Ĩ	Public Notice
US Army Corps of Engineers Philadelphia District Wanamaker Building 100 Penn Square East Philadelphia, PA 19107-3390 ATTN: CENAP-OPR	Public Notice No.DateCENAP-OPR-2019-01237-84February 24, 2021
	Application No. CENAP-OPR-2019-01237-84/Lenape Dam Mitigation Bank
	In Reply Refer to: REGULATORY BRANCH

This District has received a Prospectus to establish a compensatory wetland mitigation bank for Department of the Army permits pursuant to Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, 73 Fed. Reg. 19594 (April 10, 2008).

The purpose of this notice is to solicit comments and recommendations from the public concerning the Prospectus as described below. A full copy of the Prospectus is available for review upon request.

- BANK SPONSOR: Hagerty Environmental, LLC 415 McFarlan Road Suite 216 Kennett Square, PA 19348
- **PROJECT NAME**: Lenape Dam Mitigation Bank
- WATERWAY: Brandywine Creek
- LOCATION: Latitude 39.916667°, Longitude -75.636944°, TMP 63-4-102, Pocopson Township, Chester County, Pennsylvania (see attachment E-1).
- ACTIVITY: The proposed Lenape Dam Mitigation Bank site is located within 1 parcel, privately owned by Lenape Cabin Club, Inc. Lenape Dam would be permanently removed to allow free flow in accordance with the mitigation design plan (see attachment E2 for an overview).

Lenape Dam (D15-388) is a 280-foot long, rock-fill, low-head structure that was constructed in the early 1900s. The dam is proposed to be removed as it no longer meets the minimum standards of 25 Pa. Code Chapter 105, is not able to be economically or practically repaired or maintained to meet said standards, provides limited functional value and, in its current condition, poses a safety concern to recreational users of Brandywine Creek.

The Sponsor intends to establish the bank to provide compensatory mitigation to compensate for unavoidable impacts to Waters of the United States and/or Regulated waters of this Commonwealth occurring in the Lower Delaware River Sub-basin (Pennsylvania State Water Plan Sub-basin #3 South). The proposed Service Area includes a secondary service area composed of adjacent watersheds in Sub-basin #3 North and Sub-basin #6.

In the Service Area, the mitigation credits from the bank would be used to mitigate for impacts to streams and potentially wetlands and open water. The use of a mitigation bank to provide credits must be specifically reviewed and approved. The number of credits generated by successful implementation of the bank is based on a quantifiable functional uplift resulting from the restoration work and site protection proposed. The proposed dam removal would potentially result in the generation of 13,245 stream credits and 0 wetland credits.

Lenape Dam currently restricts free aquatic organism movement upstream and downstream by restricting flow across a majority of the creek width. By restricting aquatic organism movement and by creating an impoundment upstream, the dam alters macroinvertebrate habitat and impedes species diversity. In addition to these restrictions, the dam also presents a barrier to both resident and migratory fish passage to the upstream reaches of the Creek. Although the existing breach may allow a percentage of resident and migratory fish to pass upstream, it has been shown that each blockage on a river can result in fish passages being effective for only 3-16% of the free flow fish passage. Additionally, the estimated flow velocity through the breach is in excess of 60 centimeters per second (cm/s) under the most conservative of conditions, which far exceeds optimal swim velocities of elver (juvenile American eel) of 25 cm/s. This type of flow restriction and velocity has been documented to substantially diminish the number of elver traveling upstream. The removal of the dam will allow 100% fish passage and for the lotic community to fully reestablish in the current dam pool and upstream tributaries.

From a mitigation credit quantification standpoint, impacts to the lotic community will be accounted for via removal of the 1,000 linear feet of upstream impoundment. For fish passage impedance, credit generation will be based on the restoration of upstream access of resident and migratory fish to the next stream obstruction (i.e., dam). Specifically, the mainstem (5th order) extends upstream for 0.75 miles to the confluence of the east and west branches (both 4th order streams). The upstream reach of the east branch extends for 11.42 miles to the Davey Dam just south of Downingtown, PA and the west branch extends for 10.65 miles to the Reynolds Dam near Embreeville, PA. The total combined fish passage impedance quantity is therefore in excess of 22 miles, not including impacts to (and eventual benefits to) lower order tributaries not accounted for in the Prospectus.

There is a need for compensatory stream and wetland mitigation site opportunities in the region for impacts associated with Federal and State permitted projects. The proposed mitigation bank is technically feasible, incorporates lessons learned from, and design concepts applied successfully to, another compensatory mitigation site in the State of Maryland for the removal of Bloede Dam.

The pursuit of the proposed objectives and anticipated functional gains indicated by the sponsor, provided this site satisfies the test for ecological suitability, will result in gains to stream functions along the impounded reach. Habitat availability, fish passage, improved transport of sediments, and recreational use are a few potential examples.

Oversight of the Bank would be by an Interagency Review Team (IRT) composed of Federal and State representatives and chaired by this office. The mitigation bank credits would be available for sale to third parties provided such parties (permittees) have received all necessary Federal and State authorizations requiring compensatory mitigation.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the implications for approval of this proposed mitigation bank. Any comments received will be considered by the IRT.

Comments on the proposed bank should be submitted, in writing, within 30 days of the date of this Public Notice to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390 or via electronic mail to napregulatory@usace.army.mil.

Additional information concerning this permit application may be obtained by contacting Mr. Brian Anthony of this office at the above address, by email at <u>brian.r.anthony@usace.army.mil</u>, or by calling (215) 656-0542.

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Todd A. Schaible Chief, Regulatory Branch





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