#### **APPENDIX**

TO

# NATURAL RESOURCES RESTORATION CONSENT DECREE RESOLVING FLOODPLAIN, RIPARIAN, UPLAND, AND WETLAND CLAIMS

Among the United States, State of New Jersey, and Wyeth Holdings LLC

Related to the American Cyanamid Superfund Site, Bridgewater Township, Somerset County, State of New Jersey

## **STATEMENT OF WORK**

## **DUKE FARMS FORESTED FLOODPLAIN RESTORATION PROJECT**

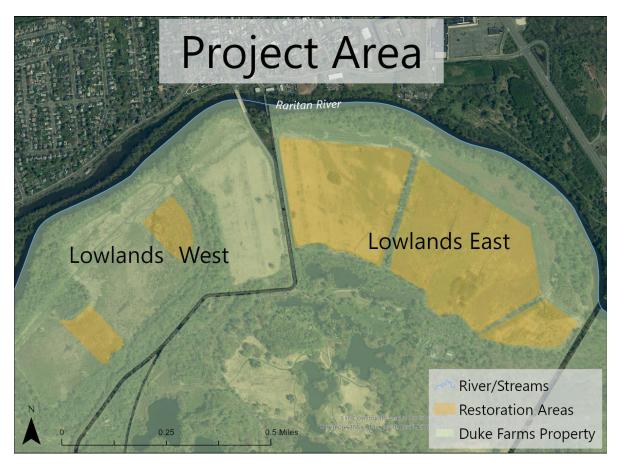
Hillsborough Township, Somerset County, State of New Jersey

## TABLE OF CONTENTS

1.	. INTRODUCTION	1
	1.1 Purpose of SOW.	1
	1.2 Structure of SOW	2
2.	COMPONENTS OF FORESTED FLOODPLAIN RESTORATION PROJECT	2
	2.1 Agreement with Duke Farms Foundation	2
	2.2 Invasive Species Treatment Plan and Planting Plan	2
	2.3 NJDEP Permitting Requirements	5
	2.4 Forested Floodplain Restoration Construction Implementation	6
	2.5 Project Construction Completion Report	6
	2.6 Forested Floodplain Restoration Project Monitoring and Maintenance Plan	7
	2.7 Forested Floodplain Restoration Project Monitoring and Maintenance Implementation	8
	2.8 Monitoring and Maintenance Reports	8
3.	DELIVERABLES, APPROVALS, AND IMPLEMENTATION	1
	3.1 Applicability	1
	3.2 Deliverable and Implementation Task Schedule	1
4.	PERFORMANCE STANDARDS, CONTINGENCY MEASURES, AND LONG-TERM STEWARDSHIP	3
	4.1 Requirement to Meet Performance Standards and, if necessary, Implement Contingency Measures	3
	4.2 Description of Performance Standards, Criteria, and Contingency Measures	3
	4.3 Long-Term Stewardship Payments.	5
5.	PROJECT COMPLETION CERTIFICATES	5
A	TTACHMENT A. Plant Species List	7
A	TTACHMENT B. Long-Term Stewardship Costs Payment and Long-Term Stewardship Oversight Costs  Tables	.10

#### 1. INTRODUCTION

1.1 Purpose of SOW. This Statement of Work ("SOW") sets forth the procedures and requirements for implementing the Work to be performed by Wyeth Holdings LLC (hereinafter "Settling Defendant") as part of the settlement of alleged natural resource damage liability in accordance with the Consent Decree entered between the United States of America, State of New Jersey, and Wyeth Holdings LLC. The Work consists of a Duke Farms Forested Floodplain Restoration Project (the "Project") that requires establishing approximately 109 acres of intermittently flooded, palustrine forested and scrub-shrub native plants in a surface water slope setting, interspersed with ephemeral vernal pools, totaling approximately three acres, for a total of 112 acres of habitat enhancement of several former agricultural fields at Duke Farms, Hillsborough Township, Somerset County, New Jersey. The subject fields are grouped into two separate geographic areas: Lowlands East located east of River Road in the northeast quadrant of Duke Farms and Lowlands West located west and northwest of River Road in the northwest quadrant of Duke Farms (hereinafter "Project Area" as a whole or "Lowlands East" or "Lowlands West" individually) (Figure 1).



**Figure 1.** Map of the "Project Area" depicting the fields targeted for restoration (in orange) within "Lowlands East" and "Lowlands West."

1.2 Structure of SOW. This SOW consists of the sequential project components including: the submission of plans, reports and other deliverables; construction, monitoring, implementation, and maintenance requirements; performance standards; a schedule for deliverables and tasks, and process for review and approval; Attachment A (Plant Species List), and Attachment B (Long-Term Stewardship Costs Payment and Long-Term Stewardship Oversight Costs Tables).

#### 2. COMPONENTS OF FORESTED FLOODPLAIN RESTORATION PROJECT

Settling Defendant shall implement each of the following components in accordance with the schedule set forth in Section 3 below:

## 2.1 Agreement with Duke Farms Foundation

- (a) Submission of Duke Farms Agreement. Settling Defendant shall submit to the Trustee Council for review and approval in accordance with Section 3 below an agreement with the Duke Farms Foundation ("DFF"), a non-profit corporation organized pursuant to the laws of the State of New York, with offices at 1112 Dukes Parkway West, Hillsborough, New Jersey 08844 (hereinafter "Duke Farms Agreement"). The Duke Farms Agreement must grant Settling Defendant the right to perform habitat enhancement activities in the Project Area and outline Settling Defendant's and DFF's respective responsibilities for Project activities.
- (b) Submission of Proposed Interpretive Signage. Settling Defendant shall submit to the Trustee Council a draft version of the interpretive sign content for inspection and review. DFF will have final approval of signage content and installation locations, provided however that the Trustee Council shall have review and approval rights under Section 3 below for all references to matters involving the Trustees in connection with the Consent Decree, the American Cyanamid Superfund Site Floodplain, Riparian, and Wetlands Restoration Plan/Environmental Assessment and associated restoration actions, and the identification of the Trustees via images, logos and text.

## 2.2 Invasive Species Treatment Plan and Planting Plan

- (a) **Invasive Species Treatment Plan**. Settling Defendant shall develop an Invasive Species Treatment Plan that addresses proactive invasive species control efforts, including the physical removal of woody invasive species shrubs and trees (*e.g.*, multiflora rose, Japanese barberry, honey locust, Callery pear) and the mowing and herbicide treatment of patches of undesirable or invasive herbaceous species (*e.g.*, Japanese stiltgrass, carpetgrass, reed canary grass, mugwort). The Invasive Species Treatment Plan shall specify:
  - (1) Implementation of the Invasive Species Treatment Plan may take place over multiple seasons and conclude when the threat of invasive species has been reduced as much as is feasible, as determined by Trustee Council.

- (2) Downed trees and shrubs that result from clearing will be left within the Project Area to act as cover for wildlife (provided there are no seed materials present), unless Settling Defendant determines it is necessary to clear some portion of downed trees to prevent damage to plantings that may result due to shifting of trees during flooding events. Excess material may be used by DFF outside of the Project Area.
- (3) Where bare soils are exposed, or establishment of native plant cover will reduce reinvasion by undesirable species, a native floodplain seed mix and/or a cover crop will be established.

## (b) Planting Plan

- (1) Settling Defendant shall develop a Planting Plan that will outline the design approach for habitat enhancement, along with earthwork modifications to retain surface waters within the Project Area (if necessary) and anticipated soil testing/amendments. A zoned landscape plan will be developed illustrating the footprint of the proposed planting cells and the locations and total acreage of (i) vernal pools, (ii) dedicated shrub plots, and (iii) tree plantings, including proposed planting zones, tree and shrub species, quantities, and sizes. The Planting Plan shall specify:
  - (i) All trees and shrubs will be 3-gallon container in size, except five percent of the planted trees will be a larger caliper size but no larger than a 7-gallon container size, 0.75-in. caliper. Larger native desirable trees that are growing naturally in the Project Area (excluding *Fraxinus* [ash] species) can count towards this five percent.
  - (ii) The composition of trees and shrubs will be approximately 80% and 20%, respectively.
  - (iii) Trees will be planted on approximate 10-ft centers in a square pattern and the shrubs will be planted on approximate 8-ft centers in a square pattern in dedicated plots.
  - (iv) All trees and shrubs will be fitted with weed mats upon installation.
  - (v) Species will include those listed in Attachment A Table 1 and Table 2, unless substitutions listed in Table 3 are required due to plant availability. Settling Defendant may propose to the Trustee Council in the Planting Plan or after submission of the Planting Plan variations or modifications to these established lists in accordance with the review and approval process set forth in Section 3.3 below.

- (vi) Subject to substitutions allowed pursuant to Table 3 of Attachment A to this SOW, individual plants from a single species of tree will not comprise less than 2% nor more than 10% of the total number of individual trees, and individual plants from a single species of shrub will not comprise less than 2% nor more than 10% of the total number of individual shrubs.
- (vii) Standard details for vernal pool creation, planting, and typical cross-sections will be included. Description of the vernal pools in the Planting Plan shall reflect that:
  - Location of vernal pools will be selected based on existing hydrology and the presence of appropriate soils (compactible or possessing a naturally-occurring low permeability, having a relatively impermeable underlying layer, and/or a high water table). A soils investigation will be conducted prior to site selection to assess these characteristics.
  - Pools will be graded so that the subsurface is irregular, with depths ranging from 3 inches to 24 inches, with 2/3 of the area ranging from 6 inches to 18 inches. Side slopes will be 10:1 or flatter.
  - Woody debris of variable sizes (some thin twigs and branches for salamander and frog egg-laying habitat and some large logs to provide cover) will be added to the pools. Large logs shall be anchored to prevent movement and scour.
- (viii) Technical details on landscape improvements associated with the habitat construction, including access pathways, staging areas, and specifications on an 8-foot-tall (minimum height) perimeter fence surrounding the enhanced areas to protect the native plantings from deer browse that will be maintained by Settling Defendant (via funding to DFF or a third party) for 10 calendar years after the Five-Year Monitoring and Maintenance Completion Certificate has been issued to Settling Defendant by the Trustee Council. Technical details shall also be included for the eventual deconstruction of the fence.
- (ix) An outline of adaptive management approaches to accomplish an 85% plant survival and an 85% beneficial cover by the end of the fifth year after commencement of implementation of the Planting Plan.

- (2) Settling Defendant shall support DFF in obtaining Planting Plan approval from the Natural Resources Conservation Service ("NRCS") because the Project Area is enrolled in the Federal Wetland Reserve Program ("WRP") and is encumbered by and subject to the existing conservation easement granted and held by NRCS (hereinafter "Conservation Easement"). Nothing herein shall alter NRCS's standard approval practices and procedures, but solely for the purposes of this SOW, NRCS's written acceptance of proposed Modifications to the Duke Farms Foundation WRP Conservation Plan will be sufficient.
- (c) Construction Plans Related to Invasive Species Treatment Plan and Planting Plan. Settling Defendant shall develop Construction Plans that include details suitable for bidding both the Invasive Species Treatment Plan and the Planting Plan to prepare and implement the Project.

## 2.3 NJDEP Permitting Requirements. Settling Defendant shall:

- (a) Prepare and submit to the NJDEP Division of Land Resource Protection (hereinafter "NJDEP Land Resource") Flood Hazard Area General Permit 4 ("GP4") and Freshwater Wetlands General Permit 16 ("GP16") applications. The information required for the GP4 and GP16 permit applications has been predetermined by NJDEP and will be submitted by Settling Defendant to NJDEP Land Resource in electronic form. This submission will include property boundaries, property maps, proposed regulated activities, topography, soil erosion and sediment control, flood hazard area/floodway information, photographs, compliance statement, a Letter of Interpretation documentation, an Office of Natural Lands Management Natural Heritage Database data request response, and applicable additional requirements. Settling Defendant will also submit to NJDEP Land Resource a Property Owner Certification form, signed by DFF, and a Public Notice form (along with documentation that the public notice was provided in accordance with N.J.A.C. 7:13-19). Pertinent information in the Planting Plan shall either be included as an attachment to the permit applications or incorporated into the permit applications.
- (b) Provide to the municipal clerk in the Township of Hillsborough, Somerset County, copies of the entire GP4 and GP16 permit applications, as submitted to NJDEP Land Resource.
- (c) Provide to the following recipients a brief description of the Project, a copy of the Project Area plan, and the form notice letter described at N.J.A.C. 7:13-19.3(d)1iii:
  - (1) The construction official of the Township of Hillsborough;
  - (2) The environmental commission, or other government agency with similar responsibilities, of the Township of Hillsborough;

- (3) The planning board of the Township of Hillsborough;
- (4) The planning board of the County of Somerset;
- (5) The local Soil Conservation District, along with any additional information necessary to comply with the New Jersey Soil Erosion and Sediment Control Program; and
- (6) All owners of real property, including easement holders, located within 200 feet of the property boundary of the Project Area.
- (d) Verify to NJDEP Land Resource via affidavit that the public has been noticed of the proposed project in the form of a legal notice in an official newspaper of the Township of Hillsborough, of if there is no official newspaper, a newspaper of general circulation in the Township of Hillsborough.
- (e) Prior to submission of the GP4 and GP16 permit applications to NJDEP Land Resource, Settling Defendant shall submit to the Trustee Council the proposed permit applications. The Trustee Council shall have review and approval rights under Section 3 below solely with respect to construction plans and details.
- **2.4 Forested Floodplain Restoration Construction Implementation.** Settling Defendant shall:
  - (a) Implement the Invasive Species Treatment Plan. Implementation of the preconstruction aspects of the Invasive Species Treatment Plan in Lowlands East and Lowlands West shall be done following the receipt of (1) approval from the Trustee Council of the Invasive Species Treatment Plan, (2) approvals from DFF/NRCS, and (3) the issuance of any applicable NJDEP Land Resource permits. Additional aspects of the Invasive Species Treatment Plan may be implemented in separate phases over successive years to account for access limitations, weather conditions, and subcontractor availability.
  - (b) Implement the Planting Plan. Implementation of the Planting Plan in Lowlands East and Lowlands West shall be done following the receipt of (1) approval from the Trustee Council of the Planting Plan, (2) the issuance of applicable NJDEP Land Resource permits, and (3) after the initial pre-construction phases of the Invasive Species Treatment Plan have been completed. The Planting Plan may be implemented in separate phases over successive years to account for the limited availability of plants and subcontractors to perform the work.
- 2.5 Project Construction Completion Report. Settling Defendant shall submit by the end of the calendar year during which field construction was completed in accordance with the Planting Plan a Construction Completion Report to the Trustee Council and NJDEP Land Resource. The Construction Completion Report shall be developed in accordance with NJDEP Land Resource regulations, guidance, and permits, as applicable. If NJDEP

Land Resource issues a Construction Completion Report approval letter, Settling Defendant shall submit a copy to the Trustee Council.

- 2.6 Forested Floodplain Restoration Project Monitoring and Maintenance Plan. Settling Defendant shall develop a Monitoring and Maintenance Plan according to the conditions outlined in the Invasive Species Treatment Plan, Planting Plan, and NJDEP Land Resource GP-4/GP-16 permits. The Monitoring and Maintenance Plan shall set forth two monitoring and maintenance periods: (1) a 5-year monitoring and maintenance period, commencing in the calendar year following the submittal of the Construction Completion Report for the Trustee Council's review and approval, during which Settling Defendant shall be responsible for implementation of all monitoring and maintenance activities; and (2) a year 6 to 15 maintenance period for which Settling Defendant shall implement or fund certain identified maintenance activities, as defined in Section 2.6(d). The Monitoring and Maintenance Plan shall include:
  - (a) A description of the methodology for measuring fulfillment of the project objectives based on the performance metrics described in Section 4 below.
  - (b) Sixty (60) vegetation monitoring plots (1.4 % of total acreage), randomly placed within fields, with the number of plots within each field weighted by acreage, and the split between tree and shrub plots weighted by percent composition (approximately 80% and 20%, respectively) of each class. Thirty (30) of these plots will be permanent and will have the same location every year, while thirty (30) will be randomized every year to ensure full representation of the planting area.
  - (c) Metrics to be monitored, include at minimum:
    - (1) Tree/shrub survivability;
    - (2) Stem density;
    - (3) Invasive species percent cover;
    - (4) Native vegetation percent cover; and
    - (5) Tree height.
  - (d) To evaluate the hydrology of and invasive species cover in and immediately adjacent to (within 15 feet of pool edge) the vernal pools, Settling Defendant shall refer to data collected by U.S. Fish and Wildlife Service (the Service) during the annual Vernal Pool Biological Monitoring. This data shall be shared by the Service by the end of the calendar year during which the monitoring took place.
  - (e) Maintenance activities for Years 6 to 15 for which Settling Defendant is responsible are: (1) fence monitoring, maintenance, and repair, as indicated, and (2) removal of excessive accumulated debris from flooding.

# 2.7 Forested Floodplain Restoration Project Monitoring and Maintenance Implementation.

- (a) Years 1 to 5 Monitoring and Maintenance Implementation. Settling Defendant shall implement the Monitoring and Maintenance Plan requirements for years 1 to 5.
- (b) Year 6-15 Maintenance Implementation. Settling Defendant shall implement (as specified in Section 2.6(e) related to fencing and flooding debris) and fund the maintenance requirements set forth in the Monitoring and Maintenance Plan for years 6 to 15. The actions specified in Section 2.6(e) may be directly performed by the Settling Defendant or its contractors, or through other arrangements as may be agreed between the Settling Defendant and DFF. Nothing herein requires Settling Defendant to implement monitoring and stewardship activities for years 6 to 15, which is planned to be undertaken by the Trustee Council using funding provided by Settling Defendant's Long-Term Stewardship Costs Payments.

## 2.8 Monitoring and Maintenance Reports

- (a) Annual Monitoring and Maintenance Reports for Each Monitoring Year 1 to 4. Settling Defendant shall provide the Trustee Council for each calendar year, by January 31<sup>st</sup> of the next calendar year, an Annual Monitoring and Maintenance Report that will for subject year: (1) summarize monitoring efforts; (2) summarize and provide full detail of monitoring data; (3) evaluate compliance with performance metrics; (4) propose contingency measures (if needed); (5) detail maintenance activities that were performed at the site; and (6) describe any other findings that Settling Defendant determines pertinent to the Trustees' understanding of Defendant's implementation of the work set forth in this SOW.
- Final Monitoring and Maintenance Report. Settling Defendant shall provide to (b) the Trustee Council no later than January 31st of the next calendar year after the fifth and final year of monitoring to be undertaken by Settlement Defendant a Final Monitoring and Maintenance Report. This report will summarize all monitoring and maintenance activities, evaluate the effectiveness of any continency measures implemented, and describe any other findings that occurred during the Five-Year Monitoring and Maintenance Period that Settling Defendant has determined are material to achieving the objectives of the Project. The Final Monitoring and Maintenance Report will also describe compliance with performance metrics and identify which tier each metric falls within the Longterm Stewardship Payment Schedule as set forth in Attachment B. Settling Defendant shall attach to the Final Monitoring Report the applicable NJDEP Land Resource approval letter or any other applicable NJDEP approval that may be valid at that time, as confirmation that the work was performed in accordance with the Planting Plan and GP-4/GP-16 permits.

## 3. DELIVERABLES, APPROVALS, AND IMPLEMENTATION

**3.1 Applicability.** All deliverables and implementation tasks required under this SOW must be submitted or completed by Settling Defendant by the deadlines or within the time durations listed in the Deliverable and Implementation Task Schedule set forth below.

## 3.2 Deliverable and Implementation Task Schedule

	Description of Deliverable, Task	¶ Ref.	Deadline	
1	Submit to Trustee Council the Duke Farms Agreements		Within 30 days of entry of Consent Decree	
2	Submit to Trustee Council the Invasive Species Treatment Plan		Within the later of (1) 180 days of entry of the Consent Decree, or (2) 10 days after DFF and NRCS's approval of the Invasive Species Plan.	
3	Submit to Trustee Council the Planting Plan		Within the later of (1) 180 days of entry of the Consent Decree, or (2) 10 days after DFF and NRCS's approval of the Planting Plan.	
4	Submit to Trustee Council any Proposed Modifications to Species Tables in Attachment A		Within 30 days of Settling Defendant's determination that a modification is necessary	
5	Submit to Trustee Council draft NJDEP Land Resource Permit Applications		Within 30 days of the Trustee Council's approval of the Invasive Species Treatment Plan and Planting Plan	
6	Submit to NJDEP and Trustee Council the Land Resource Permit Application		Within 30 days of Trustee Council's approval of draft NJDEP Land Resource Permit Applications.	
7	Implementation (and related Notice to the Trustee Council of commencement of implementation) of the Forested Floodplain Construction Related to the Invasive Species Treatment Plan		Commencement within 6 months of the NJDEP Land Resource approval of applicable permits. Completion may take multiple years but must be completed before submittal of the Final Monitoring and Maintenance Report.	
8	Implementation (and related Notice to the Trustee Council of commencement of implementation) of the Forested Floodplain Construction Related to the Planting Plan		Commencement within 6 months of the later of (1) the Trustee Council's approval of the Planting Plan, and (2) NJDEP Land Resource approval of applicable permits. Completion may take multiple years, but must be completed before submittal of the Final Monitoring and Maintenance Report.	
9	Submit to Trustee Council Project Construction Completion Report		Within 60 days of completing the implementation of the Project Construction.	

10	Submit to Trustee Council NJDEP Land Resource Construction Completion Report approval letter	Within 14 days of Settling Defendant's receipt of NJDEP Land Resource's Construction Completion Report approval letter.
11	Submit to Trustee Council Forested Floodplain Restoration Project Monitoring and Maintenance Plan	Within 90 days of completion of the Project Construction.
12	Submit to Trustee Counsel Proposed Interpretive Signage	Within 180 days of entry of completion of the Project Construction or within 30 days of final draft signage content approved by DFF.
13	Submit to Trustee Council Annual Monitoring and Maintenance Reports for Each Monitoring Year 1 to 4	On or before January 31 of the year following the subject year.
14	Submit to Trustee Council Final Monitoring and Maintenance Report for Monitoring Years 1 to 5	On or before January 31 of the year following the fifth monitoring year.
15	Implementation of Forested Floodplain Restoration Project Monitoring and Maintenance	During the Five-Year Monitoring and Maintenance Period. Additional identified maintenance obligations will be implemented or funded for years 6 to 15.
16	Implement any required contingency measures to meet performance standards in Monitoring and Maintenance Period 1 to 4	On or before the end of the Five-Year Monitoring and Maintenance Period.

## 3.3 Approval of Deliverables

#### (a) Initial Submissions

- (1) After review of any deliverable that is required to be submitted to the Trustee Council under the SOW, the Trustee Council shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.
- (2) The Trustee Council also may modify the initial submission to cure deficiencies in the submission if: (i) the Trustee Council determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the previous submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.
- (b) **Resubmissions**. Upon receipt of a notice of disapproval under ¶ 3.3(a)(1)(i) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 3.3(a)(1)(ii), Settling Defendant shall, within 30 days or such longer time as specified by the Trustee Council in such notice, correct the

deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, the Trustee Council may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring Settling Defendant to correct the deficiencies; or (5) any combination of the foregoing.

(c) Implementation. Upon approval, approval upon conditions, or modification by the Trustee Council under ¶ 3.3(a) (Initial Submissions) or ¶ 3.3(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the Consent Decree; and (2) Settling Defendant shall take any action required of it, by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ 3.3(a) or ¶ 3.3(b) does not relieve Settling Defendant of any liability for stipulated penalties under Section XI (Stipulated Penalties) of the Consent Decree.

## 4. PERFORMANCE STANDARDS, CONTINGENCY MEASURES, AND LONG-TERM STEWARDSHIP

4.1 Requirement to Meet Performance Standards and, if necessary, Implement Contingency Measures. Settling Defendant shall meet the Performance Standards set forth in the following subparagraph for restoration activities for the monitoring years 1 to 4. If necessary to meet Performance Standards, Settling Defendant shall take Contingency Measures listed below, or implement additional or alternative Contingency Measures submitted to the Trustees for review and written approval. Contingency measures must be performed over entire restoration site (not limited to specific monitoring plots). Implementation of these contingency measures shall be completed by the end of monitoring year 5.

## 4.2 Description of Performance Standards, Criteria, and Contingency Measures.

Performance Standard	Criteria	<b>Contingency Measures</b>
Survival of planted trees/shrubs	At least 85%	Replace plants with appropriate species (or when not possible, wetland indicator status) and class ( <i>i.e.</i> , tree vs. shrub) to achieve at least 85% survival.
Coverage by invasive plant species	Less than 10%	Perform mechanical and/or chemical treatment to control invasive species to achieve less than 10% cover.
Cover by native vegetation	At least 85% by the end of year 5.	None, except implement Long-Term Stewardship Payment after year five.
Planted trees height	Must reach 8 feet on average by the end of year 5.	None, except implement Long-Term Stewardship Payment after year five.

Performance Standard	Criteria	Contingency Measures
Deer fence	Must be maintained and	Maintain and repair any fence damages from
	remain effective at keeping	storms, flooding, debris, etc. on a regular basis.
	deer out of restoration areas	Large amounts of woody debris resulting from
	for a minimum of 15 years.	fence failure shall be removed from the interior
		and damage to planted trees and shrubs from
		flooding be repaired/replaced. If breaches in fence
		allow deer in, take appropriate measures to
		remove them.
Vernal pool hydrology	Each of the pools monitored	Perform appropriate modifications to pool soils,
	(by the Service) must: (1)	slope, and/or topography to achieve vernal pool
	maintain ponded water for at	hydrology.
	least 60 continuous days	
	during the inundation period	
	(March 1-June 30), with	
	exception: if rainfall during	
	this inundation period is	
	below the values set forth in	
	the Vernal Pool Hydrology	
	Criteria Reference Table (see	
	below) for two months or more during this time, the	
	criteria will be waived for	
	this period; and (2) have at	
	least one drying event	
	(during which there is	
	minimal or no standing water	
	in the pool) by the end of	
	October, with exception: if	
	rainfall during the drying	
	period (July-October)	
	exceeds the values set forth	
	in the Vernal Pool Hydrology	
	Criteria Reference Table (see	
	below) for two or more	
	months during this time, the	
	criteria will be waived for	
	this period. Monthly rainfall	
	will be determined using	
	rainfall data collected by the	
	weather station at Duke	
	Farms (Hillsborough-Duke	
	#3572), a part of the Rutgers NJ Weather Network. The	
	above waivers shall apply	
	only to Settling Defendant's	
	obligation to implement	
	contingency measures and	
	not to payment obligations as	
	specified in Section 4.3.	
Coverage by invasive species	Less than 10%.	Perform mechanical and/or chemical treatment to
in and immediately adjacent to		control invasive species.
(within 15 feet of pool edge)		
the vernal pools.		

## Vernal Pool Hydrology Criteria Reference Table

Month	Rainfall threshold (inches) <sup>1</sup>		
Inundation	on Period		
March	3.0		
April	3.1		
May	3.4		
June	3.6		

If rainfall is below the rainfall threshold values above for two months or more during the inundation period, performance criteria will be waived for this period.

Drying Period				
July	6.8			
August	6.1			
September	4.7			
October	5.4			

If rainfall exceeds the rainfall threshold values above for two months or more during the drying period, performance criteria will be waived for this period.

4.3 Long-Term Stewardship Payments. At the end of monitoring year 5, Settling Defendant shall submit within the Final Monitoring and Maintenance Report for Monitoring Years 1 to 5 an evaluation of the Project's success based on the criteria set forth in the Tiered Long-Term Stewardship Payment Schedule set forth in Attachment B. The Trustee Council will thereafter make determinations of the amounts of the Long-Term Stewardship Costs payment and the Long-Term Stewardship Oversight Costs payment pursuant to Attachment B and the Consent Decree. The Trustee Council shall provide written notification of these amounts, and Settling Defendant shall thereafter make the applicable payments in accordance with Paragraph 18 of the Consent Decree.

#### 5. PROJECT COMPLETION CERTIFICATES

- 5.1 Upon the Trustee Council's determination that the Settling Defendant completed the Forested Floodplain Restoration Project requirements under this SOW, and submitted to the Trustee Council an NJDEP Land Resource's construction complete approval letter, the Trustee Council shall issue to the Settling Defendant a "Project Construction Completion Certificate."
- 5.2 Following Settling Defendant's submission of the Five-Year Monitoring and Maintenance Report to the Trustees, the Trustees shall evaluate whether Settling Defendant has completed all monitoring and maintenance requirements and has satisfactorily implemented any contingency measures applicable to monitoring years 1 to 4. If such requirements have been completed, the Trustees shall provide Settling Defendant a "Five-Year Monitoring and Maintenance Completion Certificate."

<sup>&</sup>lt;sup>1</sup> Rainfall threshold values were determined by applying a 25% decrease (for inundation period months) or 25% increase (for drying period months) to average monthly rainfall data in Hillsborough Township, NJ for the period 2006-2020, acquired from NOAA's U.S. Climate Normals website at https://www.ncei.noaa.gov/access/us-climate-normals/.

5.3 Following the issuance by the Trustees of the "Project Construction Completion Certificate" and "Five-Year Monitoring and Maintenance Completion Certificate," Settling Defendant shall have no work obligations set forth in this SOW other than to implement the Year 6-15 requirements relating to fencing maintenance and debris removal as set forth in Section 2.6(e).

## **ATTACHMENT A**

## PLANT SPECIES LIST

TABLE 1: PROPOSED TREE SPECIES FOR FORESTED FLOODPLAIN RESTORATION

Common Name (Trees)	Species Name	Indicator
		Status
Red maple	Acer rubrum	FAC
Box elder	Acer negundo	FAC
Silver maple	Acer saccharinum	FAC
River birch	Betula nigra	FACW
Gray birch	Betula populifolia	FAC
Common hackberry	Celtis occidentalis	FACU
Common persimmon	Diospyros virginiana	FAC
Sweet gum	Liquidambar styraciflua	FAC
Black gum	Nyssa sylvatica	FAC
American sycamore	Platanus occidentalis	FACW
Swamp white oak	Quercus bicolor	FACW
Pin oak	Quercus palustris	FACW
Willow oak	Quercus phellos	FACW
Black willow	Salix nigra	OBL
Sassafras	Sassafras albidum	FACU
American linden/basswood	Tilia americana	FACU

Note: The species listed in Table 1 can comply with the minimum 2% planting requirement if they are supplemented by similar indicator status plants from Table 3.

All Tree Species (#3 container); Selected Species (#7 container)

TABLE 2: PROPOSED SHRUB SPECIES FOR FORESTED FLOODPLAIN RESTORATION

Common Name (Shrubs)	Species Name	Indicator Status
Canadian serviceberry	Amelanchier canadensis	FAC
Black chokeberry	Aronia melanocarpa aka Photinia melanocarpa	FAC
Sweet pepperbush	Clethra alnifolia	FAC
Red Osier dogwood	Cornus alba (sericea)	FACW
Silky dogwood	Cornus amomum	FAC
Gray dogwood	Cornus racemosa	FAC
Inkberry holly	Ilex glabra	FAC
Winterberry	Ilex verticillata	FACW
Spicebush	Lindera benzoin	FAC
Sweetbay magnolia	Magnolia virginiana	FACW
Northern bayberry	Morella pensylvanica	FAC
Virginia rose	Rosa virginiana	FAC
Pussy willow	Salix discolor	FACW
Elderberry	Sambucus nigra	FAC
Meadowsweet	Spiraea alba	FACW
Steeplebush	Spiraea tomentosa	FACW
Arrowwood viburnum	Viburnum dentatum	FAC
Buttonbush*	Cephalanthus occidentalis	FACW

Note: The species listed in Table 2 can comply with the minimum 2% planting requirement if they are supplemented by similar indicator status plants from Table 3.

Shrub Species (#1 to #3 container)

<sup>\*</sup> Only to be planted along the perimeter of vernal pools and exempt from the minimum 2% planting requirement.

TABLE 3: PROPOSED TREE AND SHRUB SUBSTITUTIONS FOR FORESTED FLOODPLAIN RESTORATION

Common Name (Trees)	Species Name	Indicator
		Status
Sweet birch	Betula lenta	FACU
American hornbeam	Carpinus caroliniana	FAC
Pignut hickory	Carya glabra	FACU
Shagbark hickory	Carya ovata	FACU
Tulip tree/Yellow poplar	Liriodendron tulipifera	FACU
White oak	Quercus alba	FACU
Common Name (Shrubs)	Species Name	Indicator
		Status
Speckled alder	Alnus incana	FACU
Smooth alder	Alnus serrulata	OBL**
Shadbush (common serviceberry)	Amelanchier arborea	FAC
Red chokeberry	Aronia arbutifolia aka Photinia pyrifolia	FACW
Witch hazel	Hamamelis virginiana	FACU
Virginia Sweetspire	Itea virginica	OBL**
Swamp azalea	Rhododendron viscosum	FACW
Winged sumac	Rhus copallinum	FACU
Swamp Rose	Rosa palustris	OBL**
Allegheny blackberry	Rubus allegheniensis	FACU
Bladdernut	Staphylea trifolia	FAC
High bush blueberry	Vaccinium corymbosum	FACW
Nannyberry	Viburnum lentago	FAC
Blackhaw	Viburnum prunifolium	FACU

Note: The species listed in Table 3 are exempt from the minimum 2% planting requirement if they are being used to supplement similar indicator plants from Table 1 and Table 2.

<sup>\*\*</sup>Only to be planted in areas with appropriate wetland hydrology

#### **ATTACHMENT B**

## LONG-TERM STEWARDSHIP COSTS PAYMENT AND LONG-TERM STEWARDSHIP OVERSIGHT COSTS TABLES

## I. Long-Term Stewardship Costs Payment Tables

This table sets forth the performance evaluation criteria that the Trustee Council shall employ to determine the success of the Forested Floodplain Restoration Project after review and approval of Settling Defendant's Final Monitoring and Maintenance Report. Based on the values of these performance criteria, the Trustee Council shall determine the amount of the Long-Term Stewardship Cost Payment, which shall be the total of the applicable amounts in accordance with the following four tables (1) Tree Stewardship Payment, (2) Invasive Cover Stewardship Payment, (3) Native Cover Stewardship Payment, and (4) Vernal Pool Stewardship Payment.

	TREE STEWARDSHIP PAYMENT							
	Tree Tree		Tree Survival at Year 5					
Height	Height at Year 5	Height Multiplier	<64%	65-74%	75-84%	>85%		
	>8 ft	1	\$ 1,140,678.54	\$ 575,636.16	\$ 250,268.83	\$ 93,695.85		
Tree	6.5-7.9 ft	1.5	\$ 1,711,017.80	\$ 863,454.23	\$ 375,403.25	\$ 140,543.77		
	5.0-6.4 ft	2	\$ 2,281,357.07	\$ 1,151,272.31	\$ 500,537.67	\$ 187,391.70		
	<4.9 ft	2.5	\$ 2,851,696.34	\$ 1,439,090.39	\$ 625,672.08	\$ 234,239.62		

INVASIVE COVER STEWARDSHIP PAYMENT						
Invasive Species Cover at Year 5						
>31% 21-30% 11-20% <10%						
\$ 262,152.80						

NATIVE COVER STEWARDSHIP PAYMENT						
Native Cover at Year 5						
<64%		65-74%		75-84%		>85%
\$ 72,333.65	\$	52,295.87	\$	43,753.00	\$	40,215.95

VERNAL POOL STEWARDSHIP PAYMENT						
Percent of pools with vernal pool hydrology at Year 5						
	<25%		26-50%		51-75%	76-100%
\$	22,794.00	\$	16,867.56	\$	8,265.10	\$ 3,419.10

## II. Long-Term Stewardship Oversight Costs Payment Table

This table sets forth the methodology for the Trustee Council to determine the amount of the Long-Term Stewardship Oversight Costs Payment, which shall be based on the total amount of the Long-Term Stewardship Costs Payment determined in accordance with the above performance metrics. Specifically, when the total Long-term Stewardship Costs Payment is \$233,062 to \$499,999.99, the Long-Term Stewardship Oversight Costs Payment shall be \$80,500, and when the Long-term Stewardship Costs Payment is \$500,000 to \$3,208,977, the Long-Term Stewardship Oversight Costs Payment shall be \$144,790. For the purpose of determining the Long-Term Stewardship Oversight Costs Payments, any interest or stipulated penalties related to the Long-Term Stewardship Oversight Costs Payment shall not be included.

TRUSTEE OVERSIGHT PAYMENT						
Long-Term Stewardship Costs Payment	\$233,062 - \$499.999.99	\$500,000.00 - \$3,208,977				
Long-Term Stewardship Oversight Costs Payment	\$80,500	\$144,790				