

APPENDIX C

COASTAL ZONE FEDERAL CONSISTENCY DETERMINATIONS

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Connecticut Department of
Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Office of Long Island Sound Programs

Coastal Management Consistency Review Form for Federal Activities

Use of this form, although not mandatory, will facilitate coastal consistency review analysis by the Federal agency and result in submission of sufficient information for comprehensive review by the Department of Energy and Environmental Protection (DEEP) Office of Long Island Sound Programs (OLISP). It is anticipated that submittal of a completed form with indicated supplemental materials will, in most instances, eliminate the need for further information. The form should be used in conjunction with the *Reference Guide to Coastal Policies and Definitions* (DEEP-OLISP-GUID-200). The *Instructions and Guidance for Completing the Federal Coastal Consistency Review Form for Federal Activities* (DEEP-OLISP-INST-300) explains how to complete this form and provides several critical definitions and pertinent guidance. Once completed, please submit this form with the appropriate supporting documentation to: CT DEEP-OLISP, 79 Elm Street, Hartford, CT 06106-5127. For further information or assistance in completing this form, please contact us at the address above or by phone at 860-424-3034.

Part I: Federal Agency and Contact Identification

| | | |
|--|-------------------------|------------------------|
| Agency Name: U.S. Army Corps of Engineer, New England District | | |
| Mailing Address: 696 Virginia Rd | | |
| City/Town: Concord | State: MA | Zip Code: 01742 |
| Business Phone: 978-318-8833 | ext. | Fax: |
| Agency Contact: Keith Hannon | Title: Planner | |
| E-Mail: keith.w.hannon@usace.army.mil | | |
| Identification of Primary Contact for correspondence if other than Agency Contact noted above: | | |
| Company Name: U.S. Army Corps of Engineers, New England District | | |
| Mailing Address: 696 Virginia Rd | | |
| City/Town: Concord | State: MA | Zip Code: 01742 |
| Business Phone: 978-318-8685 | ext. | Fax: |
| Contact Person: Hannah Doherty | Title: Biologist | |
| E-Mail: hannah.l.doherty@usace.army.mil | | |

Part II: Review Type and Project Title

| |
|---|
| Type of Review (check one): |
| <input type="checkbox"/> Federal Development Project <input type="checkbox"/> Negative Determination |
| <input checked="" type="checkbox"/> Other Federal agency activity (specify general type): aquatic plant management |
| Project Title or Other Identification: |
| Connecticut River Hydrilla Research and Demonstration Project |

Part III: Other DEEP Involvement with the Project

Is any component of this activity directly regulated by DEEP separate from the Federal Coastal Consistency Process (e.g., 401 Water Quality Certification)? Yes No

If yes, list below all DEEP permits, certifications, or other authorizations being pursued for this activity, and describe the regulated activity/ies:

Aquatic Pesticide Permit

Check if additional sheets are attached to this page

Has any other unit of the DEEP been contacted regarding this activity? Yes No

If yes, please identify other Departmental contacts:

**NDDB
Pesticide Management Program
Fisheries Division**

Check if additional sheets are attached to this page

Part IV: Detailed Project Information

1. Description of Proposed Activity

Describe the proposed federal activity including its purpose and all related actions. For site-specific activities, such actions might include: site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover from existing conditions resulting from the activity; phasing, timing, and method of proposed construction; and new uses and changes from existing uses. For site-specific activities proposed at waterfront sites, provide detailed information regarding any water-dependent uses proposed. For non-site specific activities, include a complete description of the proposed activity and its purpose.

The purpose of the proposed project is to provide a field-scale demonstration of technology developed under the Aquatic Plant Control Research Program (APCRP), which is evaluating the effectiveness of an aquatic herbicide to manage monoecious hydrilla (*Hydrilla verticillata*) in high water exchange environments. This field demonstration will provide valuable information for developing future guidance on how to manage this invasive aquatic plant which is expanding in high water exchange systems throughout the northeastern U.S. In addition, this field demonstration will evaluate herbicide efficacy where monoecious hydrilla is most problematic, optimal timing of treatment, and length of exposure required for effective control of hydrilla.

Treatment at Chester Boat Basin consists of applying dipotassium salt of endothall, an aquatic herbicide, at 1.8 parts per million (ppm) plus diquat dibromide at 0.36 ppm. The herbicide will be evenly distributed across the entire treatment area using a boat-based, subsurface injection application method. Chester Boat Basin is a man-made boat basin located in Chester, Middlesex County, CT and centered at 41.424° N, 72.439° W. The total area of the treatment area is 4.1 acres and has a mean depth range (mean low water to mean high water) of 4.7 to 7.6 ft mean lower low water. The boat basin is connected to the main stem of the Connecticut River.

Dipotassium salt of endothall (7-oxabicyclo [2.2.1] heptane-2,3-dicarboxylic acid) and diquat dibromide ((6,7-dihydrodipyrido (1,2a:2',1'-c) pyrazinediium dibromide) are state and federally registered selective herbicides and have already been approved for application for aquatic sites for the treatment of invasive aquatic plant species. The dipotassium salt of endothall was registered by the USEPA for use in aquatic environments in 1960 at application rates between 0.5 – 5.0 ppm for aquatic plant control. Dipotassium salt of endothall is a selective fast-acting herbicide that interferes with plant protein and lipid biosynthesis, disrupting respiration and plant membranes in sensitive plant species. This herbicide is highly effective and extensively used for hydrilla control in the US. A Registration Standard for diquat dibromide was issued by the USEPA in June 1986. The

active ingredient is a fast-acting herbicide that interferes with photosynthesis, disrupts plant cell membranes, and results in plant death within a week of application

Check if additional sheets are attached to this page

Part IV: Detailed Project Information (cont.)

2. Is the Project Site-Specific?

- Yes Please continue with Part IV and fill out all subsequent parts of the form.
 No Skip to Part V: Identification of Applicable Enforceable Policies

3. Location Information

- a. Project Address, Location, or Affected Area: **226 Middlesex Ave**

City/Town: **Chester**

State: **CT**

Zip Code: **06412**

b. Agency's interest in property, if any:

- fee simple option lessee easement not applicable
 other (specify):

c. Is the activity proposed at a waterfront site (includes tidal wetlands frontage) or within coastal, tidal or navigable waters? Yes No

If yes, name the affected coastal, tidal or navigable waters:

Connecticut River

d. If off-site effects on coastal uses and/or resources are anticipated, identify the address or location(s) of such effects and attach a map (8 1/2" x 11" format) indicating this area:

- Check if additional sheets are attached to this page
 Check here to indicate map is enclosed.

e. If the Federal project is site specific, identify and describe the existing land use on and adjacent to the site of the proposed activity and any anticipated location(s) of off-site effects on coastal resources or uses. Clearly differentiate between the descriptions of on-site and off-site areas. Include any existing structures and significant features at either location.

Chester Boat Basin is a 4.1 acre, man-made boat basin located in Chester, Middlesex County, CT. The boat basin is located off the mainstem of the Connecticut River and is surrounded by rural residential area as well as open space that includes wetlands to the south.

- Check if additional sheets are attached to this page

f. Indicate the area of the project site: **4.1** acres or square feet

g. Indicate the area of any anticipated off-site effects: **0**

- acres or square feet or other units (specify units):

Part IV: Detailed Project Information (cont.)

4. Project Plans

If the proposed Federal activity is a "Federal Development Project", or other site specific activity, please provide project plans in 8 ½" x 11" format that clearly and accurately depict the following items, and check the appropriate boxes to indicate that the information is included in this review package:

- Project location
- Existing and proposed conditions, including buildings and grading
- Coastal resources on and contiguous to the site
- High Tide Line [as defined in CGS § 22a-359(c)], Mean High Water, and Mean Low Water elevations and contours (for parcels abutting coastal waters and/or tidal wetlands only)
- Soil erosion and sediment controls
- Stormwater management measures
- Ownership and type of use on adjacent properties
- Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)

If a Spill Prevention, Control, and Containment Plan (SPCC) has been developed for this site, please provide a copy in the review package and check here to indicate its inclusion

Part V: Identification of the Applicable Enforceable Policies

In this Part, there are four tables which should be completed by checking the appropriate boxes in each. Table 1: *Coastal Resources and Associated Enforceable Policies*, is to identify on-site, adjacent, and/or potentially affected State-statutorily defined coastal resources. Table 2: *Coastal Uses and Associated Enforceable Policies*, is to identify existing and proposed State-statutorily defined coastal uses potentially affected by the project. Table 3a: *Potential Adverse Impacts on Coastal Resources* and Table 3b: *Potential Adverse Impacts on Water-dependent Uses and Opportunities* is to identify State-statutorily-defined adverse impacts.

Table 1

| Coastal Resources and Associated Enforceable Policies | On-site | Adjacent | Affected by the proposed Federal activity** |
|---|-------------------------------------|-------------------------------------|--|
| General Coastal Resources* - Definition: CGS § 22a-93(7) Policy: CGS § 22a-92(a)(2) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Beaches & Dunes - Definition: CGS § 22a-93(7)(C) Policies: CGS §§ 22a-92(b)(2)(C) and 22a-92(c)(1)(K) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bluffs & Escarpments - Definition: CGS § 22a-93(7)(A) Policy: CGS § 22a-92(b)(2)(A) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Coastal Hazard Area - Definition: CGS § 22a-93(7)(H); Policies: CGS §§ 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), 22a-92(c)(1)(K), and 22a-92(c)(2)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definitions: CGS §§ 22a-93(5), 22a-93(7)(G), 22a-93(7)(K), and 22a-93(7)(L); Policies: CGS §§ 22a-92(a)(2) and 22a-92(c)(2)(A) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Developed Shorefront - Definition: CGS § 22a-93(7)(I); Policy: CGS § 22a-92(b)(2)(G) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Freshwater Wetlands and Watercourses - Definition: CGS § 22a-93(7)(F) Policy: CGS § 22a-92(a)(2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Intertidal Flats - Definition: CGS § 22a-93(7)(D) Policies: CGS § 22a-92(b)(2)(D) and 22a-92(c)(1)(K) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Islands - Definition: CGS § 22a-93(7)(J) Policy: CGS § 22a-92(b)(2)(H) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rocky Shorefront - Definition: CGS § 22a-93(7)(B) Policy: CGS § 22a-92(b)(2)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shellfish Concentration Areas - Definition: CGS § 22a-93(7)(N) Policy: CGS § 22a-92(c)(1)(I) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shorelands - Definition: CGS § 22a-93(7)(M) Policy: CGS § 22a-92(b)(2)(I) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Tidal Wetlands - Definition: CGS § 22a-93(7)(E) Policies: CGS §§ 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

* The General Coastal Resource Policy is applicable to all proposed activities within Connecticut's coastal boundary and coastal area.

** The coastal resources affected by the project can be on-site, adjacent, or further removed from the project site.

Table 2

| Coastal Uses and Associated Enforceable Policies | |
|---|---|
| <input checked="" type="checkbox"/> | General Development* - CGS §§ 22a-92(a)(1), 22a-92(a)(4), and 22a-92(a)(9) |
| <input type="checkbox"/> | Boating - CGS § 22a-92(b)(1)(G), 22a-92(b)(1)(H), and 22a-92(b)(1)(I) |
| <input checked="" type="checkbox"/> | Coastal Recreation and Access - CGS §§ 22a-92(a)(2), 22a-92(a)(6), 22a-92(c)(1)(J), and 22a-92(c)(1)(K) |
| <input type="checkbox"/> | Coastal Structures and Filling - CGS § 22a-92(a)(2), 22a-92(b)(1)(D), 22a-92(c)(1)(B), 22a-92(c)(1)(K), and 22a-92(c)(2)(B) |
| <input type="checkbox"/> | Cultural Resources – CGS § 22a-92(b)(1)(J) |
| <input type="checkbox"/> | Dams, Dikes and Reservoirs - CGS § 22a-92(a)(2) |
| <input type="checkbox"/> | Dredging and Navigation - CGS §§ 22a-92(a)(2), 22a-92(c)(1)(C), 22a-92(c)(1)(D), and 22a-92(c)(1)(E) |
| <input type="checkbox"/> | Energy Facilities - CGS §§ 16-50g and 16-50p(a) |
| <input checked="" type="checkbox"/> | Fisheries - CGS § 22a-92(c)(1)(I) |
| <input type="checkbox"/> | Flooding and Erosion - CGS § 22a-92(a)(5) |
| <input type="checkbox"/> | Fuel, Chemicals and Hazardous Materials - CGS §§ 22a-92(a)(2), 22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(1)(A) |
| <input type="checkbox"/> | Facilities and Resources which are in the National Interest - Definition CGS § 22a-93(14) - Policy CGS 22a-92(a)(10) |
| <input checked="" type="checkbox"/> | Intergovernmental Coordination - CGS § 22a-92(a)(9) |
| <input type="checkbox"/> | Open Space and Agricultural Lands - CGS § 22a-92(a)(2) |
| <input type="checkbox"/> | Ports and Harbors – CGS § 22a-92(b)(1)(C) |
| <input type="checkbox"/> | Sewer and Water Lines - CGS § 22a-92(b)(1)(B) |
| <input type="checkbox"/> | Solid Waste - CGS § 22a-92(a)(2) |
| <input type="checkbox"/> | Transportation - CGS §§ 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H) |
| <input checked="" type="checkbox"/> | Water-dependent Uses** - Definition CGS § 22a-93(16) - Policies CGS §§ 22a-92(a)(3) and 22a-92(b)(1)(A) |

* The General Development Policy is applicable to all proposed activities within Connecticut's coastal boundary and coastal area.

** The Water-Dependent Uses Policies are applicable to all activities proposed at waterfront sites, including those sites with only tidal wetlands frontage.

Identification of State Statutorily Defined Potential Adverse Impacts

In Tables 3a and 3b, identify the adverse impact categories that apply to the proposed Federal activity. The "Applicable" column **must be checked** if the proposed activity has the **potential** to generate any of the State-statutorily defined adverse impacts, even if the activity is designed to avoid such impacts. Also indicate, by checking the appropriate boxes, whether the potential adverse impacts have been avoided or minimized and whether any resource compensation is proposed.

Table 3a

| Potential Adverse Impacts on Coastal Resources | Applicable | Impacts Are Avoided | Impacts Are Minimized | Compensation Is Proposed | Not Applicable |
|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| Characteristics and Functions of Resources - CGS § 22a-93(15)(H) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Coastal Flooding - CGS § 22a-93(15)(E) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Coastal Waters Circulation Patterns - CGS § 22a-93(15)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Drainage Patterns - CGS § 22a-93(15)(D) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Patterns of Shoreline Erosion and Accretion - CGS § 22a-93(15)(C) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Visual Quality - CGS § 22a-93(15)(F) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Water Quality - CGS § 22a-93(15)(A) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Wildlife, Finfish, Shellfish Habitat - CGS § 22a-93(15)(G) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Table 3b

| Potential Adverse Impacts on Water-dependent Uses and Opportunities | Applicable | Impacts Are Avoided | Impacts Are Minimized | Compensation Is Proposed | Not Applicable |
|--|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| Locating a non-water-dependent use at a site physically suited for, or planned for location of, a water-dependent use - CGS § 22a-93(17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Replacing an existing water-dependent use with a non-water-dependent use - CGS § 22a-93(17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS § 22a-93(17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Part VI: Consistency Analysis

Explain how the proposed activity is consistent with all of the applicable enforceable policies identified in Part V, why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated, and why the project as proposed is consistent with the enforceable policies of Connecticut's Coastal Management Program. If an adverse impact **may** result from the proposed Federal activity, describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts. For proposed Federal Development Projects, please describe the stormwater best management practices that will be utilized. Such systems should be designed to meet the guidance provided in the accompanying instructions.

Consistency Analysis is attached.

Check if additional sheets are attached to this page

Part VII: Level of Consistency and Identification of Legal Authority that Prohibits Full Consistency, if Applicable

Federal regulations allow Federal activities to be less than fully consistent with a State's enforceable policies **only** if "full consistency is prohibited by existing law applicable to the Federal Agency" [15 CFR 930.32]. Please check the appropriate box below to indicate the activities degree of consistency.

- Project is *fully* consistent with Connecticut's enforceable policies
- Project is *not fully* consistent with Connecticut's enforceable policies, but is consistent to the maximum extent practicable

If the proposed Federal Activity described in this form is not *fully* consistent with Connecticut's enforceable policies, but only consistent to the maximum extent practicable, in accordance with 15 CFR 930.32, please identify and describe the statutory provisions, legislative history, or other legal authority which limits the federal agency's discretion to comply fully with Connecticut's Coastal Management Program. Please attach additional pages if necessary. Attach copies of the relevant statutory provisions, legislative history, or other legal authority cited.

Check if additional sheets are attached to this page

Part VIII: Coastal Zone Management Act Consistency Statement

Note: This Part *must* be completed for all submissions

In this Statement "Federal Agency" means:

U.S Army Corps of Engineers

and "the project" means:

Connecticut River Hydrilla Research and Demonstration Project

This document provides the State of Connecticut Coastal Management Program with the required Consistency Determination under CZMA Section 307(c)(1) [or (2)] and 15 CFR Part 930, Subpart C, for the project described in this *Coastal Management Consistency Review Form for Federal Activities*. This determination is provided by the Federal Agency identified above. The information in this Consistency Determination is provided pursuant to 15 CFR Section 930.39. The Federal Agency has determined that the project affects the land or water uses or natural resources of Connecticut as described above. Based on the information, data, and analysis included in the *Coastal Management Consistency Review Form for Federal Activities* for the project, the Federal Agency has determined that the proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Connecticut Coastal Management Program as evaluated in this form.

Pursuant to 15 CFR Section 930.41, the Connecticut Coastal Management Program has 60 days from receipt of this form in which to concur with or object to this Consistency Determination, or to request an extension under 15 CFR Section 930.41(b).

Part IX: Certifying Signatures

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."

Signature of Certifier

Date

Keith Hannon

Name of Certifier (print or type)

Planner, US Army Corps of Engineers

Title (if applicable)

Signature of Preparer

Date

Hannah Doherty

Name of Preparer (print or type)

Biologist, US Army Corps of Engineers

Title (if applicable)

Chester Boat Basin

Part VI: Consistency Analysis

1. COASTAL RESOURCES

General Coastal Resources Policy:

Management of the invasive aquatic plant hydrilla (*Hydrilla verticillata*) through use of the aquatic herbicides dipotassium salt of endothall and diquat dibromide will have no significant, adverse impacts on water quality, tidal or freshwater wetlands and watercourses, islands, state parks and forests, marine resources, fish and wildlife, flood control, and recreation of the cove or the Connecticut River, and will not introduce invasive plants, sources of pollution, or create erosional problems. The shorefront of Chester Boat Basin would be unaffected by the management of hydrilla. The herbicides dipotassium salt of endothall and diquat dibromide are approved for aquatic use by the U.S. Environmental Protection Agency (USEPA) and Connecticut Department of Energy and Environmental Protection (CTDEEP) Pesticide Management Program and will be used according to their labels.

Freshwater Wetlands and Watercourses:

The proposed project will result in benefits to freshwater wetlands and watercourses by controlling hydrilla to densities that will not impede flow of watercourses and prevent further spread. The aquatic herbicides, their concentrations, and the timing of treatment that are proposed at Chester Boat Basin are unlikely to cause a significant effect on wetlands adjacent to the site. The treatment may kill the aboveground plant material that is on the fringe of the treatment area, but these impacts will only be temporary as plants would be able to regrow that following growing season from rhizomes or the seed bank. There are no anticipated adverse impacts expected to freshwater watercourses with the implementation of the proposed action. The chemical treatment of hydrilla in Chester Boat Basin will provide benefits to the hydrology of the system by reducing and potentially eliminating hydrilla populations from obstructing the flow of water. This will prevent flooding and return the system to a more natural state of flow.

Shorelands:

The project area is adjacent to shorelands but no adverse impacts are expected from the proposed action. The action of aquatic herbicide application will occur only within the waters of Chester Boat Basin and will not have impacts on the upland resources.

Tidal Wetlands Policy:

The tidal wetlands adjacent to Chester Boat Basin will be beneficially impacted by the proposed action of controlling the invasive hydrilla. Control will prevent hydrilla from

spreading to the wetlands, disrupting the plant community and wetland functions. No wetlands will be lost as a result of the proposed project.

2. COASTAL USES

General Development Policy:

Development, preservation, or use of the land and water resources of the coastal area will not be adversely affected by the proposed project nor will it deter development, preservation, or use by significantly disrupting either the natural environment or sound economic growth. The proposed project will improve the conditions of Chester Boat Basin. Coordination with the CTDEEP, US EPA, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service indicates that the project will not have significant adverse effects on fish and wildlife habitats or wetlands. The project will not adversely affect scenic resources, natural protective features, important agricultural lands, or wetlands.

Coastal Recreation and Access Policy:

The proposed project will result in significant benefits with respect to improved ease and safety of navigation and improved public access to, and use of, the public trust lands and waters of the State. Control of the invasive hydrilla will lead to improved access to the waters of the Connecticut River for recreation.

Fisheries:

The proposed project will beneficially impact fisheries resources by enhancing the productivity of natural resources that provide more natural feeding and spawning habitat for fish. Hydrilla overtakes aquatic systems, outcompeting native submerged aquatic vegetation and overcrowding underwater resources. Management of hydrilla will lessen the spread to natural areas that provide fish habitat in and around Chester Boat Basin.

Intergovernmental Coordination:

The proposed project is consistent since this project is being permitted and coordinated with state and federal agencies to ensure that it complies with environmental laws and regulations. The project will beneficially impact natural resources and will not disrupt economic development.

Water-Dependent Uses Policy:

The project will control the invasive aquatic plant hydrilla present in Chester Boat Basin, thereby allowing water-dependent uses of the basin to continue.

3. STATE STATUTORILY DEFINED POTENTIAL ADVERSE IMPACTS

Water Quality:

Short-term adverse impacts are expected, including the temporary increase in turbidity due to the reduction and removal of hydrilla as well as a decrease in dissolved oxygen due to the death and decomposition of hydrilla due to herbicide treatment. Long-term beneficial impacts are anticipated to water quality with the treatment of hydrilla including the return of naturally occurring water temperatures, pH, and dissolved oxygen levels.

Without management of hydrilla, water quality will decline in the areas that it is present due to its ability to change natural temperature, pH, and dissolved oxygen of the system. The fluctuations in these measures can contribute to the release of nutrients, such as phosphorus, from the sediments. There would continue to be a seasonal decrease in dissolved oxygen when hydrilla senesces and decomposes causing harm and imbalances over the long-term.

Wildlife, Finfish, Shellfish Habitat:

No federally listed threatened or endangered species are known to permanently inhabit Selden Cove. Atlantic and shortnose sturgeon may occur within the Connecticut River for spawning, and foraging. Dipotassium salt of endothall does not have known toxicity to fish, such as sturgeon. The reduced oxygen in the water due to the decomposition of hydrilla after herbicide treatment, will produce unfavorable localized conditions for individuals that may be in or near a treatment area. The removal of hydrilla will also impact the insects, mollusks, and worms that sturgeon feed on by eliminating viable habitat. Sturgeon will be able to move to areas that are either not infested with hydrilla or have not been treated for the removal of hydrilla to avoid hypoxia and find more aquatic vegetation to forage for food. No long-term impact to sturgeon is expected. See Section 5.4.2 of the Environmental Assessment (EA) for more information.

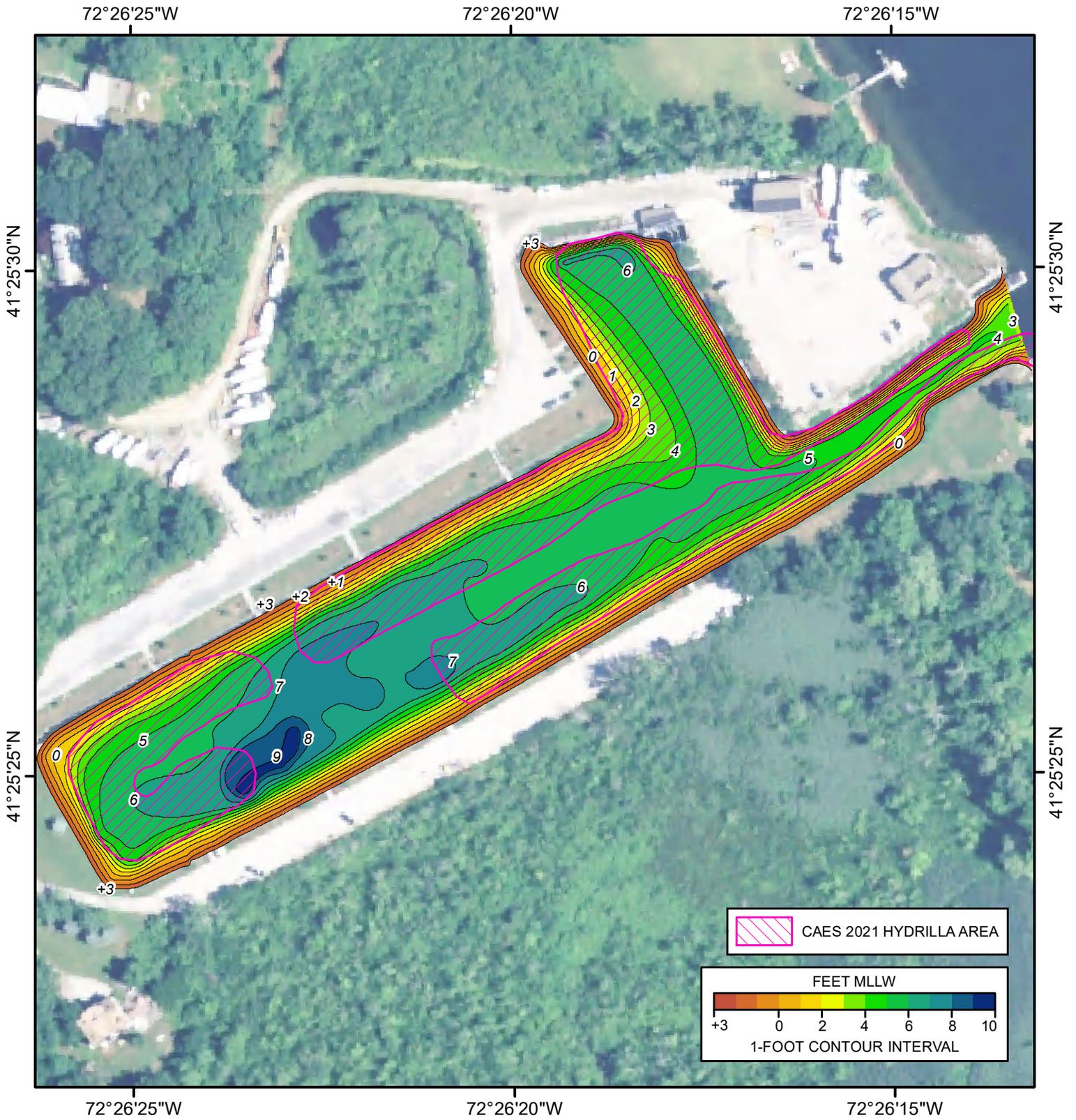
Impacts to finfish species are expected to be minimal. Basins off the mainstem of the Connecticut River can provide spawning habitat for migratory fish, such as blueback herring and alewife. There are no impacts expected to these species because herbicide application will occur after of the spawning season of April to June. See Section 5.2.5 of the EA for more information.

Benthic organisms and shellfish inhabiting the area will not be impacted by the proposed action. The proposed herbicide has passed comprehensive EPA risk assessment processes for registration of aquatic use at both the state and federal levels. This decision is based on field and laboratory studies and observations that analyze whether the active ingredient causes unreasonable risk to humans or the environment, including determining toxic concentrations for aquatic invertebrates. Registration of the herbicides implies that the active chemicals will not have significant, lasting adverse impacts to the invertebrates that may be present.

An assessment of the project indicates that there will be no significant impacts to Essential Fish Habitat, as defined by the Magnuson-Stevens Fishery Conservation and Management Act and amended by the Sustainable Fisheries Act of 1996. Potential impacts to essential fish habitat from this project include temporary loss of submerged aquatic vegetation from herbicide application. The herbicide will selectively affect the invasive hydrilla and will leave some natives. Native species will also reestablish in the cove the following growing season. This project is not expected to significantly affect any managed species. See Appendix B of the EA for the full EFH analysis.

Actions Taken to Minimize Environmental Impacts

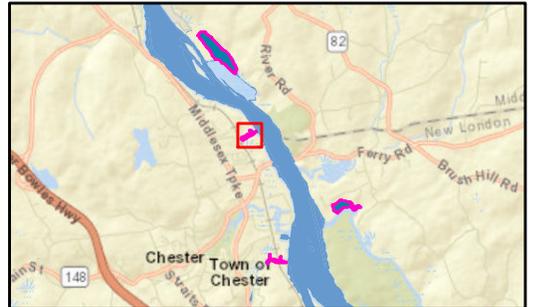
1. Application of aquatic herbicides will be avoided April 1 to June 30 to avoid the spawning season for migratory fish species, such as alewife and blueback herring.
2. All herbicide application will strictly follow EPA and label requirements.



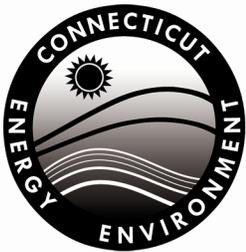
US Army Corps of Engineers
New England District

CHESTER BOAT BASIN
USACE 2023 BATHYMETRY
CHESTER, CT

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Connecticut Department of
Energy & Environmental Protection
Bureau of Water Protection & Land Reuse
Office of Long Island Sound Programs

Coastal Management Consistency Review Form for Federal Activities

Use of this form, although not mandatory, will facilitate coastal consistency review analysis by the Federal agency and result in submission of sufficient information for comprehensive review by the Department of Energy and Environmental Protection (DEEP) Office of Long Island Sound Programs (OLISP). It is anticipated that submittal of a completed form with indicated supplemental materials will, in most instances, eliminate the need for further information. The form should be used in conjunction with the *Reference Guide to Coastal Policies and Definitions* (DEEP-OLISP-GUID-200). The *Instructions and Guidance for Completing the Federal Coastal Consistency Review Form for Federal Activities* (DEEP-OLISP-INST-300) explains how to complete this form and provides several critical definitions and pertinent guidance. Once completed, please submit this form with the appropriate supporting documentation to: CT DEEP-OLISP, 79 Elm Street, Hartford, CT 06106-5127. For further information or assistance in completing this form, please contact us at the address above or by phone at 860-424-3034.

Part I: Federal Agency and Contact Identification

Agency Name: **U.S. Army Corps of Engineer, New England District**

Mailing Address: **696 Virginia Rd**

City/Town: **Concord**

State: **MA**

Zip Code: **01742**

Business Phone: **978-318-8833**

ext.

Fax:

Agency Contact: **Keith Hannon**

Title: **Planner**

E-Mail: **keith.w.hannon@usace.army.mil**

Identification of Primary Contact for correspondence if other than Agency Contact noted above:

Company Name: **U.S. Army Corps of Engineers, New England District**

Mailing Address: **696 Virginia Rd**

City/Town: **Concord**

State: **MA**

Zip Code: **01742**

Business Phone: **978-318-8685**

ext.

Fax:

Contact Person: **Hannah Doherty**

Title: **Biologist**

E-Mail: **hannah.l.doherty@usace.army.mil**

Part II: Review Type and Project Title

Type of Review (check one):

Federal Development Project

Negative Determination

Other Federal agency activity (specify general type): **aquatic plant management**

Project Title or Other Identification:

Connecticut River Hydrilla Research and Demonstration Project

Part III: Other DEEP Involvement with the Project

Is any component of this activity directly regulated by DEEP separate from the Federal Coastal Consistency Process (e.g., 401 Water Quality Certification)? Yes No

If yes, list below all DEEP permits, certifications, or other authorizations being pursued for this activity, and describe the regulated activity/ies:

Aquatic Pesticide Permit

Check if additional sheets are attached to this page

Has any other unit of the DEEP been contacted regarding this activity? Yes No

If yes, please identify other Departmental contacts:

**NDDB
Pesticide Management Program
Fisheries Division**

Check if additional sheets are attached to this page

Part IV: Detailed Project Information

1. Description of Proposed Activity

Describe the proposed federal activity including its purpose and all related actions. For site-specific activities, such actions might include: site clearing, grading, demolition, and other site preparations; percentage of increase or decrease in impervious cover from existing conditions resulting from the activity; phasing, timing, and method of proposed construction; and new uses and changes from existing uses. For site-specific activities proposed at waterfront sites, provide detailed information regarding any water-dependent uses proposed. For non-site specific activities, include a complete description of the proposed activity and its purpose.

The purpose of the proposed project is to provide a field-scale demonstration of technology developed under the Aquatic Plant Control Research Program (APCRP), which is evaluating the effectiveness of an aquatic herbicide to manage monoecious hydrilla (*Hydrilla verticillata*) in high water exchange environments. This field demonstration will provide valuable information for developing future guidance on how to manage this invasive aquatic plant which is expanding in high water exchange systems throughout the northeastern U.S. In addition, this field demonstration will evaluate herbicide efficacy where monoecious hydrilla is most problematic, optimal timing of treatment, and length of exposure required for effective control of hydrilla. Treatment at Selden Cove consists of applying dipotassium salt of endothall, an aquatic herbicide, at 5 parts per million. The herbicide will be evenly distributed across the entire treatment area using a boat-based, subsurface injection application method. Selden Cove is a cove off the Connecticut River located in Lyme, Middlesex County, CT and centered at 41.411° N, 72.417° W. The total area of the treatment area is 16.1 acres with a mean depth range (mean low water to mean high water) of 1.4 to 4.4 feet mean lower low water. The cove is connected to the main stem of the Connecticut River by Selden Creek to the west and south and is approximately 0.25 miles from the river. Dipotassium salt of endothall (7-oxabicyclo [2.2.1] heptane-2,3-dicarboxylic acid) is a state and federally registered selective herbicide and has already been approved for application for aquatic sites for the treatment of invasive aquatic plant species. The dipotassium salt of endothall was registered by the USEPA for use in aquatic environments in 1960 at application rates between 0.5 – 5.0 ppm for aquatic plant control. Dipotassium salt of endothall is a selective fast-acting herbicide that interferes with plant protein and lipid biosynthesis, disrupting respiration and plant membranes in sensitive plant species. This herbicide is highly effective and extensively used for hydrilla control in the US.

Check if additional sheets are attached to this page

Part IV: Detailed Project Information (cont.)

2. Is the Project Site-Specific?

- Yes Please continue with Part IV and fill out all subsequent parts of the form.
 No Skip to Part V: Identification of Applicable Enforceable Policies

3. Location Information

a. Project Address, Location, or Affected Area: **Selden Cove**

City/Town: **Lyme**

State: **CT**

Zip Code: **06371**

b. Agency's interest in property, if any:

- fee simple option lessee easement not applicable
 other (specify):

c. Is the activity proposed at a waterfront site (includes tidal wetlands frontage) or within coastal, tidal or navigable waters? Yes No

If yes, name the affected coastal, tidal or navigable waters:

Selden Cove

d. If off-site effects on coastal uses and/or resources are anticipated, identify the address or location(s) of such effects and attach a map (8 1/2" x 11" format) indicating this area:

Check if additional sheets are attached to this page

Check here to indicate map is enclosed.

e. If the Federal project is site specific, identify and describe the existing land use on and adjacent to the site of the proposed activity and any anticipated location(s) of off-site effects on coastal resources or uses. Clearly differentiate between the descriptions of on-site and off-site areas. Include any existing structures and significant features at either location.

Selden Cove is a 16.1 acrea cove that is mostly used for recreational boating/fishing. It is abutted by rural residential area as well as recreation and conservation land that is part of Selden Neck State Park, managed by CTDEEP.

Check if additional sheets are attached to this page

f. Indicate the area of the project site: **16.1**

acres or square feet

g. Indicate the area of any anticipated off-site effects: **0**

acres or square feet or other units (specify units):

Part IV: Detailed Project Information (cont.)

4. Project Plans

If the proposed Federal activity is a "Federal Development Project", or other site specific activity, please provide project plans in 8 1/2" x 11" format that clearly and accurately depict the following items, and check the appropriate boxes to indicate that the information is included in this review package:

- Project location
- Existing and proposed conditions, including buildings and grading
- Coastal resources on and contiguous to the site
- High Tide Line [as defined in CGS § 22a-359(c)], Mean High Water, and Mean Low Water elevations and contours (for parcels abutting coastal waters and/or tidal wetlands only)
- Soil erosion and sediment controls
- Stormwater management measures
- Ownership and type of use on adjacent properties
- Reference datum (i.e., National Geodetic Vertical Datum, Mean Sea Level, etc.)

If a Spill Prevention, Control, and Containment Plan (SPCC) has been developed for this site, please provide a copy in the review package and check here to indicate its inclusion

Part V: Identification of the Applicable Enforceable Policies

In this Part, there are four tables which should be completed by checking the appropriate boxes in each. Table 1: *Coastal Resources and Associated Enforceable Policies*, is to identify on-site, adjacent, and/or potentially affected State-statutorily defined coastal resources. Table 2: *Coastal Uses and Associated Enforceable Policies*, is to identify existing and proposed State-statutorily defined coastal uses potentially affected by the project. Table 3a: *Potential Adverse Impacts on Coastal Resources* and Table 3b: *Potential Adverse Impacts on Water-dependent Uses and Opportunities* is to identify State-statutorily-defined adverse impacts.

Table 1

| Coastal Resources and Associated Enforceable Policies | On-site | Adjacent | Affected by the proposed Federal activity** |
|---|-------------------------------------|-------------------------------------|--|
| General Coastal Resources* - Definition: CGS § 22a-93(7) Policy: CGS § 22a-92(a)(2) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Beaches & Dunes - Definition: CGS § 22a-93(7)(C) Policies: CGS §§ 22a-92(b)(2)(C) and 22a-92(c)(1)(K) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bluffs & Escarpments - Definition: CGS § 22a-93(7)(A) Policy: CGS § 22a-92(b)(2)(A) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Coastal Hazard Area - Definition: CGS § 22a-93(7)(H); Policies: CGS §§ 22a-92(a)(2), 22a-92(a)(5), 22a-92(b)(2)(F), 22a-92(b)(2)(J), 22a-92(c)(1)(K), and 22a-92(c)(2)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters - Definitions: CGS §§ 22a-93(5), 22a-93(7)(G), 22a-93(7)(K), and 22a-93(7)(L); Policies: CGS §§ 22a-92(a)(2) and 22a-92(c)(2)(A) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Developed Shorefront - Definition: CGS § 22a-93(7)(I); Policy: CGS § 22a-92(b)(2)(G) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Freshwater Wetlands and Watercourses - Definition: CGS § 22a-93(7)(F) Policy: CGS § 22a-92(a)(2) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Intertidal Flats - Definition: CGS § 22a-93(7)(D) Policies: CGS § 22a-92(b)(2)(D) and 22a-92(c)(1)(K) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Coastal Resources and Associated Enforceable Policies | On-site | Adjacent | Affected by the proposed Federal activity** |
|---|-------------------------------------|-------------------------------------|--|
| Islands - Definition: CGS § 22a-93(7)(J) Policy: CGS § 22a-92(b)(2)(H) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rocky Shorefront - Definition: CGS § 22a-93(7)(B) Policy: CGS § 22a-92(b)(2)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shellfish Concentration Areas - Definition: CGS § 22a-93(7)(N) Policy: CGS § 22a-92(c)(1)(I) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shorelands - Definition: CGS § 22a-93(7)(M) Policy: CGS § 22a-92(b)(2)(I) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Tidal Wetlands - Definition: CGS § 22a-93(7)(E) Policies: CGS §§ 22a-92(a)(2), 22a-92(b)(2)(E), and 22a-92(c)(1)(B) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

* The General Coastal Resource Policy is applicable to all proposed activities within Connecticut's coastal boundary and coastal area.

** The coastal resources affected by the project can be on-site, adjacent, or further removed from the project site.

Table 2

| Coastal Uses and Associated Enforceable Policies | |
|---|---|
| <input checked="" type="checkbox"/> | General Development* - CGS §§ 22a-92(a)(1), 22a-92(a)(4), and 22a-92(a)(9) |
| <input type="checkbox"/> | Boating - CGS § 22a-92(b)(1)(G), 22a-92(b)(1)(H), and 22a-92(b)(1)(I) |
| <input type="checkbox"/> | Coastal Recreation and Access - CGS §§ 22a-92(a)(2), 22a-92(a)(6), 22a-92(c)(1)(J), and 22a-92(c)(1)(K) |
| <input type="checkbox"/> | Coastal Structures and Filling - CGS § 22a-92(a)(2), 22a-92(b)(1)(D), 22a-92(c)(1)(B), 22a-92(c)(1)(K), and 22a-92(c)(2)(B) |
| <input type="checkbox"/> | Cultural Resources – CGS § 22a-92(b)(1)(J) |
| <input type="checkbox"/> | Dams, Dikes and Reservoirs - CGS § 22a-92(a)(2) |
| <input type="checkbox"/> | Dredging and Navigation - CGS §§ 22a-92(a)(2), 22a-92(c)(1)(C), 22a-92(c)(1)(D), and 22a-92(c)(1)(E) |
| <input type="checkbox"/> | Energy Facilities - CGS §§ 16-50g and 16-50p(a) |
| <input checked="" type="checkbox"/> | Fisheries - CGS § 22a-92(c)(1)(I) |
| <input type="checkbox"/> | Flooding and Erosion - CGS § 22a-92(a)(5) |
| <input type="checkbox"/> | Fuel, Chemicals and Hazardous Materials - CGS §§ 22a-92(a)(2), 22a-92(b)(1)(C), 22a-92(b)(1)(E) and 22a-92(c)(1)(A) |
| <input type="checkbox"/> | Facilities and Resources which are in the National Interest - Definition CGS § 22a-93(14) - Policy CGS 22a-92(a)(10) |
| <input checked="" type="checkbox"/> | Intergovernmental Coordination - CGS § 22a-92(a)(9) |
| <input type="checkbox"/> | Open Space and Agricultural Lands - CGS § 22a-92(a)(2) |
| <input type="checkbox"/> | Ports and Harbors – CGS § 22a-92(b)(1)(C) |
| <input type="checkbox"/> | Sewer and Water Lines - CGS § 22a-92(b)(1)(B) |
| <input type="checkbox"/> | Solid Waste - CGS § 22a-92(a)(2) |
| <input type="checkbox"/> | Transportation - CGS §§ 22a-92(b)(1)(F), 22a-92(c)(1)(F), 22a-92(c)(1)(G), and 22a-92(c)(1)(H) |
| <input checked="" type="checkbox"/> | Water-dependent Uses** - Definition CGS § 22a-93(16) - Policies CGS §§ 22a-92(a)(3) and 22a-92(b)(1)(A) |

* The General Development Policy is applicable to all proposed activities within Connecticut's coastal boundary and coastal area.

** The Water-Dependent Uses Policies are applicable to all activities proposed at waterfront sites, including those sites with only tidal wetlands frontage.

Identification of State Statutorily Defined Potential Adverse Impacts

In Tables 3a and 3b, identify the adverse impact categories that apply to the proposed Federal activity. The "Applicable" column **must be checked** if the proposed activity has the **potential** to generate any of the State-statutorily defined adverse impacts, even if the activity is designed to avoid such impacts. Also indicate, by checking the appropriate boxes, whether the potential adverse impacts have been avoided or minimized and whether any resource compensation is proposed.

Table 3a

| Potential Adverse Impacts on Coastal Resources | Applicable | Impacts Are Avoided | Impacts Are Minimized | Compensation Is Proposed | Not Applicable |
|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| Characteristics and Functions of Resources - CGS § 22a-93(15)(H) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Coastal Flooding - CGS § 22a-93(15)(E) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Coastal Waters Circulation Patterns - CGS § 22a-93(15)(B) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Drainage Patterns - CGS § 22a-93(15)(D) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Patterns of Shoreline Erosion and Accretion - CGS § 22a-93(15)(C) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Visual Quality - CGS § 22a-93(15)(F) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Water Quality - CGS § 22a-93(15)(A) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Wildlife, Finfish, Shellfish Habitat - CGS § 22a-93(15)(G) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Table 3b

| Potential Adverse Impacts on Water-dependent Uses and Opportunities | Applicable | Impacts Are Avoided | Impacts Are Minimized | Compensation Is Proposed | Not Applicable |
|--|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| Locating a non-water-dependent use at a site physically suited for, or planned for location of, a water-dependent use - CGS § 22a-93(17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Replacing an existing water-dependent use with a non-water-dependent use - CGS § 22a-93(17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters - CGS § 22a-93(17) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Part VI: Consistency Analysis

Explain how the proposed activity is consistent with all of the applicable enforceable policies identified in Part V, why any remaining adverse impacts resulting from the proposed activity or use have not been mitigated, and why the project as proposed is consistent with the enforceable policies of Connecticut's Coastal Management Program. If an adverse impact **may** result from the proposed Federal activity, describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts. For proposed Federal Development Projects, please describe the stormwater best management practices that will be utilized. Such systems should be designed to meet the guidance provided in the accompanying instructions.

Consistency Analysis is attached.

Check if additional sheets are attached to this page

Part VII: Level of Consistency and Identification of Legal Authority that Prohibits Full Consistency, if Applicable

Federal regulations allow Federal activities to be less than fully consistent with a State's enforceable policies **only** if "full consistency is prohibited by existing law applicable to the Federal Agency" [15 CFR 930.32]. Please check the appropriate box below to indicate the activities degree of consistency.

- Project is *fully* consistent with Connecticut's enforceable policies
- Project is *not fully* consistent with Connecticut's enforceable policies, but is consistent to the maximum extent practicable

If the proposed Federal Activity described in this form is not *fully* consistent with Connecticut's enforceable policies, but only consistent to the maximum extent practicable, in accordance with 15 CFR 930.32, please identify and describe the statutory provisions, legislative history, or other legal authority which limits the federal agency's discretion to comply fully with Connecticut's Coastal Management Program. Please attach additional pages if necessary. Attach copies of the relevant statutory provisions, legislative history, or other legal authority cited.

Check if additional sheets are attached to this page

Part VIII: Coastal Zone Management Act Consistency Statement

Note: This Part *must* be completed for all submissions

In this Statement "Federal Agency" means:

U.S Army Corps of Engineers

and "the project" means:

Connecticut River Hydrilla Research and Demonstration Project

This document provides the State of Connecticut Coastal Management Program with the required Consistency Determination under CZMA Section 307(c)(1) [or (2)] and 15 CFR Part 930, Subpart C, for the project described in this *Coastal Management Consistency Review Form for Federal Activities*. This determination is provided by the Federal Agency identified above. The information in this Consistency Determination is provided pursuant to 15 CFR Section 930.39. The Federal Agency has determined that the project affects the land or water uses or natural resources of Connecticut as described above. Based on the information, data, and analysis included in the *Coastal Management Consistency Review Form for Federal Activities* for the project, the Federal Agency has determined that the proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Connecticut Coastal Management Program as evaluated in this form.

Pursuant to 15 CFR Section 930.41, the Connecticut Coastal Management Program has 60 days from receipt of this form in which to concur with or object to this Consistency Determination, or to request an extension under 15 CFR Section 930.41(b).

Part IX: Certifying Signatures

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."

Signature of Certifier

Date

Keith Hannon

Name of Certifier (print or type)

Planner, US Army Corps of Engineers

Title (if applicable)

Signature of Preparer

Date

Hannah Doherty

Name of Preparer (print or type)

Biologist, US Army Corps of Engineers

Title (if applicable)

Selden Cove

Part VI: Consistency Analysis

1. COASTAL RESOURCES

General Coastal Resources Policy:

Management of the invasive aquatic plant hydrilla (*Hydrilla verticillata*) through use of the aquatic herbicide dipotassium salt of endothall will have no significant, adverse impacts on water quality, tidal or freshwater wetlands and watercourses, islands, State parks and forests, marine resources, fish and wildlife, flood control, and recreation of the cove or the Connecticut River, and will not introduce invasive plants, sources of pollution, or create erosional problems. The shorefront and bordering tidal wetlands of Selden Cove would be unaffected by the management of hydrilla. The herbicide dipotassium salt of endothall is approved for aquatic use by the U.S. Environmental Protection Agency (USEPA) and Connecticut Department of Energy and Environmental Protection (CTDEEP) Pesticide Management Program and will be used according to its label.

Freshwater Wetlands and Watercourses:

The proposed project will result in benefits to freshwater wetlands and watercourses by controlling hydrilla to levels that don't encroach wetlands and to densities that will not alter the integrity of the wetlands. The aquatic herbicide, its concentrations, and the timing of treatment that are proposed at the five sites are unlikely to cause a significant effect on wetlands adjacent to the sites. The treatment may kill the aboveground plant material that is on the fringe of the treatment areas, but these impacts will only be temporary as plants would be able to regrow that following growing season from rhizomes or the seed bank. The proposed action will impact the overall function of the wetlands bordering Selden Cove. There are no anticipated adverse impacts expected to freshwater watercourses with the implementation of the proposed action. The chemical treatment of hydrilla in Selden Cove will provide benefits to the hydrology of the system by reducing and potentially eliminating hydrilla populations from obstructing the flow of water. This will prevent flooding and return the system to a more natural state of flow.

Intertidal Flats:

There are no anticipated adverse impacts expected to intertidal flats from the proposed action. There is a flat within Selden Cove that is typically exposed during low tide that includes sparse vegetation. The management of hydrilla in Selden Cove is expected to prevent hydrilla from encroaching the intertidal flats. Dipotassium salt of endothall is a contact herbicide that will kill exposed plant material but does not kill roots, unexposed plant material, or seeds so there may be minimal impacts to the aboveground plant material on the flat but long-term impacts are not expected.

Shorelands:

The project area is adjacent to shorelands but no adverse impacts are expected from the proposed action. The action of aquatic herbicide application will occur only within the waters of Selden Cove and will not have impacts on the upland resources.

Tidal Wetlands Policy:

The tidal wetlands in Selden Cove will be beneficially impacted by the proposed action of controlling the invasive hydrilla. Control will prevent hydrilla from encroaching the wetlands, disrupting the plant community and wetland functions. No wetlands will be lost as a result of the proposed project.

2. COASTAL USES

General Development Policy:

Development, preservation, or use of the land and water resources of the coastal area will not be adversely affected by the proposed project nor will it deter development, preservation, or use by significantly disrupting either the natural environment or sound economic growth. The proposed project will improve the conditions of Selden Cove Coordination with the CTDEEP, US EPA, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service indicates that the project will not have significant adverse effects on fish and wildlife habitats or wetlands. The project will not adversely affect scenic resources, natural protective features, important agricultural lands, or wetlands.

Coastal Recreation and Access Policy:

The proposed project will result in significant benefits with respect to improved ease and safety of navigation and improved public access to, and use of, the public trust lands and waters of the State. Control of hydrilla will improve boating access to and within Selden Cove.

Fisheries:

The proposed project will beneficially impact fisheries resources by enhancing the productivity of natural resources that provide more natural feeding and spawning habitat for fish. Hydrilla overtakes aquatic systems, outcompeting native submerged aquatic vegetation and overcrowding underwater resources. Management of hydrilla will allow native vegetation to reestablish providing natural habitat to the native fisheries in Selden Cove.

Intergovernmental Coordination:

The proposed project is consistent since this project is being permitted and coordinated with state and federal agencies to ensure that it complies with environmental laws and regulations. The project will beneficially impact natural resources and will not disrupt economic development.

Water-Dependent Uses Policy:

The project will control the invasive aquatic plant hydrilla present in Selden Cove, thereby allowing water-dependent uses of the cove to continue.

3. STATE STATUTORILY DEFINED POTENTIAL ADVERSE IMPACTS

Water Quality:

Short-term adverse impacts are expected, including the temporary increase in turbidity due to the reduction and removal of hydrilla as well as a decrease in dissolved oxygen due to the death and decomposition of hydrilla due to herbicide treatment. Long-term beneficial impacts are anticipated to water quality with the treatment of hydrilla including the return of naturally occurring water temperatures, pH, and dissolved oxygen levels.

Without management of hydrilla, water quality will decline in the areas that it is present due to its ability to change natural temperature, pH, and dissolved oxygen of the system. The fluctuations in these measures can contribute to the release of nutrients, such as phosphorus, from the sediments. There would continue to be a seasonal decrease in dissolved oxygen when hydrilla senesces and decomposes causing harm and imbalances over the long-term.

Wildlife, Finfish, Shellfish Habitat:

No federally listed threatened or endangered species are known to permanently inhabit Selden Cove. Atlantic and shortnose sturgeon may occur within the Connecticut River for spawning, and foraging. Dipotassium salt of endothall does not have known toxicity to fish, such as sturgeon. The reduced oxygen in the water due to the decomposition of hydrilla after herbicide treatment, will produce unfavorable localized conditions for individuals that may be in or near a treatment area. The removal of hydrilla will also impact the insects, mollusks, and worms that sturgeon feed on by eliminating viable habitat. Sturgeon will be able to move to areas that are either not infested with hydrilla or have not been treated for the removal of hydrilla to avoid hypoxia and find more aquatic vegetation to forage for food. No long-term impact to sturgeon is expected. See Section 5.4.2 of the of the Environmental Assessment (EA) for more information.

Impacts to finfish species are expected to be minimal. Coves off the mainstem of the Connecticut River can provide spawning habitat for migratory fish, such as blueback herring and alewife. There are no impacts expected to these species because herbicide

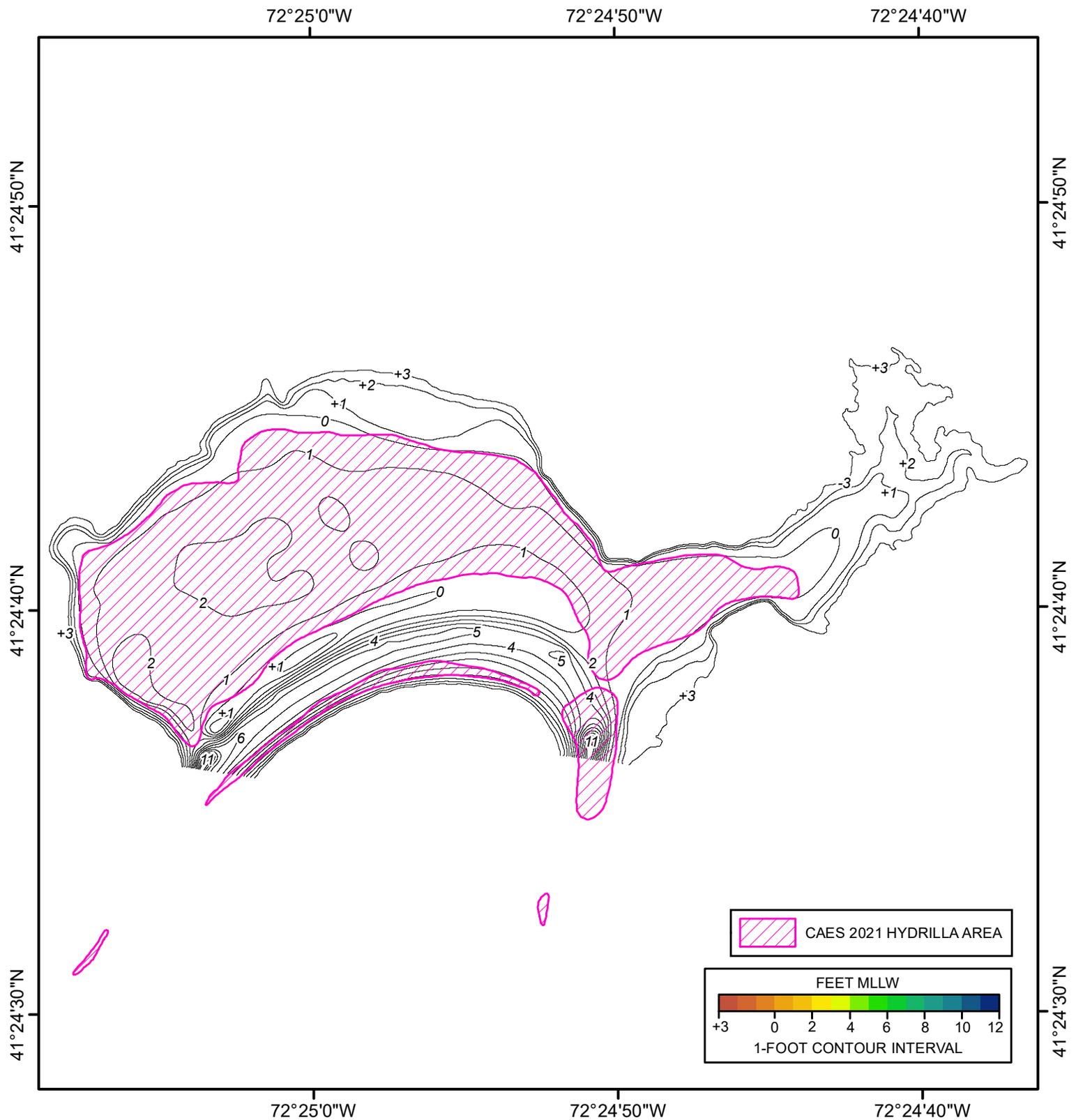
application will occur after of the spawning season of April to June. See Section 5.2.5 of the EA for more information.

Benthic organisms and shellfish inhabiting the area will not be impacted by the proposed action. The proposed herbicide has passed comprehensive EPA risk assessment processes for registration of aquatic use at both the state and federal levels. This decision is based on field and laboratory studies and observations that analyze whether the active ingredient causes unreasonable risk to humans or the environment, including determining toxic concentrations for aquatic invertebrates. Registration of the herbicides implies that the active chemicals will not have significant, lasting adverse impacts to the invertebrates that may be present.

An assessment of the project area indicates that there will be no significant impacts to Essential Fish Habitat, as defined by the Magnuson-Stevens Fishery Conservation and Management Act and amended by the Sustainable Fisheries Act of 1996. Potential impacts to essential fish habitat from this project include temporary loss of submerged aquatic vegetation from herbicide application. The herbicide will selectively affect the invasive hydrilla and will leave some natives. Native species will also reestablish in the cove the following growing season. This project is not expected to significantly affect any managed species. See Appendix B of the EA for the full EFH analysis.

Actions Taken to Minimize Environmental Impacts

1. Application of aquatic herbicides will be avoided April 1 to June 30 to avoid the spawning season for migratory fish species, such as alewife and blueback herring.
2. All herbicide application will strictly follow EPA and label requirements.



SULDEN COVE
USACE 2023 BATHYMETRY
LYME, CT

US Army Corps
of Engineers
New England District

0 200 400 600
ft

0 50 100 150 200
m

2016 NAIP AERIAL IMAGERY 1:4,000 GCS NAD1983

