

Subject: RE: Threatened & Endangered Species Request - AUTOMATIC HYDRO PROJECT
From: "Timpano, Steve" <Steve.Timpano@maine.gov>
Date: Mon, 7 Feb 2011 10:58:40 -0500
To: "Stephen Hickey" <sjh@essexhydro.com>

Stephen;

Maine Department of Inland Fisheries and Wildlife Consultation Review:

Review Request: Stephen Hickey, Essex Power Services, Inc.

Applicant: Kennebec Water District

Location: Messalonskee Stream, Waterville

Project: Low Impact Hydropower Institute (LIHI) Certification for the Automatic Hydroelectric Project

Date: February 7, 2011

I have reviewed our records for the project location and proposed development. Results are as follows:

Habitat Consultation Request Response: Location - Automatic Hydroelectric Project, Messalonskee Stream, Waterville;

Our database contains no records of occurrence of any State-listed Endangered or Threatened species or their habitats (as defined under the Maine Endangered Species Act) within the indicated project boundaries. A record of occurrence for Yellow Lampmussel (State-listed "Threatened" status) is noted well downstream from the Automatic Project near the confluence of Messalonskee Stream with the Kennebec River. One Bald Eagle nest site (State "Delisted Species" status, 12 MRSA Sec. 12810, effective 2009) is located within the project boundary approximately 1.4 miles upstream from the Automatic Project dam. Project operations according to terms and conditions of the FERC license are not anticipated to have an adverse effect upon Bald Eagles associated with the project area.

This response is based upon review of currently available, known-resource database records only. No specific survey at the project location was conducted for this review.

Steven A. Timpano

Steven A. Timpano
Environmental Coordinator
Maine Department of Inland Fisheries & Wildlife
41 SHS, 284 State Street
Augusta, ME 04333

Tel. (207) 287-5258
Fax (207) 287-6395
e-mail: Steve.Timpano@maine.gov

-----Original Message-----

From: Stephen Hickey [mailto:sjh@essexhydro.com]

Sent: Friday, February 04, 2011 3:40 PM

To: Timpano, Steve

Subject: Threatened & Endangered Species Request - AUTOMATIC HYDRO PROJECT

Steve

Essex Power Services, Inc has been hired by the Kennebec water District to submit their Automatic hydroelectric plant for certification by the Low Impact Hydropower Institute (LIHI) as a low impact facility. As a condition of its certification process LIHI requires a complete list of all threatened and endangered species in the project area. Please find attached a detailed map of the Automatic hydroelectric plant project area. Your assistance would be

appreciated with providing a list of any threatened or endangered species in the project area.

For your information, the Automatic Project is located on the Messalonskee Stream in the town of Waterville, Maine.

Thank you and please contact me with any questions.

Stephen Hickey
on behalf of the Kennebec Water District c/o Essex Power Services, Inc.
55 Union Street, 4th Floor
Boston, MA 02108
tel: 617-3657-0032
fax: 617-367-3796



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Maine Field Office – Ecological Services
17 Godfrey Drive, Suite #2
Orono, ME 04473
(207) 866-3344 Fax: (207) 866-3351

FWS/Region 5/ES/MEFO

February 10, 2011

Stephen Hickey
Essex Hydro Associates LLC
55 Union St.
Fourth Floor
Boston, MA 02108

Dear Mr. Hickey:

Thank you for your February 9, 2011, request for information from the U.S. Fish and Wildlife Service (Service). This letter provides the Service's response pursuant to Section 7 of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250), and the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667d).

Project Name/Location: Waterville - Low Impact Hydro Inst. review

Log Number: 53411-2010-SL-0113

Federally Listed Species

Atlantic Salmon

This project occurs within the range of the Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon (*Salmo salar*) in Maine, a federally-endangered species under the joint jurisdiction of the Service and the National Marine Fisheries Service (NMFS) (74 FR 29344; June 19, 2009). The Atlantic salmon GOM DPS encompasses all naturally spawned and conservation hatchery populations of anadromous Atlantic salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River and wherever these fish occur in the estuarine and marine environment. Also included in the GOM DPS are all associated conservation hatchery populations used to supplement these natural populations. Excluded are landlocked Atlantic salmon and those salmon raised in commercial hatcheries for aquaculture.

The proposed project site, however, does **not** occur in a watershed that has been designated as critical habitat for Atlantic salmon by NMFS (74 FR 29300; June 19, 2009).

For Atlantic salmon and its critical habitat, NMFS and the Service share consultation responsibilities under Section 7 of the ESA. The Service generally handles projects in the

freshwater component of the salmon's habitat and NMFS handles projects in the marine and estuarine environment (generally below the head of tide).

Based on the information currently available to us, no other federally-listed species under the jurisdiction of the Service are known to occur in the project area.

Please note that under Section 7 of the ESA, it is the federal action agency's responsibility to determine if a project may affect a federally listed species. For example, if the project receives federal funding or needs a federal permit, those actions may provide a "nexus" for Section 7 consultation under the ESA¹. If the federal action agency determines that a project would have "no effect" on a listed species or critical habitat, they do not need to seek the concurrence of the Service and there is no need for Section 7 consultation. If the federal agency determines that a project "may affect" a listed species or its critical habitat, then consultation pursuant to Section 7 of the ESA should be initiated. Please note, however, that there is no provision under Section 7 for consultation after a project has already been completed.

Other Protected Species

The bald eagle was removed from the federal threatened list on August 9, 2007 and is now protected from take under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. "Take" means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. The term "disturb" under the Bald and Golden Eagle Protection Act was recently defined within a final rule published in the Federal Register on June 5, 2007 (72 FR 31332). "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle; 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

Further information on bald eagle delisting and their protection can be found at <http://www.fws.gov/migratorybirds/baldeagle.htm>.

Please consult with our new national bald eagle guidelines, which can found at <http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>. These Guidelines are voluntary and were prepared to help landowners, land managers and others meet the intent of the Eagle Act and avoid disturbing bald eagles. If you believe this project will result in taking or disturbing bald or golden eagles, please contact our office for further guidance. We encourage early and frequent consultations to avoid take of eagles.

We have not reviewed this project for state-threatened and endangered wildlife, wildlife species of special concern, and significant wildlife habitats protected under the Maine Natural Resources Protection Act. We recommend that you contact the Maine Department of Inland Fisheries and Wildlife:

¹ Section 7 consultation, however, is only necessary when a federal agency takes a *discretionary* action (e.g., an agency has a choice of whether or not to fund or permit a particular project).

Steve Timpano
Maine Department of Inland Fisheries and Wildlife
284 State St.
State House Station 41
Augusta, ME 04333-0041
Phone: 207 287-5258

We also recommend that you contact the Maine Natural Areas Program for additional information on state-threatened and endangered plant species, plant species of special concern, and rare natural communities:

Lisa St. Hilaire
Maine Natural Areas Program
Department of Conservation
93 State House Station
Augusta, ME 04333
Phone: 207 287-8046

If you have any questions please call Mark McCollough, endangered species biologist, at (207) 866-3344 x115.

Sincerely,



Laury Zicari, Field Supervisor
Maine Field Office

Enclosure

Waterville - Low Impact Hydro Inst. review

Legend

ATS Critical_Habitat_by_HUC10

ATS GOM_DPS

Eagle nests 12-2009

Eagle nests w/ buffers 12-2009

buffer distance

660'

1,320'

RTE points-2006

RTE polys-2006

MDIFW Heritage 2008-05

State legal status(SPROT)

Endangered

Threatened

Special Concern

Other

AmericanEel

use_type

Current

Current Assumed

Historic

Historic Assumed

Uncertain

SeaLamprey

use_type

Current

Current Assumed

Historic

Historic Assumed

Uncertain

AtlanticSalmon

use_type

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Current Assumed

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AtlanticSalmon

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AmericanEel

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Current Assumed

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Historic Assumed

Uncertain

AtlanticSalmon

use_type

Current

Current Assumed

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Historic Assumed

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AmericanEel

use_type

Current

Elise Anderson

From: Elise Anderson
Sent: Monday, July 25, 2016 1:19 PM
To: 'Steven_Shepard@fws.gov'
Subject: Threatened and Endangered Species Request
Attachments: Appendix 4-4 Waterville_USGS Topographic map.pdf; Appendix 4-2 Aerial View - Project Map.pdf; Appendix 7-2 T&E USFWS Comment Letter.pdf

Dear Mr. Shepard,

Essex Power Services has been hired by the Kennebec Water District to submit an application to the Low Impact Hydropower Institute (LIHI) for the re-certification of its Automatic Hydroelectric Project as a low impact facility. This project was certified in 2010 by LIHI as low impact. We are particularly interested if there have been any changes since USFWS provided T&E information in 2011 (attached).

As a requirement of the application, the applicant is required to provide a list of all federally listed threatened and endangered species that occur in the vicinity of the project.

Please find attached a USGS Topographic Quadrangle Map (the Waterville, ME Quadrangle) as well as a detailed overhead map of the project providing the exact location of the project within the city of Waterville, Maine.

As your earliest convenience please send a listing of all federally listed threatened and endangered species that occur within the project area. Alternatively, if there have been no changes since the 2011 request for this information, please let us know and we can inform LIHI of your agency's determination of no change.

Thank you--

Elise Anderson
Environmental and Regulatory Analyst
Essex Hydro
55 Union Street, 4th Floor
Boston, MA 02108
Tel: (617) 367-0032
Fax: (617) 367-3796

Elise Anderson

From: Elise Anderson
Sent: Monday, July 25, 2016 1:26 PM
To: 'lisa.st.hilaire@maine.gov'
Subject: Threatened and Endangered Species Request
Attachments: Appendix 4-4 Waterville_USGS Topographic map.pdf; Appendix 4-2 Aerial View - Project Map.pdf

Dear Ms. St. Hilaire:

Essex Power Services has been hired by the Kennebec Water District to submit an application to the Low Impact Hydropower Institute (LIHI) for the re-certification of its Automatic Hydroelectric Project as a low impact facility. This project was certified in 2010 by LIHI as low impact.

As a requirement of the application, the applicant is required to provide a list of all **state-listed threatened and endangered plant species, plant species of special concern, and rare natural communities** that occur in the vicinity of the project.

Please find attached a USGS Topographic Quadrangle Map (the Waterville, ME Quadrangle) as well as a detailed overhead map of the project providing the exact location of the project within the city of Waterville, Maine.

As your earliest convenience please send a listing of all state-listed threatened and endangered plant species, plant species of special concern, and rare natural communities that occur within the project area.

Thank you and please contact me with any questions.

Elise Anderson
Environmental and Regulatory Analyst
Essex Hydro
55 Union Street, 4th Floor
Boston, MA 02108
Tel: (617) 367-0032
Fax: (617) 367-3796

Elise Anderson

From: Elise Anderson
Sent: Monday, July 25, 2016 1:36 PM
To: 'Perry, John'
Subject: Threatened and Endangered Species Request
Attachments: Appendix 4-4 Waterville_USGS Topographic map.pdf; Appendix 4-2 Aerial View - Project Map.pdf

Dear Mr. Perry:

Essex Power Services has been hired by the Kennebec Water District to submit an application to the Low Impact Hydropower Institute (LIHI) for the re-certification of its Automatic Hydroelectric Project as a low impact facility. This project was certified in 2010 by LIHI as low impact.

As a requirement of the application, the applicant is required to provide a list of all **state-listed threatened and endangered species of concern** that occur in the vicinity of the project.

Please find attached a USGS Topographic Quadrangle Map (the Waterville, ME Quadrangle) as well as a detailed overhead map of the project providing the exact location of the project within the city of Waterville, Maine.

As your earliest convenience please send a listing of all state-listed threatened and endangered species of concern that occur in the vicinity of the project.

Thank you and please contact me with any questions.

Elise Anderson
Environmental and Regulatory Analyst
Essex Hydro
55 Union Street, 4th Floor
Boston, MA 02108
Tel: (617) 367-0032
Fax: (617) 367-3796



PAUL R. LePAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
93 STATE HOUSE STATION
AUGUSTA, MAINE 04333

WALTER E. WHITCOMB
COMMISSIONER

July 28, 2016

Elise Anderson
Essex Hydro
55 Union Street, 4th Floor
Boston, MA 02108

Via email: eanderson@essexhydro.com

Re: Rare and exemplary botanical features in proximity to: Project-Kennebec Water District Automatic Hydroelectric Project, Waterville, Maine

Dear Ms. Anderson:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received July 25, 2016 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Waterville, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM



PHONE: (207) 287-8044
FAX: (207) 287-8040
WWW.MAINE.GOV/DACF/MNAP

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Don Cameron | Ecologist | Maine Natural Areas Program
207-287-8041 | don.s.cameron@maine.gov

Rare and Exemplary Botanical Features within 4 miles of Project: Kennebec Water District Automatic Hydroelectric Project, Waterville, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Alpine Rush						
	SC	S3	G5T5?	1898-09	5	Non-tidal rivershore (non-forested, seasonally wet)
	SC	S3	G5T5?	1916-07-06	6	Non-tidal rivershore (non-forested, seasonally wet)
American Lopseed						
	PE	SH	G5	1916-08	4	Non-tidal rivershore (non-forested, seasonally wet),Hardwood to mixed forest (forest, upland)
Awned Flatsedge						
	SC	S2	G5	1898-09-02	5	Non-tidal rivershore (non-forested, seasonally wet)
	SC	S2	G5	1898-09-02	2	Non-tidal rivershore (non-forested, seasonally wet)
Bottlebrush Grass						
	SC	S3	G5	1905-08-05	11	Hardwood to mixed forest (forest, upland)
	SC	S3	G5	1916-08-18	12	Hardwood to mixed forest (forest, upland)
Broad Beech Fern						
	SC	S2	G5	1915-08-13	11	Hardwood to mixed forest (forest, upland)
	SC	S2	G5	1953-08-21	2	Hardwood to mixed forest (forest, upland)
Clinton's Bulrush						
	SC	S3	G4	1917-07-21	13	Open wetland, not coastal nor rivershore (non-forested, wetland), Non-tidal rivershore (non-forested, seasonally wet)
Foxtail Sedge						
	PE	SH	G5	1916-07-06	2	Forested wetland
Garber's Sedge						
	SC	S2	G5	2012-05-30	1	Open wetland, not coastal nor rivershore (non-forested, wetland), Non-tidal rivershore (non-forested, seasonally wet)
	SC	S2	G5	1984-06-22	2	Open wetland, not coastal nor rivershore (non-forested, wetland), Non-tidal rivershore (non-forested, seasonally wet)

Rare and Exemplary Botanical Features within 4 miles of Project: Kennebec Water District Automatic Hydroelectric Project, Waterville, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Hairy Wood Brome-grass						
	SC	S2	G5	1915-08-10	6	Hardwood to mixed forest (forest, upland),Non-tidal rivershore (non-forested, seasonally wet)
Horned Beak-rush						
	T	S1	G4	1993-07-20	1	Open wetland, not coastal nor rivershore (non-forested, wetland), Non-tidal rivershore (non-forested, seasonally wet)
Houghton's Flatsedge						
	PE	SH	G4?	1905-07-22	1	Dry barrens (partly forested, upland),Non-tidal rivershore (non-forested, seasonally wet)
Long-leaved Bluet						
	SC	S2S3	G4G5TNR	1984-06-22	2	Non-tidal rivershore (non-forested, seasonally wet)
	SC	S2S3	G4G5TNR	1987-06-17	18	Non-tidal rivershore (non-forested, seasonally wet)
Narrow-leaf Arrowhead						
	SC	S2	G4G5	2003-09-11	7	<null>
Pale Green Orchis						
	SC	S2	G4T4Q	1892-07-15	9	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
	SC	S2	G4T4Q	1916-07-06	21	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
Rivershore Outcrop						
	<null>	S2	G3	1984-06-22	2	Non-tidal rivershore (non-forested, seasonally wet)
	<null>	S2	G3	1987-06-17	3	Non-tidal rivershore (non-forested, seasonally wet)
Shining Ladies'-tresses						
	T	S1	G5	1993-07-20	1	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
	T	S1	G5	1909-07-01	18	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not coastal nor rivershore (non-forested, wetland)
	T	S1	G5	1984-06-22	2	Non-tidal rivershore (non-forested, seasonally wet),Open wetland, not

Rare and Exemplary Botanical Features within 4 miles of Project: Kennebec Water District Automatic Hydroelectric Project, Waterville, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Showy Orchis	T	S1	G5	1941	14	coastal nor rivershore (non-forested, wetland) Non-tidal rivershore (non-forested, seasonally wet), Open wetland, not coastal nor rivershore (non-forested, wetland)
	E	S1	G5	1896-06-05	11	Hardwood to mixed forest (forest, upland)
Soft-leaf Muhly	E	S1	G5	1915-08-12	13	Hardwood to mixed forest (forest, upland)
	E	S1	G5	1941	16	Hardwood to mixed forest (forest, upland)
White Adder's-mouth	E	S1	G5	1915-08-12	12	Hardwood to mixed forest (forest, upland)
	SC	S3	G5	1993-07-20	1	Open wetland, not coastal nor rivershore (non-forested, wetland), Non-tidal rivershore (non-forested, seasonally wet)
Wild Chervil	E	S1	G5	1916-07-06	16	Forested wetland
	PE	SH	G5	1936-07	4	Hardwood to mixed forest (forest, upland)
Wild Garlic	PE	SH	G5	1916-08-18	3	Hardwood to mixed forest (forest, upland)
	SC	S2	G5	1983-07-14	4	Forested wetland, Hardwood to mixed forest (forest, upland)

STATE RARITY RANKS

- S1** Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2** Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3** Rare in Maine (20-100 occurrences).
- S4** Apparently secure in Maine.
- S5** Demonstrably secure in Maine.
- SU** Under consideration for assigning rarity status; more information needed on threats or distribution.
- SNR** Not yet ranked.
- SNA** Rank not applicable.
- S#?** Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

Note: **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

- G1** Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- G2** Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- G3** Globally rare (20-100 occurrences).
- G4** Apparently secure globally.
- G5** Demonstrably secure globally.
- GNR** Not yet ranked.

Note: **Global Ranks** are determined by NatureServe.

STATE LEGAL STATUS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

- E** ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
- T** THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

NON-LEGAL STATUS

- SC** SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
- PE** Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!
<http://www.maine.gov/dacf/mnap>

Elise Anderson

From: Elise Anderson
Sent: Monday, July 25, 2016 3:58 PM
To: 'Shay_white@fws.gov'
Cc: 'Shepard, Steven'
Subject: RE: Threatened and Endangered Species Request
Attachments: Species Summary Table.docx

Here is the species summary table as well.

From: Elise Anderson [<mailto:eanderson@essexhydro.com>]
Sent: Monday, July 25, 2016 3:57 PM
To: 'Shay_white@fws.gov'
Cc: 'Shepard, Steven'
Subject: RE: Threatened and Endangered Species Request

Thanks.

I just completed the steps of the self-certification process. I wasn't sure how to finalize step 5, since I am a "consultant with a project having federal agency involvement" (the project is licensed by the FERC). However, the reason for the request has to do with a voluntary certification program, not a federal action.

Shay, can you help by letting me know if the attached information is acceptable to receive a determination?

Thanks again for your help.

Elise Anderson

From: Shepard, Steven [mailto:steven_shepard@fws.gov]
Sent: Monday, July 25, 2016 2:39 PM
To: Elise Anderson
Subject: Re: Threatened and Endangered Species Request

Elise

We have a self-certification process for developing lists of endangered species found in a project area. The process is started at the following page of our website:

https://www.fws.gov/mainefieldoffice/Endangered_and_Threatened_Species.html

I leave for vacation tomorrow, but our office may be of help if you have any problems.

Steve

~~~~~  
Steven Shepard, C.F.P.  
U.S. Fish and Wildlife Service  
P.O. Box A  
306 Hatchery Road

East Orland, Maine 04431  
Phone: 207-469-7300, Ext. 1116  
Cell: 207-949-1288  
[steven\\_shepard@fws.gov](mailto:steven_shepard@fws.gov)

~ ~ ~ ~ ~  
*Science progresses slowly—Anon.*

On Mon, Jul 25, 2016 at 1:18 PM, Elise Anderson <[eanderson@essexhydro.com](mailto:eanderson@essexhydro.com)> wrote:

Dear Mr. Shepard,

Essex Power Services has been hired by the Kennebec Water District to submit an application to the Low Impact Hydropower Institute (LIHI) for the re-certification of its Automatic Hydroelectric Project as a low impact facility. This project was certified in 2010 by LIHI as low impact. We are particularly interested if there have been any changes since USFWS provided T&E information in 2011 (attached).

As a requirement of the application, the applicant is required to provide a list of all federally listed threatened and endangered species that occur in the vicinity of the project.

Please find attached a USGW Topographic Quadrangle Map (the Waterville, ME Quadrangle) as well as a detailed overhead map of the project providing the exact location of the project within the city of Waterville, Maine.

As your earliest convenience please send a listing of all federally listed threatened and endangered species that occur within the project area. Alternatively, if there have been no changes since the 2011 request for this information, please let us know and we can inform LIHI of your agency's determination of no change.

Thank you--

Elise Anderson

*Environmental and Regulatory Analyst*

Essex Hydro

55 Union Street, 4<sup>th</sup> Floor

Boston, MA 02108



Tel: (617) 367-0032

Fax: (617) 367-3796

## Species Summary Table

Your name: Elise Anderson

Project name used in IPaC: Automatic Hydroelectric Project

Date: 7/25/2016

| Step 2<br>Listed or candidate<br>species that are likely<br>present according to<br>the Official Species<br>List from IPaC? | Step 2<br>Is your<br>action area<br>in critical<br>habitat<br>(only for<br>Canada lynx<br>or Atlantic<br>salmon)?<br><br>Yes or No | Step 3A<br>Is suitable habitat<br>for listed or<br>candidate species<br>present in your<br>action area?<br><br>"suitable habitat<br>present"<br>"suitable habitat<br>not present"<br>"Don't know" | Step 3B<br>Does the species<br>occur in your action<br>area?<br><br>"Species present"<br>"Species not<br>present"<br>"Don't know" | Step 4<br>Is your project likely<br>to take or disturb<br>eagles and require<br>an Eagle Act permit?<br><br>"Will not disturb"<br>"May disturb"<br>"Don't know" | Step 5<br>Determinations<br>for the<br>Endangered<br>Species Act –<br><b>only Federal<br/>agencies<br/>complete this<br/>column</b><br><br>"No effect"<br>"May effect" | Notes and Documentation<br>(provide additional information<br>if needed)     |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Atlantic Salmon<br>(Salmo salar)                                                                                            | No                                                                                                                                 | Suitable habitat<br>not present                                                                                                                                                                   | Species not present                                                                                                               | Will not disturb                                                                                                                                                |                                                                                                                                                                        |                                                                              |
| Northern Long-eared<br>bat (Myotis<br>septentrionalis)                                                                      | No                                                                                                                                 | Don't know                                                                                                                                                                                        | Species not present                                                                                                               | Will not disturb                                                                                                                                                |                                                                                                                                                                        |                                                                              |
| Bald eagle                                                                                                                  | No                                                                                                                                 | Suitable habitat<br>present                                                                                                                                                                       | Species not present                                                                                                               | unlikely to disturb<br>nesting bald eagles                                                                                                                      |                                                                                                                                                                        | Bald Eagle Nest ID: 555C is over<br>2,200 feet from project dam<br>structure |
|                                                                                                                             |                                                                                                                                    |                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                 |                                                                                                                                                                        |                                                                              |
|                                                                                                                             |                                                                                                                                    |                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                 |                                                                                                                                                                        |                                                                              |

Notes:

# Automatic Hydroelectric Project

## *IPaC Trust Resources Report*

Generated July 25, 2016 01:13 PM MDT, IPaC v3.0.8

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



# Table of Contents

|                                   |          |
|-----------------------------------|----------|
| IPaC Trust Resources Report ..... | <u>1</u> |
| Project Description .....         | <u>1</u> |
| Endangered Species .....          | <u>2</u> |
| Migratory Birds .....             | <u>3</u> |
| Refuges & Hatcheries .....        | <u>5</u> |
| Wetlands .....                    | <u>6</u> |



U.S. Fish & Wildlife Service

## IPaC Trust Resources Report



NAME

Automatic Hydroelectric Project

LOCATION

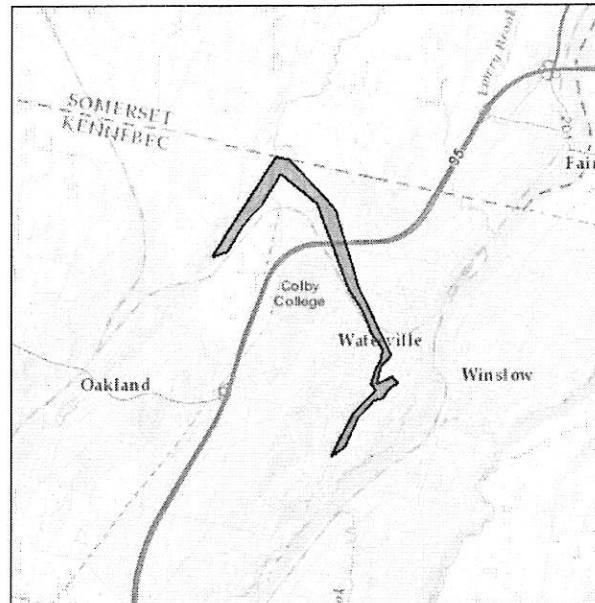
Kennebec County, Maine

DESCRIPTION

Automatic Hydro Facility, existing on  
Messalonskee Stream

IPAC LINK

[https://ecos.fws.gov/ipac/project/  
7KOS2-EKDSF-CGJFW-4HIKY-W4NUGM](https://ecos.fws.gov/ipac/project/7KOS2-EKDSF-CGJFW-4HIKY-W4NUGM)



## U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

**Maine Ecological Services Field Office**

P. O. Box A

East Orland, ME 04431

(207) 469-7300

## Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the Endangered Species Program of the U.S. Fish & Wildlife Service.

**This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.**

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

**A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.**

The list of species below are those that may occur or could potentially be affected by activities in this location:

### Fishes

#### **Atlantic Salmon** *Salmo salar*

Endangered

##### CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=E07L](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E07L)

### Mammals

#### **Northern Long-eared Bat** *Myotis septentrionalis*

Threatened

##### CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=A0JE](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0JE)

### Critical Habitats

**There are no critical habitats in this location**

## Migratory Birds

Birds are protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.<sup>[1]</sup> There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

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1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern  
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data  
<http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The following species of migratory birds could potentially be affected by activities in this location:

|                                                                                                                                                                                         |                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <b>American Bittern</b> <i>Botaurus lentiginosus</i>                                                                                                                                    | Bird of conservation concern |
| Season: Breeding<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F3</a>   |                              |
| <b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i>                                                                                                                                       | Bird of conservation concern |
| Season: Year-round<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008</a> |                              |
| <b>Bay-breasted Warbler</b> <i>Dendroica castanea</i>                                                                                                                                   | Bird of conservation concern |
| Season: Breeding                                                                                                                                                                        |                              |
| <b>Black-billed Cuckoo</b> <i>Coccyzus erythrophthalmus</i>                                                                                                                             | Bird of conservation concern |
| Season: Breeding<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0H1">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0H1</a>   |                              |
| <b>Canada Warbler</b> <i>Wilsonia canadensis</i>                                                                                                                                        | Bird of conservation concern |
| Season: Breeding                                                                                                                                                                        |                              |

|                                                                                                                                                                                                                                                |                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i><br>Season: Breeding<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN</a> | Bird of conservation concern |
| <b>Peregrine Falcon</b> <i>Falco peregrinus</i><br>Season: Breeding<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU</a>       | Bird of conservation concern |
| <b>Pied-billed Grebe</b> <i>Podilymbus podiceps</i><br>Season: Breeding                                                                                                                                                                        | Bird of conservation concern |
| <b>Short-eared Owl</b> <i>Asio flammeus</i><br>Season: Wintering<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD</a>          | Bird of conservation concern |
| <b>Willow Flycatcher</b> <i>Empidonax traillii</i><br>Season: Breeding<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6</a>    | Bird of conservation concern |
| <b>Wood Thrush</b> <i>Hylocichla mustelina</i><br>Season: Breeding                                                                                                                                                                             | Bird of conservation concern |
| <b>Yellow Rail</b> <i>Coturnicops noveboracensis</i><br>Season: Breeding<br><a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JG">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JG</a>  | Bird of conservation concern |



## Wildlife refuges and fish hatcheries

**There are no refuges or fish hatcheries in this location**

## Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

### DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

This location overlaps all or part of the following wetlands:

## Freshwater Emergent Wetland

**PEM1C**

**PEM1Ch**

**PEM1E**

**PEM1F**

## Freshwater Forested/shrub Wetland

**PFO1/4E**

**PFO1A**

**PFO1C**

**PFO1E**

**PSS1/EM1B**

**PSS1/EM1Ch**

**PSS1/EM1E**

**PSS1E**

**PSS1Eh**

## Freshwater Pond

**PUB/F05Fh**

**PUBHh**

## Riverine

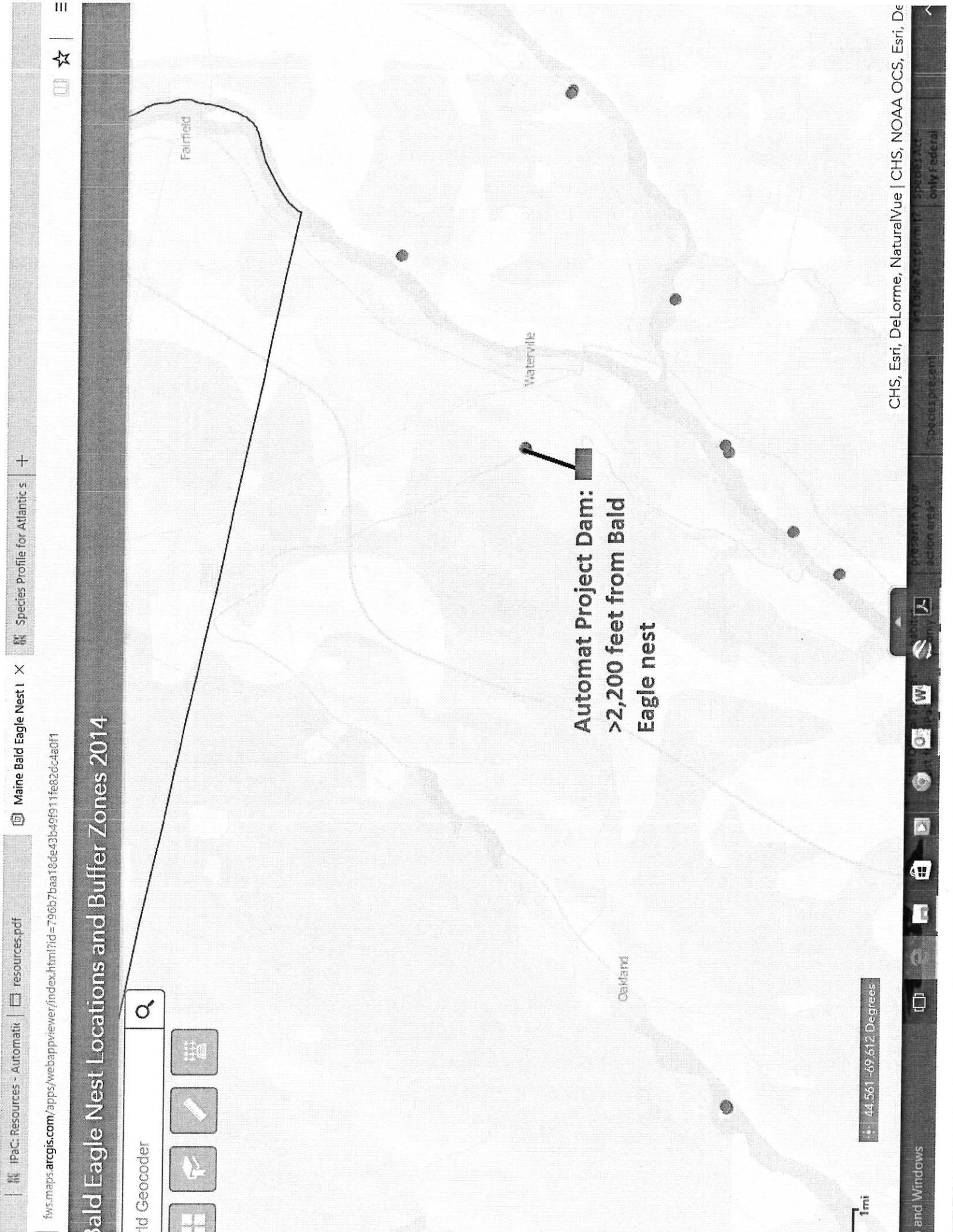
**R2UBH**

**R4SBC**

**R4SBCx**

**R5UBH**

A full description for each wetland code can be found at the National Wetlands Inventory website: <http://107.20.228.18/decoders/wetlands.aspx>



# Bald Eagle Nest Locations and Buffer Zones 2014

World Geocoder

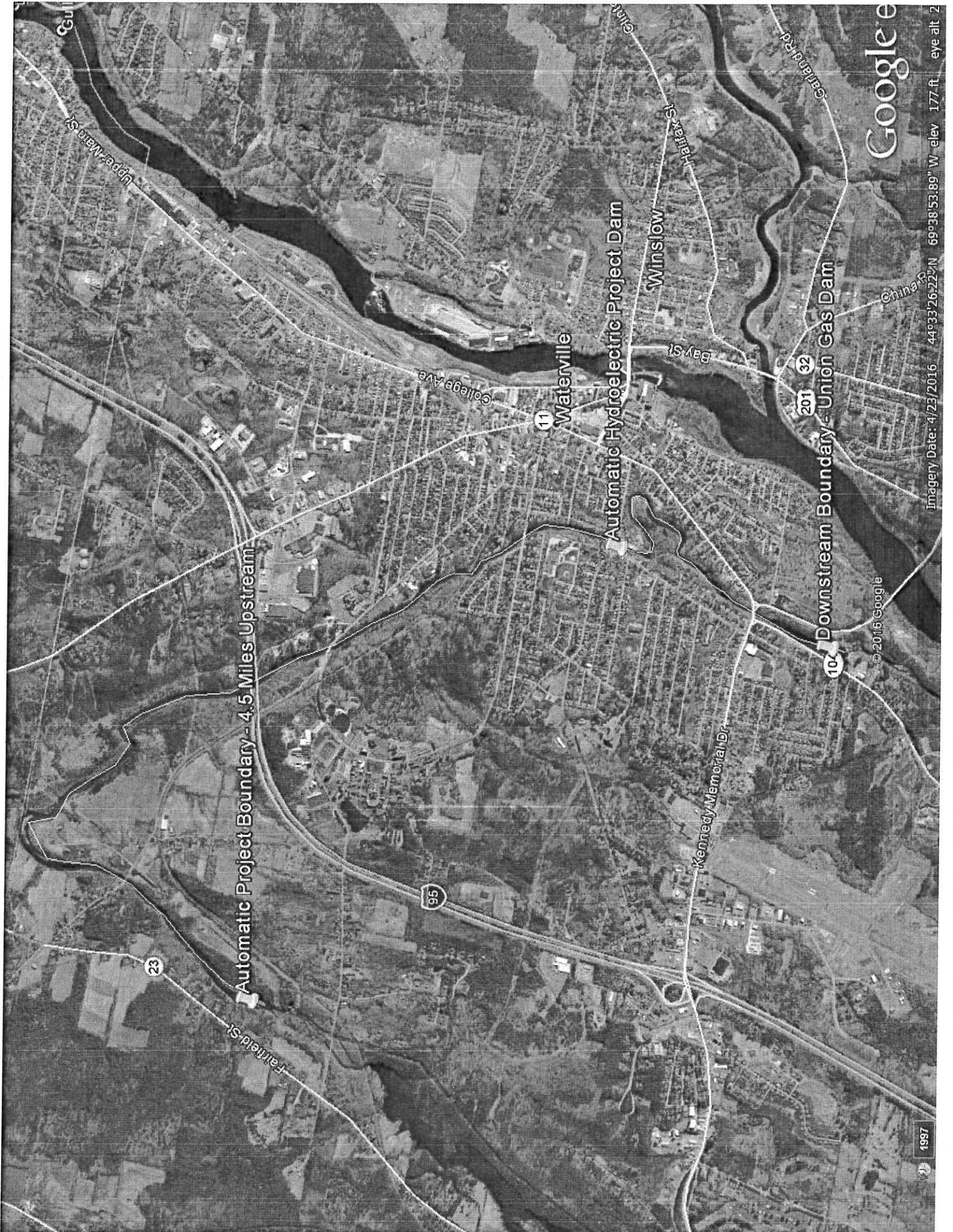


44.561 -69.612 Degrees

1mi

Automat Project Dam:  
>2,200 feet from Bald  
Eagle nest





Google

Imagery Date: 4/23/2016 44°33'26.22"N 69°38'53.89"W elev 177 ft eye alt 2

1997