



**US Army Corps
of Engineers** ®
New England District

696 Virginia Road
Concord, MA 01742-2751

PUBLIC NOTICE

Date: February 8, 2011
Comment Period Ends: March 9, 2011
File Number: NAE-2010-2215
In Reply Refer To: Ruth M. Ladd
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The District Engineer of the New England District, Corps of Engineers ("Corps") has received a prospectus dated January 27, 2011 for an In-Lieu Fee ("ILF") Program covering the State of Connecticut. The Corps is soliciting comments on the prospectus.

SPONSOR: Audubon Connecticut, 613 Rivesville Road, Greenwich, CT 06831

If the prospectus is deemed sufficient, the ILF program will be established through the development of an ILF instrument to be signed by the sponsor, the Corps, and other agencies which choose to do so. The process will follow 33 CFR 332, Compensatory Mitigation for Losses of Aquatic Resources ("Mitigation Rule"). The Mitigation Rule was published in the Federal Register on April 10, 2008.

The ILF program would provide an alternative to permittee-responsible mitigation if it is deemed appropriate during the review process for proposed unavoidable impacts authorized under Section 404 of the Clean Water Act ("Section 404") and Section 10 of the Rivers and Harbors Act of 1899 ("Section 10"). It would also provide an alternative compensation type for U.S. Army Corps of Engineers Civil Works projects needing compensation for impacts to aquatic resources as well as providing a resource for use in resolving enforcement cases under Section 404 and Section 10. The entire prospectus, entitled "**Prospectus, Connecticut In Lieu Fee Program,**" is attached to this Public Notice.

The decision whether to authorize the sponsor to proceed to the next step of developing a draft ILF instrument will be based on the District Engineer's ("DE") determination of the potential of the proposed ILF program to provide compensatory mitigation for activities authorized by Department of the Army permits. The DE has determined that this prospectus is complete in that it includes the following:

- The objectives of the proposed ILF program;
- How the ILF program will be established and operated;
- The proposed service areas;
- The general need for and technical feasibility of an ILF program;
- The proposed ownership arrangements and long-term management strategies for the ILF project sites;
- The qualifications of the sponsor related to its ability to successfully complete the types of mitigation projects that will be proposed;
- A compensation planning framework; and
- A description of the ILF program account.

The Corps of Engineers is soliciting comments from the public: federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed

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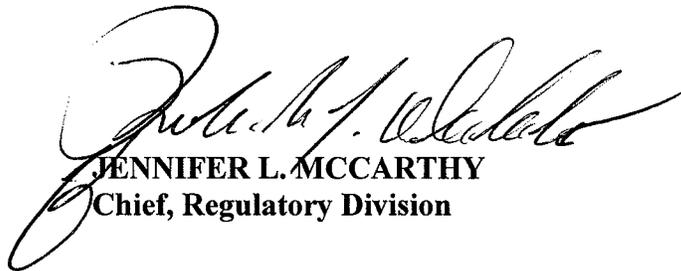
activity. Any comments received will be considered by the Corps of Engineers to determine whether to allow the sponsor to proceed to develop a draft ILF instrument. Comments are also used to determine the need for a public hearing.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by March 9, 2011.** If you have any questions, please contact Ruth M. Ladd at (978) 318-8818 or (800) 343-4789.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of comment letters will be forwarded to the sponsor and the Interagency Review Team consisting of representatives of the Corps, Environmental Protection Agency, US Fish and Wildlife Service, National Marine Fisheries Service, Natural Resources Conservation Service, and Connecticut Department of Environmental Protection.

For more information on the New England District Corps of Engineers programs, visit our website at <http://www.nae.usace.army.mil>.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK NOR DOES THE IN-LIEU FEE PROGRAM, IF APPROVED, PREJUDGE FUTURE DEVELOPMENT PROJECTS WITHIN THE SERVICE AREA.



JENNIFER L. MCCARTHY
Chief, Regulatory Division

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____



PROSPECTUS

**CONNECTICUT IN LIEU FEE
PROGRAM**

SPONSOR: AUDUBON CONNECTICUT

JANUARY 27, 2011

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1. INTRODUCTION/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 regulated waters of the United States requires a permit or permits from the United States Army Corps of Engineers (the “Corps”). The Corps requires that aquatic resource functions and services lost due to the effects of any regulated activity be replaced through compensatory mitigation, after addressing avoidance and minimization of impacts. The following prospectus outlines a proposed Connecticut In Lieu Fee (“ILF”) Program, which provides compensatory mitigation options to permit applicants under the Corps’ permit program, and provides an option for resolution of enforcement cases.

Most permittee-responsible compensatory wetland 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. 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 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, and effective monitoring and management plans.

Federal regulations recognize that ILF programs may be an environmentally preferable option over permittee-responsible mitigation based on several factors. ILF projects target larger, more ecologically valuable parcels that are prioritized within the 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, 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 (33CFR Part 332).

In Connecticut, it is estimated that there are 450,000 acres of inland wetlands and 17,500 acres of tidal wetlands (State of Connecticut Council on Environmental Quality 2010 (“CEQ”, hereafter)). The amount of inland wetlands disturbed in the state by regulated activities since 1990 exceeds 3,600 acres. The amount disturbed in 2008 and 2009 was 103 acres and 118 acres respectively. The amount of tidal wetland disturbed by permitted development was approximately 1 acre in 2008 and 2009 (CEQ). It is the goal of the State of Connecticut to produce net increases in tidal wetlands acreage and function each year, and twelve acres of tidal wetlands were restored in 2008 and five in 2009 (CEQ). This ILF program is consistent with, and will help achieve, the net wetland acreage and functional increase goal of the state.

2. ILF PROGRAM DEVELOPMENT PLAN

2.1 Goals and Objectives

The goals and objectives for the Connecticut ILF Program are:

- a) Provide an alternative to permittee-responsible compensatory mitigation that will effectively replace wetland functions and services lost through permitted impacts.
- b) Provide a compensatory mitigation option for Corps Civil Works projects and function as an option for resolution of enforcement cases.
- c) Minimize the loss of wetland functions and services by gaining approval of mitigation sites in advance of mitigation needs as funding allows.
- d) Create a program that has a level of accountability commensurate with mitigation banks as described in 33 CFR Part 332.
- e) Provide projects that meet current and expected demand for credits.
- f) Achieve ecological success on a watershed basis by identifying wetland types and functions that are appropriate to the service area and by integrating ILF projects with other conservation activities whenever possible.

2.2 Qualifications of Sponsor

The mission of National Audubon Society Inc. (“NAS”, hereafter), a 501c3 tax-exempt charitable organization incorporated pursuant to the rules and regulations of the Internal Revenue Service, is: **to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity.** For more than a century, Audubon has built a legacy of conservation success by mobilizing the strength of its network of members, Chapters, Audubon Centers, state offices and dedicated professional staff to connect people with nature and promote its protection. A powerful combination of science, education and policy expertise combine in efforts ranging from protection and restoration of local habitats to the implementation of policies that safeguard birds, other wildlife and the resources that sustain us all—in the United States and across the Americas.

Successes of NAS include:

- Protection of the Arctic National Wildlife Refuge and other fragile habitats;
- The ongoing recovery of the imperiled California condor and brown pelican; Adoption of innovative policies that balance habitat protection with green energy development on millions of acres;
- Continuing restoration of landscape-scale habitats including the Everglades and Long Island Sound.

How we do it:

- Nearly 500 local Chapters nationwide engage members in grassroots conservation action;
- Audubon environmental policy, education and science experts guide lawmakers, agencies, and our grassroots in shaping effective conservation plans, actions and the policies to support them;
- More than 2,500 Audubon-designated Important Bird Areas identify, prioritize and protect vital bird habitat from coast to coast—in partnership with BirdLife International, our IBA conservation efforts support species and their habitats across the Western Hemisphere;
- “Citizen Scientists” collect vital data, through Audubon’s annual Christmas Bird Count, the new Coastal Bird Survey, and other initiatives, generating groundbreaking analyses and guiding scientists and policy makers in addressing the needs of birds and other wildlife;
- Special ecosystem-wide conservation initiatives focus on protection and restoration of the nation’s most special places from Alaska’s Tongass to Sagebrush country and the Louisiana Coast;
- Audubon Centers and sanctuaries are hubs of conservation exploration, research, and action, allowing millions to discover and defend the natural world;
- Educational programs and materials combine with Audubon, the nation’s most acclaimed conservation magazine to introduce schoolchildren, families and nature-lovers of all ages to the wonders of nature and the power of conservation at home and around the world.

Audubon Connecticut (“AC” hereafter) is the operating unit of National Audubon Society, Inc. that oversees all NAS programs, properties and activities in Connecticut. AC manages:

- More than 4,500 acres of protected conservation land and sanctuaries in Connecticut, including substantial tracts of tidal and inland wetlands;
- Three Audubon Centers (Greenwich, Southbury and Sharon) that serve more than 42,000 visitors annually, including more than 10,000 students who participate in Audubon-led educational programming;
- The Important Bird Area program, where a network of more than 27,000 acres of key habitat in Connecticut for birds and other wildlife has been identified and protected; and
- An open space conservation project in conjunction with our conservation partners, which in 2009 raised \$25 million in funding to protect more than 1,000 acres, including 624 acres at the tidal headwaters of the East River in Guilford and a 450 acre grassland in Suffield as part of the Connecticut Grasslands Habitat Initiative.

Audubon Connecticut is comprised of more than thirty full-time staff, including the following senior management positions (see Appendix for Curriculum Vitae of project leaders) that would contribute leadership and expertise to the proposed Connecticut ILF program:

- Executive Director (M.S. Environmental Science)
- Director of Bird Conservation (B.S. Biology)
- Deputy Director of Development (Ph.D. Conservation Biology)
- Director of Governmental Affairs (M.S. Psychology)
- Director of Audubon Center at Bent of the River (M.S. Landscape Architecture)

AC provides high-quality management of land and natural resources, including but not limited to:

1. Wetland restoration, enhancement design, and construction
2. Habitat identification and evaluation
3. Habitat management
4. Conservation planning
5. Wetland assessment
6. Watershed planning
7. Bio-assay
8. Long-term monitoring and management
9. Contingency and adaptive management
10. Long-term protection
11. Conservation easements
12. Accounting and financial assurances

The AC project leaders have extensive experience in wetland science, conservation, restoration and regulation. The AC Executive Director, for example, has had direct regulatory control of more than 1,500 development sites involving tidal and inland wetlands since 1978. He also led numerous successful restoration projects, including the establishment of tidal flow at a twenty acre coastal pond, creation of a ten acre tidal marsh, and construction of a fish-way connecting a ninety-acre freshwater impoundment to tidal waters to allow passage of certain anadromous fish species (alewife, blue-backed herring) and American eel. In the case of the twenty-acre coastal pond (Eagle Pond at Greenwich Point Park in Greenwich, Connecticut), he led the project from the initial bio-assay that established the extent of severe hypoxia and related habitat degradation; preliminary and final engineering; regulatory approvals; fundraising; contractor selection and supervision; and post-construction monitoring. See Appendix for representative list of additional projects.

AC has regular contact and excellent relations with State and Federal agencies and non-governmental organizations including The Nature Conservancy, Trust For Public Land, numerous local land trusts and municipalities, which provide Audubon a large catalog of potential partners in habitat restoration and acquisition projects to fulfill mitigation requirements of the ILF program.

The AC portfolio of successful land conservation projects easily exceeds \$40,000,000 since 2004. Examples include: assisting establishment of, and additions to, the Silvio O. Conte Fish and Wildlife Refuge to preserve thousands of acres of habitat in the Connecticut River Watershed; and leading the protection of the 600-acre Goss Property in Guilford (a key coastal open space and habitat), the 50 acre Guilford Sluice Property (a tidal wetland), key addition of 144 acres of upland and tidal wetland to the Barn Island Wildlife Management Area in Stonington and the 42 acre Griswold Airport property in Madison (a key coastal open space with upland and tidal wetland habitat adjacent to the largest coastal wetland system remaining in Connecticut).

2.3 Establishment and Operation

NAS intends to establish itself as a qualified ILF sponsor for Corps authorizations, civil works projects and enforcement actions in Connecticut. NAS will work with the Corps as appropriate to assure the Corps' requirement for resource compensation are met. An Interagency Review Team ("IRT" hereafter) will advise the Corps on the establishment and management of the ILF Program. The IRT will be comprised of representatives invited by the Corps from other federal, state, tribal and municipal resource agencies that would have a substantial interest in the establishment and management of the ILF program sponsored by NAS. The Corps may designate different representatives of the agencies mentioned and may invite additional members to serve on the IRT for individual mitigation projects.

The structure of the ILF Program will be outlined in a statewide instrument that includes a compensation planning framework detailing program elements, such as service area determination, watershed conditions, priorities and needs, project selection criteria, credit/debit accounting and reporting requirements. The instrument will serve as the document that will guide and direct the mitigation project process in Connecticut. Each mitigation project will have a separate mitigation plan authored by Audubon Connecticut or its authorized contractor and then reviewed and approved by the Corps, and included as an amendment to the ILF instrument. Mitigation plans will be developed and implemented in accordance with 33 CFR 332 and the relevant rules and regulations of the New England District Corps. Mitigation plans will include, at a minimum, the following elements:

1. Project objectives
2. Site selection factors
3. Site protection instrument
4. Baseline information
5. Determination of credits, if any
6. Work plan

7. Maintenance plan
8. Performance standards
9. Monitoring requirements and protocol
10. Long-term management plan
11. Adaptive management plan
12. Long-term funding mechanism

Wetlands delineations and functional assessments will be completed using Corps-approved protocols and techniques before and after project implementation to help guide mitigation plan development and evaluate success. NAS will remain responsible for the implementation of mitigation plans under the ILF program. NAS will act as program manager and report to the Corps on the work conducted programmatically (see Section 2.4 Reporting).

2.4 Compensation Planning Framework

Proposed Service Area and Prioritization Strategy

The NAS ILF Program will develop mitigation plans for potential projects throughout Connecticut to provide appropriate compensatory mitigation for impacts to the waters of the United States and waters of the State of Connecticut, including wetlands and streams. A watershed approach will be implemented to mitigate for aquatic resource loss caused by or related to the conduct of regulated activities located in the same major river basin as the impacts also occur in. The approach will consider watershed needs and how location and type of mitigation projects address those needs. A landscape perspective within watersheds will be used to identify types and locations of ILF projects. The nature of permitted impacts along with watershed priorities and landscape positions will guide project selection and design to achieve compensation, maximize benefits to the subject watershed and improve project success and sustainability.

An appropriate service area will be established as part of each individual mitigation plan. In general, NAS proposes the seven major river drainage basins (CT Department of Environmental Protection (DEP, hereafter), 1982) to function as service areas for the Connecticut ILF program. Those seven major river drainage basins are congruent with the DEP's basin planning efforts and other conservation strategies in Connecticut (see Figure 1; numbers in parentheses after each basin refer to the sub-watersheds in the figure). The seven major river drainage basins are:

1. Southwest Coast Major Basin (70-74)
2. Housatonic Major Basin (60-60)
3. South Central Coast Major River Basin (50-53)

4. Connecticut Major Basin (40-48)
5. Thames Major Basin (30-39)
6. Southeast Coast Major Basin (20-22)
7. Pawcatuck Major Basin (10-11)

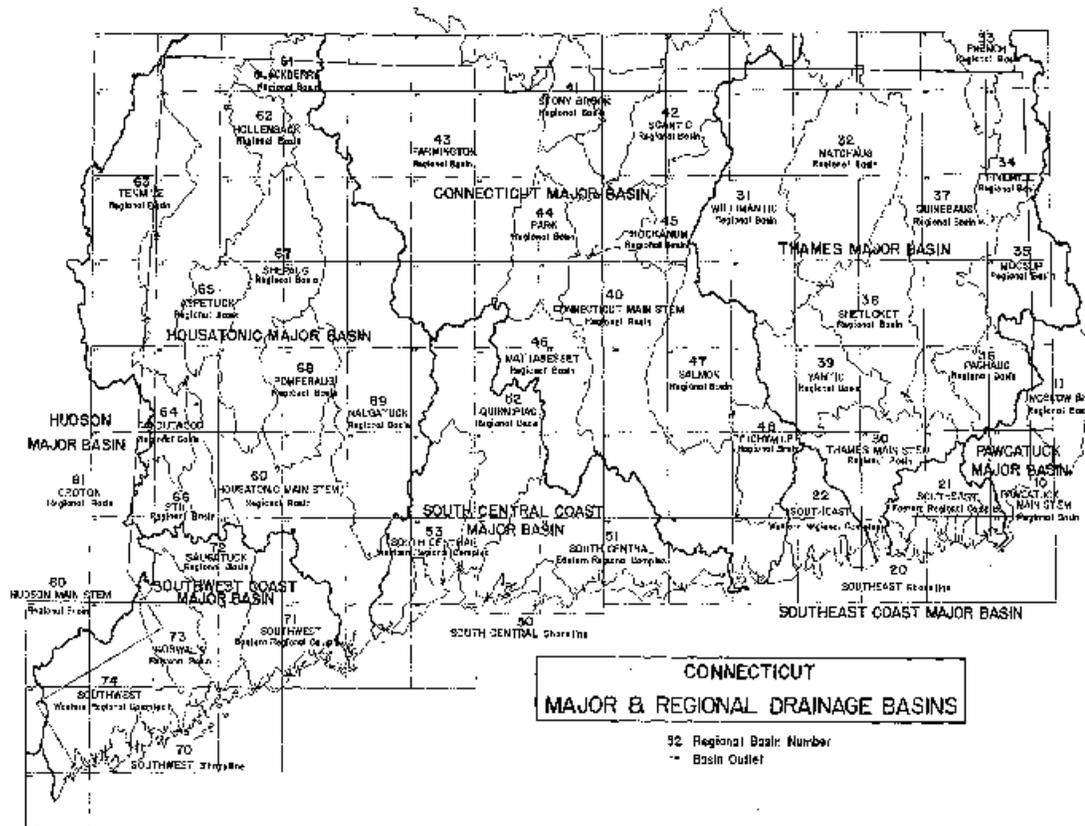
The following factors will be used to determine where in each service area an ILF project is sited and designed:

1. Past mitigation needs in the watershed based on historical permitted/authorized impacts;
2. Future need for mitigation in the watershed based on projected growth and development trends;
3. Habitat and aquatic resource conservation need and opportunity, focusing on inland and tidal wetlands, watercourses and their upland buffers;
4. Lack of private mitigation banks suitable to meet the demand for the mitigation need in the service area; and
5. Stakeholder input

Demand for mitigation credits will be determined using Corps permit trends and Connecticut population and economic growth information.

One or more specific mitigation projects in the highest ranked watershed of each service area will be identified and a plan developed to address watershed priorities. The service area may be adjusted appropriate to each individual mitigation plan. NAS will utilize existing statewide and regional documentation for historic and current watershed information. NAS will work closely with other groups, such as the DEP, United States Department of Agriculture, and Regional Planning Agencies, currently engaged in habitat resource assessment and planning.

Figure One



Description of Threats to Aquatic Resources In Connecticut

A description of threats to aquatic resources in Connecticut is located on the website of the Connecticut DEP (<http://www.ct.gov/dep/cwp>). According to the DEP, the quality and quantity of the State’s waters is a reflection of human use and, in some cases, misuse of water resources. 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. Damming of rivers to produce electricity or extraction of surface or groundwater water for human use can alter natural streamflow 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.

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 amount disturbed in 2008 and 2009 was 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.

Aquatic Resource Goals and Objectives

The aquatic resource goal of this program are to enhance the quality, increase the quantity of tidal and inland wetlands, and protect them and their buffers in the State of Connecticut. These goals will be achieved by:

1. Producing a net annual increase in tidal and inland aquatic resources through restoration of degraded areas and/or those converted to upland at some point in the past.
2. Increasing the amount of protected inland and tidal wetlands, and their upland buffers, through acquisition or application of protective easements.

Project Selection Criteria

Each ILF program mitigation project will be evaluated for its potential to provide appropriate compensatory mitigation for impacts to habitat and aquatic resources in accordance with the compensation planning framework established in the ILF instrument, based on the following criteria:

1. Likelihood of success: Funded projects must predict a high likelihood of success through a sound wetland/watercourse/habitat restoration and/or enhancement design. This includes documented presence of hydrology, soils, flora, fauna and other conditions conducive to habitat and aquatic resource development. Threats from invasive species or vandalism should be low or otherwise manageable. The project will be evaluated for its ability to result in successful and sustainable net gain of habitat and aquatic resource area and/or function.
2. Multiple objectives: Projects will be evaluated based on their ability to address multiple functions and services which may include improvement of fish and wildlife habitat, support for threatened, endangered or special concern species, flood attenuation, water quality improvement, and recreational and education values. Projects that can utilize native plant community diversity and natural processes will yield greater functional gains and will be given preference.
3. Supports regional conservation initiatives and is compatible with the surrounding landscape: Projects should be located where they compliment

adjacent land uses, meet regional conservation priorities, address limiting factors in watersheds, increase habitat diversity, support state wildlife action plans, reduce habitat fragmentation, establish corridors for wetlands and wildlife, and enhance the function of existing natural areas.

4. Project costs: Projects with high habitat and aquatic resource functional gain per dollar will be given preference. ILF program funds can be used in conjunction with other financial or organizational resources so long as ILF projects are not used as non-federal match for federal grants or programs.

Public and Private Stakeholder Involvement

As ILF program sponsor, NAS will optimize compensatory mitigation efforts under the ILF program by working closely with interested agencies, other organizations including conservation and community groups, etc., and private entities. Information will be shared via the public notice process for the prospectus. In addition, NAS 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 ILF instrument following IRT review and Corps approval. Methods for assessing habitat and aquatic resource functions pre- and post-project implementation will be coordinated with ongoing efforts by NAS, the DEP and other entities in Connecticut. This will allow the ILF program to dovetail with ongoing inventory and monitoring efforts.

Monitoring and Contingency

NAS or its authorized contractor will monitor completed ILF projects. A standard mitigation monitoring protocol will be used to provide consistency in methods and measurements among sites allowing for additional evaluation of the ILF program as a whole. The frequency and duration of monitoring and specific monitoring requirements will be defined in each individual mitigation plan. 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.

Long-term Protection and Management

NAS shall be responsible for developing and implementing a long-term protection and management plan for each ILF project. On publicly-owned land, long-term protection and management may be provided through facility management plans or integrated natural resource plans. On privately-owned land, including land

held by NAS or other conservation organizations, real estate instruments shall be recorded to guarantee protection. NAS will ensure that protection mechanisms are in place prior to release of credits. Draft conservation easements or equivalent protection mechanisms will be submitted to the IRT for review and then to the Corps for approval.

ILF projects will be designed, to the maximum extent practicable, to require little or no long-term management efforts once performance standards have been achieved. NAS shall be responsible for maintaining ILF projects consistent with the mitigation plan to ensure long-term viability as functional habitat and aquatic resources. NAS shall retain responsibility unless and until the long-term management responsibility is formally transferred to a long-term manager as approved by the Corps. The long-term management plan developed for each ILF project will include a description of anticipated management needs with annual cost estimates and an identified funding mechanism (such as non-wasting endowments, trusts, contractual arrangements with future responsible parties, or other appropriate financial instruments.)

The final conservation easement or equivalent mechanism for long-term protection and management shall be submitted to the IRT for review and then to the Corps for approval prior to the final release of mitigation project credits. Upon achieving its performance standards and approved transfer of the project for long-term protection and management, NAS will request that the Corps issue a written "closure certification."

Reporting Structure

The ILF program will submit an annual report to the Corps District Engineer and IRT that includes a statewide account and service area account of all income, disbursements and interest earned by the ILF program account and the balance of funds. The annual report will also contain the following items for each individual mitigation project that has not been approved for closure:

1. A ledger report that includes the Corps, DEP or other agency permit number, name, date issued, and town(s); the amount of authorized impacts; the amount of required compensatory mitigation; amount paid to the ILF program; and the date the funds were received from the permittee.
2. An accounting of expenditures for the ILF project.
3. The balance of advance credits and released credits at the end of the report period for each service area and resource type, and any changes in credit availability (including additional credits advanced or released.)
4. The annual monitoring report (if the monitoring period has not ended), which should include a description of any remedial action items implemented during the period; an evaluation of mitigation projects that are not meeting performance standards; and an updated adaptive management strategy if required.

3. CREDITING AND DEBITING PROCEDURE

3.1 Generation of Credits

Advance credits will be generated in each service area upon signature of the ILF program instrument. In the initial phase of the program development, mitigation projects and plans will be established from these advanced credit sales. The number of advanced credits allowed will be determined based on the projected financing necessary to begin planning and implementing ILF projects. NAS may only generate credits from an ILF project when there is a new benefit to habitat and aquatic resources at the subject site as determined by the difference between pre- and post-site conditions. Credit generation may be based on standard mitigation ratios for restoration, enhancement and protection as approved by the Corps.

3.2 Credit Release and Sales

Credit Release

Upon the signature of the ILF program instrument, 30% of credits will be advanced to each service area to generate revenues to allow for identification of project sites and to begin developing specific mitigation plans for implementation. How many actual credits are advanced to equal the 30% will be based on projected impacts based on past five years of impacts data for each service area. Each mitigation plan will include a credit release schedule referenced to performance standards. In general, credits will become available according to the following schedule:

1. 30% of credits in each service area will be advanced to each service area upon signature of the ILF program instrument.
2. 20% of credits will be released upon approval of a mitigation plan.
3. 30% of credits will be released upon approval of the as-built report and/or incrementally based on achievement of performance standards, as set forth in each approved mitigation plan.
4. The remaining credits (20%) will be released upon approval of the Corps of a long-term protection and management plan, or contract if with a third party, including a funding mechanism.

The actual number of credits available at any given point during the development of an ILF project will be determined through site monitoring, reports, and IRT site inspections. More or fewer credits may be available than what was originally defined in the mitigation plan based on monitoring and delineation of site conditions. Additional credits may be generated as a result of increased wetland functions and services that accrue over time. Additional credits are contingent on

achievement of the performance standards over time and are released at the discretion of the Corps.

Cost of Credits

The cost of each credit will be determined annually by NAS based on expected costs of restoration, establishment, enhancement and/or preservation of aquatic and habitat resources, plus a 20% administrative fee. Costs will be based on full costs accounting and include all appropriate expenses. This value will be reviewed and adjusted by NAS each year if necessary due to increases in land and operational costs. Proposed fees will be reviewed and approved by the IRT.

Sale of Credits

All activities regulated under Section 404 of the CWA, Section 10 of the Rivers and Harbors Act, Section 22a of the Connecticut General Statutes Inland Wetland Regulations, Corps Civil Works projects, enforcement resolution, and other activities as the Corps may authorize consistent with this ILF program may be eligible to use the ILF program as compensatory mitigation for unavoidable impacts.

The District Engineer will make decisions about the most appropriate compensatory mitigation on a case-by-case basis during evaluation of a permit application or during evaluation of a Civil Works project. Authority for approving use of the ILF program for compensatory mitigation lies with the District Engineer. The DEP may also use the ILF program to offset state-regulated impacts. Responsibility to provide compensatory mitigation remains with the permittee unless and until credits are purchased from the ILF program. Upon Corps approval of purchase of credits, the permittee may contact NAS to secure the necessary amount and resource type of credits, as outlined in the permit conditions. Each Section 404 or DEP authorization that includes special conditions requiring purchase of credits from the ILF program will include a requirement that NAS certify the transfer of responsibility via written communication to the permittee and the Corps. Certifications will outline the Corps or DEP permit number, file name, location, and state the number and resource type of credits that have been sold to the permittee. A copy of each certificate will be retained in the administrative and accounting records for the ILF program instrument. Credits and debits will be reflected in annual accounting reports.

NAS is responsible for fulfilling mitigation requirements for authorized activities that utilize the ILF program. This responsibility will remain with NAS for individual authorizations until the project from which the credits were purchased is closed or transferred to an approved entity.

3.3 ILF Program Account

Upon Corps approval of the ILF program, NAS will create an ILF Program Account (“PA”, hereafter). The PA will be an interest-bearing account maintained separately from NAS’s general operating budget. The PA will collect deposits from the sale of credits and will be used only for the selection, design, acquisition, implementation, monitoring, management and protection of ILF projects, and administrative costs of NAS. Administrative costs of 20% of each credit value are permitted for NAS to manage the ILF program,. 30% of each credit value will be held as financial assurance for long-term management, contingency and remedial actions and will be released upon Corps determination of project success and completion.

All interest and earnings from the PA will remain in that account for the purpose of providing compensatory mitigation as described in Section 3.2. Complete budgets for ILF projects will be approved as part of mitigation plans. Annual accounting reports will be presented for approval by the Corps. Reports will include detailed summaries of PA deposits and disbursements for each ILF project made over the previous year. The Corps may review PA records with written notice and when so requested. NAS shall provide all books, accounts, reports, files and other records relating to the PA upon the request of the Corps.

Funds received into the PA will be assigned to the appropriate service area and must be allocated for project protection and implementation within three years of receipt. If, within three years, a service area does not have a suitable site that can be implemented with the accrued funds, the time frame may be extended by the District Engineer or funds may be allocated to an alternate service area for implementation.

4. LITERATURE CITED

Department of Defense and Environmental Protection Agency. 2008. Compensatory mitigation for losses of aquatic resources; final rule. Federal Register. Doc. E8-6918 Filed 4-9-2008.

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5. APPENDIX

5.1 Curriculum Vitae of Key Personnel

THOMAS R. BAPTIST is Executive Director of Audubon Connecticut. He received a M.S. degree in Environmental Science from the University of New Haven in 1998 and a B.S. degree in Biology in 1978 from the University of Connecticut. Tom began his career with National Audubon Society in 1997 and is responsible for managing 4,500 acres of sanctuary land and overseeing educational and conservation programming that serve more than 42,000 people each year. Prior to working for Audubon, he was Conservation Director for the Town of Greenwich, Connecticut, from 1978-1997. Tom served on the Greenwich Inland Wetlands and Watercourses Agency from 1997 to 2009 and chaired the Agency from 2002 to 2009. Tom has extensive experience in wetland science, conservation, restoration and regulation, and has had direct regulatory control of more than 1,500 development sites in Connecticut since 1978. He also led numerous successful restoration projects, including the establishment of tidal flow at a twenty acre coastal pond, creation of a ten acre tidal marsh, and construction of a fish-way connecting a ninety acre freshwater impoundment to tidal waters. Other activities include Founding Member and past President of the Connecticut Ornithological Association, and a Founding Member of the Land Conservation Coalition of Connecticut. He co-founded the Mianus River Watershed Council and served on its board from 1986 to 1997, formed to protect the drinking water supply for 130,000 Connecticut and New York residents. Tom received National Audubon Society's Charles Callison Award in 2006 for his leadership in advancing Audubon's mission. He received from the Garden Club of America its Conservation Award in 1996, one of ten presented nationally that year, for environmental leadership. He was named the Connecticut Conservation Administrator of the Year in 1993 for conservation and legislative achievements. Tom co-authored *Connecticut Birds*, published in 1990 by University Press of New England, Hanover, New Hampshire, a comprehensive description of the status and distribution of all avian species occurring in Connecticut—the first compilation on the subject since 1913.

ALEXANDRA BRESLIN is Audubon Connecticut Director of Governmental Affairs and holds both an M.S. and a B.A. from Yale University, the latter magna cum laude with Distinction in the Major is responsible for legislative activities in Hartford and Washington D.C. that affect birds, other wildlife and their habitats. She brings more than 20 years of experience in politics, conservation, and community organizing to projects that range from strengthening the Connecticut Inland Wetlands Act, creating a State Wildlife Conservation License Plate, establishing a State Invasive Plants Council, and protecting open space, watershed, and farmland, to establishing the federal Long Island Sound Stewardship Act to better protect coastal areas and securing support for specific state and local coastal conservation projects through the federal Coastal and Estuarine Land Conservation Program, Land and Water Conservation Fund and

American Recovery and Reinvestment Act. Prior to Audubon, Ms. Breslin directed outreach at Connecticut Fund for the Environment on successful campaigns to protect 18,000 acres of endangered watershed lands, address threats to Long Island Sound habitats from energy transmission lines, and improve Connecticut Environmental Policy Act review of state-funded projects. Ms. Breslin resides in Bethany, Connecticut where she has served on the Inland Wetlands Commission since 1994, currently as Vice Chair, regulating local projects affecting wetlands and watercourses. She also serves as her town's representative to the South Central Connecticut Regional Water Authority's Representative Policy Board and as a member of the Land Use Committee helping to oversee management of the Authority's 26,000 acres of watershed land.

PATRICK M. COMINS is Audubon Connecticut Director of Bird Conservation. He has a B.S. degree in biology from Trinity College and has worked in the bird conservation arena for the last 15 years. Patrick began his career with the Connecticut Audubon Society doing bird surveys on the coast at the McKinney NWR and then worked for the US Fish and Wildlife Service as a biological technician at the Refuge. He has been with Audubon Connecticut as the Director of Bird Conservation for Connecticut since 2000, overseeing Connecticut's Important Bird Areas and other bird conservation program. He is the principal author of Protecting Connecticut's Grassland Heritage and currently President of the Connecticut Ornithological Association and was the 2007 recipient of their Mabel Osgood Wright Award for outstanding lifetime contributions to ornithology in Connecticut. He has written several articles on bird conservation and identification for the Connecticut Warbler and is a founding member of the Connecticut Forestlands Council and current chair of the Connecticut Forest Ecosystem Health Committee, as well as Chairman of the Executive Committee of the Friends of the Silvio O. Conte National Fish and Wildlife Refuge. He has worked with the Conte Refuge and other partners to preserve thousands of acres of habitat in the Connecticut River Watershed and played a key role in the protection of the former Goss Property in Guilford, the Guilford Sluice Property, key additions to the Barn Island Wildlife Management Area in Stonington and the former Griswold Airport property in Madison, a portfolio of land conservation projects that easily exceeds \$40,000,000 since 2004. In addition to his land protection experience, he consults with the USFWS habitat restoration project for the barrier beach at Long Beach West in Stratford, as well led the restoration of the Cove Island Park Wildlife Sanctuary in Stamford and early successional habitat management activities at Northwest Park in Windsor.

MICHELLE FRANKEL is Audubon CT Deputy Director of Development and Conservation Biologist. She has a Ph.D. in Behavioral Ecology and a M.S. degree in Biology from Boston University, and a B.A. in Biology *summa cum laude* from Yeshiva University. She also received a post doctorate fellowship at Tel Aviv University. Michelle worked for the Wetlands Institute in Stone Harbor New Jersey and published her research on predator-prey relationships in southern New Jersey salt marsh habitats, focusing on the predatory pressure by herons and

egrets on fish abundance and distribution. Michelle has extensive experience in analyzing avian responses to wide range of landscape and habitat variables, including anthropogenic impacts and micro-habitat variables. As principal investigator and researcher, she applied research results to make management recommendations to municipal level regulatory agencies, a federal parks commission, and private landowners. She is proficient at GIS and other geo-spatial analysis tools to examine species-specific requirements and anthropogenic impacts on wildlife. She has experience coordinating citizen science and large-scale studies of wildlife populations. She received a Together Green Conservation Leaders Fellowship and grant funds and training to better engage and develop diverse audiences in direct conservation action, focusing on improving urban habitats to benefit people and wildlife.

LESLIE MACLISE-KANE is Director of the Audubon Center at Bent of the River in Southbury, Connecticut, where she is responsible for the management of a 700 acre sanctuary and education facility. She has a M.S. degree in landscape architecture from the University of Massachusetts, a B.A. degree in anthropology and a B.A. degree in geography from Mount Holyoke College. She is a certified AICP planner and is a licensed tree warden. From 2000 to 2008, she was Environmental Planner, Inland Wetlands Administrator, Tree Warden and GIS Administrator for the Town of Guilford, Connecticut. In this capacity, she gained extensive experience in the regulation, protection and restoration of inland and tidal wetlands. She supervised all wetland regulatory programs of the municipality, including oversight of a \$5 million bond for land acquisition, and numerous inland and tidal wetland restoration projects. She has had direct regulatory control of more than 1,000 development sites in Connecticut since 2000. From 1997 to 2000, she was Tidelands Watershed Coordinator and Director of Connecticut River Projects for the University of Connecticut Cooperative Extension System. She is presently Chair of the Connecticut Urban Forest Council, and is a member of the Connecticut Tree Wardens Board of Directors.

5.2 Representative List of Sponsor's Conservation/Restoration Projects

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.

Eagle Pond, Greenwich Point Park, Greenwich, Connecticut, 1992. Supervised the bio-assay, engineering design, contractor selection, permit acquisition, construction work and post-construction monitoring to restore tidal flushing of a sequestered 16-acre coastal pond by installing four 48-inch culverts with tidal valves.

Steep-pass Fishway, Mianus Pond and Mianus River, Greenwich, Connecticut, 1993. Successfully re-established anadromous fish access to a ninety-acre coastal pond and three-mile stretch of riverine habitat. Supervised engineering design, permit acquisition, installation and post-construction monitoring.

Greenwich Point Marsh, Greenwich, Connecticut, 1977. Assisted the successful establishment of a five-acre *spartina alterniflora* wetland in a disturbed tidal flat.