Justin Starr, P.G.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Arcadis of New York, Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse, NY 13202
United States
Phone: 315 446 9120
Fax: 315 449 0017
www.arcadis.com

Date: June 17, 2025
Our Ref: 30229726
Subject: **Response to Comments – 2024 Restoration Monitoring Report**
NYSEG Cortland-Homer Former MGP Site
NYSDEC Site No. 7-12-005

Dear Mr. Starr,

On behalf of the New York State Electric & Gas Corporation (NYSEG), please find enclosed the revised 2024 Restoration Monitoring Report for the Cortland-Homer Former Manufactured Gas Plant (MGP) site, Operable Unit No. 2 (OU-2), located in Homer, New York (the site).

The 2024 Restoration Monitoring Report for the Cortland-Homer Former Manufactured Gas Plant (MGP) site, Operable Unit No. 2 (OU-2) was submitted to the New York State Department of Environmental Conservation (NYSDEC) on January 31, 2025. The New York State Department of Environmental Conservation (NYSDEC) provided comments to the 2024 Restoration Monitoring Report in a letter to NYSEG dated April 21, 2025. The enclosed Restoration Monitoring Report has been revised to address each NYSDEC comment. For ease of presentation, each NYSDEC comment from the April 21, 2025, letter is presented below in bold, followed by NYSEG's response.

Comments and Responses

Comment 1, General: The Report names Reed Canary Grass (RCG) as a native species; however, Partnerships for Regional Invasive Species Management (PRISM) network lists RCG as a tier 4 invasive species. Although the Preliminary Monitoring and Maintenance Plan (2020) defines invasive species from Part 575, PRISMs keep an updated list of invasive species. PRISM lists should be used to identify current invasive species. In lieu of counting RCG as invasive cover in future restoration monitoring reports, DEC requests temporary geotextile addition to the RCG areas with larger infestations and chemical treatment in the fall for all areas with RCG, please see WNY PRISM website for management considerations.

https://www.wnyprism.org/invasive_species/reed-canarygrass/

DEC also requests that the status (native or invasive) of each species named in this report be checked against the regional PRISM list and updated accordingly.

Response 1: Reed canary grass (RCG) will be designated as an invasive species in the 2024 Restoration Monitoring Report and all subsequent reporting. Other species observed on site will be checked against regional PRISM lists and redesignated in the report, as needed. As discussed during the site walk with DEC personnel,

use of adaptive management methods involving placement of mulch and geotextile is not practical to implement for RCG control within the floodplain, chemical treatment of RCG will be performed, and NYSEG will examine planting additional trees and shrubs within RCG stands, along with potential herbaceous seeding, to aid in controlling RCG. Additionally, as verbally agreed with the Department, RCG will not be factored into the % invasive species calculation but will continue to be monitored throughout the restoration monitoring period.

Comment 2, Adaptive Management: DEC requests a survey for the presence of purple loosestrife biocontrol (e.g. Galerucella beetles and weevils such as *Hylobius transversovittatus*) to be completed during each vegetation monitoring event. This request is purely for monitoring purposes only. Purple loosestrife should continue to be removed as needed.

Response 2: NYSEG/Arcadis agree to inspect purple loosestrife plants for presence of the Galerucella beetle or other biological controls. Representative photos of beetle(s) and/or biological damage, if observed, will be included in subsequent Restoration Monitoring Reports.

Comment 3, Adaptive Management: This section states the most effective control measure for Japanese knotweed is a foliar application of a targeted herbicide. Please note that Japanese knotweed should additionally be cut in the early summer prior to flowering then sprayed with herbicide. A follow-up spray treatment in the fall should also occur. Please incorporate this approach into the knotweed corrective measures.

Response 3: NYSEG/Arcadis will cut Japanese knotweed in the early summer, prior to flowering. A follow up herbicide application will occur approximately 8 weeks after initial cutting. A follow up herbicide treatment will occur in the fall as the knotweed enters senescence.

Comment 4, Adaptive Management: As mentioned in Comment #1, please incorporate geotextile controls as a form of mitigation control to larger infestations of RCG.

Response 4: See response to Comment #1 above.

Comment 5, Vegetation monitoring: This section incorporates Volunteer individual into the survival calculations. However, Volunteer individuals cannot be counted in survival until year three of monitoring to ensure the survival calculations reflect the success of restoration plans and not simply the establishment of a volunteer monoculture. Please amend the survival calculations and replace lost/dead trees, shrubs and live stakes.

Response 5: Volunteer individuals will be excluded from survival counts until monitoring Year 3 (2026). Corrective actions to replace trees/shrubs/live stakes will be completed in fall 2025, as needed.

Comment 6, Tables: DEC requests the raw data in excel format for all tables of this, and future, monitoring reports for tracking and analysis purposes.

Tables attached to the Restoration Monitoring Report will be provided to the Department as excel (.xlsx) files.

Justin Starr, P.G.
New York State Department of Environmental Conservation
June 17, 2025

Please contact Mark Castro at 203.233.1245 or mark_castro@avangrid.com with any questions or comments.

Sincerely,
Arcadis of New York, Inc.

Joe Bistrovich
Senior Environmental Engineer

Email: joe.bistrovich@arcadis.com
Direct Line: 315.671.9697
Mobile: 315.427.4585

CC. Mark Castro, PMP, NYSEG
Mark Gravelding, Arcadis

Enclosure:
2024 Restoration Monitoring Report – Revised

Justin Starr, P.G.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, New York 12233

Arcadis of New York, Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse, NY 13202
United States
Phone: 315 446 9120
Fax: 315 449 0017
www.arcadis.com

Date: June 17, 2025
Our Ref: 30229726
Subject: **2024 Restoration Monitoring Report – Revised**
NYSEG Cortland-Homer Former MGP Site
Site No. 7-12-005

Dear Mr. Starr,

On behalf of the New York State Electric & Gas Corporation (NYSEG), this letter presents the revised 2024 Restoration Monitoring Report (Monitoring Report) for the Cortland-Homer Former Manufactured Gas Plant (MGP) site, Operable Unit No. 2 (OU-2), located in Homer, New York (the site). Restoration monitoring was completed in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved OU-2 Remedial Design Report (Remedial Design).

The Remedial Design was prepared by Arcadis and submitted to the NYSDEC on April 7, 2020. Based on permit conditions, minor modifications to the Remedial Design were required with the revised Remedial Design Drawings and Technical Specifications submitted to the NYSDEC on March 16, 2021. Remedial construction and restoration activities were completed in fall 2022 with initial restoration monitoring completed in 2023.

Based on the 2023 and 2024 restoration monitoring results and the comments received from NYSDEC via letter to NYSEG dated July 23, 2024, corrective actions were developed to supplement deficient tree and shrub quantities throughout OU-2. Given the scale of these corrective actions and assessment timing, supplemental tree and shrub planting was completed during the fall 2024 planting window. Corrective actions completed in 2024 are detailed in the Adaptive Management and Corrective Actions section below. Restoration monitoring activities completed in 2024 and discussed herein represent “Year 1” of restoration monitoring.

Objectives

Restoration monitoring report objectives are to summarize:

- Completed restoration activities;
- Methodologies used to evaluate restoration effectiveness;
- Current monitoring data and to compare to the performance criteria; and
- Completed corrective actions (if any) and proposed corrective actions and adaptive management recommendations.

The following sections discuss the restoration areas, restoration activities, performance criteria and monitoring methods, adaptive management and corrective actions, vegetation monitoring results, and a summary of the "Year 1” monitoring results including recommendations for future restoration monitoring or corrective actions.

Justin Starr, P.G.
New York State Department of Environmental Conservation
June 17, 2025

Restoration Areas

The site restoration areas listed below were developed to restore vegetation communities based on site hydrology and topography. Restoration areas are shown on the Remedial Design Drawings and described below.

- Emergent Vegetation Planting Area – generally located below the mean baseflow and is determined by water elevations corresponding to typical mean base flow conditions, which corresponds to water depths of up to 4 inches along the restored shorelines and located approximately 5 feet below the mean high water (MHW) conditions.
- Inundated Shoreline Planting Area – generally located above the Emergent Vegetation Planting Area up to the 1.25-year storm interval elevation for banks with a steep slope, or to the top of bank for shallow and sloped bank areas.
- Bank Planting Area – generally located above the 1.25-year storm interval elevation to the top of the bank.
- Wet Meadow Planting Area – generally located below the 1.25-year storm interval elevation within the eastern shoreline floodplain of Area 1.
- Floodplain Planting Area – Generally located between the 1.25-year and 5-year storm interval elevations in Area 1 and above 5-year storm interval elevation in Area 2 to top of the bank.
- Grass Planting Area – located above the 5-year storm interval elevation and near top of bank and extending to the limits of disturbance on the floodplain.

Restoration Activities

Initial vegetation restoration activities for OU-2 Area 1 and Area 2 were completed in stages from fall 2021 to fall 2022 in general accordance with the NYSDEC-approved Remedial Design. At Area 1 trees and shrubs were planted in fall 2021 with live stakes and emergent vegetation planted in the spring of 2022. At Area 2 trees, shrubs, live stakes, and emergent vegetation were planted in fall 2022.

Note that through discussions between property owners (CNY Living History Center and Village of Homer) and the on-site construction team small restoration areas within the limits of disturbance at Area 1 were modified to accommodate changing property owner needs. Specifically, portions of the western shoreline floodplain planting area in Area 1 were defined as “Open Viewing” and “Grass/Maintained” planting areas. As a result, restoration densities in these areas are slightly different with respect to the Remedial Design. Habitat restoration details for Area 1 and Area 2 are provided in Table 1.

Performance Criteria and Monitoring Methods

The restored areas are monitored and maintained to evaluate the restoration status relative to performance criteria presented in the Remedial Design. Performance criteria include:

- Trees – 100% survival (within first two growing seasons);
- Shrubs – 80% survival (within first two growing seasons);
- Total vegetative cover (defined as ground and canopy cover within the radial plots) – at least 85% average cover for areas above the MHW elevation (within one growing season);

- Herbaceous ground cover – at least 85% average cover for grass planting area (using quadrat data) (within first two growing seasons);
- Invasive plant species ground cover – 0% of “prohibited” species and less than 5% of “regulated” species during each monitoring event; and
- Live stakes and emergent vegetation restored below the MHW elevation – 80% total cover by Year 5 of monitoring.

Monitoring Methods

Qualitative and quantitative monitoring activities are used to evaluate herbaceous ground cover, tree and shrub survival, live stake survival and growth, bank stability, erosion control, and invasive plant species presence. Qualitative and quantitative monitoring results are then compared to the performance criteria to identify adaptive management and/or corrective actions that may be necessary to meet restoration objectives.

Qualitative Monitoring

Qualitative meander surveys are performed early in the growing (i.e., late spring) season to evaluate restoration success and identify issues that require adaptive management and/or corrective actions by assessing:

- Tree, shrub, and live stake survival;
- Vegetation establishment for herbaceous ground cover;
- Bank stability and erosion control issues; and
- Non-native invasive and nuisance species presence and removal.

Quantitative Monitoring

Quantitative monitoring is performed late in the growing season (i.e., late summer/early fall) to quantitatively evaluate restoration success and to determine if performance criteria are being met. Quantitative monitoring focuses on identifying:

- Tree and shrub survival/mortality;
- Herbaceous cover diversity and quality;
- Stability and erosion control issues associated with the restored channel and banks; and
- Non-native invasive and nuisance species presence.

Due to the scale of the planned supplemental tree and shrub plantings, quantitative monitoring was adapted through consultation with NYSDEC (based on NYSEG discussion with NYSDEC on August 23, 2024) to specifically assess survival and total vegetative cover within areas below the MHW level to focus on evaluating emergent vegetation and inundated shoreline restored habitats to develop corrective actions for implementation in 2025.

Quantitative monitoring methods for specific vegetation communities are detailed below.

Quantitative Monitoring Methods

The quantitative monitoring event and vegetation survey are conducted to evaluate the vegetation community established within each restoration area (i.e., Area 1, Area 2). Tree survival is evaluated through individual tree

counts. Shrub (live stake) survival, herbaceous cover, emergent vegetation, and invasive species estimates are developed using the vegetation survey methods described in Appendix G of the Remedial Design and summarized below.

Vegetation survey methods include the establishment of fixed radial plots (i.e., circular 1/100-acre plots with an 11.7-foot radius or 1/10-acre plots with a 37.3-foot radius) to evaluate shrub survival and use of nested one square meter (1-m^2) quadrat plots to assess total vegetative cover and herbaceous cover condition. The primary objective of the radial plots is to assess approximately 20% of the total restored acreage to estimate shrub survival and overall total vegetative cover to compare against performance criteria. Planted shrub survival is extrapolated from radial plot counts and compared to the full restored area plantings to derive a percent survival estimate. Herbaceous vegetation and invasive species identification and individual species cover estimations are performed within each 1-m^2 quadrat. Raw observed percent cover estimates are standardized using cover class midpoints, based on the Daubenmire cover class system (Barbour et al. 1999), presented in Table 2.

Note that estimation using these methods may impart some potential bias and sampling error due to radial plots that may overlap multiple planting habitat types with planting densities that differ by species and per habitat in accordance with the NYSDEC-approved restoration design. Aggregation[1] (i.e., clustering of plantings) is also a contributing factor to density differences observed within the plots. Hence, habitat-specific shrub survival estimates were adjusted to account for habitat overlap, where applicable, to increase accuracy for the overall restored area estimate. In addition, qualitative meander surveys within each restored habitat type were used to evaluate for signs of significant shrub mortality. A breakdown of the number of radial plots and quadrats evaluated for each restoration area and habitat type is listed below

Area 1

Across the restored habitat types on the western and eastern shorelines of Area 1, 12 fixed radial plots and 18 random 1-m^2 quadrat plots were assessed (Figure 1). A breakdown of the number of radial plots and quadrats according to habitat type is listed below:

- Emergent Vegetation: 4 radial plots, 8 quadrats; and
- Inundated Shoreline: 8 radial plots, 10 quadrats.

Area 2

Across the restored habitat types in Area 2, 7 fixed radial plots and 7 random 1-m^2 quadrat plots were assessed (Figure 2). A breakdown of the number of radial plots and quadrat plots according to habitat type is listed below:

- Emergent Vegetation: 1 radial plot, 1 quadrat; and
- Inundated Shoreline: 6 radial plots, 6 quadrats.

Additionally, Area 1 and Area 2 restoration monitoring included 20 fixed photograph locations established at Area 1 (Figure 3) and 17 fixed photograph locations at Area 2 (Figure 4). Photographs will be taken at each location during subsequent monitoring events to document the restoration progress.

[1] Aggregation is measured as an index of dispersion (as the shrub count per plot variance divided by the average shrubs per plot) (Payandeh 1970).

Field Data Collection Methods

Field survey data was digitally collected using a vegetation monitoring application within Fulcrum® and was exported to Microsoft Excel® for data evaluation and table summation. An example set of field information and forms for OU-2 Area 1 and Area 2 radial and quadrat plots are provided in Attachment 1.

Adaptive Management and Corrective Actions

Adaptive management is a proactive management strategy that uses information gathered through routine monitoring to identify successful management practices and implements corrective actions that will help achieve the restoration objectives. Adaptive management and corrective actions completed in 2024 focused primarily on removal of invasive plant species within the restoration limits, along with assessment of tree and shrub mortality to determine supplemental planting quantities and identifying sparse areas of herbaceous vegetation that may require additional seeding. Completed adaptive management and corrective actions are detailed below.

Adaptive Management

During the May, September, and October 2024 visits, Arcadis performed meander surveys within restored habitat areas to address previously treated and newly identified areas where invasive shrub and plant species are present. Based on these observations, invasive species management was performed by Arcadis on September 11 and September 30, October 1, October 4, and October 7, 2024 to remove purple loosestrife (*Lythrum salicaria*), and mugwort (*Artemisia vulgaris*) using hand-removal techniques and cut stem removal for black locust (*Robinia pseudoacacia*).

- Purple loosestrife was observed primarily in the inundated shoreline restored habitats of both Area 1 and Area 2 and approximately 1,000 to 1,500 plants were removed.
    - Subsequent monitoring will include inspection of individual purple loosestrife plants for evidence of biological controls (i.e., beetles [*Galerucella calmariensis]* or weevils *[Hylobius transversovittatus]).*
- Mugwort in Area 1 was primarily confined to mulch areas of previously installed tree plantings, some minor spread was evident in the floodplain habitat, but goldenrod species were present in high abundance to outcompete, and limit spread. Mugwort in Area 2 was observed within the bank and floodplain restored habitat areas and approximately 1,000 plants were removed.
- Black locust was observed on the lower end of Area 2 western bank restoration and individual stems were cut down to the lower basal portion.

Additionally, in Area 1, Reed canary grass was observed along an upstream portion of the eastern bank and Japanese knotweed (*Reynoutria japonica*) was observed along the eastern bank below the lower bridge, where a moderate stand has developed. Invasive control measures for 2025 include a spot foliar application of a targeted herbicide applied to control Reed canary grass and potential planting of additional trees/shrubs and/or overseeding. Japanese knotweed will be cut prior to flowering followed by a foliar herbicide application approximately eight weeks after initial cutting. In general, invasive species control measures in both Area 1 and Area 2 for 2025 will include physical removal and/or spot foliar application of a targeted herbicide.

Corrective Actions

Arcadis completed a full assessment of existing tree and shrub plantings, based on observations from qualitative and quantitative monitoring activities performed in 2024. Monitoring observations and results were used to develop corrective actions to meet the baseline restoration quantities and performance criteria specified in the Remedial Design. Corrective actions included supplemental tree and shrub planting and reseeding activities at Area 1 and Area 2 and were completed between September 30, 2024 and October 8, 2024. Supplemental planting activities were performed by Clover-Leaf Nurseries, Inc. (Clover-Leaf) with planting oversight provided by Arcadis. Supplemental planting details for each area are included below:

- Area 1 – 78 trees were planted representing 7 individual species (black willow, pin oak, red maple, red oak, river birch, silver maple and sugar maple) and 1062 shrubs representing 7 individual species (arrowwood, black chokeberry, black willow, grey dogwood, red-osier dogwood, serviceberry, and silky dogwood).
    - On the eastern shoreline floodplain and inundated shoreline habitat areas, 76 trees and 991 shrubs were planted.
    - On the western shoreline floodplain area, two replacement river birch were planted.
    - On the western shoreline inundated shoreline and bank habitat areas 71 shrubs were planted.
- Area 2 – 113 trees were planted representing 9 individual species (black cherry, eastern cottonwood, linden, red maple, red oak, river birch, silver maple, sugar maple, and tulip poplar) and 442 shrubs representing the same 7 individual shrub species as Area 1.
    - On the eastern shoreline floodplain area, 75 trees and 282 shrubs were planted.
    - On the eastern shoreline bank habitat area, 38 trees and 160 shrubs were planted.

Clover-Leaf also reseeded floodplain and bank habitat areas within Area 1 and Area 2 that had noticeably bare or sparse herbaceous cover and areas where herbaceous vegetation was damaged as a result of supplemental planting activities. A supplemental tree and shrub planting summary is provided in Table 3.

Vegetation Monitoring Results

Arcadis performed both qualitative and quantitative vegetative assessments in OU-2 Area 1 and Area 2. Qualitative assessment (i.e., meander survey) was completed in Area 1 (western shoreline only) and Area 2 on May 28, 2024 and in Area 1 (eastern shoreline) on July 11, 2024[2]. Quantitative assessment in Area 1 and Area 2 was completed from September 9 to 10, 2024. Vegetation monitoring results for Area 1 and Area 2 are summarized below. Field activities are documented in the 2024 monitoring inspection checklist included as Attachment 2 and photograph log included as Attachment 3.

Area 1 Trees

Individual tree counts were performed to determine tree survivability within the Area 1 eastern and western shorelines. During the July 11, 2024 eastern shoreline meander survey, a total of 124 trees were observed alive with mortality of five trees. Based on the Remedial Design, 200 trees were specified for planting on the eastern

[2] Access to the eastern shoreline and floodplain at Area 1 was not permitted until a new access agreement between NYSEG and the property owner was executed in early July 2024.

shoreline as part of the restoration activities. During the fall 2024 supplemental planting event, 76 trees were planted on the eastern shoreline to meet Remedial Design restoration criteria.

On the western shoreline a total of 44 trees were planted during restoration activities. During the spring 2024 qualitative monitoring visit, the trees appeared healthy, and mortality of two trees was observed. During the quantitative monitoring activities, a total of 42 trees were observed alive with several showing signs of stress, with limited basal growth only. During the fall 2024 supplemental planting event, two replacement river birch trees were planted in the northern section of the western shoreline floodplain habitat.

Current tree counts, including existing and supplemental plantings, indicate that tree survival currently meets the Remedial Design restoration criteria and 100% survivability performance criteria. Additionally, seven natural tree recruits (Five green ash and two box elder greater than 5 feet tall) were observed on the eastern shoreline and six natural tree recruits (greater than 5 feet tall) were observed on the western shoreline.

Area 1 Shrubs and Live Stakes

Shrub survival estimates within the inundated shoreline, bank, and floodplain habitats were developed from fixed radial plot assessments representing approximately 21% of the total restored eastern and western inundated shoreline areas (Figure 1).

Within the eastern shoreline, shrub mortality was observed with additional shrubs either browsed by herbivores or missing. Estimated shrub survival quantities were below reported as-built quantities and Remedial Design restoration criteria. During the fall 2024 supplemental planting event, 991 shrubs were planted in the inundated shoreline and floodplain habitats. A higher proportion of shrubs were installed within sparse areas of the inundated shoreline habitat to increase the planted density in this habitat area.

Within the western shoreline inundated shoreline and bank habitats, estimated counts were also below as-built quantities and Remedial Design restoration criteria. During the fall 2024 supplemental planting event, 71 shrubs were planted in the inundated shoreline and bank habitats to improve the planted density in these habitat areas. Within the floodplain habitat, approximately nine shrubs were dead and total of 24 shrub natural recruits (i.e., greater than 18 inches tall) were observed. Based on survival estimates and natural recruitment, no supplemental shrub plantings were specified in 2024 for the western shoreline floodplain habitat. Shrub survival will be reevaluated in 2025 with corrective actions performed, as necessary.

As noted above, natural shrub recruitment was present with several native species observed, including staghorn sumac (*Rhus typhina*), green ash (*Fraxinus pennsylvanica*), eastern cottonwood (*Populus deltoides*), red maple (*Acer rubrum*), and black currant (*Ribes americanum*).

Live stake shrub survival estimates within the eastern inundated shoreline habitat were evaluated using two radial plots (IS-06 and IS-07) and indicate 100% survival for installed live stakes and shrubs. Survival estimates within the western inundated shoreline habitat used six radial plots (B-01, IS-01 to IS-05) and indicate a survival estimate of approximately 24% for installed live stakes and shrubs. Overall, live stake and shrub survival in Area 1 is approximately 54%. Detailed information regarding the individual radial plots assessed at Area 1 are presented in Table 4a and radial plot data and estimated shrub and live stake counts are presented in Table 4b.

Area 1 Emergent Vegetation

Emergent vegetation along the eastern and western shoreline was assessed using radial plots and 1-m^2 quadrats. Along the eastern shoreline, emergent vegetation species including both American bur-reed (*Sparganium*

americanum) and arrow arum (*Peltandra virginica*) and seeded and naturally recruited emergent species such as lurid sedge (*Carex lurida*) and needle spike rush (*Eleocharis acicularis*) were present. Overall vegetative cover for arrow arum along the eastern shoreline was evaluated using four quadrat plots EV-03 and EV-04 and is estimated at 12%. On the western shoreline only naturally recruited emergent vegetation was observed at radial plots EV-01 and EV-02. Invasive species coverage within the emergent vegetation habitat was approximately 7%. The primary invasive species observed was purple loosestrife. Based on the presence of this species, hand-removal activities were performed as described above to control potential spread. Detailed information regarding the individual emergent vegetation radial plots and quadrats assessed in Area 1 are presented in Table 4a and Table 5a.

Area 1 Herbaceous Vegetation

Herbaceous vegetation cover was assessed using random 1-m^2 quadrats within the inundated shoreline and emergent vegetation restored habitats and indicated a reasonable species diversity, with 24 plant species within emergent vegetation habitat and 54 plant species within the inundated shoreline habitat.

Invasive species coverage within the inundated shoreline habitat was approximately 9%. The primary invasive species observed were mugwort and purple loosestrife. Based on the presence of these species, hand-removal activities were performed as described above to control potential spread.

Quadrat data and results for Area 1 are presented in Tables 5a and 5b. A combined area quadrat data summary is provided in Table 5e, and a complete list of plant species observed during monitoring is included in Table 6.

Area 2 Trees

Individual tree counts within Area 2 were performed to determine survivability. Following qualitative and quantitative monitoring activities a total of 144 trees were observed alive and 18 were observed dead. Based on the Remedial Design a total of 257 trees were specified to be planted at Area 2 however, only 162 trees were planted during the initial restoration. Based on the observed survival quantities a total of 113 trees were planted during the supplemental planting event to meet the Remedial Design restoration criteria.

Current tree counts in Area 2 including existing and supplemental plantings indicate that tree survival currently meets the Remedial Design restoration criteria and 100% survivability performance criteria.

Area 2 Shrub and Live Stakes

Shrub survival estimates within the inundated shoreline, bank, and floodplain habitats were developed from fixed radial plot assessments representing approximately 19.5% of the total restored area (Figure 2).

Monitoring results indicate that estimated shrub counts in the bank and floodplain habitats are below reported as-built quantities and Remedial Design restoration criteria. During the fall 2024 supplemental planting event, 442 shrubs were planted in the bank and floodplain habitats. Based on survival estimates and supplemental planting, shrub survival within the bank and floodplain habitats is above the 80% which meets the performance criteria.

Live stake shrub installations and current conditions within the inundated shoreline areas indicate no installed live stakes and limited presence of naturally recruited live stake/shrub species. Note that based on the Revised Remedial Design, woody vegetation (i.e., live stakes) was limited to restored shorelines outside the historic United States Army Corps of Engineers (USACE) flood control channel[3] accounting for approximately 0.089 acres. At the

[3] The historic USACE flood control channel is shown on the March 2021 revised Design Drawings C-112, C-113, and C-114.

design density of 1,200 live stakes per acre, approximately 108 live stakes are required to meet Remedial Design restoration criteria. Corrective actions planned for spring 2025 will address deficient live stake shrubs in inundated shoreline areas.

Detailed information regarding the individual radial plots assessed in Area 2 is presented in Table 4a. Radial plot data and estimated shrub and live stake counts are presented in Table 4b.

Area 2 Emergent Vegetation

One quadrat and one radial plot (EV-05) were assessed in emergent vegetation planting areas with increased species diversity observed during both the qualitative and quantitative monitoring visits. Additional deposition of softer substrates and organic material was present in the near-shore planting environments, and natural recruitment of two obligate wetland species, water forget-me-not (*Myosotis scorpoides*) and water speedwell (*Veronica anagallis-aquatica*) were observed in the quadrat. No invasive species were observed within the quadrat or radial. Other emergent and submerged plant community species observed within the radial plot, include one emergent grass species, rice cutgrass (*Leersia oryzoides*), and three submerged aquatic plant species, water starwort (*Callitriche stagnalis*), waterweed (*Elodea canadensis*), and grass-leaved pondweed (*Potamogeton gramineus*). Outside the defined radial plot areas, several arrow arum plants were identified along the eastern and western shoreline. As compared to 2023 monitoring observations, there was a slightly higher presence of naturally recruited emergent plant species, and submerged aquatic vegetation observed in this area. Overall vegetative cover is estimated at 60% (once all recolonized native vegetation is included), as shown in Table 4a.

Area 2 Herbaceous Vegetation

Herbaceous vegetation cover was assessed using random 1-m^2 quadrats within inundated shoreline habitat and emergent vegetation restored habitats and indicated a reasonable species diversity, with 4 plant species within emergent vegetation habitat and 39 plant species within inundated shoreline habitat. Herbaceous vegetative cover was approximately 63% and 71% within the emergent vegetation and inundated shoreline habitat areas, respectively.

Invasive species coverage within the inundated shoreline habitat was approximately 5.3%. Invasive species observed included mugwort, purple loosestrife, cut-leaved teasel (*Dipsacus laciniatus*), and black locust. Corrective actions included hand-removal of mugwort and purple loosestrife and stem cutting of black locust, were performed as described above.

Quadrat data and results for Area 2 are presented in Tables 5c and 5d. A combined area quadrat data summary is provided in Table 5e, and a complete list of plant species observed during the monitoring is included in Table 6.

Summary

Qualitative and quantitative surveys were performed to guide adaptive management and corrective actions to promote successful vegetation establishment and to meet performance criteria. Adaptive management and corrective actions completed in 2024 included supplemental tree and shrub planting, and herbaceous seeding and invasive species management using hand removal and cut stem techniques. Key observations for each area are provided in the subsections below and a summary of area-specific and overall monitoring results and associated performance criteria are provided in Table 8 (below):

Area 1

- Supplemental tree planting was completed to offset mortality and increase tree quantities to meet the Remedial Design restoration criteria. Tree quantities for both the Area 1 eastern and western shorelines currently meet the 100% survivability performance criteria.
- Supplemental shrub plantings were installed in lower density bank, and floodplain restored areas to offset observed mortality and increase shrub densities to meet the Remedial Design restoration criteria. Shrub survival estimates above the MHW elevation currently exceed the performance criteria of 80%.
- Supplemental shrub plantings were installed in lower density inundated shoreline restored areas to offset observed mortality. Live stake shrub survival estimates below the MHW elevation (within the Inundated Shoreline restored areas) are currently below the performance criteria. Corrective actions to install additional live stake shrubs are planned for spring 2025.
- Supplemental shrub plantings improved total vegetative cover (i.e., ground and canopy cover within the radial plots) above the MHW elevation. Total vegetative cover currently exceeds the performance criteria of 85%. Additionally, bank and floodplain habitat areas with bare or sparse cover were overseeded and will be reevaluated during the 2025 monitoring events.
- Based on herbaceous ground cover quadrat data, total herbaceous ground cover exceeds the performance criteria of 85%.
- Invasive and nuisance plant species coverage within the inundated shoreline habitat was estimated at 9%. Invasive and nuisance plant species controls included physical plant removal within the restoration areas. The spring 2025 inspection will reassess the establishment of invasive and nuisance species with additional controls (i.e., foliar herbicide application) performed as needed.

Area 2

- Supplemental tree planting was completed to offset mortality and increase tree quantities to meet the Remedial Design restoration criteria. Tree quantities across all Area 2 restored tree planting areas currently meet the 100% survivability performance criteria.
- Supplemental shrub plantings were installed in lower density bank, and floodplain restored areas to offset observed mortality and increase densities to meet the Remedial Design restoration criteria. Shrub survival estimates above the MHW elevation currently exceed the performance criteria of 80%.
- Live stake shrub survival estimates within the Inundated Shoreline restored areas are currently below the performance criteria. Corrective actions to install additional live stake shrubs are planned for spring 2025.
- Total vegetative cover (i.e., ground and canopy cover observed through meander surveys) above the MHW elevation exceeds the performance criteria of 85%.
- Invasive and nuisance plant species coverage within the inundated shoreline habitat was estimated at 5.3%. Invasive and nuisance plant species controls included physical plant removal within the restoration areas. The spring 2025 inspection will reassess the establishment of invasive and nuisance species with additional controls (i.e., foliar herbicide application) performed as needed.

Table 8 – 2024 (Year 1) OU-2 Restoration Performance Criteria Summary

Plantings	OU-2 Monitoring Results			Performance Criteria	OU-2 Standard Achieved
	Area 1	Area 2	Overall		
Trees[1]	100%	100%	100%	100% Survival	Yes
Shrubs (above MHW)[1]	>80%	>80%	>80%	80% Survival	Yes
Shrubs and Live Stakes within the Inundated Shoreline (below MHW)[2]	54%	0%	41%	80% Survival (by Year 5 of monitoring)	No
Total Vegetative Cover (above MHW)[3]	>85%	>85%	>85%	85% Cover	Yes
Herbaceous Ground Cover (grass)[4]	>85%	N/A	>85	85% Cover	Yes
Invasive Species Ground Cover	9.0%	5.3%	7.8%	<5% (Regulated Species)	No

Notes:
1. Supplemental tree and shrub plantings were performed in Area 1 and Area 2 to meet the Remedial Design restoration criteria.
2. Shrub and live stake survival is based on extrapolation of density-based radial plot information with the adjustment of plot habitat overlap to derive estimated plant counts. Meander survey observations within the restored habitats primarily indicated most significant loss below MHW. Some mortality due to herbivory impact was observed in portions of the restored habitats.
3. Herbaceous seed mix was applied to areas of low vegetative cover within floodplain and bank restored habitats.
4. Maintained grass cover within the Area 1 uplands was unchanged from 2023 observations and is above 85%.

N/A – not applicable.

2025 Planned Activities

The 2025 (i.e., Year 2) post-construction vegetation monitoring will be conducted during two events: a qualitative inspection event in the late-Spring/early-Summer and a quantitative event in late-Summer/early-Fall. The qualitative event will be conducted to assess current restoration area conditions regarding herbaceous ground coverage, tree conditions, bank stability, and invasive species presence. Qualitative observations will be used to develop potential corrective actions in order to meet the restoration performance criteria. The quantitative event will include individual tree counts and shrub, vegetative cover, and herbaceous vegetation cover assessment radial plots and random quadrats to quantitatively compare the restoration conditions to performance criteria. These inspections will be performed across restored habitats within both Area 1 and Area 2.

Additionally, anticipated adaptive management and corrective actions to be performed in 2025 include:

- Foliar herbicide application for invasive and nuisance plant species to control establishment and limit the encroachment within the restored areas.
- Live stake shrubs will be installed within inundated shoreline habitats to offset observed mortality, improve shrub survival, and to meet the live stake performance criteria of 80% survival by Year 5 of monitoring. Quantities and species to be installed are noted below:
    - Area 1 – 131 live stakes will be installed within the western inundated shoreline habitat in areas that have sparse vegetation coverage. Quantities and species include 62 silky dogwood (Cornus amomum), 42 red-osier dogwood (Cornus sericea), and 27 black willow (Salix nigra).
    - Area 2 – 108 live stakes will be installed within the inundated shoreline habitats that are located outside the USACE flood control channel. Quantities and species include 45 silky dogwood, 36 red-osier dogwood, and 27 black willow.

  Live stakes will be installed in 2025 in accordance with the Remedial Design and during the spring dormant period as site conditions allow. Based on the timing of this corrective action, NYSEG is seeking approval of this live stake corrective action before March 1, 2025.

Justin Starr, P.G.
New York State Department of Environmental Conservation
June 17, 2025

Please contact Mark Castro at 203.233.1245 or mark_castro@avangrid.com if you have any questions or require any additional information.

Sincerely,
Arcadis of New York, Inc.

Joe Bistrovich
Senior Environmental Engineer

Email: joe.bistrovich@arcadis.com
Direct Line: 315.671.9697
Mobile: 315.427.4585

CC. Mark Castro, Avangrid
Mark Gravelding, P.E., Arcadis
Jason Vogel, Arcadis

Enclosures:

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Tables

Table 1
Area 1 and Area 2 Habitat Restoration Summary
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Restored Habitat (Planting Area)	Acreage	Trees Planted	Shrubs Planted	Live Stakes Installed	Emergent Vegetation Installed	Herbaceous Seed Mix
Area 1 - As-Built Quantities[1]						
Emergent Vegetation	0.18	--	--	--	1,401	NA
Inundated Shoreline	1.11	22	632	453	--	Yes
Bank	0.48	19	286	--	--	Yes
Floodplain	2.96	202	1,283	--	--	Yes
Grass/Maintained	0.32	1	0	--	--	Yes
Total:	**5.05**	**244**	**2201**	**453**	**1401**	
Area 1 - Post-Restoration Observations[2]						
Emergent Vegetation[3]	0.18	--	--	--	NA	NA
Inundated Shoreline[3]	1.11	22	151	322	--	Yes
Bank	0.48	18	66	--	--	Yes
Floodplain	2.96	131	482	--	--	Yes
Grass/Maintained	0.32	1	0	--	--	Yes
Total Alive[4]:	**5.05**	**166**	**699**	**322**	**--**	
Area 1 - Supplemental Planting[5]						
Inundated Shoreline[3]	--	36	350	131[6]	NA	Yes
Bank	--	9	92	--	--	Yes
Floodplain	--	33	620	--	--	Yes
Grass/Maintained	--	NA	NA	--	--	Yes
Supplemental Total:	**5.05**	**78**	**1,062**	**131**	**--**	
Area 1 - Restoration Totals:	**5.05**	**244**	**1,761**	**453**	**--**	
Area 2 - As-Built Quantities[1]						
Emergent Vegetation[3]	0.004	--	--	--	180	NA
Inundated Shoreline[3]	0.26	--	--	108	--	Yes
Bank	0.64	38	820	--	--	Yes
Floodplain	0.96	219	1,333	--	--	Yes
Total:	**1.86**	**257**	**2,153**	**108**	**180**	
Area 2 - Post-Restoration Observations[2]						
Emergent Vegetation[3]	0.004	NA	NA	--	NA	NA
Inundated Shoreline[3]	0.26	NA	NA	0	--	Yes
Bank	0.64	21	422	--	--	Yes
Floodplain	0.96	123	816	--	--	Yes
Total Alive[4]:	**1.86**	**144**	**1,238**	**0**	**--**	
Area 2 - Supplemental Planting						
Inundated Shoreline[3]	--	--	--	108[6]	NA	Yes
Bank	--	38	160	--	--	Yes
Floodplain	--	75	282	--	--	Yes
Supplemental Total:	**1.86**	**113**	**442**	**108**	**--**	
Area 2 - Restoration Totals:	**1.86**	**257**	**1,680**	**108**	**--**	
Combined Area As-Built Total:	**6.91**	**501**	**3,441**	**561**	**1,581**	

Acronyms and Abbreviations:

-- = not applicable
NA = not assessed by individual stem count

Notes:

1. As-built quantities are based on contractor survey information.
2. Post-restoration observations are based on 2023 and 2024 qualitative and quantitative inspections.
3. Emergent vegetation and inundated shoreline areas that are below the mean high water level (MHWL) were evaluated during 2023 and 2024 qualitative and quantitative site visits.
4. Alive plantings are assessed using individual counts for trees and through radial plot estimation and meander surveys for shrubs, quantity excludes observed mortality.
5. Supplemental planting quantity for trees are based on 100% survival within the first two growing seasons and for shrubs are based on 80% survival within the first two growing seasons.
6. Supplemental live stake planting will be installed during the spring 2025 dormant period.

Table 2
Cover Class System
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Percent Cover Classes		
Range of Cover (%)	**Cover Class Midpoint**	**Class**
<1%	0.5	0
1-5%	3.0	1
6-15%	10.5	2
16-25%	20.5	3
26-50%	38.0	4
51-75%	63.0	5
76-95%	85.5	6
>95%	98.0	7

Notes:

1. Based on the Daubenmire cover class system (Barbour, et al 1999).

Reference:

Barbour, M. G., J.H. Burk, W.D. Pitts, F.S. Gilliam and M.W. Swartz. 1999. Terrestrial Plant Ecology. Third Edition. California: Benjamin/Cummings.

Table 3
Area 1 and Area 2 Supplemental Tree and Shrub Planting Summary
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Restored Habitat (Planting Area)	Trees Planted[1]	Shrubs Planted[2]	Herbaceous Seed Mix Applied?
Area 1			
Inundated Shoreline	36	350	Yes[3]
Bank	9	92	Yes
Floodplain	33	620	Yes
Area Total:	**78**	**1,062**	
Area 2			
Bank	38	160	Yes
Floodplain	75	282	Yes
Area Total:	**113**	**442**	
Total:	**191**	**1,504**	

Notes:

1. Tree species planted include: black cherry, black willow, eastern cottonwood, linden, pin oak, red maple, red oak, river birch, silver maple, sugar maple, tulip poplar.
2. Shrubs in Area 1 individual restored habitats are estimated from in-field grouping given the scale of the plantings. Shrub species planted include: arrowwood, black chokeberry, black willow, grey dogwood, red-osier dogwood, serviceberry, and silky dogwood.
3. Bank seed mix was applied to bare or sparsely vegetated spots within the Inundated Shoreline habitat.

Table 4a
Vegetative Cover Radial Plot Summary
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Restored Habitat Type / Radial Plot ID	Area	Absolute Vegetative Cover (%)	Total Vegetative Cover (%)	Herbaceous Cover (%)	Shrub Cover (%)	Tree Cover (%)	Tree Count	Shrub Count	Shrub Recruit	Tree Height Range (feet)	Shrub Height Range (feet)
Emergent Vegetation											
EV-01	1	45	45	45	0	0	0	0	0	--	--
EV-02	1	2	2	2	0	0	0	0	0	--	--
EV-03	1	60	60	60	0	0	0	0	0	--	--
EV-04	1	91	91	60	30	1	0	14	0	9 - 9	3.6 - 7.4
EV-05	2	60	60	60	0	0	0	0	0	--	--
Habitat Average:		**52**	**52**	**45**	**6**	**0**	**0**	**3**	**0**	**9 - 9**	**3.6 - 7.4**
Inundated Shoreline											
B-01[4]	1	30	30	25	5	0	0	4	0	--	0.4 - 4.4
IS-01	1	47	59	35	12	0	0	9	5	--	1.5 - 3.0
IS-02	1	75	75	70	0	5	0	7	7	--	4.5 - 12
IS-03	1	80	88	45	2	10	0	3	2	--	4.7 - 6.5
IS-04	1	75	83	35	15	0	0	4	0	--	3.2 - 4.5
IS-05	1	95	95	95	0	0	0	0	0	--	--
IS-06	1	95	148	95	45	8	5	23	0	11.2 - 15	1.4 - 5.4
IS-07	1	95	121	95	8	18	6	16	2	9 - 12.4	1.8 - 4.6
IS-08	2	80	80	40	0	0	0	0	0	--	--
IS-09	2	75	75	30	0	0	0	0	0	--	--
IS-10	2	85	92	55	0	0	0	0	0	--	--
IS-11	2	70	73	40	0	0	0	0	0	--	--
IS-12	2	90	94	45	2	0	0	2	0	--	1.4 - 3.7
IS-13	2	85	86	40	3	0	0	3	0	--	1.0 - 5.0
Habitat Average:		**77**	**86**	**53**	**7**	**3**	**1**	**5**	**1**	**9 - 15**	**0.4 - 12**
Restored Habitat (All) Average:		**70**	**77**	**51**	**6**	**2**	**1**	**4**	**1**	**9 - 15 (max range)**	**0.4 - 12 (max range)**

Notes:

1. Radial plot surveys conducted September 9 to 10, 2024.
2. Absolute vegetative cover is the radial plot estimate of total cover including all strata (i.e., herbaceous, shrub, and tree species) present considering overlap.
3. Total vegetative cover is the cumulative sum of herbaceous, shrub, and tree cover observed within the radial plot.
4. Natural shrub recruits are noted, but not included within the total vegetation cover or shrub cover estimates.
5. As-built conditions versus design conditions indicate a habitat planting area difference for B-01, as shown with asterisk.

Table 4b
Shrub and Live Stake Survival Summary
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Restored Habitat Type[1]	Total Restored Area (acres)	Planted Shrub Count[2]	Plot Area (acres)	Plot Shrub Count	As Built Density[3]	Shrub Plot Density	Plot Shrub Count Extrapolated[4]
Area 1 - Western and Eastern Shoreline							
Inundated Shoreline	1.16	50	0.26	66	1640	277	244 (322)
						Percent Survival (Estimated Count):	**54% (71%)**
Area 2 - Western and Eastern Shoreline							
Inundated Shoreline	0.26	5	0.060	5	965	161	42 (42)
						Percent Survival (Estimated Count):	**17% (17%)**
Total:	**1.42**	**759**	**0.32**	**71**	**2605**	**438**	**286 (364)**
						Percent Survival (Estimated Count):	**36% (44%)**

Notes:

1. Radial plot surveys conducted September 9 to 10, 2024.
2. Counts include live stakes and estimated values from as-built information provided.
3. Density is based on some potential overlap of radial plots across restored habitat types, the density or extrapolated counts may exceed as-built quantities.
4. Estimated shrub counts include planted and total (including naturally recruited) in parentheses.
5. The radial plots assessed approximately 20% of the total restored habitat area within Area 1 and approximately 12% of the total restored habitat area within Area 2.

Table 5a
Area 1 - Emergent Vegetation Quadrat Data
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Quadrat I.D. / Scientific Name	Common Name	Growth Form	Indicator Status	Native Status	Invasive (Y/N)	Canopy Cover Class								Canopy Cover (%)	Species Composition
						EV-01Q1	EV-01Q2	EV-02Q1	EV-02Q2	EV-03Q1	EV-03Q2	EV-04Q1	EV-04Q2		
Ambrosia artemisiifolia	Annual ragweed	herbaceous	FACU	I	N	--	--	1	--	--	--	--	--	0.4	0.4
Asclepias incarnata	Swamp milkweed	herbaceous	OBL	N	N	--	--	--	--	--	--	--	3	2.6	2.5
Bidens cernua	Nodding burr marigold	herbaceous	OBL	N	N	--	--	--	--	2	3	--	--	3.9	3.8
Carex lurida	Lurid sedge	herbaceous	OBL	N	N	--	--	--	--	--	--	4	5	12.6	12.5
Chlorophyta spp.	Green algae	chlorophyte	OBL	N	N	2	3	--	--	3	--	--	--	6.4	6.4
Cornus sericea	Redosier dogwood	shrub	FACW	N	N	--	--	--	--	--	--	--	2	1.3	1.3
Cyperus bipartitus	Shining flat sedge	graminoid	FACW	N	N	--	--	--	1	--	--	--	--	0.4	0.4
Echinochloa crus-galli	Eurasian barnyard grass	graminoid	FAC	I	N	--	--	--	--	1	--	--	--	0.4	0.4
Eleocharis acicularis	Needle spike rush	herbaceous	OBL	N	N	2	1	--	--	--	2	--	--	3.0	3.0
Eleocharis obtusa	Blunt spike rush	herbaceous	OBL	N	N	--	--	--	--	2	--	--	--	1.3	1.3
Impatiens capensis	Spotted touch-me-not	herbaceous	FACW	N	N	--	--	--	--	--	--	--	3	2.6	2.5
Leersia oryzoides	Rice cutgrass	graminoid	OBL	N	N	2	1	2	1	4	2	--	--	9.4	9.3
Ludwigia palustris	Water purslane	herbaceous	OBL	N	N	--	--	3	--	4	6	--	--	18.0	17.8
Lythrum salicaria	Purple loosestrife	herbaceous	OBL	I	Y	2	1	--	--	2	2	3	--	6.9	6.8
Myosotis scorpioides	Water forget-me-not	herbaceous	OBL	I	Y	--	--	2	--	--	--	--	2	2.6	2.6
Panicum capillare	Common panic grass	graminoid	FAC	N	N	--	--	--	1	--	--	--	--	0.4	0.4
Persicaria maculosa	Lady's thumb	herbaceous	FAC	I	N	--	--	2	1	--	--	--	--	1.7	1.7
Phalaris arundinacea	Reed canary grass	graminoid	FACW	I	Y	--	--	--	--	--	--	4	2	6.1	6.0
Peltandra virginica	Arrow arum	herbaceous	OBL	N	N	--	--	--	--	--	2	4	--	6.1	6.0
Scutellaria lateriflora	Mad dog skullcap	herbaceous	OBL	N	N	--	--	--	--	--	--	--	2	1.3	1.3
Symphyotrichum lanceolatum	White panicled aster	herbaceous	FACW	N	N	--	--	--	1	--	--	--	--	0.4	0.4
Verbena hastata	Blue vervain	herbaceous	FACW	N	N	--	--	--	1	--	--	--	--	0.4	0.4
Veronica anagallis-aquatica	Water speedwell	herbaceous	OBL	I	N	5	4	--	--	--	--	--	--	12.6	12.5
Xanthium strumarium	European cocklebur	herbaceous	FAC	I	N	1	--	--	--	--	--	--	--	0.4	0.4
Cover Type - % Cover															
Vegetation (Cover Class)						6	4	4	2	6	6	6	7	65.8	
Vegetation (Raw Estimates)						90	45	25	7	75	90	75	98	63.1	
Plant Height/Species Richness															
Plot Height Average (feet)						0.1	0.1	0.3	0.2	1	0.6	2.5	2.3	0.9	
Plot Height Maximum (feet)						1.1	0.2	0.9	0.5	1.8	1.6	3.7	3.5	1.66	
Species Richness						6	5	5	6	7	6	4	7	5.8	
														(Cover Class) Total Vegetative Percent Cover	66.0
														Relative Percent Cover of Invasive Species	6.8

See Notes and Abbreviations on Table 5d.

Table 5b
Area 1 - Inundated Shoreline Quadrat Data
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Quadrat I.D. / Scientific Name	Common Name	Growth Form	Indicator Status	Native Status	Invasive (Y/N)	Canopy Cover Class										Canopy Cover (%)	Species Composition
						B-01Q1	IS-01Q1	IS-02Q1	IS-03Q1	IS-04Q1	IS-05Q1	IS-06Q1	IS-06Q2	IS-07Q1	IS-07Q2		
Ambrosia artemisiifolia	Annual ragweed	herbaceous	FACU	I	N	--	--	1	--	--	--	--	--	--	--	0.3	0.2
Artemisia vulgaris	Mugwort	herbaceous	UPL	I	Y[4]	1	--	--	1	--	--	--	--	3	5	9.0	6.4
Bidens cernua	Nodding burr marigold	herbaceous	OBL	N	N	--	--	--	--	1	--	--	--	--	--	0.3	0.2
Bidens connata	Purple-stemmed beggarticks	herbaceous	FACW	N	N	1	--	--	--	--	--	--	--	--	--	0.3	0.2
Bidens frondosa	Devil's Pitchfork	herbaceous	FACW	N	N	--	--	--	--	1	--	--	--	--	--	0.3	0.2
Calystegia sepium	Hedge bindweed	herbaceous	FAC	I	N	--	--	--	2	--	--	--	--	--	--	1.1	0.8
Carex spicata	Spiked sedge	graminoid	FACU	I	N	--	--	--	--	--	--	--	--	--	2	1.1	0.8
Carex vulpinoidea	Fox sedge	graminoid	OBL	N	N	--	--	--	--	--	--	--	--	3	2	3.1	2.2
Cornus amomum	Silky dogwood	shrub	FACW	N	N	--	--	--	--	--	--	--	2	--	--	1.1	0.8
Cornus sericea	Redosier dogwood	shrub	FACW	N	N	--	--	--	2	--	--	--	--	2	--	2.1	1.5
Cyperus strigosus	False yellow nut sedge	graminoid	FACW	N	N	--	--	--	3	--	--	--	--	--	--	2.1	1.5
Daucus carota	Queen Anne's lace	herbaceous	UPL	I	N	1	--	1	--	1	--	1	--	--	1	1.5	1.1
Epilobium ciliatum	Fringed willowherb	herbaceous	FACW	N	N	1	1	2	2	2	--	--	--	--	--	3.8	2.7
Epilobium coloratum	Eastern willowherb	herbaceous	OBL	N	N	--	--	--	--	--	2	--	--	--	--	1.1	0.8
Erechtites hieraciifolius	Common pilewort	herbaceous	FACU	N	N	--	2	--	1	1	--	--	--	--	--	1.7	1.2
Erigeron canadensis	Common horseweed	herbaceous	FACU	N	N	1	--	--	--	--	--	--	--	--	--	0.3	0.2
Eupatorium perfoliatum	Common boneset	herbaceous	FACW	N	N	--	--	--	--	--	3	--	--	--	--	2.1	1.5
Euthamia graminifolia	Flat-top goldentop	herbaceous	FAC	N	N	--	--	--	2	--	2	5	--	--	--	8.4	6.0
Eutrochium maculatum	Spotted Joe Pye weed	herbaceous	OBL	N	N	--	1	--	--	--	--	--	--	--	--	0.3	0.2
Eutrochium purpureum	Purple Joe Pye weed	herbaceous	FAC	N	N	--	--	1	--	--	--	--	--	--	--	0.3	0.2
Festuca rubra	Red fescue	graminoid	FACU	I	N	--	--	--	--	--	--	--	--	--	1	0.3	0.2
Fragaria virginiana	Common wild strawberry	herbaceous	FACU	N	N	--	--	1	--	--	--	--	2	--	1	1.7	1.2
Galium album	Hedge bedstraw	herbaceous	FACU	I	N	--	--	--	--	--	--	2	--	3	--	3.1	2.2
Galium palustre	Common marsh bedstraw	herbaceous	OBL	N	N	--	3	1	2	1	3	--	--	--	2	6.8	4.9
Glechoma hederacea	Ground ivy	herbaceous	FACU	I	Y	--	--	1	--	--	--	--	--	--	2	1.4	1.0
Impatiens capensis	Spotted touch-me-not	herbaceous	FACW	N	N	--	--	1	--	--	1	--	--	--	1	0.9	0.6
Juncus effusus	Common rush	herbaceous	OBL	N	N	--	4	4	--	1	4	--	--	--	--	11.7	8.4
Lathyrus sylvestris	Narrow-leaved everlasting pea	vine	NI	I	N	--	--	--	--	--	3	--	--	--	--	2.1	1.5
Leersia oryzoides	Rice cutgrass	graminoid	OBL	N	N	--	2	3	2	--	--	--	--	--	--	4.2	3.0
Lotus corniculatus	Birds-foot trefoil	herbaceous	FACU	I	Y	2	--	--	--	--	--	--	--	--	--	1.1	0.8
Lycopus americanus	Cut-leaf water horehound	herbaceous	OBL	N	N	--	--	2	--	--	--	--	--	--	--	1.1	0.8
Lycopus uniflorus	Northern water horehound	herbaceous	OBL	N	N	--	1	--	--	--	--	--	--	--	1	0.6	0.4
Lythrum salicaria	Purple loosestrife	herbaceous	OBL	I	Y[4]	1	2	1	--	2	2	--	--	--	--	3.8	2.7
Medicago lupulina	Black medic	herbaceous	FACU	I	Y	--	--	--	--	1	--	--	--	--	--	0.3	0.2
Mentha canadensis	American wild mint	herbaceous	FACW	N	N	--	--	--	2	--	--	--	--	--	--	1.1	0.8
Myosotis scorpioides	Water forget-me-not	herbaceous	OBL	I	Y	--	--	--	1	--	--	--	--	--	--	0.3	0.2
Oenothera biennis	Common evening primrose	herbaceous	FACU	N	N	2	--	--	--	--	--	--	--	--	--	1.1	0.8
Oxalis dillenii	Slender yellow wood sorrel	herbaceous	FACU	N	N	--	--	--	1	--	--	2	--	--	2	2.4	1.7
Panicum capillare	Common panic grass	graminoid	FAC	N	N	--	--	1	2	--	--	--	--	--	--	1.4	1.0
Persicaria maculosa	Lady's thumb	herbaceous	FAC	I	N	2	--	--	--	--	--	--	--	--	--	1.1	0.8
Picris hieracoides	Hawkweed oxtongue	herbaceous	NI	I	N	--	--	--	2	--	--	--	--	--	--	1.1	0.8

Table 5b
Area 1 - Inundated Shoreline Quadrat Data
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Quadrat I.D. / Scientific Name	Common Name	Growth Form	Indicator Status	Native Status	Invasive (Y/N)	Canopy Cover Class										Canopy Cover (%)	Species Composition
						B-01Q1	IS-01Q1	IS-02Q1	IS-03Q1	IS-04Q1	IS-05Q1	IS-06Q1	IS-06Q2	IS-07Q1	IS-07Q2		
Pilea nummulariifolia	Creeping charlie	herbaceous	FACU	N	N	--	--	--	--	--	--	--	--	2	--	1.1	0.8
Plantago lanceolata	English plantain	herbaceous	FACU	I	N	--	--	--	--	--	--	--	--	--	3	2.1	1.5
Plantago major	Common plantain	herbaceous	FACU	I	N	--	--	--	--	1	--	--	--	--	1	0.6	0.4
Populus deltoides	Eastern cottonwood	tree	FAC	N	N	2	1	--	--	1	--	--	--	--	--	1.7	1.2
Ranunculus repens	Creeping buttercup	herbaceous	FAC	I	Y	--	--	--	--	--	--	2	1	--	2	2.4	1.7
Setaria pumila	Yellow foxtail	graminoid	FAC	I	N	1	--	--	3	--	--	--	--	--	--	2.4	1.7
Solanum dulcamara	Climbing nightshade	herbaceous	FAC	I	Y	--	--	--	1	--	--	--	--	--	--	0.3	0.2
Solidago altissima	Tall goldenrod	herbaceous	FACU	N	N	--	--	--	--	--	3	4	4	4	2	14.5	10.4
Solidago canadensis	Canada goldenrod	herbaceous	FACU	N	N	2	2	4	3	3	--	--	--	2	--	11.1	7.9
Symphyotrichum lanceolatum	White panicled aster	herbaceous	FACW	N	N	1	2	--	--	--	--	3	1	--	3	5.8	4.1
Symphyotrichum puniceum	Purple-stemmed aster	herbaceous	OBL	N	N	--	--	2	--	--	--	--	5	2	2	9.5	6.8
Trifolium pratense	Red clover	herbaceous	FACU	I	N	--	--	--	--	--	--	--	--	1	1	0.6	0.4
Verbena hastata	Blue vervain	herbaceous	FACW	N	N	1	1	--	--	--	--	--	--	--	--	0.6	0.4
Cover Type - % Cover																	
Vegetation (Cover Class)						4	5	6	5	4	7	7	7	7	7	77.8	
Vegetation (Raw Estimates)						40	55	80	65	35	95	95	98	98	95	75.6	
Plant Height/Species Richness																	
Plot Height Average (feet)						0.8	1.5	1.8	1.6	1	2.5	3	4	2.8	3	2.2	
Plot Height Maximum (feet)						2.7	2.7	3.3	3.2	3.2	3.4	5.7	5.7	4.9	5.5	4.03	
Species Richness						14	12	15	17	12	9	7	6	9	18	11.9	
															(Cover Class) Total Vegetative Percent Cover		77.8
															Relative Percent Cover of Invasive Species		9.1

See Notes and Abbreviations on Table 5d.

Table 5c
Area 2 - Emergent Vegetation Quadrat Data
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Quadrat I.D. Scientific Name	Common Name	Growth Form	Indicator Status	Native Status	Invasive (Y/N)	Canopy Cover Class EV-05Q1	Canopy Cover (%)	Species Composition
Myosotis scorpioides	Water forget-me-not	herbaceous	OBL	I	Y	2	10.5	11
Phalaris arundinacea	Reed canary grass	graminoid	FACW	I	Y	4	38.0	39
Stellaria aquatica	Giant chickweed	herbaceous	FAC	I	N	2	10.5	11
Veronica anagallis-aquatica	Water speedwell	herbaceous	OBL	I	N	4	38.0	39
Cover Type - % Cover								
Vegetation (Cover Class)						5	63.0	
Vegetation (Raw Estimates)						50	50.0	
Plant Height/Species Richness								
Plot Height Average (feet)						1.3	1.3	
Plot Height Maximum (feet)						3.4	3.40	
Species Richness						4	4.0	
							(Cover Class) Total Vegetative Percent Cover	63.0
							Relative Percent Cover of Invasive Species	0.0

See Notes and Abbreviations on Table 5d.

Table 5d
Area 2 - Inundated Shoreline Quadrat Data
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Quadrat I.D. / Scientific Name	Common Name	Growth Form	Indicator Status	Native Status	Invasive (Y/N)	Canopy Cover Class						Canopy Cover (%)	Species Composition
						IS-08Q1	IS-09Q1	IS-10Q1	IS-11Q1	IS-12Q1	IS-13Q1		
Agrostis gigantea	Redtop	graminoid	FACW	I	N	--	--	--	--	2	--	1.8	1.5
Ambrosia artemisiifolia	Annual ragweed	herbaceous	FACU	I	N	--	1	--	1	--	--	1.0	0.8
Artemisia vulgaris	Mugwort	herbaceous	UPL	I	Y[4]	--	2	1	--	--	--	2.3	1.9
Bidens cernua	Nodding burr marigold	herbaceous	OBL	N	N	4	--	--	--	--	--	6.3	5.4
Bidens connata	Purple-stemmed beggarticks	herbaceous	FACW	N	N	--	2	1	1	--	1	3.3	2.8
Cyperus strigosus	False yellow nut sedge	graminoid	FACW	N	N	2	1	2	--	--	--	4.0	3.4
Daucus carota	Queen Anne's lace	herbaceous	UPL	I	N	--	--	--	1	--	--	0.5	0.4
Dipsacus laciniatus	Cut-leaved teasel	herbaceous	FACU	I	Y[4]	2	--	--	--	--	--	1.8	1.5
Echinochloa crus-galli	Eurasian barnyard grass	graminoid	FAC	I	N	1	--	1	--	3	1	4.9	4.2
Epilobium ciliatum	Fringed willowherb	herbaceous	FACW	N	N	1	--	1	--	--	--	1.0	0.8
Euphorbia maculata	Spotted spurge	herbaceous	FACU	N	N	--	2	--	--	--	--	1.8	1.5
Euthamia graminifolia	Flat-top goldentop	herbaceous	FAC	N	N	--	--	1	--	--	--	0.5	0.4
Festuca rubra	Red fescue	graminoid	FACU	I	N	2	--	3	--	--	--	5.2	4.4
Galium palustre	Common marsh bedstraw	herbaceous	OBL	N	N	--	--	--	2	2	1	4.0	3.4
Impatiens capensis	Spotted touch-me-not	herbaceous	FACW	N	N	--	--	--	2	--	--	1.8	1.5
Leersia oryzoides	Rice cutgrass	graminoid	OBL	N	N	2	--	--	--	3	--	5.2	4.4
Lolium perenne	Perennial rye	graminoid	FACU	I	N	--	4	--	4	3	4	22.4	19.0
Lotus corniculatus	Birds-foot trefoil	herbaceous	FACU	I	Y	4	--	2	--	--	--	8.1	6.9
Ludwigia palustris	Water purslane	herbaceous	OBL	N	N	--	--	--	--	1	2	2.3	1.9
Lycopus americanus	Cut-leaf water horehound	herbaceous	OBL	N	N	--	--	1	--	--	--	0.5	0.4
Lycopus uniflorus	Northern water horehound	herbaceous	OBL	N	N	--	1	--	--	--	--	0.5	0.4
Lythrum salicaria	Purple loosestrife	herbaceous	OBL	I	Y[4]	1	--	--	2	--	--	2.3	1.9
Mimulus ringens	Allegheny monkey-flower	herbaceous	OBL	N	N	1	--	1	--	--	--	1.0	0.8
Myosotis scorpioides	Water forget-me-not	herbaceous	OBL	I	Y	--	--	--	--	2	--	1.8	1.5
Panicum capillare	Common panic grass	graminoid	FAC	N	N	2	--	--	--	--	--	1.8	1.5
Panicum dichotomiflorum	Smooth panic grass	graminoid	FACW	N	N	--	3	4	1	--	--	10.3	8.7
Parthenocissus quinquefolia	Virginia creeper	vine	FACU	N	N	--	--	2	--	--	--	1.8	1.5
Persicaria maculosa	Lady's thumb	herbaceous	FAC	I	N	--	1	1	--	1	1	2.0	1.7
Plantago lanceolata	English plantain	herbaceous	FACU	I	N	--	--	--	1	--	--	0.5	0.4
Ranunculus repens	Creeping buttercup	herbaceous	FAC	I	Y	--	--	1	--	--	--	0.5	0.4
Setaria pumila	Yellow foxtail	graminoid	FAC	I	N	--	--	--	1	--	--	0.5	0.4
Solidago altissima	Tall goldenrod	herbaceous	FACU	N	N	--	2	--	--	--	--	1.8	1.5
Solidago gigantea	Late goldenrod	herbaceous	FACW	N	N	--	--	--	1	--	--	0.5	0.4
Solidago sp.	Goldenrod species	herbaceous	FACU	N	N	--	--	--	1	--	--	0.5	0.4
Symphyotrichum lanceolatum	White panicled aster	herbaceous	FACW	N	N	--	--	1	--	--	--	0.5	0.4
Trifolium pratense	Red clover	herbaceous	FACU	I	N	1	3	2	--	--	--	5.7	4.8
Trifolium repens	White clover	herbaceous	FACU	I	N	--	3	--	--	--	2	5.2	4.4
Verbena hastata	Blue vervain	herbaceous	FACW	N	N	--	1	2	--	--	--	2.3	1.9
Verbena urticifolia	White vervain	herbaceous	FAC	N	N	--	--	--	1	--	--	0.5	0.4
Cover Type - % Cover													
Vegetation (Cover Class)						5	6	6	5	5	5	70.5	

Table 5d
Area 2 - Inundated Shoreline Quadrat Data
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Quadrat I.D. / Scientific Name	Common Name	Growth Form	Indicator Status	Native Status	Invasive (Y/N)	Canopy Cover Class IS-08Q1	IS-09Q1	IS-10Q1	IS-11Q1	IS-12Q1	IS-13Q1	Canopy Cover (%)	Species Composition
Vegetation (Raw Estimates)						70	75	90	55	50	50	65.0	
Plant Height/Species Richness													
Plot Height Average (feet)						0.8	0.9	0.9	0.4	1.3	0.3	0.8	
Plot Height Maximum (feet)						2.4	4.2	2.6	1.7	3	0.8	2.45	
Species Richness						12	13	17	13	8	7	11.7	
											(Cover Class) Total Vegetative Percent Cover		70.5
											Relative Percent Cover of Invasive Species		5.3

Abbreviations:

I = Introduced or naturalized species
N = Native species
OBL = Obligate wetland plant - almost always occur in wetlands
FACW = Facultative wetland plant - usually occur in wetlands, but may occur in non-wetlands
FAC = Facultative wetland plant - occur in wetlands and non-wetlands
FACU = Facultative upland plant - usually occur in non-wetlands, but may occur in wetlands
UPL = Upland plant - almost never occur in wetlands

Notes:

1. Vegetative cover of individual species estimated at each plot using cover class midpoints shown on Table 3.
2. Canopy cover values can add up to greater than 100% due to overlapping vegetation.
3. Species composition is a proportional scaling of 0 to 100 percent and represents the percent a species contributes to the total vegetative cover.
4. Invasive species listed in 6NYCRR Part 575 and included in invasive species cover calculation for the site.

Table 5e
Area 1 and Area 2 Quadrat Data Summary
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Restored Habitat	Total Vegetative Cover (%)	Invasive Species Cover (%)	Total Species Observed	Dominant Species Observed (Common Name)
Area 1				
Emergent Vegetation	66	6.8	24	Water purslane, Lurid sedge, Water speedwell, Rice cutgrass
Inundated Shoreline	78	9.1	54	Tall goldenrod, Common rush, Canada goldenrod, Purple-stemmed aster, Mugwort, Flat-top goldentop, Common marsh bedstraw
Area 2				
Emergent Vegetation	63	0.0	4	Water speedwell
Inundated Shoreline	71	5.3	39	Perennial rye, Smooth panic grass, Birds-foot trefoil, Nodding burr marigold, Red clover, Red fescue, Rice cutgrass

Notes:

1. Vegetative cover of individual species estimated at each plot using cover class midpoints shown on Table 3.
2. Invasive plant species are those identified and listed under New York State Prohibited and Regulated Invasive Plants, published September 10, 2014 by the NYSDEC and the New York State Department of Agriculture and Markets.
3. Dominant plant species observed within the sampled restored vegetative communities were determined by applying the 50/20 rule.

Table 6
Observed Vegetation Species
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Scientific Name	Common Name	Area 1	Area 2
Acalypha rhomboidea	Common three seed mercury		X
Acer saccharinum	Silver maple	X	
Acer saccharum	Sugar maple	X	
Agrostis gigantea	Redtop		X
Ambrosia artemisiifolia	Annual ragweed	X	X
Artemisia vulgaris	Mugwort[2]	X	X
Asclepias incarnata	Swamp milkweed	X	
Bidens cernua	Nodding burr marigold	X	X
Bidens connata	Purple-stemmed beggar ticks	X	X
Bidens frondosa	Devil's pitchfork	X	
Callitriche stagnalis	Water starwort		X
Calystegia sepium	Hedge bindweed	X	
Carex lurida	Lurid sedge	X	
Carex spicata	Spiked sedge	X	
Carex stipata	Stalk-grain sedge		X
Carex vulpinoidea	Fox sedge	X	
Chlorophyta spp.	Green algae	X	
Cornus amomum	Silky dogwood	X	
Cornus sericea	Redosier dogwood	X	
Cyperus bipartitus	Shining flat sedge	X	
Cyperus esculentus	Yellow nut sedge	X	
Cyperus strigosus	False yellow nut sedge	X	X
Daucus carota	Queen Anne's lace	X	X
Dipsacus laciniatus	Cut-leaved teasel[2]		X
Echinochloa crus-galli	Eurasian barnyard grass	X	X
Eleocharis acicularis	Needle spike rush	X	
Eleocharis obtusa	Blunt spike rush	X	
Elodea canadensis	Canadian waterweed		X
Epilobium ciliatum	Fringed willowherb	X	X
Epilobium coloratum	Eastern willowherb	X	
Erechtites hieraciifolius	Common pilewort	X	
Erigeron canadensis	Common horseweed	X	
Eupatorium perfoliatum	Common boneset	X	
Euphorbia maculata	Spotted spurge		X
Euthamia graminifolia	Flat-top goldentop	X	X
Eutrochium maculatum	Spotted joe pye weed	X	
Eutrochium purpureum	Purple joe pye weed	X	
Festuca rubra	Red fescue	X	X
Fragaria virginiana	Common wild strawberry	X	
Fraxinus pennsylvanica	Green ash	X	
Galium album	Hedge bedstraw	X	
Galium palustre	Common marsh bedstraw	X	X
Glechoma hederacea	Ground ivy	X	
Impatiens capensis	Spotted touch-me-not	X	X
Itea virginica	Virginia sweetspire		X
Juncus effusus	Common rush	X	
Lathyrus Sylvestris	Narrow-leaved everlasting pea	X	
Leersia oryzoides	Rice cutgrass	X	X
Lolium perenne	Perennial rye		X
Lotus corniculatus	Birds-foot trefoil	X	X
Ludwigia palustris	Water purslane	X	X
Lycopus americanus	Cut-leaf water horehound	X	X
Lycopus uniflorus	Northern water horehound	X	X
Lythrum salicaria	Purple loosestrife[2]	X	X
Medicago lupulina	Black medic	X	

Table 6
Observed Vegetation Species
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Scientific Name	Common Name	Area 1	Area 2
Mimulus ringens	Allegheny monkey-flower		X
Myosotis scorpioides	Water forget-me-not	X	X
Oenothera biennis	Common evening primrose	X	
Oxalis dillenii	Slender yellow wood sorrel	X	
Panicum capillare	Common panic grass	X	X
Panicum dichotomiflorum	Smooth panic grass		X
Parthenocissus quinquefolia	Virginia creeper		X
Peltandra virginica	Arrow arum	X	X
Persicaria maculosa	Lady's thumb	X	X
Phalaris arundinacea	Reed canary grass	X	X
Phytolacca americana	American pokeweed		X
Picris hieracoides	Hawkweed oxtongue	X	
Pilea nummulariifolia	Creeping charlie	X	
Plantago lanceolata	English plantain	X	X
Plantago major	Common plantain	X	
Populus deltoides	Eastern cottonwood	X	
Potamogeton gramineus	Grass-leaved pondweed		X
Quercus alba	Northern white oak	X	
Quercus rubra	Northern red oak	X	
Ranunculus repens	Creeping buttercup	X	X
Reynoutria japonica	Japanese knotweed[2]		X
Rhus typhina	Staghorn sumac	X	
Robinia pseudoacacia	Black locust[2]		X
Sagittaria latifolia	Arrowhead	X	
Salix discolor	Pussy willow	X	
Salix nigra	Black willow	X	
Scirpus atrovirens	Green bulrush	X	
Scutellaria lateriflora	Mad dog skullcap	X	
Setaria pumila	Yellow foxtail	X	X
Solanum dulcamara	Climbing nightshade	X	
Solidago altissima	Tall goldenrod	X	X
Solidago canadensis	Canada goldenrod	X	
Solidago gigantea	Late goldenrod		X
Solidago sp.	Goldenrod species		X
Spyrogyra and Cladophora spp	Filamentous green algae	X	
Symphyotrichum lanceolatum	White panicled aster	X	X
Symphyotrichum puniceum	Purple-stemmed aster	X	
Trifolium pratense	Red clover	X	X
Trifolium repens	White clover		X
Verbena hastata	Blue vervain	X	X
Verbena urticifolia	White vervain		X
Veronica anagallis-aquatica	Water speedwell	X	X
Viburnum lentago	Nannyberry	X	
Mentha canadensis	American wild mint	X	
Myosotis scorpioides	Forget-me-not	X	
Xanthium strumarium	European cocklebur	X	
Stellaria aquatica	Giant chickweed		X
Total Species (OU-2):	**102**	**81**	**51**

Note:
1. Plant species observed within the restored habitats during monitoring conducted September 9 to 10, 2024.
2. 6NYCRR Part 575 listed invasive species.

Table 7
Monitoring Summary Table
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Operable Unit (OU): Common Name (Area): Subset (Area):	OU-2 Area 1 NA	OU-2 Area 2 NA
Restoration/Plantings Completed (Mo./Yr.)	May-2022	November-2023
Monitoring Year (year)	2024	2024
Monitoring Year No. (1-5)	1	1
Required Monitoring [1]	ES, TS, LS, NC, IC	ES, TS, LS, NC, IC
Vegetation Monitoring		
Native Cover (%)	85%	85%
Invasive Cover (%)	9.0%	5.3%
Invasive Species Documented	Mugwort (*Artemisia vulgaris*), Purple Loosestrife (*Lythrum salicaria*), Japanese Knotweed (*Reynoutria japonica*), Bird's Foot Trefoil (*Lotus corniculatus),* Black Medic (*Medicago lupulina*), Climbing Nightshade (*Solanum dulcamara*), Creeping Buttercup (*Ranunculus repens*), Forget-me-not (*Myosotis scorpioides*), Ground Ivy (*Glechoma hederacea*), Reed Canary Grass (*Phalaris arundinacea*)	Cut-leaved teasel (*Dipsacus Laciniatus*), Mugwort (Artemisia vulgaris), Purple Loosestrife (*Lythrum salicaria*), Japanese Knotweed (Reynoutria japonica), Black Locust (Robinia pseudoacacia), Bird's Foot Trefoil (Lotus corniculatus), Creeping Buttercup (Ranunculus repens), Forget-me-not (Myosotis scorpioides), Reed Canary Grass (Phalaris arundinacea)
Purple Loosestrife Beetle (Present/Absent/Unknown)	Unk	Unk
Trees		
No. Trees planted (Monitoring Year 0)	166	144
No. Trees planted (Corrective Action)	78	113
No. Live Trees - Current Year	244	257
No. Volunteer Trees	13	1
Tree Survivability (%)	100%	100%
Animal Damages [3]	NA	NA
Meets Restoration Criteria for Trees (Y/N)	Y	Y
Adaptive Management Plan	NA	NA
Shrubs		
No. Shrubs planted (Monitoring Year 0)	2,201	2,153
No. Shrubs planted (Corrective Action)	1,062	442
No. Live Shrubs - Current Year	1,761	1,680
No. Volunteer Shrubs	44	35
Shrub Survivability (%)	80%	78%
Meets Restoration Criteria for Shrubs (Y/N)	Y	Y
Adaptive Management Plan	NA	NA
Live Stake Shrubs		
No. Live Stake Shrubs planted (Monitoring Year 0)	453.0	108.0
No. Live Stake Shrubs planted (Corrective Action)	131.0	108.0
No. Live Stake Shrubs - Current Year	322.0	0.0
No. Volunteer Live Stake Shrubs	0.0	0.0
Shrub Survivability (%)	0.7	0.0
Meets Restoration Criteria for Live Stakes (Y/N)	N	N
Adaptive Management Plan	See 2024 Restoration Monitoring Report for 2025 Planned Corrective Actions	

Table 7
Monitoring Summary Table
OU-2 Restoration Monitoring Report
Cortland-Homer Former MGP Site - Homer, New York

Operable Unit (OU): Common Name (Area): Subset (Area):	OU-2 Area 1 NA	OU-2 Area 2 NA
Wetland Monitoring		
Wetland Hydrology (Y/N)	N	N
Hydric Soils (Y/N)	N	N
Erosion Severity [4]	NAR	NAR
Area Meets Restoration Goals (Y/N)	Y	Y
Adaptive Management Plans - Specify	NA	NA

Acronyms and Abbreviations:

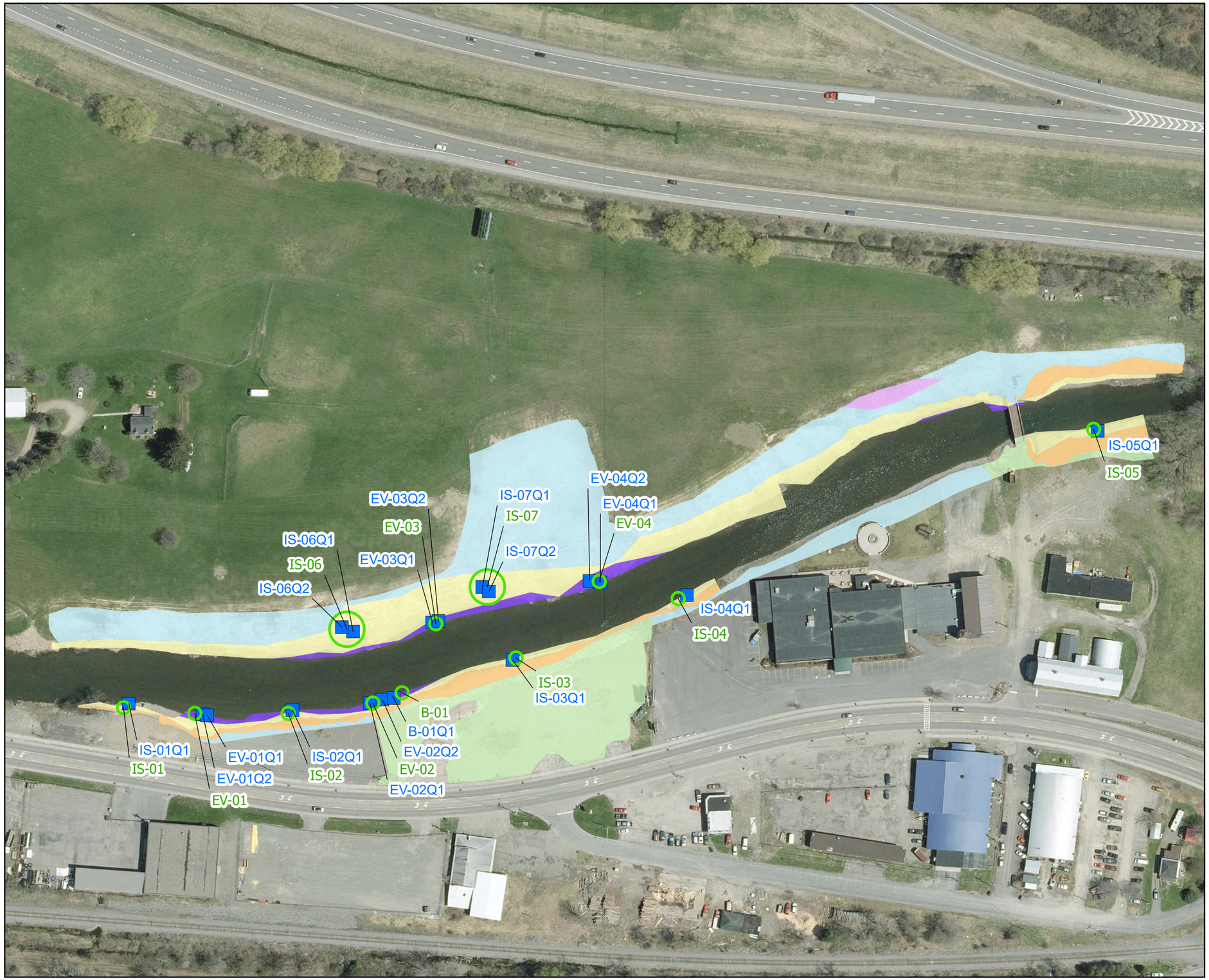
1. Required Monitoring: Wetland Hydrology (WH), Erosion (ES), Tree Survival (TS), Live Stake Survival (LS), Native Cover (NC), Invasive Cover (IC), Other – Specify.
2. Includes invasive species as listed in 6NYCRR Part 575 and by the Finger Lakes Partnership for Regional Invasive Species Management.
3. Animal Damages: Beaver Damage (BD), Deer Browse (DB), Deer Rub (DR), Other – Describe.
4. Erosion Severity: Needs Management Action (NMA), No Action Required (NAR).

NA - not applicable
Unk - Unknown

Note:

1. Volunteer tree/shrub species not included in survivability calculation.

Figures



LEGEND

- EMERGENT VEGETATION PLANTING AREA
- INUNDATED SHORELINE PLANTING AREA
- BANK PLANTING AREA
- FLOODPLAIN PLANTING AREA
- WET MEADOW PLANTING AREA
- GRASS PLANTING AREA
- RADIAL PLOTS
- QUADRAT

NOTES:

1. PROJECTION: NAD 1983 STATEPLANE NEW YORK CENTRAL FIPS 3102 FEET
2. 2022 AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE

0 125 250

GRAPHIC SCALE IN FEET

N

NYSEG - CORTLAND-HOMER FORMER MGP SITE
HOMER, NEW YORK
2024 RESTORATION MONITORING REPORT

AREA 1
VEGETATION MONITORING LOCATIONS

ARCADIS

FIGURE
1

Path: T:_ENV\NYSEG\Cortland-Homer\VegetationMonitoring\VegMonitoring_2024.aprx\Figure 1 AREA 1 VEGETATION MONITORING LOCATIONS Last Saved By: kthurn 11/6/2024

LEGEND

- EMERGENT PLANTING AREA
- INUNDATED SHORELINE PLANTING AREA
- BANK PLANTING AREA
- FLOOD PLAIN PLANTING AREA
- RADIAL PLOTS
- QUADRAT

NOTES:

1. PROJECTION: NAD 1983 STATEPLANE NEW YORK CENTRAL FIPS 3102 FEET
2. 2022 AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE

0 100 200

GRAPHIC SCALE IN FEET

N

NYSEG - CORTLAND-HOMER FORMER MGP SITE
HOMER, NEW YORK
2024 RESTORATION MONITORING REPORT

AREA 2
VEGETATION MONITORING LOCATIONS

ARCADIS

FIGURE
2

Path: T:_ENV\NYSEG\Cortland-Homer\VegetationMonitoring\VegMonitoring_2024\VegMonitoring_2024.aprx\Figure 2 AREA 2 VEGETATION MONITORING LOCATIONSRING PHOTOGRAPH LOCATIONS Last Saved By: khinn 11/6/2024

LEGEND

PHOTO LOCATION WITH DIRECTION

NOTES:

1. PROJECTION: NAD 1983 STATEPLANE NEW YORK CENTRAL FIPS 3102 FEET
2. 2022 AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE

0 125 250

GRAPHIC SCALE IN FEET

N

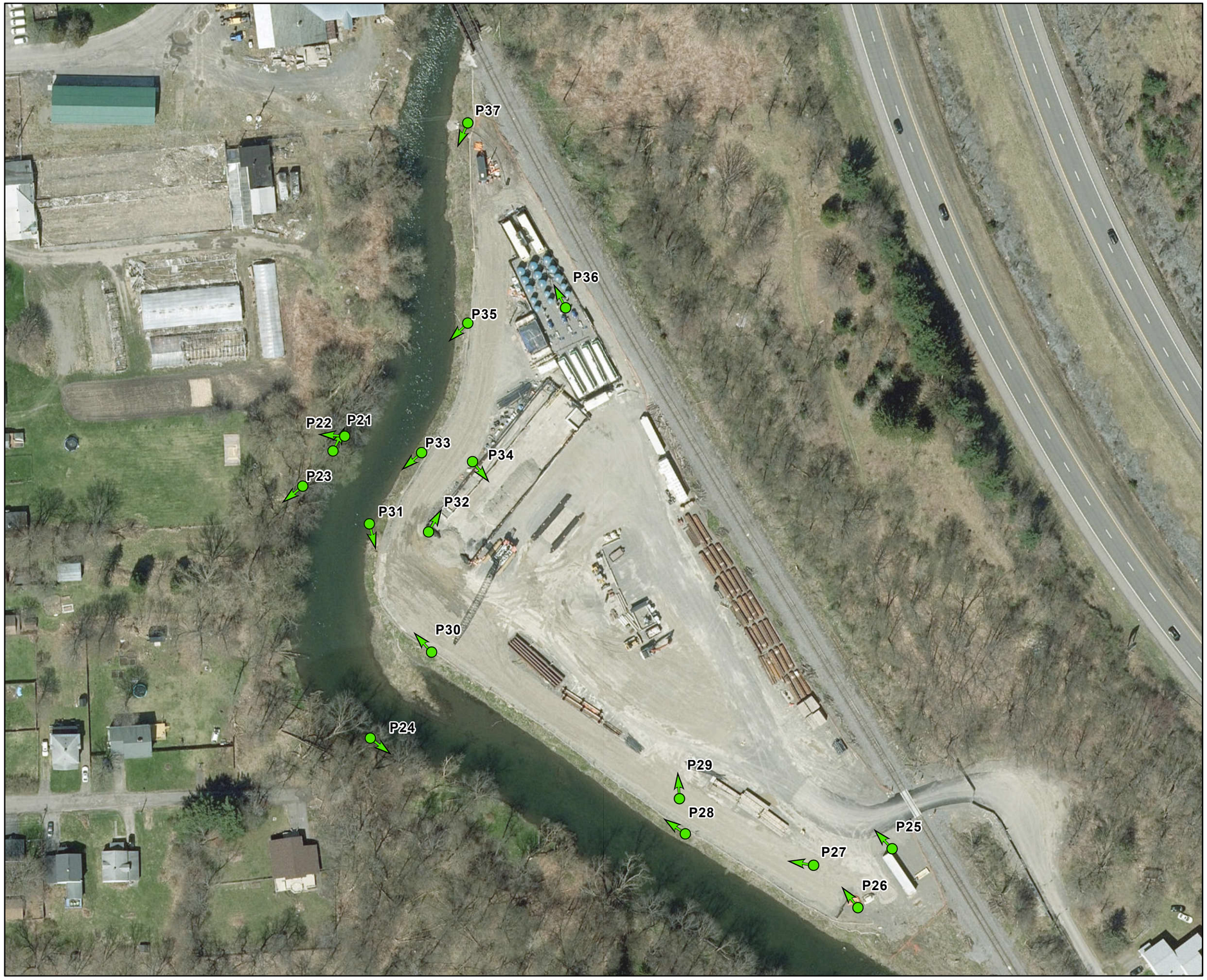
NYSEG - CORTLAND-HOMER FORMER MGP SITE
HOMER, NEW YORK
2024 RESTORATION MONITORING REPORT

AREA 1 POST-CONSTRUCTION MONITORING PHOTOGRAPH LOCATIONS

ARCADIS

FIGURE
3

Path: T:_ENV\NYSEG\Cortland-Homer\VegetationMonitoring\VegMonitoring_2024\VegMonitoring_2024.aprx\Figure 3 AREA 1 POST-CONSTRUCTION MONITORING PHOTOGRAPH LOCATIONS Last Saved By: tdrum 11/6/2024



LEGEND

PHOTO LOCATION WITH DIRECTION

NOTES:

1. PROJECTION: NAD 1983 STATEPLANE NEW YORK CENTRAL FIPS 3102 FEET
2. 2022 AERIAL IMAGERY OBTAINED FROM ESRI IMAGE SERVICE

0 100 200

GRAPHIC SCALE IN FEET

N

NYSEG - CORTLAND-HOMER FORMER MGP SITE
HOMER, NEW YORK
2024 RESTORATION MONITORING REPORT

AREA 2 POST-CONSTRUCTION MONITORING PHOTOGRAPH LOCATIONS

ARCADIS

FIGURE
4

Path: T:_ENV\NYSEG\Cortland-Homer\VegetationMonitoring\VegMonitoring_2024\VegMonitoring_2024.aprx\Figure 4 AREA 2 POST-CONSTRUCTION MONITORING PHOTOGRAPH LOCATIONS Last Saved By: ldrum 11/13/2024

Attachment 1

Example Field Forms

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-01
Habital Type : Emergent Vegetation
Survey Date : 09/09/2024
Staff : Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Water Speedwell	Veronica anagallis-aquatica	0	0	0	0
Green Algae	Chlorophyta spp.	0	0	0	0
Needle Spike Rush	Eleocharis acicularis	0	0	0	0
				Stems per acre	0
				Total % Survival	NA
Note: N/A					

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	0
Shrub Strata	N/A	0
Herb Strata	N/A	45%

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-01Q1				
Habital Type : Emergent Vegetation				
Survey Date : 09/09/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Purple Loosestrife	Lythrum salicaria	6	Non-Native	N/A
Water Speedwell	Veronica anagallis-aquatica	70	Non-Native	N/A
European Cocklebur	Xanthium strumarium	1	Non-Native	N/A
Green Algae	Chlorophyta spp.	7	Native	N/A
Rice Cut Grass	Leersia oryzoides	7	Native	N/A
Needle Spike Rush	Eleocharis acicularis	5	Native	N/A

Absolute Vegetative Cover (%)		90		
Total Species Cover (%)		96		
Native Cover (%)		12		
Invasive/Target Weed (%)		6		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-01Q2				
Habital Type : Emergent Vegetation				
Survey Date : 09/09/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Purple Loosestrife	Lythrum salicaria	1	Non-Native	N/A
Water Speedwell	Veronica anagallis-aquatica	35	Non-Native	N/A
Green Algae	Chlorophyta spp.	20	Native	N/A
Rice Cut Grass	Leersia oryzoides	1	Native	N/A
Needle Spike Rush	Eleocharis acicularis	3	Native	N/A

Total Vegetative Cover (%)		45		
Total Species Cover (%)		60		
Native Cover (%)		24		
Invasive/Target Weed (%)		1		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-04
Habital Type : Emergent Vegetation
Survey Date : 09/10/2024
Staff : Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Green Ash	Fraxinus pennsylvanica	0	1	0	0
Silky Dogwood	Cornus amomum	3	0	0	100
Red-Osier Dogwood	Cornus sericea	10	0	0	100
Black Willow	Salix nigra	1	0	0	NA
				Stems per acre	773
				Total % Survival	100

Note: N/A

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	1%
Shrub Strata	N/A	30%
Herb Strata	N/A	60%

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-04Q1				
Habital Type : Emergent Vegetation				
Survey Date : 09/10/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Purple Loosestrife	Lythrum salicaria	15	Non-Native	N/A
Reed Canary Grass	Phalaris arundinacea	40	Non-Native	N/A
Lurid Sedge	Carex lurida	30	Native	N/A
Arrowhead	Sagittaria latifolia	25	Native	N/A

Total Vegetative Cover (%)		75		
Total Species Cover (%)		110		
Native Cover (%)		55		
Invasive/Target Weed (%)		55		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-04Q2				
Habital Type : Emergent Vegetation				
Survey Date : 09/10/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Red-Osier Dogwood	Cornus sericea	10	Native	N/A
Herbs				
Swamp Milkweed	Asclepias incarnata	15	Native	N/A
Spotted Touch-Me-Not	Impatiens capensis	15	Native	N/A
Lurid Sedge	Carex lurida	55	Native	N/A
Reed Canary Grass	Phalaris arundinacea	10	Non-Native	N/A
Mad Dog Skullcap	Scutellaria lateriflora	5	Native	N/A
Water Forget-Me-Not	Myosotis scorpioides	7	Non-Native	N/A

Total Vegetative Cover (%)		98		
Total Species Cover (%)		117		
Native Cover (%)		90		
Invasive/Target Weed (%)		10		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-05
Habital Type : Emergent Vegetation
Survey Date : 09/07/2024
Staff : Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Canadian Waterweed	Elodea canadensis	0	0	0	0
Grass-leaved Pondweed	Potamogeton gramineus	0	0	0	0
Pond Water Starwort	Callitriche stagnalis	0	0	0	0
Water Speedwell	Veronica anagallis-aquatica	0	0	0	0
Rice Cut Grass	Leersia oryzoides	0	0	0	0
Reed Canary Grass	Phalaris arundinacea	0	0	0	0
				Stems per acre	0
				Total % Survival	NA

Note: N/A

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Herb Strata	N/A	60%
Tree Strata	N/A	0
Shrub Strata	N/A	0

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : EV-05Q1				
Habital Type : Emergent Vegetation				
Survey Date : 09/10/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Giant Chickweed	Stellaria aquatica	7	Non-Native	N/A
Water Speedwell	Veronica anagallis-aquatica	30	Non-Native	N/A
Water Forget-Me-Not	Myosotis scorpioides	5	Non-Native	N/A
Reed Canary Grass	Phalaris arundinacea	25	Non-Native	N/A

Total Vegetative Cover (%)		50		
Total Species Cover (%)		67		
Native Cover (%)		0		
Invasive/Target Weed (%)		25		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-01
Habital Type : Inundated Shoreline
Survey Date : 09/09/2024
Staff : Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Eastern Cottonwood	Populus deltoides	0	4	0	0
Red-Osier Dogwood	Cornus sericea	4	0	0	100
Staghorn sumac	Rhus typhina	0	1	0	0
				Stems per acre	464
				Total % Survival	100
Note: Absolute cover 50%					

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	0
Shrub Strata	N/A	20
Herb Strata	N/A	35

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-01Q1				
Habital Type : Inundated Shoreline				
Survey Date : 09/09/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Eastern Cottonwood	Populus deltoides	3	Native	N/A
Herbs				
Purple Loosestrife	Lythrum salicaria	7	Non-Native	N/A
Spotted Joe Pye Weed	Eutrochium maculatum	3	Native	N/A
White Panicled Aster	Symphyotrichum lanceolatum	5	Native	N/A
Common Rush	Juncus effusus	25	Native	N/A
Rice Cut Grass	Leersia oryzoides	5	Native	N/A
Common Marsh Bedstraw	Galium palustre	15	Native	N/A
Fringed Willowherb	Epilobium ciliatum	1	Native	N/A
Cut-Leaf Water Horehound	Lycopus uniflorus	1	Native	N/A
Blue Vervain	Verbena hastata	3	Native	N/A
Canadian Goldenrod	Solidago canadensis	5	Native	N/A
Common Pilewort	Erechtites hieraciifolius	5	Native	N/A

Total Vegetative Cover (%)		55		
Total Species Cover (%)		78		
Native Cover (%)		49		
Invasive/Target Weed (%)		7		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location： IS-02
Habital Type： Inundated Shoreline
Survey Date： 09/09/2024
Staff： Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Staghorn sumac	Rhus typhina	0	3	0	0
Pussy Willow	Salix discolor	0	4	0	NA
				Stems per acre	361
				Total % Survival	NA

Note: N/A

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	5%
Shrub Strata	N/A	20%
Herb Strata	N/A	70%

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-02Q1				
Habital Type : Inundated Shoreline				
Survey Date : 09/09/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Purple Loosestrife	Lythrum salicaria	3	Non-Native	N/A
Queen Anne's Lace	Daucus carota	1	Non-Native	N/A
Common Rush	Juncus effusus	35	Native	N/A
Cut-Leaf Water Horehound	Lycopus americanus	10	Native	N/A
Rice Cut Grass	Leersia oryzoides	20	Native	N/A
Fringed Willowherb	Epilobium ciliatum	7	Native	N/A
Common Panic Grass	Panicum capillare	3	Native	N/A
Purple Joe Pye Weed	Eutrochium purpureum	3	Native	N/A
Purple-Stemmed Aster	Symphyotrichum puniceum	10	Native	N/A
Common Marsh Bedstraw	Galium palustre	1	Native	N/A
Spotted Touch-Me-Not	Impatiens capensis	1	Native	N/A
Ground Ivy	Glechoma hederacea	3	Non-Native	N/A
Annual Ragweed	Ambrosia artemisiifolia	1	Non-Native	N/A
Canadian Goldenrod	Solidago canadensis	25	Native	N/A
Common Wild Strawberry	Fragaria virginiana	3	Native	N/A

Total Vegetative Cover (%)		80		
Total Species Cover (%)		126		
Native Cover (%)		101		
Invasive/Target Weed (%)		3		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location： IS-07
Habital Type： Inundated Shoreline
Survey Date： 09/10/2024
Staff： Jason Vogel

Survival

Radial Dimensions	0.1 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Eastern Cottonwood	Populus deltoides	0	2	0	0
Tall goldenrod	Solidago altissima	0	0	0	0
Purple-Stemmed Aster	Symphyotrichum puniceum	0	0	0	0
Common Wormwood	Artemisia vulgaris	0	0	0	0
Red-Osier Dogwood	Cornus sericea	7	0	0	100
Silky Dogwood	Cornus amomum	7	0	0	100
Silver Maple	Acer saccharinum	3	0	0	100
Sugar Maple	Acer saccharum	1	0	0	100
Northern White Oak	Quercus alba	1	0	0	100
Northern Red Oak	Quercus rubra	1	0	0	100
				Stems per acre	1133
				Total % Survival	100

Note: N/A

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	18%
Shrub Strata	N/A	10
Herb Strata	N/A	95%

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-07Q1				
Habital Type : Inundated Shoreline				
Survey Date : 09/10/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Red-Osier Dogwood	Cornus sericea	10	Native	N/A
Herbs				
Mugwort	Artemisia vulgaris	20	Non-Native	N/A
Hedge Bedstraw	Galium album	20	Non-Native	N/A
Purple-Stemmed Aster	Symphyotrichum puniceum	5	Native	N/A
Red Clover	Trifolium pratense	1	Non-Native	N/A
Creeping Charlie	Pilea nummulariifolia	5	Non-Native	N/A
Tall Goldenrod	Solidago altissima	40	Native	N/A
Canadian Goldenrod	Solidago canadensis	10	Native	N/A
Fox Sedge	Carex vulpinoidea	15	Native	N/A

Total Vegetative Cover (%)		98		
Total Species Cover (%)		126		
Native Cover (%)		70		
Invasive/Target Weed (%)		20		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location： IS-07Q2				
Habital Type： Inundated Shoreline				
Survey Date： 09/10/2024				
Staff： Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Mugwort	Artemisia vulgaris	50	Non-Native	N/A
Tall Goldenrod	Solidago altissima	5	Native	N/A
White Panicled Aster	Symphyotrichum lanceolatum	15	Native	N/A
Purple-Stemmed Aster	Symphyotrichum puniceum	5	Native	N/A
Creeping Buttercup	Ranunculus repens	10	Non-Native	N/A
Red Clover	Trifolium pratense	3	Non-Native	N/A
Cut-Leaf Water Horehound	Lycopus uniflorus	3	Native	N/A
Common Marsh Bedstraw	Galium palustre	7	Native	N/A
Red Fescue	Festuca rubra	1	Non-Native	N/A
Common Wild Strawberry	Fragaria virginiana	3	Native	N/A
Queen Anne's Lace	Daucus carota	3	Non-Native	N/A
Slender Yellow Wood Sorrel	Oxalis dillenii	5	Native	N/A
Common Plantain	Plantago major	2	Non-Native	N/A
Ground Ivy	Glechoma hederacea	6	Non-Native	N/A
Spotted Touch-Me-Not	Impatiens capensis	2	Native	N/A
English Plantain	Plantago lanceolata	15	Non-Native	N/A
Fox Sedge	Carex vulpinoidea	7	Native	N/A
Spiked Sedge	Carex spicata	5	Native	N/A

Total Vegetative Cover (%)		95		
Total Species Cover (%)		147		
Native Cover (%)		32		
Invasive/Target Weed (%)		50		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location： IS-09
Habital Type： Inundated Shoreline
Survey Date： 09/10/2024
Staff： Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Mugwort	Artemisia vulgaris	0	0	0	0
Canadian Goldenrod	Solidago canadensis	0	0	0	0
Common Threeseed Mercury	Acalypha rhomboidea	0	0	0	0
Cut-Leaf Water Horehound	Lycopus uniflorus	0	0	0	0
Common Panic Grass	Panicum capillare	0	0	0	0
Arrowhead	Sagittaria latifolia	0	0	0	0
Birds-Foot Trefoil	Lotus corniculatus	0	0	0	0
				Stems per acre	0
				Total % Survival	NA
Note: N/A					

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Herb Strata	N/A	30%
Shrub Strata	N/A	0
Tree Strata	N/A	0

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-09Q1				
Habital Type : Inundated Shoreline				
Survey Date : 09/10/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Mugwort	Artemisia vulgaris	10	Non-Native	N/A
Lady's Thumb	Persicaria maculosa	3	Non-Native	N/A
Cut-Leaf Water Horehound	Lycopus uniflorus	3	Native	N/A
Smooth Panic Grass	Panicum dichotomiflorum	15	Native	N/A
Blue Vervain	Verbena hastata	2	Native	N/A
Purple-Stemmed Beggar Ticks	Bidens connata	7	Native	N/A
False Yellow Nut Sedge	Cyperus strigosus	1	Native	N/A
Red Clover	Trifolium pratense	15	Non-Native	N/A
White Clover	Trifolium repens	20	Non-Native	N/A
Annual Ragweed	Ambrosia artemisiifolia	3	Non-Native	N/A
Perennial Rye Grass	Lolium perenne	40	Non-Native	N/A
Tall Goldenrod	Solidago altissima	10	Native	N/A
Spotted Spurge	Euphorbia maculata	7	Native	N/A

Total Vegetative Cover (%)		75		
Total Species Cover (%)		136		
Native Cover (%)		38		
Invasive/Target Weed (%)		10		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-10
Habital Type : Inundated Shoreline
Survey Date : 09/10/2024
Staff : Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Red Fescue	Festuca rubra	0	0	0	0
Fall Panic Grass	Panicum dichotomiflorum	0	0	0	0
Red Clover	Trifolium pratense	0	0	0	0
Perennial Rye Grass	Lolium perenne	0	0	0	0
				Stems per acre	0
				Total % Survival	NA

Note: N/A

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	0
Herb Strata	N/A	55%
Shrub Strata	N/A	0

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location： IS-10Q1				
Habital Type： Inundated Shoreline				
Survey Date： 09/10/2024				
Staff： Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Mugwort	Artemisia vulgaris	3	Non-Native	N/A
Eurasian Barnyard Grass	Echinochloa crus-galli	3	Non-Native	N/A
Lady's Thumb	Persicaria maculosa	3	Non-Native	N/A
Creeping Buttercup	Ranunculus repens	3	Non-Native	N/A
Smooth Panic Grass	Panicum dichotomiflorum	40	Native	N/A
Allegheny Monkey-Flower	Mimulus ringens	3	Native	N/A
Cut-Leaf Water Horehound	Lycopus americanus	3	Native	N/A
Blue Vervain	Verbena hastata	5	Native	N/A
False Yellow Nut Sedge	Cyperus strigosus	5	Native	N/A
White Panicled Aster	Symphyotrichum lanceolatum	1	Native	N/A
Purple-Stemmed Beggar Ticks	Bidens connata	3	Native	N/A
Fringed Willowherb	Epilobium ciliatum	3	Native	N/A
Flat-Top Goldentop	Euthamia graminifolia	2	Native	N/A
Red Fescue	Festuca rubra	15	Non-Native	N/A
Birds-Foot Trefoil	Lotus corniculatus	5	Non-Native	N/A
Red Clover	Trifolium pratense	7	Non-Native	N/A
Virginia Creeper	Parthenocissus quinquefolia	5	Native	N/A

Total Vegetative Cover (%)		90		
Total Species Cover (%)		109		
Native Cover (%)		51		
Invasive/Target Weed (%)		3		

Photograph of Aerial Cover Quadrat

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-13
Habital Type : Inundated Shoreline
Survey Date : 09/10/2024
Staff : Jason Vogel

Survival

Radial Dimensions	0.01 acres				
Common Name	**Scientific Name**	**Alive (Installed)**	**Alive (Recruited)**	**Dead (Installed)**	**Survival (%)**
Red-Osier Dogwood	Cornus sericea	1	0	0	100
Virginia Sweetspire	Itea virginica	1	0	0	100
Arrowwood	Viburnum dentatum	1	0	0	100
				Stems per acre	155
				Total % Survival	100

Note: N/A

Photograph of Survivability Radial Plot

Other Species Observed

Common Name	Scientific Name	Notes
Tree Strata	N/A	0
Shrub Strata	N/A	3%
Herb Strata	N/A	40%

Cortland-Homer 2024 Monitoring and Reporting

Monitoring Location : IS-13Q1				
Habital Type : Inundated Shoreline				
Survey Date : 09/10/2024				
Staff : Jason Vogel				
Aerial Cover				
Dimensions	1	meters		
Common Name	**Scientific Name**	**Absolute Cover %**	**Nativity (native, non native, weed)**	**Vigor**
Trees				
Shrubs				
Herbs				
Eurasian Barnyard Grass	Echinochloa crus-galli	3	Non-Native	N/A
Lady's Thumb	Persicaria maculosa	1	Non-Native	N/A
Common Marsh Bedstraw	Galium palustre	1	Native	N/A
Water Purslane	Ludwigia palustris	5	Native	N/A
Purple-Stemmed Beggar Ticks	Bidens connata	3	Native	N/A
Perennial Rye Grass	Lolium perenne	40	Non-Native	N/A
White Clover	Trifolium repens	5	Non-Native	N/A

Total Vegetative Cover (%)		50		
Total Species Cover (%)		58		
Native Cover (%)		9		
Invasive/Target Weed (%)				

Photograph of Aerial Cover Quadrat

Attachment 2

Monitoring Inspection Checklists

Bi-Annual Monitoring Inspection Checklist
Cortland-Homer Former MGP Site

I. GENERAL INFORMATION

Inspection Date: September 9 and 10, 2024 - Area 1
Conducted By: Jason Vogel, Sarah Mack
Weather Conditions: High 50s to mid-70s F, Partly cloudy with afternoon showers, winds calm <10 mph

II. INSPECTION SUMMARY

1. Vegetation

A. Woody Vegetation *(Note evidence of damage from trespassing or herbivory, note physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)*

Dogwood live stakes that were present were healthy along both shorelines. Natural recruitment - primarily eastern cottonwood and green ash found within inundated shoreline areas.

Signs of herbivore damage (beaver chew) to some willow shrubs. Approximately 50 to 70% survival for shrubs and live stakes within the inundated shoreline (see Table 3b).

Some observations of herbivore digging around tree installations. Human disturbance of pole and wire staking observed on tree plantings.

B. Herbaceous Vegetation *(Note evidence of areas of bare/sparse vegetation; note any damage from trespassing or herbivory; note any physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)*

Inundated shoreline and emergent vegetation cover was moderate to high along the eastern shoreline and lower in western shoreline areas that had been armored with rip-rap.

Bank and surrounding floodplain cover was well established and vegetation was healthy.

Grass and maintained planting areas found within the Living Museum property were well established and providing stable herbaceous ground cover.

C. Presence of Invasive Species *(Note the invasive species present. If a quantitative assessment is performed, complete the attached field form for each planting area. If "prohibited" invasive species are observed, record the species, location, and size of the population observed.)*

Mugwort and purple loosestrife were observed within inundated shoreline, floodplain, and bank restored habitat areas. Stand of Japanese knotweed present along eastern shoreline.

D. Vegetation below MHWL *(Note evidence of damage from trespassing or herbivory, note physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)*

Emergent plugs observed along eastern shoreline with bur-reed and arrow arum present. Natural recruitment of water speedwell, lurid sedge, and needle spike rush was found in emergent areas where more sediment deposition was present.

2. Riverbank Stability *(Note any physical changes since last inspection; note evidence of significant erosion [e.g., slope failure, ruts, gullies, washouts, or sloughing]; note other conditions that could jeopardize the performance of the completed remediation actions. If a quantitative assessment is performed, complete the attached field form for each transect.)*

Coir logs that remain were in place. No significant changes were observed to the minor bank erosion areas noted during the spring inspections. Minor sloughing within some of the soil-choke/rip-rap bank areas were noted but not significant to impact overall stability. Some portions of the inundated shoreline remained washed out from periodic high flows, but but some increased sediment deposition was present in near-shore areas, as compared to 2023 observations.

3. Other Observations *(Confirm that repair/maintenance activities identified during prior inspection, if any, have been performed; note any other general observations.)*

III. FOLLOW-UP MAINTENANCE AND REPAIR ACTIVITIES

Recommend continued invasive species removal/treatment. Tree replacement with herbivore protection is recommended. Meader surveys were performed in May and July 2024 site inspections to quantify trees and shrub planting quantities for re-installation and bare spots for overseeding. Natural recruitment observed for emergent vegetation species and native shrubs in the inundated shoreline has improved, but potential live stake installation along the western shoreline may be used in spring 2025 to increase woody vegetative cover.

ATTACH ADDITIONAL INFORMATION AS APPROPRIATE

Bi-Annual Monitoring Inspection Checklist
Cortland-Homer Former MGP Site

I. GENERAL INFORMATION

Inspection Date: September 10, 2024 - Area 2
Conducted By: Jason Vogel, Sarah Mack
Weather Conditions: High 50s to mid-70s F, Partly cloudy to sunny, Winds calm <10 mph

II. INSPECTION SUMMARY

1. Vegetation

A. Woody Vegetation *(Note evidence of damage from trespassing or herbivory, note physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)*

Trees are primarily alive with several dead and some with stress with limited basal growth. Herbivore damage present across bank shrubs and one tree damaged from beaver activity.

Shrubs that remained were primarily healthy. Upper bank and floodplain shrub survival appeared to be moderate to high. Some natural recruitment of eastern cottonwood, box elder, and staghorn sumac present in upper bank to floodplain areas.

B. Herbaceous Vegetation *(Note evidence of areas of bare/sparse vegetation; note any damage from trespassing or herbivory; note any physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)*

The upland support area indicated establishment of herbaceous groundcover that was improved from spring site inspection and stable within this non-jurisdictional restored area.

The inundated shoreline and lower bank herbaceous vegetation indicated relatively stable cover with only some minor bare spots.

The bank and floodplain herbaceous vegetation indicated relatively stable and high cover throughout most of the restored areas. Some human use trails near coir log line is present..

C. Presence of Invasive Species *(Note the invasive species present. If a quantitative assessment is performed, complete the attached field form for each planting area. If "prohibited" invasive species are observed, record the species, location, and size of the population observed.)*

Black locust shrubs on upper bank were cut to ground level and larger specimens were cut and will be treated next spring with targeted herbicide stem application. Additionally, mugwort was observed primarily around tree and mulched planting areas. Purple loosestrife was observed primarily in the lower bank areas. Physical plant removals of mugwort and purple loosetrife were performed after quantitative monitoring activities to limit spread.

D. Vegetation below MHWL *(Note evidence of damage from trespassing or herbivory, note physical changes since last inspection. If a quantitative assessment is performed, complete the attached field form for each planting area.)*

Some Arrow arum plugs were present along both shorelines. Limited natural recruitment of submerged aquatic vegetation was observed along both shorelines. Live stakes were not observed along either restored shorelines where plantings were made. Based on further design modifications, the lack of woody vegetation in this area is acceptable.

2. Riverbank Stability *(Note any physical changes since last inspection; note evidence of significant erosion [e.g., slope failure, ruts, gullies, washouts, or sloughing]; note other conditions that could jeopardize the performance of the completed remediation actions. If a quantitative assessment is performed, complete the attached field form for each transect.)*

Coir logs remain stable throughout the banks. Bank soil primarily stable. Minor bank sloughing in transitional/lower bank from both human use and natural disturbances.

No significant changes since spring site inspection.

3. Other Observations *(Confirm that repair/maintenance activities identified during prior inspection, if any, have been performed; note any other general observations.)*

None.

III. FOLLOW-UP MAINTENANCE AND REPAIR ACTIVITIES

Tree and shrub replacements were planted during early fall 2024. Survival of these replacements will be monitored in spring 2025.

Tree collar protection is recommended to avoid herbivore damage. Continued treatment of invasive species through removal/treatment will be implemented in 2025.

Improved emergent vegetation was observed in 2024, but further assessment of natural recruitment of emergent vegetation during spring 2025 site inspections.

ATTACH ADDITIONAL INFORMATION AS APPROPRIATE

Attachment 3

Area 1 and Area 2 Photograph Log

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P1

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P1.

Coordinates:
42.622131
-76.183690

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northeast.

Photo: P2

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P2.

Coordinates:
42.622155
-76.183659

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing South.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P3

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P3.

Coordinates:
42.622185
-76.183652

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast.

Photo: P4

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P4.

Coordinates:
42.620165
-76.183548

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P5

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P5.

Coordinates:
42.621241
-76.183390

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast.

Photo: P6

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P6.

Coordinates:
42.620756
-76.183175

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing South.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P7

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P7.

Coordinates:
42.620058
-76.182948

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing North.

Photo: P8

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P8.

Coordinates:
42.619928
-76.182777

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P9

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P9.

Coordinates:
42.619153
-76.182314

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

Photo: P10

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P10.

Coordinates:
42.619140
-76.182304

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P11

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P11.

Coordinates:
42.618569
-76.182190

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing North.

Photo: P12

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P12.

Coordinates:
42.618373
-76.182028

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing North.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P13

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P13.

Coordinates:
42.618291
-76.181815

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing North.

Photo: P14

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P14.

Coordinates:
42.618927
-76.181661

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P15

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P15.

Coordinates:
42.619510
-76.181994

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing North.

Photo: P16

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P16.

Coordinates:
42.620392
-76.182717

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing South.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P17

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P17.

Coordinates:
42.620466
-76.182822

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

Photo: P18

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P18.

Coordinates:
42.620796
-76.182949

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing North.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P19

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P19.

Coordinates:
42.621397
-76.183181

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northeast.

Photo: P20

Location:
Area 1 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P20.

Coordinates:
42.621875
-76.183253

Date: 09/11/2024

Taken By:
Jason Vogel

Notes:
Facing Northeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P21

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P21.

Coordinates:
42.611507
-76.183294

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northeast.

Photo: P22

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P22.

Coordinates:
42.611548
-76.183250

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southwest.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P23

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P23.

Coordinates:
42.611408
-76.183412

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast

Photo: P24

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P24.

Coordinates:
42.610696
-76.183157

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P25

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P25.

Coordinates:
42.610369
-76.181164

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

Photo: P26

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P26.

Coordinates:
42.610212
-76.181298

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P27

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P27.

Coordinates:
42.610332
-76.181466

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southwest.

Photo: P28

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P28.

Coordinates:
42.610422
-76.181956

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P29

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P29.

Coordinates:
42.610522
-76.181977

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

Photo: P30

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P30.

Coordinates:
42.610938
-76.182922

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P31

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P31.

Coordinates:
42.611301
-76.183157

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing South.

Photo: P32

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P32.

Coordinates:
42.611278
-76.182931

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P33

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P33.

Coordinates:
42.611509
-76.182957

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southwest.

Photo: P34

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P34.

Coordinates:
42.611475
-76.182762

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southeast.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P35

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P35.

Coordinates:
42.611866
-76.182778

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Southwest.

Photo: P36

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P36.

Coordinates:
42.611908
-76.182404

Date: 09/10/2024

Taken By:
Jason Vogel

Notes:
Facing Northwest.

PHOTOGRAPH LOG

Fixed Assessment Photos
NYSEG – Cortland-Homer Former MGP Site
OU-2, Area 1 & Area 2
Homer, New York

Photo: P37

Location:
Area 2 – Fixed Point Photo Locations

Description:
Fixed-Point Photo Location P37.

Coordinates:
42.612419
-76.182756

Date: 05/28/2024 (September photo not available)
Taken By:
Jason Vogel

Notes:
Facing Southwest.