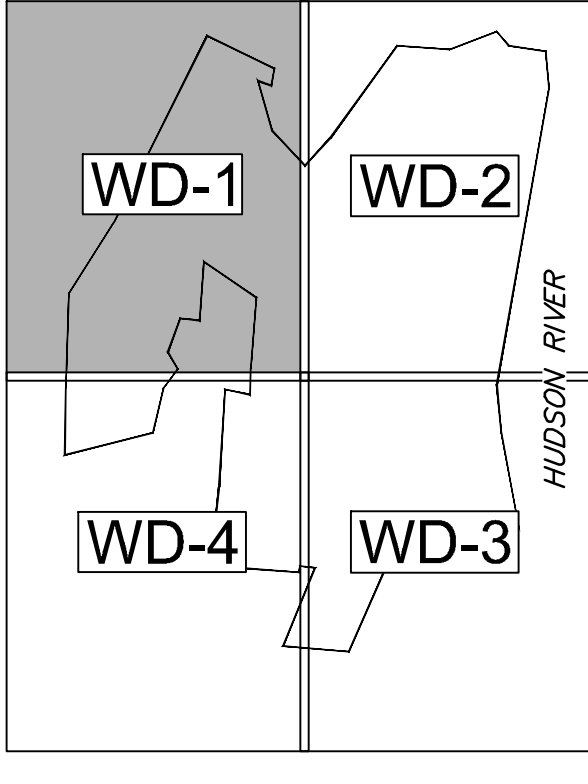
WETLANDS IN NON-AJD AREAS SHOULD BE CONSIDERED JURISDICTIONAL BY USACE UNDER SECTION 404 OF THE CLEAN WATER ACT AS THEY WERE NOT REMOVED AS PART OF THE AJD REVIEW OF JULY 2024. ADDITIONAL REVIEW REQUIRED TO OBTAIN FEDERAL NON-JURISDICTIONAL DETERMINATION.

AGENCY SITE INSPECTIONS:

1. PAIGE LEWANDOWSKI OF NYSDCE ON 12/5/2023.
2. BRIAN ORZEL OF USACE ON 7/9/2024.

MAP REFERENCE:

1. REFERENCE IS HEREBY MADE TO A CERTAIN MAP ENTITLED "MAP OF LANDS TO BE CONVEYED TO THE SCENIC HUDSON LAND TRUST, INC." DATED APRIL 9, 2019, LAST REVISED SEPTEMBER 26, 2019, MADE BY BRINNER AND LARIOS P.C.
2. REFERENCE IS HEREBY MADE TO A CERTAIN MAP ENTITLED "TOPOGRAPHIC AND ON-STREATER RESOURCES MAP OF LANDS TO BE CONVEYED TO THE SCENIC HUDSON LAND TRUST, INC." DATED APRIL 9, 2019, MADE BY BRINNER AND LARIOS P.C. IT IS NOTED THAT THE BRINNER AND LARIOS MAPING SHOWED A HIGH WATER MARK ALONG THE HUDSON RIVER, THAT REPRESENTATION HAS BEEN REMOVED FROM THIS MAP AS A HIGH WATER MARK DOES NOT NECESSARILY RELATE TO FEDERALLY REGULATED TIDAL DATUM UNDER SECTION 404 OF THE CLEAN WATER ACT OR SECTION 10 OF THE RIVERS AND HARBORS ACT.



HUDSON CLIFFS - QUARRY WATERS

MAP OF AQUATIC RESOURCES PREPARED FOR SCENIC HUDSON LAND TRUST INC.

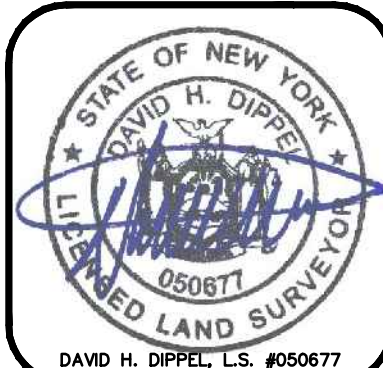
C/O KINGSTON & T/O ULSTER, ULSTER COUNTY, NEW YORK

DATE	DESCRIPTION
10/03/24	ADDRESS COMMENTS FROM ARMY CORPS
08/09/24	JURISDICTIONAL DETERMINATION REVISIONS
03/21/24	AQUATIC RESOURCES TABLE REVISIONS
02/02/24	REVIEW WETLAND IF FIGURE
09/29/23	ADD TIDAL DATUM INFORMATION
01/29/23	GENERAL REVISIONS
12/04/20	ADDED INFO FOR WETLANDS AL, AM & AN
04/04/20	ADDED INFO FOR WETLANDS AL, AM & AN

CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

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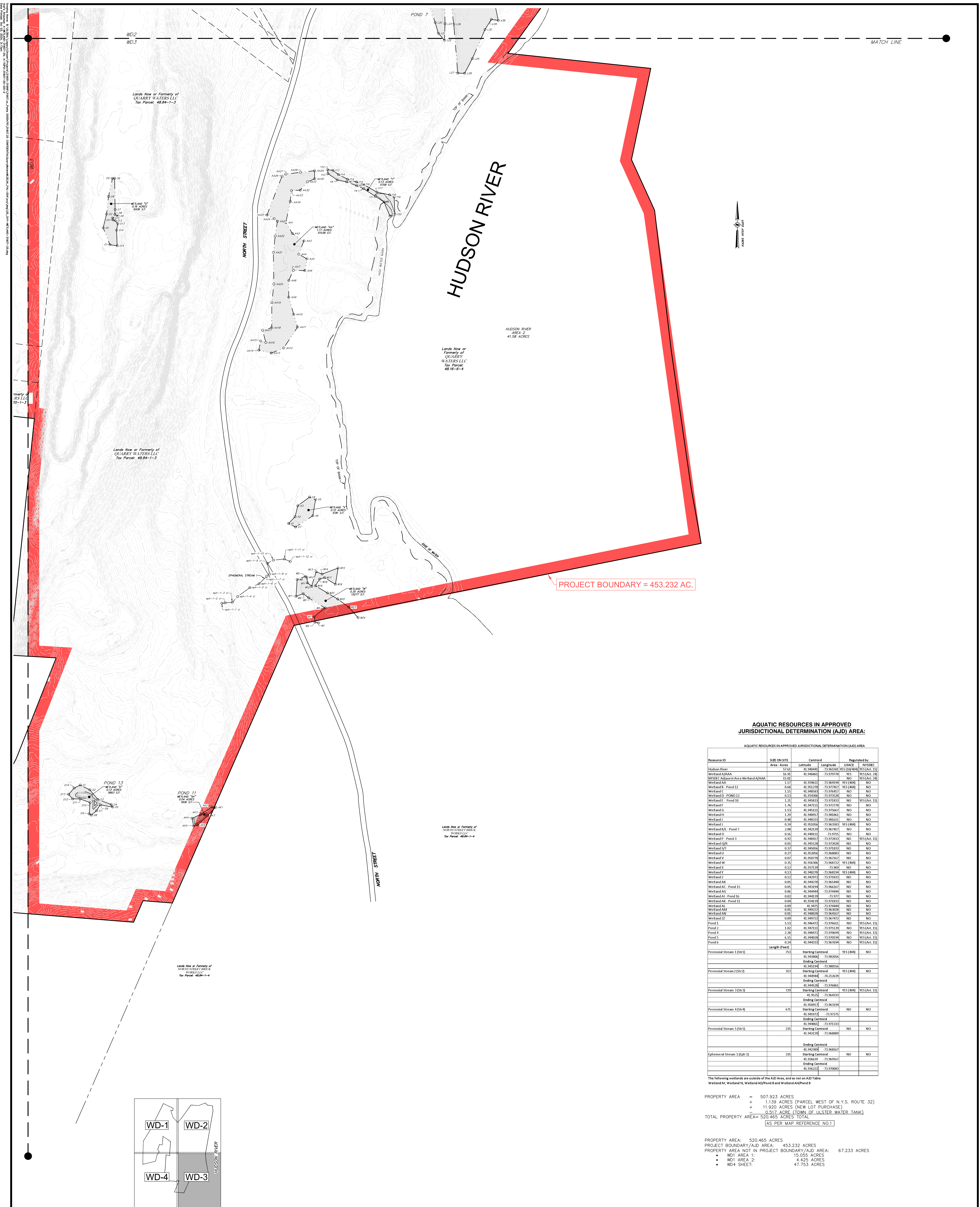
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AQUATIC RESOURCES IN APPROVED JURISDICTIONAL DETERMINATION (AJD) AREA:							
AQUATIC RESOURCES IN APPROVED JURISDICTIONAL DETERMINATION (AJD) AREA							
Resource ID	SIZE ON SITE	Controlled	Regulated by				
	Acres	Latitude	Longitude	USACE	NWRC		
Hudson River	12.61	41.94841	-73.65050	YES (14)(b)	YES (14)(c)		
Westland/AJAA	16.99	41.94841	-73.65078	YES	YES (14)(a, b)		
NWRC Adjacent Area Westland/AJAA	15.00				YES (14)(a, b)		
Westland C	1.17	41.93963	-73.63024	YES (14)(b)	NO		
Westland - Pond 12	1.16	41.93128	-73.63028	YES (14)(b)	NO		
Westland C	1.15	41.94063	-73.63747	NO	NO		
Westland C - POND 13	0.13	41.94066	-73.63728	NO	NO		
Westland - Pond 10	1.20	41.94043	-73.63733	YES (14)(a, 13)	YES (14)(a, 13)		
Westland F	1.36	41.94213	-73.63728	NO	NO		
Westland G	1.55	41.94311	-73.63728	NO	NO		
Westland H	1.26	41.94017	-73.63680	YES (14)(b)	NO		
Westland I	0.48	41.94833	-73.63661	NO	NO		
Pond 1	1.24	41.93194	-73.63660	YES (14)(b)	NO		
Westland K/L - Pond 7	0.60	41.94219	-73.63747	NO	NO		
Westland O	0.16	41.94311	-73.63715	NO	NO		
Westland - Pond 3	0.91	41.94843	-73.63728	YES (14)(a)	YES (14)(a)		
Westland Q/R	0.05	41.94528	-73.63708	NO	NO		
Westland S/L	0.37	41.94566	-73.63783	NO	NO		
Westland T	0.27	41.95066	-73.64080	NO	NO		
Westland V	0.07	41.95078	-73.64267	NO	NO		
Westland W	0.35	41.93306	-73.63762	YES (14)(b)	NO		
Westland X	0.15	41.93178	-73.63680	NO	NO		
Westland Y	0.13	41.94078	-73.64054	YES (14)(b)	NO		
Westland Z	0.12	41.94297	-73.63733	NO	NO		
Westland AB	0.01	41.94428	-73.64044	NO	NO		
Westland AC - Pond 15	0.05	41.94334	-73.64657	NO	NO		
Westland AC	0.06	41.94444	-73.64444	NO	NO		
Westland AD - Pond 16	0.06	41.94444	-73.63977	NO	NO		
Westland AD - Pond 11	0.04	41.93419	-73.63783	NO	NO		
Westland AE	0.09	41.94019	-73.63783	NO	NO		
Westland AF	0.01	41.94052	-73.63808	NO	NO		
Westland AG	0.01	41.94052	-73.63808	NO	NO		
Westland AH	0.01	41.94052	-73.63808	NO	NO		
Pond 1	5.53	41.94847	-73.63661	NO	YES (14)(a, 13)		
Pond 2	1.00	41.93173	-73.63728	YES (14)(a, 13)	YES (14)(a, 13)		
Pond 3	0.60	41.94847	-73.63660	NO	YES (14)(a, 13)		
Pond 4	0.16	41.94028	-73.63708	NO	YES (14)(a, 13)		
Pond 5	6.15	41.94028	-73.63708	NO	YES (14)(a, 13)		
Pond 6	2.34	41.94028	-73.63708	NO	YES (14)(a, 13)		
		Length (feet)					
Perennial Stream 1 (Str 1)		753	Starting Centerline 41.94380 41.94334	41.93056 41.93056	YES (14)(b)	NO	
Perennial Stream 2 (Str 2)		313	Starting Centerline 41.94844	41.93056 41.94044	YES (14)(b)	NO	
Perennial Stream 3 (Str 3)		729	Starting Centerline 41.94044	41.93056 41.94044	YES (14)(b)	YES (14)(a, 13)	
Perennial Stream 4 (Str 4)		671	Starting Centerline 41.95017	41.93056 41.93056	YES (14)(b)	NO	
Perennial Stream 5 (Str 5)		235	Starting Centerline 41.94847	41.93056 41.93056	YES (14)(b)	NO	
Epifaunal Stream 1 (Ep 1)		335	Starting Centerline 41.94289	41.93667 41.94044	NO	NO	

The following wetlands are outside of the AID Area, and so not on AID Table:  
Wetland M, Wetland N, Wetland AD/Pond 3 and Wetland AH/Pond 9.

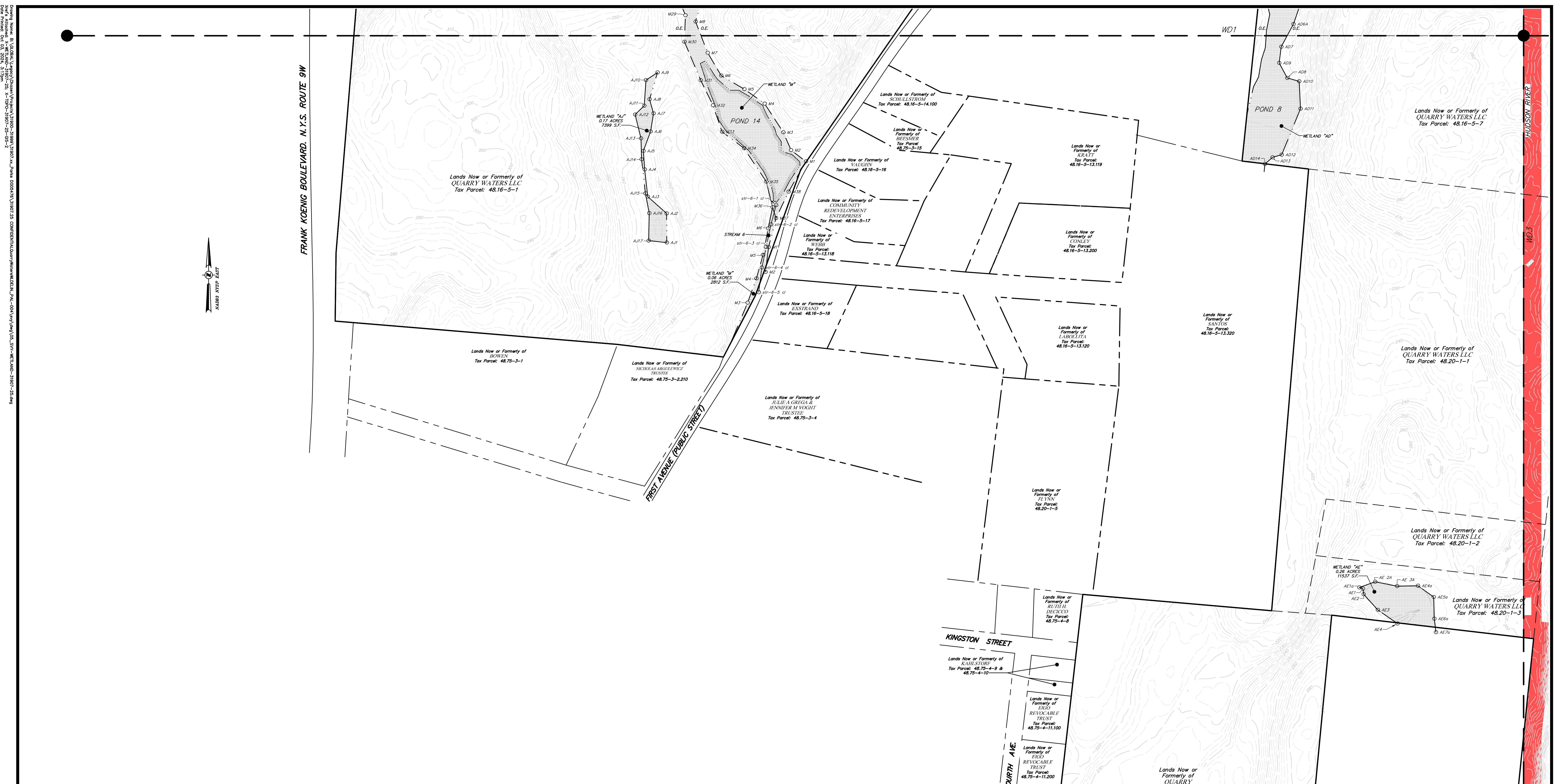
PROPERTY AREA	=	507.923 ACRES
+		1.139 ACRES (PARCEL WEST OF N.Y.S. ROUTE 32)
+		11.920 ACRES (NEW LOT PURCHASE)
		<u>0.517 ACRES (TOWN OF ULSSTER WATER TANK)</u>
TOTAL PROPERTY AREA=		520.465 ACRES TOTAL
		<u>AS PER MAP REFERENCE NO.1</u>

PROPERTY AREA: 520.465 ACRES  
PROJECT BOUNDARY/AJD AREA: 453.232 ACRES  
PROPERTY AREA NOT IN PROJECT BOUNDARY/AJD AREA: 67.233 ACRES

- WD1 AREA 1: 15.055 ACRES
- WD1 AREA 2: 4.425 ACRES
- WD4 SHEET: 47.753 ACRES



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**AQUATIC RESOURCES IN APPROVED JURISDICTIONAL DETERMINATION (AJD) AREA:**

AQUATIC RESOURCES IN APPROVED JURISDICTIONAL DETERMINATION (AJD) AREA

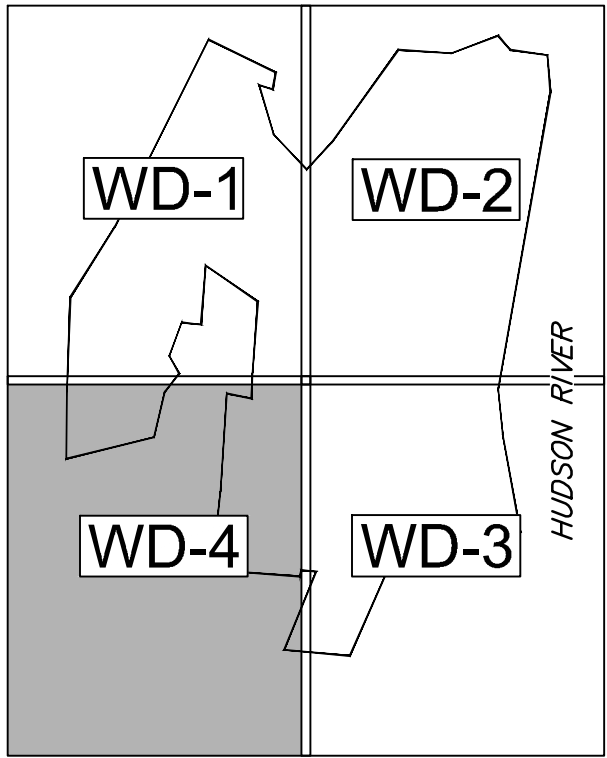
Resource ID	SIZE ON SITE		Centroid	Regulated by
	Area - Acres	Latitude	Longitude	
Hudson River	57.61	41.940401	-73.965201	YES (Art. 15)
Wetland A/AAA	16.91	41.940601	-73.979701	YES (Art. 15)
Wetland B - Pond 12	0.68	41.951201	-73.977401	YES (Art. 15)
Wetland C - Pond 13	0.13	41.948601	-73.979501	NO
Wetland D - Pond 10	1.21	41.948501	-73.978801	NO
Wetland E	1.76	41.941101	-73.977701	NO
Wetland F	1.53	41.941101	-73.976601	NO
Wetland H	1.29	41.940901	-73.981801	NO
Wetland I	0.48	41.940101	-73.981601	NO
Wetland J	0.24	41.951601	-73.963801	YES (Art. 15)
Wetland K/L - Pond 7	2.08	41.942101	-73.967401	NO
Wetland O	0.16	41.940101	-73.975101	NO
Wetland P - Pond 3	0.90	41.948401	-73.978301	NO
Wetland Q/R	0.05	41.945501	-73.978001	NO
Wetland S/T	0.17	41.940601	-73.978301	NO
Wetland U	0.27	41.952601	-73.968801	NO
Wetland V	0.07	41.950701	-73.967101	NO
Wetland W	0.35	41.948601	-73.967201	YES (Art. 15)
Wetland X	0.12	41.952101	-73.969001	NO
Wetland Y	0.13	41.940101	-73.978401	YES (Art. 15)
Wetland Z	0.12	41.942901	-73.978301	NO
Wetland AB	0.05	41.940701	-73.965401	NO
Wetland AC - Pond 15	0.06	41.945101	-73.966501	NO
Wetland AG	0.06	41.944401	-73.974401	NO
Wetland AI - Pond 16	0.02	41.944101	-73.977101	NO
Wetland AJ - Pond 13	0.08	41.945101	-73.978301	NO
Wetland AL	0.09	41.947501	-73.974401	NO
Wetland AM	0.06	41.949701	-73.967001	NO
Wetland AN	0.01	41.946001	-73.964501	NO
Wetland AZ	0.09	41.949701	-73.967201	NO
Pond 1	1.10	41.944701	-73.976601	NO
Pond 2	1.00	41.947101	-73.975301	NO
Pond 4	2.28	41.948401	-73.970601	YES (Art. 15)
Pond 5	0.15	41.948601	-73.970601	NO
Pond 6	0.24	41.945101	-73.967001	YES (Art. 15)
Perennial Stream 1 (Sta 1)	Length (Feet)	Starting Centroid	YES (Art. 15)	NO
		41.943801 -73.983001		
		Ending Centroid		
		41.945101 -73.980501		
Perennial Stream 2 (Sta 2)	313	Starting Centroid	YES (Art. 15)	NO
		41.940401 -73.973601		
		Ending Centroid		
		41.945201 -73.976801		
Perennial Stream 3 (Sta 3)	729	Starting Centroid	YES (Art. 15)	YES (Art. 15)
		41.950101 -73.964301		
		Ending Centroid		
		41.950101 -73.963101		
Perennial Stream 4 (Sta 4)	671	Starting Centroid	NO	NO
		41.949701 -73.972701		
		Ending Centroid		
		41.948601 -73.973301		
Perennial Stream 5 (Sta 5)	235	Starting Centroid	NO	NO
		41.945101 -73.968801		
		Ending Centroid		
		41.943801 -73.968101		
Ephemeral Stream 1 (Sta 1)	335	Starting Centroid	NO	NO
		41.946101 -73.969101		
		Ending Centroid		
		41.946201 -73.970001		

The following wetlands are outside of the AID Area, and so not on AID Table:  
Wetland M, Wetland N, Wetland AD/Pond 8 and Wetland AH/Pond 9

PROPERTY AREA = 507.923 ACRES  
+ 1.130 ACRES (PARCEL WEST OF N.Y.S. ROUTE 32)  
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= 520.465 ACRES TOTAL  
TOTAL PROPERTY AREA= 520.465 ACRES TOTAL  
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• WD1 AREA 2: 4.425 ACRES  
• WD4 SHEET: 47.753 ACRES

THIS SHEET (WD4) IS OUTSIDE OF THE PROJECT BOUNDARY AND IS NOT PART OF THE CURRENT APPROVED JURISDICTIONAL DETERMINATION. THE CORPS IS NOT DETERMINING THE JURISDICTIONAL STATUS OF THE WATERS ON THIS SHEET AT THIS TIME. (OCTOBER, 2024)



DATE	DESCRIPTION
10/03/24	ADDRESS COMMENTS FROM ARMY CORPS
08/08/24	JURISDICTIONAL DETERMINATION REVISIONS
03/27/24	AQUATIC RESOURCES TABLE REVISIONS
02/02/24	REVISE WETLAND T. FIGURE
09/29/23	ADD TIDAL DATUM INFORMATION
01/29/23	GENERAL REVISIONS
12/04/20	ADDED INFO FOR WETLANDS AL, AM & AN
08/05/2019	description

**CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.**

**THE CHAZEN COMPANIES**

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