AMENDMENT #1 TO THE

AUDUBON CONNECTICUT IN-LIEU FEE PROGRAM INSTRUMENT

1. WHEREAS, the approved Audubon Connecticut In-Lieu Fee Program Instrument was signed by the U.S. Army Corps of Engineers, New England District ("Corps"), the National Audubon Society, Inc., ("NAS"), and Audubon Connecticut on August 21, 2013.

NOW THEREFORE, the following changes shall be modified to read as follows, with deletions crossed out and new text in italics and underlined:

August 21, 2013
Amendendment #1: 05/27/2022

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Introduction and Need

Pursuant to authority granted by the Clean Water Act ("CWA") Section 404 and the Rivers and Harbors Act Section 10, the conduct of regulated activities within waters of the United States requires a permit or permits from the United States Army Corps of Engineers ("Corps"). The Corps requires that aquatic resource functions and services lost due to the effects of a regulated activity*, that are more than minimal,* be replaced through compensatory mitigation, after addressing avoidance and minimization of impacts. This In Lieu Fee Program Instrument ("Instrument") establishes the circumstances and manner in which National Audubon Society, Inc., a charitable organization exempt from taxation under Section 501(c)(3) of the United States Internal Revenue Code, through its Connecticut program, Audubon Connecticut ("NAS" or "Audubon CT"), will sponsor an In-Lieu Fee ("ILF") program in the State of Connecticut (the "Audubon CT ILF" program). The Audubon CT ILF program will provide a compensatory mitigation option for permit applicants (each, a "Permittee") under permit programs administered by the Corps.

Most permittee-responsible compensatory wetland and/or stream mitigation projects are small and the environmental benefits of such are often limited in scope and scale. Studies have shown that many mitigation sites in southern New England have a high failure rate primarily because they fail to meet performance standards (Minkin and Ladd, 2003). Also, mitigation plans often have significant information gaps regarding compensation goals, planning considerations, design features and monitoring data. (Wilkinson and Thomas, 2005; Minkin and Ladd, 2003; Kusler and Kentula, 1990.) Mitigation failure rates can often be addressed by developing a mitigation program that incorporates landscape and watershed planning, well-defined project goals and success criteria, baseline data, proven site selection criteria and restoration techniques, effective monitoring and management plans, and oversight by individuals with wetland and/or stream expertise.

Federal regulations recognize that ILF programs ~~may~~ *are presumed to* be an environmentally preferable option over permittee-responsible (i.e., permittee-conducted) mitigation based on several factors. ILF projects target larger, more ecologically valuable parcels that are prioritized within a landscape or watershed. ILF programs consistently include thorough scientific analysis, planning, implementation and monitoring for each project. The structure of an ILF program facilitates up-front site selection and mitigation plan development, and provides greater scientific expertise and financial assurances that translate to a reduction in loss of aquatic resource function and reduction in project success uncertainty (33 CFR Part 332, hereinafter the "Mitigation Rule").

Audubon CT will work with the Corps, through its District Engineer for the Corps' New England District ("District Engineer"), as appropriate to assure that the Corps' requirements for aquatic resource compensation are met. The Corps will coordinate with an Interagency Review Team ("IRT") on the establishment and management of the Audubon CT ILF program. The IRT will also take part in the final approval of compensatory projects. The IRT will be comprised of representatives invited by the Corps from other federal, state, and tribal. The Corps may invite additional agencies to serve on the IRT for individual mitigation projects.

1.0 Establishment and Operations

This Instrument describes the program structure and operating procedures by which Audubon CT ILF projects in Connecticut will be proposed, implemented and maintained. This Instrument is a living document that will be reviewed on an annual basis and updated as necessary through amendments to comply with the most current ILF guidance, rules and regulations as well as procedural modifications.

An applicant for a Corps permit may elect to pay a compensation fee into the Audubon CT ILF program in place of other forms of compensatory mitigation for impacts associated with an applicant's proposed project. In order to receive mitigation credit from the Corps for paying a compensation fee, the applicant must receive the approval of the Corps and comply with all applicable laws, regulations and policies concerning avoidance, minimization, and compensation of adverse project impacts to protected natural resources.

The Corps shall, at its sole discretion but in coordination with applicable permit review resource agencies, determine whether payment of an ILF is appropriate for ~~Development Project~~ impacts to affected natural resources.

If the Corps determines that payment of an ILF constitutes appropriate compensatory mitigation, in whole or in part, for the adverse impacts of a project, the Corps shall determine the amount of fee to be paid, and require that it be paid to the Audubon CT ILF program prior to the start of construction of the project. All compensatory fees shall be made payable to "National Audubon Society, Inc." NAS shall deposit all ILF contributions it collects pursuant to the Audubon CT ILF program into the ILF Program Account (see Section 4.3 below), less the allowable administrative fee described in Section 4.3.1 below. NAS shall play no role in any Corps regulatory decision determining the nature and extent of any required compensatory mitigation or determining the appropriateness of any specific ILF payment. Audubon CT shall use the ILF Program Account to fund mitigation projects based on a competitive award or grant approach. This approach is more fully described in Section 6.0 below.

2.0 Goals and Objectives

The goals and objectives of the Audubon CT ILF program are as follows:

a) Provide an alternative to permittee-responsible compensatory mitigation that will effectively compensate for functions and values of aquatic resources lost through permitted impacts;
b) Substantially increase the extent and quality of restoration, enhancement, creation and preservation of natural resources over that which is typically achieved by permittee-responsible mitigation for activities that impact on wetlands, significant

wildlife habitats and other waters of the State of Connecticut, which include waters of the United States;

c) Reduce the extent of cumulative adverse impacts to aquatic resources that are protected by the regulatory framework of the Clean Water Act;

d) Provide applicants of permits from the Corps greater flexibility in compensating for adverse impacts to protected natural resources; and

e) Achieve ecological success on a watershed basis by directing Audubon CT ILF funds to natural resource types and functions that are appropriate to the geographic service area, and by integrating Audubon CT ILF projects with other conservation activities whenever possible.

Additional information about these goals and objective can be found in Section 5 of Appendix A.

3.0 ILF Program Service Areas

The major river drainage basins within the territorial limits of the State of Connecticut – the Housatonic, Connecticut, and Thames River as delinated by the CT DEEP (1982) - will form the boundaries of the three river service areas, each named for its respective drainage, and will also serve as boundaries for the three coastal service areas for the Audubon CT ILF program. In addition, the portions of watersheds in Connecticut that extend into Rhode Island are included but only for payments into the program, not for location of mitigation projects. See Figure A1 and Appendix A, Section 1. The portion of the Hudson River drainage basin that extends into Connecticut is included with the Housatonic River Service Area.

4.0 Accounting Procedures

Audubon CT shall establish and maintain a system for tracking the production of credits, credit transactions, and financial transactions between Audubon CT and Permittees, each of which is described below in this Section 4.0. In all cases, credit production, credit transactions, and final transactions will be tracked on a programmatic basis (i.e., the number of available credits for the entire program by service area) and separately for each individual project.

4.1 Determining Project-Specific Credits and Fees and Initial Fee Schedule

4.1.1 Method for Determining Project-Specific Credits

Credits generated by approved and completed projects will provide credits based on the New England District Mitigation Guidance effective at the time the projects are approved for funding.

4.1.2 Method for Determining Fees for Credits and Initial Fee Schedule

The fees for each credit sold by the Audubon CT ILF program will be developed no more than annually by Audubon CT, and approved by the Corps, based on an analysis of costs (using a full cost accounting basis). The initial fee schedule showing credit costs and fees for each service area is described in the ILF fact sheet which is updated periodically, an example of which is in Appendix F. The initial (and future) analysis of credit costs includes, but is not be limited to, a consideration of the following costs for each service area within the boundaries of the Audubon CT ILF program: land acquisition; project planning and design; construction; plant materials; labor; legal fees; remediation or adaptive management activities; program administration; contingency costs appropriate to the stage of the project planning, including uncertainties in construction and real estate expenses; the resources necessary for long-term management and protection of the mitigation project; and financial assurances (including contingency costs) that are expected to be necessary to ensure successful long-term management and protection of the mitigation projects.

4.2 Advance Credits

4.2.1 Generation of Advance Credits

Upon approval of this Instrument, Audubon CT shall be permitted to sell advance credits for each service area in the amount described in Table . Advance credits function much like a loan, and must be replenished with released credits, as described in Section 4.2.2 below. The number of advance credits available for each service area is based on the impacts permitted within each service area over the past three year period, using acres or linear feet as a surrogate for credits and rounding up to a whole number for wetlands and linear feet for streams and rivers. (A list of those impacts by service area is available upon request.) For service areas where little impact has occurred over the past three years, a minimum of ten (10) advance wetland credits and 5,000 advance stream credits per service area will be available to ensure sufficient funding to initiate projects in those service areas. Note that stream impacts tend to be small so all service areas will have the minimum of 5,000 advance stream credits.

Table 1 – Advance Credits by Service Area *(source of impact records: Corps*)

Service Area	Advance Wetland Credits	Advance Stream Credits
Southwest Coast	10	5,000
Housatonic/Hudson	10	5,000
South Central Coast	19	5,000
Connecticut River	17	5,000
Thames River	53	5,000
Southeast Coast/Pawcatuck	18	5,000
TOTAL	127	30,000

If, by the end of the third year after the first advance credit is purchased by a permittee, the Corps determines that Audubon CT is failing to provide compensatory mitigation, or if a service area does not have a suitable site that can be implemented with the accrued

funds, the District Engineer may extend this time frame or may direct the funds to alternative service areas or alternative compensatory mitigation projects. Additional information regarding failure to fulfill the terms of the Instrument is discussed in Section 11 below.

4.2.2 Replenishing Advance Credits with Released Credits

Credits for preservation projects will be released upon receipt of the recorded preservation document and approval by the Corps of the longterm management plan.

Credits for construction (reestablishment, rehabilitation, and establishment) projects will generally be released at the end of the monitoring period which will be a minimum of five years unless the IRT determines success criteria have been met sooner.

Once Audubon CT has sold all of its advance credits in any service area, no more advance credits may be sold in that service area until credits have been generated and released. Once released credits have replaced any previously sold advance credits, an equal number of advance credits may be made available for sale again at the discretion of the District Engineer, in consultation with the IRT. In the event released credits eventually exceed the number of expended advance credits, such released credits become regular credits, available to be sold to compensate for Development Projects but not required to be replenished.

4.2.3 Failure of Program to Provide Mitigation Within Allotted Timeframe

If, by the end of the third year after the first advance credit is purchased by a permittee, the Corps determines that Audubon CT is failing to provide compensatory mitigation, or if a service area does not have a suitable site that can be implemented with the accrued funds, the District Engineer may extend this time frame or may direct the funds to alternative service areas or alternative compensatory mitigation projects. Additional information regarding failure to fulfill the terms of the Instrument is discussed in Section 11 below.

4.3 ILF Program Account

Upon Corps approval of the ILF Instrument and before any fees are accepted, Audubon CT will establish an ILF program account (“Program Account”). This Section describes Audubon CT’s operation of the Program Account, which will track credit production, credit transactions and final transactions. See Section 7.3 below for the Program Account reporting requirements.

The Program Account will be an interest-bearing account held at a financial institution that is a member of the Federal Deposit Insurance Corporation, and maintained separately from the National Audubon and Audubon CT general operating budget. Any interest accruing in the Program Account will be used to provide compensatory mitigation for impacts to aquatic resources. The Program Account will track funds by service area. Any funds received from other entities and for other purposes (i.e., donations, grants) will

be kept in a separate account. The terms and conditions of this Instrument shall apply only to the Program Account, and not to any such separate account.

Every five years, the sponsor will use administrative fees for an auditor, approved by the Corps, to audit the funds (excluding administrative funds) and ensure that credit withdrawals and deposits are accurate. However, the Corps has the authority to audit the Program Account records at any time, during Audubon CT regular business hours and upon reasonable (i.e., at least two weeks) prior written notice.

4.3.1 Direct and Administrative Costs

Funds paid into the Program Account will only be used for the direct replacement and management of aquatic resources by the Audubon CT ILF program (i.e., selection, design, acquisition, implementation, monitoring and management of Audubon CT ILF projects, hereinafter "Direct Costs") and payment of Audubon CT's Administrative Costs (described below in this Section 4.3.1). Direct Costs may include, without limitation, the preparation and implementation of Mitigation Plans, securing permits for conducting mitigation activities; activities related to the reestablishment, rehabilitation, establishment, and/or preservation of aquatic resources and their buffers, maintenance and monitoring of mitigation sites, including, but not limited to, the fulfillment of any reporting obligations; the purchase of credits from mitigation banks (only as a last resort); direct acquisition activities, such as appraisals, surveys, title insurance, and legal fees. In no event will Direct Costs include costs for education, research and outreach, or for implementation of best management practices for wetlands.

Twenty percent (20%) of the fees paid into the Program Account will be allocated to Audubon CT for administrative costs (i.e., not directly related to the replacement and management of aquatic resources by the Audubon CT ILF program, hereinafter "Administrative Costs"). At any point Audubon CT and the Corps together may review this agreed-upon percentage in light of the costs claimed by Audubon CT. Administrative Costs may include, without limitation, bank charges associated with the establishment and operation of the ILF program; day-to-day management expenses of the Audubon CT ILF program such as bookkeeping, mailings, printing, office supplies and computer hardware and software; costs related to the solicitation of Letters of Intent (as defined in Section 6.2 below); and salaries of staff involved in administrative activities of the Audubon CT ILF program, including benefits and overhead, as well as consultant costs and expenses for administrative activities.

4.3.2 Financial and Credit Accounting

Audubon CT shall establish and maintain an annual report ledger that tracks the production of released credits for each individual Audubon CT ILF project.

With respect to income, Audubon CT shall track all fees and other income received, the source of the income (e.g., permitted impact, donation, grant, penalty fee, etc.) and any interest earned by the Program Account. The ledgers shall also include a list of all permits secured by paying a compensation fee to the Audubon CT ILF, including the appropriate permit number, the service area and town in which the specific authorized impacts are

located, the amount (acreage or linear feet) of authorized impacts, the aquatic resource type impacted by Cowardin class or stream classification, if applicable, the amount of compensatory mitigation required, the amount paid to the Audubon CT ILF for each authorized impact, and the date the Audubon CT ILF received the funds from the permittee.

Audubon CT shall track all program expenditures and the nature of the expenditure. Administrative fees will also be tracked in a separate account in the general ledger and reported in the annual report to the Corps.

The ledger shall also include, for each Audubon CT ILF project, the service area in which the project is located, the amount of compensation being provided by method (i.e., restoration, establishment, enhancement or preservation), the aquatic resource type(s) represented by Cowardin class, the amount of compensatory mitigation being provided (acres and/or linear feet).

The ledger shall also include a balance of advance credits and released credits for each service area.

For internal controls, there must be adequate segregation of duties in the deposit process. The employee that receives the check or payment information must be different than the employee who enters the income/check information in Audubon's financial records. The deposit information should be reviewed for accuracy by a party other than the employee receiving/recording the applicant payment information.

Prior to sending a credit transaction letter acknowledging receipt of funds and confirming purchase of credits, there must be an independent review of the credit calculation by someone other than the person preparing the letter (sample is in Appendix C).

5.0 Legal Responsibility for Compensatory Mitigation

Audubon CT shall assume all responsibility for satisfying the mitigation requirements of the Corps permit for which fees have been accepted (i.e., the implementation, performance, and long-term management of the compensatory mitigation project(s) approved pursuant to this Instrument and subsequent mitigation plans). The transfer of responsibility is established by: 1) the approval of this Instrument by both the Corps and Audubon CT (effective on the last signature date); 2) receipt by the District Engineer of a Credit Transaction Letter (as defined in Section 7.2) ; and 3) the transfer of fees from the Permittee to Audubon CT. Audubon CT may use grantees, subcontractors and agents in the performance of its obligations as described herein, provided Audubon CT shall nevertheless remain responsible for all such obligations. See Section 6 below for a description of the project selection process and Appendix A for description of the compensatory planning framework.

5.1 Provision of Legal Responsibility

Corps approval of this Instrument constitutes the regulatory approval required for the Audubon Connecticut In Lieu Fee Program to be used to provide compensatory mitigation for Department of the Army permits pursuant to 33 C.F.R. 332.8(a)(1). This Instrument is not a contract between the National Audubon Society and the Corps or any other agency of the federal government. Any dispute arising under this Instrument will not give rise to any claim by Audubon Connecticut for monetary damages. This provision is controlling notwithstanding any other provision or statement in the Instrument to the contrary.

6.0 Project Selection

6.1 Project Advisory Committee

Audubon CT shall establish and maintain a Project Advisory Committee (the "PAC") for the purpose of evaluating and recommending specific preservation, reestablishment, rehabilitation and establishment projects to the Audubon CT ILF program. The PAC shall have at least six and no more than nine members. Membership on the PAC shall be divided into two classes: Permanent Members and Rotating Members (together, the "PAC Members"). Six seats on the PAC shall be allocated to the following Permanent Members:

1. a member of the Board of Audubon CT (to be appointed by the Chair of the Audubon CT Board);
2. the Audubon CT Director of Bird Conservation (or his/her designee as may be appointed by the Audubon CT Executive Director); and
3. one representative each from the following governmental agencies (which representative shall be appointed by the respective agency):

    a. Connecticut Department of Energy and Environmental Protection;
    b. United States Army Corps of Engineers;
    c. United States Fish and Wildlife Service; and
    d. United States Environmental Protection Agency.

Three seats on the PAC shall be allocated to Rotating Members, who shall be non-governmental conservation organizations or institutions of higher education located in Connecticut.

Rotating Members shall be appointed by the Audubon CT Executive Director and shall each serve staggered three-year terms.

The PAC Chair shall be the Audubon CT Board representative. The administrative needs and functions of the PAC may be served by a consultant hired by Audubon CT for such purposes.

The PAC shall meet no less than once a year, as determined by the PAC Chair, to review proposals and to formulate recommendations on them. Notice of any PAC meeting shall

be given at least ten (10) days in advance, in person, by telephone, mail, or email sent to each PAC Member. The PAC Members in attendance at any PAC meeting shall be a quorum. A majority vote of the PAC members in attendance at a meeting shall constitute an act of the PAC. The PAC shall adopt its own bylaws, to be approved by a majority of PAC Members. The PAC shall determine its own order of business and shall provide for keeping a record of its proceedings. The record of the PAC meetings shall be a public record maintained at the offices of Audubon CT and available for reasonable inspection during regular business hours at the request of the Corps.

6.2 Project Selection Process

Audubon CT shall lead the process of soliciting letters of intent (each, a "Letter of Intent," an example of which is referenced in Appendix B) for projects to be considered for funding by the Audubon CT ILF program. All Letters of Intent shall come through Audubon CT for consideration by Audubon CT and the Corps. Audubon CT will evaluate whether each Letter of Intent is complete (see Appendix B) and satisfies the goals and objectives of the Audubon CT ILF program (see Section 5 of Appendix A) before submitting such Letter of Intent to the Corps for its approval. Letters of Intent must include a summary *and map.* Projects determined to meet the goals and objectives of the program will be invited by Audubon CT to submit a full project proposal (*an* "Application").

Applications must include a description of how the project meets the evaluation criteria (in Section 6 of Appendix A). Audubon CT will distribute the applications to the PAC for its review (according to procedures that the PAC shall determine), and recommendations on prioritization (using the criteria described in Section 6 of Appendix A) and funding allocations. The PAC will deliver its recommendations to the IRT.

The Corps will coordinate project review with the IRT. Final approval of the recommended mitigation projects by the Corps will be documented in a letter from the Corps to Audubon CT. Notwithstanding final approval of any project described in an application, Audubon CT's commitment to fund any such project shall be subject to the applicant's satisfactory completion of the funding conditions described in a funding agreement ("Project Agreement") between the applicant and Audubon CT, including, without limitation, real property due diligence and legal documents.

After receipt of the Corps' final approval letter for proposed projects, Audubon CT will send all project applicants a letter notifying them of their project's approval or rejection. If the latter, a brief explanation will be included.

Subsequent to project approval, the proponent must submit a Mitigation Plan. Mitigation Plans will contain at a minimum the information required by Section 332.8(j)(1) of the Mitigation Rule.

Any agency or entity represented on the PAC that requests funding from the Audubon CT ILF for undertaking its project shall recuse itself from the PAC's deliberation on, ranking of, and voting on the project, but may appear before the PAC to explain and describe the project or answer the questions of the PAC and/or Audubon CT. A PAC member must

disclose any potential conflict of interest in a proposed project or any adjacent properties affected by a proposed project. If a conflict of interest is found to exist, the interested PAC member will refrain from voting on the proposed project.

6.3 Approved Projects

Projects approved for funding by the Corps following review by the PAC and the IRT are listed in Appendix E. Details on these projects, such as their mitigation plans, are available on the Corps' on-line Regulatory In-lieu fee and Bank Information Tracking System (RIBITS).

The project naming convention is the project application year, the service area, the project name, the town, and the state.

7.0 Reporting Protocols

Audubon CT shall report to the Corps the following information:

- project monitoring reports as described in Section 7.1 below, on a schedule and for a period as defined by the project-specific Project Agreement;
- credit transaction notifications as described in Section 7.2 below;
- annual report of the Program Account summarizing financial and credit activity as described in Section 7.3 below;
- if applicable, financial assurances and long term funding report as described in Section 7.4 below; and
- the five-year status and trends report described in Section 10 of Appendix A.

7.1 Monitoring Reports

Monitoring reports shall be submitted for all Audubon CT ILF projects involving reestablishment, rehabitation, or establishment, and each report shall describe compliance with project-specific performance standards. Monitoring reports shall follow the Corps' guidance described in New England District Mitigation Guidance ~~(2010)~~ (2020), or any such Corps successor guidance.

Due dates for reports will be outlined in each Project Agreement.

Monitoring reports shall be submitted to the District Engineer in paper or electronic format (preferred). The details of the report shall be project-specific and identify specific parameters for monitoring, including a project overview, specific permit requirements, a summary of mitigation goals, the standards of success to achieve mitigation goals and/or measures needed to attain those standards, an assessment of how well the site is meeting these performance standards, before and after photographs, and any charts or figures which can facilitate displaying this information. The reports shall also describe needed remedial actions, visual estimates of plant cover, presence of invasive species, wildlife using the area and comment on plant health and vigor. The District Engineer shall make the reports available to the IRT.

The length of the monitoring period shall be specified in the Mitigation Plan but will be for a minimum of five years unless USACE determines the performance measures have been met sooner.

7.2 Credit Transaction Letter

Each time Audubon CT accepts a fee from a permittee in exchange for advance or released credits, Audubon CT shall notify the permittee of the credit transaction with a letter within fifteen (15) days of receipt (the "Credit Transaction Letter") and will copy the District Engineer. The Credit Transaction Letter shall be in the form of Appendix C, and shall report the permit number, the service area, the number and resource type of credits that have been secured, and state that Audubon CT has legally accepted the responsibility for providing the required compensatory mitigation.

7.3 Annual Report of Program Account

Beginning January 1, 2019, Audubon CT will submit to the District Engineer and IRT by March 31 of each year an annual report of the Program Account (the "Program Account Annual Report") that describes the Audubon CT ILF Program transactions occurring in each preceding calendar year. Prior to January 1, 2019, Audubon CT reported on the NAS fiscal year (July 1-June 30) basis, with an 18 month report being submitted for the period of July 1, 2017 – December 31, 2018. The Program Account Annual Report will be made publicly available after review and approval of the report. Such Program Account Annual Report shall include the following information:

Ledger for Financial Program Accounting:

- All income received and interest earned by the Program Account for the Audubon CT ILF as a whole and by service area;
- A list of all Permittee permits (by service area) secured by paying a mitigation fee to the Audubon CT ILF, describing:
  - The Corps permit number (and/or state permit number);
  - The service area for which the authorized impacts are located;
  - The amount of authorized impacts;

- The amount of required compensatory mitigation;
- The amount paid to the Audubon CT ILF;
- The date funds were received from the Permittee;

- A description of the Audubon CT ILF expenditures from the Program Account to the project grantees for the Audubon CT ILF as a whole and by service area.

Ledger for Credit Accounting:

- The balance of advance credits and released credits at the end of the report period for the Audubon CT ILF program as a whole and by service area;
- The permitted impacts for each resource type;
- All additions and subtractions of credits; and
- Other changes in credit availability (e.g., additional credits released, credit sales suspended, etc.)

7.4 Financial Assurances and Long Term Funding Report

Should a project require financial assurances, Audubon CT shall submit an annual report on the status of any financial assurances and long-term management funding (the "FA/LTMF Annual Report") to the District Engineer and the IRT. Said report shall be delivered to the District Engineer on or before March 31 of each year and shall provide information for the preceding calendar year.

8.0 Compensation Planning Framework

The Compensation Planning Framework ("CPF") shall guide the selection and implementation of specific Audubon CT ILF aquatic resource restoration (re-establishment), enhancement (rehabilitation), creation (establishment), and/or preservation projects. The framework is a watershed-based plan to support aquatic resource restoration with ten critical elements. The CPF is discussed in detail in Appendix A and includes the following elements:

Element 1: The geologic service area(s), including watershed-based rationale for delineation of each service area;

Element 2: A description of the threats to aquatic resources in the service area(s), including how the Audubon CT ILF program will help offset impacts resulting from those threats;

Element 3: An analysis of current aquatic resource loss in the service area(s);

Element 4: An analysis of current aquatic resource conditions in the service area(s), supported by field documentation;

Element 5: A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide;

Element 6: A prioritization strategy for selecting and implementing compensatory mitigation activities;

Element 7: An example of how any preservation objectives identified above satisfy the criteria for use of preservation;

Element 8: A description of any public and private stakeholder involvement in the plan development and implementation, including coordination with federal, state, tribal, and local aquatic resource management and regulatory authorities;

Element 9: A description of the long term protection and management strategies for activities conducted by Audubon CT;

Element 10: A strategy for periodic evaluation and reporting on Audubon CT's progress in achieving the goals and objectives of the Audubon CT ILF program, including a process for revising the CPF as necessary; and

Element 11: A protocol for monitoring completed projects to achieve project success criteria.

The CPF provides a mechanism by which the District Engineer may request additional information to ensure effective compensation planning.

9.0 Long-term Management Responsibilities

Audubon CT must ensure that preservation documents include a requirement that the grantee notify Audubon CT and the Corps of any changes in the long-term stewardship of a project or if any of the property is to be taken by eminent domain or otherwise encumbered. Deeds and easements for property restored, enhanced, created or preserved (as the case may be) by the Audubon CT ILF program shall provide that, if the property is subject to any future government condemnation or other taking, the compensation received as a result of such condemnation or other taking must be used for alternative mitigation to accomplish the property's conservation goals.

10.0 Default and Closure Provisions

10.1 Default

Should the Corps determine that Audubon CT is in material default of any provision of this Instrument or an approved Mitigation Plan, the Corps shall provide Audubon CT with written notice of such material default. If Audubon CT fails to remedy such default within ninety (90) days after receipt of such notice (or if such default cannot reasonably be cured within such ninety (90) day period, upon Audubon CT's failure to commence and diligently pursue remediation of such default), the Corps may, upon written notice to Audubon CT, declare Audubon CT in breach and take appropriate action, including but not limited to, suspending credit sales, adaptive management, decreasing available credits, directing of funds to alternative locations, taking enforcement actions, calling bonds or any other

financial assurance(s) in place, or terminating this Instrument as provided in Section 10.2 below.

10.2 Termination (Closure)

The Corps or Audubon CT may terminate this Instrument by giving ninety (90) days written notice to the other party. Prior to termination, Audubon CT shall deliver to the Corps an accounting of funds held in the Audubon CT ILF Program Account (defined in Section 4.3) which shall provide for ongoing expenses of approved projects. Upon termination, after payment of all outstanding obligations, any remaining amounts in the Program Account shall be paid to entities as specified by the Corps. In the event of termination of the Instrument: (i) Audubon CT shall cancel as many outstanding obligations as possible, but Audubon CT shall be entitled to payment for all non-cancelable costs incurred through the date of termination, and (ii) Audubon CT shall be responsible for fulfilling any remaining mitigation obligations, unless the obligation is specifically transferred to another entity as agreed upon by the Corps and Audubon CT.

10.3 Force Majeure

Audubon CT will not be liable, and nothing herein shall constitute a default or breach, for any delay, damage or failure to comply with the terms of this Instrument or any project-specific Mitigation Plan attributed to circumstance beyond Audubon CT's reasonable control which materially adversely affects its ability to perform, including, but not limited to, natural catastrophes such as earthquake, fire, flood, storm, drought, disease or infestation; war or civil disturbance; strike or labor dispute; or condemnation or other taking by a governmental body. Audubon CT will coordinate any force majeure occurrence with the Corps and IRT, as appropriate.

11.0 Miscellaneous

11.1 Amendment / IRT Participation

With the exception of Appendices B, C, D, and F, this Instrument shall only be amended or modified with the written approval of all signatory parties and in compliance with the Mitigation Rule. Changes to Appendices B, C, D, and F, require approval by the Corps, which it will coordinate with the IRT. The Corps will coordinate any proposed amendments with the IRT.

11.2 Notice

Any notice required or permitted hereunder shall be deemed to have been given when any of the following occur: (i) when notice is delivered by hand, or (ii) three (3) days have passed following the date deposited in the United States Mail, Postage Prepaid, by Registered or Certified Mail, Return Receipt Requested, and a copy of the return receipt with date is available upon request or (iii) when notice is sent by Federal Express or similar Next Day Nationwide Delivery System, addressed as follows (or addressed in such other manner as the party being notified shall have requested by written notice to the other party):

All written correspondence between Audubon CT and the Corps, including financial and operational reports, shall be addressed to the Corps and Audubon CT at:

If to the Corps:

U.S. Army Corps of Engineers
Regulatory Division
696 Virginia Road
Concord, MA 01742-2751
Connecticut Branch, ILF Project Manager

If to Audubon CT:

Audubon Connecticut
185 East Flat Hill Road
Southbury, CT 06488
Attention: Managing Director

With a copy to:
National Audubon Society, Inc.
225 Varick Street, 7th Floor
New York, NY 10014
Attention: Chief Financial Officer

12.0 Other Documents

Annual Report(s), monitoring reports, and similar documents may be e-mailed to the New England District Corps of Engineers ILF Project Manager who will acknowledge receipt for Audubon CT's records.

13.0 Signature Page

IN WITNESS WHEREOF, the parties hereto have executed this In-Lieu Fee Program Instrument Amendment this day of , 2019.

Sponsor: National Audubon Society, Inc.

By _____ Date:
Name:
Title:

Audubon Connecticut

By _____ Date:
Name:
Title:

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

By _____ Date:
Tammy R. Turley, Chief, Regulatory Division

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APPENDICES

A. Compensation Planning Framework
B. Letter of Intent for Mitigation Projects/ Instructions
C. Sample Credit Transaction Letter
D. Representative List of Sponsor's Conservation/Restoration Projects At Inception of Instrument
E. Approved Projects
F. Sample Fact Sheet

Appendix A - Compensation Planning Framework

The eleven elements of the Compensation Planning Framework (CPF) required by the Mitigation Rule (as defined in the Introduction to the Instrument) are discussed below.

1. ILF Program Service Areas [332.8(c)(2)(i)] (element 1)

The major river drainage basins as determined by CT DEEP (1982) will form the limits of the service areas for the Audubon CT ILF program, except for (See Figure A1) two small basins along the eastern Connecticut shore. The Southeast Coast Major Basin and the Pawcatuck Major Basin are lumped together because of their small size and the impracticality of keeping them as separate service areas. Note that portions of watersheds in Connecticut that extend into Rhode Island are also included, but only for payments into the program, not for location of mitigation projects The Housatonic River watershed includes portions of the Hudson River drainage basin, and a small portion of northwest Greenwich lies within the Hudson River drainage basin and is included in the Southwest Coast service area. These six (6) major river drainage basins are congruent with the CT DEEP's basin planning efforts and other conservation strategies in Connecticut including, but not limited to, Connecticut's Comprehensive Wildlife Conservation Strategy (CT DEEP 2005) and Connecticut Climate Preparedness Plan, prepared by the Governor's Steering Committee (2010).

The six major service areas in Connecticut for the Audubon CT ILF program will be:

1. Southwest Coast Major Basin
2. Housatonic Major Basin / Hudson Major Basin
3. South Central Coast Major River Basin
4. Connecticut Major Basin
5. Thames Major Basin
6. Southeast Coast Major Basin and the Pawcatuck Major Basin.

2. Threats to Aquatic Resources in Connecticut [332.8(c)(2)(ii)] (element 2)

Threats to aquatic resources include anthropomorphic (human influenced) activities that have resulted in or continue to result in impacts (stresses) to aquatic ecosystems. Stresses result in the loss, degradation or impairment of ecosystem functions and values. The threats include habitat loss and fragmentation resulting from urbanization of the watersheds from residential and commercial development and associated roadway construction. Historic development of Connecticut's coastline has resulted in the loss of tidal wetlands and impacts to estuarine environments. Residential and commercial development and concomitant railway and roadway construction has eliminated coastal resources and/or the tidal exchange between open water and estuarine habits. The transitions from estuarine to inland ecosystems/habitats have also been adversely impacted by development. Disturbed land forms also provide a means of colonization by alien and invasive plant species, which displace native plants and reduce habitat value.

a) Habitat Loss and Fragmentation

Incompatible residential, commercial and road development are the most significant causes of habitat loss and fragmentation in CT (DEEP 2005). Urbanization and development, especially along the coast and in the major river valleys in CT, have resulted in degradation of habitat including the destruction of inland and coastal wetlands, the hardening and erosion of stream/river banks and shorelines, and the removal and/or alteration of vegetative cover. In rural areas, the historic conversion of forest to agriculture has also reduced the amount of inland wetlands and other habitats caused by changes in quantity and quality of water flow (both surface and subsurface), cutting or removal of vegetation, alteration of existing topography, and soil erosion.

The loss of habitat connectivity is one important effect of road construction and usage (Forman et al., 2003). When habitats are no longer connected, the movement of wildlife may be impaired or limited, and the potential loss of access to key habitats for survival (as well as direct mortality from collision with motor vehicles) may be increased. Fragmentation of wetlands and stream barriers are both losses of habitat connectivity.

The degradation and loss of habitat can be described in terms of decreases in, or elimination of, populations of plants and animals. DEEP (2005) identified 475 animal species in CT of greatest conservation need. They include 27 species of mammals, 148 bird species, 30 reptile and amphibian species, 74 fish species and 196 invertebrate species. Twelve (12) key habitats and forty-three (43) sub-habitats have been identified by DEEP. Aquatic and terrestrial habitats are included. Primary habitat threats include habitat loss, degradation, and fragmentation from development, changes in land use, and competition from non-native species. Additional threats include a lack of information on the species and their habitats, insufficient resources to maintain or enhance wildlife habitat, and public indifference.

Connecticut's Twelve Key Habitats of Greatest Conservation Need, identified by DEEP (2005), are:

1. Upland Forest. (In regard to the Audubon CT ILF Program, upland forests are important buffers to vernal wetlands and other aquatic habitats.)
2. Upland Woodlands and Shrub. (As with upland forests, upland woodlands and shrub habitats are important buffers to aquatic habitats.)
3. Upland Herbaceous. (As above.)
4. Forested Inland Wetland
5. Shrub Inland Wetland
6. Herbaceous Inland Wetland
7. Sparsely Vegetated Inland Wetland
8. Tidal Wetland
9. Freshwater Aquatic

10. Estuarine Aquatic
11. Unique and Man-made. (Certain unique and man-made habitats (e.g., terraced pans) may provide important buffers for aquatic habitats.)
12. Intensively Managed. (Grasslands are an example of intensively managed areas that may be important buffers to aquatic resources and thus may be of potential relevance to the Audubon CT ILF program.)

Additionally, the state's Water Plan considers:

1. The impact of climate change on the availability and abundance of water resources and the importance of climate resiliency;
2. Quantities and qualities of water that are available for public water supply, health, economic, recreation and environmental benefits on a regional basin scale considering both surface water and groundwater;
3. Land use and other measures, including an assessment of land acquisition or land protection needs, where appropriate to ensure the desired quality and abundance of water and to promote development in concert with available water resources.

CT DEEP has compiled maps of habitats (see Natural Diversity Data Base http://www.ct.gov/deep/cwp/view.asp?A=2702&Q=323464) that support endangered, threatened or State-species of special concern. The distribution of those species by proposed service area is summarized in Table 3 below. Note, all federally listed species are automatically included on the state lists.

Table 2 - CT DEEP Distribution of Endangered, Threatened and of State-species of Special Concern

Watershed Service Area	Number of known locations for state-listed endangered, threatened or species of special concern
Southwest Coast	99
Housatonic/Hudson	349
Connecticut River	333
South Central Coast	170
Southeast Coast/Pawcatuck	62
Thames River	262

b) Altered hydrologic regimes (water withdrawal, dams, etc.)

Stormwater from areas of impervious surfaces, including rooftops, roads and other paved surfaces, and poorly designed culverts and other drainage structures have resulted in alteration of floodwater flows and fragmentation of aquatic organism habitat. Loss of flood storage potential caused by draining or filling of wetlands has resulted in alterations of flood zones and riparian areas. Damming of rivers to produce electricity and extraction of surface or groundwater water for human use

can alter natural stream flow patterns and threaten the sustainability of natural populations of fish and other aquatic life. Poorly planned development, destruction of wetlands, and, in some cases, a lack of dam maintenance, can increase the potential for severe flooding and the destruction of property and loss of life that can be associated with those events. Alteration to stream flows can lead to changes in downstream flow volumes, increases in water temperatures, and changes to the nutrient status of the water. All of these changes can alter the support capacity of aquatic habitat and the relationship between aquatic and terrestrial habitats.

Since European settlement, the construction of dams on rivers and other watercourses for commercial mills, to generate hydroelectric power, or impound water to create lakes and water-supply reservoirs, has resulted in the interruption of anadromous fish migrations across the state.

c) Nutrient enrichment and pollution

According to the CT DEEP, the quality and quantity of the State's waters is a reflection of human use and, in some cases, misuse of water resources. The CT DEEP maintains a list of Impaired Waterways pursuant to Section 303(d) of the CWA (see http://www.ct.gov/dep/cwp/view.asp?a=2719&q=325610&depNAV_GID=1654 . The waters listed therein have failed to meet their swimmable and fishable status and require additional attention. Many water resources are used to dilute and assimilate wastes generated as a result of human activities. Rain washes contaminants out of the atmosphere and off the land surface into rivers and streams. EPA identifies non-point source pollutants from agriculture and construction as two primary sources of sediment and associated nutrients that negatively impact water quality and degrade benthic habitats. CT DEEP has established TMDL (Total Maximum Daily Load) criteria for a number of fresh and saline surface waters. These criteria include designated limits for bacteria, nutrients and other pollutants. The two limiting nutrients in aquatic systems are nitrogen and phosphorous. In freshwater systems, phosphorus is the limiting nutrient, while in saline waters, nitrogen is the limiting nutrient. Limiting nutrient means that there must be a larger quantity of one of these pollutants in the respective aquatic environment before an algal bloom or excessive aquatic weed growth can take place. Principal sources of these nutrients in agricultural environments include fertilizer, animal waste, and failing septic systems. Sources in urbanized watersheds include failing or improperly operating municipal sewage treatment plants or septic system leaching systems, and fertilizers. Atmospheric deposition is also a source of nitrogen and phosphorus and oxides of sulfur and nitrogen.

d) Invasive species/pests and pathogens

Alteration of water chemistry and/or of physical habitat (aquatic or upland) may facilitate invasion and colonization by alien and aggressive plant species. Landscaping with non-native or invasive species, or the intentional or unintentional release of invasive plant and animal species, has impacted aquatic and terrestrial habitats in Connecticut. Examples of invasive plants include: Autumn and Russian

olive (*Elaeagnus umbellata and E. angustifolia)*, mile-a-minute vine (*Persicaria perfoliata*), kudzu (*Pueraria montana var. lobata*), Japanese knotweed (*Fallopia japonica*), purple loosestrife (*Lythrum salicaria*), Japanese barberry (*Berberis thunbergii*), winged euonymus (*Euonymus alatus*), and Eurasian water milfoil (*Myriophyllum spicatum*). One of the most common invasive plants of disturbed freshwater and low salinity habitats is the common reed *Phragmites australis*. Plant pathogens (fungus) can also be unintentionally introduced, e.g., chestnut blight, which resulted in the loss of one of the most important and numerous forest trees in the Northeast, the American chestnut. Examples of invasive fish species include the Asian snakehead fish and Asian (black, silver and big head) carp. These species will displace native fish populations due to their aggressive nature and competition for food consumed by native species.

e) Climate Change and Sea Level Rise

Changes in precipitation quantity, intensity, frequency and temporal distribution will impact surface water flow and temperatures. Intense storms such as Tropical Storms Irene and Sandy, that exceed stream-channel capacity may cause serious bank and shoreline erosion and cause serious sedimentation of aquatic benthic environments or altered deposition patterns. Salinity ranges of estuarine habits may also be affected, influencing plant colonization and fisheries habitat. CT DEEP has provided information on climate change and associated sea level rise at *https://www.ct.gov/deep/cwp/view.asp?a=2705&q=475764&deepNav_GID=2022*. Increases in precipitation and associated runoff will also impact the ability of municipal sewage treatment plants that are fed by combined sewers. Increased flows of combined sewage and stormwater may result in more frequent discharge of incompletely-treated human waste before being discharged to rivers and eventually Long Island Sound. This can result in increased nutrient and pathogen loading, causing beach closures due to bacteria and expansion of the anoxic areas in the Sound.

The Governor's Steering Committee on Climate Change prepared a report on *Climatic Change Impacts on Connecticut Natural Resources (2010)*. Its Natural Resource Work Group stated: "The degree of impact will vary among habitats and species." In reference to Connecticut's *Comprehensive Wildlife Conservation Strategy (CT DEP, 2005)* the Working Group identified eighteen (18) different terrestrial and aquatic habitats at risk. The habitats include: Cold Water Streams, Tidal Marsh, Open Water Marine, Beaches and Dunes, Freshwater Wetlands, Offshore Islands, Major Rivers and Forested Swamps. An increase in temperature was identified as the dominant driver for both terrestrial and aquatic habitat types, such as Upland Forest Complexes and Cold Water Streams. Changes in precipitation patterns will impact aquatic habitats including freshwater wetlands, bogs and fens. A rise in sea level will impact coastal habitats including tidal marsh, beach and dunes (Governor's Steering Committee, 2010).

3. Analysis of Historic Aquatic Resource Losses [332.8(2)(iii)] (element 3)

Since 1990, more than 3,600 acres of inland wetland have been disturbed by human activities regulated under the Connecticut Inland Wetlands and Watercourses Act (CEQ). This averages 180 acres of inland wetlands disturbed annually over that period. The amounts disturbed in 2008 and 2009 were 103 acres and 118 acres respectively. The amount of tidal wetland disturbed by permitted development was approximately 1 acre in each of those years (CEQ), which is a testament to the effectiveness of tidal wetland regulatory programs. However, a review of the 1836 coastal survey prepared by the United States Coast Guard reveals that the destruction of tidal wetlands in Connecticut, especially west of New Haven, has been substantial. Some municipalities in Fairfield County have lost as much as 90% of the tidal wetlands formerly present, and most of this loss is related to filling or dredging for private and public purposes. The statewide wetlands reporting form data has not been used to distinguish between habitat types or service area in Connecticut due to insufficient time and resources needed to catalog and verify available data.

Figure A4 depicts the location of permitted impacts that are associated with the Corps permit programs from 1986 through 2011 and are plotted by service area.

4. Current Aquatic Resource Conditions [332.8(2)(iv)] (element 4)

The Integrated Water Quality Report (CT DEEP 2011) provides a current assessment of current aquatic resource conditions in Connecticut. Further expected impacts to aquatic resource conditions, i.e., sea level rise, drought and flood cycles and other effects of global climate change, are described in the Connecticut Climate Preparedness Plan (Governor's Steering Committee 2010). and are also set forth in the Northeast Climate Impacts Assessment (NECIA) (Union of Concerned Scientists 2007).

NECIA indicates a warming of 0.5 degrees F per decade since 1970. Winter temperatures increased at a rate of 1.3 degrees F per decade since 1970. Other climate changes observed across the region include more frequent days of temperatures over 90 degrees F; a longer growing season; less snow and more rain over winter periods; reduced snow pack and increased snow density; earlier breakup of winter ice on streams and lakes; earlier spring snow melt leading to earlier peak river flows; and. rising sea-surface temperatures and sea levels.

The Connecticut Climate Preparedness Plan (Governor's Steering Committee 2010) identified natural resources at risk from climate change across all service areas. These resources include cold water streams, tidal marsh, open water marine, beaches and dunes, freshwater wetlands, offshore islands, major rivers, and forested swamps. Changes to these habitats include: i) the conversion of rare habitats (e.g., cold water to warm water streams, tidal marsh and offshore islands to submerged lands), ii) loss and/or replacement of critical species dependent on select habitats, and iii) increased susceptibility of habitats to other ongoing threats (e.g., fragmentation due to development and establishment of invasive species).

The Connecticut Integrated Water Quality Report (2011) identified stream and surface water bodies that do not meet water quality standards. While municipal-owned

wastewater treatment plants are identified as the primary point source of pollutants (nutrients, bacteria), nonpoint source pollutants associated with stormwater runoff play a major role in degrading water quality and preventing surface water bodies from attaining the designated use goals. All water bodies that fail to fully support one or more of the designated uses (e.g., habitat for fish, other aquatic life and wildlife, and recreation) are placed on the Impaired Water List. These impaired water bodies are monitored for physical, chemical and biological parameters and may have a total maximum daily load (TMDL) for pollutants assigned to them. CT DEEP conducts a reassessment of the list every two years at which time current conditions within service areas are expected to be updated.

The introduction and spread of invasive plant and animal species are a direct threat to the ecological health of aquatic habitats. The Connecticut Invasive Species Management Group and the New Haven Agricultural Experimental Station monitor the spread of invasive aquatic plant species across all service areas. Examples of invasive plants impacting aquatic habitat and recreational use of surface water bodies include colonization of lakes and ponds with Eurasian water milfoil and water chestnut.

The Long Island Sound Watershed Initiative (Natural Resources Conservation Service 2011), identifies Long Island Sound as an estuary of distinction. Its 17,814 square mile watershed encompasses portions of four states: Vermont, New Hampshire, Massachusetts and Connecticut. Water quality in the Sound and in the coastal estuaries is linked to water quality and other conditions in all five service areas in Connecticut. Ninety percent (90%) of the freshwater entering Long Island Sound drains from three major rivers in Connecticut: the Connecticut, Housatonic and Thames.

Activities within the watershed directly impact water quality and habitats in the estuaries and the Sound. Existing resource concerns and problems include habitat impacts and declining populations of endangered, threatened and special concern species. Water quality concerns include increases in nutrient and sediment discharges and bacteria contamination. Noxious and invasive plant species are also cited. The LIS Watershed Initiative identifies a series of problems currently impacting the resources. These include:

- Non-point source pollution contributing to hypoxia from nitrogen loading, toxic contamination and pathogen contamination;
- Habitat loss from development and degradation from urban, suburban and agricultural runoff;
- Increased sediment loading;
- Forest fragmentation;
- Invasive species colonization (terrestrial and aquatic);
- Loss of prime farm land; and
- Barriers to fish movement and migration

The LIS Watershed Initiative establishes goals to improve the water quality of the Sound through restoration and management activities along the major river systems and the

coast, to among other things improve habitat and natural filtration to enhance water quality. Such efforts will also help to maintain hydrologic and ecological functions associated with both upland and aquatic systems.

5. Aquatic Resource Goals and Objectives [332.8(c)(2)(v)] (element 5)

The goals and objectives described in Section 2 of the ILF Instrument will be achieved, to the extent practicable and feasible, as follows (note: preservation of one type of habitat does not justify or offset the loss of a different type of habitat):

1. Support projects that result in the protection of headwater streams and wetlands that have high natural resource value, protect a drinking water supply, and/or repairs an impaired waterbody and buffers thereof.
2. Support projects that reduce habitat fragmentation.
3. Support projects that include control and/or removal of invasive species as part of a project's management plan.
4. Support projects that include upland buffers to aquatic resources, including but not limited to dunes, beach strands, and upslope "advancement zones" adjacent to tidal wetlands.
5. Support projects that increase the areal distribution and quality of tidal and inland aquatic resources through restoration, enhancement, creation and protection of the aquatic habitats lost as a result of permitted impacts within a specific service area.
6. Integrate Audubon CT ILF projects with other conservation activities whenever possible in order to promote habitat connectivity.
7. Support projects that include habitats that support federal and state-listed endangered and threatened species.
8. Support projects that include at-risk habitats identified in Appendix D of the CT Climate Preparedness Plan (Governor's Steering Committee 2010):
    - Cold water streams and associated riparian zones
    - Tidal marsh
    - Open water marine
    - Beaches and dunes
    - Herbaceous freshwater wetlands
    - Offshore islands that contain tidal marsh, protective buffers including dunes and beach strands, and other protected aquatic resources
    - Intertidal flats and shores
    - Major rivers and associated riparian zones
    - Forested swamps
    - Subtidal aquatic beds

5.1 Goals and Objectives By Service Area

a) Southwest Coast

The Southwest Coast service area contains densely developed urban land along the I-95 corridor. Interior regions of the area are typified by moderate to low density residential development. Coastal and inland aquatic resources have been impacted by both commercial and residential development. Waterways have been historically altered for power generation, impacting fisheries movement. Wetlands and riparian zones have been impacted from roadway construction and urban sprawl. Water quality impacts have resulted from both point and nonpoint source discharges resulting in accelerated siltation and accelerated eutrophication of water bodies. Current impacts to inland wetlands and waterways have been diminished with the adoption of Inland Wetlands and Watercourses regulations.

Conservation Objectives:

- Acquire land and conservation easements to provide upslope "advancement zones" adjacent to tidal marshes.
- Pursue wetland restoration and enhancement opportunities (with upland buffers) in sustainable landscape settings.
- Encourage preservation projects, particularly for rare species, vernal pools, headwater streams (1st and 2nd order) and their associated critical terrestrial habitats.
- Restore the movement of anadromous fisheries to the upper reaches of the watercourses via fish ladders, by-passes or dam removal.
- High elevation salt marsh preservation, restoration, and/or rehabilitation.

b) South Central Coast

This region is similar in land use to the Southwest. Large urban environments with high density commercial and residential development along the coast grade into moderate to low density (suburban) residential development.

Conservation Objectives:

- Acquire land and conservation easements to provide upslope "advancement zones" adjacent to tidal marshes.
- Pursue wetland restoration and enhancement opportunities (with upland buffers) in sustainable landscape settings.
- Encourage preservation projects, particularly for rare species, vernal pools, headwater streams (1st and 2nd order) and their associated critical terrestrial habitats to ensure that the region's extensive aquatic resources remain intact and functional into the future.
- Restore the movement of anadromous fisheries to the upper reaches of the watercourses via fish ladders, by-passes or dam removal.

- Preservation and restoration/rehabilitation of freshwater tidal emergent marsh.
- High elevation salt marsh preservation, restoration, and/or rehabilitation.

c) Housatonic River

This area ranges from high density residential and commercial development at the mouth of the Housatonic River in Stratford and Milford and around the cities of Danbury, Watertown and Torrington. The Housatonic River and its larger tributaries have seen the historic alteration of river flows for the production of hydroelectric power. Development between the major roadways (Routes 7, 8 and I-84) is typified by low density residential development and agricultural land use. Cultural eutrophication of surface waters is evident on both small and larger water bodies and streams.

The upper reaches of the service area are rural in nature supporting large undisturbed tracts of secondary hardwood forests and open meadow habitat. Tributaries along the Housatonic River provide cold water and headwater stream habitats. Habitats supporting endangered, threatened and state-species of special concern are prominent from the mouth of the Housatonic River, and the southwestern and northwest portions of the service area.

Conservation Objectives:

- Acquire land and conservation easements to provide upslope “advancement zones” adjacent to tidal marshes.
- Acquire land and conservation easements in riparian areas adjacent to coldwater streams.
- Encourage habitat connectivity and protection, particularly for areas on the Wildlife Action Plan, within the Stewart B. McKinney National Wildlife Refuge’s Conservation Planning Areas and Special Focus Areas, rare species, vernal pools, headwater streams (1st and 2nd order) and their associated critical terrestrial habitats.
- Pursue opportunities to restore priority resource types, as well as opportunities to restore marginal or non-productive agricultural land in sustainable landscape settings.
- Restore the movement of anadromous fisheries to the upper reaches of the watercourses via fish ladders, by-passes or dam removal.
- Pursue wetland restoration and enhancement opportunities (with upland buffers) in sustainable landscape settings.
- Preservation of Black Spruce bogs and calcareous fens.
- Preservation and restoration/rehabilitation of freshwater tidal emergent marsh.

d) Connecticut River

The central Connecticut valley is typified by urban core areas in the Hartford and Middletown surrounded by moderate density residential and commercial urban

periphery. These areas are flanked by suburban development. The area supports an extensive number of endangered, threatened and state-species of special concern and critical habitats.

Conservation Objectives:

- Acquire land and conservation easements to provide upslope “advancement zones” adjacent to tidal marshes.
- Acquire land and conservation easements in riparian areas adjacent to coldwater streams.
- Encourage habitat connectivity and protection, particularly for rare communities and species, high value vernal pools and their associated critical terrestrial habitats, headwater streams (1st and 2nd order), river confluences with tributary streams, and head of tide river regions.
- Pursue wetland restoration and enhancement opportunities (with upland buffers) in sustainable landscape settings.
- Restore the movement of anadromous fisheries to the upper reaches of the watercourses via fish ladders, by-passes or dam removal.

e) Southeast Coast/Pawcatuck Rivers

This service area is dominated by low density rural development. The area supports a number of habitats supporting endangered, threatened and state-species of special concern.

Conservation Objectives:

- Acquire land and conservation easements to provide upslope “advancement zones” adjacent to tidal marshes.
- Encourage habitat protection, particularly for rare communities and species, high value vernal pools, headwater streams (1st and 2nd order) and their associated critical terrestrial habitats.
- Pursue wetland restoration and enhancement opportunities (with upland buffers) in sustainable landscape settings.
- Restore the movement of fisheries at key locations via fish ladders, by-passes or dam removal.
- High elevation salt marsh preservation, restoration, and/or rehabilitation.

f) Thames River

This service area is also dominated by low density rural development. The area supports a number of habitats supporting endangered threatened and state-species of special concern.

Conservation Objectives:

- Acquire land and conservation easements to provide upslope “advancement zones” adjacent to tidal marshes.
- Acquire land and conservation easements in riparian areas adjacent to coldwater streams.
- Promote wetland protection, particularly for rare communities and species, high value vernal pools, headwater streams (1st and 2nd order) and their associated critical terrestrial habitats.
- Pursue wetland restoration and enhancement opportunities (with upland buffers) in sustainable landscape settings.
- Restore the movement of anadromous fisheries to the upper reaches of the watercourses via fish ladders, by-passes or dam removal.
- Preservation of Black Spruce bogs.
- Preservation, restoration, and/or rehabilitation of freshwater tidal emergent marsh.
- Preservation, restoration, and/or rehabilitation of glacial outwash plain wetlands and associated upland recharge zones in Hinkley gravelly sandy loam.

6. Prioritization Strategy for Project Selection and Implementation [332.8(c)(2)(vi)] (element 6)

The Audubon CT ILF program compensatory mitigation projects are selected using a competitive award approach. After a reasonable amount of funds have been collected from the sale of advanced credits, public agencies (at the federal, state and local levels), non-profit conservation organizations and private individuals will be invited to submit a Letter of Intent for eligible restoration, enhancement, creation and preservation projects in one or more service areas in Connecticut. A Letter of Intent is summary in nature and is designed to provide sufficient information to determine whether a proposed project meets the goals of the Audubon CT ILF program. Instructions for what is required for this Letter of Intent are addressed in Appendix B. Full proposals are evaluated on a 100-point scale by the Project Advisory Committee using the prioritization criteria outlined below. These criteria can be modified upon the approval of Audubon CT and the Corps.

Criteria used to rank proposals

Potential to Meet Audubon CT ILF Program Goals (30%). The proposal meets the core program requirement to restore, enhance, preserve or create aquatic resources and that all project sites must be conserved in perpetuity by appropriate easement or other legal mechanism. Considerations include:

a) The sustainability of the proposed mitigative actions (restoration, enhancement, preservation, creation) and the acreage proposed for each or any of these.

b) The resource types to be restored, enhanced, or created and the degree to which the proposed project replaces the functional benefits of impacted resources in the service area based on a functional assessment of the project. To fully meet this criterion, projects cannot be preservation-only.

c) Proximity of the proposed project to impacts within the same service area.

d) For preservation-only projects, the type and likelihood of the threat of degradation to the site over the next twenty years. NOTE: If there is no threat, the project cannot be used for mitigation.

e) Inclusion of upland areas sufficient to protect, buffer, or support identified aquatic resources and ecological connectivity to other conservation areas or undeveloped large blocks of habitat.

f) Current and proposed condition of the property, and "functional lift" provided by the project (e.g., proposed improvement in habitat quality, contribution to functioning biological systems, water quality, level of degradation, etc.)

g) Other specific conservation objectives developed for the major watershed basin within which the project exists.

Landscape Context (20%). The proposal meets the core program requirement to consider the location of a potential project relative to statewide focus areas for land conservation or habitat preservation identified by a state agency, other regional or municipal plans, or Audubon CT.

a) Presence within or adjacent to habitat areas of statewide conservation significance or other natural resource priority areas such as, but not limited to, state forests, wildlife management area, Audubon Important Bird Areas (IBAs), U.S. Fish and Wildlife Service's Comprehensive Conservation Plans and their Conservatin Planning Areas and Special Focus Areas.

b) Presence within or adjacent to public or private conservation lands that maintain and preserve habitat connectivity.

c) Presence of natural resources of significant value and/or rarity within the project site boundaries (e.g., unique wetland types, areas of GAA groundwater and AA surfacewater classifications, and large habitat blocks relative to the surrounding land usage).

Project Readiness/Feasibility (20%). The proposal meets the core program requirement to demonstrate project readiness and likelihood of success, where success is defined by the ability of the project to meet Audubon CT ILF Program goals and objectives in a reasonable time period. Considerations include:

a) Documentation of landowner willingness to participate in the proposed project, including conveying a conservation easement or fee title, with conservation covenants, to the property (for projects not on public or private conservation lands).

b) Level of project urgency (e.g., area of rapid development or on-going site degradation, other available funding with limited timing, option to purchase set to expire, etc.)

c) Degree to which the proposal demonstrates understanding of resource conservation issues and needs.

d) Soundness of the technical approach of the conceptual plan presented in the proposal.

e) Initial progress (e.g., planning, fundraising, contracting, site design, etc.)

f) Likelihood that the project will meet proposed schedule and/or required deadlines.

g) Likelihood that the proposed actions will achieve the anticipated ecological benefits and results.

h) Completeness and feasibility of long-term stewardship and monitoring plan, including endowment.

i) Lack of potential for adverse impacts (such as flooding or habitat loss) associated with the project.

j) Conformance with any applicable Corps and state mitigation policy, guidance and permitting requirements, including appropriate financial assurances for any construction activity.

Project Sponsor Capacity (15%). The proposal meets the core program requirement to provide for long-term management and/or stewardship by a responsible state or federal resource agency, municipality, or conservation organization. Considerations include:

a) Presence of qualified, capable conservation entity willing to sponsor and/or maintain the project.

b) Level of support and involvement of other relevant agencies, organizations and local community.

c) Degree to which the project sponsor, and any associated partners, demonstrate the financial, administrative and technical capacity to undertake and successfully complete the project.

d) Adequacy of long-term stewardship to ensure the project is sustainable over time and a funding mechanism for the associated costs (e.g., endowment or trust).

e) Legal and financial standing of the project sponsor.

f) Quality and completeness of proposal materials.

Cost Effectiveness (10%). The proposal meets the core program requirement that a project uses its funds efficiently given the condition, location and relative appraised value of property(ies). Considerations include:

a) Clarity and detail of budget submitted.

b) Sufficiency of funds available in the applicable service area (major watershed basin).

c) Availability and source of matching funds necessary to complete the project.

Other benefits (5%). The Application assesses the potential for the project to support economic activity, job creation, recreational access, scenic enhancements or other contributions to the environmental quality of the area where the project is located.

7. Explanation of How Preservation Satisfies Criteria for use of Preservation [332.8(2)(vii)] (element 7)

The Audubon CT ILF program watershed approach to selecting aquatic resources compensation projects is designed to include the preservation and long-term viability of critical habitats, ecological processes and biological diversity.

The Mitigation Rule allows for preservation-only projects to mitigate the loss of aquatic resources from past impacts. Preservation-only projects must meet the following criteria:

- The resource to be preserved provides important physical, chemical or biological functions for the watershed;
- The resource to be preserved contributes significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the District Engineer must use appropriate quantitative assessment tools, where available;
- Preservation is determined by the District Engineer to be appropriate and practicable;
- The resource is under threat of destruction or adverse modification; and
- The preserved site will be permanently protected through an appropriate legal instrument.

Projects with restoration, creation, and/or enhancement should include preservation of these areas plus appropriate buffers.

Non-aquatic resources, such as riparian areas and upland buffers, may be used for generating credits when they are essential to maintaining the ecological viability of the adjoining aquatic resources. In addition, credits may only be awarded to projects to be carried out on public lands if such projects are based solely on aquatic resource functions provided by the compensatory mitigation project, over and above those provided by public programs already planned or in place.

8. Public-Private Stakeholder Involvement [332.8(c)(2)(viii)] (element 8)

As the program sponsor, Audubon CT will optimize compensatory mitigation efforts under its ILF program by working closely with interested agencies, other organizations (including conservation and community groups, etc.) and private entities. In addition, Audubon CT will continue to work closely with other conservation entities, public and private organizations, agencies and landowners to identify habitat and aquatic mitigation opportunities and develop mitigation plans and methods for inclusion in the Audubon CT ILF instrument following IRT review and Corps approval. Audubon CT has sought input on its ILF program, reporting and evaluation forms and has reviewed suggested projects from Regional Planning Agencies, local Inland Wetland and Watercourse Agencies and members of the Connecticut Association of Wetland Scientists and Society of Wetland Scientists – New England Chapter. Audubon CT also seeks annual input from the CT DEEP for information that may identify potential restoration, preservation, establishment (creation) or enhancement projects.

9. Long-Term Management [332.8(2)(ix)] (element 9)

The Audubon CT ILF program shall be responsible for ensuring that individual project sponsors develop and implement a long-term protection and management plan for each mitigation project of the Audubon CT ILF. On publicly-owned land, long-term protection

and management may be provided through facility management plans or integrated natural resource management plans (INRMPs). On privately-owned land, including land held by NAS or other conservation organizations, real estate instruments shall be recorded to guarantee protection. Audubon CT will ensure that protection mechanisms are in place prior to requesting the release of credits. Draft conservation easements or equivalent protection mechanisms will be submitted to the Corps and Audubon CT for review and approval.

Audubon CT ILF projects will be designed, to the maximum extent practicable, to require low intensity long-term management effort once performance standards have been achieved. Audubon CT shall be responsible for maintaining or ensuring the maintenance of Audubon CT ILF project sites as specified in the Mitigation or Management Plan specific to each project to ensure long-term viability of project sites as functional habitat and aquatic resources. The long-term management plan developed for each Audubon CT ILF project will include a description of anticipated long-term management needs with annual cost estimates for such needs and an identified funding mechanism that will be used to meet those needs (such as non-wasting endowments, trusts, contractual arrangements with future responsible parties, or other appropriate instruments.) The long-term steward shall sign off on the long-term management plan following review and approval of the plan by Audubon CT and the Corps.

The final conservation easement or equivalent mechanism for long-term protection and management shall be submitted to the Corps (who may in turn seek the advice and guidance of the IRT) for approval prior to the final release of mitigation project credits.

10. Program Evaluation and Reporting Protocol [332.8(2)(x)] (element 10)

Every five years, Audubon CT, with review by the Corps, will produce a status and trends report summarizing the previous five years. The document will examine the goals for each service area and discuss how well the projects assisted with promoting those goals. Every ten years or as funds allow, Audubon CT and others will reexamine and update the Compensation Planning Framework, including working with a broad range of stakeholders.

11. Monitoring of Completed Projects [332.8(2)(xi)] (element 11)

Methods for assessing habitat and aquatic resource functions pre- and post-project implementation will be coordinated with ongoing efforts by Audubon CT, the CT DEEP and other entities in Connecticut. This will allow Audubon CT to dovetail its ILF program with ongoing inventory and monitoring efforts.

The project grantee will monitor its completed ILF project*(s)* until success criteria are achieved in accordance with the approved Mitigation Plan for each project. An approved standard mitigation monitoring protocol will be used to provide consistency in methods and measurements among habitat types. The frequency and duration of monitoring and specific monitoring requirements will be defined in each individual Mitigation Plan, with a minimum monitoring period of five years. In general, monitoring reports will include plans, maps and photographs to illustrate site conditions, plus a narrative summarizing

conditions, monitoring results as compared to performance standards, and recommendations for contingency or adaptive management if needed. The monitoring duration designated in a Mitigation Plan may be extended by the Corps if performance standards have not been met. The Corps District Engineer may also reduce or waive monitoring requirements upon determination that performance standards have been achieved. New England District Mitigation Guidance in place at the time of project review will be used to review each proposed project.

Appendix B - Letter of Intent for Mitigation Projects/ Instructions

Applications are made on-line at http://ct.audubon.org/conservation/in-lieu-fee-program.

Appendix C - Sample Credit Transaction Letter

Date

Permittee's name and address

Subject: Sale of (number of Credits) for (service area/project name), File No. NAE-20xx-xxxxx

Dear NAME:

National Audubon Society, through its Connecticut program, Audubon Connecticut..

This letter confirms the receipt of $xxxxxx for the sale of (number of credits) (Resource Type A) credits and (number of credits) (Resource Type B) credits to . compensate for for (number of acres) acres of impact to the aquatic resources in the (name of service area).

By selling these credits, Audubon is the party responsible for fulfilling the agreed-to mitigation aspect of the permit(s) listed above.

Yours truly,

_____
for Audubon Connecticut

cc. New England District Corps of Engineers
Connecticut Branch ILF Project Manager
and
CENAE-R@usace.army.mil

Appendix D - Representative List of Sponsor's Conservation/Restoration Projects At Inception of Instrument

Ford Pond Phragmites Control Project, Sharon, Connecticut, 2010. Received Landowner Incentive Program grant from the CT DEP to eliminate Phragmites through cycled Glyphosate application and mowing.

Karse Brook, Sharon, Connecticut, 2010. Completed the planning and regulatory reviews to install pond levelers to support beaver use and control water level for nesting waterfowl and other marsh fauna in a two-mile reach of Karse Brook. Work to begin in 2011. In addition, initiated Phragmites control measures and management of shrub habitat to reduce loss by adjacent canopy invasion.

Calcareous Wetland Management, Sharon and Salisbury, Connecticut, 2010. Bio-assay completed and control of invasive plants is ongoing in this rare wetland type.

In-Stream Riparian Improvements, Pomperaug River, Southbury, 2010. Received a DEP Statewide Ecosystem Management and Habitat Restoration Grant to enhance aquatic habitat along a one mile reach of the Pomperaug River.

Riparian Corridor Enhancement Project, Audubon Center at Bent of the River, Southbury, 2008. WHIP grants – applied for and oversaw grants from federal agency to remove invasive species and plant native shrubs to improve habitat and reduce stream bank erosion on Pomperaug River.

Phragmites Control and small boat storage and launch, Jacob's Beach, Guilford, 2007. Responsible for permitting and oversight of installation.

Coastal Salt Marsh Subsidence Study, 2003 – 2006. Assisted NRCS scientists as local coordinator for extensive study of saltmarsh subsidence in coastal Long Island Sound.

Wetland Habitat Enhancement Project, Audubon Center at Bent of the River, Southbury, 2003. WHIP grant work included invasive herbaceous and woody plant control and wetland habitat establishment.

Appendix E - Approved Projects

All information is publicly available on RIBITS (see Section 6.3)

2016 Projects

2016-CT R-Zemko Sawmill Preserve–Salem, CT

The objective of this project is to expand the Southeast Land Trust's (SLT) Zemko Preserve through the preservation of 20 acres of wetland and uplands associated with the Eightmile River-East Branch.

The performance standards for the project are submission of a copy of the recorded deed to the Corps and the approval by the Corps of a long-term management plan.

Through fee simple acquisition of these parcels, SLT will preserve the site in perpetuity as a buffer to the adjacent open canopy Whittlesey Swamp on the Zernko Sawmill Preserve, and as a wildlife corridor in the larger forest block. SLT will provide stewardship including removal of litter and trash, control of invasive species, maintenance of forest openings which provide diversity of habitat, and restoration of some forest canopy bridges over the driveway into the property. In a manner that maintains the ecological values of the property, SLT will provide limited public access through a trail system to the site which allows for education, stewardship, monitoring and study of the site.

2016-HOUS-Salmon Kill Restoration–Salisbury, CT

The objective of this project is to restore habitat attributes in two stream segments conducive to a cold-water fishery in the Salmon Kill, specifically for native and wild trout.

The performance standards for the project are to document: an increase in the number and depth of pools, an increase in pool-riffle sequences, large wood structures remain intact, an increase in the number of large woody material at the project sites, >50% plant survival after 5 years, an increase in canopy cover, and increase in riparian buffer width, an increase in cold-water fish diversity and age classes, >80% of pre-restoration eroding stream bank is stabilized, the 7-day average maximum daily temperatures decreases, and the number of records of >19 and 24 degrees C decreases.

This project will restore nature stream process, form, and function which include improved water quality, reduced stream temperatures, reconnected stream and floodplain, reduction of peak flows, improved riparian corridor quality, and increased aesthetic value in a high priority conservation targeted area.

2016-HOUS-Stratford Point Living Shoreline-Stratford, CT

The objective of this project is to construct a living shoreline to restore coastal habitats which will maintain resiliency and function on Stratford Point.

The performance standards for the project are documentation of 3.0 acres of previously non-existent low marsh (estuarine intertidal emergent – persistent) and 1.5 acres of coastal dune planting establishment (tidal fringe).

This project is expected to provide critical ecosystem services that have have been degraded or lost at the site and vicinity through previous hazardous material (lead pellets from skeet shooting) remediation work. Some of the benefits will be decreased erosion, natural sediment transport dynamics, improved water quality, atmospheric carbon storage, enhanced ecosystem resilience to severe storms and sea level rise, habitat for federal and state-listed species as well as other species, and connectivity between the upland and aquatic habitats. This will be accomplished by planting Spartina alterniflora behind precast concrete “reef balls” installed by others, planting of Spartina patens in the upper intertidal zone, and providing soil amendments and plantings to restore the coastal dune.

2016-SCC-Indian River-Orange, CT

The objective for this project is to restore fish passage which is currently severely constrained by an inadequate culvert located about 525 feet upstream of 69 Tyler City Road.

The performance standards for the project are documentation of removal of the two existing 18” reinforced concrete pipes and installation of river bed stone for scour protection.

This small and straightforward project involves the removal of inadequately sized culverts and the reestablishment of a natural stream channel to provide ecological connectivity between the upstream and downstream habitats. This will particularly benefit fish.

2016-THAMES-Lukaszek Preservation-Thompson, CT

The objective of this project is to preserve 76.6 acres in the upper watershed of the Five Mile River comprised of a wide variety of wetland types and their upland buffers. The Wyndham Land Trust (WLT) will own and manage the land.

The performance standards for the project are submission of a copy of the recorded deed to the Corps and the approval by the Corps of a long-term management plan.

Through fee simple acquisition of this area, WLT will preserve the site in perpetuity and manage it for its natural resource functions and values including: Five Mile River source water protection and habitat for Connecticut Greatest Conservation Need Species. Some habitats will be actively managed such as control of invasive species and maintenance of a former gravel-removal area as an early succession habitat for rare species

2017 Projects

2017-CT R-Danforth-Colebrook, CT

The objective of this project is to preserve 15 acres which includes 2.5 acres of forested wetland with the balance providing wetland buffer. The Aton Forest will own and manage the land along with the 1300-acre adjacent field research station and nature preserve.

The performance standards for the project are submission of a copy of the recorded deed to the Corps and the approval by the Corps of a long-term management plan.

Through fee simple acquisition of this area, Aton Forest will preserve the site in perpetuity and manage it to protect its natural resource functions and values. The parcel will be actively managed open space and for natural history study. It will be monitoring throughout the year for threats trespass, and disturbances. Non-native species may be managed as needed to protect and maintain the natural condition.

2017-CT R-Dolan Pond Fishway-Essex, CT

The objective of this project is to reestablish fish passage, particularly migratory fish such as river herring, at the Donal Pond Dam on the Falls River through installation of a “steeppass” fishway.

The performance standards for the project are documentation of installation of the fishway, stabilization of any disturbed sediments, and evidence of use by fish.

This project is in the Lower Connecticut River which is a focal area for many conservation groups. It is upstream of state wildlife management areas. The fishway will provide fish access to a mile of stream habitat but another planned fishway will expand access to a 45-acre pond. The fishway will be monitored and maintained by the Essex Land Trust and Connecticut Department of Energy and Environmental Protection.

2017-CT R-Stoeke-Hartland, CT

The objective of this project is to preserve 67.7 acres which includes extensive forested wetland, an intermittent stream, and buffer. The Hartland Land Trust (HLT) will own and manage the land.

The performance standards for the project are submission of a copy of the recorded deed to the Corps and the approval by the Corps of a long-term management plan.

The project expands existing conservation lands which counters habitat fragmentation. It drains into both the east and west branches of the Wild and Scenic Farmington River which is essential to the drinking water supply for the Greater Hartford area. There may be at least two listed species on the property which enhances the value of the site. Although there are no invasive species currently on the site.

2017-SCC-Harrison-N. Branford, CT

The objective of the project is the preservation of 21 acres by the North Branford Land Conservation Trust (NBLCT). The property includes a forested wetland, a part of which is a vernal pool, an upper perennial stream, and associated buffers. NBLCT will own and manage the parcel.

The performance standards for the project are submission of a copy of the recorded deed to the Corps, the approval by the Corps of a long-term management plan, and the receipt of a monitoring report document the results of an invasive species control plan one year after implementation.

The project abuts land owned by the Regional Water Authority. There are several trails that will be available to the public. The NBLCT will manage the parcel which will include controlling invasive species and protecting the natural resources on the site.

2017-SCC-Quinnipiac River Preserve-New Haven, CT

The objective of the project is the preservation of 26 acres by the New Haven Land Trust (NHLT). The property includes coastal wetlands associated upland buffer.

The performance standards for the project are submission of a copy of the recorded deeds to the Corps and the approval by the Corps of a long-term management plan.

The property is adjacent to the Quinnepiac Meadows Nature Preserve and will become part of it. The wetlands on the property are tidal saltmarsh and provide important bird habitat. The upland buffer will provide for marsh migration resulting from sea level rise. It is expected that the site will be used by students

for research projects and bird walks. The adjacent preserve includes terrapin nesting habitat and this property may as well.

2017-SW COAST-Belknap-Weston, CT

The objective of the project is the preservation of 38 acres by the Aspetuck Land Trust (ALT) by fee (27.852 acres) and easement (10.5 acres). The property includes wetlands, vernal pools, and associated upland buffers.

The performance standards for the project are submission of a copy of the recorded deeds to the Corps and the approval by the Corps of a long-term management plan.

The property is dominated by tall broadleaf trees but includes eight acres of forested and scrub-shrub wetlands. There is also a boulder seepage wetlands. The site abuts the ALT Honey Hill Preserve. The property contains the headwaters fo tributaries to the West Branch of the Saugatuck River. ALT will manage the property and create a public hiking trail.

2017-THAMES-Mashapaug/Rizner-Union, CT

The objective of the project is the preservation of 134 acres by the Opacum Land Trust (OPT). The property includes forested wetlands, an upper perennial stream, lacustrine wetlands including 1.4 miles of shoreline, and associated buffers.

The performance standards for the project are submission of a copy of the recorded deed to the Corps and the approval by the Corps of a long-term management plan.

The property abuts the Nipmuck State Forest and Bigelow State Park in the northeast corner of Connecticut. It includes 1.4 miles of the shore of Mashapaug Pond, a perennial stream, ephemeral streams, forested and scrub-shrub wetlands, a vernal pool, a mixed forest connecting to an old-growth Atlantic white cedar swamp, and habitat for bald eagles, osprey, loons, and neotropical migratory songbirds. OPT will manage the property and address invasive species, any unlawful dumping, and other actions that would adversely affect the property.

2018 Projects

2018-CT R-Farmington River-Bosco-Hartland, CT

The objective of the project is the preservation of 46.8 acres by the Hartland Land Trust (HLT) for protection of water quality and maintenance of the rich diversity of plant and animal life on the property.

The performance standards for the project are submission of a copy of the recorded deeds to the Corps and the approval by the Corps of a long-term management plan.

The property drains in the west branch of the Wild and Scenic Farmington River which is essential to the drinking water supply for Greater Hartford. It also includes wetlands and brooks and some potential vernal pools. The project abuts existing conservation lands – the Bassett-Kell Preserve and Pasquariello Preserve - and will counter habitat fragmentation and to prevent sensitive habitat loss. HLT will manage the property.

2018-HOUS-Simpson Acquisition-Bethany, CT

The objective of the project is the preservation of 50.88 acres by the Town of Bethany with the Bethany Land Trust (BLT) co-managing the property to protect the habitats and manage trails.

The performance standards for the project are submission of a copy of the recorded deeds to the Corps and the approval by the Corps of a long-term management plan.

The property is an area of unfragmented woodland. It provides linkage in a growing area of protected lands at the conjucture of Bethany, Beacon Fall, and Naugatuck. It is bordered by the Bethany Veterans Memorial Park, BLT lands, and the Woodward Preserve. It borders Hockanum Brook and includes tributaries of the brook, wetlands, and upland buffers. BLT will provide trail and habitat management services.

2018-SE COAST-Paulann Sheets-North Stonington, CT

The objective of the project is the preservation of 86.5 acres by the Avalonia Land Conservancy (ALC) to protect it in its natural state and allow for non-motorized passive recreation.

The performance standards for the project are submission of a copy of the recorded deeds to the Corps and the approval by the Corps of a long-term management plan.

The property has over half-mile of frontage on the Green Fall River and includes wetlands, vernal pools, and associated upland buffers. It is part of the Aquifer Protection Area of the Pawcatuck River basin. ALC will manage the site and do a thorough inventory of bird, amphibians, mammals, invertebrates, and reptiles.

Appendix F – Sample Fact Sheet

US Army Corps of Engineers
New England District

Effective August 21, 2013

FACT SHEET

National Audubon Society, Inc.-Connecticut

In-Lieu Fee Program

The National Audubon Society, Inc., through its Connecticut program (Audubon-CT) is the sponsor of an "in-lieu fee" (ILF) program for aquatic resource compensatory mitigation required by Department of the Army authorizations. This program was approved by the New England District Corps of Engineers (Corps) and Audubon-CT on August 21, 2013. The program provides an alternative to Corps permittees who are required to compensate for their impacts to wetlands and waters of the United States in the State of Connecticut.

Prior to this program, permittees generally conducted their own compensatory mitigation, (permittee-responsible mitigation) including monitoring and maintenance. This ILF option involves paying a fee "in lieu of" permittee-responsible mitigation. The fee can be used for all the compensation or in combination with other permittee-responsible compensation.

As sponsor, Audubon-CT has no role in the Corps permit decision. Its role is to collect the fees from the Corps permit applicants; identify opportunities or projects for wetland restoration, enhancement, creation or preservation in the same service area as the impacts; oversee the execution of the projects and assure long-term stewardship. By aggregating funds from multiple permitted impacts, the ILF program can develop compensatory projects that offer greater ecological benefits than permittee -responsible mitigation and contribute to watershed level conservation goals. These compensatory mitigation projects will be subject to approval by the Corps in consultation with an interagency review team made up of state and federal agencies.

The program divides the State into six separate service areas based on watersheds. The watersheds and their current cost per square foot are listed in the table below. The service areas are attached.

Service Area	Notes	Credit Cost Per Square Foot[1]
Housatonic River		$ 7.56
Southwest Coastal		$ 9.12
South-central Coastal		$ 7.45
Connecticut River		$10.11
Thames River	South of I-95	$10.80
	North of I-95	$ 7.97
Southeast Coastal		$ 7.97

[1] Costs are subject to change.

8-21-2013

FIGURES

(appended as pdf files, pages not numbered)

A1 Service Areas

A2 Service Areas and Regional Basins

A3 Connecticut ILF Service Areas:

- **A3.1 Thames Service Area**
- **A3.2 Housatonic/Hudson Service Area**
- **A3.3 Southwest Coast Service Area**
- **A3.4 South Central Coast Service Area**
- **A3.5 Southeast Coast / Pawcatuck Service Area**
- **A3.6 Connecticut River Service Area**

A4 U.S. Army Corps of Engineers Permit Locations (1986-2011)

A5 Locations of Key Habitats for Birds and Other Wildlife in CT

IN WITNESS WHEREOF, the undersigned have caused this amendment to be duly executed.

National Audubon Society, Inc.:

By _____ Date:
Ingrid Milne
Chief Financial Officer

Audubon Connecticut, Inc:

By_____ Date:
Michael Burger
Executive Director

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

_____ Date:
Tammy R. Turley
Chief, Regulatory Division