APPENDIX 6

KENNEBEC HYDRO DEVELOPERS GROUP (KHDG) STATUS SUMMARY/CHRONOLOGY

BROOKFIELD WHITE PINE HYDRO LLC

1998 Kennebec Hydro Developers Group Agreement
Status of Provisions

(October 2024)

On May 28, 1998, the licensees of the former Edwards Project (FERC Project No. 2389) and seven upstream projects (including Lockwood, Hydro-Kennebec, Shawmut, and Weston), collectively the members of the Kennebec Hydro Developers Group (KHDG); the Kennebec Coalition (consisting of American Rivers, Inc; the Atlantic Salmon Federation; Kennebec Valley Chapter of Trout Unlimited; the Natural Resources Council of Maine; and Trout Unlimited), the National Marine Fisheries Service (NMFS), the State of Maine (consisting of the Maine Department of Inland Fisheries and Wildlife; Maine Department of Marine Resources; and the Maine State Planning Office), and the U.S. Fish and Wildlife Service (USFWS) together filed an offer of settlement, known as the Lower Kennebec River Comprehensive Settlement Accord (1998 KHDG Agreement).

The 1998 KHDG Agreement included provisions for supporting the removal of Edwards Dam; providing fish passage for Atlantic salmon, American shad, river herring, and American eel at the Lockwood, Hydro-Kennebec, Shawmut and Weston projects, as well as other hydroelectric projects located on the mainstem Kennebec and Sebasticook rivers; and funding for fisheries restoration efforts on the Kennebec River. The 1998 KHDG Agreement outlined fish passage improvements and monitoring measures for the lower Kennebec River projects including: the installation of an interim trap and truck facility at the Lockwood Project in 2006; permanent downstream passage facilities and operational measures at Lockwood, Hydro-Kennebec, Shawmut, and Weston; and improvements to the former Fort Halifax Project (FERC No. 2552) on the Sebasticook River, such as the installation of a temporary fish pump and permanent fish passage facilities. Additionally, upstream passage facilities at Hydro-Kennebec, Shawmut, and Weston and permanent facilities at Lockwood were predicated on trigger numbers for American shad or the need for passage as dictated by the populations of Atlantic salmon, alewife, or blueback herring.

KHDG members, in accordance with the 1998 KHDG Agreement, have installed various anadromous and catadromous upstream and downstream fish passage facilities, have conducted studies at various projects, have been involved with dam removals at the Ft. Halifax and Edwards Projects and are presently in the process of installing new upstream fish passage facilities on the mainstem Kennebec River Projects. As discussed above, the 1998 Agreement was largely predicated on the removal of Edwards Dam was, which was transferred and removed in 1999. In addition, Fort Halifax Dam was ultimately removed in 2008.

By FERC Order dated September 16, 1998, the terms of the KHDG Agreement were incorporated into the licenses for the Edwards, Fort Halifax, Lockwood, Hydro-Kennebec, Shawmut, Weston, Benton and Burnham Projects. Amended water quality certifications, issued on August 3, 1998, for the Projects likewise included the applicable terms.

The following provides a summary of the relevant provisions of the 1998 KHDG

Agreement and the status of those provisions.

KHDG Agreement Provision	Status
A. Term of Agreement If by December 2014 the biological triggers for permanent upstream passage facilities discussed herein have not been met at one or more of the dams covered by this agreement, the parties will meet to assess the progress in restoring species covered by this agreement (alewife, American shad, blueback herring, Atlantic salmon, and American eel), and will attempt to reach consensus on future fish passage measures. Any disputes will be handled through the FERC process	The "biological trigger" (i.e. passage numbers) for shad passage was not met by December 2014; however, populations of Atlantic salmon were in peril to the extent that they were listed as endangered under the Endangered Species Act on November 17, 2000 by NMFS and the USFWS (collectively, the Services). At the time, the listing range for the Gulf of Maine Distinct Population Segment (DPS) of Atlantic salmon did not include areas where the Lockwood, Shawmut, and Weston Projects are located. On June 19, 2009, the Services expanded the listing range for these fish to include the Kennebec River, which was also listed as critical habitat. As such, the licensees engaged the resource agencies (all of which are signatories to the 1998 KHDG Agreement) in discussions for providing immediate upstream and downstream passage under the ESA. The Interim Species Protection Plan (ISPP), which identified an alternate trigger for fish passage construction, was filed for the Hydro-Kennebec Project on April 6, 2012, supplemented October 15, 2012 and incorporated into the FERC license on February 28, 2013. The ISPP for the Lockwood, Weston and Shawmut Projects was filed on February 21, 2013 and was incorporated into the FERC licenses on May 19, 2016. Collectively, these ISPPs require the construction of upstream fish passage facilities and the development of proposals for downstream fish passage improvements pending the outcome of studies. As such, upstream fish passage facilities and downstream improvements are now being constructed as date certain as a result of the development of a Biological Assessment for Atlantic salmon, rather than a biological trigger number for shad (or an alternate trigger). A final SPP for the lower Kennebec Projects (Lockwood, Hydro-Kennebec and Weston)
Term of Agreement (cont'd)	

KHDG Agreement Provision	Status
	was filed with the FERC on May 31, 2021. The Shawmut Project license application, filed with the FERC on January 31, 2020, included proposals for upstream fish passage and downstream fish passage at the Project. While a biological trigger for the construction of upstream passage at the HK, Weston and Shawmut Projects was never established, this provision was rendered moot by the commitment to date certain installation of upstream fish passage and downstream improvements. FERC's May 19, 2016 Order Approving the ISPP states,"The Kennebec Agreement provides for the possibility of a biologically-based trigger based on the status and growth of Atlantic salmon or river herring (river herring refers collectively to alewives and blueback herring). Thus, under the agreement, an alternative trigger for permanent passage facilities could be based on a biological review of the status of Atlantic salmon. In this case, however, the licensees and resource agencies did not adopt an alternative trigger for installing permanent passage facilities under the Kennebec Agreement. Instead, the status of Atlantic salmon as endangered, together with expansion of its geographic range, provided the trigger for development of the Interim Plan to protect Atlantic salmon at these projects." In compliance with its obligations under the KHDG Agreement, the upstream fish passage facilities have been designed to accommodate the suite of target diadromous species, in full consultation with the agencies and in accordance with design populations for shad, salmon and river herring developed by MDMR.
Term of Agreement (cont'd)	To address the shad biological trigger and the concern with shad passage specifically, in late January 2014, the licensees for the

KHDG Agreement Provision	Status
Term of Agreement (cont'd)	four lower Kennebec River Projects, NMFS, USFWS, MDMR, MDIFW, Trout Unlimited, Atlantic Salmon Federation, and the Natural Resources Council of Maine attended a meeting to discuss why Lockwood's fish lift was capturing fewer shad than expected and to work together to find a solution. As a result of that meeting, the licensees, resource agencies, and the other stakeholders formed a Lockwood fish lift American shad passage working group ("Working Group"). The Working Group's initial tasks were to investigate impediments to shad passage and work together to propose solutions. The Working Group met in March and April 2014 and finalized the following list of studies that were completed at the Lockwood lift in 2014: • Tailrace Bathymetry - Bathymetry measurements in the tailrace (from the powerhouse to an area approximately 1,000 feet downstream) was conducted to identify potential issues regarding the zone of passage for shad. The Licensee completed this work in August 2014 and developed a bathymetry map although the map did not identify a limiting zone of passage area. • Fish Lift Engineering Evaluation - The Licensee completed an engineering evaluation of the existing fish lift attraction water system to determine and confirm appropriate operating parameters. The Evaluation concluded that the original graph used to determine attraction flow water valve position was incorrect. • Fish Lift Attraction Flow Modifications –Following the Fish Lift Engineering Evaluation, the Licensee developed a new graph and valve position starting with the 2014 migration season. This new valve position provided additional attraction flow beyond what was previously provided; however, shad captures in the fish

KHDG Agreement Provision	Status
Term of Agreement (cont'd)	lift did not improve in the 2014 season. Despite the lack of shad passage improvement, the higher attraction flows were continued to be provided. • Shad Location and Behavior Evaluation – This study focused on where shad are concentrated, where their holding locations were and how they behave by deploying a floating camera in the tailrace area below Lockwood's fish lift during the 2014 shad migration period. Shad were observed individually and in schools of up to approximately 10 fish, generally on the bottom of the river. Most shad observed were within 80-100 feet downstream of the fish lift entrance. Although the floating camera work did not identify a "silver bullet" reason for why fewer than expected shad are captured at Lockwood, it provided some insights into shad behavior that advance understanding of that issue. The effort was repeated in 2015. • Angler Activity near the Fish Lift - Anglers regularly fish for and catch shad close to the fish lift entrance (i.e. within 100 feet of the fish lift entrance), and even cast towards and close to the fish lift entrance and it is possible that this activity may disrupt shad migration into the fish lift. In the fall of 2014, the licensee installed a fence for public safety and security purposes that extends to about 150 feet below the fish lift entrance. Secondarily, this fence deters anglers from fishing close to the fish lift and within 150 feet of the dam, where no fishing is allowed by State of Maine regulations. In a meeting on October 29, 2014, the shad working group discussed the work completed in 2014 and developed the following list of studies and activities that were completed in 2015:

KHDG Agreement Provision	Status
Term of Agreement (cont'd)	• Acoustic Study - BWPH will hire a fish sound expert to determine sound/noise levels emanating from the powerhouse and whether they are impacting shad migration to the fish lift entrance. The study showed an acoustic profile comparable to other facilities; but the study indicated that there could be acoustic signals that are a deterrent to shad though the source of these signals, in proximity to the fish lift, is unknown. • Fish Lift Attraction Water System Evaluation - BWPH supplied the data that was used to develop the new attraction water system rating curve and explained how adjustments to Lockwood's gate yield certain discharges. • 2D Hydraulic Modeling – A 2D hydraulic model of the river below Lockwood's station and in the bypass reach was developed using the bathymetry data collected in 2014 and existing bathymetry data collected from previous studies. The 2D model generally suggests that running the station as Licensee has been doing in the past (i.e. units 7-1 first on last off) appears to provide the best attraction flows towards the fish lift. The 2D model also indicates that during spill events, there are flows in the bypass reach that could attract fish. • Radio Telemetry Study - The radio telemetry study monitored shad behavior and investigated whether station flows, fish lift flow, river flows, or other variables can be manipulated to determine if any configurations improve shad movement into Lockwood's fish lift. Radio-tagged shad during this study made use of the portion of the Kennebec River just downstream of the immediate tailrace area and towards the deeper water portions of the channel adjacent to Fort Halifax Park. • Predatory Striped Bass Removal - MDMR planned to

KHDG Agreement Provision	Status
Term of Agreement (cont'd)	investigate options to non-lethally remove striped bass from the area in and around the fish lift entrance, to determine if the presence of striped bass is impacting shad entry into Lockwood's fish lift. This study was indefinitely postponed due to logistical and permitting reasons. • Entrance Gate Underwater Camera Observations - The camera observations identified that some shad (and river herring) would move in and out of the camera view just downstream of the fish lift entrance gate and not hold in any one position which indicated the existence of a back eddy directly below the entrance gate and a dead water area closer to the river bottom that may confuse some shad and other fish approaching the entrance to the fish lift. Efforts in 2016 to help better understand and enhance American shad passage at Lockwood were implemented as follows: • Engineering and agency consultation for attraction flow improvements (entrance weir modifications, new entrance flapper gate, etc.). The licensee contracted with Kleinschmidt Associates (KA) to review the feasibility of installing the new entrance flapper gate. The new flapper gate option was not pursued because KA identified that space constraints in the lower flume of the fishway made this option not viable. • Engineering design and agency consultation for Lockwood fishlift new upper flume and new sorting facility at fishlift. The licensee contracted with KA to develop design drawings for this work in consultation with agency personnel. The 60% design drawings were completed by the end of January 2017. The new upper

KHDG Agreement Provision	Status
Term of Agreement (cont'd)	flume and sorting facility are expected to be operational by May 1, 2019 after a two winter construction period beginning in the winter of 2017. • Feasibility/conceptual designs and agency consultation for zone of passage river bottom modification up to fish lift entrance. This option was put on hold at this time due to logistical issues associated with construction, permitting and benefits of this option. • A bypass reach fishway. Resource agencies have advocated for a new fishway in the bypass reach. The parties to the agreement also met on January 14, 2015 to discuss Section III (D) of the agreement and next steps. During that meeting, the licensees updated the parties on recent fish way design efforts at Hydro Kennebec and Lockwood and described past and upcoming efforts to resolve the American shad passage issue at Lockwood. The resource agencies were generally in agreement with the proposals. Other stakeholders (Trout Unlimited, Atlantic Salmon Federation, Maine Rivers, Natural Resources Council of Maine) did not have any specific suggestions to resolve the shad passage issue at Lockwood other than dam removal, for which MDMR also expressed support. The licensees committed to continuing consultation with the signatories to the 1998 Agreement to improve shad passage at the Lockwood facility as discussed above while proceeding with the development and design of a bypass reach fishway, discussed in greater detail below. All four projects have requirements for permanent downstream passage facilities to be installed concurrent with upstream passage. Each project has dedicated downstream passage facilities (fish booms at Lockwood, HK and Weston, trashracks at Shawmut and dedicated downstream sluices at all four

KHDG Agreement Provision	Status
	projects) and some downstream passage studies of herring and eel have been conducted and effectiveness testing for Atlantic salmon smolts was conducted pursuant to the 2013 ISPP/BiOP. The licensee proposed improvements to the downstream passage facilities that specifically target all diadromous species as part of the 2021 SPP and Shawmut relicensing.
B. Consultation process The functional and final design of any interim or permanent upstream or downstream fish passage or collection facility discussed herein must be approved in writing by the resource agencies prior to filing that design with the Federal Energy Regulatory Commission and Maine Department of Environmental Protection. Any disputes will be handled through the FERC process.	This requirement is mirrored in the 401 WQC incorporating the 1998 KHDG Agreement. As part of the Condition Compliance permit application and FERC final design filing, the full consultation record (conceptual, 30%, 60%, 90% and final design) has been filed with MDEP on May 27, 2020 and FERC on December 31, 2019, respectively.
C. Effectiveness studies KHDG dam owners will conduct effectiveness studies of all newly constructed interim and permanent upstream and downstream fish passage facilities at project sites. Study plans for these effectiveness studies will be filed with FERC and Maine DEP no later than the date on which passage at a particular project becomes operational, and will be subject to a consultation process with, and written approval from the resource agencies. In the event that effectiveness studies show that passage at individual projects is less than the targeted passage efficiency goals, KHDG dam owners will make a good faith effort to achieve these goals through modification of facilities and/or operations, following consultation with the resource agencies. In the event that studies show that, subsequent to said modifications, passage at individual projects continues to be less than the targeted efficiency goals,	There are no "targeted passage efficiency goals" in the KHDG Agreement other than the numbers of shad, which do not equate to passage efficiency. The following studies have been conducted at the Project, pursuant to the KHDG Agreement (and ISPP/BiOP for Atlantic salmon): • 2019 Fish assemblage study • 2017 Brown trout movement study (radio telemetry) • 2016 Adult river herring siting study • 2015 Atlantic salmon downstream smolt study (radio telemetry) • 2014 Tailrace American eel mortality surveys • 2014 Atlantic salmon downstream smolt study (radio telemetry)

KHDG Agreement Provision	Status
resource agencies may seek continued funding for trap and truck or other programs, or other mitigation from KHDG dam owners. Any disputes will be handled through the FERC process.	• 2013 Atlantic salmon downstream smolt study (radio telemetry) • 2008 Downstream passage study of silver American eels (radio telemetry) • 2007 Downstream passage study of silver American eels (radio telemetry) • 2007 Upstream eel passage effectiveness evaluation • 2004 - present Qualitative downstream passage stranding and mortality observations • 2001 – present Upstream night-time eel passage surveys (2001 – 2004 conducted jointly with MDMR)
D. For American eel at all projects:	
1. KHDG dam owners and DMR, in consultation with NMFS and USFWS, and subject to approval by FERC, shall undertake a three-year research project designed to determine: (a) the appropriate placement of upstream passage for American eel at each of the seven KHDG facilities based upon field observations of where eel are passing or attempting to pass upstream at each facility; and (b) appropriate permanent downstream fish passage measures, based upon radio telemetry and other tracking mechanisms, and field observation. Consultation between KHDG and the resource agencies to design and coordinate the research project shall begin no later than June 1, 1998. Performance of the studies shall begin during the 1998 migration season if possible, but in no case later than the 1999 migration season. The studies shall be in effect for three complete migration seasons, and shall be completed, including data compilation and analysis, by December 31, 2001.	As listed above, MDMR conducted night-time upstream eel passage surveys jointly with Normandeau Associates and the licensees from 2001–2004 to inform the location of upstream eel passage facilities at the four lower Kennebec Projects including Shawmut. The Licensee has continued annual periodic night-time surveys to evaluate and verify use and location of the upstream eel passage facilities, which have not been paid for by MDMR. As listed above, downstream eel telemetry studies were conducted at the lower Kennebec River Projects. The Shawmut Project had downstream eel telemetry studies in 2007 and 2008 (whole station survival of 71.1% and 85.7%) Downstream radio telemetry studies were conducted collaboratively with and funded by MDMR at the four lower Kennebec Projects but not for the three years required by the KHDG Agreement due to a lack of the availability of silver eels, as documented in the 2004 Diadromous Fish Passage Efforts
2. The studies shall be supervised by DMR, based upon objectives and methods agreed to by KHDG and the resource	

KHDG Agreement Provision	Status
agencies, and subject to approval by FERC. The studies shall cost no more than $427,000, and shall be paid for by DMR. 3. Based on the results of these studies and beginning no later than January 1, 2002 and ending no later than June 30, 2002, KHDG dam owners and the resource agencies shall engage in consultation to attempt to reach agreement on the appropriate location of upstream eel passage at each facility, and the appropriate permanent downstream passage measures to apply to each facility.	Report dated on April 1, 2005).
a. Upstream passage. KHDG dam owners agree that, if agreement is reached on the location of upstream eel passage at each facility, KHDG dam owners will install said passage at each facility during 2002. The cost to KHDG dam owners of materials for each upstream eel passage facility shall not exceed $10,000 and the total cost of materials to KHDG dam owners per dam shall not exceed $20,000, in the event that construction of more than one upstream passage facility is required per dam. The parties shall jointly request FERC to amend licenses and insert the agreed-upon terms and conditions for upstream eel passage. American Eel (cont'd)	The following measures have been implemented for upstream eel passage at the Shawmut Project: • In 2003, the Licensee installed upstream eel passage at the eastern end of the spillway and consisting of two sections connected by one turn pool. One section of the eelway channel ran parallel to the dam, and the other section ran up and over the flashboards. • In 2009, the Licensee installed the rubber dam on the spillway. Rubber dam installation sealed the leakage and eels were no longer attracted to this area as determined by night-time observations conducted by the Licensee. • In 2010, the Licensee relocated the upstream eel passage. The Licensee, with assistance from MDMR, installed a seasonal eelway in an eel migration location identified after numerous nighttime observations. The eelway consists of a 6-foot-long by 1-footwide angled wooden trough leading to a 5-gallon collection bucket. The trough is lined with textured substrate and attraction water for the eelway is provided via hoses connected to water drains at the non-overflow section of the dam and is located between the first section of the hinged

KHDG Agreement Provision	Status
	flashboards and the unit 1 tailrace. • In 2019, the licensee installed a second upstream eel passage adjacent to the forebay plunge pool based on continued night-time observation conducted by the Licensee. The second eelway consists of a 6-foot-long by 1-foot-wide angled aluminum trough leading to a 5-gallon collection bucket. The trough is lined with Enkamat mesh and attraction water for the eelway is provided via hoses connected to a submersible pump in the forebay.
b. Downstream passage. If agreement is reached at consultation on the appropriate downstream passage measures, the parties shall jointly request FERC to amend licenses and insert the agreed-upon terms and conditions for downstream eel passage.	The 1998 FERC License Amendment incorporates the terms and conditions of the KHDG Agreement and for each of the four lower Kennebec Projects includes the requirements to "Study and implement upstream and downstream passage for American eels." At the Shawmut Project, the 2008 radio telemetry studies demonstrated effective downstream eel passage via the deep canal gate adjacent to Unit 7 in conjunction with night time shut downs of Units 7 and 8. The deep gate located adjacent to Unit 7 is the primary interim downstream passage measure for out-migrating adult American eels. The Licensee opens the deep gate and turn off Units 7 and 8 at night, for 8 hours a night, during a six-week period between September 15 and November 15 inclusive. The gate is set at approximately 2.5 feet passing approximately 425 cfs to provide effective passage. The preliminary Section 18 prescriptions for relicensing includes 1 inch clear space trashracks at both powerhouses, full station shut-downs from August 15 to October 31 for 8 hours each night, and effectiveness testing.
If consensus is not reached on either upstream passage location or	The licensees have installed upstream passage for American eels

KHDG Agreement Provision	Status
downstream passage measures by June 30, 2002, any party shall be free to petition FERC to amend any license to insert appropriate terms and conditions.	at the four lower Kennebec Projects, including the Shawmut Project, as discussed above. Downstream passage is provided at the four lower Kennebec Projects, including the Shawmut Project, as discussed above.
4. In the event that, during the course of the eel tracking studies, it is revealed that certain interim downstream measures are needed to avoid significant downstream turbine injury and/or mortality (immediate or delayed) at a particular site, KHDG dam owners will consult with the resource agencies and agree to undertake cost-effective measures designed to minimize mortality at that site.	The licensee has conducted downstream passage radio telemetry studies at the Project. Based on the results of these studies, downstream passage is provided via deep gates, downstream passage and spill and with supplemental turbine shutdowns based on telemetry study data results at Shawmut.
5. In the event that DMR does not receive the necessary appropriation or legislative spending authorization required to fund the studies discussed in paragraph III.G. l. & 2. above, the provisions in this Agreement governing American eel, found in paragraphs III.G. l through III.G. 4, are null and void, but all other provisions of this Agreement remain in full force and effect. In the event that paragraphs III.G. l through III.G.4 become null and void, any party may petition FERC to amend any license regarding upstream and downstream passage of eel.	As discussed above, the three years of downstream effectiveness testing has not been completed as a result of a lack of outmigrating silver eels for study purposes. It is not clear whether the MDMR would have the necessary appropriation or legislative spending authorization required to fund further studies.
E. Reporting.	
Continuous progress assessments will be undertaken through annual reports which will be filed with FERC by KHDG dam owners, consistent with current practice by KHDG dam owners.	KHDG Reports are filed annually following 30 days of signatory review. KHDG Reports are due on March 31 of each year based on a FERC amendment issued March 21, 2000 extending the due date for the annual reports.
IV. Terms and conditions for specific projects:	

KHDG Agreement Provision	Status
A. BIOLOGICAL ASSESSMENT PROCESS FOR LOCKWOOD, UAH-HYDRO KENNEBEC, SHAWMUT AND WESTON	
The schedule described herein for installing permanent upstream fishways at Lockwood, UAR-Hydro Kennebec, Shawmut and Weston projects is based primarily on the anticipated growth in the population of American shad in the Kennebec River. However, the State of Maine's goal is to restore anadromous species (with the exception of lamprey) to their historic range. This means restoring other anadromous species above Lockwood, UAR-Hydro Kennebec, Shawmut and Weston including Atlantic salmon, alewife, and blueback herring. The resource agencies will continue to assess the status and growth of the population of shad and other anadromous fish populations in the Kennebec River, as is being done on the Saco River and elsewhere in Maine. *Should the growth of salmon or river herring runs make it necessary to adopt an alternative approach for triggering fishway installation (i.e., one not based on the project specific, biologically-based trigger number for shad), the resource agencies will meet with the licensee(s) to attempt to reach consensus on the need, timing and design of permanent upstream fish passage facilities at the Lockwood, Hydro-Kennebec, Shawmut, and Weston projects. Disputes will be handled through the FERC process.*	Biological Assessments were developed for Atlantic salmon outlining the passage measures proposed as part of the ISPPs for the Hydro-Kennebec Project on April 6, 2012 and for the Lockwood, Weston and Shawmut Projects on February 21, 2013. Biological Assessments were developed for Atlantic salmon outlining the passage measures proposed as part of the SPP for Lockwood, HK and Weston on May 31, 2021 and are being evaluated pursuant to the relicensing for the Shawmut Project. As discussed above, while a biologically based trigger for Atlantic salmon has not been adopted, Brookfield instead proposed date certain implementation of upstream and downstream passage measures pursuant to the Section 7 process. As discussed above, this provision is recognized as satisfied by FERC as the implementation of date certain passage measures precludes the need for a biologically based trigger for Atlantic salmon. Brookfield has upheld the provisions of the KHDG targeting other diadromous fish species as part of design efforts (all upstream and downstream fishways are designed to accommodate the suite of target diadromous species, not Atlantic salmon alone) and as “constituent elements” to Atlantic salmon critical habitat.
B. LOCKWOOD AND UAH-HYDRO KENNEBEC	

KHDG Agreement Provision	Status
1. Interim upstream fish lift. At the Lockwood facility, licensee shall install an interim trap, lift, and transfer facility for American shad, river herring, and Atlantic salmon at the powerhouse, to be operational by May 1, 2006. Licensee recognizes and acknowledges that the success of the resource agencies' and Kennebec Coalition's efforts to restore shad, and to begin the restoration of Atlantic salmon to the Kennebec River Basin and achieve established fisheries management goals is dependent upon: (a) the State's ability to collect sufficient quantities of healthy shad brood stock from the Sebasticook River at the Fort Halifax dam, and from the Kennebec River at the Lockwood dam to use in DMR's Waldoboro hatchery and for stocking in upstream waters; and (b) the resource agencies' and other interested organizations' ability to collect available brood stock of Atlantic salmon from the Sebasticook River at the Fort Halifax dam, and from the Kennebec River at the Lockwood dam, to initiate a Kennebec River salmon hatchery operation. Licensee further recognizes and acknowledges that, assuming the prior removal of the Edwards dam, installation of an interim fish lift at the Lockwood dam in 2006 is needed, and Licensee will not seek to eliminate or defer this installation requirement before FERC or other regulatory bodies.	Lockwood fish lift operational in 2006. The fishery resource agencies ceased collection of shad broodstock from Fort Halifax or Lockwood Dams in 2008 as the hatchery program for shad ceased, as the Waldoboro hatchery closed due to lack of funding, availability of broodstock, and “current management of American shad along the East Coast.” Juvenile shad were stocked into the Kennebec from 1992 to 2008. Resource agencies and/or the Kennebec Coalition never collected Atlantic salmon brood stock from the Fort Halifax or Lockwood dams. A Kennebec River salmon stocking program only just started in 2020 with the stocking of 89,000 Atlantic salmon smolt of Penobscot River origin (bred using Penobscot River broodstock and raised at the Nashua hatchery) below Lockwood Dam and 100,000 in 2021. Salmon egg planting in the Sandy River has been conducted using Penobscot River origin eggs since 2004. In total, two years of shad study were conducted at the Lockwood Project in 2009 and 2015 with similar results. The small number and short duration of shad in the tailrace, coupled with attraction to the bypass reach during the 2009 and 2015 studies and during Atlantic salmon upstream studies conducted in 2016 and 2017, is the reason a bypass reach fishway has been designed for the Lockwood Project. A letter was sent to FERC on August 9, 2017 indicating a shift to a bypass reach fishway design in lieu of completion of the lift flume.
C. SHAWMUT	

KHDG Agreement Provision	Status
1. Permanent upstream passage at Shawmut shall be operational 2 years following the earlier to occur of either of the following biological triggers. In no event shall permanent upstream fish passage be required to be operational before May 1, 2012. a. 15,000 American shad passed in any single season in the permanent passage facility at UAR-Hydro Kennebec; or b. a biological assessment trigger initiated for Atlantic salmon, alewife or blueback herring as described in IV -A above.	The upstream fish passage facility at Shawmut is based on a biological assessment (with date certain installation but not a biological population trigger) for Atlantic salmon but is designed to pass all target diadromous species. Final designs were developed in full consultation with NMFS, USFWS, MDMR, MDEP and MDIFW and filed with the FERC on December 31, 2019. An extension of time to construct the Shawmut fishway and to conduct a Feasibility Assessment (to consider alternatives to the fishways including dam removal) was filed with the FERC in full consultation with the agencies on March 20, 2018. On July 13, 2020, FERC rejected the request for an extension of time for the Shawmut upstream fishway, so that FERC could instead consider the fishways proposed for Shawmut as part of the relicensing process.
2. Downstream passage: a. Interim passage beginning upon the effective date of this Agreement:	Studies were conducted at Shawmut following the implementation of "permanent downstream facilities" a three-year average of 93.6 for salmon (2013-2015).
b. Permanent passage: Permanent downstream facilities will be operational on the date that permanent upstream passage is operational. Licensees will be permitted to install permanent downstream passage at an earlier date if it so chooses.	The Shawmut Project has interim downstream passage facilities (downstream sluice gate plus additional spill for Atlantic salmon smolts) that are effective for Atlantic salmon smolts. Downstream passage became a relicensing proposal and USFWS and NMFS have preliminarily prescribed 1 to 1.5-inch clear spaced trashracks or overlays, night-time shut downs, and other improvements to the downstream fishway.

KHDG Agreement Provision	Status
V. Funds for Fisheries Restoration of the Kennebec. KHDG darn owners will pay $4,750,000 to the State of Maine, c/o the National Fish and Wildlife Foundation ("NFWF"), pursuant to an agreement entered into between NFWF and the State of Maine, at scheduled payment intervals listed below. KHDG dam owners' payments to the State will be used only for anadromous fisheries restoration in the Kennebec, including funding for restoration of alewife, shad, blueback herring, and salmon; the eel studies described herein; and costs incurred by the State in connection with removing the Edwards Darn. The schedule of payments by KHDG darn owners to the NFWF is: $2,375,000.00, received by NFWF on or before January 15, 1999; $935,000.00, received by NFWF on or before January 15, 2000; and $180,000.00 per year, received by NFWF on or before January 15, for each of the years beginning January 15, 2003 and continuing up to and including January 15, 2010. KHDG dam owners that are signatories to this Agreement are jointly and severally liable for all payments listed herein.	The 1998 Agreement required members of KHDG to contribute $4.75 million to the State of Maine to be used for diadromous fisheries restoration efforts in the Kennebec River basin. In accordance with the Kennebec River Restoration Fund Agreement, the National Fish and Wildlife Foundation (NFWF) was responsible for disbursements from the fund to the State of Maine Department of Marine Resources to use for the restoration of river herring, American shad, and Atlantic salmon, and for conducting American eel passage evaluations on the Kennebec River. The KHDG Agreement funding obligation was initiated in 1998 and completed in 2010.