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February 26, 2021

VIA E-FILING

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

SUBJECT: West Canada Creek Project (FERC No. 2701-059)
Final License Application

Dear Secretary Bose:

Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company, is the Licensee, owner and operator of the West Canada Creek Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC or Commission) Project No. 2701. The West Canada Creek Project consists of two developments, Prospect and Trenton, located on West Canada Creek in Oneida and Herkimer counties, New York. The current license for the West Canada Creek Project expires on February 28, 2023. Erie is pursuing a new license for the Project using the FERC Integrated Licensing Process (ILP) pursuant to 18 C.F.R. Part 5 of the Commission's regulations. Erie must file its final application for a new license with FERC no later than February 28, 2021.

In accordance with 18 CFR § 5.16(c), Erie respectfully submits the Final License Application (FLA) for filing with the Commission. The FLA is being filed in accordance with the ILP and consists of the following technical exhibits and environmental report:

Volume I of III: Public
- Initial Statement;
- Exhibit A - Project Description;
- Exhibit B - Project Operation and Resource Utilization;
- Exhibit C - Construction History;
- Exhibit D - Statement of Cost and Financing;
- Exhibit G - Project Maps; and
- Exhibit H - Description of Project Management and Need for Project Power.

Volume II of III
- Exhibit E - Environmental Report.
-

Volume III of III: Contains Critical Energy Information (CEII);
- Exhibit F - General Design Drawings and the Supporting Design Report (SDR); and
- Exhibit H- Appendix H-1 -Single-line Diagram.

In accordance with the Commission's Order No. 630 (68 FR 9857), Exhibit F, including the SDR, and Appendix H-1 of Exhibit H (Single-line Diagram) contains Critical Energy Information and is being submitted under separate cover for the Commission's non-public file (Volume III). Exhibit F contains sensitive and detailed engineering information that, if used incorrectly, may compromise the safety of the Project and those responsible for its proper operation. Members of the public requesting CEII information for the West Canada Creek Project must comply with the Commission's procedures for obtaining access to CEII as required under CFR § 388.113. All public requests for CEII should be made to the Commission's CEII Coordinator.

Volume II, Exhibit E, Environmental Report, discusses the results of the studies conducted in support of the relicensing and considers how the information and data collected during those studies addresses issues that were raised by agencies and other relicensing participants. In support of this proposal, Exhibit E evaluates the potential impacts to environmental, recreational, and cultural resources that may occur as a result of continued Project operation under a new license. Exhibit E includes Erie's proposals for the protection and mitigation of effects on, or enhancement to, resources that are associated with the continued operation of the Project. Exhibit E also includes stakeholder comments regarding the Draft License Application, and Erie's responses, as appropriate.

Erie is providing electronic copies of the FLA to relevant resource agencies, tribes, non-governmental organizations, and other potential interested parties included on the attached distribution list. An electronic copy of the FLA can be downloaded from FERC's eLibrary system (https://elibrary.ferc.gov/eLibrary/search) by searching under docket number P-2701 (sub docket 059). The FLA will also be available at the Project's public relicensing website at https://westcanadacreek.brookfieldusprojects.com/.

Erie is providing two courtesy paper copies of the FLA to the FERC Office of Energy Projects (Room 61-02) and to the Office of General Counsel-Energy Projects (Room 101-56). Erie will publish a notice of the filing of this FLA twice in two Project area newspapers, the Observer-Dispatch and the Times Telegram, and will file proof of publication with FERC once available.

If you have any questions or require any additional information, please contact me at (315) 598-6130 or via email at steven.murphy@brookfieldrenewable.com.

Sincerely,

Steven Murphy
Director, Licensing
Brookfield Renewable

Attachments: Final License Application for the West Canada Creek Hydroelectric Project
cc: Distribution List

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VOLUME I
FINAL LICENSE APPLICATION

INITIAL STATEMENT, EXHIBIT A, B, C, D, G AND H

WEST CANADA CREEK HYDROELECTRIC PROJECT
FERC NO. 2701-NY

Submitted by:

Erie Boulevard Hydropower, L.P.
Fulton, New York

Prepared by:

Kleinschmidt

February 2021

WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

INITIAL STATEMENT

BEFORE THE
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

West Canada Creek Hydroelectric Project **FERC Project No. 2701**

APPLICATION FOR LICENSE FOR A MAJOR PROJECT – EXISTING DAM

INITIAL STATEMENT

(Pursuant to 18 CFR §4.51)

1. Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company (Brookfield), applies to the Federal Energy Regulatory Commission (FERC or Commission) for a new license for the West Canada Creek Hydroelectric Project (Project), FERC Project No. 2701, an existing major project, as described in the attached exhibits. The current license was issued by order dated March 18,1983 (22 FERC ¶ 62,347), with a license expiration date of February 28, 2023.

2. The location of the Project is:

   State: New York
   Counties: Oneida and Herkimer
   Towns: Trenton and Russia
   Stream or Body of Water: West Canada Creek

3. The exact name and business address of the applicant are:

   Erie Boulevard Hydropower, L.P.
   399 Big Bay Road
   Queensbury, New York 12804

The exact name and business address of each person authorized to act as agent for the applicant in this application are:

Steven Murphy
Director, U.S. Licensing
Erie Boulevard Hydropower, L.P.
33 West 1st Street South
Fulton, New York 13069

Jon Elmer
Director of Operations
Erie Boulevard Hydropower, L.P.
800 Starbuck Avenue, Suite 201
Watertown, New York 13601

4. Erie Boulevard Hydropower, L.P. is a domestic corporation and is not claiming preference under Section 7(a) of the Federal Power Act, 16 U.S.C.A. §800.

5. (i) The statutory or regulatory requirements of the State of New York, the state in which the Project is located, which would, assuming jurisdiction and applicability, affect the Project with respect to bed and banks, and to the appropriation, diversion and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting and distributing power, and in any other business necessary to accomplish the purposes of the license under the Federal Power Act are:

    a. Authorization to conduct the business of generation, transmission, and distribution of electricity pursuant to Article 2 of New York's Transportation Corporation Law.
    b. Water Quality Certification (WQC) pursuant to Title 6 of New York Codes, Rules and Regulations (NYCRR) Section 608.9 and Section 401 (a)(1) of Public Law 92-500 as amended by Public Law 95-217 (Clean Water Act of 1977), 33 U.S.C. Section 1341.

    (ii) The steps the Applicant has taken, or plans to take, to comply with each of the laws cited above are:

    a. Applicant has complied with the requirements of the laws of the State of New York with respect to the right to engage in the business of developing and transmitting power.
    b. Applicant will apply to the New York Department of Environmental Conservation (NYSDEC) for a Water Quality Certification no later than 60 days after FERC issues the notice of acceptance and ready for environmental analysis per 18 CFR 5.23.

6. All existing Project facilities are owned by Erie Boulevard Hydropower, L.P.

7. The West Canada Creek Project consists of two developments; the Prospect Development and the Trenton Falls Development. Together these developments have a combined capacity of 39.8 MW.

8. The Project does not occupy any lands of the United States.

9. Project is an existing constructed project; no additional construction is proposed.

VERIFICATION STATEMENT

THE FOLLOWING INFORMATION IS PROVIDED PURSUANT TO 18 CFR §5.18(A) AND §4.32(A) OF THE COMMISSION'S REGULATIONS:

1. Erie Boulevard Hydropower, L.P. possesses all proprietary rights necessary to construct, operate or maintain the Project.

2. The name and mailing address of the counties in which any part of the Project and any federal facilities that would be used by the project are located:

   The West Canada Creek Project is located in Oneida and Herkimer counties, New York.

   Oneida County Clerk
   Oneida County Office Building
   800 Park Avenue
   Utica, New York 13501

   Herkimer County Clerk
   109 Mary Street, Suite 1111
   Herkimer, New York 13350

   There are no federal facilities used by the West Canada Creek Project.

3. The name and mailing address of every city, town, or similar local political subdivision in which any part of the project and any federal facilities that would be used by the project are located:

   The West Canada Creek Project is located in the Town of Russia in Herkimer County, New York, and the Town of Trenton in Oneida County, New York.

   Town of Russia
   8916 North Main Street
   P O Box 126
   Poland, New York 13431

   Town of Trenton
   PO Box 206
   8520 Old Poland Road
   Barneveld, New York 13304

   There are no federal facilities used by the West Canada Creek Project.

4. The name and mailing address of every city, town, or similar local political subdivision that has a population of 5,000 or more people and is located within 15 miles of the project dam:

Town of Marcy
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City of Rome
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Rome, New York 13440

Town of Lee
5808 Stokes Lee Center Road
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City of Utica
1 Kennedy Plaza
Utica, New York 13502

City of New Hartford
Town of New Hartford
48 Genesee Street
New Hartford, New York 13413

City of Frankfort
201 Third Avenue
Frankfort, New York 13340

5. There are no irrigation districts, drainage districts, or similar special purpose political subdivisions in which any part of the project is located or affected as outlined in 18 CFR §4.32 l(a)(2)(iii)(A) and (B).

6. Every other political subdivision in the general area of the Project that there is reason to believe would likely be interested in, or affected by, this notification:

Mohawk Valley Water Authority
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7. The names and mailing addresses of potentially affected Indian tribes:

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Oneida Tribe of Indians of Wisconsin
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St. Regis Mohawk Tribe
Michael Conners, Jr. Chief
Beverly Cook, Chief
Eric. Thompson, Chief
412 State Route 37
Akwesasne, New York 13655

8. For a license (other than a license under Section 15 of the Federal Power Act) state that the Applicant, in accordance with 18 CFR 4.32(a)(3), made a good-faith effort to notify, by certified mail, the following entities of the filing of this application:
   a) Every property owner of record of any interest within the bounds of the Project;
   b) The entities listed in (2) above;
   c) Other governmental agencies that would likely be interested in or affected by the application.

This requirement does not apply because Erie is applying for a new license for an existing Project under Section 15 of the Federal Power Act.

SUBSCRIPTION

This Application for New License for the West Canada Creek Project, FERC Project No. 2701, is executed in the State of New York, County of Warren, by Thomas Uncher, Vice President of Erie Boulevard Hydropower, LP, 399 Big Bay Road, Queensbury, NY 12804, who, being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief and that he is authorized to execute this application on behalf of Erie Boulevard Hydropower, LP. The undersigned has signed this application this ___ day of February, 2021.

Erie Boulevard Hydropower, L.P.

By: _____

Thomas Uncher
Vice President

VERIFICATION

Subscribed and sworn to before me, a Notary Public of the State of New York this 25th day of February, 2021.

Brenda Schermerhorn
(Notary Public)

(My Commission Expires July 2, 2023)/seal

BRENDA J. SCHERMERHORN
NOTARY PUBLIC, State of New York
Reg. No. 01SC6169934
Qualified in Saratoga County
My Commission Expires July 2, 2023

WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

EXHIBIT A

PROJECT DESCRIPTION

TABLE OF CONTENTS

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1.0 GENERAL PROJECT DESCRIPTION

Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company, is the Licensee, owner and operator of the West Canada Creek Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC or Commission) Project No. 2701. The West Canada Creek Project consists of two developments, Prospect and Trenton, located on West Canada Creek in Oneida and Herkimer counties, New York. The upstream Prospect Development is located approximately 33 river miles (RM) from the confluence of West Canada Creek with the Mohawk River. The downstream Trenton Development is located approximately 31 river miles from the confluence of West Canada Creek with the Mohawk River. Figure 1 provides the general location of the Project facilities. A map of the Project boundary is provided in Exhibit G.

The Prospect Development is composed of: a 176-acre impoundment; a concrete overflow dam with earthfill dikes on either end; a 4,500-foot-long canal extending from a south dike to a concrete intake; a 430-foot-long steel penstock; an approximate 1.3-mile-long bypass reach; a reinforced concrete powerhouse containing a single turbine generator unit with a nameplate capacity of 17.3 MW; 6.9 kilovolts (kV) generator leads, 15-kV breaker, 6.6/46-kV transformer, a 46-kV switch connecting to the National Grid interconnection point within the substation; and appurtenant facilities.

The Trenton Development is composed of: a 9 acre impoundment; a concrete masonry dam with a spillway, non-overflow sections, and auxiliary spillway; a concrete intake and a 14-foot-diameter tunnel/pipeline; a surge tank; four 7-foot-diameter penstocks; an approximate 3,703-foot-long bypass reach; two adjoining powerhouses housing retired in-place (Unit Nos. 1, 2, 3, and 4) and operational Unit Nos. 5, 6, and 7 with a total rated capacity of 22.5 MW; 13.2-kV generator leads, three 15-kV breakers, two 13.2/46-kV transformers, two 46-kV switches connecting to the National Grid interconnection point within the substation; and appurtenant facilities.

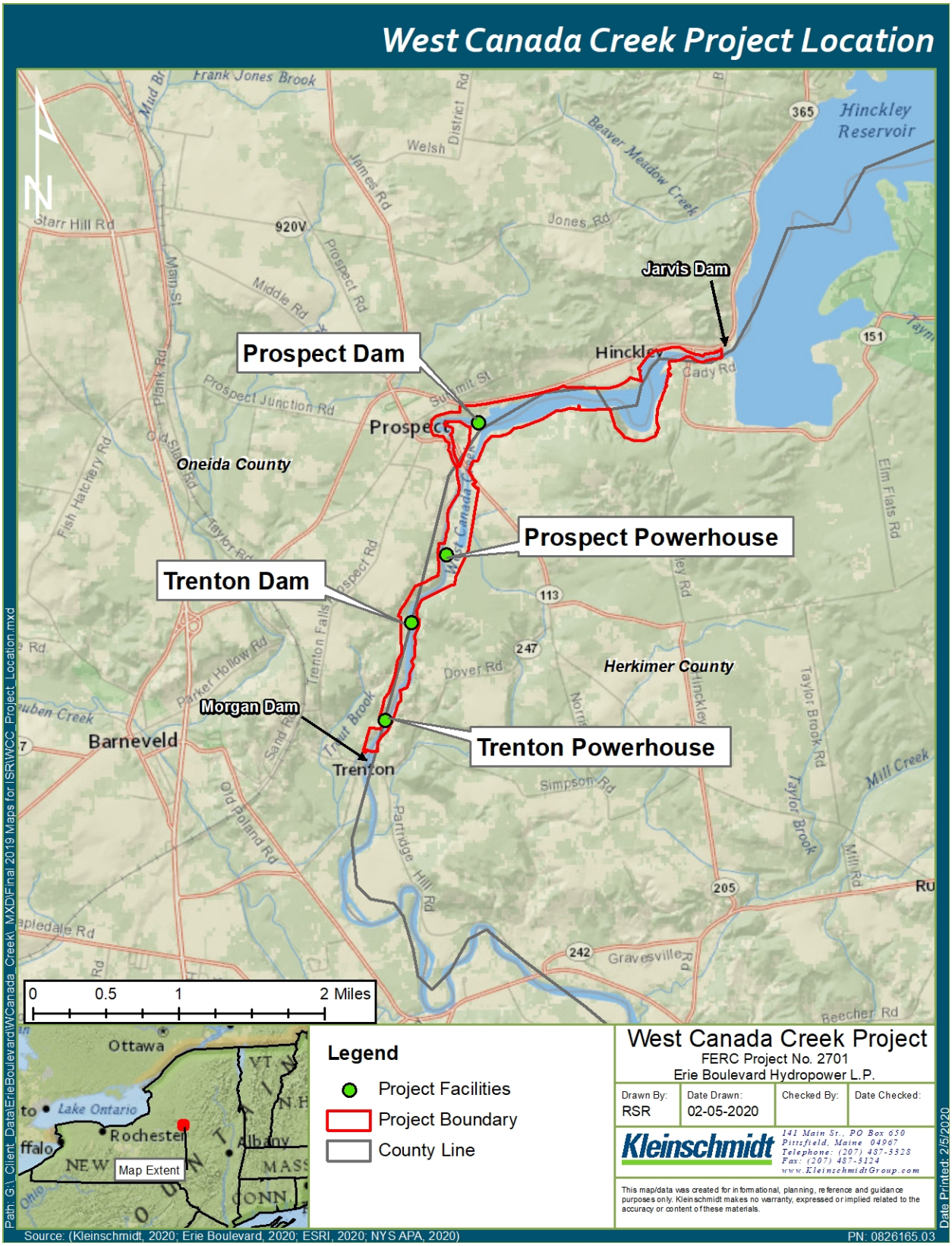

Figure 1 West Canada Creek Project Location

2.0 PROSPECT DEVELOPMENT

2.1 Project Structures

2.1.1 Dam

The Prospect dam includes a main spillway, a north dike, and south dike. The main spillway is a concrete overflow 306-foot-long by 45-foot-high spillway controlled by three 27-foot-wide Tainter gates and seven 27-foot-wide needle beam bays. Each gate and bay is separated by a 4-foot concrete pier. There are two 42-inch pipes in the dam that were installed during dam construction with reservation for future water main connectors by the City of Utica now the Mohawk Valley Water Authority (MVWA).[1] The two dikes are earthen embankments with impervious cores. The north dike is 400 feet long by 47 feet high and the south dike is 475 feet long by 47 feet high. The spillway crest is located at an elevation of 1,146.5 feet U.S. Geological Survey (USGS)[2]. The impoundment's normal pool elevation resides at 1,161.5 feet USGS aligning with the top of the Tainter gates.

2.1.2 Intake and Conveyance System

Water is diverted through a 4,500-foot-long by 22-foot-high earthen power canal dike and forebay that extends from the south side of the dam to a concrete intake structure. The forebay is approximately 250 feet long by 65 feet wide. The intake consists of a concrete reinforced structure with a head gate hoist frame and electrical equipment house. The intake is equipped with vertical steel trashracks with 3 5/8-inch clear spacing, a motor operated rack rake, a structural steel gate of the fixed wheel type operated by a 60,000-pound capacity two-drum cable type motor driven hoist, and slots for stop logs. A 430-foot-long by 13.5-foot-diameter steel penstock conveys water from the intake to the Prospect powerhouse.

2.2 Impoundment

The Prospect impoundment has a normal maximum surface area of 176 acres (with 161.7 acres in the main impoundment and 13.8 acres in the forebay) at a normal maximum surface elevation of 1,161.5 feet USGS. At normal maximum surface elevation, the

[1] The MVWA is currently in the process of upgrading the existing water pipe transfer system associated with the withdrawals from Hinckley Reservoir. This project does not currently include connection to the pipes in the Prospect dam or withdraw from the Prospect impoundment.
[2] All elevations refer to USGS mean sea level datum (National Geodetic Vertical Datum or NGVD).

impoundment has a gross storage capacity of 3,250 acre-feet and a useable storage capacity of 803 acre-feet.

2.3 Bypass Reach

The Prospect bypass reach extends approximately 1.3 miles between the Prospect dam and the Prospect Powerhouse. The Prospect bypass reach is a narrow gorge with steep side slopes of rock outcrops and dispersed vegetation, and bordered along the top elevation with primarily forested vegetation. The Prospect canal extends to the east and the Mohawk Valley Water Authority (MVWA) Water Treatment Plant is located to the west of the bypass reach. Access to the bypass reach is restricted due to the steep terrain and for public safety reasons.

2.4 Generating Equipment

The Prospect Powerhouse, built in 1959, is located on the east bank of West Canada Creek. The Prospect Powerhouse is made of reinforced concrete and is approximately 62 feet wide by 76 feet long. From the equipment floor, the powerhouse is approximately 52 feet high with a substructure that is approximately 37 feet in depth. The Prospect Powerhouse contains one 17,325 (kilowatt) kW vertical shaft turbine with a Francis runner. The turbine has a design capacity of 23,700 horsepower (hp), a design head of 135 feet, a minimum safe operating limit of 4 MW at a hydraulic capacity of 525 cubic feet per second (cfs) and a maximum hydraulic capacity of 1,855 cfs. The governing equipment is a Woodward cabinet actuator type with 80,500-foot-pounds capacity, arranged to operate the wicket gates by means of two servomotors in the turbine pit.

The Prospect Powerhouse contains one direct connected vertical alternating current (A.C.) synchronous generator with a direct connected exciter. The generator is rated at 19,250 kilovolt amps (kVA), 0.9 power factor 17,325 kW, 180 revolutions per minute (rpm), 6,900 volts, 3-phase, 60-cycle. The exciter is shunt wound, self-excited, and is designated to operate in conjunction with a rotating amplifier type voltage regulator. The Prospect tailrace discharges directly into West Canada Creek (Trenton impoundment).

2.5 Transmission Facilities

The Prospect Development has a substation that adjoins the powerhouse. From the powerhouse the 6.9 kV generator leads go underground to the substation. The Licensee owns a 15-kV breaker, a 6.6/46-kV transformer, and a 46-kV switch connecting to the

National Grid interconnection point within the substation. Exhibit H, Appendix H-1, contains the single-line diagram for the Prospect Development, which is being filed as Critical Energy/Electric Infrastructure Information (CEII).

2.6 Ancillary Equipment

Prospect Development has one, four-motor electric overhead traveling bridge crane rated at 60-tons capacity with an allowable overload capacity of 25 percent. The crane is equipped with a 10-ton auxiliary hoist. The Prospect Powerhouse additionally contains a 15-kV breaker, the station control battery with automatic charger, the recorders and transmitters, and all electrical and mechanical parts to operate the station.

See Table 1 for Prospect Development project components summary table. See Figures 2 and 3 for location of project facilities.

Table 1 Prospect Development Project Components List

Prospect Development	
Prospect Development Capacity	17.3 MW
Prospect Dam River Mile	33
Impoundment	
Normal Surface Area	176 acres
Normal Surface Elevation	1,161.5 feet USGS
Useable Storage Capacity	803 acre-feet
Gross Storage Capacity	3,250 acre-feet
Dam	
Layout	Concrete overflow dam with earthfill dikes on either end
Overflow Dam Dimensions	306 feet long by 45 feet high
North Dike Dimensions	400 feet long by 47 feet high
South Dike Dimensions	475 feet long by 47 feet high
Spillway Crest Elevation	1,146.5 feet USGS
Intake	
Power Canal Dimensions	4,500 feet long by 22 feet high
Forebay Dimensions	250 feet long by 65 feet wide
Intake Construction	Reinforced concrete with vertical steel racks
Water Conduits	
Penstock	430 feet long by 13.5 feet diameter
Bypass Reach	Approximately 1.3 miles long
Powerhouse	
Year Built	1959
Construction Type	Reinforced concrete
Dimensions	62 feet wide by 76 feet long by 52 feet high

Prospect Development	
Turbines	
Number	1
Type	Vertical shaft with Francis runner
Rating	17,325 kw
Turbine Design Capacity	23,700 HP
Maximum Hydraulic Capacity	1,855 cfs
Minimum Hydraulic Capacity	525 cfs
Turbine Design Head	135 feet
Switchyard/Transmission Lines	
	The Prospect Development has a substation that adjoins the powerhouse. From the powerhouse the 6.9 kV generator leads go underground to the substation. The Licensee owns a 15-kV breaker, a 6.6/46-kV transformer, and a 46-kV switch connecting to the National Grid interconnection point within the substation.
Appurtenances	
	The Prospect Development has one, four motor electric overhead traveling bridge crane rated at 60-ton capacity with an allowable overload capacity of 25 percent. The crane is equipped with a 10-ton auxiliary hoist.

Figure 2 Prospect Development Dam and Power Canal Facilities

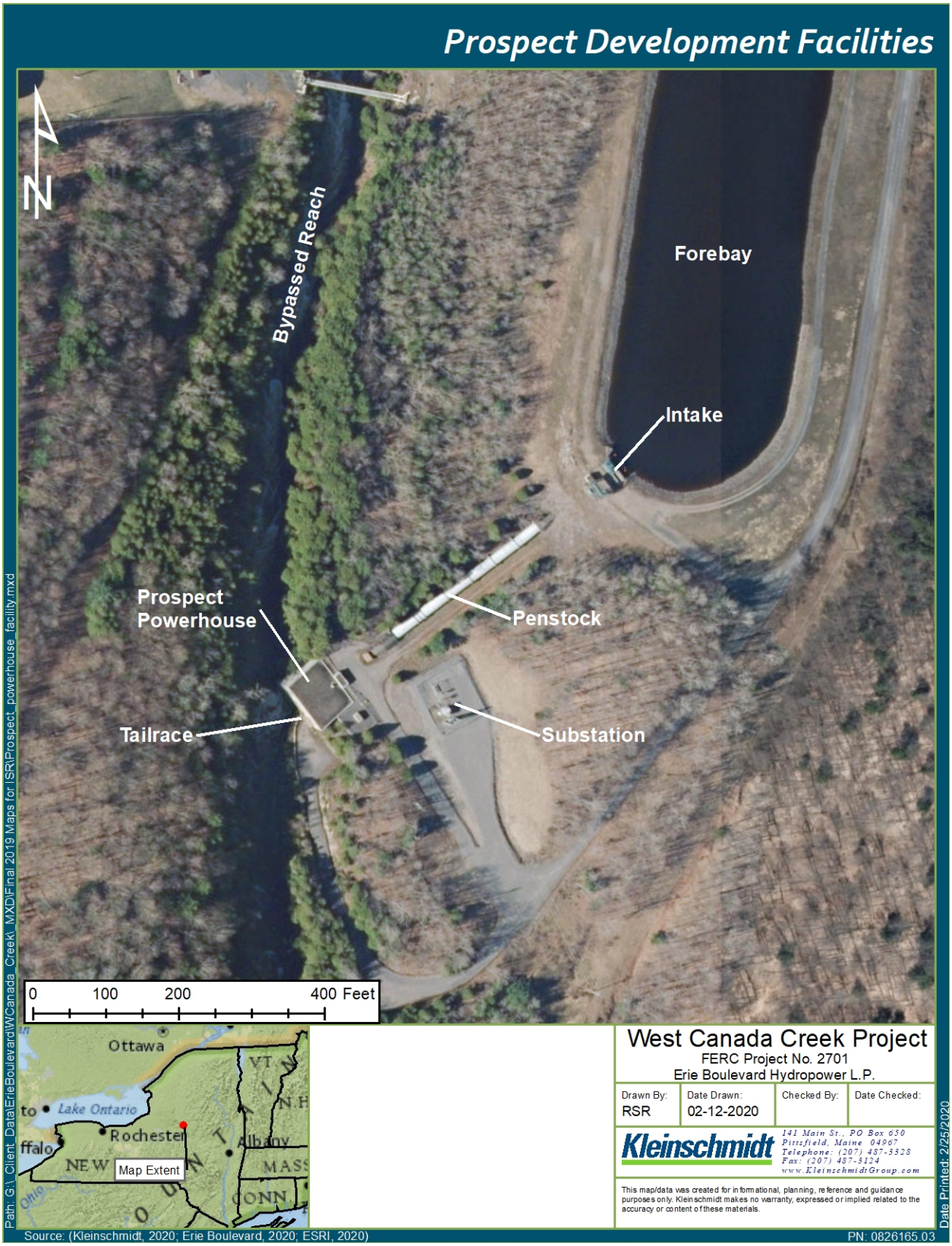

Figure 3 Prospect Development Intake and Powerhouse Facilities

3.0 TRENTON DEVELOPMENT

3.1 Project Structures

3.1.1 Dam

The Trenton dam is a 288-foot-long by approximately 61-foot-high concrete and masonry dam consisting of a main spillway with non-overflow sections on either side and an auxiliary spillway. The main spillway section is approximately 100 feet long by 56 feet high with a crest elevation of 1,017.9 feet USGS surmounted by 6-foot-high trippable wooden flashboards and a 10-foot-high by 15-foot-wide sluice gate. A rock island separates the auxiliary spillway and the east non-overflow section. The west non-overflow section is 106 feet long, 65 feet high, with a crest elevation of 1,026.6 feet USGS. The east non-overflow section is 82 feet long, 56 feet high, with a crest elevation of 1,024.6 feet USGS. The auxiliary spillway is 160 feet long, 6.5 feet high, with a crest elevation of 1,016.2 feet USGS, and is surmounted by 7.5 foot a pneumatic flashboard system with a crest elevation of 1023.9 feet USGS when fully inflated. The impoundment's normal pool elevation resides at 1,023.9 feet USGS which aligns with the top of the main spillway's 6-foot-high flashboards.

3.1.2 Intake and Conveyance System

The Trenton intake resides on the west side of the impoundment and approximately 100 feet upstream of the dam. The intake is 20 feet wide and contains a 20-foot-high by 14-foot-wide vertical lift gate protected by a single set of trashracks with 2-inch clear spacing (upstream of the gate). The gate opens into a 14-foot-diameter concrete-lined tunnel excavated in bedrock. There are valve houses downstream of the right non-overflow structure that contain valves which formerly controlled flow to the original steel pipeline from the eight low level conduits discussed above. The valves remain in place within these buildings in a closed position.

From the intake, a concrete lined 14-foot-diameter tunnel, approximately 1,284 feet long, connects to a 14-foot-diameter steel pipeline. The 14-foot-diameter steel pipeline reduces to a 12-foot-diameter steel pipeline that extends to a surge tank. The total pipeline length is approximately 2,000 feet. A 12-foot-diameter penstock extends from the surge tank and branches off into three 7-foot-diameter penstocks that lead to the newer powerhouse (Powerhouse No. 2). A 7-foot-diameter penstock also branches off

from the 12-foot-diameter steel pipeline, but ahead of the surge tank, and leads to the older powerhouse (Powerhouse No. 1). Powerhouse No. 1 was retired in-place in 1989.

3.2 Impoundment

The Trenton impoundment has a normal maximum surface area of 9-acres at a normal maximum surface elevation of 1,023.9 feet USGS. At normal maximum surface elevation, the impoundment has a gross storage capacity of 264 acre-feet and a useable storage capacity of 155 acre-feet.

3.3 Bypass Reach

The Trenton bypass reach extends approximately 3,703 feet (0.7 miles) between the Trenton Dam and Powerhouse. The bypass reach (Trenton Falls Gorge) is a steeply-sloped narrow gorge with a series of waterfalls, dropping approximately 200 feet over the length of the bypass reach. Access to the bypass reach is restricted due to the steep terrain and for public safety reasons. The gorge is bordered along the top elevation with primarily forested vegetation to the east and to the west with vegetation and Project facilities.

3.4 Generating Equipment

The Trenton powerhouse complex is located on the west bank of the West Canada Creek. The original powerhouse, Powerhouse No. 1, was constructed in 1901 and is a steel-framed, native stone building. Powerhouse No. 1 is approximately 120 feet long by 37 feet wide by 60 feet high and houses Unit Nos. 1-4 that were retired in-place in 1989. In 1918 a second powerhouse, Powerhouse No. 2, was built abutting the upstream side of the original powerhouse. Powerhouse No. 2 is a steel-framed concrete building approximately 125 feet long by 37 feet wide by 96 feet high. Powerhouse No. 2 houses active Unit Nos. 5, 6 and 7.

Powerhouse No. 1 contains four turbine units that have been retired in-place. Powerhouse No. 2 contains operational turbine Unit Nos. 5, 6, and 7. Unit No. 5 is rated at 7,395 kW, Unit No. 6 is rated at 7,656 kW and Unit No. 7 is rated at 7,395 kW for a total nameplate rating of 22,446 kW. Each unit has vertical Francis type runners with a design capacity of 12,315 hp, a design head of 265 feet at .75 kW/hp, the resulting kW is 9,236. Each unit has a minimum single unit safe operating limit of 2.5 MW at a hydraulic capacity of 145 cfs and a maximum station hydraulic capacity of 1,425 cfs. The Trenton tailrace discharges directly into West Canada Creek.

Unit Nos. 5, 6, and 7 generators are direct connected vertical A.C. synchronous machines. The Unit No. 5 generator is rated at 8,500 kVA, 0.87 power factor, 7,395 kW 327 rpm, 13,200 volts, 3-phase, 60 hertz (hz). The Unit No. 6 generator is rated at 8,800 kVA, 0.87 power factor, 7,656 kW, 327 rpm, 13,200 volts, 3-phase, 60 hz. The Unit No. 7 generator is rated at 8,500 kVA, 0.87 power factor, 7,395 kW 340 rpm, 13,200 volts, 3-phase, 60 hz. Each generator has a direct connected exciter.

An automated base flow release valve is tied directly to the piping associated with Unit No. 6. The valve bypasses the turbine during forced shutdowns to pass the required 160 cfs base flows at the Trenton Powerhouse.

3.5 Transmission Facilities

The Trenton Powerhouse adjoins a National Grid 46-kV substation. From the powerhouse the 13.2-kV generator leads go overhead to the National Grid substation. The Licensee owns three 15-kV breakers, two 13.2/46-kV transformers, and two 46-kV switches connecting to the National Grid interconnection point within the substation. Exhibit H contains the single-line diagram for the Trenton Development, which is being filed as CEII.

3.6 Ancillary Equipment

Trenton Powerhouse No. 2 is equipped with a 50-ton capacity crane with motor travel and lift. In addition, there is a 10-ton auxiliary crane.

See Table 2 for Trenton Development project components summary table. See Figures 4 and 5 for location of Project facilities.

Table 2 Trenton Development Project Components List

Trenton Development	
Trenton Development Capacity	22.446 MW
Trenton Dam River Mile	31
Impoundment	
Normal Surface Area	9 Acres
Normal Surface Elevation	1,023.9 feet USGS
Useable Storage Capacity	155 acre-feet
Gross Storage Capacity	264 acre-feet
Dam	

Trenton Development	
Layout	Concrete masonry dam with a spillway, two non-overflow sections, and an auxiliary spillway
Main Spillway Dimensions	100 feet long by 61 feet high
Main Spillway Flashboards	6-foot-high trippable wooden boards
West Non-Overflow Section	106 feet long by 65 feet high
East Non-Overflow Section	82 feet long by 56 feet high
Auxiliary Spillway Dimensions	160 feet long by 6.5 feet high
Auxiliary Spillway Flashboards	7.5 foot pneumatic flashboard system with a crest elevation of 1023.9 feet when fully inflated
Main Spillway Crest Elevation	1,017.9 feet USGS
Intake	
Intake Dimensions	20 feet wide with a 20-foot-high vertical lift gate
Water Conduits	
Pipeline	A concrete lined 14-foot-diameter tunnel is approximately 1,284 feet long and connects to a 14-foot-diameter steel pipeline. The 14-foot-diameter steel pipeline reduces to a 12-foot-diameter steel pipeline that extends to the surge tank. The total pipeline length is approximately 2,000 feet.
Penstock	A 12-foot-diameter penstock extends from the surge tank and branches off into three 7-foot-diameter penstocks that lead to Powerhouse No. 2. A 7-foot diameter penstock branches off from the 12-foot diameter steel pipeline ahead of the surge tank and leads to the older Powerhouse No. 1. Powerhouse No. 1 was retired in place in 1989.
Bypass Reach	Approximately 3,703 feet (0.7 mile) long
Powerhouse No. 1 (retired in place)	
Year Built	1901
Construction Type	steel-framed, native stone
Dimensions	120 feet long by 37 feet wide by 60 feet high
Powerhouse No. 2	
Year Built	1918
Construction Type	Steel-framed, concrete building
Dimensions	125 feet long by 37 feet wide by 96 feet high
Turbines	
Number	Unit Nos. 1,2,3,4 = retired in place; Unit Nos. 5,6,7 = active
Type	Francis Type Runners
Rating	Unit No. 5 = 7,395 kw; Unit No. 6 = 7,656 kw; Unit No. 7 = 7,395 kw
Turbine Design Capacity	12,315 HP
Maximum Hydraulic Capacity	1,425 cfs (combined units)

Trenton Development	
Minimum Hydraulic Capacity	145 cfs (individual unit)
Turbine Design Head	255 feet
Switchyard/Transmission Lines	
	The Trenton Powerhouse adjoins a National Grid 46-kV substation. From the powerhouse the 13.2-kV generator leads go overhead to the National Grid substation. The Licensee owns three 15-kV breakers, two 13.2/46-kV transformers, and two 46-kV switches connecting to the National Grid interconnection point within the substation.
Appurtenances	
	The Trenton Powerhouse No. 2 is equipped with a 50-ton capacity crane with motor travel and lift. In addition, there is a 10-ton auxiliary.

Figure 4 Trenton Development Dam and Intake Facilities

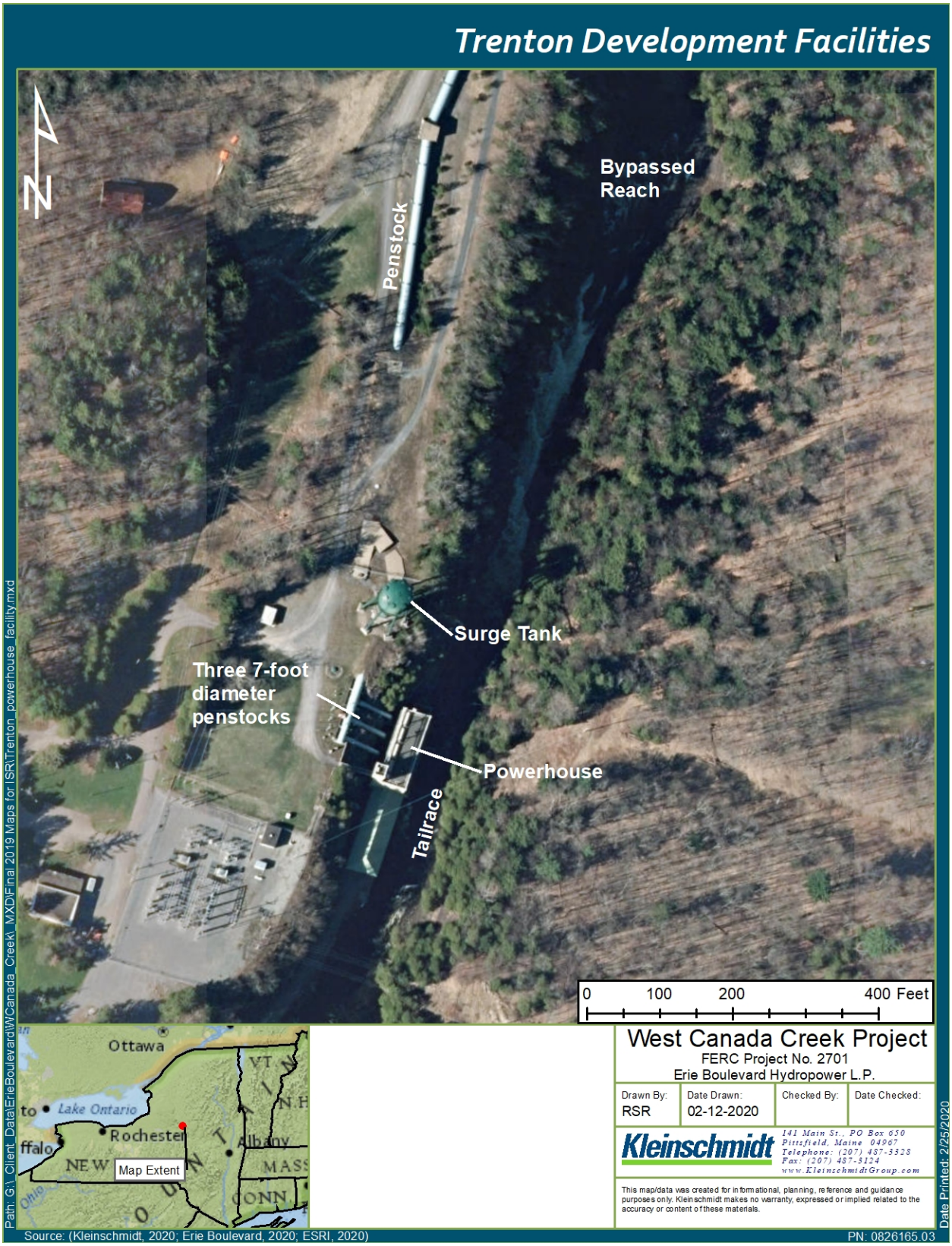

Figure 5 Trenton Development Penstock, Surge Tank and Powerhouse Facilities

4.0 LANDS OF THE UNITED STATES

There are no lands of the United States within the West Canada Creek Project boundary.

WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

EXHIBIT B

PROJECT OPERATION AND RESOURCE UTILIZATION

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1.0 PROJECT OPERATION

1.1 Project Operational Control

Erie Boulevard Hydropower, L.P. (Erie or Licensee), typically operates the West Canada Creek Hydroelectric Project (FERC No. 2701) (Project) so that daily average inflows from the upstream Hinckley Reservoir into the Project are released from the Prospect and Trenton Developments that same day to maintain daily average outflows (i.e., daily average inflows equal daily average outflows). The two developments are typically operated in tandem such that outflow from Prospect Development is followed by similar outflow at the downstream Trenton Development.

The Prospect Development operates in manual or semi-automatic mode. Erie has the ability to remotely start and stop the Prospect unit and remotely operate the three Tainter gates. A traveling operator is on-site during weekdays, visiting the site once or twice daily. Additional personnel are sent to the site on an as-needed basis (e.g., for maintenance reasons). The Prospect Development has been automated for remote operation from Erie's North America System Control Center in Marlborough, Massachusetts, which is manned around the clock.

The Trenton Development operates in manual or semi-automatic mode. The generating units are controlled and monitored from Erie's North America System Control Center in Marlborough, Massachusetts. Instrumentation is used to monitor headwater levels at Trenton. At the Trenton Development, Erie can remotely operate the flood gate and vary the generating units down to motoring. Unit No. 7 also has remote start/stop capability. A travelling operator is on-site during weekdays, visiting the site once or twice daily.

1.2 Annual Plant Factor

The average annual plant factor is determined using the following equation:

$$\frac{\text{Average Annual Output}}{\text{Licensed Capacity x 8,760 hrs/yr}} = \text{Avg. Annual Plant Factor}$$

The Prospect Development currently has a gross average annual energy production of approximately 77,161 megawatt-hours (MWh) per year during the period 2011-2019, and an annual plant factor of approximately 50.9 percent based on its current FERC authorized capacity of 17.3 MW.

The Trenton Development currently has a gross average annual energy production of approximately 146,883 megawatt-hours (MWh) per year during the period 2011-2019, and an annual plant factor of approximately 74.5 percent based on its current FERC authorized capacity of 22.5 MW.

1.3 Existing Project Operation

1.3.1 General Project Operation

Inflow to the West Canada Creek Project is supplied from the upstream Hinckley Reservoir outflows. Hinckley Reservoir is operated by the New York State Canal Corporation (NYSCC) in accordance with the 2012 Hinckley Reservoir Operating Diagram (NYPA 2020) and governed by legally binding operating agreements[1] between the NYSCC, the Mohawk Valley Water Authority (MVWA), and Erie. The Jarvis Hydroelectric Project (FERC No. 3211) utilizes the Hinckley Reservoir releases to generate power. Outflows from Hinckley Reservoir and the Jarvis Project discharge directly into the Prospect Reservoir.

The current FERC license for the Jarvis Project allows for peaking operations and requires the New York Power Authority (NYPA) (as licensee for the Jarvis Project) to coordinate with Erie (as licensee for the West Canada Creek Project) and the NYSCC to maintain a continuous base flow of 160 cfs in West Canada Creek, as measured immediately downstream of the NYSCC diversion weir (Nine Mile Creek Feeder Dam). When conducting peaking operations, the NYPA will average the outflow required by the 2012 Operating Diagram over the course of a 24-hour day. The Jarvis Project will, therefore, generate with a lower outflow during non-peak demand periods and then generate with a higher outflow during peak demand periods, so that the total daily average flow is equal to the required outflow.

The NYPA Hydrologist communicates with the Erie Water Resource Manager twice weekly to discuss the application of the 2012 Operating Diagram based upon reservoir elevation in relation to the rule curve. The West Canada Creek Project is typically operated so that daily average inflows from Hinckley Reservoir (as controlled by the NYSCC and the NYPA based upon the 2012 Operating Diagram) into the West Canada Creek Project are released from the Prospect and Trenton developments that same day to maintain daily

[1] The 2012 Operating Diagram was accepted and became effective in 2013 by an agreement by NYSCC and MVWA dated February 1, 2013, and an agreement by NYSCC and Erie dated January 13, 2015.

average outflows (i.e., daily average inflows equal daily average outflows). The two developments are typically operated in tandem such that outflow from Prospect Development is followed by similar outflow at the downstream Trenton Development.

The current FERC license (Article 33) for the West Canada Creek Project requires Erie, as licensee, to provide a continuous base flow release of 160 cfs or inflow from the Hinckley Reservoir (whichever is less) for fisheries and aquatic habitat immediately downstream of the NYSCC diversion weir (Nine Mile Creek Feeder Dam).[2] To maintain the required 160 cfs base flow below the NYSCC diversion weir, Erie coordinates with NYSCC and continuously monitors the flow amount diverted into the Nine Mile Feeder Canal by the NYSCC. Essentially, when the diversion amount is communicated to Erie by the NYSCC, Erie will factor this amount into their base flow requirement by adding that value to the 160 cfs base flow. This new value will determine the total amount of flow needed to be passed through the Trenton Development continuously to meet the base flow requirements for the West Canada Creek. (For example, if 40 cfs is being diverted through the Nine Mile Feeder Canal this means that Trenton Development will have to discharge at least 160 cfs + 40 cfs or 200 cfs from Trenton Development instantaneously to meet base flow requirements during that diversion period).

Erie maintains staff gages and electronic instrumentation at the headpond and tailrace areas of each development to allow monitoring and control of Project operation. The NYSCC operates the diversion structure gatehouse (and associated gages) and alerts Erie of changes. Erie provides the required base flow by releasing 160 cfs, or more, via the turbines or at Trenton Dam, depending on NYSCC's operation of the New York State Canal System.

[2] The New York State canal system navigation season typically runs from mid-May to mid-October (NYSCC 2020a). During the period 2013 to 2019, monthly average NYSCC diversion flows into the Nine Mile Feeder Canal ranged from 0 cfs to 69.6 cfs, with lowest daily average diversion of 0 cfs and highest daily average diversion of 74 cfs during this period (NYSCC 2020b).

1.3.2 Normal Project Operation

PROSPECT DEVELOPMENT

The Prospect Development utilizes its reservoir's limited storage capacity as it operates between reservoir elevations of 1,161.5 feet (normal surface elevation) and 1,156.5 feet. When sufficient flow (within range of 500 cfs to 1,400 cfs) is provided from Hinckley Reservoir discharges upstream, the Prospect Reservoir can fluctuate up to approximately 5 feet daily and typically peaking occurs during the day and refill periods during the evening periods. When inflows are above or below the sufficient flow range (within 500 cfs to 1,400 cfs), the Prospect Development will typically operate as a run-of-river plant. However, when flows are below 500 cfs, Prospect's unit is operating below its optimal efficiency which may cause cavitation. To prevent damage to the unit due to cavitation, the unit may cycle on and off, thus operating in peaking mode. Instrumentation is used to monitor headwater level at Prospect.

TRENTON DEVELOPMENT

The Trenton Development utilizes its reservoir's limited storage capacity as it operates between elevation 1,023.9 (normal surface elevation) and 1,011.9 feet. When sufficient flow (within range of 500 cfs to 1,400 cfs) is provided from upstream, the Trenton Reservoir can fluctuate up to approximately 12 feet daily and typically peaking occurs during the day. When inflows are above or below the sufficient flow range (within range of 500 cfs to 1,400 cfs), the Trenton Development will typically operate as a run-of-river plant. The required 160 cfs base flow is passed either through the Trenton Development generating units or operations at the Trenton Dam. The turbine inlet valves and the base flow valve are electronically controlled by a programmable logic controller (PLC). If the base flow is interrupted by a turbine shutdown, the base flow valve tied to Unit no. 6 at the powerhouse is automated to open a specific amount to allow the passage of the required base flow.

1.3.3 Project Operation During Low Flows

PROSPECT DEVELOPMENT

When sufficient quantities of water are not available to permit the continuous operation of Prospect Development at full capacity, energy production or plant operation is

scheduled as much as possible to meet the load requirements of the interconnected electric system.

TRENTON DEVELOPMENT

When sufficient quantities of water are not available to permit the continuous operation of the development at full capacity, energy production or plant operation is scheduled as much as possible to meet the load requirements of the interconnected electric system. Unit Nos. 5, 6, and 7 operate at efficient load within the limitations of load demand, stream flow available and typically sequenced with the upstream Prospect Development.

1.3.4 Project Operation During High Flows

PROSPECT DEVELOPMENT

During periods of high flow, the Prospect Development is operated continuously at the full plant hydraulic capacity of approximately 1,855 cfs through the turbine and spilling flows in excess of 1,855 cfs. Managing flows beyond turbine capacity is accomplished by operating in a run-of-river mode utilizing any of the three Tainter gates, which have a combined hydraulic capacity of approximately 16,500 cfs at normal pond elevation.

TRENTON DEVELOPMENT

During periods of high flow, the Trenton Development is operated continuously at the full plant hydraulic capacity of approximately 1,425 cfs through the turbines and spilling flows in excess of 1,425 cfs. Managing flows beyond turbine capacity is accomplished by operating in a run-of-river mode by utilizing flood gate (hydraulic capacity of approximately 1,800 cfs at normal pond elevation), pneumatic crest, and trippable flashboards.

1.4 Proposed Project Operation

Erie provides the applicant's proposed measures, including those related to Project operations, in Exhibit E, Section 2.2, *Applicant's Proposed Action*.

2.0 ESTIMATED ENERGY PRODUCTIONS AND DEPENDABLE CAPACITY

2.1 Project Hydrology

The West Canada Creek has a total drainage area of approximately 561 square miles. The Trenton Development dam is located at approximate RM 31, and has a drainage area of approximately 376 square miles. The West Canada Creek headwaters originate in Hamilton County, New York and flow approximately 75 miles to its confluence with the Mohawk River.

Inflow to the Project is regulated and from the upstream Hinckley Reservoir which has a usable storage capacity of 75,417 acre-feet at spillway crest elevation of 1,225 feet (NYPA 2020). Inflow to the West Canada Creek Project is provided from Hinckley Reservoir through discharges from the upstream Jarvis Hydroelectric Project (P-3211) or spill over the Hinckley dam. Table 1 provides the mean, maximum, and minimum monthly daily average outflows for Hinckley Reservoir as reported by NYPA in the Jarvis Project Final License Application (NYPA 2020).

Table 1 Hinckley Reservoir Daily Outflow (cfs) (Period July 2001 - December 2019)

Month	Min	Max	Avg
January	298	6,381	1,088
February	106	2,261	944
March	104	4,449	1,044
April	246	15,820	2,085
May	298	7,912	1,251
June	245	13,062	868
July	178	7,696	697
August	234	2,311	569
September	119	3,744	590
October	120	4,942	829
November	298	16,803	1,176
December	223	4,156	1,068

Source: NYPA 2020

Prospect Development discharges directly into Trenton Development. Trenton Development discharges directly into West Canada Creek. Streamflow data provided for West Canada Creek Project is based on the downstream USGS Gage No. 01346000 at Kast Bridge located on West Canada Creek in Herkimer, New York, for the period of 1999 to 2019. Flow data for the West Canada Creek Project at the Prospect Dam and Trenton Dam are based on prorations of their respective drainage areas.

Table 2 and Table 3 present the mean, maximum, and minimum monthly average outflows for the Prospect Development and Trenton Development, respectively, for the period 1999 to 2019. Prospect Development discharges directly into Trenton Development. Trenton Development discharges directly into West Canada Creek.

The annual and monthly flow duration curves are provided in Appendix B-1. The flow curves were developed based on USGS Gage No. 01346000 (at Kast Bridge) located on West Canada Creek in Herkimer, New York, for the period of 1999 to 2019.

Table 2 Prospect Development Monthly Average Flows (cfs) (Period 1999-2019)

Month	Min	Max	Avg
January	374	5,993	1,155
February	234	3,860	1,037
March	284	4,462	1,338
April	395	14,003	2,233
May	319	7,909	1,316
June	184	13,786	930
July	205	8,344	723
August	197	2,786	589
September	146	5,819	596
October	126	4,890	952
November	395	12,770	1,233
December	443	4,252	1,233

Source: Prorated from USGS No. 01346000 at Kast Bridge, Herkimer NY, for the period of 1999-2019; prorating factor is 0.726..

Table 3 Trenton Development Monthly Average Flows (cfs) (Period 1999-2019)

Month	Min	Max	Avg
January	375	6,006	1,158
February	234	3,868	1,039
March	285	4,472	1,341
April	396	1,4033	2,238
May	319	7,925	1,319
June	185	1,3815	932
July	206	8,362	725
August	197	2,792	590
September	146	5,831	597
October	127	4,901	954
November	396	1,2797	1,236
December	444	4,261	1,236

Source: Prorated from USGS No. 01346000 at Kast Bridge, Herkimer NY, for the period of 1999-2019;\ prorating factor is 0.727.

1.1 Average Annual Energy Generation and Dependable Capacity

For the period from 2011 to 2019, the average annual power generated by the Prospect Development is 77,161 megawatt-hours (MWh), by the Trenton Development is 146,883 MWh, and by the total Project (both developments) is 224,044 MWh. Monthly average energy generation for the period 2011 to 2019 is provided in Table 4 for the Prospect Development and Table 5 for the Trenton Development. Total monthly average energy for the entire West Canada Creek Project is provided in Table 6.

The power is sold into the wholesale market administered by the New York Independent System Operator (NYISO). The NYISO calculates the dependable capacity for small hydro projects for two capability periods (summer and winter) (NYISO 2020). The calculation is based on the amount of generation the development produced during the NYISO's 20 peak load hours for each capability period. Each capability period has a five-year rolling average. For the most recent periods, Prospect Development's dependable capacity amount was 6.3 MW for the summer period and 13.1 MW for the winter period, and Trenton Development's dependable capacity amount was 14.2 MW for the summer period and 23.1 MW for the winter period.

Table 4 Historical Gross Monthly Generation (MWh) at the Prospect Development 2011 - 2019

Month	2011	2012	2013	2014	2015	2016	2017	2018	2019	AVERAGE
January	6,176	8,274	6,172	9,297	9,475	9,190	4,731	7,435	9,499	7,806
February	3,196	8,176	6,337	6,060	3,681	7,584	8,829	8,332	10,213	6,934
March	6,544	8,746	4,130	2,294	967	11,891	12,215	10,662	7,891	7,260
April	11,122	6,178	8,652	9,784	9,381	11,298	12,460	10,433	11,121	10,048
May	11,065	8,088	6,836	12,157	7,234	5,228	8,777	9,342	11,520	8,916
June	5,369	4,631	9,354	6,825	6,928	1,219	6,597	2,780	8,933	5,848
July	3,972	2,650	9,143	5,955	6,731	2,403	6,563	1,756	3,230	4,711
August	2,563	2,015	2,343	4,778	1,096	3,163	4,745	2,069	2,794	2,841
September	6,599	1,489	2,452	5,273	738	3,231	4,051	3,054	4,396	3,476
October	8,086	4,375	2,121	4,950	-	2,988	2,793	6,602	7,950	4,430
November	7,077	5,238	8,505	5,513	5,682	5,674	10,655	9,213	9,679	7,471
December	8,054	4,633	10,543	6,073	6,700	6,417	6,897	8,447	9,018	7,420
Annual Total	79,821	64,494	76,588	78,960	58,613	70,287	89,314	80,125	96,243	77,161

Table 5 Historical Gross Monthly Generation (MWh) at the Trenton Development 2011 - 2019

Month	2011	2012	2013	2014	2015	2016	2017	2018	2019	AVERAGE
January	12,136	15,495	12,416	17,436	17,919	11,466	-	14,648	17,179	13,188
February	7,363	15,206	12,466	12,372	8,032	11,967	9,742	15,858	18,571	12,397
March	13,695	15,859	9,818	5,951	3,326	20,631	20,600	18,986	15,116	13,776
April	18,593	12,138	15,418	16,695	16,128	19,941	20,146	17,967	18,714	17,304
May	17,689	14,779	13,878	20,400	14,010	10,929	16,092	16,310	20,242	16,037
June	9,784	9,630	16,267	13,238	13,365	5,261	12,729	6,854	16,388	11,502
July	7,614	6,882	15,500	12,395	13,910	6,807	12,607	4,502	8,098	9,813
August	6,950	6,155	6,216	10,409	4,767	7,695	10,381	5,052	6,974	7,178
September	12,023	4,882	6,775	11,082	3,542	7,749	8,874	7,252	9,453	7,959
October	15,138	9,997	5,549	10,759	9,409	7,482	7,260	13,301	14,906	10,422
November	13,580	10,715	15,139	11,994	9,957	11,496	18,913	16,866	14,085	13,638
December	15,107	9,938	18,461	12,571	10,750	9,473	13,843	16,095	16,781	13,669
Annual Total	149,671	131,676	147,903	155,302	125,114	130,895	151,185	153,691	176,506	146,883

Table 6 Historical Gross Monthly Generation (MWh) at the West Canada Creek Project 2011 - 2019

Month	2011	2012	2013	2014	2015	2016	2017	2018	2019	AVERAGE
January	18,312	23,769	18,588	26,732	27,394	20,656	4,731	22,083	26,678	20,994
February	10,559	23,382	18,804	18,432	11,713	19,551	18,571	24,190	28,784	19,332
March	20,239	24,605	13,947	8,245	4,293	32,522	32,816	29,648	23,007	21,036
April	29,715	18,315	24,071	26,479	25,509	31,239	32,605	28,400	29,835	27,352
May	28,753	22,867	20,715	32,557	21,245	16,157	24,869	25,652	31,761	24,953
June	15,153	14,261	25,621	20,064	20,293	6,480	19,326	9,634	25,321	17,350
July	11,586	9,532	24,643	18,350	20,641	9,210	19,170	6,258	11,328	14,524
August	9,512	8,170	8,558	15,188	5,863	10,857	15,126	7,121	9,768	10,018
September	18,622	6,371	9,226	16,355	4,280	10,980	12,925	10,306	13,849	11,435
October	23,224	14,372	7,671	15,709	9,409	10,470	10,053	19,903	22,856	14,852
November	20,657	15,953	23,644	17,508	15,639	17,170	29,567	26,079	23,764	21,109
December	23,161	14,571	29,004	18,644	17,451	15,889	20,740	24,543	25,799	21,089
Annual Total	229,493	196,170	224,490	234,262	183,727	201,182	240,499	233,816	272,749	224,044

1.2 Area-Capacity Curves

Figure 1 and Figure 2 provide the area capacity curves for the Prospect and Trenton Developments, respectively.

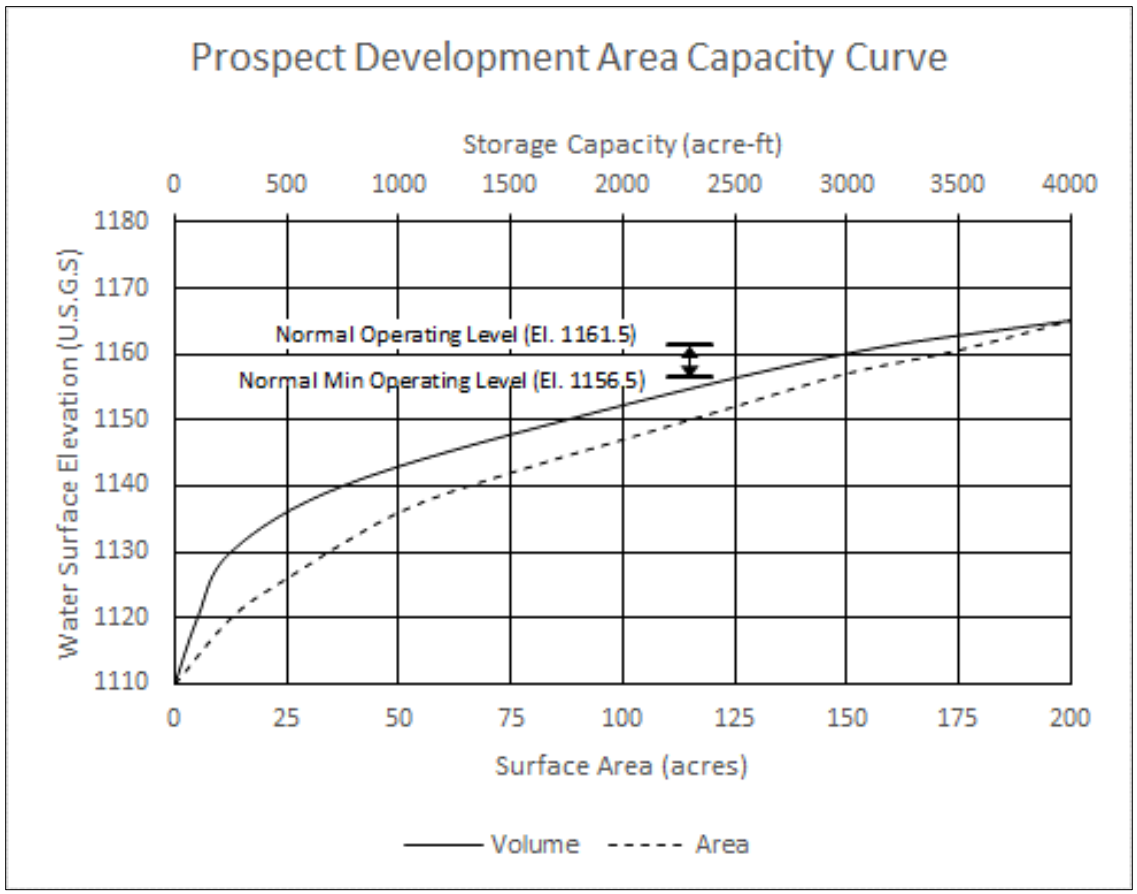


Figure 1 Prospect Development Area Capacity Curve

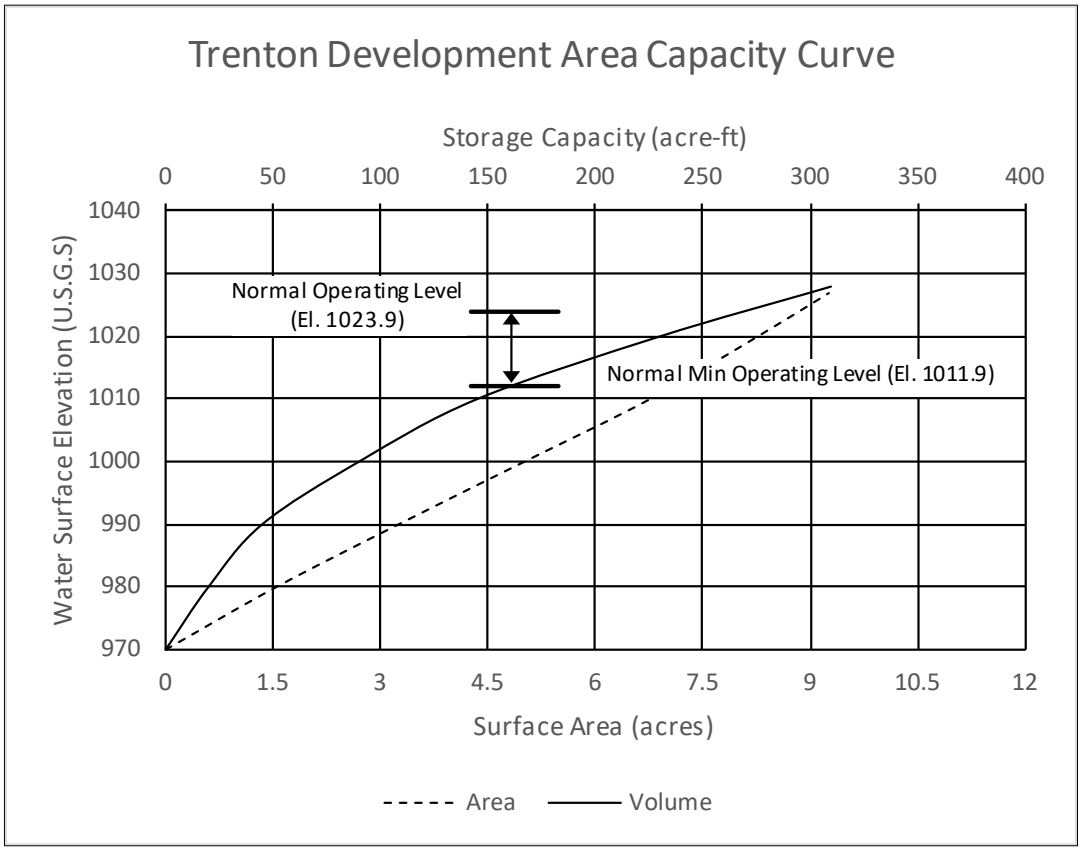


Figure 2 Trenton Development Area Capacity Curve

1.3 Estimated Hydraulic Capacity

Table 7 provides the maximum and minimum hydraulic capacities for the West Canada Creek Project's turbines. Prospect Development has a total maximum hydraulic capacity of 1,855 cfs and Trenton Development has a total maximum hydraulic capacity of 1,425 cfs.

Table 7 West Canada Creek Project Hydraulic Capacity

Development/Unit	Minimum Hydraulic Capacity (cfs)	Maximum Hydraulic Capacity (Cfs)
Prospect Powerhouse		
Unit 1	525	1,855
Trenton Powerhouse		
Unit 5	145	475
Unit 6	145	475
Unit 7	145	475
Total	145 (one unit operating)	1,425

1.4 Tailwater Rating Curves

The normal tailwater elevation at the Prospect Development is 1,024 feet msl and at the Trenton Development is 755.5 feet msl. Figure 3 and Figure 4 illustrate the tailwater rating curves for the Prospect and Trenton Developments, respectively.

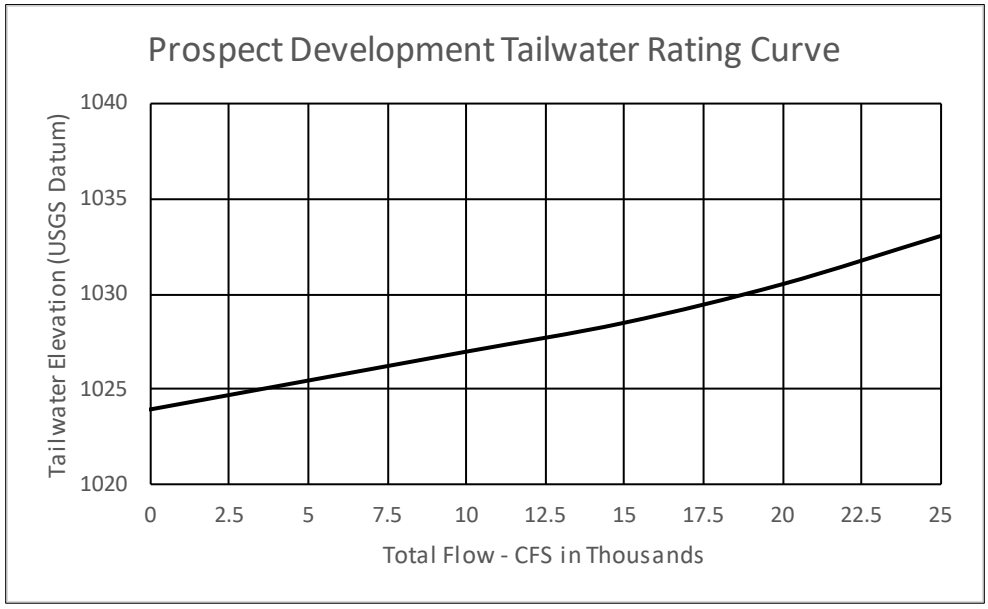


Figure 3 Prospect Development Tailwater Rating Curves

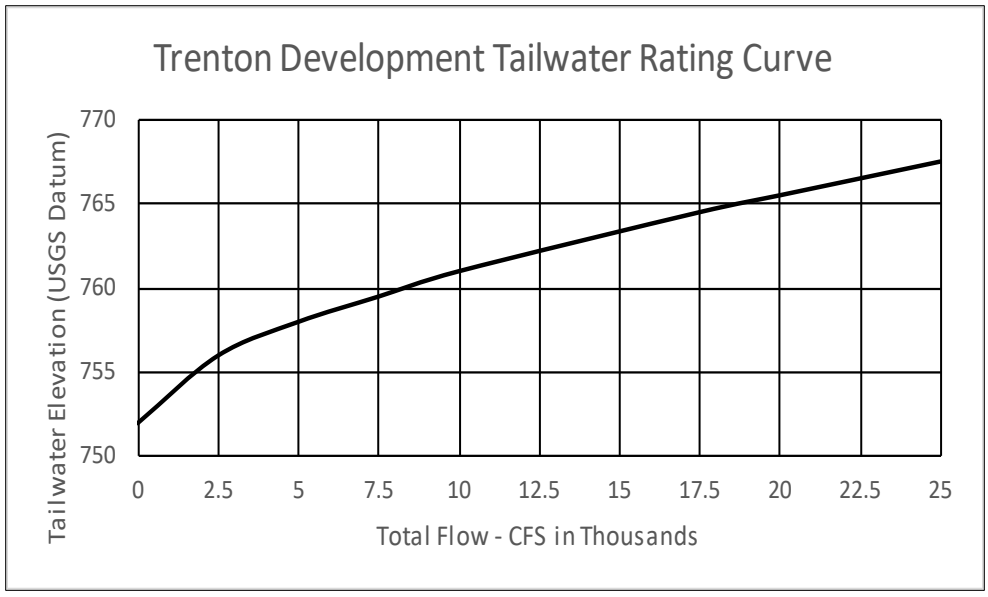


Figure 4 Trenton Development Tailwater Rating Curves

1.5 Power Plant Capability vs. Head

Figure 5 and Figure 6 provide curves of the estimated plant capability as a function of head for the Prospect and Trenton power plants, respectively.

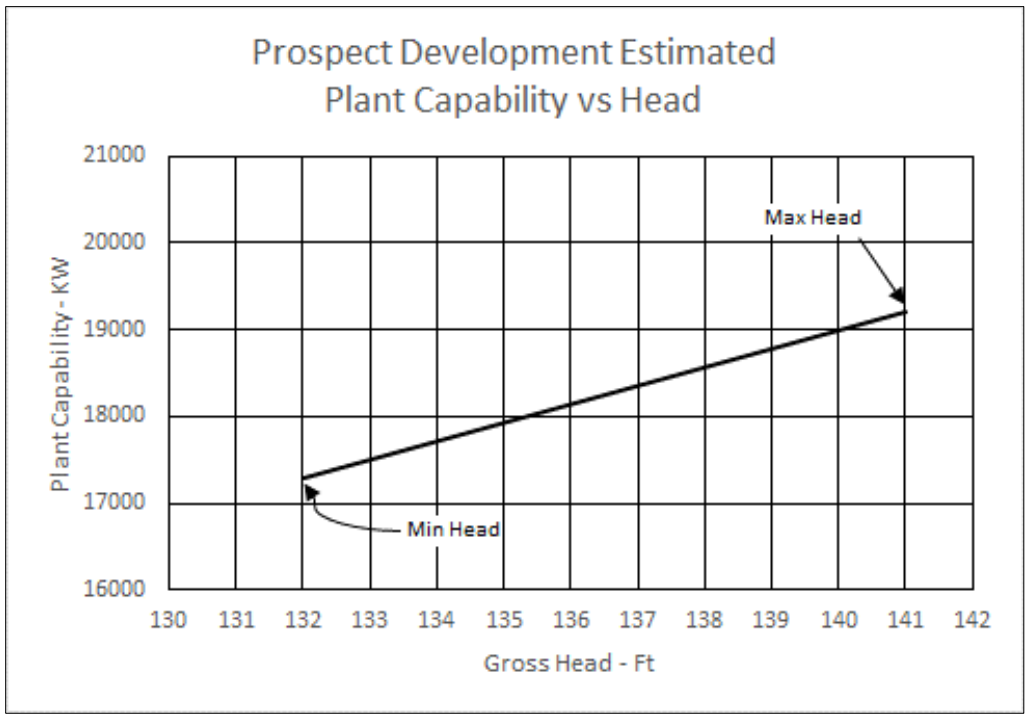


Figure 5 Prospect Development Estimated Plant Capability vs Head

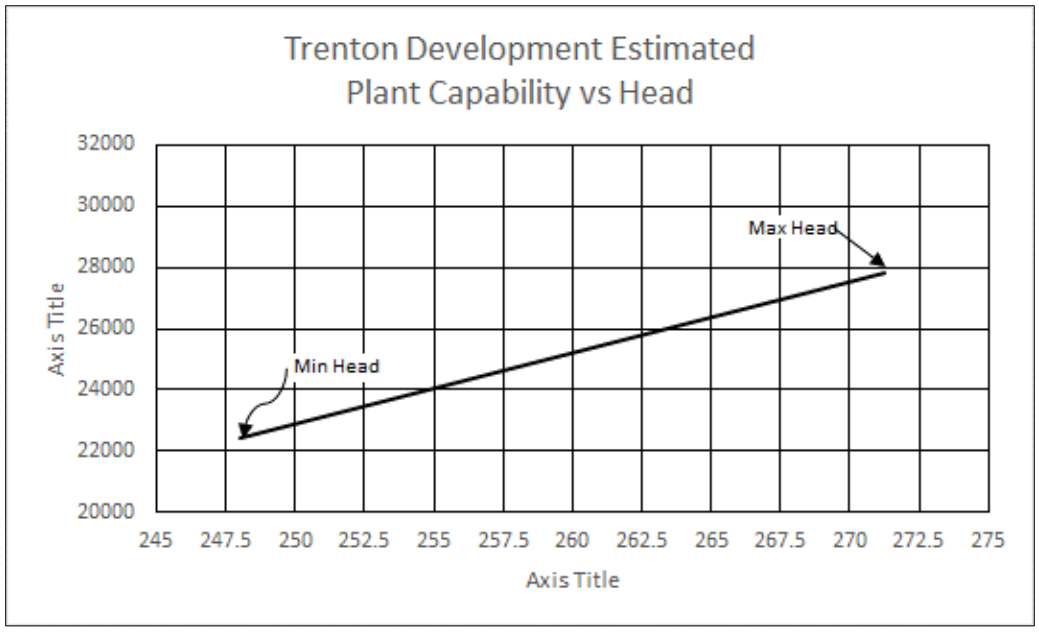


Figure 6 Trenton Development Estimated Plant Capability vs Head

3.0 UTILIZATION OF PROJECT POWER

As a wholesale seller of generated electricity, Erie sells the electricity generated from the West Canada Creek Project as a market participant in the NYISO. The Project is interconnected to the National Grid transmission system.

4.0 PLANS FOR FUTURE DEVELOPMENT

Erie has no future development plans proposed as part of this relicensing proceeding.

5.0 REFERENCES

New York Independent System Operator (NYISO). 2020. Load & Capacity Data Report. Available: https://www.nyiso.com/documents/20142/2226333/2020-Gold-Book-Final-Public.pdf/9ff426ab-e325-28bc-97cf-106d792593a1?t=1588251915775

New York State Canal Corporation (NYSCC). 2020a. Boating on the Canals. Available: http://www.canals.ny.gov/boating/index.html.

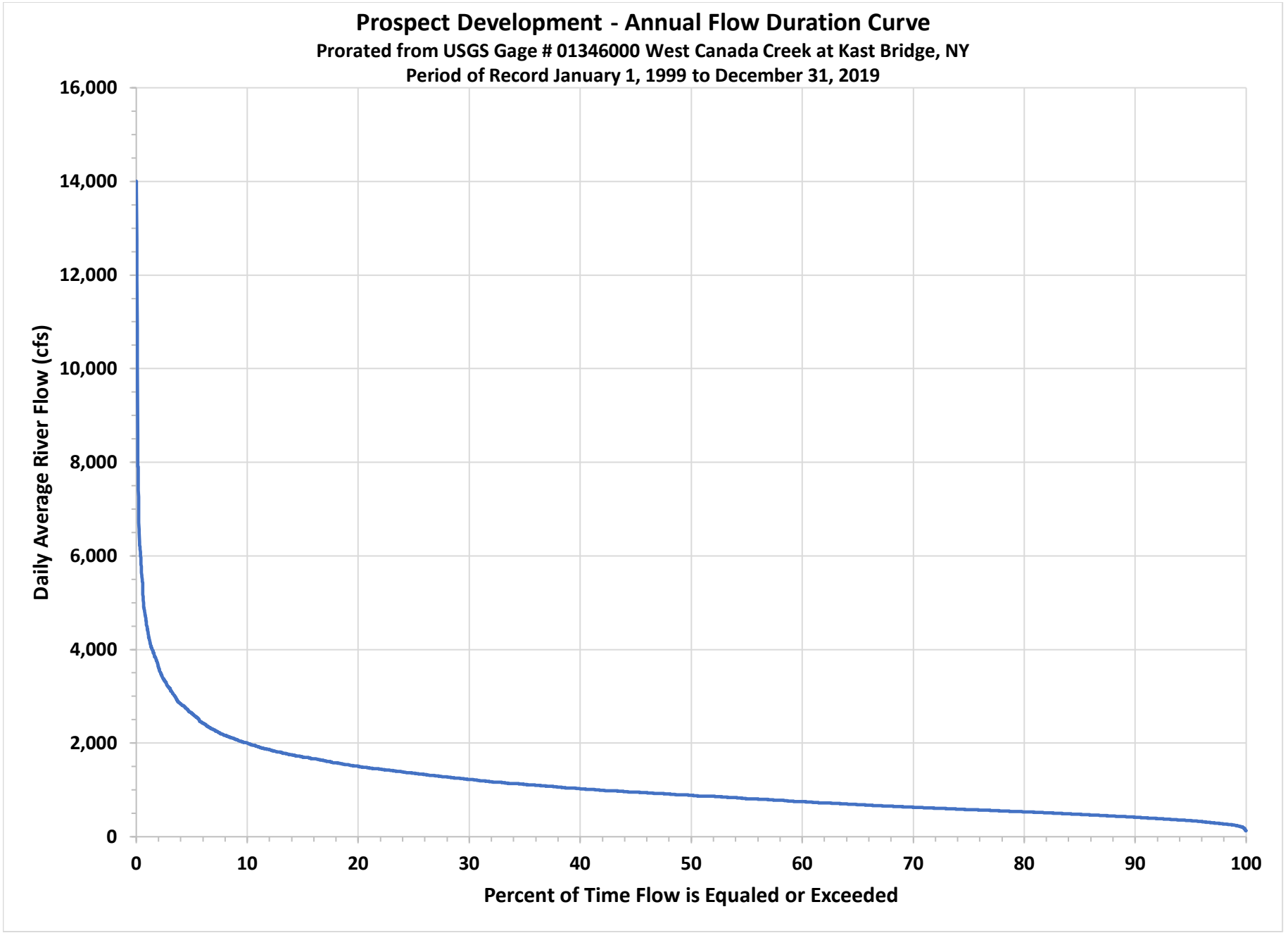
NYSCC. 2020b. Hinckley Reservoir Water Levels Data. Available: http://www.canals.ny.gov/wwwapps/waterlevels/hinckley/hinckleywaterlevels.aspx

New York Power Authority (NYPA). 2020. Final License Application, Gregory B. Jarvis Project (P-3211) Relicensing, Exhibit B - Project Operation and Resource Utilization. July 2020.

Niagara Mohawk Power Corporation (NMPC).1980. Application for License for Major Project, West Canada Creek Hydropower Project (FERC No. 2701).

APPENDIX B-1

FLOW DURATION CURVES


Prospect Development - Annual Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
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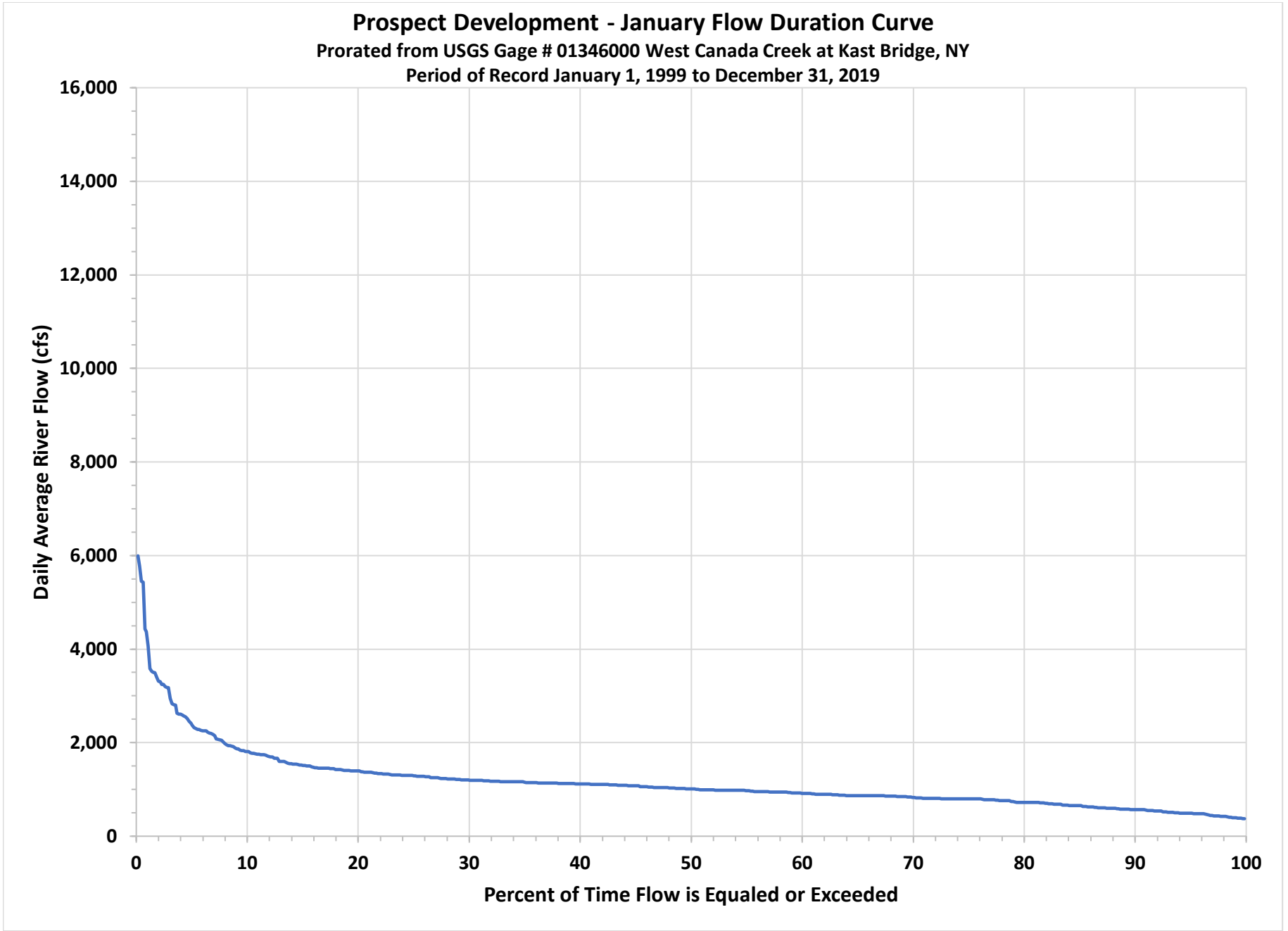
Percent of Time Flow is Equaled or Exceeded


Prospect Development - January Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
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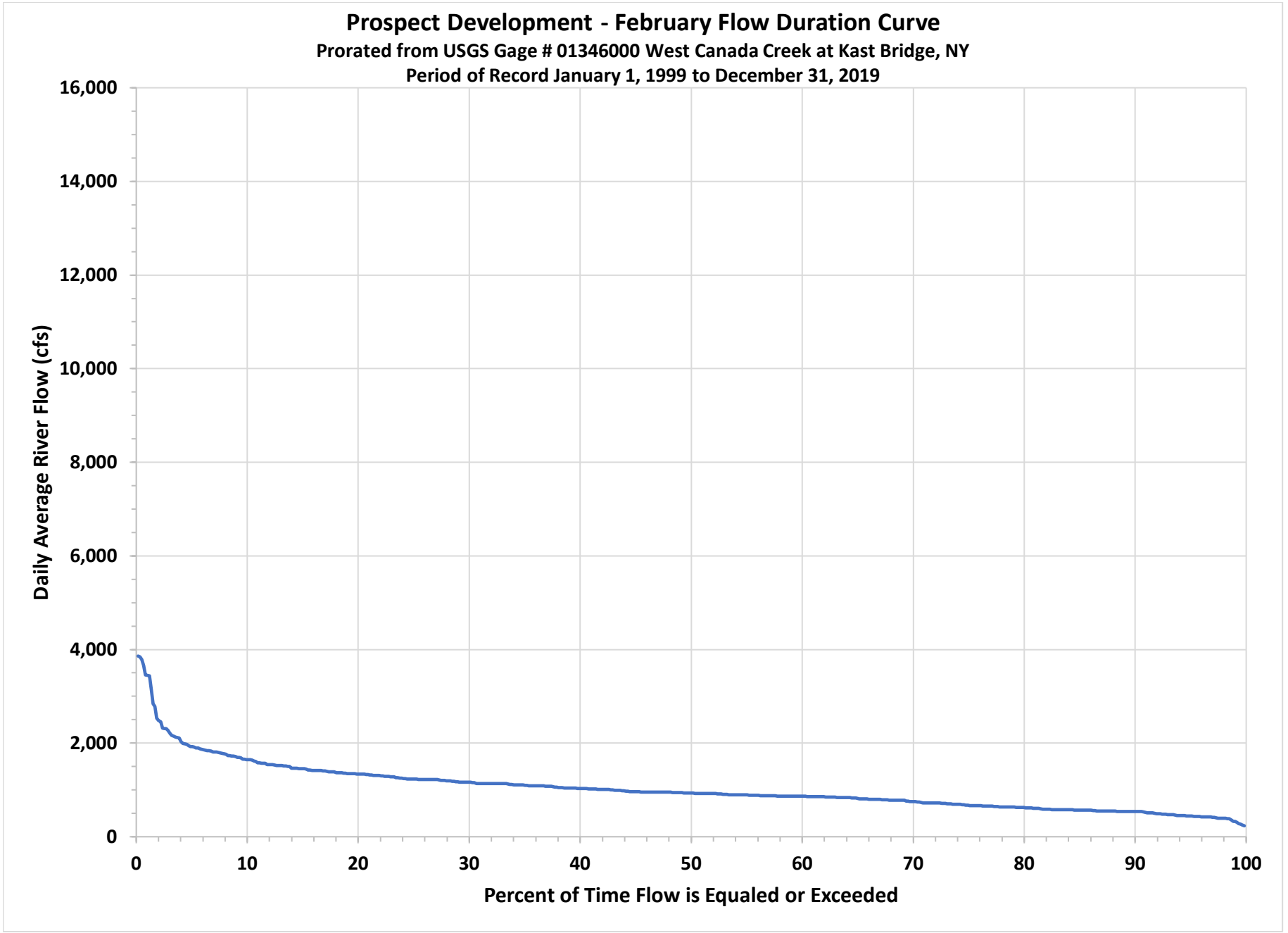
Percent of Time Flow is Equaled or Exceeded


Prospect Development - February Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
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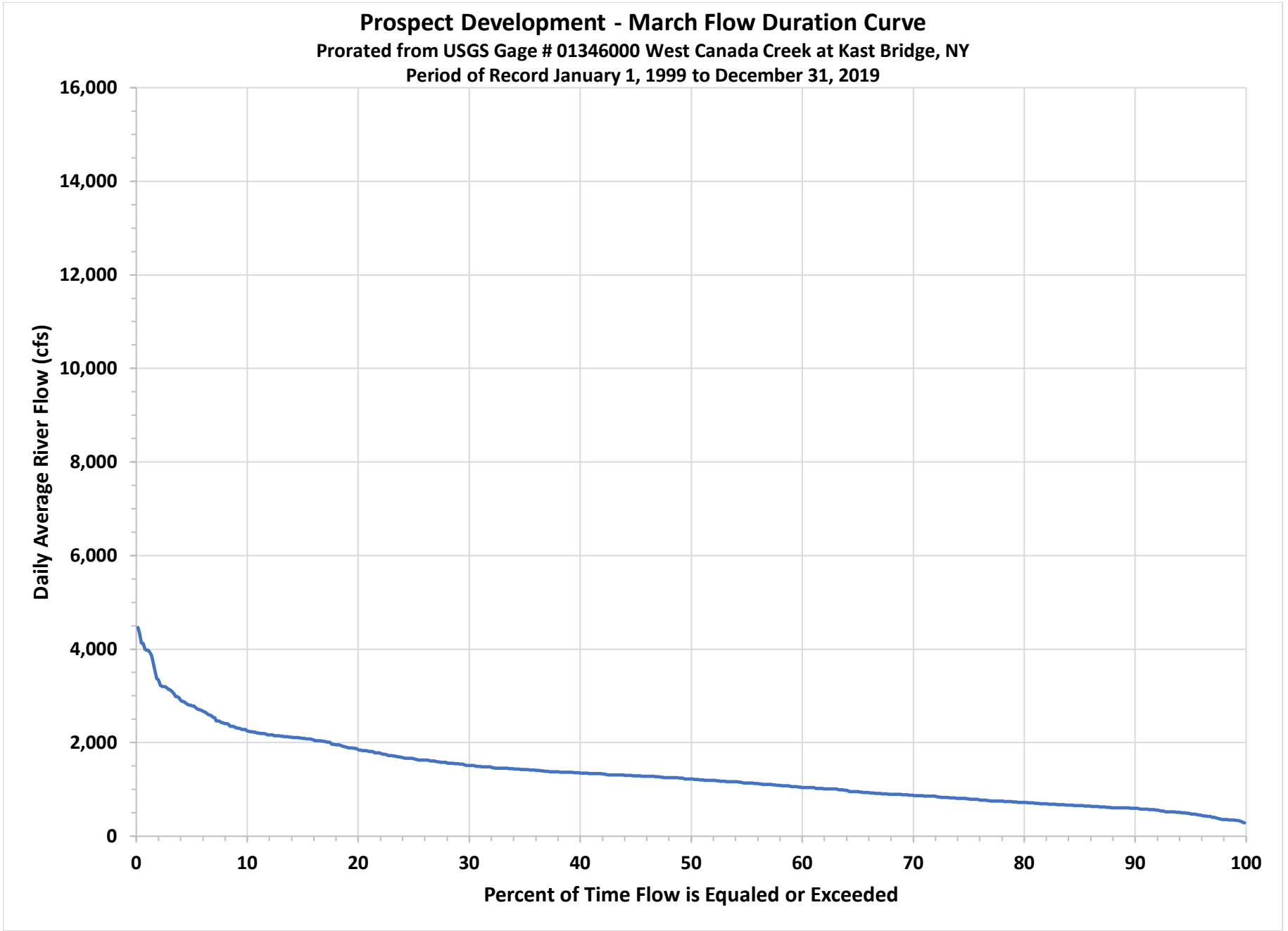
Percent of Time Flow is Equaled or Exceeded


Prospect Development - March Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
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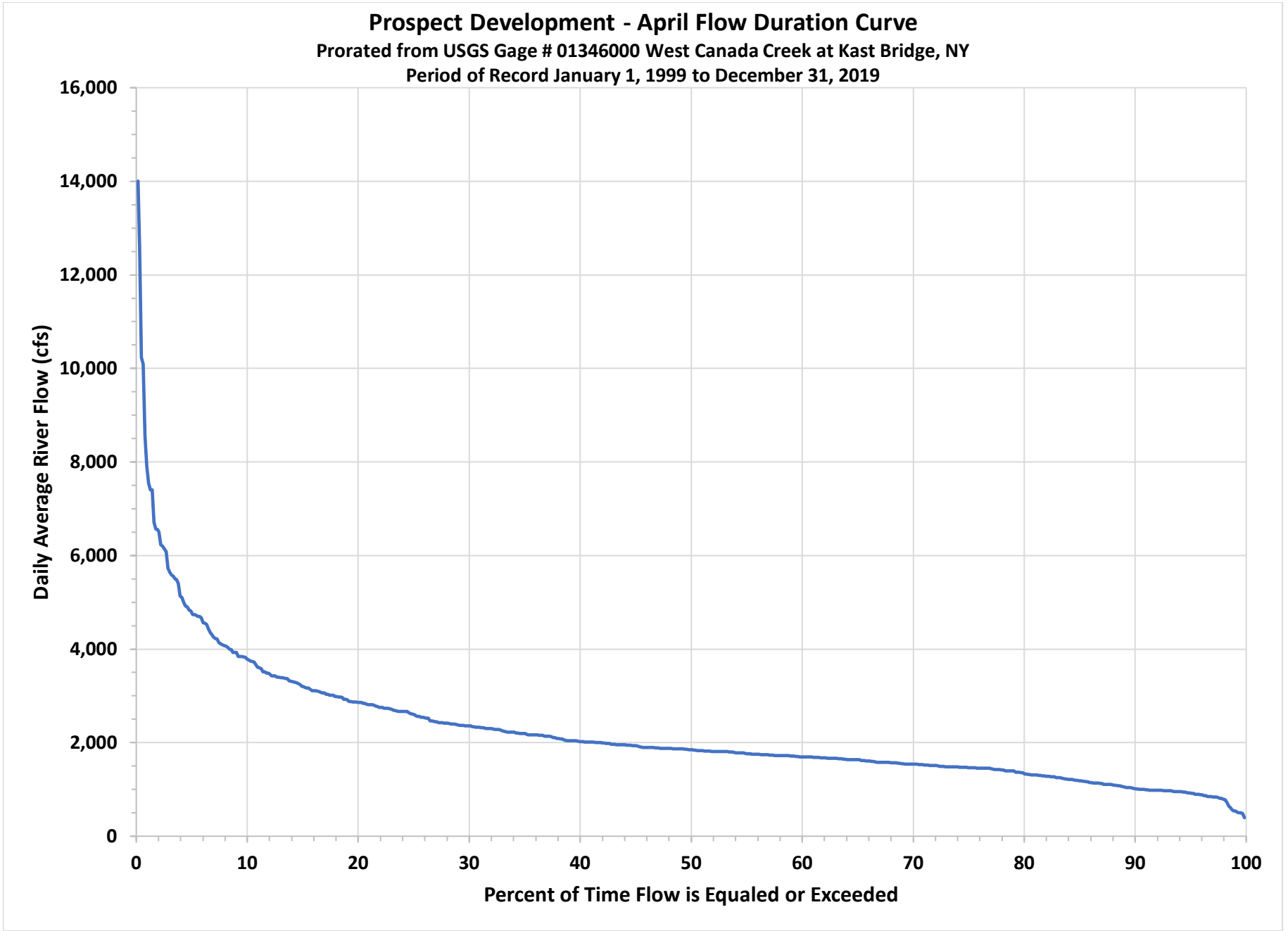
Percent of Time Flow is Equaled or Exceeded


Prospect Development - April Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
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8,000
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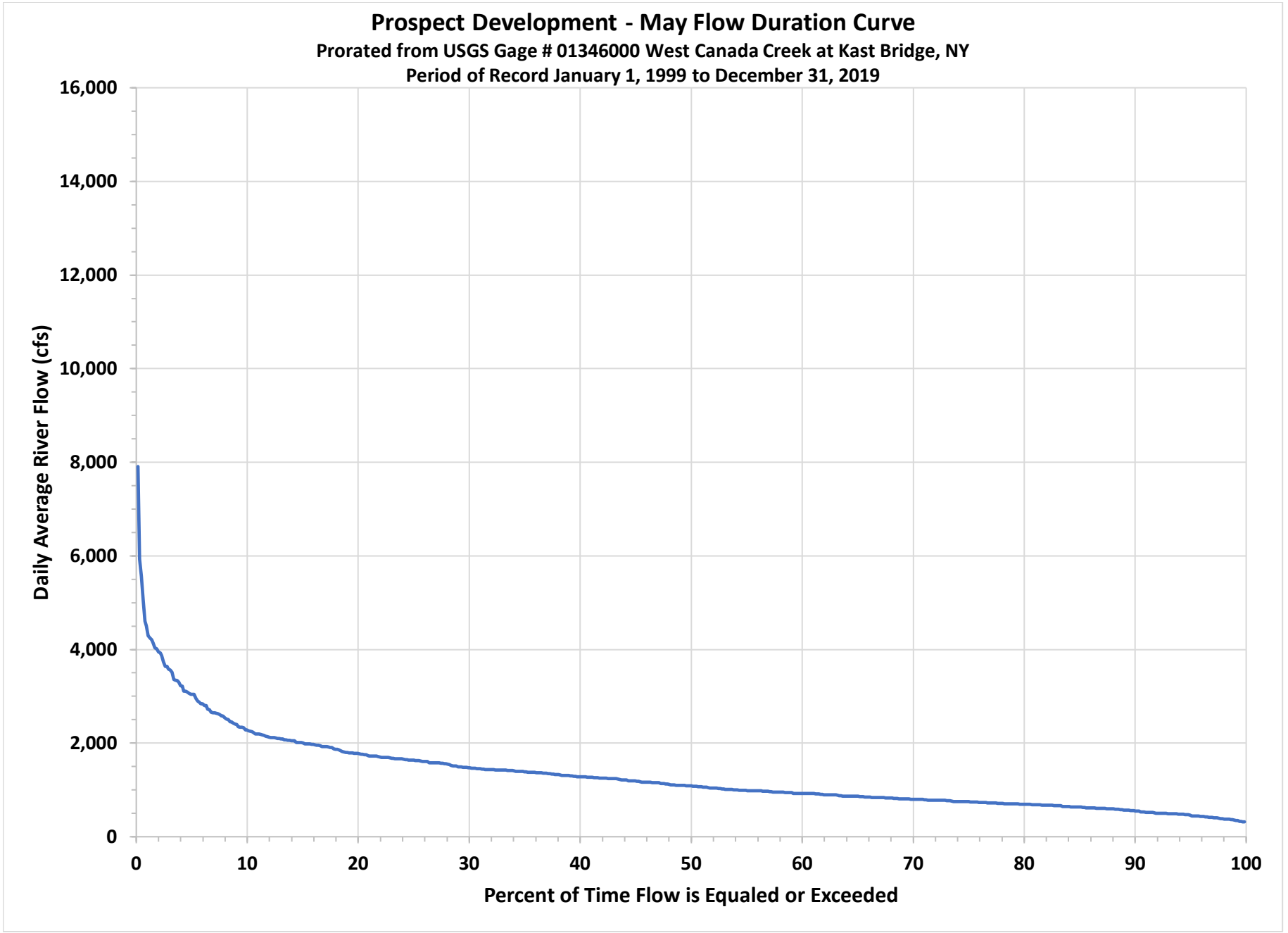
Percent of Time Flow is Equaled or Exceeded


Prospect Development - May Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
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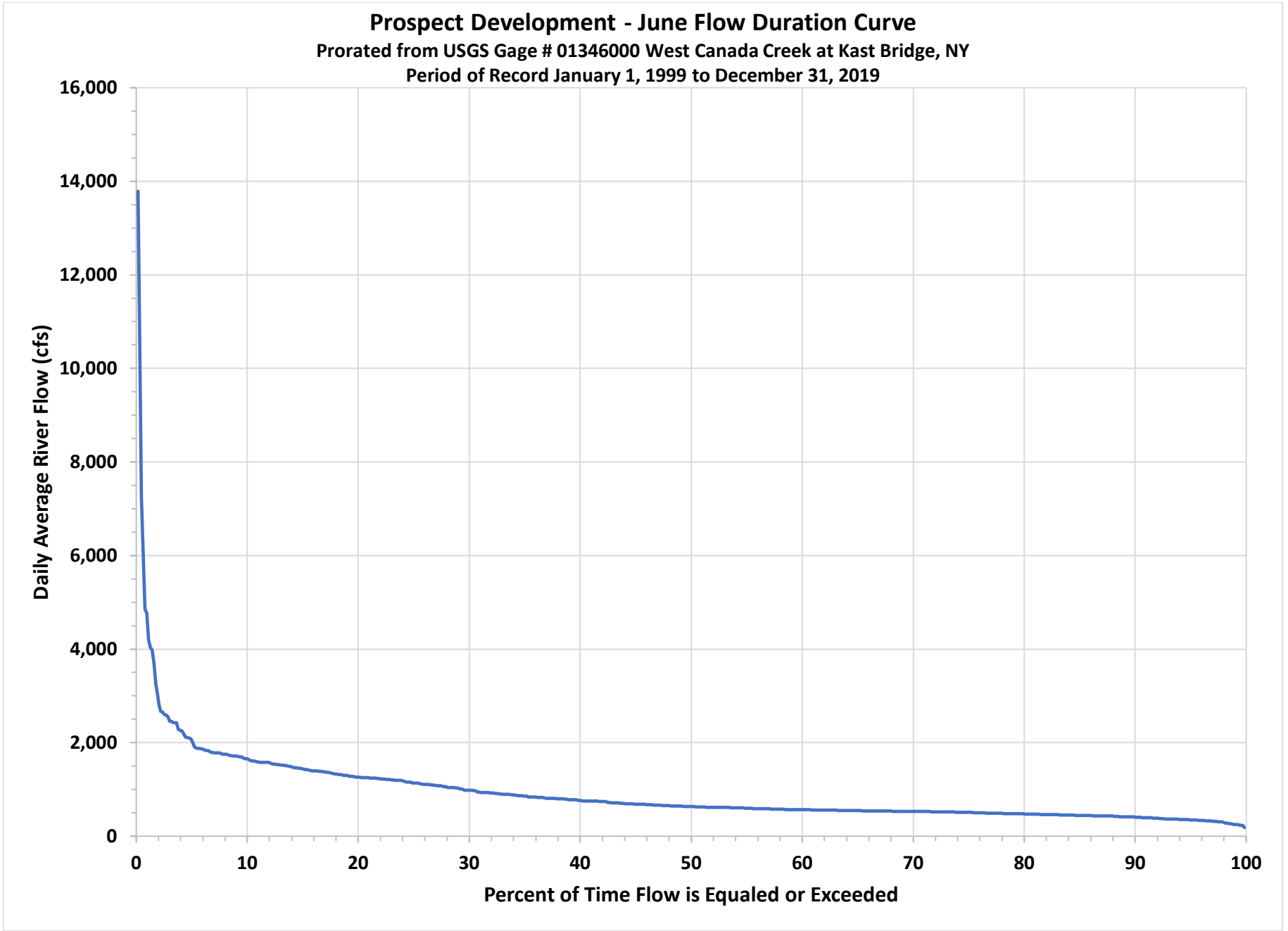
Percent of Time Flow is Equaled or Exceeded


Prospect Development - June Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
12,000
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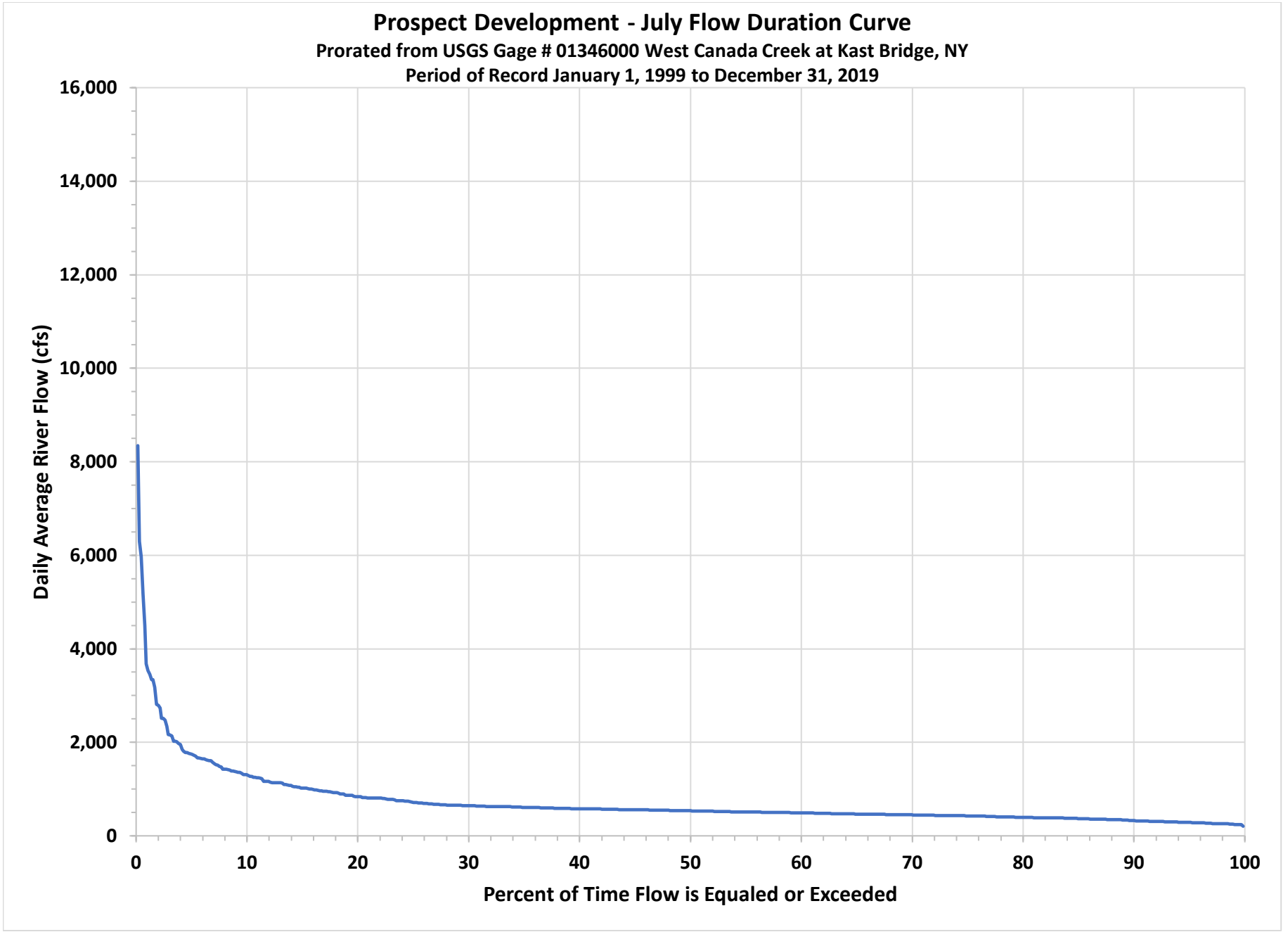
Percent of Time Flow is Equaled or Exceeded


Prospect Development - July Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
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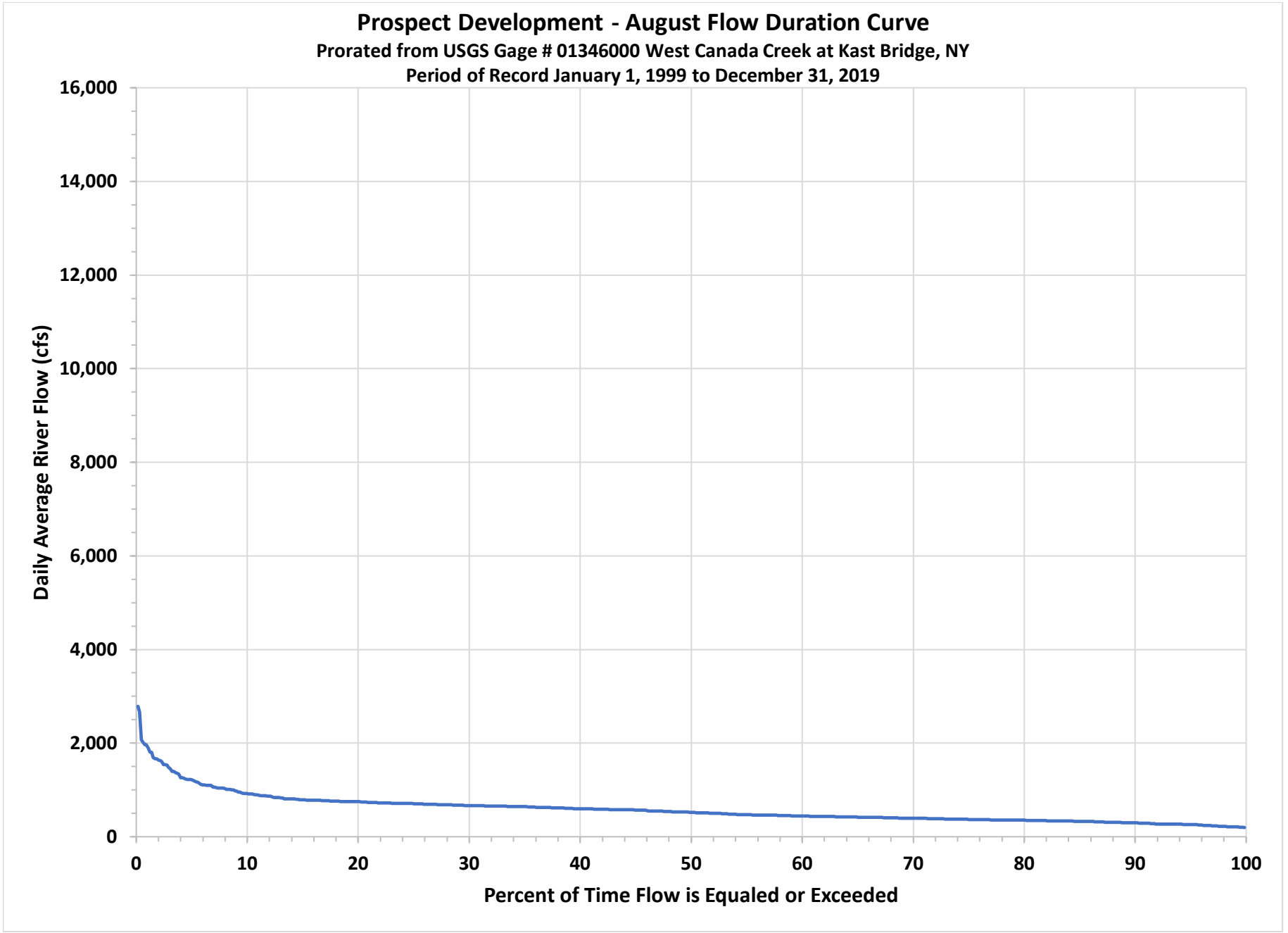
Percent of Time Flow is Equaled or Exceeded


Prospect Development - August Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
12,000
10,000
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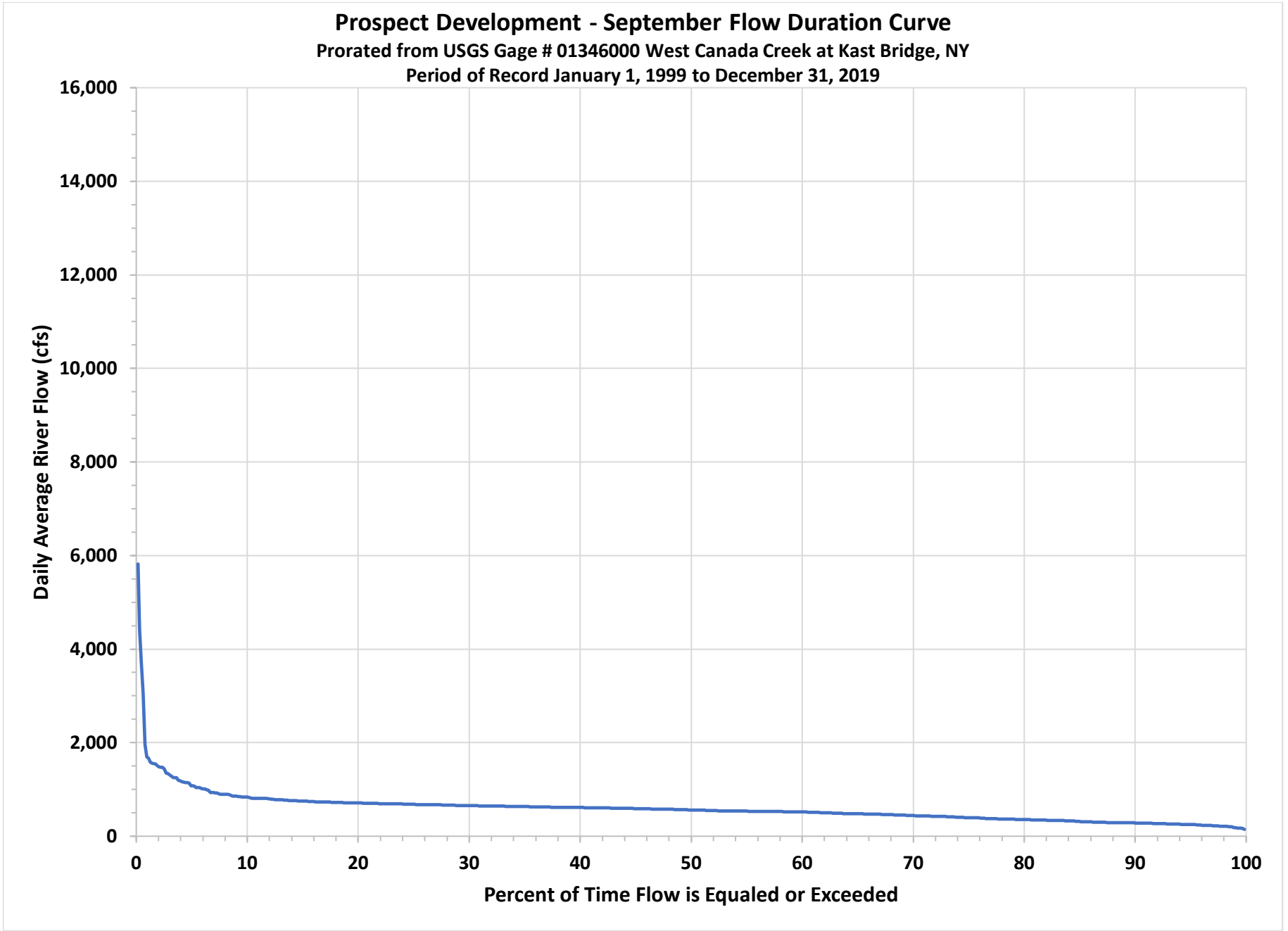
Percent of Time Flow is Equaled or Exceeded


Prospect Development - September Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
12,000
10,000
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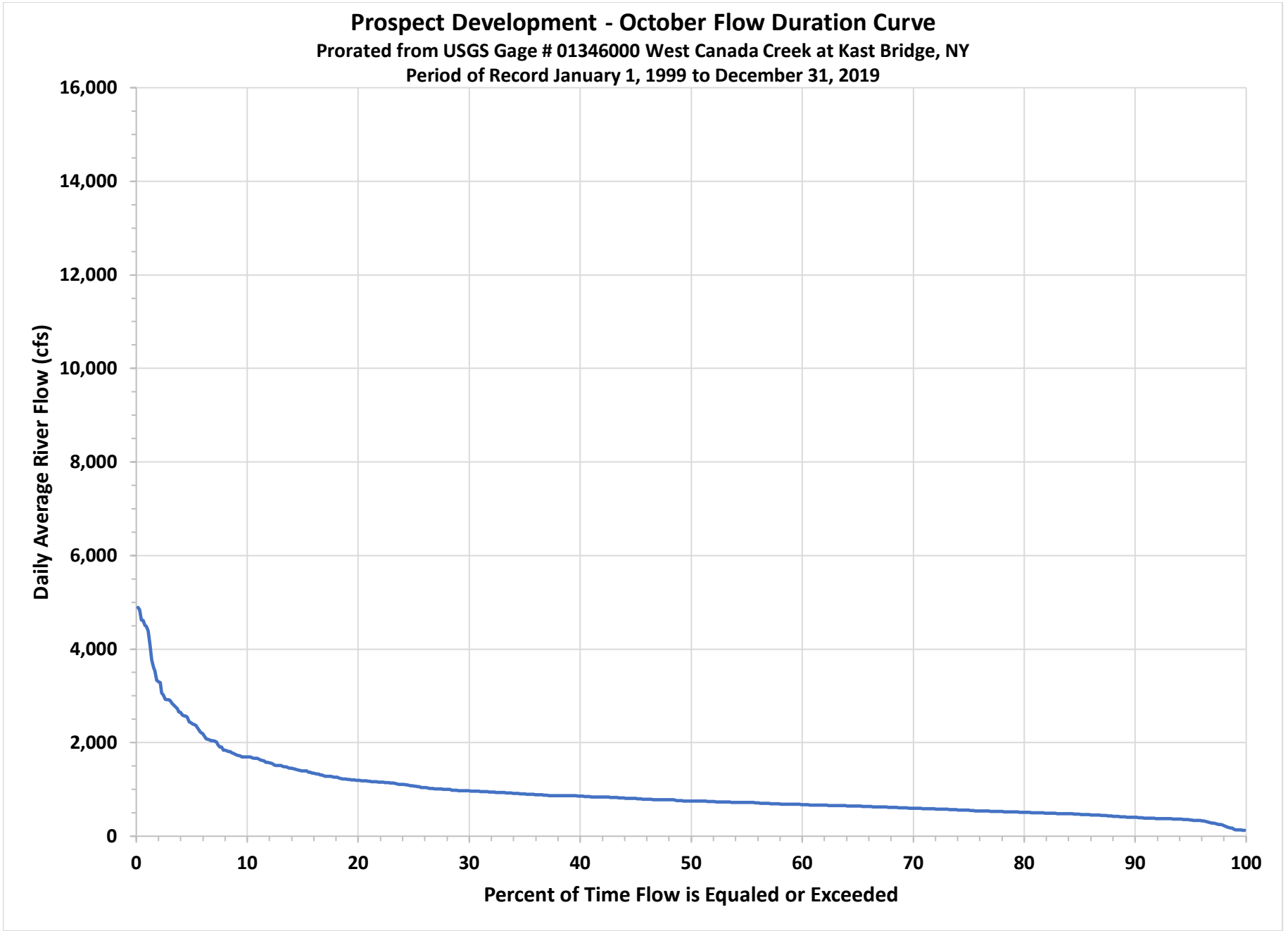
Percent of Time Flow is Equaled or Exceeded


Prospect Development - October Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
12,000
10,000
8,000
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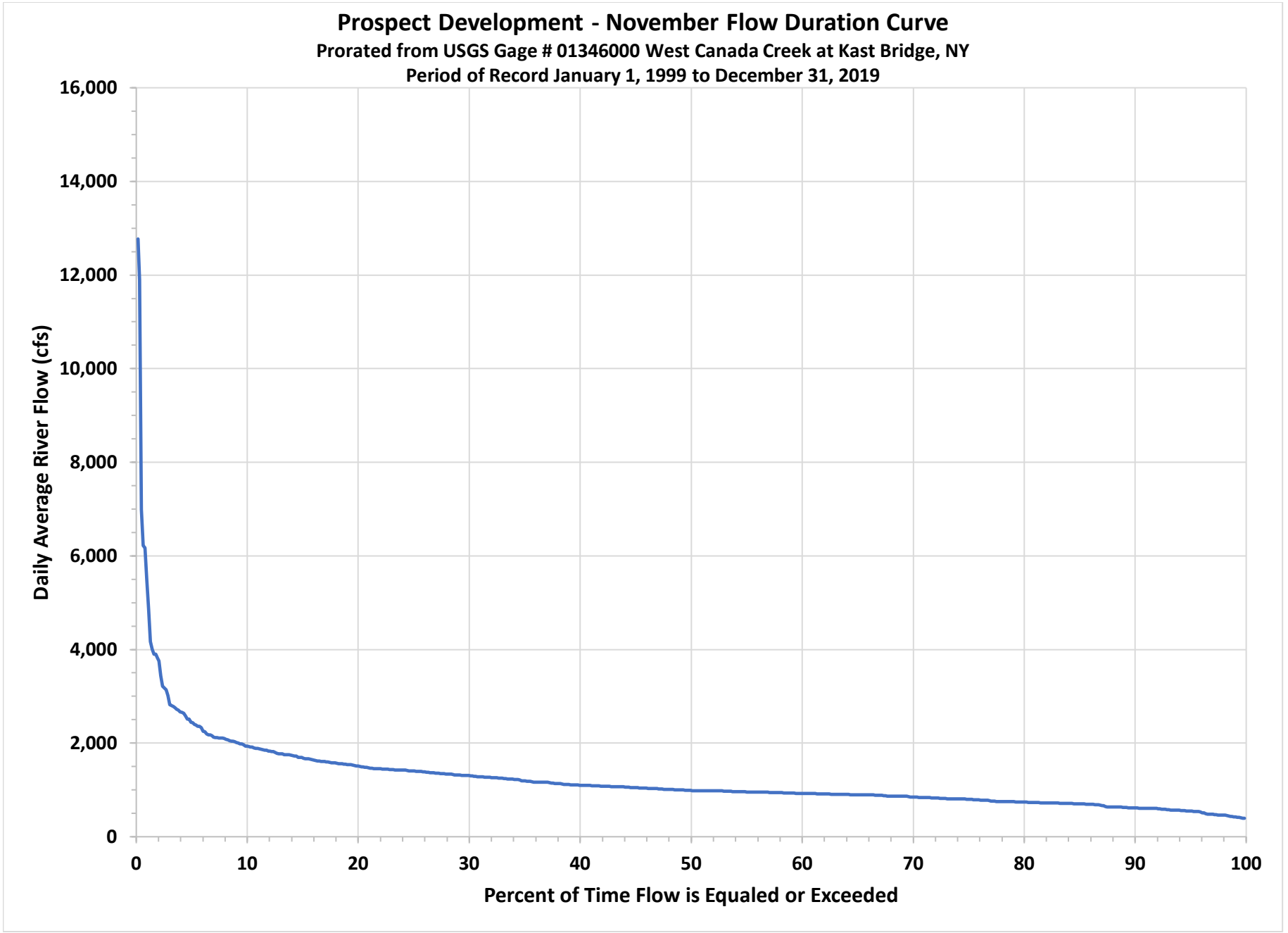
Percent of Time Flow is Equaled or Exceeded


Prospect Development - November Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
12,000
10,000
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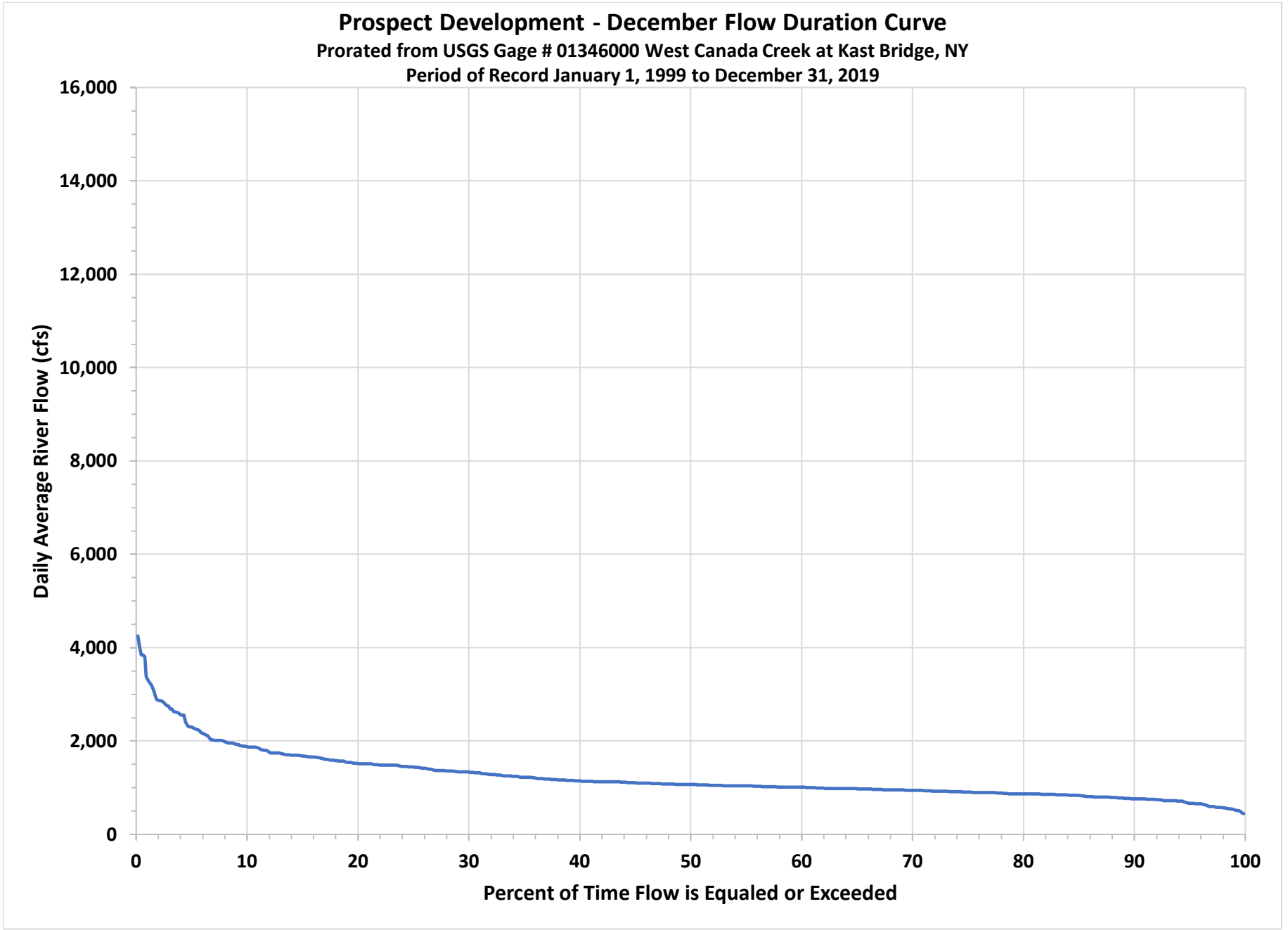
Percent of Time Flow is Equaled or Exceeded


Prospect Development - December Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
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14,000
12,000
10,000
8,000
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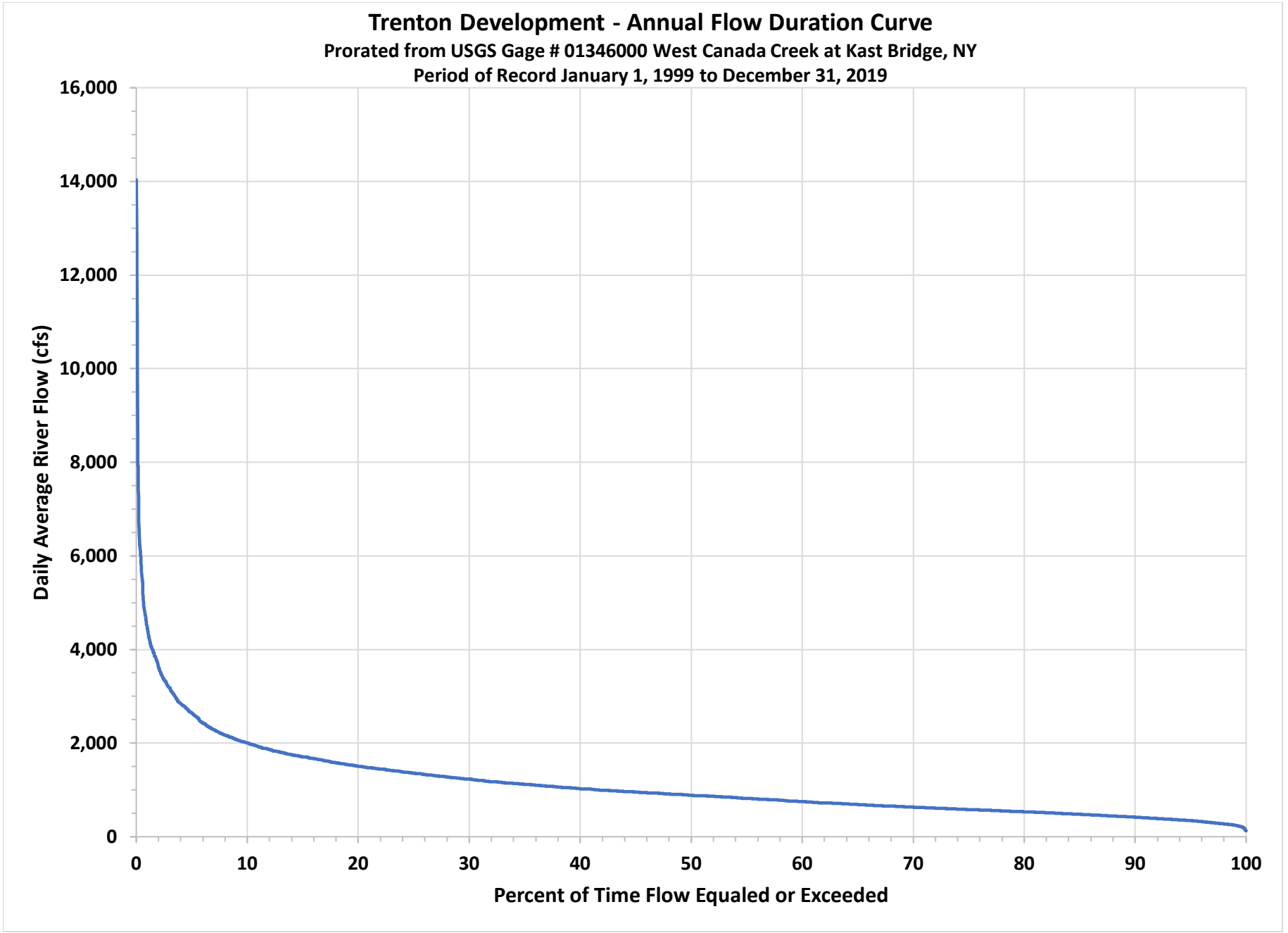
Percent of Time Flow is Equaled or Exceeded


Trenton Development - Annual Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
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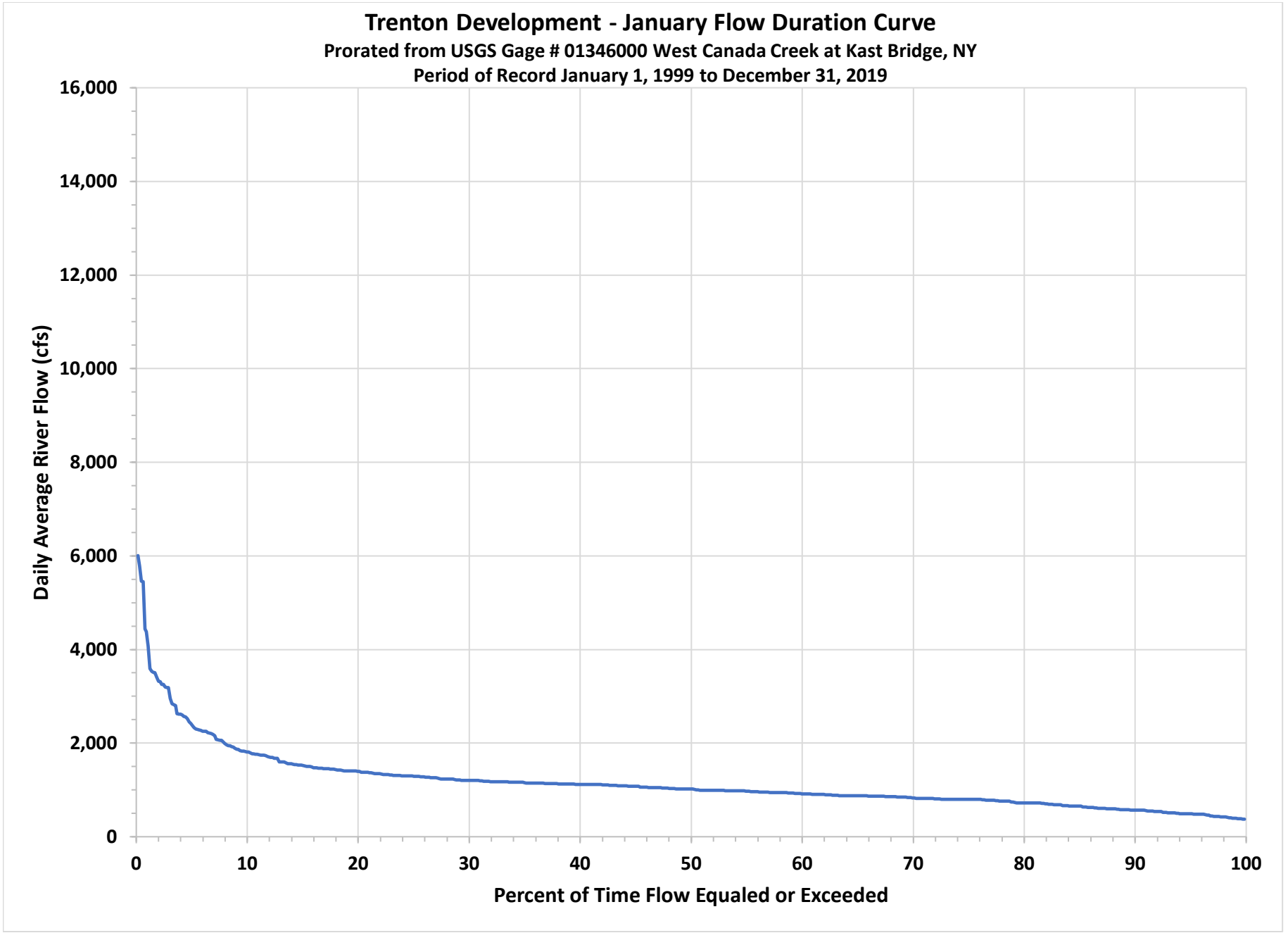
Percent of Time Flow Equaled or Exceeded


Trenton Development - January Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
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10,000
8,000
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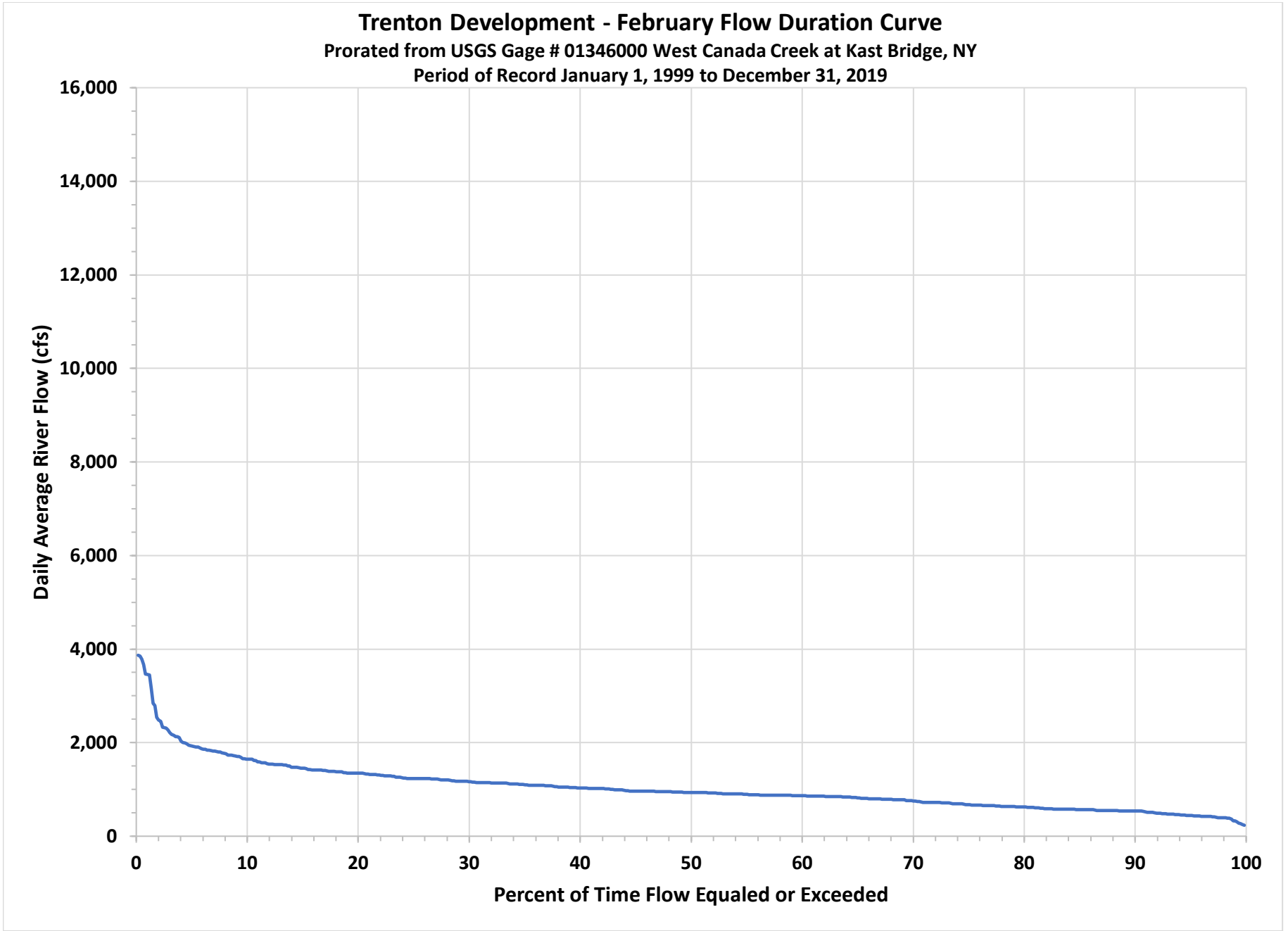
Percent of Time Flow Equaled or Exceeded


Trenton Development - February Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
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10
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50
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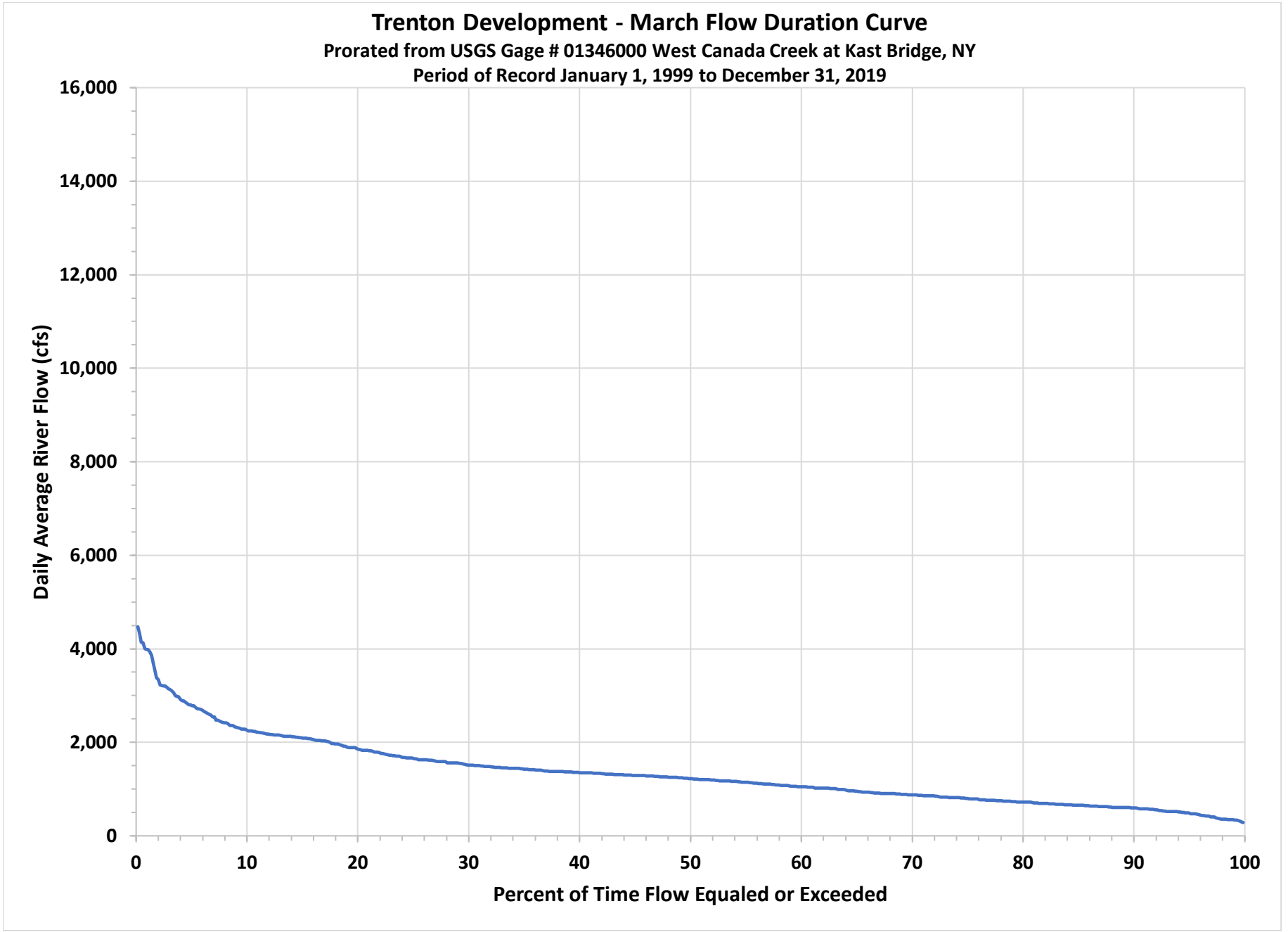
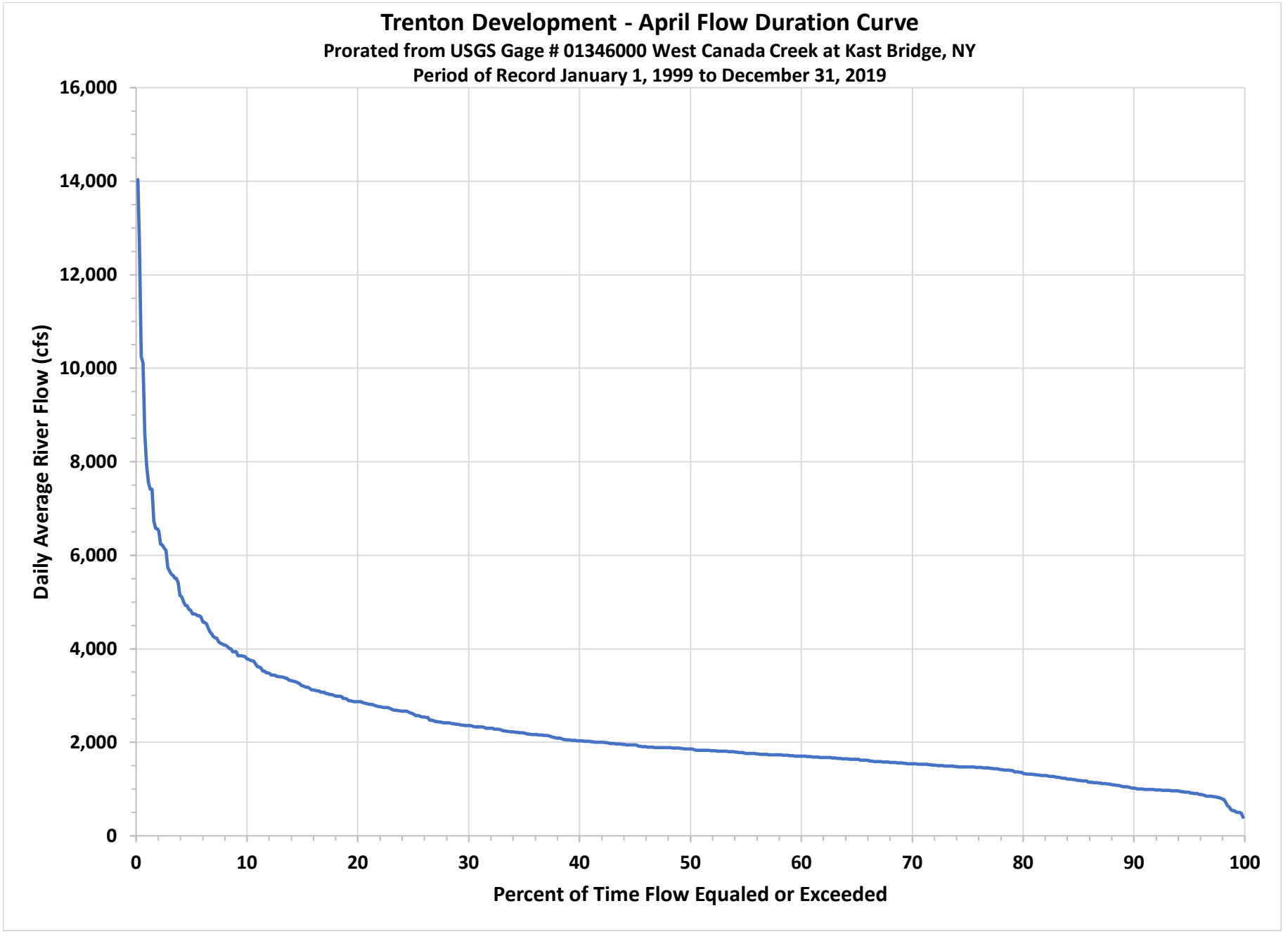
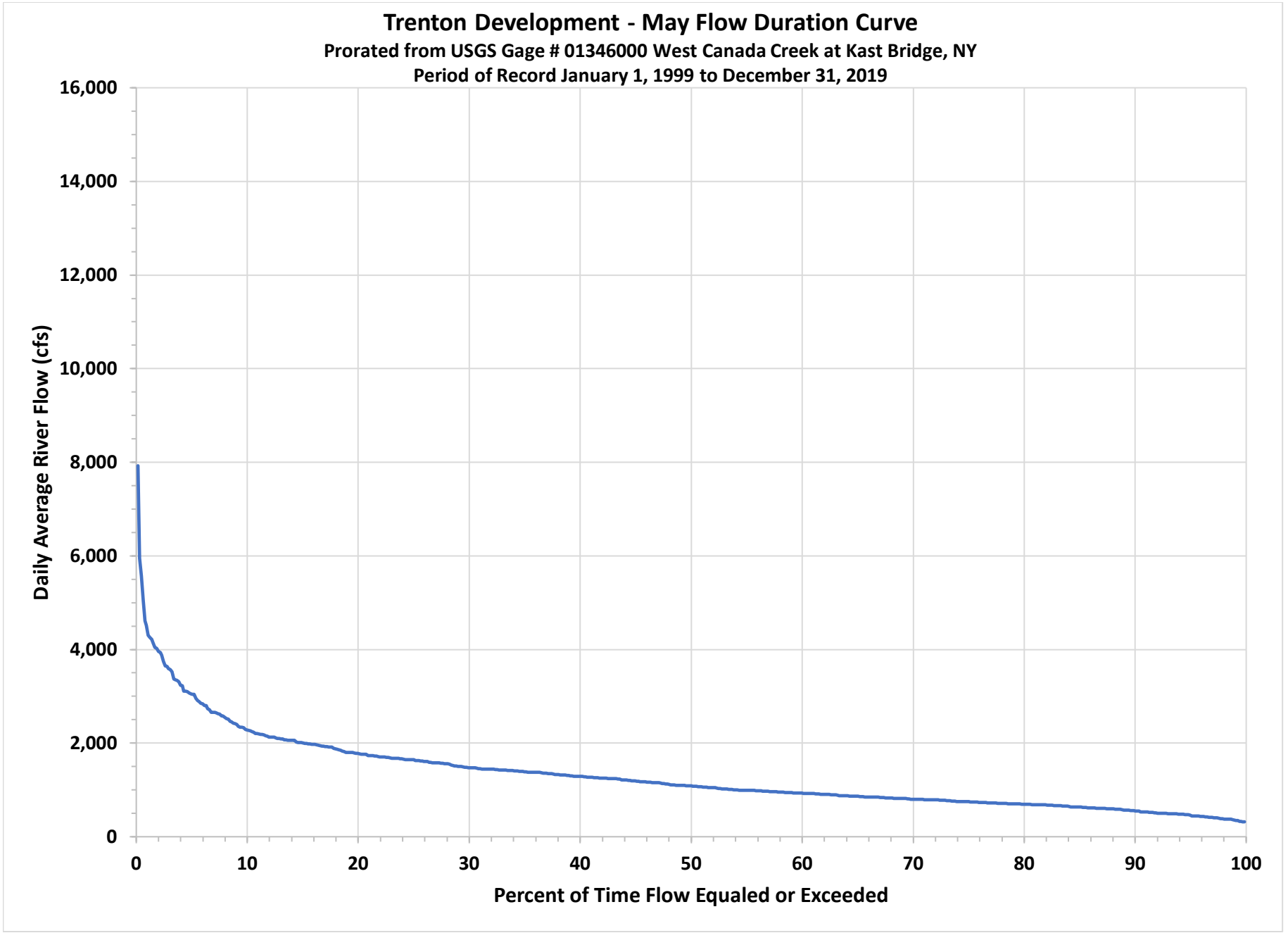
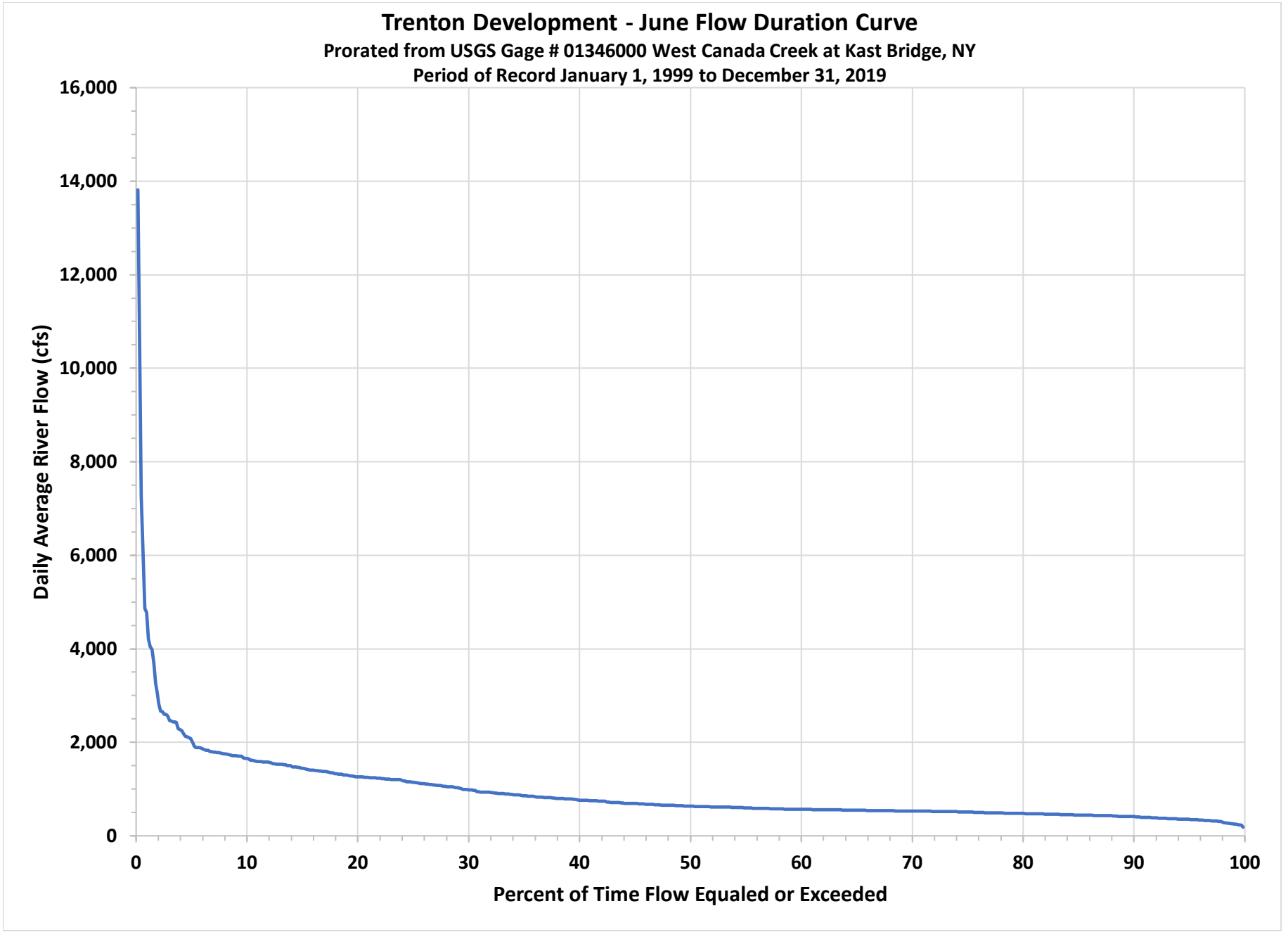
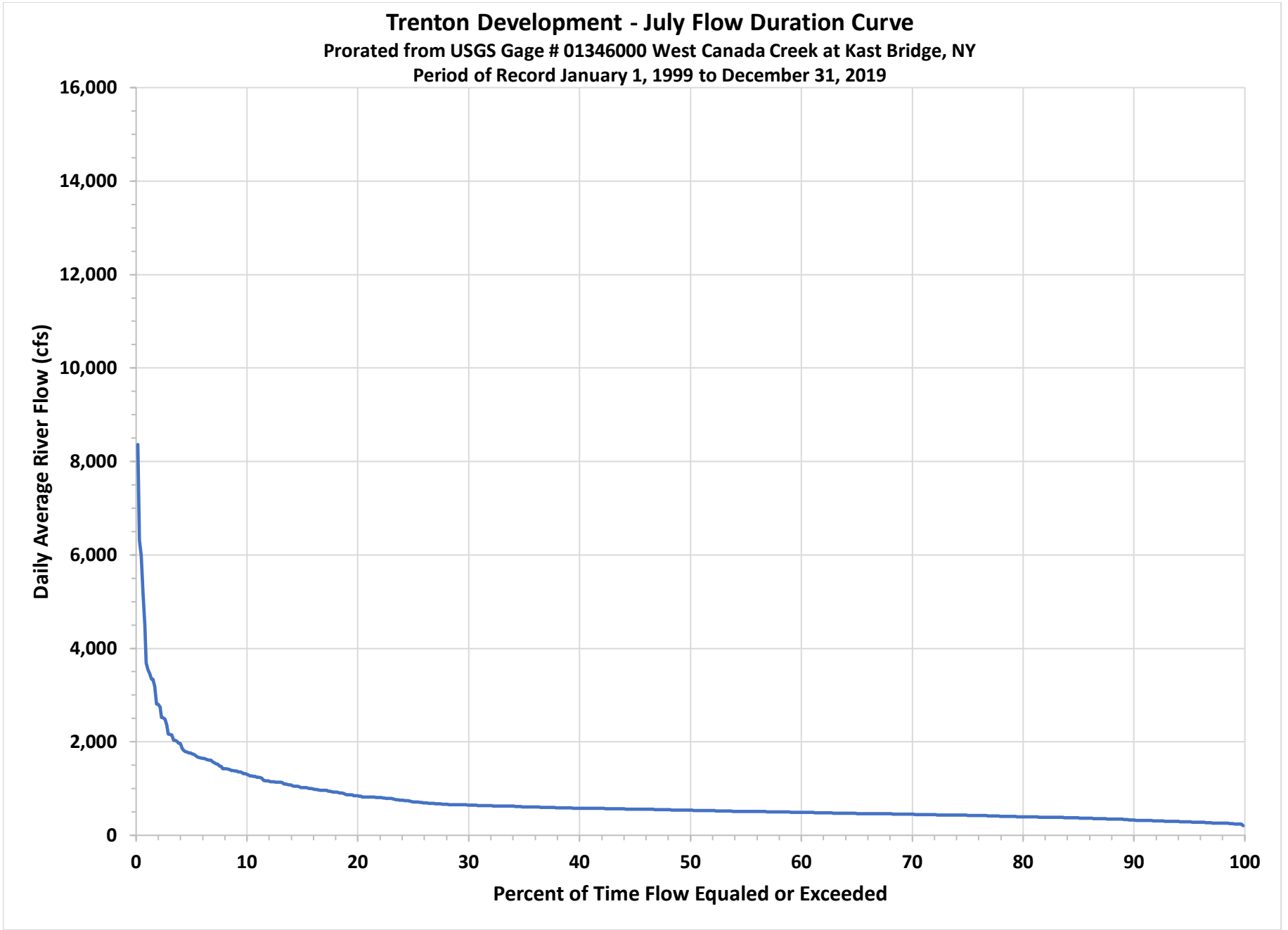
70
80
90
100
Percent of Time Flow Equaled or Exceeded

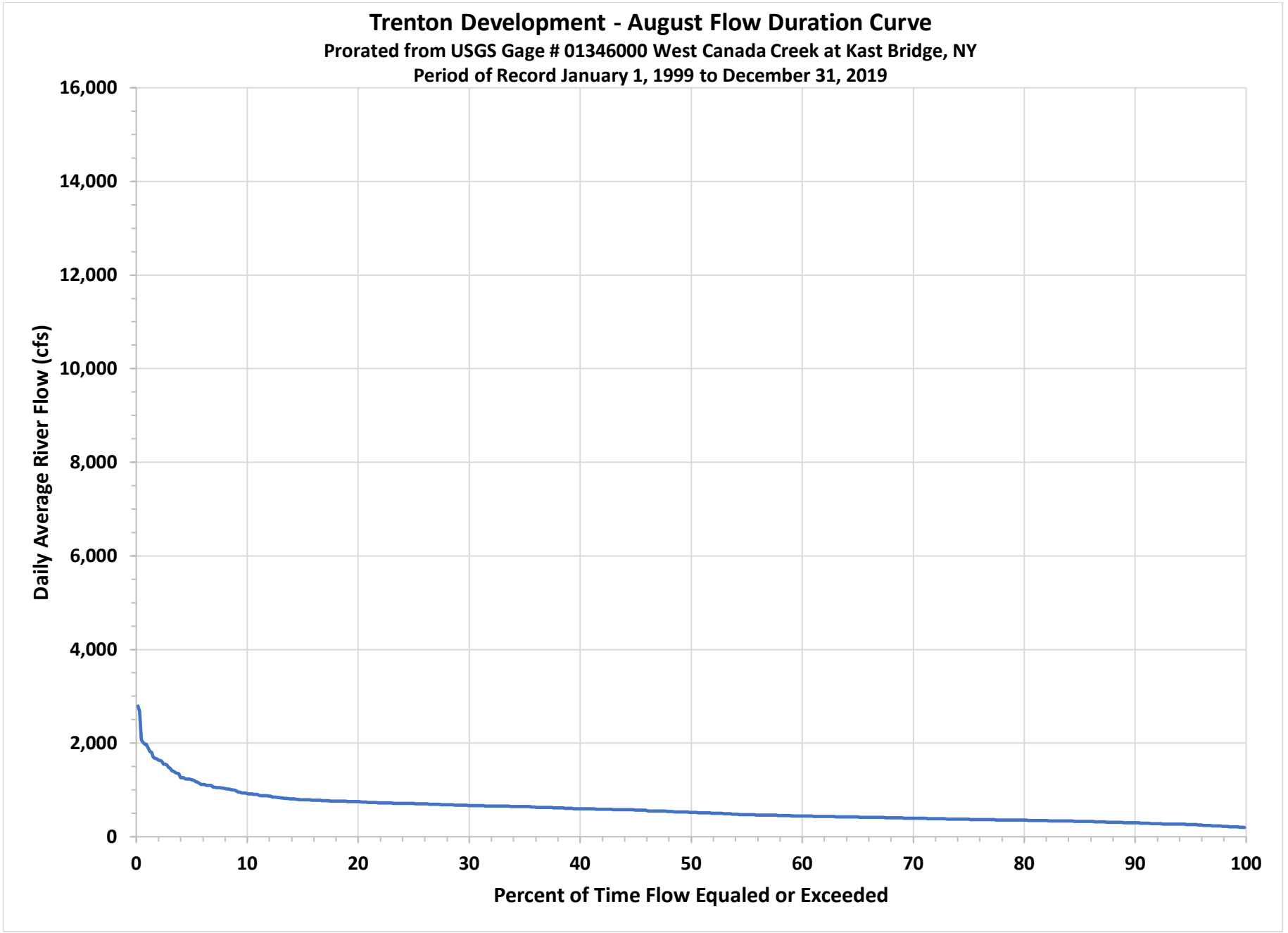

Trenton Development - March Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded

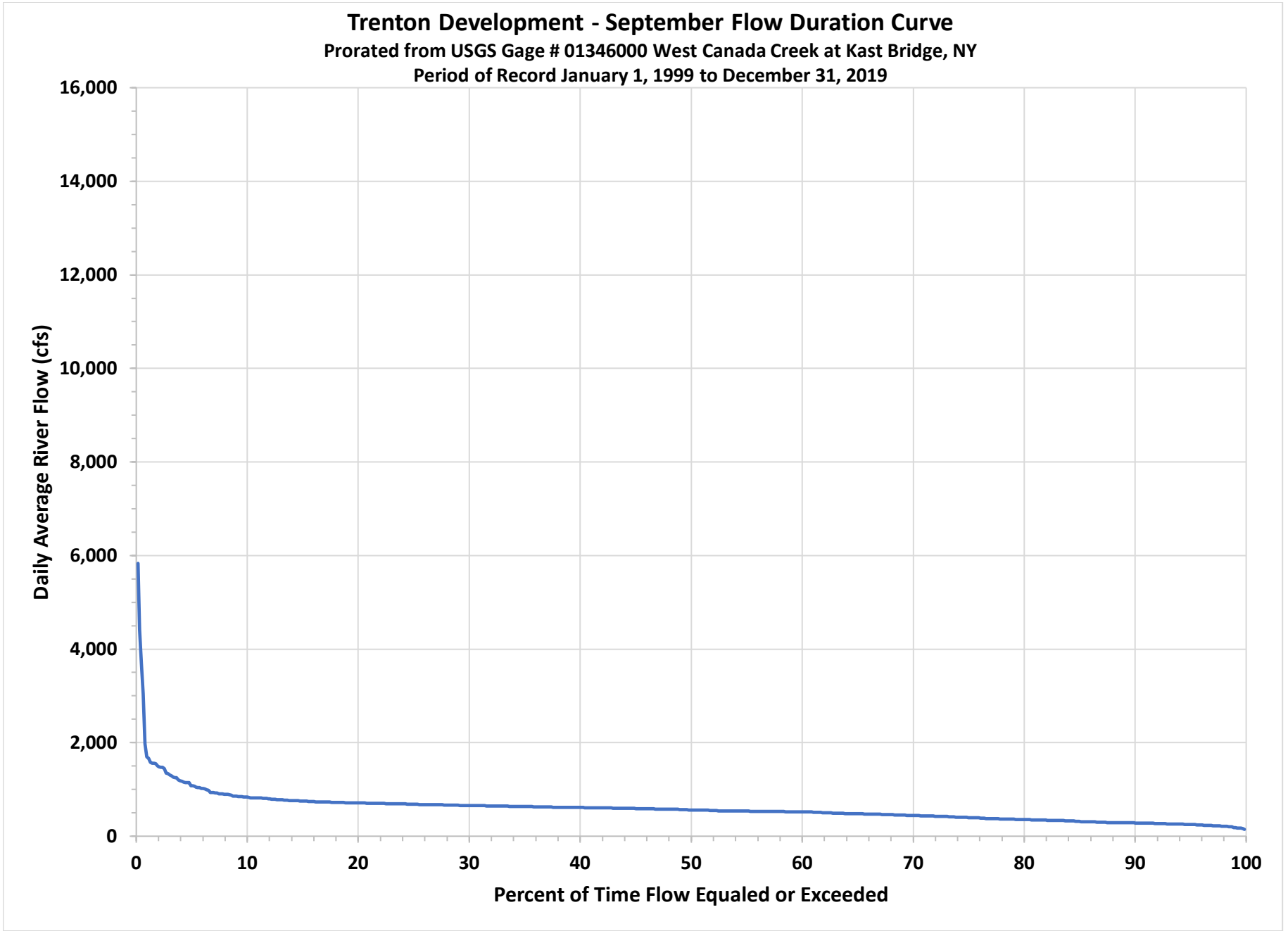

Trenton Development - April Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded

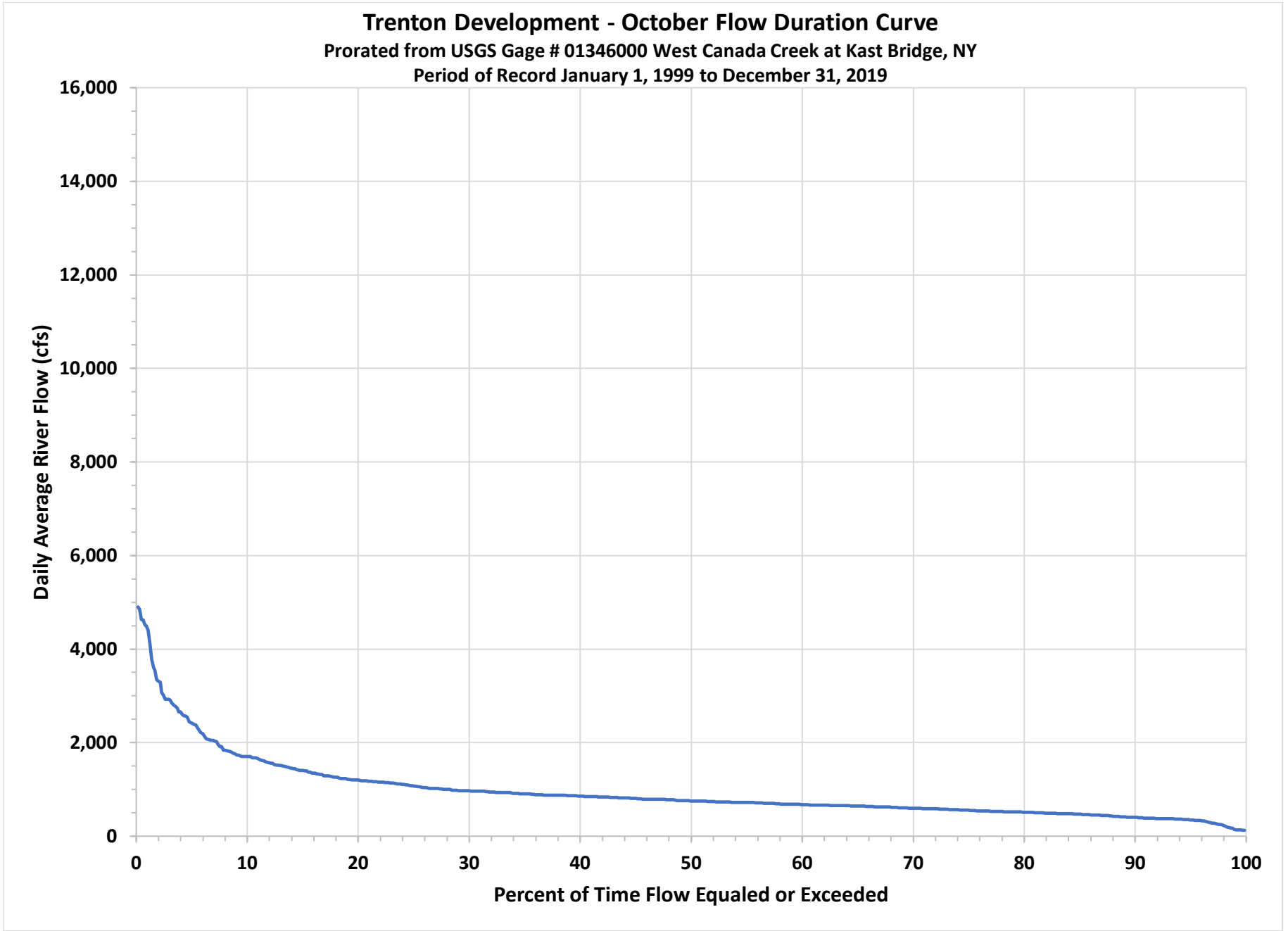

Trenton Development - May Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded

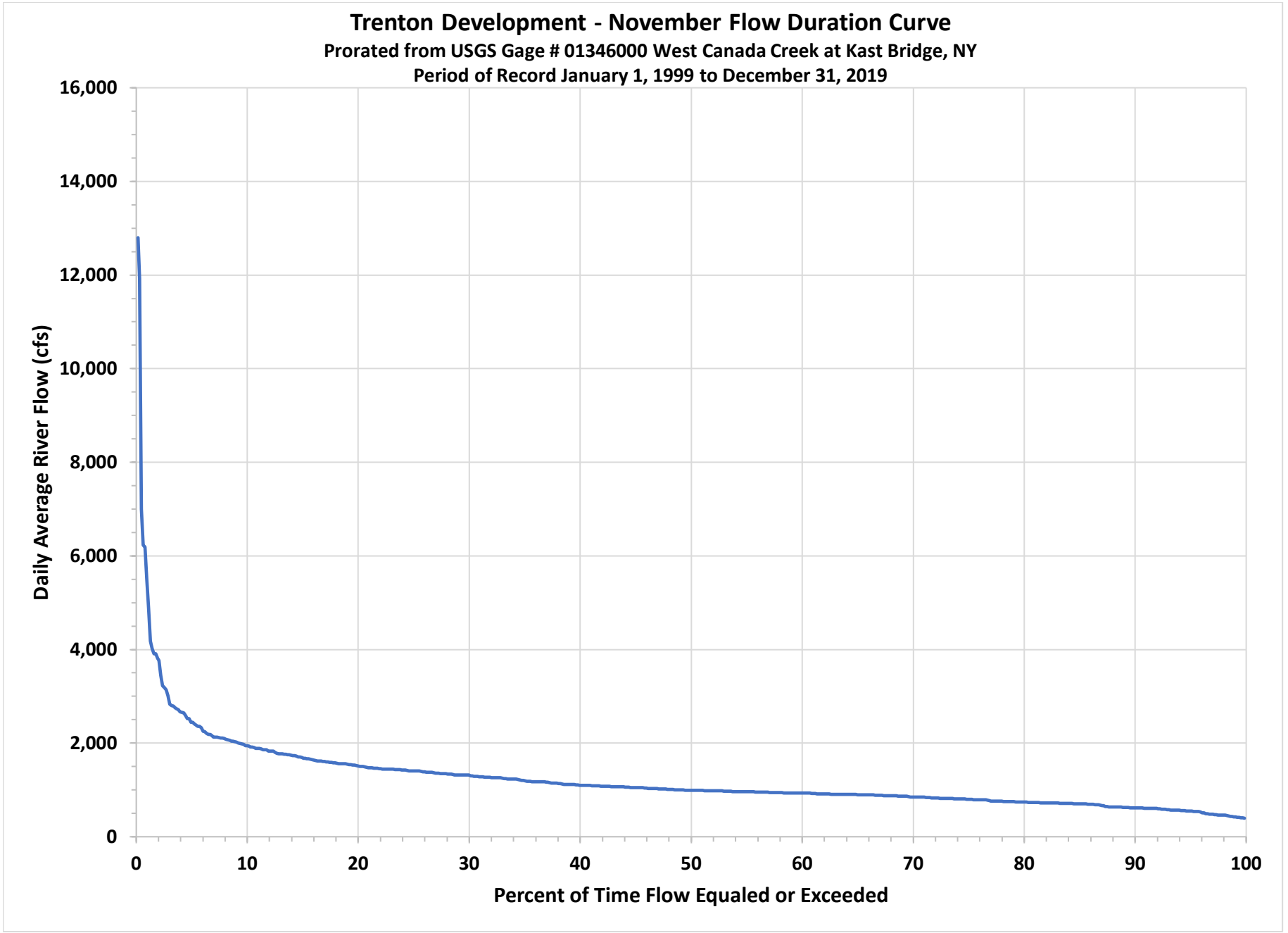

Trenton Development - June Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded

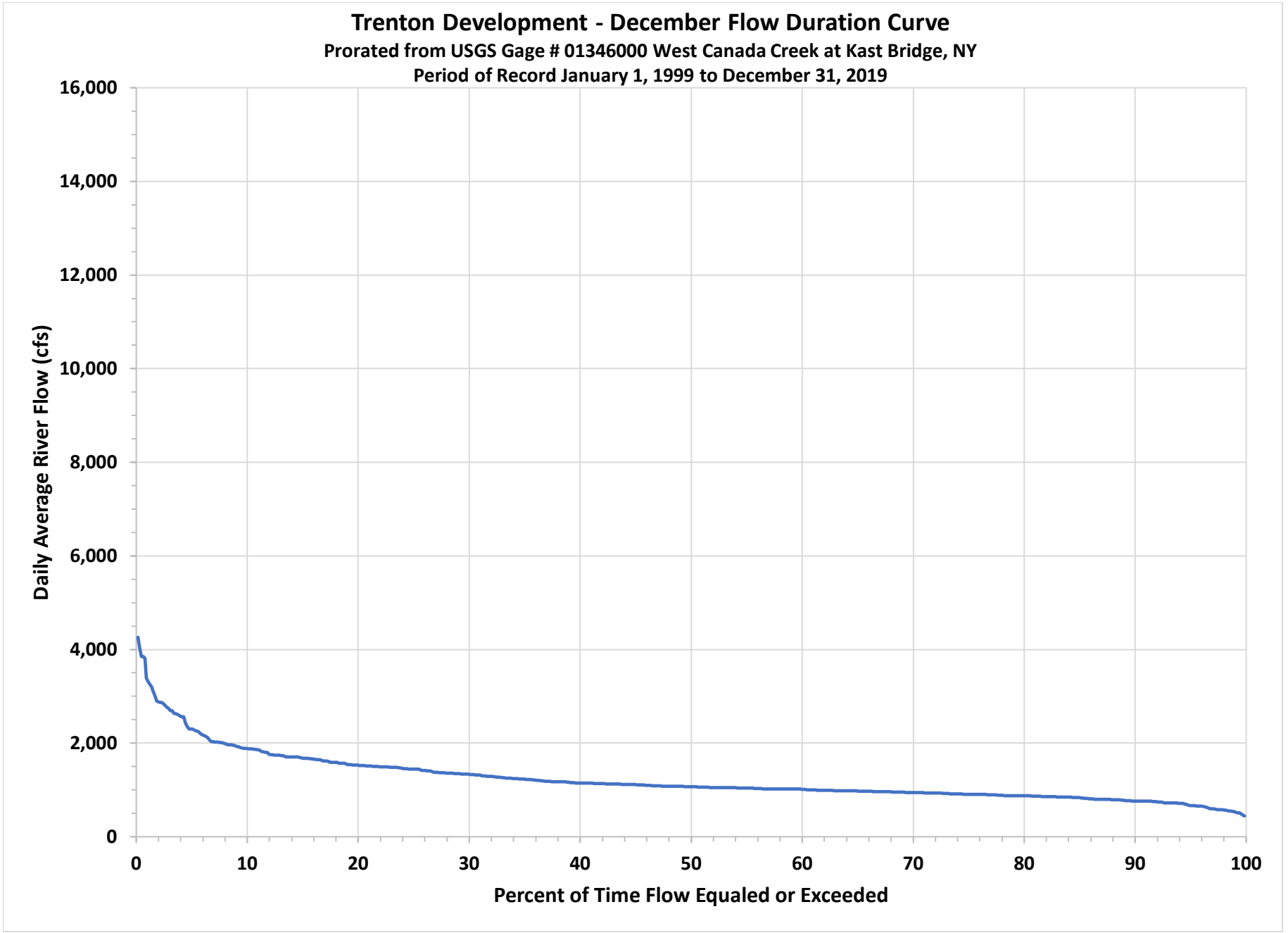

Trenton Development - July Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded


Trenton Development - August Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded


Trenton Development - September Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded


Trenton Development - October Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded


Trenton Development - November Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded


Trenton Development - December Flow Duration Curve
Prorated from USGS Gage # 01346000 West Canada Creek at Kast Bridge, NY
Period of Record January 1, 1999 to December 31, 2019
Daily Average River Flow (cfs)
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Flow Equaled or Exceeded

WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

EXHIBIT C

CONSTRUCTION HISTORY

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LIST OF TABLES

1.0 CONSTRUCTION HISTORY

Table 1 provides a summary of construction history at the Prospect Development and Table 2 at the Trenton Development of the West Canada Creek Hydroelectric Project.

Table 1 Summary of Construction History at the Prospect Development

Year(s)	Activity
1959	Completion of Prospect Development.
1992	Repainting of three tainter gates.
1993	Rehabilitation program, including the post-tensioning of two bays (Bays No. 5 and 6) of the dam with three rock anchors rated 597.5 kips each.
1995	Construction of new substation and powerhouse roof replacement. Repair of rip-rap along the left inboard side of the canal.
1996	Repair of ditch at northern dike with granular material.
2003	Repair tainter gates (concrete remediation, seals and painting of upstream face).
2015	Runner rehabilitation

Table 2 Summary of Construction History at the Trenton Development

Year(s)	Activity
1901	Completion of original Trenton Hydroelectric Development with 7 foot diameter woodstave penstock, and powerhouse No. 1 with 4 units.
1917-1919	New powerhouse No 2. with two 6400 kW units. New 12 foot diameter woodstave penstock and surge tank.
1922	New 6400 kw unit at Powerhouse No. 2, and new intake structure with a 10.5 foot tunnel extension to 12 foot diameter penstock. Six foot flashboards added at main spillway and 8 foot flashboards at auxiliary spillway.
1931	Seven foot diameter woodstave penstock replaced with steel.
1951	New flood gate at spillway of the dam.
1983	New intake structures and 14 foot diameter tunnel extension to penstock. New surge tank and concrete work at dam and auxiliary spillway.
1989	Abandonment (retirement in place) of Powerhouse No. 1 and Unit's 1 through 4.

Year(s)	Activity
1992-1993	Rehabilitation program, including: • A new concrete overlay at the downstream face of the non-overflow sections of the dam and a new drainage system to relieve seepage. • A new ogee-shaped spillway crest. • Replacement of 2-foot-high parapet wall, new gate sill and also new reinforced concrete apron at toe of floodgate structure. • Concrete surface repair work throughout the site. • Removal of existing gate operators at the retired waste sluice conduits 1 through 6. • Construction of apron downstream of sluiceway/spillway section. • New access stairway at the west non-overflow structure. • Rehabilitation of access road to the powerhouse, including slope protection measures. • Runner replacement on Units 5, 6, and 7.
2004	Construction of Trenton Falls Scenic Trail
2005	Installation of automated base flow release valve at the Trenton Powerhouse
2006	Painting of pipeline. Encasement of lower exposed portion of the No. 7 penstock in concrete. Post-flood rehabilitation (after flood of June 2006): • Repair of powerhouse access road. • Repair of dam access road. • Rehabilitation of auxiliary spillway and flashboards. • Repoint block retaining walls at main spillway. Construction of ADA Accessible Scenic Overlook at Trenton Falls Scenic Trail
2011	Lower Road repair due to flood Concrete slab installed at base of non-overflow – washed out due to flood
2017	Penstock and surge tank orifice repair
2020	Post flood rehabilitation (after flood of October 31 - November 1, 2019) • Repair of valve house. • Repair of dam access road. Replacement of the existing wooden trippable flashboards along the auxiliary spillway with a pneumatic flashboard system.

2.0 PROJECT SCHEDULE OF NEW DEVELOPMENT

The West Canada Creek Project is an existing development and no new construction or modification of any project structures is proposed at this time.

WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

EXHIBIT D

STATEMENT OF COSTS AND FINANCING

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1.0 ORIGINAL COST OF EXISTING UNLICENSED FACILITIES

This section is not applicable to the West Canada Creek Hydroelectric Project (Project) because Erie Boulevard Hydropower, L.P. (Erie or Licensee) is not applying for an initial (original) license.

2.0 ESTIMATED AMOUNT PAYABLE UPON TAKEOVER PURSUANT TO SECTION 14 OF THE FEDERAL POWER ACT

Under Section 14(a) of the Federal Power Act (FPA), the Federal government may take over any project licensed by the FERC upon the expiration of the original license. The Commission may also issue a new license in accordance with Section 15(a) of the FPA. If such a takeover were to occur upon expiration of the current license, the Licensee would have to be reimbursed for the net investment, not to exceed fair value, of the property taken, plus severance damages. To date, no agency or interested party has recommended a federal takeover of the Project pursuant to Section 14 of the Federal Power Act.

2.1 Fair Value

The fair value of the Project is dependent on prevailing power values and license conditions, both of which are currently subject to change. The best approximation of fair value would likely be the cost to construct and operate a comparable power generating facility. Because of the high capital costs involved with constructing new facilities and the increase in fuel costs associated with operation of such new facilities (assuming a fossil fueled replacement), the fair value would be considerably higher than the net investment amount. If a takeover were to be proposed, the Licensee would calculate fair value based on then-current conditions.

2.2 Net Investment

The FPA defines "net investment" as the original cost, plus additions, minus the sum of the following items (to the extent that such items have been accumulated during the period of the license from earnings in excess of a fair return on such investment): (a) unappropriated surplus (b) aggregate credit balances of current depreciated accounts; and (c) aggregate appropriations of surplus or income held in amortization, sinking fund, or similar reserves.

The net book investment for the Project is approximately $29,616,794 as of the end of 2020.

2.3 Severance Damages

Severance damages are determined either by the cost of replacing (retiring) equipment that is "dependent for its usefulness upon the continuance of the License" (Section 14, Federal Power Act), or the cost of obtaining an amount of power equivalent to that generated by the Project from the least expensive alternative source, plus the capital cost of constructing any facilities that would be needed to transmit the power to the grid, minus the cost savings that would be realized from not operating the Project. These values would need to be calculated based on power values and license conditions at the time of project takeover.

3.0 ESTIMATED COST OF NEW DEVELOPMENT

3.1 Land and Water Rights

The Licensee is not proposing to expand land or water rights as a consequence of this license application.

3.2 Cost of New Facilities

The Licensee is not proposing any capacity related developments for the Project.

4.0 ESTIMATED AVERAGE ANNUAL COST OF THE PROJECT[1]

The estimated average annual cost of the total Project over the period of 2018 to 2020 was approximately $4,376,642. This estimate includes costs[2] associated with existing and projected project operations and maintenance, as well as local property and real estate taxes, but excludes income taxes, depreciation, and costs of financing.

[1] The West Canada Creek Hydroelectric Project is a member of the Erie Boulevard Hydropower, LP portfolio of assets and costs are assigned to the overall portfolio; the costs herein are prorated from the total portfolio costs and are approximations.
[2] Including major maintenance costs.

4.1 Capital Costs

There is no fixed schedule for West Canada Creek Project life extension program, rather a sequence of activities designed to be implemented when needed. Accordingly, there is no fixed annual budget allocated for life-extension activities. These activities would be performed on an as-needed basis using existing planning procedures that provide short- and long-term windows to evaluate, schedule, and budget replacements and rehabilitation work in an orderly fashion.

4.2 Taxes

Property taxes for the 2020 fiscal year were approximately $1.8 million. Income taxes for the Project are incorporated into costs of the Licensee's consolidated business and are not separated out for the Project.

4.3 Depreciation and Amortization

The annualized composite rate of depreciation for the Project is approximately 8.35 percent.

4.4 Operation and Maintenance Expenses

The estimated annual operation and maintenance expense for 2020 at the Project was approximately $4,443,805. This estimate includes the property taxes noted in section 4.2.

4.5 Cost to Develop the License Application

The approximate cost to date to prepare the application for new license for the Project is $1,500,000.

4.6 Costs of Proposed Environmental Measures

The Licensee is evaluating the need for protection, mitigation, or enhancement measures (PME). If Licensee proposes any PME measures, estimated costs of any proposed PME measures will be provided in the final license application.

5.0 ESTIMATED ANNUAL VALUE OF PROJECT POWER

The Licensee participates in the wholesale market administered by the New York Independent System Operator (NYISO). The Licensee estimates total annual energy production of about 224,044 MWh which will be sold at the prevailing market rates. The average market clearing price for energy in 2020 can be estimated based on the New York ISO website (https://www.nyiso.com/).

6.0 SOURCES AND EXTENT OF FINANCING

The Licensee's current financing needs are generated from internal funds. The Licensee is likely to finance major enhancements through earnings retention, equity contributions, third-party loans and loans made by the corporate parent or some combination of those mechanisms.

WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

EXHIBIT G

PROJECT MAPS

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LIST OF FIGURES

1.0 PROJECT MAPS

The attached Exhibit G maps denote the West Canada Creek Hydroelectric Project (Project) boundary. Table 1 provides a summary of the drawing numbers and titles for the Exhibit G maps. The Project Boundary Maps show the Project vicinity, location, and boundary in sufficient detail to provide a full understanding of the Project. The Exhibit G maps were prepared in accordance with the requirements of 18 C.F.R. § 4.51(h).

Table 1 Project Boundary Maps

Drawing Number	Title
Exhibit G- Sheet 1 of 4	Project Boundary Map
Exhibit G- Sheet 2 of 4	Project Boundary Map
Exhibit G- Sheet 3 of 4	Project Boundary Map
Exhibit G- Sheet 4 of 4	Project Boundary Map

Erie Boulevard Hydropower, L.P. (Erie or Licensee) is proposing to modify the Project boundary to remove the existing substations at the Trenton Development, which are not a Project component and are owned by National Grid (not owned by Erie). Figure 1 denotes the location of the existing Project boundary under the existing license, and Figure 2 denotes the location of the proposed Project boundary modifications, which includes an overall reduction of about 1.8 acres of lands within the Project boundary . In addition, minor corrections to the West Canada Creek Project boundary occurred during the development of these maps to correct conflicts found between the Exhibit G drawings previously approved by Federal Energy Regulatory Commission (FERC or Commission) and the associated boundary description. The Exhibit G drawings incorporate these proposed Project boundary modifications and minor corrections. Erie possesses property or easement rights to all areas within the defined Project boundary.

2.0 FEDERAL LANDS

There are no public lands or reservations of the United States within the West Canada Creek Project boundary.

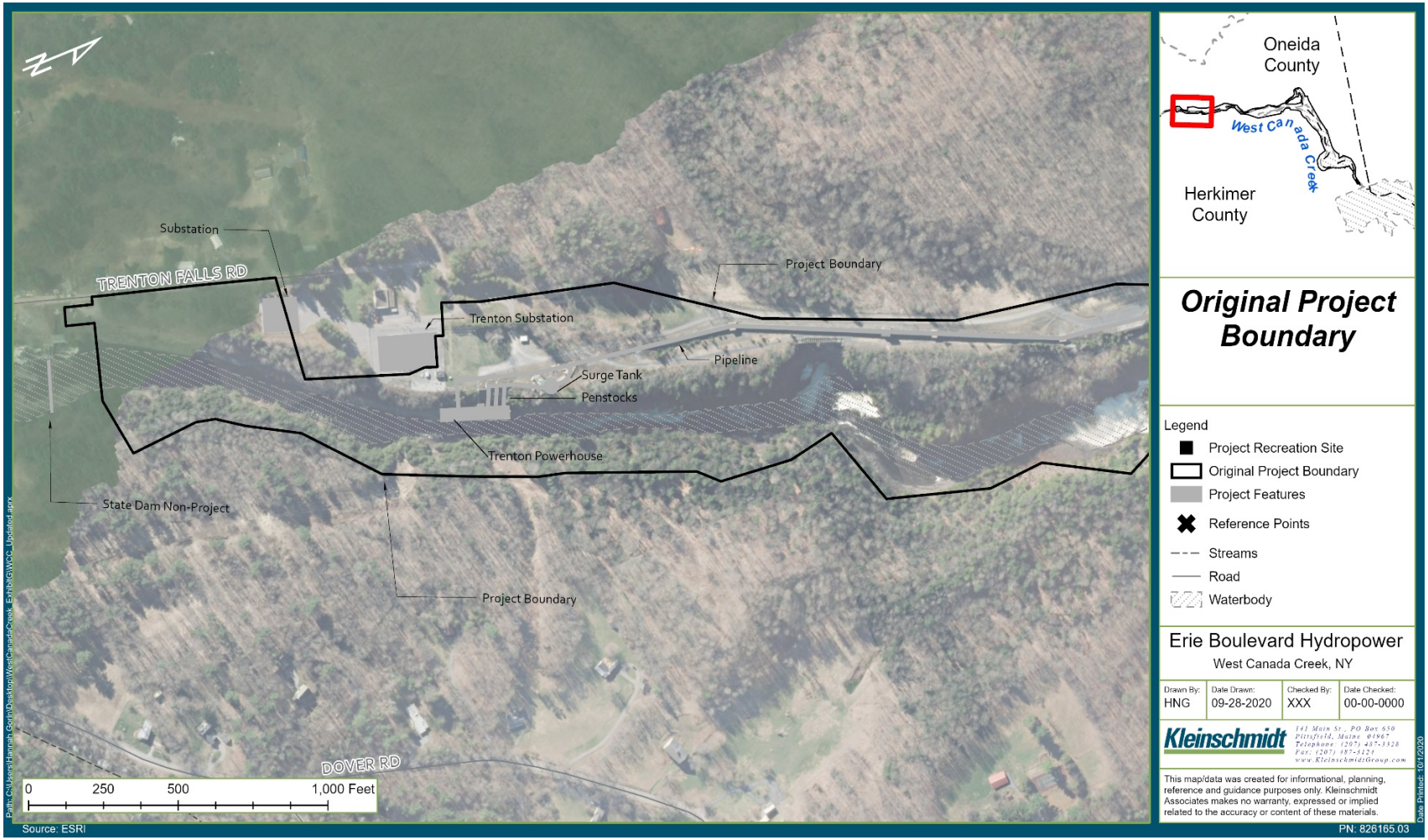


Figure 1 Location of the Existing Project Boundary near National Grid Trenton Substations

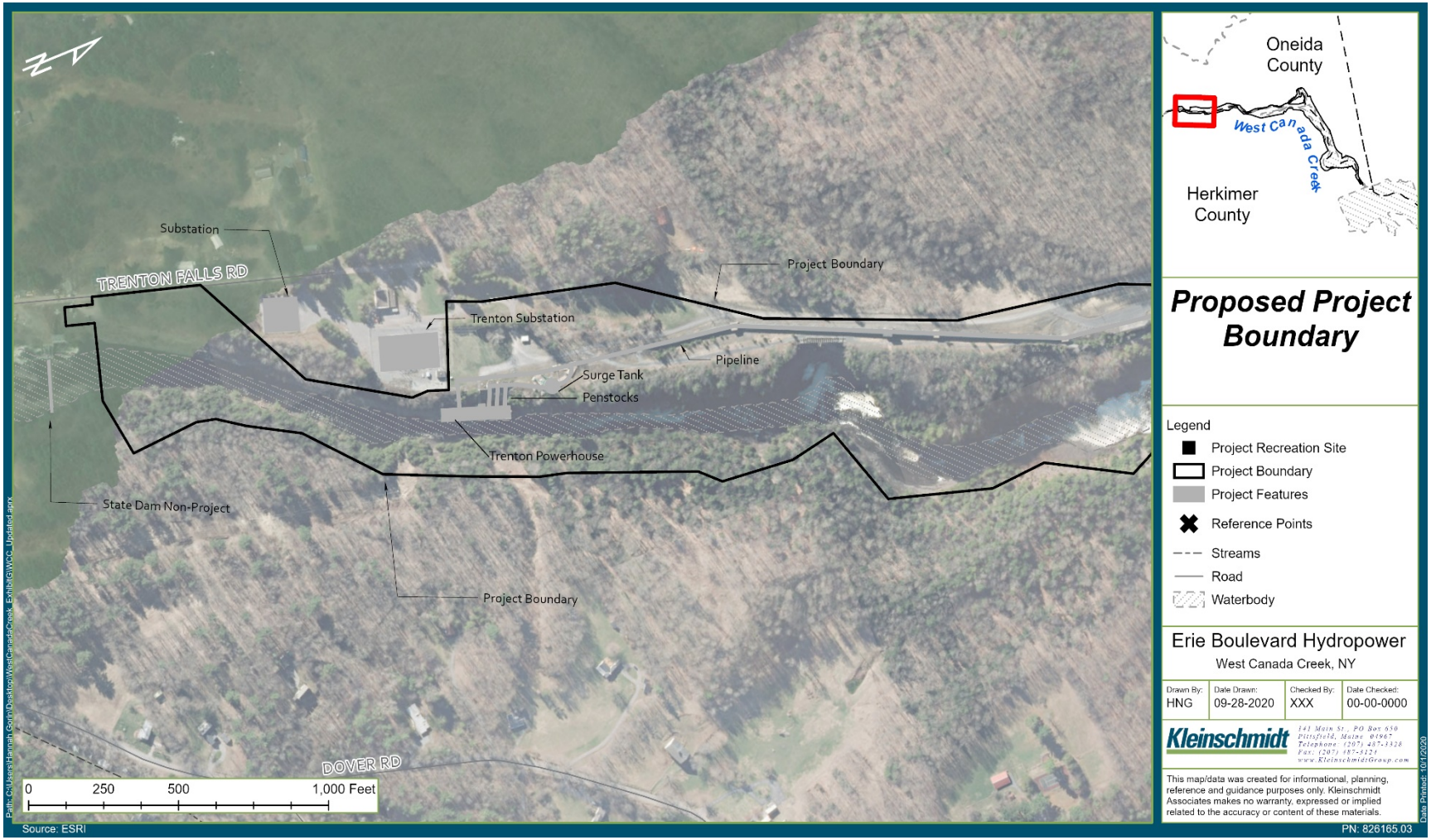
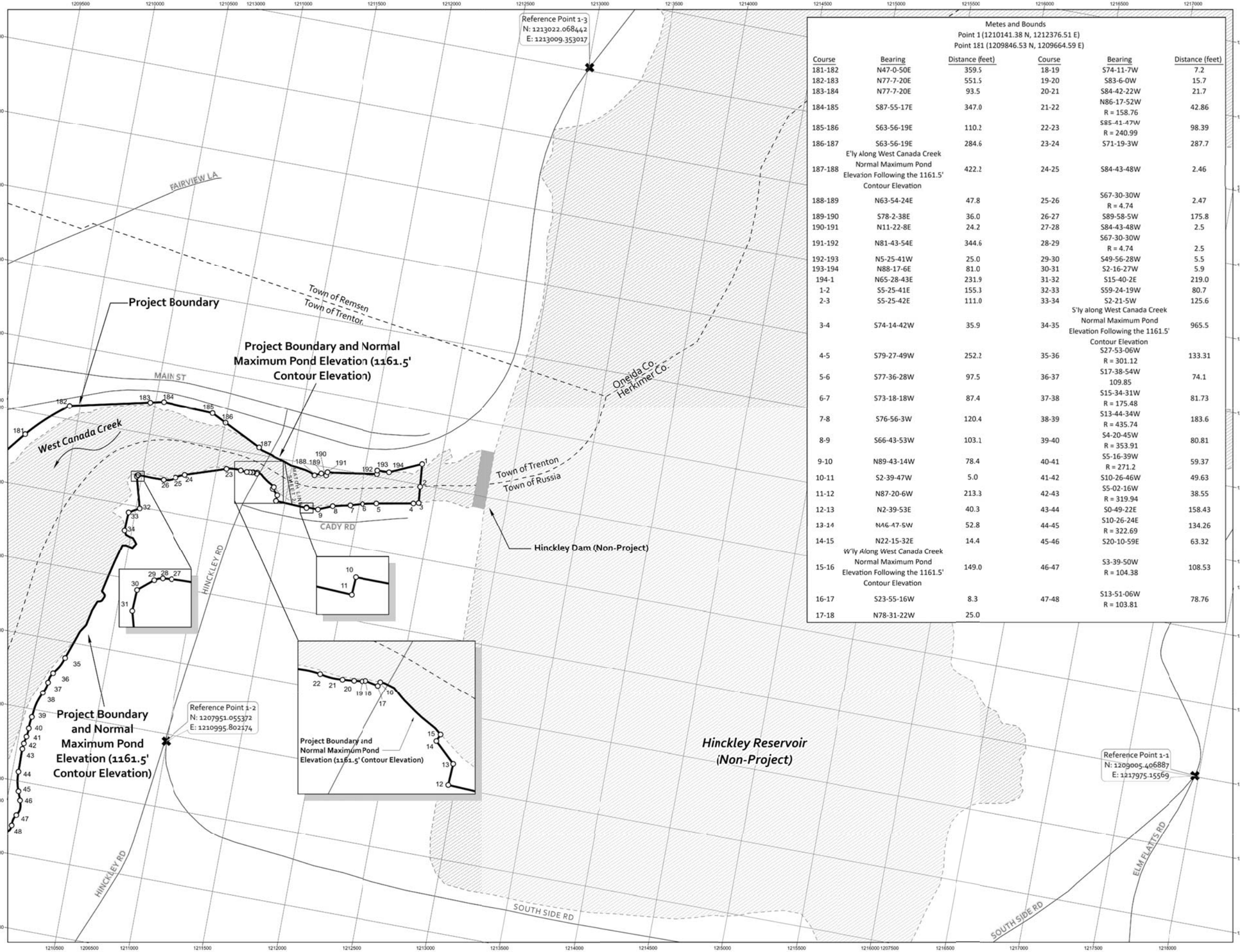


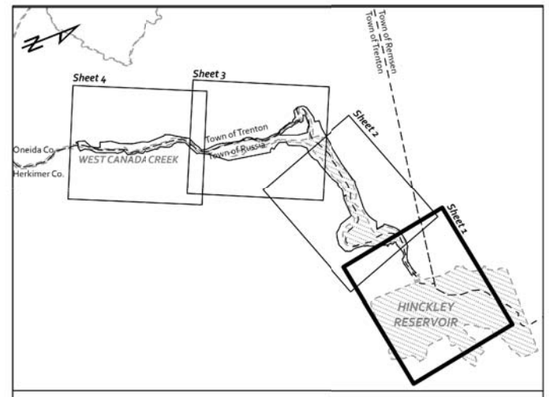
Figure 2 Location of the Proposed Project Boundary near National Grid Trenton Substations

EXHIBIT G DRAWINGS



Metes and Bounds
Point 1 (1210141.38 N, 1212376.51 E)
Point 181 (1209846.53 N, 1209664.59 E)

Course	Bearing	Distance (feet)	Course	Bearing	Distance (feet)
181-182	N47-0-50E	359.5	18-19	S74-11-7W	7.2
182-183	N77-7-20E	551.5	19-20	S83-6-0W	15.7
183-184	N77-7-20E	93.5	20-21	S84-42-22W	21.7
184-185	S87-55-17E	347.0	21-22	N86-17-52W R = 158.76	42.86
185-186	S63-56-19E	110.2	22-23	S85-41-47W R = 240.99	98.39
186-187	S63-56-19E	284.6	23-24	S71-19-3W	287.7
187-188	E'ly along West Canada Creek Normal Maximum Pond Elevation Following the 1161.5' Contour Elevation	422.2	24-25	S84-43-48W	2.46
188-189	N63-54-24E	47.8	25-26	S67-30-30W R = 4.74	2.47
189-190	S78-2-38E	36.0	26-27	S89-58-5W	175.8
190-191	N11-22-8E	24.2	27-28	S84-43-48W	2.5
191-192	N81-43-54E	344.6	28-29	S67-30-30W R = 4.74	2.5
192-193	N5-25-41W	25.0	29-30	S49-56-28W	5.5
193-194	N88-17-6E	81.0	30-31	S2-16-27W	5.9
194-1	N65-28-43E	231.9	31-32	S15-40-2E	219.0
1-2	S5-25-41E	155.3	32-33	S59-24-19W	80.7
2-3	S5-25-42E	111.0	33-34	S2-21-5W	125.6
3-4	S74-14-42W	35.9	34-35	S'ly along West Canada Creek Normal Maximum Pond Elevation Following the 1161.5' Contour Elevation	965.5
4-5	S79-27-49W	252.2	35-36	S27-53-06W R = 301.12	133.31
5-6	S77-36-28W	97.5	36-37	S17-38-54W 109.85	74.1
6-7	S73-18-18W	87.4	37-38	S15-34-31W R = 175.48	81.73
7-8	S76-56-3W	120.4	38-39	S13-44-34W R = 435.74	183.6
8-9	S66-43-53W	103.1	39-40	S4-20-45W R = 353.91	80.81
9-10	N89-43-14W	78.4	40-41	S5-16-39W R = 271.2	59.37
10-11	S2-39-47W	5.0	41-42	S10-26-46W	49.63
11-12	N87-20-6W	213.3	42-43	S5-02-16W R = 319.94	38.55
12-13	N2-39-53E	40.3	43-44	S0-49-22E	158.43
13-14	N46-47-5W	52.8	44-45	S10-26-24E R = 322.69	134.26
14-15	N22-15-32E	14.4	45-46	S20-10-59E	63.32
15-16	W'ly Along West Canada Creek Normal Maximum Pond Elevation Following the 1161.5' Contour Elevation	149.0	46-47	S3-39-50W R = 104.38	108.53
16-17	S23-55-16W	8.3	47-48	S13-51-06W R = 103.81	78.76
17-18	N78-31-22W	25.0			



12.67°W
12/9/2019

- Project Boundary
- Project Features - Above Ground
- Project Features - Underground
- Project Recreation Site
- Reference Points
- County/Municipal Boundary
- Roads
- Streams
- Waterbody
- Match Line
- Transmission Line

Map notes:

1. The West Canada Creek Project is located in the State of New York in Herkimer and Oneida Counties.
2. Reference Point coordinates are shown in NAD 1983 2011 StatePlane New York Central FIPS 3102 Ft US.
3. Elevations shown are referenced to NAVD 88, where MSL = NGVD + 1.04659 ft. Conversion factor was determined from NOAA tidal benchmark at Albany, Hudson River NY, Station ID 8518995.
4. Licensee has acquired all flowage rights and title in fee or the right to use in perpetuity all lands necessary or appropriate for the construction, maintenance, and operation of the Project. All property records are kept on file with the licensee.
5. There are no federal lands within the Project boundary.
6. The Project boundary description, as required by 18 CFR 4.41, is represented here by a grid of Northings and Eastings around, and graticules within, the map frame. Any position in Northings and Eastings along the Project boundary can be determined using these references.
7. The Project boundary was derived from the following sources: Erie Boulevard Hydropower, L.P. Information shown hereon was compiled from an actual survey, as applicable
8. Total Project area = 413.24 acres, calculated in USA Contiguous Albers Equal Area Conic coordinate system
9. Metes and Bounds courses were calculated in a Geographic Information System using a 12.67 decimal degree ground to grid correction.
10. The Project Boundary, in part, was digitized from contour elevations derived from USGS NY FEMA LiDAR data (USGS 2017).

ERIE BOULEVARD HYDROPOWER, L.P.

WEST CANADA CREEK PROJECT
FERC NO. 2701

PROJECT BOUNDARY MAP

EXHIBIT G | SCALE: 1" = 333' | SHEET NO. 1 OF 4

0 250 500 1,000 1,500 2,000 Feet

SURVEYORS STATEMENT

I HEREBY CERTIFY TO THE FEDERAL ENERGY REGULATORY COMMISSION (FERC) THAT THIS PLAN MEETS THE CONDITIONS SET FORTH BY FERC FOR ITS EXPRESSED PURPOSE. THE PURPOSE OF THIS MAP IS TO PROVIDE A GEOREFERENCED VISUAL DEPICTION OF THE LOCATION OF PROJECT FEATURES AND BOUNDARIES BASED ON THE BEST AVAILABLE HISTORICAL DRAWINGS AND DIGITAL REFERENCE SOURCES INCORPORATED INTO THE GEOGRAPHIC INFORMATION SYSTEM (GIS). LOCATIONS HAVE NOT BEEN VERIFIED BY PHYSICAL FIELD SURVEYS AND THIS DRAWING SHOULD NOT BE USED FOR PURPOSES OF DEVELOPING PROPERTY BOUNDARY DESCRIPTIONS.

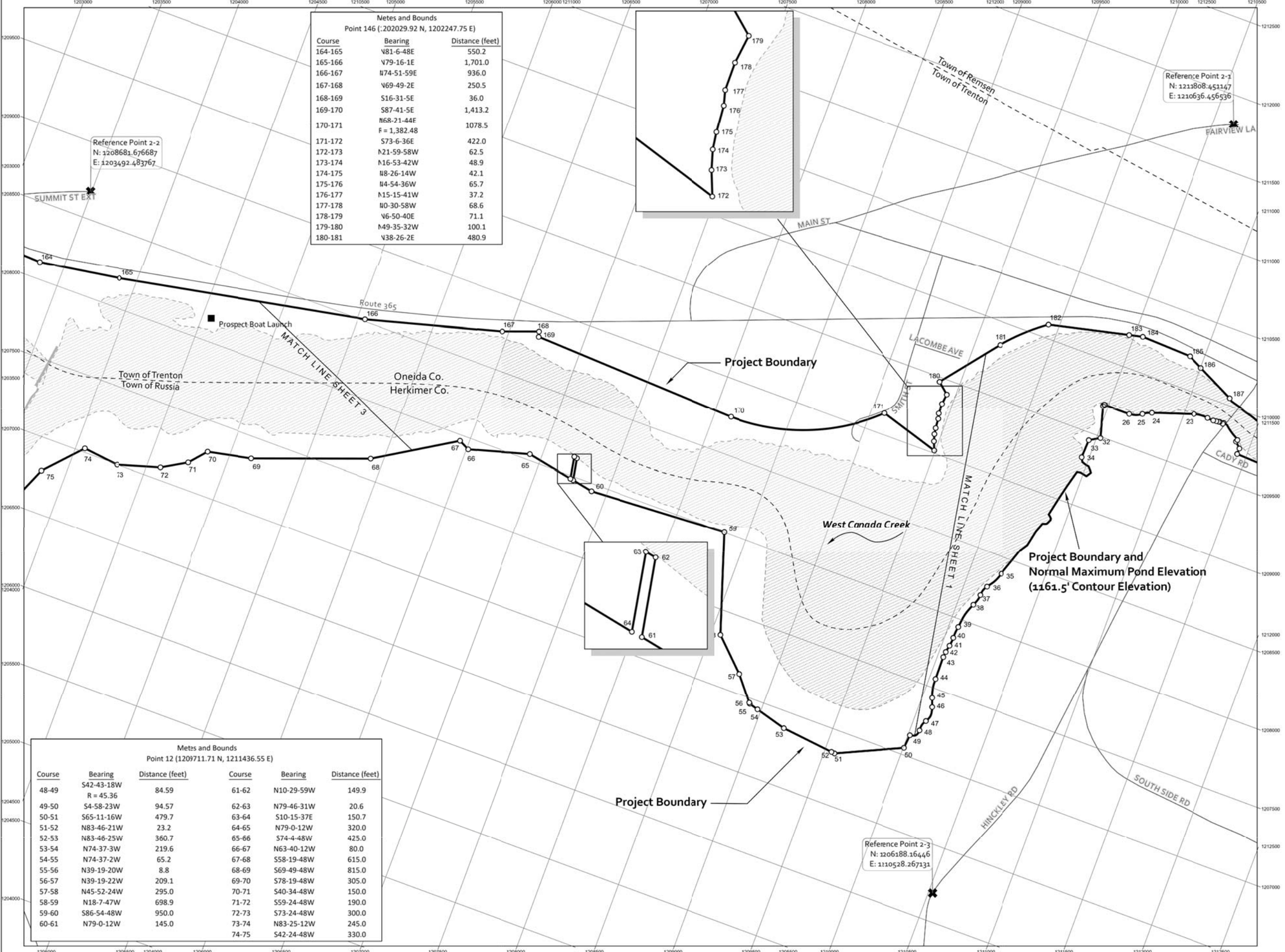
STATE OF MAINE · STEPHEN W. EVERETT 2161 · PROFESSIONAL LAND SURVEYOR

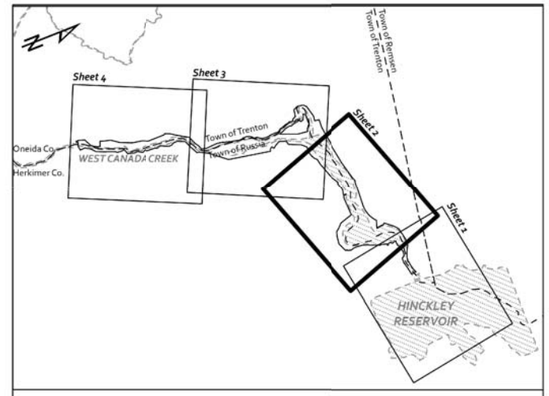
NO.	DATE	DESCRIPTION OF ISSUE OR REVISION	DR.	CK.	APP.
2	2/26/2021	FINAL LICENSE APPLICATION	HNG	KPN	SPM
1	10/1/2020	DRAFT LICENSE APPLICATION			

EX. DWGS. APP'D DATE ??/??/????

FILE NAME(S) ????

FERC DWG. NUMBER 2701-





12.67°W
12/9/2019

- Project Boundary
- Project Features - Above Ground
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ERIE BOULEVARD HYDROPOWER, L.P.

WEST CANADA CREEK PROJECT
FERC NO. 2701

PROJECT BOUNDARY MAP

EXHIBIT G | SCALE: 1" = 333' | SHEET NO. 2 OF 4

0 250 500 1,000 1,500 2,000 Feet

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STATE OF MAINE · STEPHEN W. EVERETT 2161 · PROFESSIONAL LAND SURVEYOR

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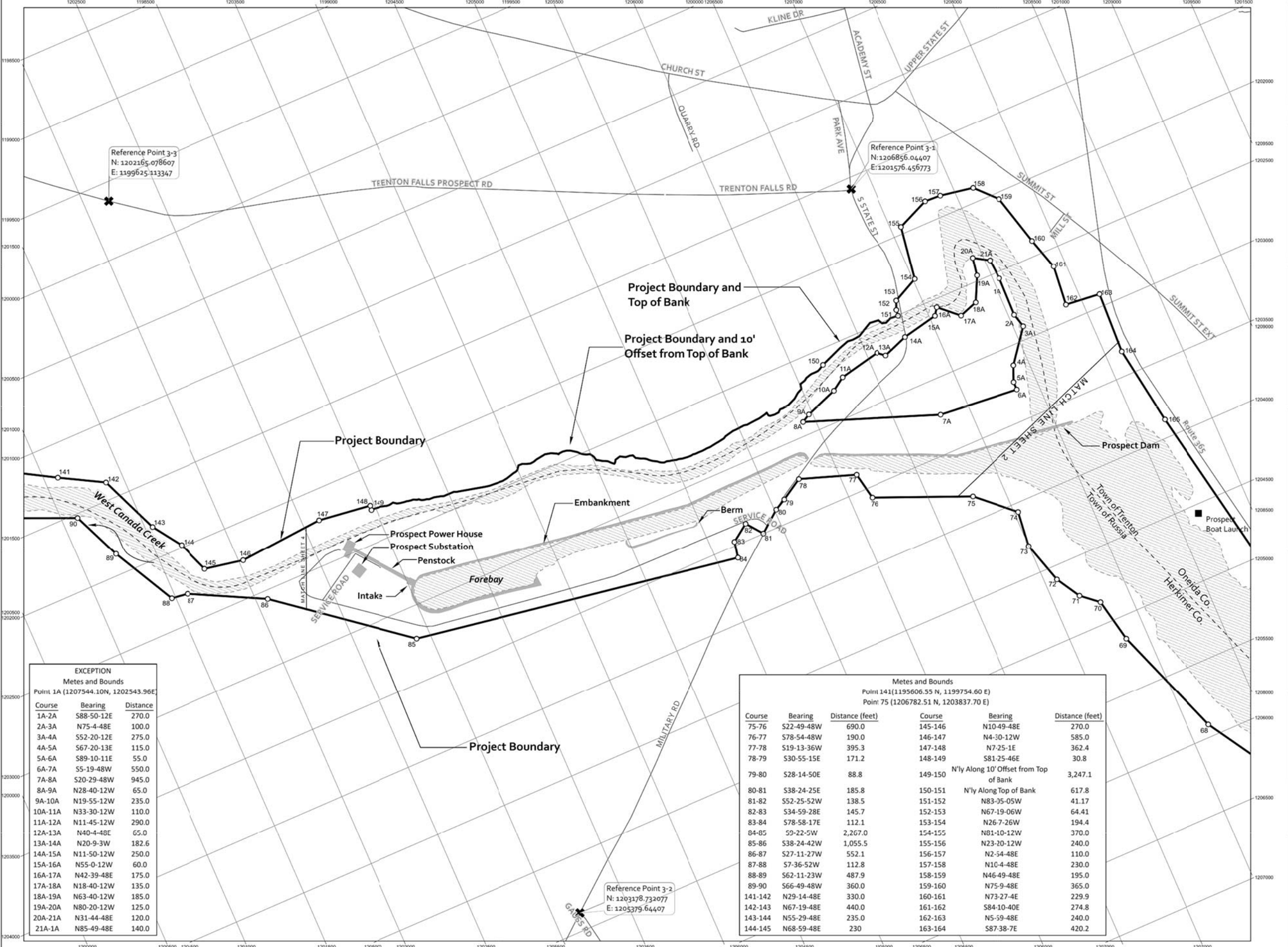
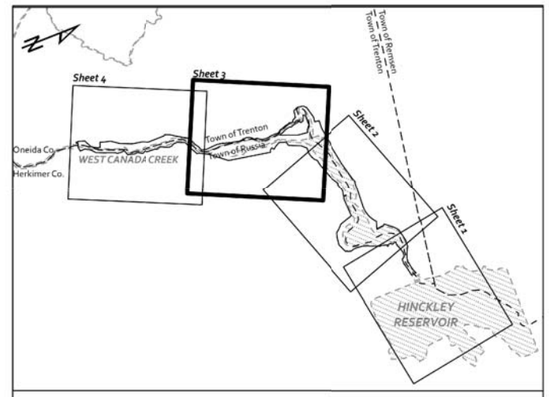


EXCEPTION
Metes and Bounds
Point 1A (1207544.10N, 1202543.96E)

Course	Bearing	Distance
1A-2A	S88-50-12E	270.0
2A-3A	N75-4-48E	100.0
3A-4A	S52-20-12E	275.0
4A-5A	S67-20-13E	115.0
5A-6A	S89-10-11E	55.0
6A-7A	S5-19-48W	550.0
7A-8A	S20-29-48W	945.0
8A-9A	N28-40-12W	65.0
9A-10A	N19-55-12W	235.0
10A-11A	N33-30-12W	110.0
11A-12A	N11-45-12W	290.0
12A-13A	N40-4-48E	65.0
13A-14A	N20-9-3W	182.6
14A-15A	N11-50-12W	250.0
15A-16A	N55-0-12W	60.0
16A-17A	N42-39-48E	175.0
17A-18A	N18-40-12W	135.0
18A-19A	N63-40-12W	185.0
19A-20A	N80-20-12W	125.0
20A-21A	N31-44-48E	120.0
21A-1A	N85-49-48E	140.0

Metes and Bounds
Point 141(1195606.55 N, 1199754.60 E)
Point 75 (1206782.51 N, 1203837.70 E)

Course	Bearing	Distance (feet)	Course	Bearing	Distance (feet)
75-76	S22-49-48W	690.0	145-146	N10-49-48E	270.0
76-77	S78-54-48W	190.0	146-147	N4-30-12W	585.0
77-78	S19-13-36W	395.3	147-148	N7-25-1E	362.4
78-79	S30-55-15E	171.2	148-149	S81-25-46E	30.8
79-80	S28-14-50E	88.8	149-150	N'ly Along 10' Offset from Top of Bank	3,247.1
80-81	S38-24-25E	185.8	150-151	N'ly Along Top of Bank	617.8
81-82	S52-25-52W	138.5	151-152	N83-05-05W	41.17
82-83	S34-59-28E	145.7	152-153	N67-19-06W	64.41
83-84	S78-58-17E	112.1	153-154	N26-7-26W	194.4
84-85	S9-22-5W	2,267.0	154-155	N81-10-12W	370.0
85-86	S38-24-42W	1,055.5	155-156	N23-20-12W	240.0
86-87	S27-11-27W	552.1	156-157	N2-54-48E	110.0
87-88	S7-36-52W	112.8	157-158	N10-4-48E	230.0
88-89	S62-11-23W	487.9	158-159	N46-49-48E	195.0
89-90	S66-49-48W	360.0	159-160	N75-9-48E	365.0
141-142	N29-14-48E	330.0	160-161	N73-27-4E	229.9
142-143	N67-19-48E	440.0	161-162	S84-10-40E	274.8
143-144	N55-29-48E	235.0	162-163	N5-59-48E	240.0
144-145	N68-59-48E	230	163-164	S87-38-7E	420.2



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ERIE BOULEVARD HYDROPOWER, L.P.

WEST CANADA CREEK PROJECT
FERC NO. 2701

PROJECT BOUNDARY MAP

EXHIBIT G | SCALE: 1" = 333' | SHEET NO. 3 OF 4

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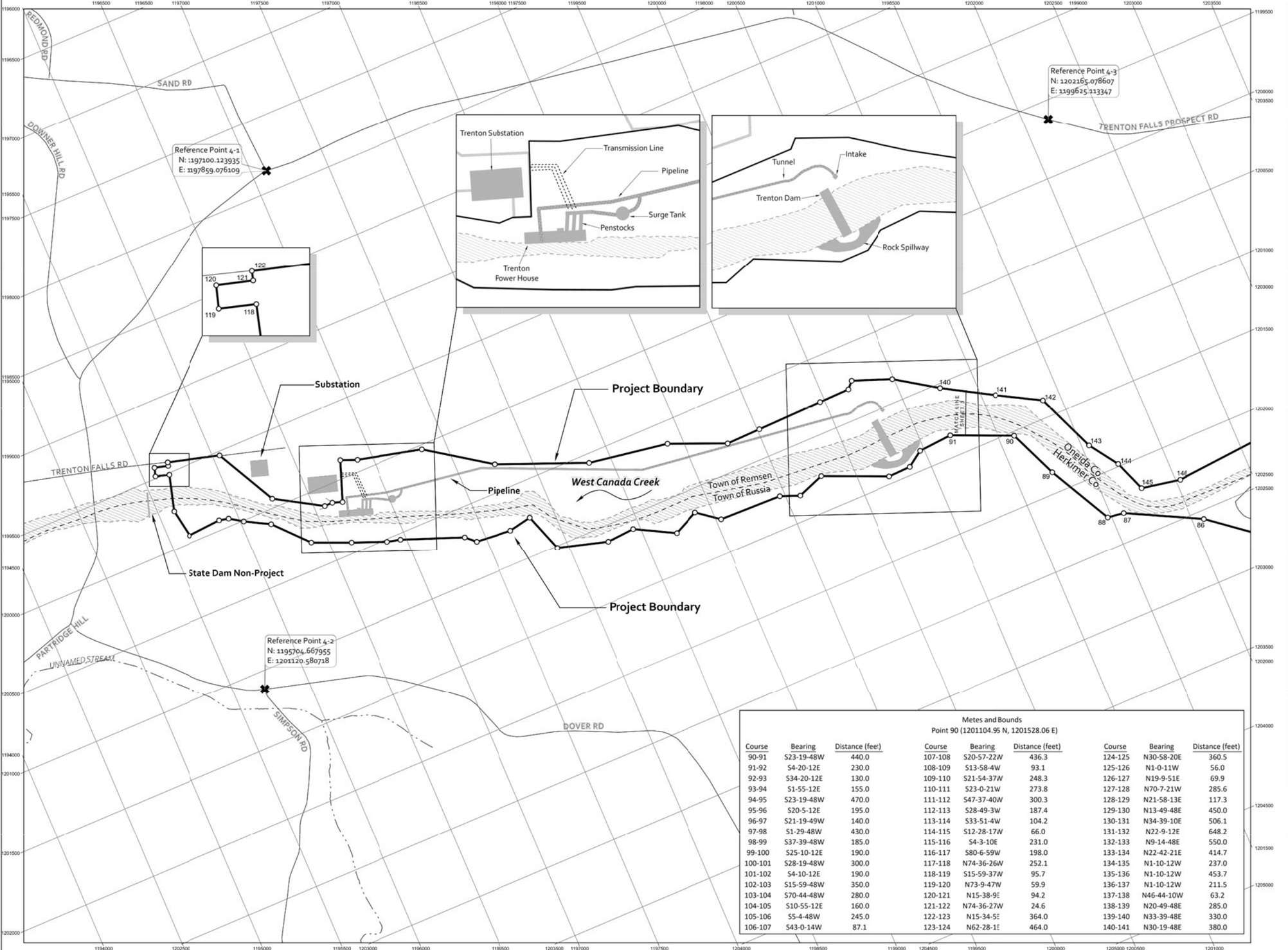

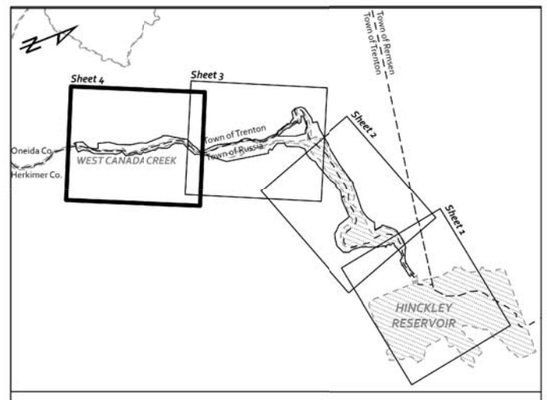

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Metes and Bounds
Point 90 (1201104.95 N, 1201528.06 E)

Course	Bearing	Distance (feet)	Course	Bearing	Distance (feet)	Course	Bearing	Distance (feet)
90-91	S23-19-48W	440.0	107-108	S20-57-22W	436.3	124-125	N30-58-20E	360.5
91-92	S4-20-12E	230.0	108-109	S13-58-4W	93.1	125-126	N1-0-11W	56.0
92-93	S34-20-12E	130.0	109-110	S21-54-37W	248.3	126-127	N19-9-51E	69.9
93-94	S1-55-12E	155.0	110-111	S23-0-21W	273.8	127-128	N70-7-21W	285.6
94-95	S23-19-48W	470.0	111-112	S47-37-40W	300.3	128-129	N21-58-13E	117.3
95-96	S20-5-12E	195.0	112-113	S28-49-3W	187.4	129-130	N13-49-48E	450.0
96-97	S21-19-49W	140.0	113-114	S33-51-4W	104.2	130-131	N34-39-10E	506.1
97-98	S1-29-48W	430.0	114-115	S12-28-17W	66.0	131-132	N22-9-12E	648.2
98-99	S37-39-48W	185.0	115-116	S4-3-10E	231.0	132-133	N9-14-48E	550.0
99-100	S25-10-12E	190.0	116-117	S80-6-59W	198.0	133-134	N22-42-21E	414.7
100-101	S28-19-48W	300.0	117-118	N74-36-26W	252.1	134-135	N1-10-12W	237.0
101-102	S4-10-12E	190.0	118-119	S15-59-37W	95.7	135-136	N1-10-12W	453.7
102-103	S15-59-48W	350.0	119-120	N73-9-47W	59.9	136-137	N1-10-12W	211.5
103-104	S70-44-48W	280.0	120-121	N15-38-9E	94.2	137-138	N46-44-10W	63.2
104-105	S10-55-12E	160.0	121-122	N74-36-27W	24.6	138-139	N20-49-48E	285.0
105-106	S5-4-48W	245.0	122-123	N15-34-5E	364.0	139-140	N33-39-48E	330.0
106-107	S43-0-14W	87.1	123-124	N62-28-1E	464.0	140-141	N30-19-48E	380.0

ERIE BOULEVARD HYDROPOWER, L.P.

WEST CANADA CREEK PROJECT
FERC NO. 2701

PROJECT BOUNDARY MAP

EXHIBIT G | SCALE: 1" = 333' | SHEET NO. 4 OF 4

0 250 500 1,000 1,500 2,000 Feet

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WEST CANADA CREEK HYDROELECTRIC PROJECT

FERC NO. 2701

EXHIBIT H

DESCRIPTION OF PROJECT MANAGEMENT AND NEED FOR PROJECT POWER

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

The West Canada Creek Hydroelectric Project (Project) (FERC Project No. 2701) is an existing generating facility licensed to Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company. The Licensee is an independent power producer and, the Project generates low cost, clean, emissions-free, renewable power that is currently sold to the New York wholesale electricity market administered by the New York Independent System Operator (NYISO). Exhibit H provides information pursuant to 18 CFR § 5.18(c), including Erie's ability to operate and maintain the project, any plans to modify the project, Erie's safety management, operation and maintenance of the Project, and other applicable information to be provided by existing applicants pursuant to 18 CFR § 5.18(c)(1)(ii).

2.0 INFORMATION TO BE SUPPLIED BY ALL APPLICANTS

2.1 Plans and Ability of the Applicant to Operate and Maintain the Project

2.1.1 Plans to Increase Capacity or Generation

The Licensee has no current plans to increase the capacity or generation of the Project.

2.1.2 Plans to Coordinate the Operation of the Project with Other Water Resource Projects

The Licensee proposes to maintain existing project operations and coordination with other water resource Projects as described in Exhibit B. The West Canada Creek Project consists of two developments, Prospect and Trenton, and is located on West Canada Creek in Oneida and Herkimer counties, New York. The West Canada Creek Project is located directly downstream of the Gregory B. Jarvis Hydroelectric Project (FERC No. 3211), which is situated at the Hinckley Dam, and owned and operated by the Power Authority of the State of New York (NYPA or Power Authority). The Hinckley Dam, reservoir, and associated lands are owned by the People of the State of New York, under the jurisdiction of the New York State Canal Corporation's (NYSCC). The Hinckley Reservoir is operated by the NYSCC to: supply water to the New York State Canal System, provide domestic water supply[1], provide flows for hydroelectric power generation, provide base

[1] The Mohawk Valley Water Authority (MVWA) owns and operates the regional water system that provides drinking water for approximately 128,000 customers throughout 18 municipalities in Oneida and Herkimer

flows for aquatic resources, and provide flood protection for the West Canada Creek and lower Mohawk River Valleys. The Hinckley Reservoir regulates flows for the generation of hydroelectric power at the Jarvis Project and at the West Canada Creek Project.

The current FERC license for the Jarvis Project allows for peaking operations and requires the Power Authority (as licensee for the Jarvis Project) to coordinate with Erie (as licensee for the West Canada Creek Project) and the NYSCC to maintain a continuous base flow of 160 cfs in West Canada Creek, as measured immediately downstream of the NYSCC diversion weir (Nine Mile Creek Feeder Dam). The Power Authority Hydrologist communicates with the Erie Water Resource Manager twice weekly to discuss the application of the 2012 Operating Diagram based upon reservoir elevation in relation to the rule curve. The West Canada Creek Project is typically operated so that daily average inflows from Hinckley Reservoir (as controlled by the NYSCC and Power Authority based upon the 2012 Operating Diagram) into the Project are released from the Prospect and Trenton developments that same day to maintain daily average outflows (i.e., daily average inflows equal daily average outflows).

Approximately 1 mile downstream of the Trenton Dam is the NYSCC diversion weir (also known as the Nine Mile Creek Feeder Dam or Morgan Dam), which diverts flow from West Canada Creek into the Nine Mile Feeder Canal and feeds into the New York State Canal System. Flows are diverted primarily during the navigation season[2] with releases to supplement downstream canal water levels to help maintain navigability in the canal system.

Approximately 13 miles downstream of the Nine Mile Creek Feeder Dam is the Newport Dam associated with the Newport Hydroelectric Project which operates under an exempt FERC license (FERC No. 5196) with a 1,960-kW capacity. Further downstream, approximately 26 miles below the Nine Mile Creek Feeder Dam is the Herkimer Dam associated with the Herkimer Hydroelectric Project (FERC No. 9709), with a licensed capacity of 1,680 kW.

Counties (MVWA 2020 at https://www.mvwa.us/.). The MVWA intake is located at the Hinckley Dam and withdrawals occur from Hinckley Reservoir, upstream from the West Canada Creek Project.

[2] The New York State canal system navigation season is typically from mid-May through mid-October (NYSCC 2020 at http://www.canals.ny.gov/boating/index.html.).

2.1.3 Plans to Coordinate the Operation of the Project with Other Electrical Systems

Erie, as a wholesale seller of generated electricity, sells the power generated from the West Canada Creek Project as a market participant in the NYISO. The Project is interconnected to the National Grid distribution and transmission system.

2.2 Need for the Electricity Generated By the Project

2.2.1 The Reasonable Costs and Availability of Alternative Sources of Power

The West Canada Creek Project generates emission-free, renewable power and the electrical output from the Project is sold wholesale into the NYISO administered market. The Project provides peaking and variable output generation of value to the grid. If the Project would not provide this variable output generation, replacement energy would most likely be replaced by natural gas fired peaking projects. Exhibit D of the Final License Application provides an analysis of the costs of producing Project power. Alternative sources are likely to be generating units powered by fossil fuels, whose fuel and other variable costs may be significantly higher than those of the Project.

2.2.2 Increase in Costs if the Licensee is not Granted a License

If the Licensee is not granted a license, this Project would cease to provide affordable, clean electricity to the NYISO. The NYISO and its wholesale customers would need to obtain the annual equivalent capacity and energy from other sources capable for meeting on-peak demands, and the cost and availability of such alternative sources of power would be determined by other suppliers available to NYISO. An unquantified increase in costs may occur to the electric customer in the region if a license for continued operation of the Project was not granted.

2.3 Effects of Alternative Sources of Power

2.3.1 Effects on Licensee's Customers

This section is not applicable to the Licensee since the Licensee sells its electricity into the NYISO.

2.3.2 Effects on Licensee's Operating and Load Characteristics

The Licensee is an independent power producer and, as such, does not maintain a separate transmission system which could be affected by replacement or alternative power sources.

2.3.3 Effects on Communities Served By the Project

See the discussion above in *Section 2.2, Need for Electricity Generated by the Project*, regarding the loss of the Project's generation. Because the Licensee cannot predict with any certainty the actual type or location of a potential alternative facility providing replacement power, it cannot specifically discuss potential effects of an alternative source of power on any particular community.

2.4 Need, Reasonable Cost, and Availability of Alternative Sources of Power

The Licensee is an independent power producer and, as such, does not have an obligation or need to prepare load and capability forecasts in reference to any particular group or class of customers. For the region, those obligations and tasks remain within the scope of services provided by the NYISO.

2.5 Effect of Power on Applicant's Industrial Facility

This section is not applicable as the Licensee does not use the power generated for its own industrial operations.

2.6 Need of the Tribe for Electricity Generated By the Project

The Licensee is not an Indian Tribe; therefore, this section is not applicable.

2.7 Impacts on the Operations and Planning of the Licensee's Transmission System of Receiving or Not Receiving the License

Because the Licensee is an independent power producer and does not own the local transmission system, this section is not applicable to the Licensee. However, power generated by the Project is currently transmitted to National Grid's transmission/distribution system as shown in the Single Line Diagram for the West Canada Creek Project (see Appendix H-1).

2.8 Statement of Need for Modifications to Existing Project Facilities or Operations

Erie has no plans to construct new facilities or to alter operations of the Project. Erie is seeking authorization to continue operating the Project in its current configuration and as it is currently licensed to operate.

2.9 Consistency with Comprehensive Plans

Section 10(a)(2)(A) of the Federal Power Act (FPA), 16 U.S.C. section 803 (a)(2)(A), requires FERC to consider the extent to which a project is consistent with Federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. On April 27, 1988, the Commission issued Order No. 481-A, revising Order No. 481, issued October 26, 1987, establishing that the Commission will accord FPA section 10(a)(2)(A) comprehensive plan status to any Federal or state plan that: (1) is a comprehensive study of one or more of the beneficial uses of a waterway or waterways; (2) specifies the standards, the data, and the methodology used; and (3) is filed with the Secretary of the Commission. FERC currently lists 49 comprehensive plans for the State of New York. Of those the following 6 comprehensive plans are identified as pertaining to waters in the vicinity of the Project:

- Adirondack Park Agency. n.d. New York State wild, scenic, and recreational rivers system field investigation summaries. Albany, New York.
- National Park Service. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.
- New York Department of Environmental Conservation. 1985. New York State Wild, Scenic, and Recreational River System Act. Albany, New York. March 1985.
- New York State Office of Parks, Recreation, and Historic Preservation. New York Statewide Comprehensive Outdoor Recreation Plan: 2003-2007[3]. Albany, New York. January 2003.
- U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

[3] An updated version dated 2020-2025 is available at https://parks.ny.gov/documents/inside-our-agency/20202025StatewideComprehensiveOutdoorRecreationPlan.pdf

- U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

Based on a review of these plans, Erie has determined that current and proposed operations of Project facilities are consistent with these plans.

2.10 Financial and Personnel Resources

Erie has considerable experience operating not only the West Canada Creek Project but other hydroelectric and water storage projects within New York State and within the region. Erie has available a complete staff of engineers, biologists, operators, mechanics, and electricians that are trained and experienced in the operation of hydroelectric projects. Erie has or can acquire the necessary resources to continue the efficient operation and maintenance of the Project. Information regarding the Project's expected annual costs and value is provided in Exhibit D of the Final License Application.

2.11 Notification of Affected Landowners

Erie is not proposing any modifications to the Project boundary, to encompass additional lands of others. Therefore, notification of adjacent landowners is not applicable.

2.12 Applicant's Electricity Consumption Efficiency Improvement Program

Because the Licensee is an independent power producer, this section is not applicable to the Project.

2.13 Tribes Affected By the Project

There are no Native American lands, known Native American traditional cultural properties or religious properties, or National Register-eligible or -listed sites associated with Native American Nations within the Project boundary or which would likely be affected by the Project relicensing. The following is a listing of Native American tribes that have been consulted by the Licensee (via distribution of the Notice of Intent, Pre-Application Document, Integrated Licensing Process (ILP) filings, and Draft License Application) and by FERC (letters dated March 9, 2018):

Oneida Indian Nation
Ray Halbritter, Nation Representative
Jesse Bergevin, Historian
2037 Dreamcatcher Plaza
Oneida, NY 13421

Oneida Tribe of Indians of Wisconsin
Tehassi Hill, Chairman
N7210 Seminary Road
Oneida, WI 54155

St. Regis Mohawk Tribe
Chief Michael Conners
Chief Beverly Cook
Chief Eric Thompson
412 State Route 37
Akwesasne, New York 13655

The Oneida Indian Nation responded via email (April 4, 2018) that the Nation had no comments or concerns regarding the West Canada Creek Project relicensing. No additional responses were received.

3.0 INFORMATION TO BE PROVIDED BY AN APPLICANT WHO IS AN EXISTING LICENSEE

3.1 Measures Planned to Ensure Safe Management, Operation, and Maintenance of the Project

3.1.1 Safe Management, Operation, and Maintenance

Erie has developed, according to FERC's Guidelines for Public Safety at Hydropower Projects, Public Safety Plans for the West Canada Creek Project, which are revised on a regular basis as conditions warrant. These plans (and revisions) are reviewed and accepted by the FERC New York Regional Office. Erie operates the West Canada Creek Project consistent with its commitment to public and employee safety. Erie attains its safety goals by:

- Providing an in-depth management and technical support organization;

- Establishing and implementing specific operating procedures including standard bulletins;
- Training operations and maintenance personnel;
- Inspecting all Project facilities regularly and monitoring indicators of Project condition and safety;
- Implementing a rigorous inspection and maintenance program for operating equipment and facilities vital to safety;
- Limiting public access and providing warning signs and other public safety devices where Project operations or Project features could endanger the public consistent with FERC's Guidelines for Public Safety at Hydropower Projects (FERC 2011[4]), and Security Program for Hydropower Projects (FERC 2016[5]); and
- Complying with all applicable local, state, and federal laws and regulations regarding the safe operation of industrial and electric facilities.

These measures have been consistently applied and expanded as appropriate to ensure the safe, continued operation and maintenance of the Project. As described in the Project's Public Safety Plan, Erie implements public safety and security measures, such as signage, fencing, alert/warning devices, and boat barriers to protect public safety and for Project security purposes.

3.1.2 Description of Operation During Flood Conditions

A description of operations during flood conditions is provided in Exhibit B of this Final License Application.

3.1.3 Description of Warning Devices Used to Ensure Downstream Public Safety

Erie maintains a Fishermen Alert System (FAS) below the Trenton Powerhouse. The FAS includes one siren/strobe combination located at the Trenton Powerhouse, one siren/strobe combination adjacent to Morgan Dam, and one solar powered strobe located on Dover Bridge. The FAS is activated prior to loading any unit or increasing the flow out of the Trenton Powerhouse. Additionally, the FAS is activated prior to releasing any flows at the Trenton Dam.

[4] FERC. 2011. Guidelines for Public Safety at Hydropower Projects. updated November 29, 2011.
[5] FERC. 2016. Division of Dam Safety and Inspections FERC Security Program for Hydropower Projects Revision 3A.

The system is equipped with a programmable logic controller (PLC)that will either sound the siren or light the strobe. During daylight hours (6 am to 9 pm) the PLC is programmed to activate both the siren and the strobe. During nighttime hours (9 pm to 6 am) the PLC will activate only the strobe and not the siren to minimize the disturbance to local residents during times when they may be sleeping. The FAS can be activated by operations personnel located at Trenton Falls Station, or via a Supervisory Control and Data Acquisition (SCADA) command originated from the North American System Control Center (NASCC). In addition, Erie personnel visibly check the bypass reach prior to initially opening the flood gate.

Erie provides information regarding flow releases at the Trenton Powerhouse via SafeWaters (https://safewaters.com/home), a publicly accessible website and toll-free phone line (1-844-430-FLOW (3569). SafeWaters is updated daily and based on river gauge information, approximate forecasts, and estimated flows.

3.1.4 Discussion of Any Proposed Changes to the Operation of the Project or Downstream Development Affecting the Emergency Action Plan

Erie is not proposing any changes to the operation of the Project that would affect the Emergency Action Plan (EAP). Erie is not aware of any proposed downstream development that would be affected by the Project. Erie submitted the most recent annual update to the EAP for the Project on December 31, 2020.

3.1.5 Description of Monitoring Devices and Description of Maintenance and Monitoring Programs

Headpond and tailwater elevations are monitored at both developments with both electronic instrumentation and visual staff gages. Additional information regarding dam safety and monitoring is provided in the West Canada Creek Dam Safety and Surveillance Monitoring Plan (DSSMP), filed as Critical Energy Infrastructure Information (CEII) with the Commission. The Trenton Development DSSMP was last filed on March 24, 2020, and the Prospect Development DSSMP was last filed on October 11, 2017.

3.1.6 Project's Employee Safety and Public Safety Record

Erie has an excellent record of operating in a work-safe environment. During the past 10 years, there have been no employee deaths, lost-time accidents or recordable injuries at

the Project. There have been no project-related deaths or serious injuries to members of the public within the Project boundary during the past 10 years.

3.2 Current Project Operation

A description of Project operations is provided in Exhibit B of this Final License Application.

3.3 Project History

A description of Project history is provided in Exhibit C of this Final License Application.

3.4 Lost Generation Due to Unscheduled Outages

Table 1 summarizes unscheduled outages and lost generation during the previous 6-year period (2015-2020). This table lists unscheduled outages lasting longer than 24 hours, and therefore, does not include periodic brief unit outages. In order to maximize energy production from the facility, Erie has a consistent record of addressing outages immediately and preventative measures taken in order to prevent future occurrences.

Table 1 Project Unscheduled Outages and Lost Generation, 2015-2020

Unit	Outage Start Time	Outage End Time	Duration (Hours)	Reason for Unit Unavailability
Prospect 1	7/22/15 18:43	7/28/15 14:23	140	Burnt up collector rings.
Trenton 6	6/29/16 8:48	6/30/16 13:51	29	Ground repair.
Trenton 5	12/24/16 13:22	2/14/17 17:00	1252	Penstock flange leakage/failure.
Trenton 6	12/24/16 13:22	2/14/17 17:00	1252	Leak on unit 5, headgate closed.
Trenton 7	12/24/16 13:22	2/14/17 17:00	1252	Leak on unit 5, headgate closed.
Trenton 5	6/29/18 7:39	7/2/18 14:00	78	Burnt lightning arrester.
Trenton 5	1/30/19 6:06	2/1/19 12:54	55	Collector ring brush failure.
Prospect 1	3/15/19 13:38	3/16/19 13:54	24	Rack maintenance.
Prospect 1	5/23/19 20:22	5/25/19 8:45	36	National Grid line trip.
Trenton 5	11/1/19 7:36	11/3/19 11:42	52	Rack maintenance
Trenton 6	11/1/19 7:36	11/3/19 11:42	52	Rack maintenance
Trenton 7	11/1/19 7:36	11/3/19 11:42	52	Rack maintenance

3.5 Record of Compliance

The Project has a good record of compliance with the terms and conditions of the existing license. A review of the Licensees' records indicates no violations of the terms and conditions of the license. In addition, the Licensee has no records of communication from the Commission indicating possible noncompliance.

3.6 Actions Affecting the Public

Erie, as a generator of electric power and a major employer and taxpayer of the region, has strong ties with the communities in the region. Erie has provided charitable giving to several local organizations, such as donations to the Community Foundation of Herkimer and Oneida Counties and the Foothills Rural Community Ministry Food Pantry.

Erie has developed and maintains a public boat launch at the Prospect Reservoir. In addition, Erie, in partnership with the Town of Trenton, provides controlled public access to view the scenic Trenton Falls gorge for one or two weekends in the spring and one or two weekends in the fall annually since 2004[6].

3.7 Ownership and Operating Expenses that would be Reduced if the license were transferred

This section is not applicable because there is no competing application to take over the Project and no proposal to transfer the license.

3.8 Annual fees for use of federal or Native American lands

This section is not applicable because the Project uses no federal or Native American lands.

[6] The Trenton Scenic Trails event was cancelled during 2020 due to COVID safety considerations.

APPENDIX H-1

SINGLE LINE DIAGRAMS

This Material is Critical Energy/Electric Infrastructure Information (CEII). Members of the Public may Obtain Nonpublic or Privileged Information by Submitting a Freedom of Information Act (FOIA) Request.