

8.iv.	<p>An analysis of any potential temporary and/or permanent adverse environmental impact(s), whether onsite or offsite, of the proposed regulated activity or project on regulated waters, channels, riparian zones, fishery resources, and threatened or endangered species and their habitat, which includes:</p> <ul style="list-style-type: none"> <li>A. A justification for the proposed regulated activity or project, including an explanation of why any proposed regulated activity or project and its location is the most appropriate for the site, and how the proposed location and design minimizes adverse environmental impact(s) to the resources;</li> <li>B. An analysis of alternatives to the proposed regulated activity or project, including a no-build alternative;</li> <li>C. A description of all measures to be taken to reduce any potential adverse environmental impact(s) to the resources;</li> <li>D. A plan to mitigate the effects of all adverse environmental impacts; and</li> <li>E. Any monitoring or reporting methods that will be used.</li> </ul>	<p>Environmental Report, Sections 2, 4 and 5  Application Attachment E  Application Attachment G-2  Application Attachment G-3  Application Attachment J  Application Attachment K  Application Attachment N</p>
8.v.	<p>For an individual permit for activities which are likely to either disturb an area known to contain a threatened or endangered species or disturb any habitat that could support a threatened or endangered species, a survey for threatened or endangered species and their habitat. This survey shall be performed by a person with education and experience in wildlife biology, zoology, and/or botany, as appropriate, and shall include the items listed in A through I.</p>	<p>Application Attachment J-1</p>
8.vi.	<p>For regulated activities requiring an individual permit where activities are proposed within the inner 150 feet of the 300-foot riparian zone, provide documentation that demonstrates the items listed in A through D.</p>	<p>Application Attachment K</p>
8.vii.	<p>For an activity or project in the Pinelands Area as designated by Section 10(a) of the Pinelands Protection Act, N.J.S.A. 13:18-1 et seq., a Certificate of Filing, a Certificate of Completeness, or a resolution approving an application for public development, issued by the NJ Pinelands Commission.</p>	<p>Not Applicable</p>

This document was prepared pursuant to these requirements and presents a discussion of the Freshwater Wetlands Protection Act and Flood Hazard Area Control Act regulated resources, special aquatic sites, public lands, critical habitat, channels, riparian zones, fishery resources, threatened or endangered species and their habitat, and other relevant environmental features observed along the proposed Project route, as well as analysis and findings regarding the effect the Project will have on those environmental resources and a description of measures to be taken to reduce potential adverse environmental impacts.

## 2.0 PROJECT DESCRIPTION

### 2.1 Basic Purpose and Intended Use of Project

The Project is an interstate natural gas pipeline subject to Federal Energy Regulatory Commission (FERC) Certificates of Public Convenience and Necessity and Related Authorizations, dated January 19, 2018, directing PennEast to construct and operate the Project pursuant to Section 7 of the Natural Gas Act (NGA) (the Certificate) for the purpose of transporting natural gas in interstate commerce. A copy of the Certificate is attached to the cover letter transmitting this FWPA/FHACA application. The New Jersey portion of the Project includes a proposed 37.8-mile 36-inch diameter interstate natural gas transmission pipeline in Hunterdon and Mercer Counties, a 0.6-mile 12-inch diameter lateral pipeline in Holland Township, a 1.9-mile 36-inch diameter lateral pipeline in West Amwell Township, and appurtenant facilities and infrastructure necessary for the Project.<sup>1</sup> The Gilbert Lateral in Holland Township connects to the Gilbert Electric Generating Station and provides an interconnection with Gilbert Power, LLC (f/k/a NRG REMA, LLC) and Elizabethtown Gas (Elizabethtown). The Lambertville Lateral in West Amwell Township provides an interconnection with the Algonquin and Texas Eastern interstate pipelines. The Project is not water dependent.

A detailed discussion of the purpose and need of the project is set forth in the alternatives analysis found in Attachment K to the application, which demonstrates that the requirements of N.J.A.C. 7:7A-10.2 are met. Specifically, the alternatives analysis found in Attachment K demonstrates that the Project:

- Has no practicable alternative which would have a less adverse impact on the aquatic ecosystem or would not involve a freshwater wetland or State open water and would not merely substitute other significant environmental consequences for those attendant on the original Project proposal;
- Will result in the minimum feasible alteration or impairment of the aquatic ecosystem;
- Will not modify a present or documented habitat or jeopardize continued existence of a threatened or endangered species;
- Will not modify a critical habitat under the Endangered Species Act of 1973, 16 U.S.C. § 1531;
- Will not violate any applicable State water quality standard;
- Will not violate any applicable toxic effluent standard or prohibition under the federal Water Pollution Control Act;
- Will not violate the Marine Protection, Research and Sanctuaries Act of 1972, 33 U.S.C. §§ 1401;
- Will not cause significant degradation of ground or surface waters;
- Will not adversely affect a property listed or eligible for listing on the New Jersey or National Register of Historic Places;
- Will not violate the FHACA, N.J.S.A. 58:16A-50 et seq., or implementing rules at N.J.A.C. 7:13;
- Is otherwise lawful;
- Is in the public interest;
- Will not involve a discharge of dredged material or a discharge of fill material, unless the material is clean, suitable material free from toxic pollutants in toxic amounts;
- Is consistent with the Water Quality Management Plan (208 Plan), N.J.S.A. 58:11A-1; and
- In its entirety complies with the Stormwater Management rules at N.J.A.C. 7:8.

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<sup>1</sup> Information contained herein was derived in part from PennEast's FERC Application for the Project. Information was also derived in part from PennEast's supplemental filings with FERC and FERC's DEIS for the Project.

## **2.2 Proposed Route Description**

The Project is located in Holland, Alexandria, Kingwood, Delaware and West Amwell Townships in Hunterdon County and Hopewell Township in Mercer County. The Project traverses rural areas of Hunterdon and Mercer Counties along a route designed to meet the project delivery points. The landform along the Project route varies from gently rolling farmlands with scattered suburban subdivisions, villages and towns to mountainous areas with steep slopes and stream carved ravines. Within such a setting, potential impacts associated with pipeline construction will be minimized by collocating the pipeline with existing utility corridors to the maximum extent practicable and by favoring areas that have been previously cleared of forest cover. Most of the route is located on previously disturbed farmland (which will be unaffected once the pipeline is installed) or collocated with existing utility corridors. To access the Project's three New Jersey connection points the route traverses multiple freshwater wetland complexes and Delaware River tributary stream networks in the region. Given the landscape shifting the Project route to the west or to the east within any similarly-oriented corridor capable of meeting the delivery points would have the same or greater impact on aquatic ecosystems, freshwater wetlands, State open waters, and riparian areas.

The proposed alignment was established following FERC's Project scoping meetings and numerous conversations with landowners, State and local agencies, and other stakeholders. PennEast substantially modified the originally proposed pipeline route to respond to requests to collocate the Project with existing utility infrastructure and to avoid populated areas and critical resources, such as Category One (C1) waterbodies, freshwater wetlands, and Green Acres parcels. Notably, Mercer County specifically requested that PennEast modify the route to collocate the Project with existing utility lines notwithstanding possible impacts to preserved lands within those utility lines. Collocation of the pipeline with existing, cleared utility right-of-ways (ROWs), where practicable, is consistent with FERC and NJDEP policy to lessen environmental and visual impacts. In addition, field data gathered during environmental surveys helped PennEast make adjustments related to environmental constraints and discussions with individual landowners.

The proposed route was developed following a careful examination of roadway, utility and railroad ROWs. Roughly 18 miles of the total length of the resulting pipeline route in New Jersey is collocated with existing utility ROWs. In this context, collocation can mean within, partially within, or adjacent to an existing power line ROW. Further discussion on collocation efforts is provided in Attachment K of this application



### 3.0 PROJECT DESIGN AND CONSTRUCTION TECHNIQUES

The Project will be rated for a maximum allowable operating pressure of 1,480 pounds per square inch gauge (psig). The proposed facilities will be designed and constructed to meet or exceed the safety standards established by the United States Department of Transportation (USDOT) in 49 CFR Part 192.

In the design process, PennEast sought to avoid aquatic resources in pipeline alignment routing and by collocating the pipeline with existing utilities and roadways. PennEast engaged in a significant effort to avoid and minimize impacts to aquatic resources by examining the use of trenchless construction technologies at each pipeline crossing of a freshwater wetland and State open water. Numerous pipeline crossings of freshwater wetlands and waterbodies are not anticipated to result in surface impacts due to the implementation of conventional bore and horizontal directional drilling (HDD), which virtually eliminates surface impacts. The Project incorporates eleven (11) HDDs spanning over seven and one half (7.5) miles and forty-six (46) conventional bores that avoid or minimize regulated environmental resources. Nearly twenty percent (20%) of the Project relies upon directional drilling and other trenchless techniques to avoid temporary and permanent wetland impacts. Implementation of conventional bores will require a 30-foot operational easement over the pipeline but will not require a trench for installation of the pipeline. Where trenchless construction is not feasible due to geology, severe topography, or pipeline alignment, workspace minimization was implemented to the maximum extent possible while maintaining worker safety and protection.