STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0022

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PERMIT

AMENDMENT B TO
GREAT PONDS PERMIT GP 788
and WATER QUALITY CERTIFICATION

The staff of the Maine Land Use Regulation Commission (Commission), after reviewing the application and supporting documents submitted by for Amendment B to Great Ponds Permit GP 788, finds the following facts:

1. Applicant: Kingsbury Plantation
   P.O. Box 155
   Abbott, Maine 04406

2. Date of Completed Application: August 24, 2018

3. Location of Proposal: Kingsbury Plantation, Piscataquis County
   Lot #31 on Plan #08
   1.8 acres (owned)

4. Zoning: (D-RS) Residential Development Subdistrict
   (P-WLl) Wetland Protection Subdistrict

5. Existing Structure: Kingsbury Dam

6. Affected Waterbody: Kingsbury Pond

   The Commission has identified Kingsbury Pond as a resource class 2, management class 5 lake that is relatively accessible and relatively developed, and has significant fisheries and physical resources.

Background

7. Kingsbury Pond is a 390-acre pond located in Kingsbury Plantation and Mayfield Township in Piscataquis County. The applicant's 1.8-acre lot was developed prior to the inception of

the Commission with a non-hydropower dam located at the northeastern end of Kingsbury Pond in Kingsbury Plantation, which outlets to Kingsbury Stream. The site includes a public boat launch and a parking area on the north side of the dam, and is located near the junction of Route 16 and the Hotel Road, which is a short road connecting Route 16 and Wellington Road.

A. Kingsbury Dam (aka the "Robert C. Furber Dam") was originally constructed in 1858, consisting of a granite and wooden spillway and an earthen fill dam. In 1961 the dam and the land under it was deeded to the residents of Kingsbury Plantation. In 1969, the dam was breached and improvements to the dam were initiated. Slate facing was added as a part of a federal project in the 1974, and other maintenance work was done. Dam repair and improvements were not completed at that time due to insufficient funds, but were completed under Great Ponds Permit GP 788, issued by the Commission in 2000 to Kingsbury Plantation to reconstruct the area of the dam between spillway #1 and Route 16, and to repair spillway #1. At that time, the dam consisted of concrete, granite blocks and earthen fill; and was comprised of two spillways straddling a concrete wall, one emergency spillway straddling a concrete wall, granite blocks along the north and south sides of the dam and extending into the lake at spillway #1, a wooden deck over spillway #1, slate riprap below the spillways and behind the concrete wall, and a screen across spillway #1.

B. In 2005, Amendment A to GP 788 was issued to Kingsbury Plantation for repair work when the dam breached between spillway #2 and the Wellington Road, and additional granite blocks were installed. Currently, the dam consists of earthen fill, granite blocks, concrete walls and precast concrete deck panels with a steel guardrail, a one-inch thick steel plate dam gate with associated frame and hoists (the emergency spillway), a concrete outfall apron, and two spillways. There is riprap below the dam on the north side of Kingsbury Stream.

C. In 2012, Lot #31 was purchased by Kingsbury Plantation. Previously, Kingsbury Plantation owned only the dam and the land under it.

Proposal

8. The applicant proposes to install a new steel gate and to repair a 1,300-square foot area of riprap along the north side of Kingsbury Stream. All dam repair work will be within the footprint of the existing dam, during a period of low water. The time required to conduct the repair work is approximately three weeks.

A. *Dam repair.* The new steel gate would be set in place just below the existing gate, which would be used as a coffer dam and removed after the new gate is installed. By using the existing gate as a coffer dam, the water level of the lake would not be affected. If conditions during the repair work cause the water level to rise, the existing sluice way will be used to keep water from entering the work area.

(1) The new gate will include concrete ballast, steel gate guides, lifting frame and hoist, a

concrete pier for the hoist frame and gate guides, and a concrete sill extension. The amount of concrete used will be 8 cubic yards. Concrete operations will not introduce materials into the pond or stream by using control measures, including designated wash out areas and contained mixing equipment. No other fill will be required.

(2) Regarding maintaining the flow of Kingsbury Stream during the three-week construction period the applicant stated, "Our work installing the new gate will not impact the ability to operate the spillways or affect the flows from springs immediately below the dam, as the gate section is not used to provide water to Kingsbury Stream." The applicant also provided the "Dam Operation and Maintenance Manual for Kingsbury Plantation (Manual)," which explains that the gate being replaced is not typically used for water control for Kingsbury Stream, and that water passes over the top of the plates at full pond when both spillways and stoplogs are closed. The following is excerpted from that Manual: "Seepage through the dam, controlled flow over the spillways, and flows from springs immediately below the dam provide sufficient flow for fish in Kingsbury Stream. The planks in Spillway 2 and/or Gate 1 can be raised to provide additional flow to Kingsbury Stream if needed."

B. *Riprap repair.* The area of riprap to be repaired is below the dam, on the north side of Kingsbury Stream, and above the normal high water mark of the stream. This section of riprap was damaged by erosion in Spring, 2017. Filter fabric will be installed behind the riprap to help prevent future erosion problems.

C. *Estimated cost.* The estimated cost of the proposed work is $84,150.

D. *Access.* The work area will be accessed from the adjacent parking area. No site preparation will be needed, other than a staging area for the equipment and materials.

9. *Wetlands and flood prone areas*. Wetland areas within the dam footprint or near the dam include (a) the lake, the stream channel, and any wetland within 25 feet of the stream channel (P-WL1 wetlands); and (b) an area of scrub shrub wetland adjacent to the south side of the stream (P-WL2 wetland). The proposed dam repair will not result in new wetland impacts beyond the existing impacts previously considered by the Commission associated with the existing dam. The repair work will not impact the wetland located on the south side of the stream. The dam site is an unmapped area prone to flooding, but is not mapped by the Federal Emergency Management Agency (FEMA) as a flood zone or by LUPC as a Flood Prone Area Protection (P-FP) subdistrict.

10. *Erosion and sedimentation control*. Because the proposed dam repair work will be within the existing concrete footprint of the dam, it will not cause soil disturbance leading to erosion or sedimentation. For any area of mineral soil that will be disturbed by the dam repair work, by the riprap repair, where heavy machinery will be operated, and at the staging area, the Maine Erosion and Sedimentation Control Best Management Practices (BMPs) produced by the Maine Department of Environmental Protection will be used, in particular silt fencing and hay bales.

Review comments

11. *State Soil Scientist.* The State Soil Scientist reviewed the application and had no objections because it is a repair operation and very little soil disturbance is expected to occur. For the riprap repair, he recommended that at the end of the workday no exposed soil should be left unprotected if rain is expected overnight or the next day.

12. *Maine Department of Inland Fisheries and Wildlife (MDIFW).* MDIFW reviewed the application and offered the following comments:

> "[The] main concern is that nearly all of the existing flow into Kingsbury Stream was coming from underneath the existing concrete outflow (downstream) apron, which is under the construction area, and it's not clear if the applicant could see this during the high flows when they took their photos. If the applicant attempts to shut off this flow to control flow through the construction site, they will have to provide some flow into Kingsbury Stream from either the middle gate (which is holding about 12-14" of water) or some other method (syphon/pump). Otherwise, [the applicant] will dry up Kingsbury Stream. In other words, some minimum flow will need to be maintained during construction. If the applicant does not intend to control the flow under the apron, then they should be all set."

Review Criteria and Standards

13. *Shoreland alteration.* Pursuant to *Land Use Districts and Standards*, 01-672 C.M.R. 10 (last revised September 20, 2018) (herein after "Chapter 10"), § 10.02(193), a shoreland alteration is:

> "Any land use activity, which alters the shoreland area, either at, adjacent to or below the normal high water mark, of any surface water body, including but not limited to:
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> a. dredging or removing materials from below the normal high water;
>
> b. construction or repairing any permanent structure below the normal high water mark.
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> For purposes of this subsection, permanent structure shall mean any structure, including but not limited to, causeways, wharfs, piers, docks, concrete or similar slabs, bridges, hand-carry launches, trailered ramps, water-access ways, piles, marinas, retaining walls, riprap, buried or submarine utility cables and lines, permanent docking structures, mooring structures, and water lines. A structure which is not fixed in or over the water or below the normal high water mark for more than 7 months in a calendar year shall not be a permanent structure;
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> c. depositing any dredged spoil or fill below the high-water mark; and
>
> d. depositing dredged spoil or fill, or bulldozing, scraping or grading, on land adjacent to a water body in such a manner that the material or soil may fall or be washed into the water body, except that filling and grading or water crossings which do not require a permit as specified in Section 10.27, or other provisions of these rules shall not constitute shoreland alteration.
>
> Activities which cause additional intrusion of an existing structure into or over the water

body, are also considered shoreland alterations."

14. *Structure.* Pursuant to Chapter 10, § 10.02(205), A structure is defined as "[A]nything constructed or erected with a fixed location on or in the ground, or attached to something having a fixed location on or in the ground, including, but not limited to, buildings, mobile homes, retaining walls, billboards, signs, piers and floats. 12 M.R.S.A. §682. For purposes of regulating development in flood prone areas, a walled and roofed building. A gas or liquid storage tank that is principally above ground is also a structure."

15. *Permit required.* Pursuant to Chapter 10, § 10.23,N,3,c(11), "Shoreland alterations, including reconstruction of permanent docking structures; but excluding marinas, new or expanded permanent docking structures, water access ways, trailered ramps, hand-carry launches, water crossings of minor flowing waters, and motorized recreational gold prospecting" may be allowed within P-WL1 subdistricts upon issuance of a permit from the Commission pursuant to 12 M.R.S. § 685-A(10), and subject to the applicable land use standards set forth in Chapter 10, §§ 10.25 through 10.27.

16. *Water body and wetland impacts and level of permit review*. Pursuant to Chapter 10, § 10.25,P,2,a,(2), the level of permit review required depends upon the size of the proposed wetland alteration and the P-WL subdistrict involved. Generally, a project altering any area of P- WL1 wetland requires Tier 3 review. However, alteration of P-WL1 wetlands may be eligible for Tier 1 or Tier 2 review if the Commission determines that the activity will not have an unreasonable negative affect on the freshwater wetlands or other protected natural resources present. In making this determination, consideration shall include but not be limited to, such factors as the size of the alteration, functions of the impacted area, existing development or character of the area in and around the alteration site, elevation differences and hydrological connection to surface water or other protected natural resources.

    A. Pursuant to Chapter 10, § 10.25,P,1 for a Tier 1 review the following standards apply.
        (1) "*Soil erosion.* The activity will not cause unreasonable erosion of soil or sediment or unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment."
        (2) "*Harm to habitats; fisheries.* The activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life."
        (3) "*Lower water quality.* The activity will not violate any State water quality law, including those governing the classification of the State's waters."

    B. Pursuant to Chapter 10, § 10.25,P,2,b,(1)(a), projects requiring Tier 1 review must avoid alteration of wetland areas on the property to the extent feasible considering natural features, cost, existing technology and logistics based on the overall purpose of the project.

    C. Pursuant to Chapter 10, § 10.25,P,2,b,(2), projects requiring Tier 1 review must limit the amount of wetland to be altered to the minimum amount necessary to complete the project.

17. *General criteria for approval.* Pursuant to 12 M.R.S. § 685-B(4), which has been incorporated into rule in Chapter 10, § 10.24, the Commission may not approve an application unless:

    A. "Adequate technical and financial provision has been made for complying with the requirements of the State's air and water pollution control and other environmental laws, and those standards and regulations adopted with respect thereto."

    B. "Adequate provision has been made for loading, parking and circulation of land, air and water traffic, in, on and from the site, and for assurance that the proposal will not cause congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods."

    C. "Adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to ensure there will be no undue adverse effect on existing uses, scenic character and natural and historic resources in the area likely to be affected by the proposal."

    D. "The proposal will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water and suitable soils are available for a sewage disposal system if sewage is to be disposed on-site."

    E. "The proposal is otherwise in conformance with 12 M.R.S. §§ 681 – 689 and the regulations, standards and plans adopted pursuant thereto."

18. The facts are otherwise as represented in Great Ponds Permit GP 788, GP 788-A, the application for Amendment B to GP 788, and supporting documents.

Based upon the above Findings, the staff concludes the following.

1. *Kingsbury Pond level.* Because the existing dam gate will be left in place to serve as a coffer dam during the placement of the new gate, the level of Kingsbury Pond will not be altered during construction. Further, the permanent level of Kingsbury Pond will not be changed as a result of the gate replacement. As such, the Commission concludes that the repair of the dam as proposed will not result in a change to the water quality classification of Kingsbury Pond.

2. *Kingsbury Stream flow.* The applicant provided information to explain why the flow of Kingsbury Stream will not be affected during the three-week period required for installation of the new gate. Adequate flow for fish in Kingsbury Stream is maintained by seepage through the dam, controlled flow over the spillways on either side, and flows from springs immediately below the dam. The Commission concludes that Kingsbury Stream will not be adversely affected by the dam repair work and that the concerns raised by MDIFW will be met during the construction project.

3. *Level of wetland review.* Pursuant to Chapter 10, § 10.25,P,2(a)(2), the Commission

concludes that the repair of the dam, as proposed, will not have an unreasonable adverse effect on Kingsbury Pond, Kingsbury Stream, or the scrub shrub wetland adjacent to the stream. Therefore, the level of wetland review may be reduced from Tier 3 to Tier 1. Specifically, because this is an in-kind and in-place replacement of the existing steel gate, which is not used to control the flow to Kingsbury Stream, the impact to the P-WL1 wetlands would be less than the area previously altered by the existing dam, and limited to only that which is necessary to maintain the integrity of the dam. In addition, the project would be completed during a period of low water. It is unlikely that an undue adverse impact to either the pond or the stream would occur as a result of the repair work, if conducted as proposed.

4. *Flood prone area standards.* Pursuant to Chapter 10, § 10.02(205), a dam is not considered to be a structure for the purposes of applying the flood prone area standards in Chapter 10, § 10.25,T (see Finding #14). In addition, while the Kingsbury Dam is at a location known to flood, it is not in a flood prone area that has been mapped by FEMA or by the LUPC. As such, it is not subject to the standards for flood prone areas in Chapter 10, § 10.25,T.

5. *Erosion and sedimentation control.* The applicant proposes to use the Maine Erosion and Sedimentation Control Best Management Practices to control any erosion of upland soils and contain any construction debris in order to prevent sedimentation to Kingsbury Pond and Kingsbury Stream, and to minimize water quality impacts. The timing of the repair work during a period of low water also minimizes the potential for an adverse effect due to the activity where the work is at or below the normal high water mark. The water quality of Kingsbury Pond and Kingsbury Stream are not expected to be adversely effected by the project.

6. If carried out in compliance with the Conditions below, the proposal will meet the criteria for approval at 12 M.R.S. § 685-B(4).

Therefore, the staff approves the application of Kingsbury Plantation for Amendment B to Great Ponds Permit GP 788 subject to with the following conditions.

1. The Standard Conditions for Shoreland Alterations (version 4/04), a copy of which is attached.

2. The dam repair work must be an in-kind, in-place replacement of the existing gate and supporting structures, as summarized in Finding #8. The dam replacement must not result in a permanent alteration of the level of Kingsbury Pond or the flow of Kingsbury Stream. The flow of Kingsbury Stream must be maintained during construction.

3. The work done to repair the riprap on the north side of the dam must not extend below the normal high water mark of Kingsbury Stream. Filter fabric must be placed behind the riprap in the repaired area to help minimize any future erosion problems.

4. Work at or below the level of the water must be completed during a period of low water.

5. The dam and riprap repair work must not affect any wetland area other than the pond and the

stream.

6. *Erosion and sedimentation control.*

   A. Prior to the start of construction, measures to control erosion and sedimentation, including but not limited to staked hay bales and silt fencing, must be placed between any area above the normal high water mark that will be disturbed and the waterbody to prevent sediment from entering the waterbody. Any silt fencing used must be removed within 30 days of completing the project, if soil stabilization is complete.

   B. All areas of disturbed mineral soils above the normal high water mark must be stabilized with hay or bark mulch and replanted in accordance with the Commission's Guidelines for Vegetative Stabilization. In areas where revegetation is not initially successful, additional measures to control erosion and sedimentation must be undertaken as often as necessary to be effective.

   C. Wheeled or tracked heavy machinery must not be driven below the normal high water mark of Kingsbury Pond or Kingsbury Stream. Mats or platforms must be used as needed to protect the shoreline from damage.

   D. If heavy machinery is used, then the repair work must not occur when the soil above the normal high water mark is frozen or saturated.

   E. Should any erosion or sedimentation occur during construction, the permittee shall contact the Land Use Planning Commission immediately, notifying it of the problem and describing all proposed corrective measures.

7. *Concrete.* Contained concrete mixing areas and designated wash-out areas must be used when mixing concrete in order to prevent uncured concrete from being introduced into the pond or the stream.

8. Any stockpiled debris or excavated material must be placed above the normal high water mark, and must not be placed within a wetland. Upon completion of the project within the terms of this permit, any debris or excavated materials remaining must be removed from the lot and all solid waste and other debris disposed of in a proper manner, in compliance with all applicable state and federal solid waste laws and rules.

This permit is approved only upon the above stated conditions and remains valid only if the permittee complies with all of these conditions. In addition, any person aggrieved by this decision of the staff may, within 30 days, request that the Commission review the decision.

DONE AND DATED AT AUGUSTA, MAINE THIS 28th DAY OF SEPTEMBER, 2018

By: Bill Hinkel
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for Nicholas D. Livesay, Executive Director