ENCLOSURE C – DESCRIPTION OF AQUATIC HABITAT

A. AQUATIC HABITAT

Based on field surveys, the proposed Pennsylvania Pipeline Project (Project) crosses a total of 64 wetlands, 3 ponds, and 125 streams in Westmoreland County. Resource Tables 2 and 3 included in this Attachment provide details regarding the specific wetland/stream type, crossing distances, temporary and permanent impacts, and crossing methods for all the water resources impacted in Westmoreland County. In addition, Enclosure A of this Attachment (Aquatic Resources Report and Supplementals) includes completed field data forms and specifics for each resource impacted; Enclosure E, Part 4 of this Attachment (Impact Avoidance, Minimization, and Mitigation Procedures) describes the proposed construction crossing methods and mitigation measures; and Attachment 12 (Erosion and Sediment Control Plan) provides details regarding the various soil erosion control measures that will be implemented at each resource crossing. The following provides a description of the stream and wetland resources crossed by the Project in Westmoreland County.

Streams

The Project crosses a total of 43 perennial streams, 35 intermittent streams, and 47 ephemeral streams in Westmoreland County. Under Pennsylvania Code, Title 25, §93.3, surface waters are categorized into five protected use categories: aquatic life, water supply, recreation and fish consumption, special protection, and other. Surface waters classified under the aquatic life category are further divided into the following four subcategories:

- CWF – Cold Water Fishes—Maintenance and/or propagation of fish species including the family Salmonidae and additional flora and fauna which are indigenous to cold water habitat.
- WWF – Warm Water Fishes—Maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.
- MF – *Migratory Fishes*—Passage, maintenance, and propagation of anadromous and catadromous fishes and other fishes that move to or from flowing waters to complete their life cycle in other waters.
- TSF – *Trout Stocked Fishery*—Maintenance of stocked trout from February 15 to July 31, and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat. The PAFBC refers to TSF streams as Approved Trout Waters.

Based on a review of eMapPA maintained by Pennsylvania Department of Environmental Protection (PADEP) and a review of Drainage List A of Pennsylvania Code, Title 25, Chapter 93, §93.9h, the designated/protected uses and fisheries classifications for the streams crossed by the Project in Westmoreland County include:

- 18 streams have a designated use for CWF,
- 30 streams have a designated use for HQ-CWF,

- 12 streams have a designated use for WWF,
- 4 streams have a designated use for HQ-WWF,
- 12 streams have a designated use for WWF, MF
- 48 streams have a designated use for TSF,
- 1 stream has a designated use for TSF, MF,
- 21 streams are designated as Approved Trout Water,
- 1 stream is designated as both Approved Trout Waters and Stocked Trout Streams

Of the total 125 streams crossed by the Project ROW in Westmoreland County, a total of 34 are classified as High Quality (HQ) and none of the streams crossed are classified as Exceptional Value (EV). HQ waters are those surface waters with water quality that exceed levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water by satisfying Pennsylvania Code 025 §93.4b(a). EV waters include high quality surface waters that satisfy Pennsylvania Code 025 §93.4b(b). The water quality of all HQ and EV streams must be maintained and protected in accordance with antidegradation requirements (Pennsylvania Code 025 §93.4a).

Of the 125 streams crossed in Westmoreland County, 105 have a bank-to-bank crossing width equal to or less than 10 feet. A total of 14 streams have a crossing width of 11-20 feet and 3 streams have a crossing width of 35-40 feet. An unnamed tributary to the Conemaugh River is Crossed three times with crossing widths of 79 feet, 100 feet, and 378 feet.

Riparian areas, located within 150 feet of the HQ and EV streams and 100 feet landward of the other streams, that are crossed by the Project in Westmoreland County consist of a variety of different cover types. In areas where the Project parallels existing ROW, these areas will primarily consist of herbaceous/emergent vegetation. Areas of new ROW, including the expansion of the existing ROW, may consist of agricultural areas, open fields/pasture, and/or wetland and upland scrub-shrub and forested habitat.

All 125 streams crossed in Westmoreland County will be restored to their original conditions (i.e., elevation, flow, stream substrate, hydrologic conditions, etc.) except for possibly a few limited areas of forested cover. These areas will retain their overall function, providing fish and wildlife habitat, but will have a long-term change in cover type.

Wetlands

The proposed Project will cross a total of 64 wetlands and 3 ponds in Westmoreland County (Table 2, Attachment 11). The wetland resources crossed represent a variety of different wetland types including palustrine emergent (PEM), palustrine scrub-shrub (PSS), palustrine forested (PFO), palustrine unconsolidated bottom (PuB), and combinations of these cover types. There are 37 wetlands crossed by the Project in Westmoreland County, with crossings less than 100 wide, 11 are greater than 100 feet wide, and 5 are greater than 200 feet wide.

As presented in detail in Attachment 11, Enclosure E, Part 2 (Section 2.8.1), each wetland crossed by the proposed Project in Westmoreland County was evaluated in accordance with 25 Pa. Code § 105.17(1) to determine whether or not the wetland area satisfied the

requirements for classification as an Exceptional Value (EV) wetland resource. Based on this evaluation, no wetlands crossed in Westmoreland County are considered EV wetlands

SPLP also evaluated the functions and values of the wetland areas using the USACE Highway Methodology (USACE 1999) assessment method as it is generally acceptable to the PADEP and the United States Army Corps of Engineers (USACE). In accordance with the method, eight functions (groundwater recharge/discharge, floodflow alteration, fish and shellfish habitat, sediment/toxicant/pathogen retention, nutrient removal/retention/transformation, production expert, sediment/shoreline stabilization, and wildlife habitat), and five values (recreation, educational/scientific value, uniqueness/heritage, visual quality/aesthetics, and threatened/endangered species habitat) were assessed for each impacted wetland. In addition to the standard functions and values assessment, a Wetland Function-Value Evaluation Form was used to assess EV wetlands. Enclosure D (Attachment 11) and SPLP's Resource Identification and Project Impacts (Attachment 11, Enclosure E, Part 2) describe the impacts, including functions and values, to EV wetlands crossed by the Project. Enclosure C of this Attachment provides a function and values assessment of the wetlands crossed by the Project in Westmoreland County.

All the wetlands crossed in Westmoreland County will be restored to their original conditions (i.e., elevation, hydrologic conditions, etc.).

A.1 Food Chain Production

All of 64 wetlands and 125 streams crossed by the proposed Project in Westmoreland County are considered to have some potential for food chain production. Growth of herbaceous plants within the emergent wetlands constitutes the food chain base that supports primary consumers such as invertebrates and small mammal herbivores. Secondary and tertiary consumers, including both omnivores and carnivores, are supported by the diversity and abundance of prey items in the wetland and stream ecosystems.

In addition, most of the streams within the County support photosynthetic algae, overhanging woody vegetation, and/or small aquatic vascular plants that support invertebrate herbivores (*i.e.*, aquatic insects). Such invertebrates are consumed by small reptiles and fish that inhabit some of the streams along the proposed Project.

A.2 General Habitat

a. Nesting

Nesting habitat within the wetlands and streams is limited in areas where the proposed Project parallels existing right-of-way (ROW). Vegetation is routinely mowed or cut within the existing ROW and at station facilities, limiting the nesting habitat to low growing, herbaceous plants and some limited shrubs. These areas may provide suitable nesting habitat for various bird species that nest on, or near, the ground. Within wetlands and streams, the forest edge provides suitable woody cover for bird species that commonly nest in shrubby edge habitats. In areas where the ROW does not parallel an existing ROW, the nesting

habitat may include both upland and wetland interior forests, open fields/meadows, and/or scrub-shrub areas. Combined, all the crossed by the Project provide nesting habitat for a variety of bird species including raptors, grassland species, waterfowl, woodpeckers, and numerous songbirds.

b. Spawning

In general, the 64 wetlands crossed by the Project in Westmoreland County do not include bodies of water large enough for fish spawning but may provide seasonal breeding habitats for amphibians, such as frogs and salamanders. Wetlands fed by a permanent source of surface water may also provide seasonal spawning habitat for small, non-game fish species.

Most of the 43 perennial streams crossed by the proposed Project in Westmoreland County provide potential habitat for seasonal spawning of game and non-game fish species.

c. Rearing

In areas where the proposed Project parallels existing ROW wetlands in Westmoreland County are not considered to have a high potential for wildlife rearing. This assessment is based on the routine maintenance activities conducted along the existing ROW within wetland and stream areas. The maintenance of the existing ROW limits the value of these wetlands for wildlife rearing.

In areas where the ROW does not parallel an existing ROW in Westmoreland County, the rearing habitat may include both upland and wetland interior forests, open fields/meadows, and/or scrub-shrub areas. Although these areas provide undisturbed areas of rearing habitat, the Project is not located in remote areas and the overall character of the surrounding area is primarily considered rural in terms of wildlife habitat. Consequently, these areas offer similar opportunities for rearing as the areas that parallel existing ROW.

Although some small mammals and birds may utilize the Project area for rearing purposes, the habitat provided in the adjacent undisturbed areas provides more shelter and food sources than the existing ROW. Consequently, the majority of rearing activities will not occur in the Project area but rather the adjacent areas.

d. Resting

All of the 64 wetlands and 125 streams crossed in Westmoreland County provide habitat that has the potential to be used for resting by a variety of birds and mammals. However, similar to the areas used for rearing, wildlife are likely to utilize more remote and secluded areas that offer more protection/cover for resting. Therefore, although the Project area does provide some resting habitat/areas for songbirds and possibly small mammals, these species are more likely to utilize the adjacent areas that provide more cover and/or perches.

e. Migration

The 64 wetlands crossed by the proposed Project in Westmoreland County are not believed to be substantially utilized during the migration of wildlife or birds. However, some of the wetland complexes that support large areas of open water, including ponds or reservoirs, may be utilized by migrating waterfowl. Other areas along the Project that may be used during migration include the forested edge habitat along the existing ROW that may be used by migrating songbirds.

Seasonal migration of trout during spawning is likely to occur within 21 streams designated as Approved Trout Waters and 1 stream designated as Approved Trout Waters and Stocked Trout Streams crossed by the Project in Westmoreland County. Additionally, there is potential for anadromous fish migration to occur within the 49 streams designated as TSF and TSF, MF.

f. Feeding

As indicated under Section A.1 (Food Chain Production), the 64 wetlands and 125 streams along the proposed route in Westmoreland County provide a food source for invertebrates, birds, reptiles, amphibians, and mammals. In general, this function is limited relative to the areas located outside the proposed Project area which provide higher rates of primary productivity. However, wetland areas within the proposed Project area support small numbers of aquatic insects, mollusks, or amphibians that meet specific prey requirements of birds and mammals with an affinity for wetland and stream habitats such as raccoon (*Procyon lotor*). In addition, streams traversed by the Project are likely utilized by a variety of wildlife species as a source of drinking water.

g. Escape Cover

The Project primarily parallels existing pipeline ROW or is located in primarily in rural areas in Westmoreland County; therefore, there is limited escape cover provided in the Project area due to lack of habitat diversity and structure. Specifically, vegetation on the existing ROW is limited to shrubs and herbaceous plants as compared to the diversity of habitat structure provided in the adjacent and surrounding vegetated areas.

Streams and other waterbodies within the proposed Project area provide escape cover for aquatic organisms when there is a presence of submerged stream bank vegetation/roots, aquatic plants, undercut banks, rocky substrates, and woody debris present.

h. Other

No other general habitat considerations were identified during either the wetland delineations or stream characterization surveys in Westmoreland County.

A.3 Habitat for Threatened and Endangered Plant and Animal Species

As presented in the Attachment 6 (PNDI and Agency Coordination) and Attachment 9 (Project Description) of the JPA, SPLP has coordinated extensively with the Pennsylvania Department of Conservation and Natural Resources (PADCNR), Pennsylvania Game Commission (PGC), Pennsylvania Fish and Boat Commission (PAFBC), and U.S. Fish and Wildlife Service (USFWS) throughout the entire Project planning process. Based on this coordination a number of species of concern have been identified in the Project area: the table below identifies the 4 animal species that have been identified in Westmoreland County.

Species of Concern Identified in the Project Area in Westmoreland County

Species of Concern	Clearance Letter	General Habitat Requirements	Conservation Plan
Animals			
Ghost Shiner	10/26/15	Low-gradient sections of large creeks and small to large rivers having moderate flow and moderately clear to turbid water. Bottom may vary from silt/detritus to clean gravel.	Not Required
Brook Stickleback		Prefers cool, clear, heavily weeded, spring-fed creeks, small rivers, lakes, and ponds.	Not Required
Indiana Bat	10/31/16	Primary maternity roosts are trees (often large dead trees) with exfoliating bark and sun exposure that results in high temperatures; males seek cooler roosts. Most roosts are within ¾ mile of water.	Myotis Conservation Plan
Northern long-eared bat	10/31/16	Associated with boreal forests. Uses caves and underground mines for hibernation. Maternity roosts are located in tree cavities, under exfoliating tree bark, and in buildings.	Myotis Conservation Plan

A.4 Environmental Study Areas

a. Sanctuaries

There are no wildlife, bird, fish, or plant sanctuaries that would be crossed by the proposed Project in Westmoreland County.

b. Refuges

No National Wildlife Refuges or management areas, designated critical habitat, or significant habitats were identified within the proposed Project area in Westmoreland County.

c. Other

The Project crosses two Core Habitats and one Supporting Landscape in Westmoreland County, as listed in the tables below. Core habitats are areas that are most closely associated with the habitat for species of concern. These areas can support little disturbance without adversely affecting the habitat of the species of concern. Supporting Landscapes are the areas surrounding or adjacent to core habitat that are not considered the primary habitat of the species of concern or natural community. Supporting Landscapes represent the areas necessary to maintain vital ecological processes or secondary habitat that could be impacted by certain types of disturbance.

Core Habitat Crossed by the Pennsylvania Pipeline Project in Westmoreland County

Name of Core Habitat	Distance Traversed (miles)	Aquatic Resources Present[a]
Lowber Slopes Biological Diversity Area	0.05	No
Sewickley Creek Slopes Biological Diversity Area	0.3	Yes

Source: PADCNR 2016

[a] Attachment 11, Enclosure E, Part 4 provides a more detailed discussion of impacts to streams and wetlands, impact avoidance and minimization measures, and a description of the crossing construction measures that will be used.

The Lowber Slopes Biological Diversity Area Core Habitat is composed of a woodland of red maple, sugar maple, black maple, and hackberry covers the mid to upper slope of this area. The lower slope is an open pasture with dense patches of multiflora rose. No project wetlands are located within the Core Habitat. No project waterbodies are located within the Core Habitat.

Core Habitat for Sewickley Creek Slopes Biological Diversity Area is characterized by steep south and southwest facing slopes that are interrupted by small tributary stream valleys. The area is somewhat disturbed by a railroad grade that parallels the creek on the souths side. Natural forest cover is restricted to the slopes and floodplain by residential development and agricultural land in the uplands. The forest cover is characterized as a Dry-mesic calcareous central forest dominated by oaks and hickory. Project waterbodies located within the Core Habitat include streams S172 and S225.

A.5 Stream Relocation, Enclosure, or Dredging

There are no stream relocations, enclosures, or waterway dredging/deepening activities proposed in conjunction with the proposed Project. Therefore, a description of the instream macroinvertebrate communities is not required as part of this Environmental Assessment Form (EAF).

B. WATER QUANTITY AND STREAMFLOW

B.1 Natural Drainage Patterns

The waterbodies in Westmoreland County within the proposed Project ROW are located in the Monongahela River Basin and the Allegheny River Basin. The Project crosses the following HUC 12 watersheds in Westmoreland County: Hinckston Run-Conemaugh River, Cedar Creek-Youghiogheny River, Maple Creek-Monongahela River, Haymakers Run-Turtle Creek, Pollack Run-Youghigheny River, Brush Creek, Little Sewickley Creek, Richards Run-Conemaugh River, Conemaaugh River-Kiskiminetas River, Baldwin Creek-Conemaugh River, Lower Sewickley Creek, Beaver Run Reservoir-Beaver Run, and Lower Loyalhanna Creek.

The proposed Project ROW crosses three physiographic provinces of Pennsylvania in Westmoreland County. The general drainage pattern of the streams located in the Waynesburg Hills, Allegheny Mountain, and Pittsburgh Low Plateau sections is dendritic, which is similar to the branching of tree roots. Dendritic drainage patterns develop in regions underlain by homogeneous material that is subject to a similar resistance to weathering.

B.2 Flushing Characteristics

The ability of a stream to maintain its flushing characteristics of both natural and introduced material is primarily defined by its width, flow velocity, and substrate. Most of the streams in the Westmoreland County area are low to medium-gradient streams that are best characterized as having moderate rates of flushing and residence times.

The majority of 64 wetlands located in Westmoreland County within the proposed Project area do not contain surface waters that support continuous flow; therefore, the majority of the wetlands crossed by the Project are considered to have a very low flushing ability based on their topography (low-lying depressions), limited sustained flows, and thick vegetation.

B.3 Current Patterns

Except in the wetlands that are associated with perennial streams, there are no sustained currents present within the wetlands crossed by the proposed Project.

The drainage pattern associated with the 125 streams crossed in Westmoreland County is dendritic and does not generally contain complex current patterns. Natural meanders with minimal obstructions are present.

B.4 Groundwater Discharge for Baseflow

Some of the wetlands associated with the proposed Project in Westmoreland County are associated with seeps or springs and are therefore located in areas of groundwater discharge, which may contribute to the baseflow of the streams. However, details on the amount of

groundwater discharge associated with the Project area wetlands/seeps has not been determined.

Based on the local topography and geology, there is a potential for some Project streams to be augmented by groundwater discharge. However, no studies have been conducted to quantify the contribution of groundwater discharge to the baseflow of the streams located within the Project area.

B.5 Natural Recharge Area for Ground and Surface Waters

Most of 64 wetlands crossed in Westmoreland County by the proposed Project are either located at points of seasonal groundwater discharge such as seeps or springs, or are associated with streams. Therefore, some of these wetlands are considered natural recharge areas for surface water. Similarly, some of the wetlands and streams in Westmoreland County may act as groundwater recharge areas based on their geographic location/setting and underlying material.

B.6 Storm and Floodwater Storage and Control

One of the primary functions of wetlands and floodplains is to store stormwater and attenuate floodwaters. In addition, baseflow conditions of the majority of the streams traversed is much lower than their bankfull condition; consequently, they all have additional capacity for storm and floodwater storage and control. Given the number of wetlands and streams within the Project area in Westmoreland County, storm and floodwater storage and control is considered to be moderate to high.

B.7 Public and Private Water Supplies/Wells

SPLP used PADEP's eMapPa system to identify Public Water Supply (PWS) areas that utilized Groundwater Wells and Surface Water Intakes as their source. The PWS data was used to create a file of all known public water supply areas within 1 mile of the Project workspace and notification letters and maps were sent to these identified PWS authorities. In the letters, Sunoco requested the locations of the authority's PWS groundwater well and/or surface intakes. Based on the information received, four of these PWS areas have been identified in Westmoreland County.

SPLP used DCNR's PAGWIS well data to identify a total of 22 recorded private groundwater wells located within 150 feet of the proposed Project's HDD locations. However, the DCNR recommends that PAGWIS data not be used for mapping purposes; therefore, SPLP will verify with the appropriate landowners, the exact location(s) of their water well(s) prior to construction. SPLP's Water Supply Assessment, Preparedness, Prevention, and Contingency Plan (Attachment 12, Tab12B) provides a summary of well identification efforts completed to date as well as SPLP's mitigation plan.

C. WATER QUALITY

The water quality of the Project waterbodies in Westmoreland County is considered good as is evidenced by the HQ-TSF, HQ-WWF, TSF, WWF, and trout classifications. Table 3 of this Attachment of the JPA, provides a summary of all the existing use and designated use classifications associated with the Project streams.

C.1 Preventing Pollution

Most of the land surrounding the proposed Project area in Westmoreland County is either forested or agricultural. Consequently, potential sources of pollution are minor and mainly limited to possible agricultural runoff. A majority of the waterbodies traversed by the proposed Project have good water quality as is evidenced by the presence of anadromous fish species (based on state classifications), and the trout and water quality state designations (for designated and existing uses). There is not a great concern of pollution in the general proposed Project area.

The wetlands within the proposed Project area in Westmoreland County have some limited capacity to mitigate pollution. The water detention capacities and growth of vegetation allow the wetlands to filter some pollutants. However, no studies have been conducted to quantify either the pollution prevention capacities of the wetlands, or the need for such functions in the proposed Project area.

C.2 Sedimentation Control and Patterns

The proposed Project area is primarily located within or adjacent to either forested or agricultural areas in Westmoreland County. Many of the agricultural fields have vegetation buffers bordering the streams. As a result, the existing sources of sediment within the proposed Project area are limited to potential runoff from plowed agricultural fields, or runoff from unpaved roads. Generally, clear water was evident in most of the streams surveyed within the proposed Project area.

During periods of high precipitation and runoff, the wetlands within the proposed Project area in Westmoreland County can be expected to limit the transport of sediments to downstream or downslope areas. However, no studies have been conducted to quantify the volume of sediments retained by, or deposited in, these wetlands.

C.3 Salinity Distribution

Only freshwater wetlands and streams were identified in the Project area in Westmoreland County. There is no evidence of any naturally occurring or man-induced salinity associated with the wetlands and streams identified within the proposed Project area.

C.4 Natural Water Filtration

As previously stated, the wetlands and streams crossed by the proposed Project in Westmoreland County are located in relatively undeveloped, forested or agricultural areas and there does not appear to be a great need for the natural filtration of water. Based on field observations, the surface water is considered to be of good quality.

D. RECREATION

D.1 Game Species

Hunting is a common and popular recreational activity in the vicinity of the proposed Project area in Westmoreland County, which contains an abundance of both small and large game species. Although the level of hunting activities and specific game species hunted in the Project area are unknown, the Project traverses areas where game hunting is assumed to occur.

The proposed Pennsylvania Pipeline Project does not cross any Pennsylvania State Game Land (SGL) in Westmoreland County (PAGC 2013). The proposed Pipeline crosses one privately-owned hunting club in Westmoreland County: Police Rod and Gun Club.

D.2 Non-Game Species

The level of recreational activities involving non-game species, such as bird watching, wildlife photography, and amateur naturalist study, occurring in wetlands/streams located within the Project area is not known. Due to the location of the majority of the proposed Project area near forested lands, the wetlands and streams traversed by the proposed Project offer a high potential for recreational observation.

D.3 Fishing

Many of the streams associated with the proposed Project offer high quality recreational and sport fishing opportunities. In Westmoreland County, 21 of the Project streams have been designated by the PAFBC as Approved Trout Waters and 1 stream has been designated as both Approved Trout Water and Stocked Trout Stream. Additionally 8 streams have a designated use for CWF, 30 streams have a designated use for HQ-CWF, 12 streams have a designated use for WWF, 4 streams have a designated use for HQ-WWF, 12 streams have a designated use for WWF, MF, 48 streams have a designated use for TSF, 1 stream has a designated use for TSF, MF.

D.4 Hiking

As identified in the table below, the Project crosses one hiking trail and two designated water trails in Westmoreland County. The existing pipeline ROW already forms a long, linear, relatively unobstructed corridor, which offers the potential for use as a hiking trail; however,

the amount of hiking that occurs along the entire corridor is not expected to be significant, since most of the existing ROW passes through private properties.

Hiking and Water Trails Crossed by the Pennsylvania Pipeline Project in Westmoreland County

Name of Trail	Aquatic Resources Present
Great Allegheny Passage	No
Youghiogheny River Water Trail	Yes
Kiski-Conemaugh River Water Trail	Yes

Source: PADNCR and Rails-to-Trails Conservancy 2016

D.5 Observation (Plant/Wildlife)

There is limited to moderate potential for recreational plant or wildlife observation in Westmoreland County as most the properties are privately owned and there is limited access to the Project area.

D.6 Other Recreation

The Project does not cross any state forests in Westmoreland County. However, the proposed Project may cross areas that provide additional recreational activities, including biking, backpacking, camping, picnicking, horseback riding, canoeing, kayaking, boating, rafting, scenic drives, cross-country skiing, and motorized vehicle use (i.e., all-terrain vehicles, snowmobiles).

The Project crosses the Loyalhanna Lake and Conemaugh Recreation Areas, UASCE owned/administered properties, in Westmoreland County. These areas provide a mixture of recreational uses for visitors including camping, hiking, biking, swimming, fishing, hunting and boating opportunities. Within the Project ROW, Loyalhanna Lake provides fishing and boating/canoeing opportunities and camping at the Bush Recreation Area, and Conemaugh River Lake provides educational trails and overlooks of cultural/historical resources.

E. UPSTREAM AND DOWNSTREAM PROPERTY

The proposed Project is located within relatively undeveloped agricultural or forested areas. In many instances, individuals who own wetlands and riparian areas also own most of the adjacent property. The proposed Project will not cause long-term degradation of water quality, alter flow volumes, or change the direction of flow. In addition, operation of the proposed Project is not expected to interfere with the normal riparian rights of upstream or downstream landowners.

F. OTHER ENVIRONMENTAL FACTORS

There were no other environmental factors of concern identified during the field surveys conducted for the proposed Project.