

APPENDIX M

PRELIMINARY CONCEPTUAL MITIGATION PLAN



**ALGONQUIN INCREMENTAL MARKET
PROJECT**

Preliminary Conceptual Mitigation Plan

Revised June 2014

TABLE OF CONTENTS

1.0 INTRODUCTION..... 1

2.0 PROJECT DESCRIPTION 2

3.0 WETLANDS..... 5

 3.1 Wetlands Crossed by the Project..... 5

 3.1.1 Pipeline Facilities..... 5

 3.1.2 Aboveground Facilities..... 7

 3.1.3 Access Roads..... 7

 3.2 Wetland Impacts and Mitigation 7

 3.2.1 Mitigation and Restoration Measures 7

 3.2.2 Compensatory Mitigation 7

4.0 WATERBODIES 11

5.0 REFERENCES..... 12

ACRONYMS AND ABBREVIATIONS

AIM	Algonquin Incremental Market
Algonquin	Algonquin Gas Transmission, LLC
BMPs	best management practices
CFR	Code of Federal Regulations
CTDEEP	Connecticut Department of Energy & Environmental Protection
E&SCP	Erosion and Sediment Control Plan
FERC	Federal Energy Regulatory Commission
FERC Procedures	FERC's Wetland and Waterbody Construction and Mitigation Procedures
HDD	horizontal directional drill
hp	horsepower
MLV	mainline valve
MP	milepost
M&R	metering and regulating
NGA	Natural Gas Act
NYSDEC	New York State Department of Environmental Conservation
OHWM	ordinary high water mark
PAR	Permanent Access Road
PEM	palustrine emergent
PFO	palustrine forested
Plan	Conceptual Mitigation Plan
Project	AIM Project
PSS	palustrine scrub-shrub
ROW	right-of-way
TAR	temporary access road
U.S.	United States
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

1.0 INTRODUCTION

This Conceptual Mitigation Plan (“Plan”) describes the methods that will be implemented during construction of the Algonquin Gas Transmission, LLC (“Algonquin”) Incremental Market Project (“AIM Project” or “Project”) to minimize, avoid, and mitigate for temporary and permanent impacts to wetlands and waterbodies. This Plan also includes a brief description of the Project and a listing of wetland and waterbody temporary and permanent impacts. The AIM Project location is depicted on Figure 1.1-1 in Resource Report 1.

2.0 PROJECT DESCRIPTION

Algonquin, an indirect, wholly-owned subsidiary of Spectra Energy Partners, LP, is seeking authorization from the Federal Energy Regulatory Commission (“FERC” or “Commission”) pursuant to Section 7(c) of the Natural Gas Act¹ (“NGA”) to construct, install, own, operate, and maintain the AIM Project which will involve expansion of its existing pipeline system located in New York, Connecticut, Rhode Island and Massachusetts. Algonquin is also seeking authorization pursuant to Section 7(b) of the NGA² to abandon certain segments of existing mainline pipeline as a related component of the AIM Project. The AIM Project will create 342,000 dekatherms per day of firm transportation capacity to deliver natural gas to the Northeast markets to meet immediate and future supply and load growth requirements of the Project Shippers as defined in Section 1.2 of Resource Report 1. Specifically, the Project will create additional pipeline capacity from the Ramapo, New York receipt point on the Algonquin system to various Algonquin city gate delivery points in Connecticut, Rhode Island, and Massachusetts. The target in-service date for the AIM Project is November 1, 2016.

The AIM Project includes the construction of approximately 37.6 miles of take-up and relay, loop and lateral pipeline facilities, modifications to six existing compressor stations resulting in the addition of 81,620 horsepower (“hp”) of compression, modifications to 24 existing metering and regulating (“M&R”) stations, the construction of three new M&R stations and the removal of one existing M&R station. These proposed Project facilities are located in New York, Connecticut, Rhode Island and Massachusetts. Refer to Figure 1.1-1 in Resource Report 1 for a Project overview map that shows the location of all proposed facilities and their association with Algonquin’s existing pipeline facilities. A complete discussion of the proposed Project facilities follows.

Proposed Pipeline Facilities

The proposed AIM Project includes approximately 37.6 miles of pipeline composed of the following facilities:

- Construction of approximately 20.1 miles of mainline pipeline, comprised of the following:
 - Haverstraw to Stony Point Take-up & Relay - Take-up and relay 3.3 miles of 26-inch diameter pipeline with 42-inch diameter pipeline in Rockland County, New York upstream of Algonquin’s existing Stony Point Compressor Station;
 - Stony Point to Yorktown Take-up & Relay - Take-up and relay 9.4 miles of 26-inch diameter pipeline with 42-inch diameter pipeline and the installation of an approximately 2.9-mile section of new pipeline ROW that includes a 0.7-mile horizontal directional drill (“HDD”) crossing of the Hudson River. This 12.3-mile segment is located in Rockland County, New York and Westchester County, New York downstream of Algonquin’s existing Stony Point Compressor Station; and
 - Southeast to MLV 19 Take-up & Relay - Take-up and relay 4.5 miles of 26-inch diameter mainline pipeline with 42-inch diameter pipeline (including a new 0.7-mile long, 42-inch diameter HDD pipeline crossing of Interstate 84 and the Still River) located in Putnam County, New York and Fairfield County, Connecticut downstream of and between Algonquin’s existing Southeast Compressor Station and mainline valve (“MLV”) 19;

¹ 15 U.S.C. §§ 717f(b) and 717f(c) (2006).

² 15 U.S.C. § 717P(b) (2006).

- Line-36A Loop Extension - Installation of 2.0 miles of 36-inch diameter pipeline loop extension in Middlesex County, Connecticut and Hartford County, Connecticut downstream of Algonquin's existing Cromwell Compressor Station;
- E-1 System Lateral Take-up & Relay - Take-up and relay 9.1 miles of 6-inch diameter pipeline with 16-inch diameter pipeline on Algonquin's existing E-1 System in New London County, Connecticut;
- E-1 System Lateral Loop - Installation of 1.3 miles of 12-inch diameter pipeline loop on Algonquin's existing E-1 System in New London County, Connecticut;
- West Roxbury Lateral - Installation of 4.2 miles of new 16-inch diameter pipeline and 0.9 miles of new 24-inch diameter pipeline off of Algonquin's existing I-4 System in Norfolk and Suffolk Counties, Massachusetts.

Modifications to Existing Algonquin Compressor Stations

Algonquin will modify six existing Algonquin compressor stations to add an additional 81,620 hp to its pipeline system as part of the AIM Project. This increase in horsepower will be achieved with the installation of six new compressor units. The proposed compressor modifications include the following:

Stony Point Compressor Station - Rockland County, New York

- ◆ Install two (2) Solar Mars 100 (15,900 hp each) natural gas-fired compressor units;
- ◆ Restage one (1) existing compressor driven by a Solar Taurus 60 natural gas-fired turbine;
- ◆ Install gas cooling for the new units; and
- ◆ Station piping modifications.

Southeast Compressor Station - Putnam County, New York

- ◆ Install one (1) Solar Taurus 70 (10,320 hp) natural gas-fired turbine compressor unit;
- ◆ Restage one (1) existing compressor driven by a Solar Taurus 70 natural gas-fired turbine;
- ◆ Replace the compressor body driven by an existing Solar Mars 90 natural gas fired turbine;
- ◆ Install gas cooling for the new unit; and
- ◆ Station piping modifications.

Oxford Compressor Station – New Haven County, Connecticut

- ◆ Restage one (1) existing compressor driven by a Solar Taurus 60 natural gas-fired turbine;

Cromwell Compressor Station - Middlesex County, Connecticut

- ◆ Install one (1) Solar Mars 100 (15,900 hp) natural gas-fired turbine compressor unit;
- ◆ Install gas cooling for the new unit and two (2) existing turbine compressor units; and
- ◆ Station piping modifications.

Chaplin Compressor Station - Windham County, Connecticut

- ◆ Install one (1) Solar Taurus 60 (7,700 hp) natural gas-fired turbine compressor unit;
- ◆ Restage two (2) existing compressors driven by Solar Taurus 60 natural gas-fired turbines;
- ◆ Install gas cooling for the new unit and two (2) existing turbine compressor units; and
- ◆ Station piping modifications.

Burrillville Compressor Station - Providence County, Rhode Island

- ◆ Install one (1) Solar Mars 100 (15,900 hp) natural gas-fired turbine compressor unit;
- ◆ Restage two (2) existing compressors driven by Solar Taurus 60 natural gas-fired turbines;

- ◆ Install gas cooling for the new unit; and
- ◆ Station piping modifications.

Modifications to Existing Algonquin M&R Stations

The AIM Project will include modifications to 24 existing Algonquin M&R stations in New York, Connecticut and Massachusetts, to accept the new gas flows associated with the AIM Project. Three M&R stations are located in New York, 13 are located in Connecticut and eight are located in Massachusetts. The types of modifications will include the replacement of existing heaters and metering facilities, piping modifications, and facility uprates. In addition, one existing M&R station (Greenville) will be removed in Connecticut.

Modifications at 21 of these existing stations are minor in nature and will take place within the existing fenced facilities. Three of the remaining M&R stations will require complete reconstruction and one will be decommissioned and removed (Greenville M&R). The stations requiring reconstruction are all in Connecticut and include the Willimantic M&R Station, Guilford M&R Station and Glastonbury M&R Station. The Glastonbury and Guilford M&R stations will be rebuilt within the same station footprint while the Willimantic M&R Station will be rebuilt on a new parcel of land being acquired by Algonquin adjacent to the existing station property. The M&R station locations are shown on the United States Geological Survey (“USGS”) quadrangle excerpts and aerial photo based site plans provided in Appendix 1A of Resource Report 1.

Construction of New Algonquin M&R Stations

Algonquin will construct three new M&R stations: two are located in Bristol and Suffolk counties in Massachusetts and one is located in New London County, Connecticut.

- Construct one (1) new M&R station in Connecticut:
 - Oakland Heights M&R Station – construct a new M&R station, including regulation, in the City of Norwich, New London County.
- Construct two (2) new M&R stations in Massachusetts:
 - Assonet M&R Station – construct a new M&R station, including regulation, in the Town of Freetown, Bristol County; and
 - West Roxbury M&R Station – construct a new M&R station, including regulation, in the City of Boston, Suffolk County.

3.0 WETLANDS

Wetlands are defined by the U.S. Army Corps of Engineers (“USACE”) as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and bottomlands. Algonquin delineated wetland boundaries using the methodology described in the USACE’s Wetlands Delineation Manual (Environmental Laboratory, 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2). The 1987 Manual and more recent supplements identify three environmental factors to consider when making wetland determinations: indicators of hydrophytic vegetation, hydric soil, and wetland hydrology.

3.1 Wetlands Crossed by the Project

Field surveys were conducted within a 300-foot wide study area across the Project area to identify and map wetlands, except for the West Roxbury Lateral where the study corridor was variable due to the developed nature of that route. Based on this survey, a total of 163 wetland crossings were identified in the AIM Project construction workspace; 77 in New York and 86 in Connecticut. The AIM Project facilities proposed in Rhode Island and Massachusetts will not cross any wetlands. The complete listing of wetland crossings, including crossing length and total impact to each wetland, is provided in Table 2D-1 located in Appendix 2D, Resource Report 2.

3.1.1 Pipeline Facilities

New York

The AIM Project facilities in New York will have a total of 77 wetland crossings. These wetlands are primarily characterized as PEM wetlands that are dominated by *Phragmites australis* in the right-of-way (“ROW”) and as palustrine forested (“PFO”) wetlands off the maintained ROW. Wetlands along the Haverstraw to Stony Point Take-up and Relay segment were located in areas of topographic relief given that this survey area is extremely hilly. Sloping stream drainages were often associated with bordering wetlands. A particularly large wetland system in the Town of Haverstraw is associated with tributaries to Minisceongo Creek. Wetlands within the maintained pipeline ROW along the Stony Point to Yorktown Take-up & Relay segment are also dominated by *Phragmites australis* while the off-ROW sections are primarily wooded. A large wetland system is encountered in the drainage area of Dickey Brook and its tributaries in the Town of Cortlandt. Within the Blue Mountain Reservation, there are also several large wetland systems crossed by the pipeline.

New York State has mapped wetland areas that are regulated under its Freshwater Wetlands Act. There are five New York State Department of Environmental Conservation (“NYSDEC”) mapped wetlands that are crossed or are in close proximity to the pipeline ROW along the Stony Point to Yorktown Take-up & Relay pipeline. Algonquin has discussed and confirmed these crossings in a meeting with NYSDEC on December 5, 2013. These areas include the following:

- Town of Cortlandt
 - NYSDEC Wetland P-3 – This is a Class 1 wetland that is crossed by the Stony Point to Yorktown Take-up & Relay pipeline between milepost (“MP”) 7.70 and MP 7.85. This NYSDEC mapped wetland has been field delineated as B13-SPLR-W13 for the AIM Project.

- NYSDEC Wetland P-1 – This is a Class 2 wetland that is crossed between MP 8.50 and MP 8.75. This NYSDEC mapped wetland has been field delineated as A13-SPLR-W2 for the AIM Project.
- NYSDEC Wetland A-35 – This is a Class 2 wetland that is crossed in two areas north of Crompond Road. The first wetland crossing occurs between MP 10.63 and MP 10.68 and the second is crossed between MP 10.79 and MP 10.81. These wetlands have been assigned the following identification numbers for the AIM Project: B13-SPLR-W23 and B13-SPLR-W25.
- Town of Yorktown
 - NYSDEC Wetland A-10 – This is a Class 2 wetland that is crossed between MP 11.04 and MP 11.12 on the east side of Lexington Avenue. This wetland has been field delineated as B13-SPLR-W26 for the AIM Project.
- Town of Southeast
 - NYSDEC Wetland BR-36 – This is a Class 2 wetland that is located along the western edge of the existing Southeast Compressor Station in Putnam County. The proposed work at the compressor station will not impact this wetland but construction workspace is located within the 100-foot Adjacent Area. This wetland has been field delineated as A13-SECS-W1 for the AIM Project.

Wetlands are also regulated by the municipalities along the AIM Project route in New York State and generally include wetlands smaller than wetlands regulated by NYSDEC under New York State law. Accordingly, the delineations provided above include all wetland areas, not just those sized 12.4 acres pursuant to NYSDEC regulations.

Connecticut

The AIM Project facilities in Connecticut will have a total of 86 wetland crossings. These wetlands vary greatly between segments but for the most part consist of PEM wetlands within the existing ROW and PFO wetlands outside the existing ROW.

The Southeast to MLV 19 Take-up & Relay pipeline segment crosses 23 wetland areas. Notable are three large wetland systems, one associated with the Sawmill River, one located at MP 0.17 in Danbury, and a third associated with the Still River at MP 1.74. The wetland system associated with the Still River will be crossed by utilizing the HDD method. The majority of the remaining small wetlands were located within heavy residential areas, most often in the ROW as PEM wetlands dominated by *Phragmites australis*.

The Line-36A Loop Extension pipeline segment crosses 11 wetland areas, all associated with streams. This segment of the pipeline is located in an area of relatively flat topography. There is a PEM/PFO wetland system associated with Coles Brook between MP 0.03 and MP 0.14. A tributary to Dividend Brook is associated with a large wetland system dominated by *Phragmites australis* that contains several small intermittent streams and an open water area. The remaining wetlands are dominated by *Phragmites australis* in the ROW and are associated with Dividend Brook.

The E-1 System Lateral Take-up & Relay pipeline segment runs northwest to southeast in a generally parallel orientation with Susquetonscut Brook from MP 0.0 to MP 6.0. As a result of this alignment, there are numerous wetland crossings along this stretch that are associated with minor tributaries of Susquetonscut Brook. Most of these are PEM wetlands located within the existing pipeline ROW. Outside the maintained ROW, the wetland cover type is primarily PFO. South of MP 6.0, the wetlands crossed by the pipeline are associated with small intermittent and ephemeral streams and drainages, the

largest wetlands being located at MP 7.3 and between MP 8.7 and 8.9. These wetlands were classified as PEM wetlands within the ROW and most often classified as PFO wetlands outside the ROW.

The E-1 System Lateral Loop pipeline segment crosses six wetland areas consisting of one large wetland system and three smaller wetland systems along the maintained pipeline ROW. The largest wetland system is crossed between MP 0.31 and MP 0.49 and is predominantly a PFO wetland with a minor stream.

Rhode Island

There are no wetland impacts in Rhode Island.

Massachusetts

There are no wetland impacts in Massachusetts.

3.1.2 Aboveground Facilities

As proposed, the aboveground facilities will not have an impact on wetlands.

3.1.3 Access Roads

Algonquin is proposing to use existing roads along the AIM Project area as temporary access roads (“TARs”) and permanent access roads (“PARs”). Algonquin does not anticipate impacts to any wetlands as a result of the use of these access roads. In areas where wetlands are adjacent to the access road, construction crews will avoid the wetland so that no impact will occur.

3.2 Wetland Impacts and Mitigation

Construction of the AIM Project pipeline segments will result in temporary impacts to 52.3 acres of wetlands. Of this amount, 24.0 acres will be impacted by the New York pipeline facilities and 28.3 acres will be impacted by the Connecticut pipeline facilities. Impacts to wetlands associated with the Hudson River in New York and the Still River in Connecticut will be avoided as Algonquin intends to cross these areas utilizing the HDD method. No wetlands will be affected in Rhode Island or Massachusetts and no wetlands will be affected during construction at existing and proposed aboveground facilities.

Construction of the proposed pipeline segments will result in temporary impacts to 35.2 acres of emergent and scrub-shrub wetlands and 17.1 acres of forested wetlands. Approximately 2.3 acres of previously forested wetland will be permanently converted to non-forested cover types and maintained by means of mechanical cutting and mowing as part of pipeline operation. The remaining 14.8 acres of forested wetland will be allowed to revert to a forested state following construction and restoration of the ROW. Table 2D-1 located in Appendix 2D of Resource Report 2 summarizes wetland impacts for the AIM Project facilities.

3.2.1 Mitigation and Restoration Measures

Construction and mitigation activities in wetlands will be conducted in accordance with the procedures and best management practices (“BMPs”) in the AIM Project Erosion and Sediment Control Plan (“E&SCP”) and the conditions of related permits. The E&SCP can be found in Appendix 1B of Resource Report 1.

Algonquin has begun initial discussions with the USACE New England and New York Districts as well as NYSDEC and Connecticut Department of Energy and Environmental Protection (“CTDEEP”) to discuss wetland impacts and mitigation.

The AIM Project E&SCP was developed using the FERC’s Upland Erosion Control, Revegetation, and Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures (“FERC Procedures”). Also reflected in the AIM Project E&SCP is Algonquin’s significant experience and practical knowledge of pipeline construction and effective environmental protection measures. Lessons and insights gained from past construction projects have been incorporated into the AIM Project E&SCP. Recommended practices include, wherever practical:

- ◆ A reduction of construction corridor widths where possible;
- ◆ A 50-foot setback for ATWS for wetlands;
- ◆ Minimization of riparian clearing to the extent practicable while ensuring safe construction conditions;
- ◆ Expedited construction in and around wetlands;
- ◆ Confinement of stump removal to the trench-line to minimize soil disturbance (unless safety or access considerations require stump removal elsewhere);
- ◆ Return of wetland bottoms and drainage patterns to their original configurations and contours to the extent practicable;
- ◆ Permanent stabilization of upland areas near wetlands as soon as practicable after trench backfilling to reduce sediment run-off;
- ◆ Segregation of topsoil in unsaturated wetlands to preserve the native seed source (which will facilitate re-growth of herbaceous vegetation once pipeline installation is complete);
- ◆ Utilization of recommended seed mixes as specified by relevant land management agencies;
- ◆ Periodic inspection of the construction corridor during and after construction;
- ◆ Post-construction wetland monitoring to evaluate the progress of wetland revegetation; and
- ◆ Documentation of invasive species prior to construction and post-construction monitoring to compare pre- and post-construction occurrences.

In accordance with the AIM Project E&SCP, Algonquin will conduct post-construction maintenance and monitoring of the ROW in affected wetlands to assess the success of restoration and revegetation. Monitoring efforts will include documenting occurrences of exotic invasive species to compare to pre-construction conditions.

To assist with these periodic monitoring and surveillance efforts, and to comply with the U.S. Department of Transportation Safety Standards (49 CFR Part 192), a 30-foot corridor centered on the pipeline will routinely be cleared of woody growth greater than 15 feet in height, with a 10-foot strip centered over the pipeline being maintained in an herbaceous state. Because of this vegetation maintenance restriction within wetland areas, 20 feet of Algonquin’s 50-foot wide permanent ROW easement within wetlands will be allowed to revert to scrub-shrub and forested cover types.

3.2.2 Compensatory Mitigation

Federal

The USACE will usually require compensatory mitigation (e.g., purchase of mitigation credits, payment of in-lieu fee, development of a site-specific mitigation plan) for loss of “waters of the U.S.” greater than 0.10 acre.

No permanent loss of “waters of the U.S.” will occur as a result of the Project. During pipeline trenching operations, fill placement (side-cast material) will be placed back in the pipeline trench. The USACE considers this permanent fill placement even though wetland side-cast material is being replaced in the same trench where it was excavated. The wetland impacts resulting from the fill placement are temporary since the wetland will continue to function as a wetland.

PEM wetlands impacted during construction will be restored in accordance with the FERC Procedures. These areas should quickly recover following construction. Compensatory mitigation for temporary effects to PEM wetlands is not proposed.

Palustrine scrub-shrub (“PSS”) wetlands impacted during construction will be restored in accordance with the FERC Procedures. Although the herbaceous understory within these areas should quickly recover following construction, there may be a temporal lag before the sub-canopy reaches maturity. Compensatory mitigation for temporary effects to PSS wetlands is not proposed.

PFO wetland areas not within the maintained permanent ROW impacted during construction will also be restored in accordance with the FERC Procedures. Although these areas will remain in a wetland state, there is a temporal time lag associated with these areas regaining their wetland canopy function. Similarly, forested wetland areas that are located within the new proposed permanent ROW areas will remain in a wetland state but will permanently lose their wetland canopy function.

Algonquin proposes to provide compensatory mitigation for the PFO wetland areas that will be temporarily and permanently affected (through conversion to PEM) as a result of the Project. The USACE New England District will accept payment to an in-lieu fee program³ for PFO wetland impacts in Connecticut. A permit applicant may make a payment to an in-lieu fee program that will conduct wetland, stream or other aquatic resource restoration, creation, enhancement, or preservation activities. In-lieu fee programs are generally administered by government agencies or non-profit organizations that have established an agreement with the regulatory agencies to use in-lieu fee payments collected from permit applicants.

The USACE New York District will require on-site restoration for temporary PFO wetland impacts (e.g. replant workspace, control invasive species, monitoring). However, the USACE New York District will require off-site mitigation for permanent impacts to forested wetlands from new maintained ROW. Off-site mitigation must be “in-kind”, in the same watershed as the impact, and at a 2:1 ratio.

Algonquin proposes to contribute to an approved in-lieu-fee program where acceptable by federal and state agencies, and to conduct on-site or off-site in-kind mitigation where it is not. On-site restoration at agency designated ratios will be the preferred method of mitigation.

New York⁴

At this time Algonquin has not confirmed state compensatory mitigation requirements for both temporary and permanent PFO wetland impacts in New York. As previously stated temporary impacts to PEM and PSS wetlands will be through restoration of these areas. Temporary disturbances, where pre-construction conditions are essentially restored, for example when laying a pipeline, do not require compensatory

³ Details on the use of the in-lieu fee program are available at http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/final_mitig_rule.pdf.

⁴ Further details on NYSDEC’s guidelines on compensatory mitigation are available online at http://www.dec.ny.gov/docs/wildlife_pdf/wetmit.pdf.

mitigation since there is no permanent loss. Compensatory mitigation is only used when it can offset project impacts that cannot be avoided entirely or reduced any further. Compensatory mitigation should preferably be “in-kind” and “on-site”. In-kind mitigation means replacing a wetland that is being altered with a wetland of the same type, for example replacing emergent marsh with emergent marsh. Functions and benefits of the replacement wetland are assumed to be generally the same as those of the wetland being replaced. On-site mitigation is mitigation undertaken within or contiguous to the wetland impacted by a project. It does not necessarily have to be within the same site boundaries as the project, but it must involve the same wetland. The preferred order of compensatory mitigation is wetland restoration, then creation, and finally enhancement.

The NYSDEC regulates impacts to “mapped wetlands” larger than 12.4 acres in size under the Freshwater Wetlands Act (Environmental Conservation Law Article 24). Impacts to wetlands not mapped will be subject to the mitigation requirements of the USACE New York District described above. At this time it is assumed that the compensatory mitigation proposal submitted to the USACE New York District for PFO impacts will be deemed acceptable to NYSDEC.

Connecticut

At this time Algonquin has not confirmed state compensatory mitigation requirements for both temporary and permanent PFO wetland impacts in Connecticut. As previously stated temporary impacts to PEM and PSS wetlands will be through restoration of these areas. Initial discussions with the CTDEEP has indicated that they will not accept payment to an in-lieu fee program as required by the USACE. Additional discussions with CTDEEP will have to take place to coordinate an appropriate level of mitigation. Algonquin is concerned that two totally distinct compensatory mitigation approaches in Connecticut will be required for the same impacts.

Massachusetts

There are no wetland impacts associated with proposed Massachusetts Project facilities and, therefore, no compensatory mitigation is proposed in Massachusetts.

Rhode Island

There are no wetland impacts associated with proposed Rhode Island Project facilities and, therefore, no compensatory mitigation is proposed in Rhode Island.

4.0 WATERBODIES

A total of 108 surface waterbodies will be affected by construction of AIM Project pipeline facilities. These included 42 perennial streams, 62 intermittent streams, 3 ephemeral streams and 1 pond (see Table 2C-1 in Appendix 2C, Resource Report 2). Of these 108 waterbodies, 90 are minor crossings (less than 10 feet wide), 17 are intermediate crossings (10 to 100 feet wide), and one is a major crossing, the Hudson River (greater than 100 feet wide). Two of the 108 waterbodies are classified as estuarine waterbodies while the remaining 106 are freshwater waterbodies.

No waterbodies will be impacted by the work at the existing and proposed aboveground facilities. However, a few aboveground facility sites are located in relatively close proximity to mapped waterbodies. Algonquin will use existing roads in the AIM Project area as TARs and PARs. Algonquin does not anticipate impacts to any waterbodies as a result of the use of these existing access roads.

In accordance with the FERC Procedures, all waterbody crossings will be completed within 24 to 48 hours. Stream bed and bank contours will be restored in accordance with the FERC Procedures and waterbody banks will be stabilized as soon as possible after construction activities have been completed to prevent sloughing. Stream functions should be quickly restored following restoration activities.

The USACE will usually require compensatory mitigation (e.g., purchase of mitigation credits, development of a site-specific mitigation plan) for loss of “waters of the U.S.” greater than 0.10 acre. The proposed waterbody crossings do not represent a loss of “waters of the U.S.” and therefore, Algonquin does not propose to provide any compensatory mitigation.

5.0 REFERENCES

Environmental Laboratory. (1987). "Corps of Engineers wetlands delineation manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS., NTIS No. AD A176 912.