NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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April 7, 2017

National Fuel Gas Supply Corporation and
Empire Pipeline, Inc.
6363 Main Street
Williamsville, NY 14221
Attn: Ronald Kraemer

RE: Joint Application: NYSDEC Permit Nos.:
9-9909-00123/00004 (Water Quality Certification)
9-9909-00123/00001 (Article 24 - Freshwater Wetlands)
9-9909-00123/00002 (Article 15 – Protection of Waters)
Notice of Denial

Dear Mr. Kraemer:

On April 8, 2016, New York State Department of Environmental Conservation (NYSDEC or Department) received[1] from National Fuel Gas Supply Corporation and Empire Pipeline, Inc. (collectively, NFG or Applicants) a Joint Application (Application) to obtain a Clean Water Act (CWA) Section 401[2] Water Quality Certification (WQC) for the proposed Project (as defined below) and New York State Environmental Conservation Law (ECL) Article 15, Title 5 (Protection of Waters) and Article 24, Title 23 (Freshwater Wetlands permits).[3] Based on a thorough evaluation of the Application as well as supplemental submissions, the Department hereby provides notice to NFG that, in accordance with Title 6 New York Codes Rules and Regulations (NYCRR) Part 621, the Application fails to demonstrate compliance with New York State water quality standards. Accordingly, NFG's Application, including its request for a WQC, is denied.[4] As required by 6 NYCRR § 621.10, a statement of NYSDEC's basis for denial is provided below.

BACKGROUND

Prior to receiving NFG's application for a certificate of public convenience and necessity for the Project pursuant to sections 7(b) and 7(c) of the Natural Gas Act (which was submitted by

[1] By letter agreement, dated January 20, 2017, the Department's Office of General Counsel and counsel for the Applicants mutually agreed that, for the purposes of review under Section 401 of the CWA, the Joint Application was deemed received by NYSDEC on April 8, 2016, "[t]hereby extending the date the NYSDEC has to make a final determination on the application until April 7, 2017."
[2] 33 U.S.C. § 1341.
[3] NFG's remaining applications for two Air State Facility permit applications; one for the Pendleton and Portersville compressor stations, remain pending before the Department and are not discussed herein.
[4] By this Notice of Denial, the Department also denies NFG's applications for permits pursuant to ECL Article 15 (stream disturbance) and Article 24 (freshwater wetlands disturbance) for the same reasons stated herein

NFG on March 17, 2015), Federal Energy Regulatory Commission (FERC) issued a *Notice of Intent to Prepare an Environmental Assessment for the . . . Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* on October 22, 2014 (EA Notice). The Department responded to the EA Notice by letter to FERC, dated November 21, 2014, asserting, among other issues, that the Project warranted a full Environmental Impact Statement (EIS) rather than an Environmental Assessment (EA) due to its expansive scope and significant impacts to New York's environmental and natural resources.[5] The Department reiterated this position to FERC in two additional letters on May 29, 2015 (before the issuance of the EA) and August 25, 2016 (after issuance of the EA), respectively.[6] FERC disregarded the Department's concerns and, on February 3, 2017, issued a certificate approving construction and operation of the Project. This certificate relies upon the EA and is conditioned upon NFG first obtaining all other necessary approvals, including the WQC. Accordingly, along with other necessary approvals from the Department, the Application for a WQC pending with the Department must be approved before construction of the Project may commence. NFG's Application was reviewed by NYSDEC in accordance with ECL Article 70 (Uniform Procedures Act or UPA) and its implementing regulations at 6 NYCRR Part 621, which provide a review process for applications received by NYSDEC.

Project Description and Overview of Impacts

The project primarily consists of a new 97-mile, 24-inch, interstate transmission pipeline that would transport natural gas extracted in Pennsylvania, through Allegany, Cattaraugus and Erie Counties in New York, ultimately delivering natural gas, to New York, the Northeast and Midwest United States and Canada (Project).[7] Construction and operation of the Project will (i) cross 192 State-regulated streams and (ii) impact a total of 73.377 acres of federal and State wetlands, of which there will be 2.335 acres of permanent impacts to NYSDEC-regulated Class I[8] and Class II[9] wetlands. The impacted streams and wetlands are home to a number of significant animal species, including trout (brown and rainbow) and the Eastern Hellbender, which is a State-listed species of concern; these water resources provide the necessary habitat to support their survival and

[5] FERC Docket No. CP15-115-000, Submittal 20141121-5254

[6] FERC Docket No. CP15-115-000, Submittals 20150529-5329 and 20160826-5189

[7] The Project also includes; (i) the take up and relay of approximately 4 miles of an existing 16-inch supply pipeline with a 24-inch pipeline in the Towns of Wheatfield and Pendleton in Niagara County, New York; (ii) a pipeline interconnection with Tennessee Gas Pipeline in the Town of Wales, Erie County, New York; (iii) a new 22,214 horsepower compressor station in Town of Pendleton, Niagara County; (iv) the addition of approximately 5,350 horsepower of compression at NFG's existing Porterville Compressor Station in the Town of Elma, Erie County, New York; and (v) a new natural gas dehydration facility in the Town of Wheatfield, Niagara County, New York.

[8] Class I wetlands provide the most critical of the State's wetland benefits, reduction of which is acceptable only in the most unusual circumstances. A permit shall be issued only if it is determined that the proposed activity satisfies a compelling economic or social need that clearly and substantially outweighs the loss of or detriment to the benefits of the Class I wetland. 6 NYCRR § 663.5(e)(2). A compelling economic need implies that the proposed activity carries with it actual necessity and that the proposed activity is one which must be done and is unavoidable. [6 NYCRR 663.5(f)(4).]

[9] Class II wetlands provide important wetland benefits, the loss of which is acceptable only in very limited circumstances. A permit shall be issued only if it is determined that the proposed activity satisfies a pressing economic or social need that clearly outweighs the loss of or detriment to the benefits of the Class II wetland. 6 NYCRR § 663.5(e)(2). A pressing economic or social need is one that is urgent and intense, although it does not have to be necessary or unavoidable. [6 NYCRR 663.5(f)(5).]

propagation. The Project, as proposed, would necessarily impact these waterbodies and jeopardize their best usages that New York's water quality standards were enacted to protect.

I. NYSDEC Application Review

The Department received NFG's Application to obtain a WQC pursuant to § 401 of the CWA on April 8, 2016. NFG supplemented the Application a number of times and, on January 25, 2017, the Department published a Notice of Complete Application for public review in the Environmental Notice Bulletin. NFG also had the Notice of Complete Application published in the Buffalo News, the Niagara Gazette, the Lockport Union Sun, the Olean Times, the Salamanca Press and the Wellsville Daily Reporter. This notice commenced a public comment period ending on February 24, 2017. During this time period three legislative hearings were held at different locations along the Project route. Approximately 5,700 public comments, both written and oral, were received during the comment period.

In making its determination to deny NFG's Application for a WQC and permits pursuant to ECL Articles 15 and 24, NYSDEC has reviewed the impacts directly associated with the Project proposal in terms of water body water quality, stream bed and bank disturbances, and wetlands and wetland adjacent area disturbances. The following discusses the nature of those impacts stemming from Project construction and operation. Because of these identified impacts, as well as their cumulative effect of these impacts, the Application does not demonstrate that the Project will comply with the State's water quality standards.

STATEMENT OF REASONS FOR DENIAL

The Department, in accordance with CWA § 401, is required to certify that a project meets State water quality standards if the project requires a federal agency issuing a federal license or permit in conjunction with its proposed operation. An applicant for a water quality certification must demonstrate compliance with the water quality regulations found at 6 NYCRR Section 608.9 (Water Quality Certifications). In order to make this demonstration, an applicant must show compliance with §§ 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act, as implemented by New York's applicable water quality standards and thermal discharge criteria set forth in 6 NYCRR Parts 701, 702, 703, 704 and 750, as well as other applicable State statutes, regulations, and criteria. Additional State statutes and regulations applicable to the Project activity here include, for example, ECL Article 15, Title 5 and its implementing regulations at 6 NYCRR Part 608, as well as ECL Article 24, Title 23 and its implementing regulation at 6 NYCRR Part 663.

To obtain a WQC, an applicant must demonstrate compliance with the above-referenced State water quality standards. Here, NFG's Application fails to demonstrate that the Project will comply with New York State water quality standards. Specifically, NFG has failed to demonstrate that construction and operation of the Project will comply with the best usages of the impacted waterbodies, as set forth in 6 NYCRR § 701.6, 701.7, 701.8 and 701.25 and NYSDEC's Narrative Water Quality Standards set forth in 6 NYCRR § 703.2. The Department is guided by statute to take into account the cumulative impact upon all relevant resources in making a determination in connection with any license, order, permit or certification, which in this case includes being able

to evaluate the cumulative water quality impacts of right-of-way (ROW) construction and operation on the numerous water bodies mentioned in this letter.[10]

In particular, the Project fails to avoid or adequately mitigate adverse impacts to water quality and associated resources. Crossing multiple streams and freshwater wetlands within a watershed or basin, including degrading riparian buffers, causes a negative cumulative effect on water quality to that watershed or basin. If allowed to proceed, the Project would materially interfere with or jeopardize the biological integrity[11] and best usages[12] of affected water bodies and wetlands.

Pertinent to the Department's review are the best usages of Class A, B and C streams (being 126 of the 192 streams crossed by the Project). These best usages include fish propagation and survival, and fishing. Class A waters also include usages related to drinking water supply. It is evident that the impacts from the Project, as set forth below, will impede the best usages of many water bodies, particularly those with a trout standard or rare species, by degrading the survival and propagation of balanced, indigenous populations of shellfish, fish and wildlife that rely upon these waters. As it relates to State Narrative Water Quality Standards, 6 NYCRR § 703.2 states that there shall be "no increase [in turbidity] that will cause a substantial contrast to natural conditions." The techniques utilized for construction of the Project will cause numerous violations of the turbidity standard.

The following are the Department's reasons for denial of the Application based on applicable sections of the Federal and New York State environmental laws, regulations or standards related to water quality.

I. Stream Crossings

The Department's review of applications for water quality impacts due to stream disturbances is conducted pursuant to Articles 15 and 17 of the ECL and 6 NYCRR Part 608 (Use and Protection of Waters), including sections 608.8 (Standards) and 608.9 (Water Quality Certifications);[13] Part 701 (Classifications) and section 703.2 (Narrative Water Quality Standards). As mentioned above, 6 NYCRR § 608.9(a)(6) requires the Department to consider "all state statutes, regulations and criteria" applicable to a given activity in making an ultimate determination regarding a WQC. In its consideration of NFG's Application, and pursuant to § 608.9(a)(6), the

[10] ECL § 3-0301(1)(b).
[11] 33 U.S.C. § 1251(a).
[12] *See generally* 6 NYCRR Part 701.
[13] In order to be obtain a WQC pursuant to 6 NYCRR § 608.9, an applicant must also demonstrate compliance various Federal statutes and State regulations, including: sections 301-303, 306 and 307 of the Federal Water Pollution Control Act, as implemented by the following provisions:

(1) effluent limitations and water quality-related effluent limitations set forth in Section 754.1 of this Title [now § 750-1.1];
(2) water quality standards and thermal discharge criteria set forth in Parts 701, 702, 703 and 704 of this Title;
(3) standards of performance for new sources set forth in section 754.1 of this Title [now § 750-1.1];
(4) effluent limitations, effluent prohibitions and pretreatment standards set forth in section 754.1 of this Title;
(5) prohibited discharges set forth in section 751.2 of this Title [now § 750-1.3]; and
(6) State statutes, regulations and criteria otherwise applicable to such activities.

Department relied, in part, on the standards set forth in 6 NYCRR § 608.8, which provide the framework within which the Department reviews stream disturbance impacts and other water resource impacts of a given project. Specifically, § 608.8(c) states that a "basis for the issuance [will include whether] . . . the proposal is in the public interest, in that . . . the proposal will not cause unreasonable, uncontrolled or unnecessary damage to the natural resources of the State, including soil, forests, water, fish, shellfish, crustaceans and aquatic and land-related environment."

NFG's Application, and subsequent submissions, outline the techniques to be used to install the Project pipeline. Considering the permitting standards described above in context with the Application, numerous environmental impacts will occur both during and after Project construction that will violate, or cause or contribute to violation of State water quality standards.

Because of the potential for significant habitat damage, destruction and permanent loss from pipeline construction, the Department recognizes that trenchless pipeline installation techniques, namely horizontal directional drilling (HDD) or conventional boring (CB), would prevent or substantially minimize impacts to regulated aquatic resources by avoiding surficial construction within these habitat areas and the associated water quality impacts. Because such trenchless crossing methods are proven to be a method to generally assure compliance with water quality standards, by avoiding and/or minimizing impacts, the Department has required a trenchless feasibility analysis of streams crossed by the Project's pipeline. Based on its analysis, NFG has concluded that such methods are not feasible with respect to 184 of the stream crossings. Consequently, impacts and damage to water resources will necessarily occur where trenchless crossing methods are not employed.

Impacts to Streams

During the course of construction, including clearing a 75-foot wide ROW along the entire length of the pipeline in New York (approximately 75 miles), 192 State-regulated streams will be crossed. Of these streams, there are seven Class A waterbodies (including two class A(T) streams); five Class B waterbodies; and 59 Class C waterbodies (including nine C(T) and six C(TS) streams). Cumulatively, construction would impact a total of 15,954 linear feet of streams and result in a combined total of 3.26 acres of temporary stream disturbance impacts. During its review of the Application, NYSDEC directed NFG to demonstrate compliance with State water quality standards[14] by providing site-specific information for each of the streams impacted by the Project. NYSDEC informed NFG that all stream crossings must be evaluated for environmental impacts and, for the reasons stated above, that trenchless technology was the preferred construction method for stream crossing.

Rather than directly clearing and excavating a ROW path and installing a pipe through all regulated areas, trenchless crossing methods, here HDD or CB, would instead 'drill' a void under the affected resource through which the pipeline follows thereby avoiding nearly all impacts to regulated aquatic resources. While trenchless crossing methods are the preferred crossing methods for all stream crossings in order to avoid or minimize water quality impacts, the Department recognizes the additional expense that may be associated with such methods. Therefore, the

[14] 6 NYCRR §§ 608.9 and 703.2

Department focused on more environmentally sensitive or significant waterbodies for purposes of additional analysis. Thus, rather than require the analysis at each of the 192 stream crossings, the Department requested that NFG provide a trenchless feasibility analysis aimed to assess the possibility of installing the Project pipeline using trenchless technology at 55 selected crossings. Of those 55 streams, 13 were identified by the Department as having even greater environmental significance and therefore requiring greater consideration for trenchless installation. These 13 priority streams had the following classifications: one Class A; one Class A(T); one Class B; four Class C(T); and six Class C(TS). A three-tiered method of evaluation was performed comprising of sequential reviews encompassing *physical/technical parameters*, then *environmental constraints* and lastly *technical design parameters*. NFG's analysis progressed through these categories until preventative constraints were identified, at which point NFG's analysis ended. Ultimately, even after the Department narrowed the scope of review for trenchless feasibility analysis, NFG concluded it would utilize trenchless methods at only five of the 13 priority streams identified by the Department.

NFG intends that the remaining 184 streams, which includes eight priority streams (*see* Table 1, below), will be crossed using dry crossings, permanent culverts or temporary bridges, all of which will negatively affect water quality. NFG proposes dry crossings of three Class A waterbodies (including one class A(T) stream); five Class B waterbodies; and 57 Class C waterbodies (including eight C(T) and five C(TS) streams). These crossings will permanently impair aquatic habitat and generate turbidity that will impair the best usages[15] of these waterbodies, thereby violating State water quality standards.

Table 1

Stream Name	Classification	Environmental Significance
Five Mile Creek	C(T)	Brown trout
Elton Creek	C(TS)	Brown trout and rainbow trout – wild and stocked
Ischua Creek	C(T)	Brown trout
Cattaraugus Creek	C(T)	Brown trout and rainbow trout – wild and stocked
Unnamed Tributary to Ischua Creek	C(TS)	Brown trout
Dodge Creek	C(T)	Brown trout, hellbender, mussels (creeper, fat mucket, flutedshell, plain pocketbook, spike)
McKinstry Creek	C(TS)	Brown trout and rainbow trout, including trout spawning
Haskell Creek	C(TS)	Brown trout, including trout spawning

[15] 6 NYCRR Part 701 sets forth the best usages of various waterbodies. The following best usages are applicable here:

- Class A waters are a "source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing . . . [and] shall be suitable for fish, shellfish, and wildlife propagation and survival";

- Class B waters are "primary and secondary contact recreation and fishing . . . [that] shall be suitable for fish, shellfish, and wildlife propagation and survival"; and

- Class C waters are for fishing[,] . . . shall be suitable for fish, shellfish and wildlife propagation and survival [and] . . . shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

The dry crossing of streams designated as trout (T) or trout spawning (TS) will negatively affect riparian and in-stream conditions necessary to provide habitat to support trout presence and preserve water quality. The loss of and conversion of riparian cover types will increase the input of turbid water (in violation of water quality standards). Construction in the ROW will destabilize stream banks and increase risks for further erosion and bank instability that would compromise water quality, notably turbidity. Excavation across stream beds will remove in-stream habitat forms such as rocks and woody debris that form pools and pockets as habitat for trout and other aquatic organisms. For example, cobble bars and gravel bottoms of streams provide spawning areas for aquatic organisms, and provide benthic invertebrates habitat areas. Furthermore, this will destabilize stream beds and likely make them much more susceptible to erosion, affecting both immediate habitat in the ROW but also downstream water quality and habitat by introducing turbidity and sedimentation. Upstream habitat may also be affected by migrating upstream erosion. These changes will negatively affect the best usages of trout and trout spawning streams by reducing the habitat to support trout and thereby fish survival, spawning and fishing.

NYSDEC's recent experiences with constructing large scale natural gas pipelines across New York State, involving multiple water body crossings in multiple watersheds or basins, point to the fact that, even with stringent water quality protection conditioning, violations of water quality standards at this scale occur causing significant degradation of water quality in stream after stream along a constructed ROW.

More broadly, riparian habitat surrounding streams within the Project ROW will be permanently impacted by construction activities involving excavation and burial of the pipeline and any needed grading of local topography by heavy construction equipment. When crossing streams, installing the pipeline requires excavating a trench a minimum of six feet deep by five feet wide through any stream bed. Currently, NFG does not propose to use HDD or CB for the majority of the stream crossings and instead proposes alternative construction methods, all of which have adverse water quality impacts. Conducting such construction in the wet would lead to far greater water quality impacts than HDD or CB. Furthermore, construction in dewatered conditions will not only physically disturb stream beds via excavation along the centerline of the pipeline, but also dry and desiccate any stream habitat between the excavated centerline and the perimeter of the dewatered ROW. The Department finds that these construction techniques would cause significant damage or destruction to both riparian and in-stream habitat, in turn causing violations of State water quality standards related to turbidity and best usages of the affected waterbodies. This damage or destruction would occur during construction and continue for a period of time post-construction.

Waters of the State are assigned classification and standards of quality and purity.[16] In establishing a waterbody classification, the Department is required to take into consideration the characteristics of surrounding lands in arriving at said classification in order to conserve the value of the water uses.[17] With respect to NFG's Project, several water quality standards will be negatively affected. The narrative standard for *turbidity*[18] will be violated when in-water

[16] ECL § 17-0301(4) and 6 NYCRR Part 701.
[17] ECL § 17-0301(3)(b)
[18] 6 NYCRR § 703.2.

construction occurs and at certain times during the post-construction phase. These water quality impacts and changes in riparian and stream habitat will degrade the affected waters which will then be unable to support best usages. This is particularly the case with a trout standard or rare species designation where the water body impact degrades the water body's capacity to guarantee the survival and propagation of balanced, indigenous populations of shellfish, fish and wildlife that rely upon those waters.

a. Impacts During Construction

Pipeline construction will cause significant impacts to riparian and stream habitat, with resulting adverse impacts to water quality.

i. Riparian Losses

Intact, naturally forested buffers, known as riparian zones, are critical for maintaining and protecting stream corridors and stream water quality. Areas with degraded riparian zones exhibit poorer aquatic habitat and water quality characteristics. NFG's open-dry trench stream crossing method will clear riparian vegetation (established woodland areas, trees and other woody plant material) and fully expose a full 75-foot bare soil ROW on both sides of each stream crossed. Using this area of disturbance, riparian impacts have been assessed as a percentage change in the area of riparian cover 100' x 75' wide on either side of all open-dry trenched streams. The loss of riparian habitat to this extent within the 100-foot buffer of a stream crossing is a negative impact to water quality and stream habitat to the extent that the riparian area contributes unfiltered, sediment laden, turbid water to the water body through bank erosion. This typically happens after construction has been completed, when revegetation measures have yet to adequately take hold, or have been unsuccessful, and therefore do not prevent stream bank erosion.

The Department performed a desktop aerial analysis of all open-dry trench stream crossings which aggregated the area of impacts within the riparian habitat zone. The area of all these crossings was summed and multiplied by one (100% habitat loss) to yield an area of 14 acres of total impact to riparian habitat. This represents the loss of riparian habitat along the entire length of the Project ROW during construction. While NFG proposes to regrade and replant select zones of the impacted riparian areas following construction, fully in-kind vegetation, including mature trees, will not be replanted nor ever be allowed to fully regrow to pre-construction conditions. Riparian habitat values will therefore not return to previous capacity to protect each water body from erosion and resulting sedimentation and turbidity in violation of State water quality standards. In addition, this has the added effect of negatively impacting best usages of the water body by aquatic species that cannot sustain exposure to these impacts.

Upon preparing a stream for dewatering, various construction steps, such as the excavation of intake pits and the placement of barriers, will be conducted within flowing water that will cause a significant visible contrast and exceedance of the turbidity water quality standard. At the completion of construction, work within flowing water will again occur as the materials and fill are removed from stream channels. There are 130 streams categorized as perennial or intermittent that are expected to be subject to these conditions. As proposed, the Project will cause State water quality violations related to turbidity to occur on at least two days at each stream crossing site,

totaling at least 260 water quality violations during the course of the Project. The installation and removal of temporary bridges and stream bank stabilization efforts associated with these stream crossings will also cause single event violations of the turbidity water quality standard. There will be further violations of the turbidity standard within regulated wetlands due to the extent of wetlands disturbance and degradation of wetlands values and benefits, as described above. The Application's inadequate design of mitigation of wetlands impacts will result in further degradation of the water quality benefits that wetlands perform.

ii. In-Stream Losses

All streams with flowing water at the time of construction of open-dry trench stream crossings will be dewatered for a length of 75 feet (being the width of the ROW) to facilitate excavating a trench and installing the pipeline across the stream bed. This will physically disturb the entire portion of stream bed between the up- and downstream limits of construction and the bankfull widths of each stream. Because of dewatering and subsequent drying, any aquatic organisms within this area will be lost. Thus, the disturbed stream bed is considered a 100% loss of stream habitat. This loss will continue for a period of time and only gradually abate under natural conditions when recovery and stabilization of this area occurs following completion of construction and rewatering. As calculated and reported by the applicant (which included only perennial and intermittent streams), the length of disturbed stream channels and their bankfull widths within the disturbed ROW will cause a total of 3.26 acres of in-stream habitat to be lost. Due to the increased turbidity caused during construction, the best usages of these waters for aquatic species and maintenance of these species' habitat will be lost until the affected water bodies recover and stabilize.

b. Post-Construction Impacts

i. Riparian Losses

In the post-construction time frame, regrading and replanting of new vegetation in the fully cleared riparian corridor will only occur within a limited portion of the riparian area disturbed during construction (see above). The re-vegetated area within the permanently maintained ROW in the riparian zone will be routinely mowed; new vegetation will not be allowed to grow higher than 15 feet. Based upon the typical disturbance layout described above (for both sides of a stream), clearing and ROW maintenance for the project will create a permanent loss of 0.11 acres of riparian habitat. Applying the percent cover from the riparian losses calculation to this 0.11 acre area per stream crossing yields a project total of 8.8 acres of permanent riparian habitat loss for all stream crossings. The permanent loss of the native, established riparian vegetation in these locations will have a negative effect on water quality and stream ecological health for the full service life of the pipeline. As described above, the degraded vegetative buffer, including the removal of established treed areas that hold and maintain stream bank structure, will cause bank erosion, resulting in sedimentation and turbidity in the water body. When this occurs, it will also degrade the best uses of the water body for aquatic organisms.

ii. In-Stream Losses

Following construction, disturbed in-stream areas will be rewatered and stabilized as necessary to prevent any obvious sources of erosion or stream degradation. However, the hydro-geomorphology of these streams is extremely complicated and disturbance to the bed and banks of the streams will result in instability and lead to future vertical or lateral erosion, which will result in additional turbidity and impairment of water quality. Given the increasing frequency of extreme weather and rainfall events, and the recent history of such events in this region of New York,[19] the integrity of streams and adjacent riparian areas will be of increasing importance to maintaining water quality. Only by avoiding physical disturbance to the bed and banks of streams will ongoing extensive and violations of water quality standards (turbidity) prevent along with the prevention of an impairment of designated best usages. The instability and turbidity of concern extends up- and down-stream beyond the project ROW.

Significantly, at least one of the streams proposed to be dry crossed by NFG (Dodge Creek, classified as a C(T) waterbody) is habitat occupied by the Eastern Hellbender, a listed New York State Species of Special Concern pursuant to ECL § 11-0535 and 6 NYCRR § 182.4. Eastern Hellbenders require clear streams and rivers to sustain their habitat and spawning. Accordingly, the impacts to Dodge Creek caused by Project construction, including changes in water quality (including turbidity) and flow, constitute a threat to the Eastern Hellbender and violate the best usage of the waterbody pursuant to 6 NYCRR § 701.8 and standards set forth in 6 NYCRR § 608.8(c).

II. Wetlands

Freshwater wetlands are an invaluable resource for flood protection, the protection and preservation of water resources and wildlife habitat. In addition to preserving water quality though their hydrologic absorption and storage capacity, wetlands protect subsurface water resources, recharge groundwater, and cleanse surface runoff to water bodies.[20] A permit pursuant to Article 24 of the ECL is required for any disturbance which will impair any of the functions and benefits of a NYSDEC regulated wetland and its associated adjacent areas.[21] Because 6 NYCRR § 608.9(a)(6) provides that an applicant for a WQC must also demonstrate compliance with "State statutes, regulations and criteria otherwise applicable to such activities," NFG must demonstrate that disturbances to a NYSDEC regulated wetland and its adjacent area will not violate applicable water quality standards, including those related to turbidity.[22]

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[19] Szabo, C.O., Coon, W.F., and Niziol, T.A., 2010, Flash floods of August 10, 2009, in the Villages of Gowanda and Silver Creek, New York: U.S. Geological Survey Scientific Investigations Report 2010-5259, 23 p.

[20] As pertinent to the Department's review here, ECL § 24-0105(7) defines the following wetland benefits:

1. flood and storm control;
2. wildlife habitat;
3. protection of subsurface water resources; . . .
5. pollution treatment;
6. erosion control; . . . and
9. sources of nutrients in freshwater food cycles and nursery grounds for freshwater fish.

[21] Adjacent area is defined as areas of land and water that are outside a wetland and within 100 feet, measured horizontally, of the boundary of the wetland. [6 NYCRR § 663.2(b).]

[22] *See* ECL 24-0701(2); 6 NYCRR §§ 608.9 and 703.2.

The freshwater wetlands permit issuance standards provide that a proposed activity must:

- be compatible with the public health and welfare, be the only practicable alternative that could accomplish the applicant's objectives and have no practicable alternative on a site that is not a freshwater wetland or adjacent area; and

- minimize degradation to, or loss of, any part of the wetland or its adjacent area and must minimize any adverse impacts on the functions and benefits that the wetland provides.[23]

In the event that there are impacts that cannot be avoided and minimized, the applicant should provide a mitigation proposal to enhance the existing benefits provided by a wetland or create and maintain new wetland benefits. The purpose of mitigation is to offset those benefits lost by construction and operation of the Project and increase the likelihood that the proposed activity will meet permit issuance standards.[24]

Impacts to Wetlands

NFG has estimated that the Project will disturb a total of 73.377 acres of federal and State wetlands. Of that total, there are 2.335 acres of permanent, and 17.262 acres of temporary, impacts to NYSDEC-regulated Class I and Class II wetlands. In addition, 21.461 acres of the associated adjacent area would be impacted by the Project.

Disturbances to these wetlands due to construction and ROW maintenance will have permanent and temporary negative impacts on New York's surface and subsurface water quality by decreasing wetland functions and benefits directly associated with protecting and preserving the integrity of water chemistry and biology. For example, a change in vegetative cover type due to construction and ROW maintenance will change evapotransporation rates, altering the capacity of a wetland to hold and release flood and storm water. Changing the type and species of vegetation in the wetland will permanently change ecological community dynamics and the types and composition of wildlife using that wetland. NFG's wetlands disturbances will not only cause permanent changes to surface water, those Project activities will cause soil compaction and alter the soil profile. These activities will also cause at least temporary, and possibly permanent, changes to soil dynamics from the altered soil characteristics, including complete removal and "replacement" of the pre-existing soil layers. Infiltration rates of water and the flow of water through the soil will also be impacted, which will affect local subsurface water quality. In addition to these persistent impacts described above, construction will temporarily remove or degrade all vegetation from some work areas. NFG's activities – particularly removing and changing vegetation – will alter the wetlands abilities to hold and release flood waters, and will change the ability of those disturbed areas to provide pollution treatment and water quality benefits.

As discussed below, NFG has failed to demonstrate that the Project disturbances adequately avoid or minimize impacts to wetland benefits as they relate to State water quality standards, or, alternatively, satisfactorily mitigate such impacts.

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[23] 6 NYCRR § 663.5(e)(2).
[24] 6 NYCRR § 663.5(g).

a. Avoidance and Minimization

NFG has not demonstrated that there are no practicable alternatives to avoid all disturbance to wetlands impacts due to construction of the Project, and post-construction ROW maintenance, thereby avoiding State water quality impacts. 6 NYCRR § 663.5(e)(2). In at least one situation (Dodge Creek), impacts to regulated wetlands and associated streams could have been entirely avoided, thereby avoiding State water quality impacts. 6 NYCRR § 663.5(e)(2).

NFG has also not demonstrated that it will adequately minimize disturbances to wetlands so as to assure that there will be no adverse impacts to wetlands themselves or to State water quality. NFG is not proposing to replace woody plants located in and near forested and shrub wetlands that its Project will impact. Nor does NFG propose to reduce impacts on wetlands functions and benefits by replacing the preexisting wetland and reestablishing a fully functional habitat and riparian areas adjacent to those wetlands. NFG's Application does not offer minimization of wetland impacts, which means NFG does not assure that water quality standards will be met in water bodies associated with these impacted wetlands.

b. Mitigation

Mitigation of impacts to regulated wetlands associated with this Project do not meet the regulatory provisions of 6 NYCRR § 663.5(g)(1), requiring that proposed mitigation be "in the immediate vicinity of the site of the proposed project" and be regulated by ECL Article 24. Permanent impacts to Article 24 regulated freshwater wetlands, and the associated adjacent areas, occur across several subwatersheds and two different basins. The area proposed by NFG to mitigate these collective impacts is not in the same basin as that containing the majority of these impacts, much less in the same subwatershed where most of the impacts occur, contrary to § 663.5(g)(1)(i). Furthermore, the mitigation is not proposed on or adjacent to a wetland regulated by Article 24 and therefore cannot be considered mitigation for the wetland benefits that will be degraded or lost through the proposed activity.

III. Basis for Denial of the WQC and ECL Articles 15 and 24 Permits

As stated above, in order for the Department to grant its request for a WQC, NFG must demonstrate the Project's compliance with §§ 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act, as implemented by applicable State water quality standards criteria set forth in 6 NYCRR Parts 701, 702, 703, 704 and 750, and State statutes, regulations and criteria otherwise applicable to such activities.[25] NFG has failed to demonstrate compliance with (i) §§ 303 and 306 of the Federal Water Pollution Control Act, as implemented; (ii) 6 NYCRR Parts 701, 703 and 750;[26] and (iii) 6 NYCRR Parts 608 and 663, which are State regulations applicable to the Project.

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[25] 6 NYCRR § 608.9.

[26] Part II.B of the State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Actives (GP-0-15-002) states that an owner or operator (here, NFG) cannot commence construction activity until its authorization to discharge goes into effect. Effectiveness does not occur at least until the owner or operator has obtained "all necessary [NYSDEC] permits subject to the UPA (*see* 6 NYCRR Part 621)," which includes WQCs as well as ECL Articles 15 and 24 permits.

It is evident that the impacts from the Project, as set forth above, will cause turbidity in such a manner to that impedes the best usages of many waterbodies, particularly those with a trout standard or rare species, by degrading the survival and propagation of balanced, indigenous populations of shellfish, fish and wildlife that rely upon these waters.

NYSDEC Denial

For the reasons articulated above, the Department hereby denies NFG's Application for a water quality certification, as well as for an ECL Article 15 (stream disturbance) permit and an ECL Article 24 (freshwater wetlands disturbance) permit, because it fails to demonstrate compliance with State water quality standards and other applicable State statutes and regulations. This notice of denial is the Department's final determination. Should NFG wish to address the above deficiencies, a new joint application must be submitted pursuant to 6 NYCRR § 608.9 and 6 NYCRR Part 621. UPA, 6 NYCRR § 621.10 provide that that an applicant has a right to a public hearing on the denial of a permit, including a § 401 WQC. A request for hearing must be made in writing to me within 30 days of the date of this notice.

Sincerely,

John Ferguson
Chief Permit Administrator

Cc: B. Clark
J. Kittka
K. Webster
S. Lare
S. Russo
R. Rosenthal
T. Berkman
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C. Hogan
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