STATEMENT OF SERVICES: HERBICIDE APPLICATION AT
GREAT DISMAL SWAMP NATIONAL WILDLIFE REFUGE SUFFOLK, VIRGINIA

l. GENERAL INFORMATION

1.1 This contract provides for aerial application services for the control and eradication of target *Acer rubrum, Clethra alnifolia, Toxicodendron radicans* and other woody or herbaceous vegetation in managed forest stands in the southeastern part of the refuge (Figure 1).

1.2 *Broad-leaved trees, vines and shrubs*

Treatment units are located in forested wetland in the southeastern section of the refuge known as the Blocks (Figures 1 & 2). Spray units are separated into east and west units and range from (approximately) 630 acres to 970 acres in size.

1.3 Contractor shall furnish all necessary equipment, labor and materials necessary to accomplish the herbicide application. Spraying will take place by rotary wing aircraft (helicopter). The herbicide application(s) shall be during the late growing season in SE Virginia with all application(s) completed by September 30, 2026. All herbicide application(s) shall be consistent with the product label instructions, manufacturer's guidance and the requirements of this contract.

1.4 The period of performance shall be August 26, 2026 through September 30, 2026.

2. LOCATIONS, QUANTITIES, CONTACTS

2.1 General Location: The work areas are located in the City of Chesapeake, Virginia (see Figure 1). Estimated application acres, chemicals to be used, and Project Officer (project contact personnel) are as follows:

Location: Great Dismal Swamp NWR, southeastern refuge, in the Blocks.
Acres to treat: up to 1600 acres of *Acer rubrum, Clethra alnifolia, Toxicodendron radicans* and other woody or herbaceous vegetation within the managed forested units.
(NOTE: The contractor will provide pricing per acre sprayed)

Herbicide/Surfactant for late season spray: Contractor shall apply via rotary wing aircraft the herbicide that best controls hardwood trees and shrubs; this herbicide includes a mixture of water, Habitat (or their chemical equivalents when similarly labeled materials are available from multiple suppliers and approved by the NWR Project Officer) and Methylated Seed Oil, at the rate of 2 pints (32 oz.) Habitat + 3.2 oz. MSO at 10 gallons per acre, **or as per latest manufacturer requirements**. These herbicides will be appropriately labeled for specific application (i.e. aquatic label for use directly over water). Herbicides must be registered for aquatic use.

Project Officer: Susan Stanley, Refuge Biologist, 3100 Desert Road, Great Dismal Swamp NWR, Suffolk, VA, 23434 (phone: 757-986-3705).

2.2 Site Location: Treatment areas are depicted in Figures 1 & 2.

3. TREATMENT AREAS, CONTROL GOALS AND HERBICIDES

3.1 General: Specific treatment units are areas where mechanical thinning/fuel reduction has recently occurred. Spray units may be from (approximately) 630 acres to 970 acres in size. The contractor is encouraged to visit the sites to determine the logistics required for the work. The purpose of this treatment is to achieve the vegetation control goals described in the next paragraph.

3.2 Vegetation Control Objectives: A minimum of 95% of all the identified areas will be sprayed, with each area receiving at least 95% coverage by foliar spray, to the degree that effective treatment of at least 95% of the targeted area is completed.

3.3 Herbicide Selection Procedure: The contractor will use “Habitat®” and "Methylated Seed Oil (MSO)" or their chemical equivalents, when similarly labeled materials are available from multiple suppliers and approved by the NWR Project Officer. These herbicides/surfactants will be appropriately labeled for specific application (i.e. aquatic label for use directly over water). Herbicides must be registered for aquatic use. No restricted use herbicides are allowed. No herbicides can be used on National Wildlife Refuge property without prior approval from the Project Officer. In addition, all carriers and adjuvant must be non-toxic and registered for water applications. A surfactant shall be added per label instructions to all herbicide mixtures.

3.4 Minimizing Impacts to Non-Target Species: No broadcast spraying shall be performed when wind speeds exceed specifications listed on the herbicide label, or 10 mph, whichever is greater, or wind directions are likely to result in drift to non-target areas, or public use areas.

4. NOTIFICATION OF TREATMENT

The contractor will provide a 72-hour notice to the NWR Project Officer before arriving at the site locations for herbicide treatment work. This will ensure that Refuge staff is available to answer questions, participate in any reconnaissance that may be conducted, and close the area to public use if needed. The telephone number for the office is listed above, under “Locations, Contacts”.

5. HANDLING, MIXING, APPLICATION RATES AND METHODS

5.1 Handling and Mixing: All herbicides will be handled and stored in accordance with instructions on the EPA registration label. All herbicides shall be mixed in accordance with the label instructions so that the desired rate of application can be attained with the contractor's application equipment. Mixing water is the responsibility of the contractor. The contractor is required to provide a secondary containment system around their herbicide mixing area when herbicides are mixed on government property. This containment system must be constructed of impervious materials. The contractor will ensure that no contamination of any water source occurs and that emergency spill containment equipment is at the worksite and is capable of containing all potential herbicide spills from contractor vehicles/equipment. Unused, mixed pesticides will be disposed of in accordance with local, state and EPA guidelines. Spray equipment cleaning will also be accomplished in accordance with these guidelines. Prior to leaving a worksite for the day, the contractor shall remove all equipment and unused materials, any waste materials, oil, empty herbicide containers and litter resulting from contract activities on government property.

5.2 Equipment: The equipment used by the contractor shall be designed for such work and operated in a safe manner. The equipment will be capable of accurately delivering a predetermined rate per acre dosage of herbicide.

5.3 Rates and Method of Application: Application rates will be per the specification on the material safety data sheet, labeling and manufacturer's suggested rate tables, per chemical used and the desired results identified in "3.2 Vegetation Control Objective".

During the *Broad-leaved trees, vines and shrubs* late season spray, contractor shall apply via rotary wing aircraft a mixture of water, Habitat (or generic equivalent) and Methylated Seed Oil, at the rate of 2 pints (32 oz.) Habitat + 3.2 oz. MSO at 10 gallons per acre, or as per latest manufacturer requirements.

6.SAFETY AND CERTIFICATION

6.1 Safety Manual: Notwithstanding any other provisions of this contract, the Contractor shall comply with all safety and health requirements as outlined in OSHA Safety Standards to ensure the safe working conditions for contractor's employees and government workers.

6.2 Hazard Communication: The contractor shall implement a hazard communication program in accordance with 29 Code of Federal Regulations (CFR) 1910.1200 or 1926.59. The written hazard communication program shall address, as a minimum, the following: training (to include potential safety and health effects from exposure), labeling, current inventory of hazardous chemicals on site, and the location and use of Material Safety Data Sheets (MSDSs).

6.3 Licensing: The contractor, all contractor's employees, and any subcontractors performing any of the work under this contract shall possess a valid state commercial herbicide applicator's license for the state in which work is being performed (Virginia) and shall comply with all Federal, State, and local laws and regulations applicable to the contract work and to the products and material used by the contractor in performing that work. Evidence of such licensing shall be submitted with the "Application Plan" as outlined in Paragraph 7. 1.

6.4 Public Safety: Public safety must be ensured when spraying or using pesticides. In application areas where there is potential for use by the public, the refuge staff will station personnel to enforce closure during time of spraying and/or place appropriate warning signs which inform the public that pesticide application work is on-going.

6.5 EPA Registration Label: All work shall be performed in accordance with the instructions on label shall be strictly adhered to.

6.6 Material Safety Data Sheets: Material Safety Data Sheets (MSDS) shall be submitted to Contracting Officer with the "Application Plan" as outlined in Section 7.1. The Contractor shall also make these MSDSs readily available to all affected contract employees.

6.7 Spills and Contamination: The contractor shall submit as part of the "Application Plan" described in Section 7.1, the response measures to be implemented should a spill or

contamination occur. The contractor's immediate response to a spill or contamination shall be to proceed with the required measures to limit the contamination. Immediately following this initial response, the contractor shall notify the appropriate Project Officer at the work location and other appropriate local, state, and federal officials. Subsequent to these actions, the contractor shall take actions to clean up the spill as recommended by the Project Officer. Should a personnel contamination occur, the contractor shall take immediate actions as prescribed by chemical manufacturer so as to protect the safety and health of the contaminated individual(s). Immediately following the contractor's initial response, the incident shall be reported to the Project Officer.

7.SUBMITTAL AND REPORTING

7.1 Application Plan: The contractor shall submit an electronic copy of an application plan to the Contracting Officer. This plan shall outline, per National Wildlife Refuge site, the types of herbicides, planned application rates, hyperlinks to MSDS's and labels for each chemical to be used, scanned copies of applicator licenses, and a spill and contamination action plan. Additionally, the contractor shall certify in writing that all employees engaged in handling, mixing and spraying herbicides have read the MSDS's and that personal protective equipment specified by the MSDS's will be provided to and worn by these persons. Further, one hard copy of the approved plan shall be provided that will include a signed statement by the contractor that this plan complies with all state, local and federal regulations. This plan shall be submitted for review and approval within 7 working days of the notice of contract award and prior to the desired start of work. Government approval of this plan in no way relieves the contractor of any liability for compliance with all Federal, State, and/or local regulations, should there be omissions/errors within said plan.

7.2 Post-Application Documentation: The contractor shall submit a spray log to the Project Officer by October 9, 2026 detailing: day(s) and time(s) sprayed, chemical applied, application rate, weather conditions (average wind speed, temperature, humidity, cloud cover). The contractor shall also provide ArcGIS shapefiles to the refuge Project Officer showing areas sprayed. The contractor will have AgNav or similar system on-board; so the refuge can geo-reference application areas. Shapefiles will be georeferenced using the Grid Coordinate System: UTM zone 18 and Horizontal Datum: NAD1983.

8. PREWORK MEETING

Within 10 days after contract award, the contractor shall contact the Contracting Officer to arrange a meeting to discuss and develop a mutual understanding of the requirements and details of work. There may also be occasions when subsequent conferences will be called to reconfirm understandings or provide clarifications on contract requirements.

9. LIABILITY OF AND DAMAGES TO THE GOVERNMENT

9.1 Insurance: The contractor will carry liability insurance that will cover the application of pesticides as defined in this specification. This coverage will include as a minimum drift, run-off, and pollution (sudden and accidental) for all contract operations. The amount of coverage this

insurance will provide will not be less than $1,000,000 per incident. A Certification of Insurance form signed by the insuring agency shall be provided to the Contracting Officer prior to award of the contract. The insurance must provide coverage for the entire contract period. The insurance policy shall state that it cannot be cancelled without 30 days written notice to the Contracting Officer. Failure to secure insurance will be grounds for non-award and termination of the insurance during the performance period of this contract for any reason will be grounds for termination of this contract. The contractor will be in default and the contract terminated if the insurance lapses and is not immediately replaced with equal coverage. (If insurance lapses, work is suspended pending replacement insurance. The delay is not compensable to the contractor).

9.2 Government Liability: The Government assumes no liability from the contractor's performance of the contract work. The contractor shall hold and save the Government harmless from any and all liability arising from the performance of the contract.

9.3 Responsibility for Damages: The contractor is responsible for all damages to persons and property resulting from performance of the contract work. The contractor shall return any Government furnished property to the Government in the condition it was received, ordinary wear and tear excepted. The contractor shall repair or replace, at the option of the Contracting Officer, any Government furnished property lost or damaged in the course of the contract work.

10. WARRANTY

10.1 The contractor is responsible for damages to persons or property within and outside the treatment areas resulting from the performance of the contract work. Damage costs as determined by government personnel will be charged in the form of a fine for the cost of rehabilitation or replacement of the affected resources. Other penalties may be assessed based on local, State, or Federal laws.

11.INSPECTIONS AND ACCEPTANCE
Work will be inspected periodically for conformance with these specifications for timeliness, safety and results achieved.

Appendix

Figure 1. Treatment units (red and Blue) in Blocks section of refuge. On the west side of Lake Drummond (center) there is a potential helicopter take-off/landing site.

Figure 2. Aerial Herbicide Treatment Units in The Blocks section of the Great Dismal Swamp NWR. Both units previously experienced mechanical treatment and/or wildfire.