



**REVIEW OF APPLICATION FOR LIHI CERTIFICATION  
OF THE  
FREEDOM FALLS HYDROELECTRIC PROJECT**

**FERC Project No. 14421, exempt  
Sandy Stream - Freedom, Maine**



*Photo source reference: Freedom Falls Low Impact Hydropower Institute Certification Application*

**January 13, 2021  
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## **FINAL REVIEW OF APPLICATION FOR LIHI CERTIFICATION OF THE FREEDOM FALLS HYDROELECTRIC PROJECT**

This report provides final review findings and recommendations related to the certification application submitted to the Low Impact Hydropower Institute (LIHI) by Freedom Falls LLC (Applicant) for certification of the Freedom Falls Hydroelectric Project (Project). The final certification application was filed on November 3, 2020 and is subject to review under the current 2<sup>nd</sup> edition LIHI Handbook (Revision 2.04, April 1, 2020).

### **I. INTRODUCTION**

The Freedom Falls Hydroelectric Project (Project) is located on the Sandy Stream. The Project is located in the Town of Freedom, Waldo County, Maine. The Town of Freedom is a small rural town in Central/Mid-Coast Maine approximately 16 miles west of Belfast, 20 miles east of Waterville, and 30 miles northeast of Augusta.

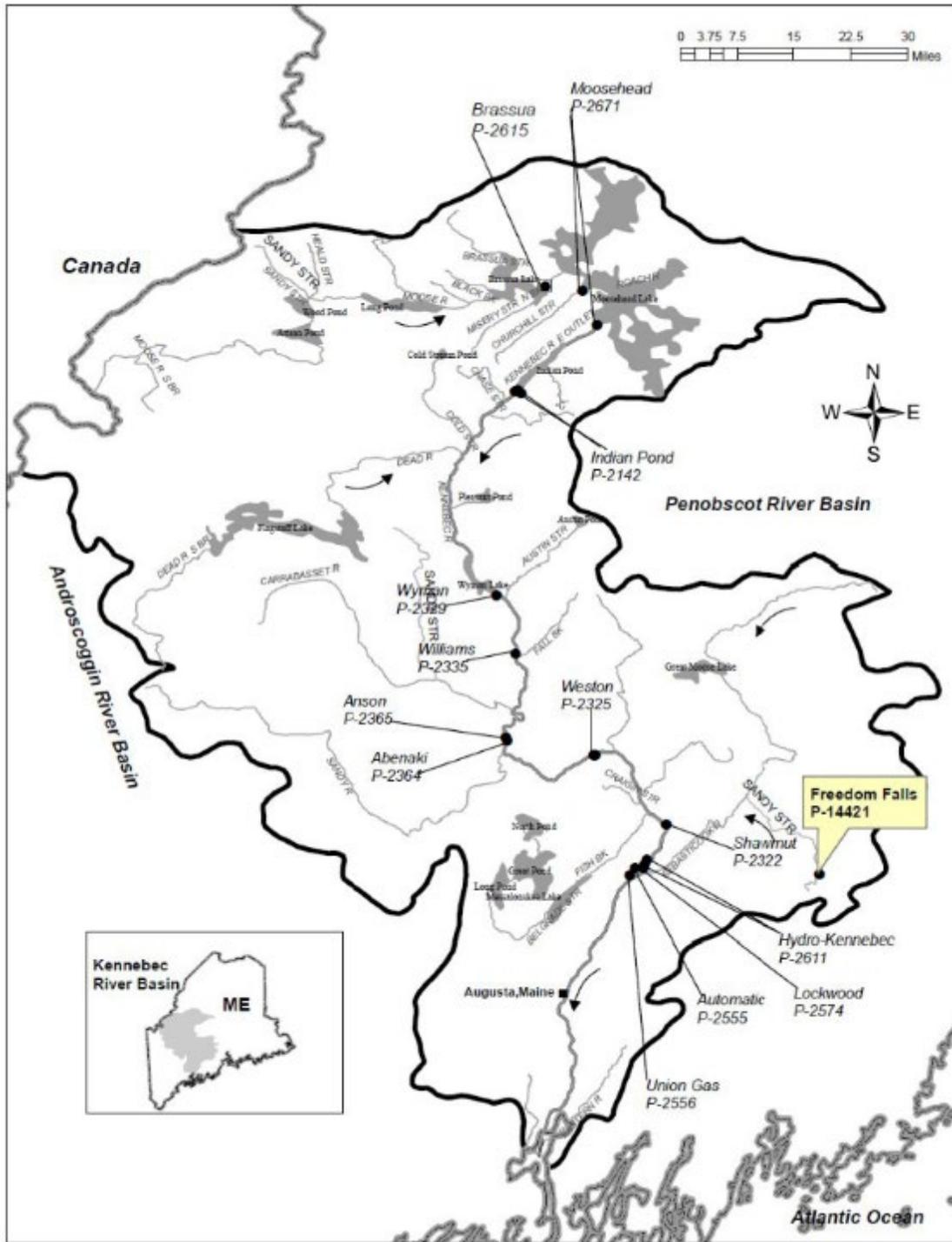
The original dam structure dates back to 1834 when a gristmill was constructed on the Sandy Stream. The overall property operated as a gristmill from 1834 to c. 1894 and then as a woodturning mill from c. 1894 to c. 1967. From 1967 to 2012, the Mill at Freedom Falls was abandoned. In 2012, the Mill at Freedom Falls was purchased by the current owner. Rehabilitation of the Mill at Freedom Falls was completed in 2013, which included the addition of hydropower generation.

### **II. PROJECT LOCATION AND SITE CHARACTERISTICS**

The Project is located in the Town of Freedom, Waldo County, Maine on Sandy Stream. Sandy Stream flows north to Unity Pond and then into Twenty-Five Mile Stream which flows northwest to its confluence with the Sebasticook River.

The Project is a 0.35 MW run-of-river project and consists of a 12-foot tall and 90-foot long stone masonry concrete-capped structure. There are no flashboards. The dam impounds a 1.6-acre mill pond at the downstream end of Sandy Pond at water surface elevation of 453 feet NGVD. The watershed area is approximately 7.8 acres.

There are two dams upstream of the Project. Sandy Pond #2 is a breached dam owned by Freedom Falls LLC (but not part of the FERC project) and Sandy Pond #3 which is located approximately ¼-river miles upstream is owned by the Town of Freedom (Figure 2). There are no dams downstream of the Project before the Sandy Stream's confluence with the Sebasticook River. The upstream Sandy Pond #2 dam creates a 14-acre pond and the Sandy Pond #3 dam creates a 435-acre pond used for recreational fishing and boating.



**Figure 1. Freedom Falls Project Location and Watershed** (source reference: Freedom Falls Low Impact Hydropower Institute Certification Application)



**Figure 2. Sandy Pond Dams** (source reference: *Freedom Falls Low Impact Hydropower Institute Certification Application*)



**Figure 3. Freedom Falls Dam** (source reference: *Freedom Falls Low Impact Hydropower Institute Certification Application*)

Water is conveyed from the dam to the powerhouse through a 60-foot long penstock which creates a short bypassed reach in Sandy Stream. The powerhouse contains one Francis turbine with a 35 kW capacity and the Project generates approximately 65 MWh per year. This turbine, a Natel Energy Restoration Turbine, was installed in December 2019 replacing the formerly installed Natel linear Pelton machine originally installed in 2017.

### III. REGULATORY AND COMPLIANCE STATUS

The Project was issued an order granting exemption from licensing (5 MW or less) by FERC (FERC Exemption No. 14421) on March 25, 2013.<sup>1</sup> The Notice of availability of Environmental Assessment was issued by FERC on March 25, 2013 (FERC EA).<sup>2</sup>

This review included a docket search of the FERC eLibrary. Records for the Project date back to June 2012 with the submission of the Application for Exemption of Small Hydropower Project from Licensing. Following issuance of the FERC Exemption and FERC EA, the eLibrary includes

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<sup>1</sup> <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=13214933>

<sup>2</sup> <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=13212940>

submission of required documents and Project financing. On March 13, 2015 the Applicant requested an extension of time under exemption Article 11 of 180 days for the start of construction. This delay request was made due to a delay in obtaining details from the turbine manufacturer which impacted project schedule. This extension of time was approved by FERC on April 16, 2015. A supplemental request for an extension of time to begin construction was submitted by the Applicant on September 17, 2015 pending approval by the Commission's Division of Dam Safety and Inspections – New York Regional Office (D2SI-NYRO). This extension of time was approved by FERC on October 5, 2015. Additional filings from 2018 thru 2020 were made based on upgrades to the Natel turbine at the facility.

No exemption deviations have been documented on the eLibrary. Under the FERC exemption, the Project is subject to Standard Articles including Article 2 which requires compliance with any terms and conditions that federal and state fish and wildlife agencies may impose.

#### **IV. PUBLIC COMMENTS RECEIVED OR SOLICITED BY LIHI**

The application was publicly noticed on November 9, 2020 and notice of the application was forwarded to resource agency and stakeholder representatives listed in the application. No public comments were received by LIHI during the 60-day comment period which ended on January 8, 2021. Based on the completeness of the application, no resource agencies were contacted as part of this review.

#### **V. ZONES OF EFFECT**

The Applicant delineated the Project into two Zones of Effect (ZoEs): Zone 1 is the impoundment extending 600 feet upstream from the dam, Zone 2 is the tailrace/downstream zone extending approximately 130 feet downstream from the dam and includes a very short (approximately 50-foot long) bypassed reach (Figure 3). The Applicant selected the standards shown in the tables below. Where the reviewer disagrees with the selected standards, recommended standards are indicated in **RED** in the matrix tables below.

**Zone of Effect # 1: Impoundment Zone**

CRITERION		ALTERNATIVE STANDARDS				
		1	2	3	4	PLUS
A	Ecological Flow Regimes		✓			
B	Water Quality	✓				
C	Upstream Fish Passage	✓				
D	Downstream Fish Passage		✓			✓
E	Watershed and Shoreline Protection	✓				
F	Threatened and Endangered Species Protection	✗	✓			
G	Cultural and Historic Resources Protection		✓			✓
H	Recreational Resources			✓		

**Zone of Effect # 2: Tailrace/Downstream Zone**

CRITERION		ALTERNATIVE STANDARDS				
		1	2	3	4	Plus
A	Ecological Flow Regimes		✓			
B	Water Quality	✓				
C	Upstream Fish Passage		✓			
D	Downstream Fish Passage	✓				
E	Watershed and Shoreline Protection	✓				
F	Threatened and Endangered Species Protection	✗	✓			
G	Cultural and Historic Resources Protection		✓			✓
H	Recreational Resources	✓				



**Figure 3. Freedom Falls Zones of Effect (source reference: Freedom Falls Low Impact Hydropower Institute Certification Application)**

## VI. DETAILED CRITERIA REVIEW

### A: Ecological Flow Regimes

**Goal:** *The flow regimes in riverine reaches that are affected by the facility support habitat and other conditions suitable for healthy fish and wildlife resources.*

**Assessment of Criterion:** The Applicant selected Standard A-2, Agency Recommendation for both ZOE. Impoundments can typically qualify for A-1 since this criterion is focused primarily on riverine reaches, and with little impoundment storage, Standard A-1 is also appropriate.

**Discussion:** Sandy Stream is located in the upper reaches of the Kennebec River watershed. The watershed to the dam is approximately 7.8 square miles and includes the two dams

upstream. Sandy Pond #2 is located approximately 600 feet upstream and is a breached dam owned by Freedom Falls LLC, and Sandy Pond #3 is owned by the Town of Freedom.

The Project is operated in an instantaneous run-of-river mode. The impoundment associated with Zone 1 is a 1.6 acre impoundment with a normal water surface elevation of 453 feet NGVD. The Project has a 0.5-foot normal operating range between 452.5 feet (0.5 foot below normal water surface elevation) and 453 feet (normal water surface elevation). This operation is based on conditions submitted by the U.S. Department of Interior (DOI) under Section 30(c) of the Federal Power Act. Pond level sensors are installed on the upstream face of the dam to record pond level readings. This sensor is connected to the turbine control system. A flow sensor is also located within the turbine unit. A manual staff gauge is included on the spillway to confirm sensor readings.

The FERC exemption has established minimum flow releases of 3 cfs or inflow (whichever is less) over the spillway to maintain continuous flow to the bypassed reach and to maintain aesthetics of the spillway during the day. The minimum flow level was determined by the Applicant to ensure that the bypassed reach remains wetted at all times. There are no anadromous fish in the Project vicinity. According to the FERC EA, American shad, alewife, blueback herring and Atlantic salmon were present but downstream dams on the Kennebec River blocked their passage. The Applicant stated that they had been told there is no historical record of alewives or Atlantic salmon in Sandy Pond likely due to the steep drop at the Freedom Falls dam site and the shallow, sandy marsh that probably existed before Dam #3 was built.

No resource agencies made minimum flow recommendations during the exemption proceedings, although they made other recommendations. However, the FERC exemption requires a minimum 2 cfs or inflow (whichever is less) flow thru the downstream American eel passage facility at night during the period of August 1 through October 15, and 3 cfs at all other times. The Project has a minimum hydraulic capacity of 8 cfs and a maximum hydraulic capacity of 30 cfs. All flows above and below this range pass over the spillway. The operation of the Project is documented in the Operation Compliance Monitoring Plan for the Freedom Falls Hydroelectric Project prepared by Kleinschmidt and dated March 2015. FERC issued an "Order Modifying and Approving Operation Compliance Monitoring Plan Pursuant to Exemption Article 27" dated May 08, 2015. The plan and order required notification to DOI, MDIF&W and FERC of any recorded exceedance of compliance requirements and a review of the plan following the first year of project operations. No deviations have been reported to FERC since issuance based on review of the FERC eLibrary.

Based on the application, supporting documentation, and FERC eLibrary documents, this review finds that the Project is in compliance with flow requirements and operates to protect aquatic habitat, and therefore satisfies the ecological flow regimes criterion.

## **B: Water Quality**

**Goal:** *Water Quality is protected in waterbodies directly affected by the facility, including downstream reaches, bypassed reaches, and impoundments above dams and diversions.*

**Assessment of Criterion:** The Applicant selected Standard B-1, Not Applicable/De Minimis Effect for both ZoEs.

**Discussion:** Sandy Stream is a tributary of the Sebasticook River and Kennebec River Watershed. Sandy Stream flows north to Unity Pond and then into Twenty-Five Mile Stream which flows northwest to its confluence with the Sebasticook River. Sandy Stream is not listed as impaired according to the 2016 Integrated Water Quality Monitoring and Assessment Report issued by the Maine DEP<sup>3</sup>. This project was issued a FERC exemption and therefore was not required to obtain a Water Quality Certificate.

The FERC EA notes there is no site specific water quality data on Sandy Stream. Water quality monitoring has been completed upstream of the project area on Sandy Pond. Sandy Pond, which is a shallow and well mixed pond due to wind, was noted as being eutrophic based on chlorophyll-a and total phosphorus. The dissolved oxygen (DO) levels were not reported to change with depth and data collected in 2003 by Maine Department of Environmental Protection (DEP) noted the DO ranged from 7.3 to 8.2 milligrams per liter (mg/l). This Project operates in a run-of-river mode with a 0.5-foot operating range. Therefore, as noted in the FERC EA staff analysis “the project impoundment and habitat in Sandy Stream downstream of the project tailrace would essentially be unchanged compared to current conditions, and aquatic organisms, including fish and benthic macroinvertebrates, would be unaffected.” Additionally, the water surface is maintained as not to impact recreational uses of the upstream Sandy Pond (see further discussion under Standard H).

Based on the application, supporting documentation, and FERC library documents, this review finds that the Project does not appear to adversely impact water quality and operation will not directly change water quality. Therefore, the Project satisfies the water quality criterion.

## **C: Upstream Fish Passage**

**Goal:** *The facility allows for the safe, timely, and effective upstream passage of migratory fish. This criterion is intended to ensure that migratory species can successfully complete their life cycles and maintain healthy populations in areas affected by the facility.*

**Assessment of Criterion:** The Applicant selected Standard C-1, Not Applicable/De Minimis Effect in Zone 1 and Standard C-2, Agency Recommendation for Zone 2.

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<sup>3</sup> State of Maine 2016 Integrated Water Quality Monitoring and Assessment Report  
<https://www.maine.gov/dep/water/monitoring/305b/index.html>

**Discussion:** Historically, anadromous fish including American shad, alewife, blue back herring and Atlantic Salmon were present in Sandy Stream. The FERC EA noted that Maine Division of Marine Resources (DMR) is undertaking an anadromous fish restoration plan for the Kennebec River basin, of which Sandy Stream is a part. NOAA National Marine Fisheries Service (NMFS) indicated via its Intervention Notice on the Notice of Application Accepted for Filing support that restoration efforts are in progress downstream of the then proposed project site for anadromous fish, and that they are expected to return to Sandy Stream. The FERC EA noted there are multiple dams downstream of the Project which do not have fish passage facilities, currently blocking upstream passage into Sandy Stream. The Project's exemption Standard Article 2 reserves authority for agencies to require fish passage facilities. To date no agency has exercised its authority.

American eel is a state-listed special concern species which occur within the Project area (upstream and downstream). Multiple agencies consulted during the FERC exemption application (Exemption Application, Appendix B) recommended the Project include upstream eel passage. Sandy Stream was noted in the FERC EA as a rearing habitat for both juvenile and adult American eel.

The FERC exemption (Article 16 and Standard Article 2) and Department of Interior conditions (Condition 4) included the requirement for upstream passage of American eel. This upstream passage required consultation with DOI and Maine Department of Marine Resources (DMR) to assess the appropriate location and design. The Project application noted the installation of this upstream passage had been delayed pending operation of the new turbine and installation of the new trash rack which have since been completed. Email correspondence dated September 30, 2020 to LIHI specifically discussed the status of the upstream passage and states the Applicant is working with USFWS representatives on the final design of the upstream passage and upon approval, expects to install it before May 1, 2021.

Based on the application, supporting documentation, and FERC elibrary documents, and correspondence from the Applicant, this review finds that the Project will be in compliance with the agency recommendation for upstream passage of American eel upon successful construction of the upstream passage and the Applicant's commitment to annual operation from May 15<sup>th</sup> thru August 31<sup>st</sup>. Upon completion of the installation, the upstream passage criterion will be satisfied, therefore a condition is recommended to ensure that passage is installed as planned.

#### **D: Downstream Fish Passage**

**Goal:** *The facility allows for the safe, timely, and effective downstream passage of migratory fish. For riverine (resident) fish, the facility minimizes loss of fish from reservoirs and upstream river reaches affected by Facility operations. Migratory species can successfully complete their life cycles and to maintain healthy populations in the areas affected by the Facility.*

**Assessment of Criterion:** The Applicant selected Standard D-1, Not Applicable/De Minimis Effect for Zone 2 and Standard D-2 and D-PLUS for Zone 1. This review finds that Standard D-1 is appropriate in the Zone 2 tailrace/downstream reach since once below a project there is no further impediment to downstream movement. This review finds that Standard D-2, Agency Recommendation is appropriate in the impoundment and bypassed reach.

**Discussion:** The Project's exemption Standard Article 2 reserves authority for agencies to require fish passage facilities. To date no agency has exercised its authority.

Sandy Pond is a warmwater fishery with largemouth bass, white sucker, brown bullhead, chain pickerel, golden shiner, white perch and yellow perch in addition to American eel (FERC EA). Standard Article 2 of the exemption and DOI Conditions 2 and Condition 3 required protecting the downstream migration of adult American eels, along with preventing most adult and some juvenile fish, from entrainment and mortality through the installation of a 3/4-inch clear spacing trash rack on the intake structure, and downstream eel passage to be provided by a bypass pipe adjacent to and near the bottom of the turbine intake. The bypass is operated from sunset to sunrise during the period of August 1<sup>st</sup> through October 15<sup>th</sup> annually. As discussed in Criterion A above, the use of the bypass requires a minimum flow of 2 cfs or inflow (whichever is less).

The Applicant requested the PLUS standard for downstream passage given the installation of the Natel Restoration Hydro Turbine (RHT). For fish that could get through the trashrack and become entrained, the RHT minimizes injury and mortality through the unit's unique design features.<sup>4</sup> Survival has been tested in laboratory settings to be 99% or greater.

Freedom Falls is the site of the first commercially operational RHT in the USA. The RHT MS D55 installed at Freedom Falls is part of a family of turbines at full size (>1 meter diameter) that are able to safely pass large fish at low head hydropower projects.

Based on the application, supporting documentation, and FERC elibrary documents, this review finds that the Project satisfies the downstream fish passage criterion. Additionally, based on the use of the Natel turbine, which is recognized as being more fish friendly and considered an advanced technology, this review finds that the Project satisfies the D-Plus standard.

### **E: Shoreline and Watershed Protection**

**Goal:** *The facility has demonstrated that sufficient action has been taken to protect, mitigate or enhance the condition of soils, vegetation and ecosystem functions on shoreline and watershed lands associated with the facility.*

**Assessment of Criterion:** The Applicant selected Standard E-1, Not Applicable/ De Minimis Effect for both ZoEs.

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<sup>4</sup> <https://www.natelenergy.com/2020/04/24/fish-safe-restoration-hydro-turbine-video/>

**Discussion:** The Project impounds approximately 1.6 surface acres of water extending approximately 600 feet upstream to the Sandy River #2 dam. The Applicant states there is no Shoreline Management Plan in place to manage the impoundment.

The application states that approximately 75% of the shoreline around the impoundment is owned by Freedom Falls LLC, including approximately 2.5 acres abutting the impoundment and 0.25 acres of land for the Project itself. This land area is generally large forest area and some wetlands and was noted as being used by the associated Mill School for outdoor educational resources. The shoreland zone of some of Sandy Pond upstream of the Project has been developed into camping lots, seasonal camps, and a few year-round homes.

In response to an inquiry from the Applicant as part of the FERC Exemption Application (Appendix B), MDIF&W was consulted with respect to significant wildlife habitats. The Department in response noted two Significant Wildlife Habitats (moderate value Inland Waterfowl and Wading Bird Habitats) associated with the upstream Sandy Pond noting “*these are located well away from your project area*”. Maine Natural Areas Program and Department of Conservation, under similar consultation, reported “*no rare botanical features that would be disturbed within the project site*”.

While no Shoreline Management Plan is in place the area surrounding the impoundment is subject to the Town of Freedom shoreland Zoning standards.

Based on the application, supporting documentation, and FERC elibrary documents, this review finds that the Project with its run-of-river operation and small footprint, has little to no impact on the shoreline and therefore satisfies the shoreland and watershed protection criterion.

## **F: Threatened and Endangered Species**

**Goal:** *The facility does not negatively impact federal or state listed species.*

**Assessment of Criterion Passage:** The Applicant selected Standard F-1, Not Applicable/ De Minimis Effect for both ZoEs. Based on this review, Standard F-2 is more appropriate since there are or may be listed species in the facility area.

**Discussion:** The FWS Information for Planning and Consultation (IPaC) database was accessed to determine federally-listed species that could occur in the Project vicinity. An updated IPaC review was conducted in September 2020. Findings indicate that the federally endangered Atlantic salmon (*Salmo salar*) and the federally threatened Northern long-eared bat (*Myotis septentrionalis*) could occur in the Project vicinity. No critical habitats were identified for these species in the Project vicinity.

On October 14, 2020, MDIF&W responded to an Applicant inquiry stating that state-listed threatened and endangered species along with Special Concern species have been documented

in the general vicinity of the Freedom Mill Dam. This consultation noted American eel (species of Special Concern) are within the Project area.

In addition, while a comprehensive statewide inventory for bats has not been completed it is likely that several species of bats could occur within the Project area during the breeding season. These species all have similar habitat requirements.

- Little brown bat (State Endangered)
- Northern long-eared bat (State Endangered)
- Eastern small-footed bat (State Threatened)
- Big brown bat (Special Concern)
- Red bat (Special Concern)
- Hoary bat (Special Concern)
- Silver-haired bat (Special Concern)
- Tri-colored bat (Special Concern)

The Applicant reached out to the Maine Natural Areas program and received a response on October 1, 2020 which indicated that there are no rare botanical features documented in the Project area and low probability that any exist.

The Gulf of Maine Distinct Population Segment of Atlantic salmon (GOP DPS) was originally listed as an endangered species under the ESA on November 17, 2000 and revised on June 19, 2009 to cover an expanded range that encompassed additional large river systems in Maine found to contain Atlantic salmon populations genetically similar to those in the previously listed coastal river populations; critical habitat for the GOP DPS was also designated at that time. NOAA National Marine Fisheries service, via letter dated October 18, 2011 (FERC Exemption Application Appendix C) notes the Project area along Sandy River in the Sebasticook River watershed, is within the geographic range of the GOM DPS, but also notes poor fish passage conditions have *“precluded Atlantic Salmon from accessing the Sebasticook and its tributaries”*. At the time of this consultation in 2011 they stated *“Given the low numbers of Atlantic Salmon in the watershed, it is not anticipated that any presently occur in the project area”*.

The Northern long-eared bat (NLEB) was listed as a federally threatened species under the ESA on May 4, 2015 and is also a species of special concern in Maine. The application stated that the Project does not typically need to conduct tree cutting and states if tree cutting is needed in the future, they will abide by the 4(d) ruling issued by USFSW.

In response to an inquiry from the Applicant as part of the FERC Exemption Application (Appendix B), MDIF&W was consulted with respect to significant wildlife habitats. The Department in response noted two Significant Wildlife Habitations (moderate value Inland Waterfowl and Wading Bird Habitats) associated with the upstream Sandy Pond noting *“these are located well away from your project area”*. Maine Natural Areas Program and Department of Conservation, under similar consultation, reported *“no rare botanical features that would be disturbed within the project site.”*

Based on the application, supporting documentation, and FERC elibrary documents, this review finds that the Project is unlikely to affect listed species given its small footprint, run-of-river operations, and commitment to follow the 4(d) rule for Northern long-eared bat should tree removal become necessary. Therefore, the Project satisfies the threatened and endangered species protection criterion.

### **G: Cultural and Historic Resources Protection**

**Goal:** *The Facility does not unnecessarily impact cultural or historic resources that are associated with the facility's lands and waters, including resources important to local indigenous populations, such as Native Americans.*

**Assessment of Criterion:** The Applicant selected Standard G-2, Approved Plan with Standard G-PLUS for both ZoEs in the standards matrix, however the Application specifically discusses this Project under the G-1 Not Applicable/De Minimis Effect standard. Based on this review, Standard G-2 and Standard G-PLUS are appropriate for this Project.

**Discussion:** The application states The Mill at Freedom Falls was built by John True in 1834 as a gristmill using hydromechanical power from the stream to produce about 8,000 bushels of grain per year. In 1894, the building was converted to a wood turning mill making wood tool handles, dowels, etc. To accommodate this growing business, various additions for materials handling, shipping, and the like were added over the years. This business closed in 1967 and the mill was abandoned at that time.

The Mill Building was determined to be eligible for listing on the National Register of Historic Places based on its status as an exemplary demonstration of early mill construction and for its role in the economic history of the Town of Freedom and western Waldo County in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. The FERC Exemption noted the Mill Building was entered into the National Register of Historic Places on April 19, 2012. The FERC Exemption (Condition 22) specifically noted that *“Commission staff conclude that the project will not alter the historic character of existing structures and that issuing an exemption from licensing for the project would have no adverse effect on historic properties, including the existing mill building that Freedom is rehabilitating”*. As noted in the Application, no cultural resources or historic properties management plan was required but the exemption required consultation with the SHPO for land-disturbing activities (Article 28) and consultation should previously unidentified resources be discovered (Article 29).

The Applicant has also selected the Standard G-PLUS. The Mill Building has been fully restored and based on the application, this rehabilitation was completed in *“consultation with the Maine SHPO and according to National Park Service Standards in order for it to qualify for State and Federal Historic Tax Credits”*. This rehabilitation included rebuilding of foundation walls, repair of the timber frame structure, replacement of windows, restoration of the exterior and additions, and providing modern amenities in keeping with the historic nature of the building. The building is currently occupied by a restaurant, museum, wine store and the Mill School, along with operation of the powerhouse for the hydroelectric system. This restoration effort

was documented in a film, “Reviving the Freedom Mill”.<sup>5</sup> Maine Preservation also presented a 2013 Honor Award for adaptive use of the Mill at Freedom Falls for “the work in realizing the potential of the town’s hidden gem, funding and managing its restoration, and working with the community to share the triumph”.<sup>6</sup>

Based on the application, supporting documentation, and FERC elibrary documents, this review finds that the Project does not adversely impact cultural or historic resources and the Applicant has made a substantial commitment to restoring the Mill building, in consultation with the SHPO and according to National Park Service Standards, which is listed on the National Register of Historic Places. Therefore, the Project satisfies the cultural and historic resources protection criterion and the G-PLUS criterion.

### **H: Recreational Resources**

**Goal:** *The facility accommodates recreation activities on lands and waters controlled by the facility and provides recreational access to its associated lands and waters without fee or charge.*

**Assessment of Criterion Passage:** The Applicant selected Standard H-3, Assured Accessibility for Zone 1 and H-1, Not Applicable/De Minimis Effect for Zone 2.

**Discussion:** There are no requirements in the FERC exemption related to recreation.

For the Zone 1 area, the Applicant states that approximately 75% of the Project impoundment shoreline is owned by Freedom Falls LLC. A portion of this area is used by the Mill School as an outdoor educational resource. The application notes the impoundment shoreline “*is accessible to the public free of charge where direct access is available and does not cross other private lands*”

For the Zone 2 area, the Applicant states the area is generally inaccessible and includes steep banks and fencing with no recreational opportunities. The Applicant also indicated the four-mile stretch from the downstream side of the dam to Unity Pond is listed by American Whitewater as having Class II and III rapids.

The LIHI application and discussions contained in the FERC exemption note public recreational sites exist upstream of the Project. Sandy Pond is used for boating, fishing and snowmobiling. Access to Sandy Pond is available by a public boat launch, owned and operated by the Town, located on the northeastern end. In accordance with the US Department of Interior Conditions included in the FERC exemption, the Project is to operate in an instantaneous run-of-river mode with a one-half foot impoundment fluctuation limit. The FERC EA noted this operation would not impact access to the boat launch and/or affect recreational resources.

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<sup>5</sup> <https://vimeo.com/ondemand/revivingthefreedommill>

<sup>6</sup> <https://www.maine Preservation.org/2013-honor-awards/2018/8/1/mill-at-freedom-falls-freedom> and <https://savingplaces.org/stories/back-to-the-grind-mill-freedom-falls>

Based on the application, supporting documentation, and FERC elibrary documents, this review finds that the Project satisfies the recreational resources criterion.

## **VII. CERTIFICATION RECOMMENDATION**

This review included evaluation of the application and additional information provided, a review of the FERC elibrary, and review of other publicly available information. Based on this evaluation, the Reviewer recommends that the Freedom Falls Project be certified for a term of ten (10) years including two PLUS awards for downstream passage and cultural and historic resources. The following condition is also recommended.

**Condition 1:** The facility Owner shall notify LIHI within 60 days of completion of the upstream eel passage expected to be installed by May 1, 2021. The notification shall include copies of any approvals received from DOI and/or Maine DMR of the final design and installation.