

October 31, 2019

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)
ILP Relicensing Studies Progress Report #2 and Request to Modify Process
Plan and Schedule to Align with Study Plan Determination**

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 (FERC No. 2701) (Project). 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 current license for the West Canada Creek Project expires on February 28, 2023. Erie is pursuing a new license for the Project using the Commission's Integrated Licensing Process (ILP) pursuant to 18 C.F.R. Part 5 of the Commission's regulations.

On February 28, 2018, Erie filed a Notification of Intent (NOI) and Pre-Application Document (PAD) with the Federal Energy Commission (FERC or Commission) to initiate the ILP. Erie submitted a Proposed Study Plan (PSP) on August 13, 2018, and held a Study Plan meeting on September 11, 2018. Following receipt of comments, Erie submitted a Revised Study Plan (RSP) on December 11, 2018. On March 7, 2019, the Commission issued a Study Plan Determination (SPD) for the Project in accordance with 18 C.F.R. § 5.13(c).

Pursuant to 18 C.F.R. §5.15(b) and as identified in its RSP, Erie filed with FERC the first ILP Relicensing Studies Progress Report for the West Canada Creek Project on July 29, 2019, which summarized activities conducted since the Commission's issuance of the SPD. Erie is filing this second progress report to provide an update of activities that have occurred subsequent to the filing of the first progress report. All relicensing studies listed below are, unless otherwise described, being conducted in accordance with the approved RSP and the Commission's SPD.

As documented in the Study Progress Reports, Erie has conducted ongoing consultation and made progress in all of the required studies. The current Process Plan and Schedule has the schedule for the completion and filing of the Initial Study Report (ISR) on January 10, 2020, which was based on assumption of FERC's issuance of the Study Plan Determination on January 10, 2019, to allow one year for conducting studies and preparing reports. FERC's SPD determination was issued on March 7, 2019, and Erie is respectfully requesting a revision of the Process Plan and Schedule to change the ISR filing date to March 7, 2020, to align with one

year following the issuance of FERC's SPD. This revised schedule will provide Erie the necessary time to conduct data analysis and prepare the study reports.¹ Accordingly, Erie is providing a proposed revised Process Plan and Schedule (Attachment A), for Commission review and approval. Erie is not requesting any schedule revisions to the filing of the Updated Study Report at this time.

Following is a summary of key study activities and consultation Erie has conducted since the previous Study Progress Report for each of the studies. Erie continued consultation with agencies and interested parties regarding aspects of the studies. Erie conducted an agency consultation call on August 9, 2019, with the New York State Department of Environmental Conservation (NYSDEC) and U.S. Fish and Wildlife Service (USFWS) to review preliminary field efforts and data analysis for the Aquatic Mesohabitat Survey, and to review logger and sampling locations for the various studies. Attachment B provides a memo summarizing key components of the call including Erie's presentation.

In addition, Erie reached out to USFWS, NYSDEC, American Whitewater (AW), New York State Fish and Wildlife Management Board (FWMB), New York Trout Unlimited (NYTU), and the Town of Trenton to conduct consultation calls on September 9 and 12, 2019, regarding various components of the Recreation Use, Needs, And Access Study, Whitewater Boating Flow and Access Study, and Aesthetics Flow Assessment. Attendees on the calls included representatives from the USFWS, NYSDEC, AW and NYTU. Attachment C provides a memo summarizing key components of the calls including Erie's presentations.

Aquatic Mesohabitat Assessment Study

- Erie provided a technical memo to the USFWS and NYSDEC on August 3, 2019, summarizing the Aquatic Mesohabitat Survey field efforts, methodology, and preliminary results for the downstream reaches (West Canada Creek from Trenton to confluence with Mohawk River). Erie consulted with USFWS and NYSDEC on August 9, 2019, to review the preliminary results and gained agreement on the locations of level loggers and transect locations. Attachment B provides the technical memo and summary of the consultation discussion.
- Based on consultation, Erie maintained the level logger locations with the exception of moving one logger that was located in P_14 where it was influenced by backwatering from the Newport impoundment, to a location slightly upstream of the Newport impoundment to RR_1 in the riffle-run complex. Erie added an additional level logger to the Prospect bypass reach at location Ri_2 as recommended by NYSDEC and USFWS (see Attachment B).
- Erie conducted on-the-ground visits to selected segments to verify that the object size substrate classification is consistent with empirical observation. Erie conducted transect surveys at each logger location for a total of 9 transects, including 3 within the Prospect

¹ The anticipated ISR filing will include all study reports with the exception of the Whitewater Boating Flow and Access Study. Erie will be implementing the Whitewater Boating field study during the 2020 season, as summarized under the Whitewater Boating Study sub-section. Erie will provide a summary of any additional consultation efforts subsequent to this Study Progress Report associated with the Whitewater Boating Study as part of the ISR filing.

bypass reach and 6 locations in the downstream reach (West Canada Creek from Trenton tailrace to confluence with Mohawk River).

- Erie has completed all field efforts associated with this study. Erie will provide the results of this study as part of the ISR filing.

Macroinvertebrate and Freshwater Mussel Surveys

- Erie consulted with USFWS and NYSDEC on August 9, 2019, and reviewed the sampling locations for the macroinvertebrate and freshwater mussel surveys. Erie was not proposing any surveys within either the Trenton bypass reach, or impoundment given that the substrates were predominantly bedrock ledge that were unsuitable habitat for mussels and sampling would pose a significant safety risk for divers. NYSDEC and USFWS both agreed that sampling in Trenton impoundment or bypass was not necessary, stating that sampling would be conducted upstream at Prospect and also within the downstream reaches (see Attachment B). This is consistent with Erie's RSP which had proposed sampling in the Trenton impoundment and bypass reaches if suitable habitat was present.
- Erie conducted freshwater mussel surveys on September 16 through 20, 2019, and September 23 through 25, 2019. Sampling locations included 10 cells in the Prospect impoundment, 2 locations in the Prospect bypass reach and 20 locations in the downstream reaches (West Canada Creek from Trenton tailrace to confluence with Mohawk River).
- Erie deployed macroinvertebrate sampling traps at 2 locations in the Trenton bypass reach, and 2 kick net sampling locations within the Prospect bypass reach, and conducted kick net sampling at 8 locations in the downstream reach at approximately 4-mile intervals as discussed with the USFWS and NYSDEC during the August 9, 2019, consultation call (see Attachment B). The traps were deployed for approximately 6 weeks from August 21, 2019 to October 3, 2019.
- Erie has completed all field efforts associated with this study. Erie will provide the results of this study as part of the ISR filing.

Impoundment Shoreline Characterization Study

- Erie conducted drone shoreline sampling efforts of both the Prospect and Trenton impoundments on August 6 and 7, 2019, respectively to collect imagery of the major aquatic habitat types along the Project's impoundment shorelines. The survey was conducted at minimum pond level so that habitat parameters within the drawdown zone could be photo documented.
- The Phase 2 survey was conducted between August 20, 2019 through August 22, 2019. Data collected during the drone survey were used to categorize shoreline habitats based on substrates, bank slope and in-water cover. Microhabitat data were collected of the study along 5 transects to document one representative transect for each major type of shoreline slope/littoral substrate/cover condition in the Prospect impoundment.
- As discussed and agreed to with the USFWS and NYSDEC during the August 9, 2019, consultation call, no shoreline transects were conducted for the Trenton impoundment (see

Attachment B). This was due to the vertical bedrock walls with almost vertical littoral zones and safety concerns associated with access to Trenton. This was a deviation from the RSP/SPD in that Erie had anticipated transects (less than 2) at the Trenton impoundment.

- Erie has completed all field efforts associated with this study. Erie will provide the results of this study as part of the ISR filing.

Fish Assemblage Assessment

- Erie conducted additional consultation with USFWS and NYSDEC (August 9, 2019) regarding the locations and timing of the backpack electrofishing surveys, the mesh size and configuration of the gill nets (see Attachment B).
- Erie conducted fish assemblage sampling on September 9 through September 13, 2019, September 17 and September 18, 2019, and September 25 and September 26, 2019, at the Prospect impoundment (gill nets and boat electrofishing), the Trenton impoundment (gill nets) and the West Canada Creek downstream reach (georator and backpack electrofishing).
- Sampling locations included one location in the Prospect bypass reach and 6 locations downstream, including: downstream Morgan dam; downstream of Newport dam; at three locations at confluence of tributary streams but still in the main stem of the West Canada Creek, to include at the confluence of Mill Creek, White Creek, and Cold Brook, respectively.
- The three tributary confluence locations included two sampling locations (Sites A and B) for a total sample length of approximately 750 feet of the river alignment at these locations. Site A began approximately 375 feet downstream, extending to the confluence, and Site B began just upstream of the confluence, extending upstream approximately 375 feet. The fishes collected at Sites A and B were processed separately to allow identification of the type and number of fish caught at each location.
- Sampling of fishes within the impoundments was conducted in accordance with the RSP and SPD, and based on consultation with NYSDEC and USFWS regarding the gill net characteristics (as documented in Study Progress Report 1). Gill nets were used to target fishes using deeper water habitats (greater than 8 feet). Nets were set beginning near the edge of shallow shoreline areas extending into deeper waters.
- Erie has completed all field efforts associated with this study. Erie will provide the results of this study as part of the ISR filing.

Fish Entrainment and Turbine Passage Survival Assessment

- Erie is currently conducting the desktop study and obtaining site specific data as specified for this analysis.
- Erie will provide the results of this study as part of the ISR filing.

Water Quality Study

- Erie has conducted 6 downloads of water quality data from the loggers, collecting data approximately every 2 weeks since the last progress report. Erie will continue to collect information until November 15th, at which time the loggers will be removed.
- Since Progress Report 1, high flows and vandalism destroyed or displaced level loggers located in the Prospect lower bypass reach (replacement occurred on August 22, 2019); upstream of Poland (replacement occurred on August 28, 2019), and upstream of Newport (replacement occurred on August 19, 2019).
- Erie has collected 5 vertical water quality profiles (2-foot increments) from the Prospect impoundment and also collected spot water quality sampling at 6 locations within the Prospect bypass reach on July 25, August 8, September 4, September 18, and October 3, 2019. Spot measurements were collected at locations upstream and within inflows to the Prospect bypass reach to document water influences by tributaries.
- Erie will continue to collect air temperature data at Trenton Station until removal of the water quality loggers.
- Erie will provide the results of this study as part of the ISR filing.

Recreation Use, Need and Access Study

- Erie conducted a consultation call on September 9, 2019, with USFWS, NYSDEC, AW, and NYTU to continue consultation related to the Recreation Use, Needs and Access Study. Attachment C provides a meeting summary and copy of the meeting presentation.
- Spot Counts and Traffic Counter - Facility inventories were completed, and spot counts conducted at the Prospect boat launch and the 10 identified downstream West Canada Creek recreation access sites. A total of 12 spot counts were conducted at these access sites, including 4 weekdays, 4 weekend days, and 4 holiday weekend days – Memorial Day, Fourth of July and Labor Day (2 counts). A traffic counter was installed at Prospect boat launch from Memorial Day weekend through Labor Day to capture information pertaining to vehicular traffic at this site.
- Trenton Trail Days - The fall Trenton Trail Days were held on September 14 and 15, 2019, and visitor intercept surveys were conducted. There were a total of approximately 2,650 visitors and Erie conducted approximately 240 intercept surveys.
- Recreation Visitor Survey - The recreation visitor online survey was closed September 3, 2019, following Labor Day weekend. A total of 211 surveys were completed, including 179 online surveys and 32 surveys collected from the Prospect boat launch drop box.
- Erie has completed all field efforts associated with this study. Erie will provide the results of this study as part of the ISR filing.

Whitewater Boating Flow and Access Study

- Erie conducted a consultation call on September 9, 2019 with USFWS, NYSDEC, AW, and NYTU to continue consultation related to the Whitewater Boating Flow and Access Study. Attachment C provides a meeting summary and copy of the meeting presentation.
- Erie conducted an additional consultation call on September 12, 2019 with the USFWS, NYSDEC, and AW to further review and discuss the land-based assessment of the Prospect bypass reach for the Whitewater Boating Flow and Access Study. Attachment C provides a meeting summary and copy of the meeting presentation.
- Erie and representatives from AW and USFWS conducted in-field review of the Prospect bypass reach on September 24, 2019, to review potential put-in and take-out locations. At the request of AW, Erie collected additional drone footage of the Prospect bypass reach at flows of 500 cfs. Erie anticipates reviewing the drone footage specific to whitewater features and access with representatives from AW and USFWS to determine if additional study is warranted for the Prospect bypass whitewater boating study. Any additional updates will be provided as part of the ISR filing.
- The study area for the downstream controlled flow assessment was identified based on discussion during the May 29, 2019 and September 9, 2019 consultation calls and subsequent calls with AW. The parties identified a segment of the upper reach (above Middleville) and a segment of the lower reach (below Middleville) to provide representative segments for assessment, rather than the entire approximately 28-mile reach from Morgan Dam to Kast Bridge, in order to assist in the logistics of the whitewater boating study.
- Erie conducted additional consultation with AW to identify participants and logistics for the study, assess weather conditions, and determine whether to proceed with the study for the targeted study dates. In addition, Erie monitored Jarvis Project operators and the existing Jarvis Project rule curve operational requirements to determine if targeted flows would be available and could be provided for the study dates.
- In consultation with AW, the whitewater boating controlled flow study was scheduled for several dates, including September 16 and October 7, and 8, October 15 and 16, October 18 and 19, and October 25 and 26, 2019. Each date was postponed due to field conditions that were not conducive to the controlled flow study (high flow rain events and/or high inflow from Jarvis Project outflows) and participant availability. Specifically, Erie and AW consulted the week prior to each scheduled field study date to review USGS Gage data at Kast Bridge (USGS 01346000) and meteorological data (potential upcoming rain events). The lower downstream reach of the study is located just upstream of Kast Bridge, which is approximately 25 miles downstream of Trenton tailrace. Based on level logger data, in-field experience, and input from AW, estimated flow travel time from Trenton tailrace down to Kast Bridge is approximately 6-8 hours depending on flow levels. In addition, based on review of Kast Bridge gage records and review of project operation releases, tributaries in the downstream reach below Trenton (West Canada Creek from Trenton tailrace to confluence with Mohawk River), such as Cincinnati Creek, can contribute significantly to overall flow in the downstream reaches during a significant rain event. Therefore, on occasions when

inflows from Jarvis Project were within levels such that Erie could provide controlled flows within the targeted flow levels (600, 1,000 and 1,400 cfs), the downstream inflows from contributing tributaries were at such levels that the targeted flow levels could not be obtained during the targeted study dates.

- Due to anticipated higher flows, colder weather, shorter daylight periods and associated safety considerations of the participants, Erie, in consultation with AW, is postponing the study until the 2020 study season (anticipated May/June/July 2020) (see Attachment C).
- The delay of the whitewater boating controlled flow study is a deviation from Erie's RSP. Erie has conducted the required consultation, refined the study methodology and logistics, and made multiple attempts to implement the whitewater boating study as summarized above. Erie will consult with AW in the spring of 2020 to determine schedule for implementing the field study and will provide the study report as part of the Draft License Application.

Aesthetics Flow Assessment Study

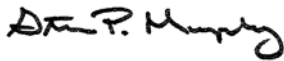
- Erie conducted a consultation call on September 9, 2019 with USFWS, NYSDEC, AW, and NYTU to continue consultation related to the Aesthetics Flow Assessment Study. Attachment C provides the meeting summary and presentation.
- Erie proposed the following targeted aesthetic flow assessment releases: Prospect bypass reach of leakage, 100 cubic feet per second (cfs) and 200 cfs, and Trenton bypass reach of leakage, 200 cfs and 400 cfs. During the September 9, 2019 consultation call, the participants suggested that the evaluation remove the leakage flow. The consulted parties stated that sufficient information was provided for the aesthetic conditions during leakage (and documented in the photographs). The consulted parties recommended that the flow assessment include flows of 100, 200, and 400 cfs at both bypass reaches. Based on previously documented flows, Erie recommended assessing 100, 200 and 400 cfs flows at Trenton bypass, but to assess 100, 200 and 300 cfs flows at Prospect bypass reach for the aesthetics controlled flow study.
- Erie conducted the aesthetic controlled flow study on September 24, 2019. Participants included representatives from USFWS (2 participants), NYSDEC (3 participants), AW, and the Town of Trenton. Environmental Design & Research (EDR), experts in aesthetic resources assessment, facilitated the aesthetics controlled flow field assessment and documentation. Participants completed an assessment form at the selected KOP locations at each controlled flow release. Participants also completed comparative flow post-evaluation form and focus group discussion after reviewing all flows.
- At the request of NYSDEC, following the flow assessment, participants were provided photos of each flow and given the opportunity to provide additional information via a supplemental comparative flow assessment form to afford further opportunity to review and compare the various flows based on the photographic documentation.
- Erie has completed all field efforts associated with this study. Erie will provide the results of this study as part of the ISR filing.

Additional Field Data Collection

- On August 23, 2019, Erie used an acoustic Doppler current profiler (ADCP) to measure the discharge of the minimum flow valve at Trenton Station.

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
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Attachments: Attachment A – Proposed Revised Process Plan and Schedule
Attachment B – Consultation Regarding Aquatic and Fisheries Studies
Attachment C – Consultation Regarding Recreation and Aesthetic Studies

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West Canada Creek Hydroelectric Project (P-2701)

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STUDY PROGRESS REPORT 2

ATTACHMENT A

PROPOSED REVISED PROCESS PLAN AND SCHEDULE

WEST CANADA CREEK HYDROELECTRIC PROJECT (FERC No. 2701)

RELICENSING PROCESS PLAN AND SCHEDULE

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
FERC	Issue Director's Study Plan Determination	3/7/19	5.13(c)
Mandatory Conditioning Agencies	File Any Study Disputes	3/27/19	5.14(a)
Dispute Panel	Select Third Dispute Resolution Panel Member	4/9/19	5.14(d)
Dispute Panel	Convene Dispute Resolution Panel	4/16/19	5.14(d)(3)
Erie	File Comments on Study Disputes	4/21/19	5.14(i)
Dispute Panel	Dispute Resolution Panel Technical Conference	5/2/19	5.14(j)
Dispute Panel	Issue Dispute Resolution Panel Findings	5/16/19	5.14(k)
FERC	Issue Director's Study Dispute Determination	6/05/19	5.14(l)
Erie	First Study Season	Spring – Fall 2019	5.15(a)
Erie	File Initial Study Report	3/7/20	5.15(c)(1)
All Stakeholders	Initial Study Report Meeting	3/22/20	5.15(c)(2)
Erie	File Initial Study Report Meeting Summary	4/6/20	5.15(c)(3)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	5/6/20	5.15(c)(4)
All Stakeholders	File Responses to Disagreements/Amendment Requests	6/5/20	5.15(c)(5)
FERC	Issue Director's Determination on Disagreements/Amendments	7/5/20	5.15(c)(6)
Erie	Second Study Season	Spring- Fall 2020	5.15(a)
Erie	File Preliminary Licensing Proposal (or Draft License Application)	10/1/20	5.16(a)-(c)
All Stakeholders	File Comments on Preliminary Licensing Proposal (or Draft License Application)	12/30/20	5.16(e)

Responsible Party	Pre-Filing Milestone	Date	FERC Regulation
Erie	File Updated Study Report	1/10/21	5.15(f)
All Stakeholders	Updated Study Report Meeting	1/25/21	5.15(f)
Erie	File Updated Study Report Meeting Summary	2/9/21	5.15(f)
Erie	File Final License Application	2/28/21	5.17
All Stakeholders	File Disagreements/Requests to Amend Study Plan	3/11/21	5.15(f)
Erie	Issue Public Notice of Final License Application Filing	3/15/21	5.17(d)(2)
All Stakeholders	File Responses to Disagreements/Amendment Requests	4/10/21	5.15(f)
FERC	Issue Director's Determination on Disagreements/Amendments	5/10/21	5.15(f)

¹ Activities in shaded areas are not necessary if there are no study disputes.

² If the due date falls on a weekend or holiday, the deadline is the following business day.

³ Early filings or issuances will not result in changes to these deadlines.

STUDY PROGRESS REPORT 2

ATTACHMENT B

AQUATICS AND FISHERIES STUDIES CONSULTATION

B1 - MEMO SUMMARIZING AUGUST 9, 2019 CONSULTATION CALL AND PRESENTATION

**B1 - MEMO SUMMARIZING AUGUST 9, 2019 CONSULTATION CALL AND
PRESENTATION**

MEETING/CALL SUMMARY
WEST CANADA CREEK PROJECT (P-2701)

AGENCY CONSULTATION MEETING FOR AQUATIC STUDIES
AQUATIC MESOHABITAT STUDY AND SAMPLING LOCATIONS
Conference Call

ATTENDEES: Dick McDonald - NYSDEC
Dave Erway - NYSDEC
Jana Lantry - NYSDEC
John Wiley - USFWS
Steve Murphy, Brookfield
Bryan Apell – Kleinschmidt
Brandon Kulik – Kleinschmidt
Karen Klosowski – Kleinschmidt

DATE: August 9, 2019

Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company (Brookfield) is currently undergoing relicensing for the West Canada Creek Hydroelectric Project (FERC Project No. 2701) (Project) under the Federal Energy Regulatory Commission (FERC) Integrated Relicensing Process (ILP). Erie conducted this agency consultation call with the New York State Department of Environmental Conservation (NYSDEC) and U.S. Fish and Wildlife Service (USFWS) to review preliminary Aquatic Mesohabitat Survey field efforts and data analysis for the downstream reaches of West Canada Creek (West Canada Creek from Trenton tailrace to confluence with Mohawk River)¹.

In addition to the mesohabitat preliminary results, Erie reviewed the proposed sampling locations for the following field efforts:

- Aquatic Mesohabitat Assessment - adjustment to level logger locations and transect locations;
- Shoreline Characterization Study - shoreline transects;
- Macroinvertebrate and Mussel Surveys - macroinvertebrate and mussel sampling locations; and
- Fish Assemblage Assessment - electrofishing sampling locations.

See materials reviewed during the call in Attachment 1 – Technical Memo, and Attachment 2 Supplemental materials.

¹ Erie conducted the Aquatic Mesohabitat Survey assessment of the bypass reaches during a separate field effort and summarized the preliminary results in a separate technical memorandum. Erie distributed and reviewed the preliminary results with the NYSDEC and the USFWS on July 3, 2019 and July 16, 2019, respectively.

AQUATIC MESOHABITAT SURVEY - DOWNSTREAM REACHES

Brandon Kulik (Kleinschmidt) reviewed the key components of the Aquatic Mesohabitat Survey field efforts, methodology, and preliminary results for the for the downstream reaches (West Canada Creek from Trenton tailrace to confluence with Mohawk River). The purpose of the mesohabitat survey was to map, identify and quantify the mesohabitat types within the Project bypass reaches as the basis to locate level loggers and transects. Mr. Kulik summarized that the assessment included approximately 32 miles of West Canada Creek and the assessment was conducted in the traditional method (i.e., float trip) rather than the drone survey method conducted in the bypass reaches. The timing of the field assessment was conducted when flows were at a low enough level, approximately 500 cubic feet per second (cfs) or less (at Trenton Falls), to enable navigating a canoe and to see mesohabitat breaks and water clarity and depth was suitable to classify the substrates. The field assessment took 3 days; the team traversed upstream to downstream recording data of the mesohabitat breaks, and characterized dominant substrates and cover characteristics

Mr. Kulik stated that the field team applied the same classification, cover type, and substrate (i.e., Brusven scale) approach as conducted in the bypass reach assessment. Two new mesohabitat classifications were added to include run-riffle complexes and run-pool complexes. Run-riffle complexes includes stretches that were predominantly run but that contained shallow, intermittent, short low gradient riffles that become inundated at higher flows. Run-pool complexes contained predominantly run but some intermittent smaller pool areas. Mr. Kulik stated that the data analysis was similar to the bypass reach assessment, with the exception of no drone data assessment and then the distances between habitat unit boundaries, obtained with hand held GPS units were computed in GIS. Mr. McDonald (NYSDEC) questioned the use of ArcView information system as it was no longer available. Mr. Kulik stated that it was ArcGIS not ArcView and that clarification would be updated for the study report.

Mr. Kulik stated that the field team classified the 32-mile study area as having 3 distinct geomorphic reaches, and that the technical memorandum summarizes the key characteristics of these reaches, as well as a summary of the total study area (see Attachment 1). John Wiley (USFWS) stated that the characterization seems fairly accurate characterization. Mr. McDonald (NYSDEC) suggested that for the Attachment A to the memorandum (figures denoting the characteristics of the reaches) first show an overview map of all of the reaches to help orient and provide an overview, to include the location of the level loggers on this figure. Mr. Kulik agreed and stated that one would be added to the study report.

Mr. Kulik reviewed the results for each reach (see Attachment 1). NYSDEC questioned if there were no fines or gravel in the reaches. Mr. Kulik stated that there were patches and small areas on the inside bends and sometimes a small point gravel bar, but that these were not a predominate substrate. Mr. Kulik stated that this survey was intended to be a general characterization of the predominant substrates for the 32-mile reach. He stated that secondary substrates and more detail (i.e., fines, micro-habitat features) would be captured in the transect locations during those field efforts. Mr. McDonald (NYSDEC) also commented that additional information would also be obtained as part of the macroinvertebrate and mussel sampling in these reaches.

LOGGER AND SAMPLING LOCATIONS

LOGGER/TRANSECT LOCATIONS

Mr. Kulik stated that Erie proposed to maintain the current level logger locations with the exception of moving one logger that is currently located in P_14, to a location slightly upstream of the Newport impoundment to RR_1 in the riffle-run complex, as it is currently influenced by the impoundment pool. USFWS and NYSDEC agreed to the locations of the loggers, including adjusting that one logger location as proposed. Mr. Kulik summarized that the loggers would then be placed at: Reach 1: P-1 - pool, upstream of Morgan Dam, Ri_1 - riffle, downstream of Morgan Dam, and RP-1 - run-pool complex; Reach 2: RR_1 - riffle-run upstream of Newport impoundment and Ri_19 - riffle downstream of Newport dam; and Reach 3: Ru_24- run downstream of Herkimer dam. This scheme generally stratifies the logger and transect locations among the three reach segments and in representative mesohabitat types.

Mr. Apell (Kleinschmidt) stated that an additional level logger was added to the Prospect bypass reach at location Ri_2 as recommended by NYSDEC and USFWS on the previous consultation call (July 16, 2019). This will result in three logger and transect locations in the Prospect bypass reach. Steve Murphy (Brookfield) also informed NYSDEC and USFWS that several loggers were lost or damaged during recent high flow event and would be reinstalled after new equipment arrives, likely week of August 19. The adjustment for level logger upstream of Newport impoundment would be made when the replacement loggers were installed.

In terms of transect locations in Prospect impoundment, Erie will conduct sampling according to what was proposed in the Revised Study Plan, one transect accounting for each major type of shoreline slope/littoral substrate/cover condition documented during the survey with and anticipated minimum of 4 transects. For the Trenton impoundment, due to the vertical bedrock walls with no littoral zones and safety concerns associated with access to Trenton, no transects will be conducted for the Trenton impoundment.

NYSDEC and USFWS commented that the graphics used for the substrates and the orientation of the maps made it difficult to discern substrate type and suggested using dots or other type of graphic rather than lines. Mr. Kulik stated that the figures would be updated for the study report. Mr. Kulik stated that field efforts to conduct the transects for the Aquatic Mesohabitat Survey were targeted for the week of August 19.

MACROINVERTEBRATE SAMPLING LOCATIONS

Mr. Apell reviewed the macroinvertebrate sampling locations that include 2 locations in Prospect bypass reach (Ri-5 and Ru_3, see Attachment 1, Attachment B) and 8 locations in the downstream reach at approximately 4-mile intervals (see Attachment 1, Attachment C). He stated that the locations were selected to meet NYSDEC guidelines and were in riffle-run type areas. Mr. Apell stated that Erie is not proposing conducting macroinvertebrate sampling in the Trenton bypass reach given low abundance of suitable habitat (96 percent of the substrate was bedrock or large boulder) and safety concerns. NYSDEC and USFWS stated even if low value habitat, there is some habitat and would be helpful to have some data, however, the safety concerns were also acknowledged.

Following further discussion of the Trenton bypass, Erie agreed to conduct two sampling at locations that where safer access was possible, including within the vicinity between P_11 and Ri_11, and within the vicinity of M_14. Participants on the call reviewed sampling methods would likely include substrate traps left deployed for 5-week period per NYSDEC sampling protocols. All parties acknowledged that although the macroinvertebrate sampling was starting late in the field season, there was still an adequate amount of field sampling season available.

MUSSEL SAMPLING LOCATIONS

Mr. Apell reviewed the mussel sampling locations to include 10 cells in the Prospect impoundment, 2 locations in the Prospect bypass reach (P_4 and P_8, see Attachment 1, Attachment B), and 20 locations in the downstream reaches (see Attachment 1, Attachment C). Mr. Apell stated that Erie was not proposing any surveys within either the Trenton bypass reach or impoundment given that the substrates were predominantly bedrock ledge that were unsuitable habitat for mussels and sampling would pose a significant safety risk for divers.

The participants reviewed pictures of the Trenton impoundment that were taken earlier that week as part of the Shoreline Characterization Study field efforts (see Attachment 1, Supplement). These pictures showed vertical bedrock walls with no littoral zone. Mr. Murphy stated that the field effort for the Trenton impoundment characterization included approximately 20 hours of safety protocols and field preparation in order to conduct just 1 hour of field efforts. NYSDEC and USFWS questioned and Erie confirmed that the photos and field efforts reflected a 12-foot drawdown at the Trenton impoundment. NYSDEC and USFWS both agreed to no sampling in Trenton impoundment or bypass, stating that sampling would be conducted upstream at Prospect and also within the downstream reaches.

FISH ASSEMBLAGE ASSESSMENT ELECTROFISHING SAMPLING LOCATIONS

Mr. Apell reviewed proposed electrofishing sampling locations, to include one location in the Prospect bypass reach (area between Ri_7 and P-7, Attachment 1 Attachment C), and 6 locations downstream: downstream Morgan dam; downstream of Newport dam; at three locations at confluence of tributary streams but still in the main stem of the West Canada Creek, to include at the confluence of Mill Creek, White Creek, and Cold Brook, respectively; and sampling over at least one of the unique mesohabitat types.

Mr. Wiley stated that USFWS was seeking information to address two key questions: (1) how does the mainstem fishery change from coldwater (i.e., trout) to warmwater (i.e., smallmouth bass) and where is the transition zone, and (2) to what extent do the coldwater tributary confluences provide refugia for the mainstem fishery. Participants on the call reviewed the locations and discussed having two of the tributary confluence locations include two sampling locations (A and B) with one at the confluence location and one approximately 100 to 200 yards upstream in the mainstem of the confluence sampling location. The sampling at the A and B sites would be collected and identified separately to allow identification of the type and number of fish caught at each location.

The participants reviewed the sampling locations and adjusted them to the following locations: Ri_2, Gi_1 (site A and B), Ru_10 (site A and B), Ri_17, RR-3 (moved from Ri_20), and RR_13. The participants discussed sampling approach and Mr. Apell stated either backpack or georator equipment would be used. Mr. McDonald questioned and Mr. Apell confirmed that conductivity would be measured prior to sampling and equipment adjusted accordingly.

Jana Lantry (NYSDEC) questioned about gill net mesh sizes. Ms. Klosowski (Kleinschmidt) stated that the information had been discussed on the previous consultation call, and that the specific gill net sizes had been provided to NYSDEC and USFWS via email and in the Study Progress Report 1. Ms. Klosowski stated she would forward information to Ms. Lantry. Ms. Lantry questioned if Kleinschmidt had collector's permit and offered assistance if needed. Mr. Apell stated that Kleinschmidt had submitted an application and would follow-up if any additional assistance was needed.

ATTACHMENT 1
CONSULTATION CALL (AUGUST 9, 2019)
PRESENTATION MATERIALS

WEST CANADA CREEK PROJECT (P-2701)
AQUATIC MESOHABITAT SURVEY PRELIMINARY DATA
TRENTON TO THE MOHAWK RIVER CONFLUENCE

To: Todd Phillips, NYSDEC
John Wiley, USFWS

FROM: Brandon Kulik, Kleinschmidt

CC Steve Murphy, Brookfield
Karen Klosowski, Kleinschmidt
Bryan Apell, Kleinschmidt

SUBJECT: Aquatic Mesohabitat Survey - Preliminary Summary of Field Efforts and Data Analysis for West Canada Creek Downstream Reaches

DATE: August 07, 2019

Erie Boulevard Hydropower, L.P. (Erie), a Brookfield Renewable company (Brookfield) is currently undergoing relicensing for the West Canada Creek Hydroelectric Project (Project No. 2701) (Project) under the Federal Energy Regulatory Commission (FERC) Integrated Relicensing Process (ILP). As part of this relicensing process, Erie is conducting nine studies during the 2019 study season. This memorandum summarizes the Aquatic Mesohabitat Survey field efforts, methodology, and preliminary results for the downstream reaches (West Canada Creek from Trenton tailrace to confluence with Mohawk River). The field assessment for the bypass reaches was conducted during a separate field effort and summarized in a separate technical memorandum, distributed to the New York State Department of Environmental Conservation (NYSDEC) and the U.S. Fish and Wildlife Service (USFWS) on July 3, 2019 and reviewed with NYSDEC and USFWS on July 16, 2019.

The purpose of the Aquatic Mesohabitat Survey is to map the distribution and abundance of aquatic mesohabitat, quantitatively characterize the types of aquatic habitats that occur within the Project study area, and provide a basis for locating level loggers and transects.

The study area includes:

1. Prospect bypass reach - extends from the toe of Prospect dam downstream to Trenton impoundment.
2. Trenton bypass reach - extends from the toe of Trenton dam downstream to Trenton tailrace.
3. West Canada Creek Trenton to Newport - extends from the Trenton tailrace downstream to the Newport Project impoundment.
4. West Canada Creek downstream of Newport - extends from the Newport project tailwater downstream to the confluence with the Mohawk River.

As discussed during the April 18, 2019 agency consultation call with NYSDEC and USFWS, the approach for field data collection and assessment for the lower reaches of West Canada Creek from Trenton to confluence with Mohawk River required field conditions of flows less than approximately 500 to 700 cubic feet per second (cfs) to adequately delineate habitat boundaries.

Field efforts to inform placement of level loggers for the downstream reaches by the July 1, 2019 deadline identified by the FERC Study Plan Determination (SPD) were delayed due to the weather conditions of rain and high flows. Erie monitored flows and deployed field teams for the assessment of the lower reaches as soon as target flows in the downstream reach were achieved during the week of July 8, 2019. Erie is providing this technical memorandum in anticipation of a consultation call with NYSDEC and USFWS to review and discuss these data. In the interim, Erie deployed level loggers in this reach at the locations indicated for the water quality data loggers and will consult with the NYSDEC and USFWS about potential adjustment of this placement following the consultation.

FIELD DATA COLLECTION

Data were collected via canoe from July 9 through 11, 2019 via traditional methodology (float trip), with the discharge of the Project set daily at 500 cfs or less, which resulted in flows no higher than 700 cfs (due to cumulative tributary inflow) occurring further downstream at the Kast Bridge U.S. Geological Survey (USGS) gage. This flow was high enough to facilitate safe and efficient navigation, but low enough to be wadable in shallows, enabled distinct breaks in mesohabitat units to be readily observed, and substrates to be viewed. Both lighting and water clarity quality were suitable for viewing.

Two aquatic biologists traversed West Canada Creek in a 15-foot canoe, and recorded data using a Trimble Geo 5T handheld global positioning system (GPS) unit equipped with a data dictionary that allowed the user to record menu-driven information about habitat type, dominant substrate, and cover quality, as well as additional annotations as necessary. The canoe was paddle in a downstream direction and paused at each mesohabitat boundary to collect a boundary waypoint. The canoe was maneuvered broadly through each segment so that substrate could be characterized.

Substrate was visually observed through a combination of viewing scope, wading, and/or by probing deeper areas with a 6-foot rod. It was occasionally not possible to define substrates in deep pools, in which case “unknown” was recorded. At the end of traversing each mesohabitat unit, the crew discussed and agreed to which substrate(s) were dominant and recorded the information prior to entering the next unit. A handwritten data sheet and large-format river charts were also used as field aids to record each individual habitat unit observed during the float. Mesohabitat segments were field-referenced to the nearest 0.1 river-mile (RM) as indicated on the charts, with RM 0.0 being the confluence of West Canada Creek with the Mohawk River downstream from Herkimer, New York.

Potential mesohabitat types were classified as:

- Pool – placid, slow flowing, well-defined hydraulic control;
- Riffle – fast flowing, broken or turbulent water surface, no hydraulic control;
- Run – moderate flowing, unbroken, shallow (less than 3-feet-deep), hydraulic control;

- Run-riffle complex – runs contiguously bracketing short, low-gradient riffles that would be submerged into the adjacent runs at higher flows;
- Run-pool complex - an alternating run and pool sequence with gradual, rather than sharply defined boundaries that may shift somewhat at different flows;
- Glide – fast/moderate flowing, deep, hydraulic control;
- Minor – these included high-gradient rapids, and other features that were small in area or uncommon features;
- Ledge – areas of expansive horizontal bedrock; and
- Drop – small, sharp vertical wall that is too small to be classified as a waterfall.

Substrates were classified as: bedrock, boulder (small, medium or large), rubble (small, medium large), cobble (small, medium, large), and drop using the Brusven scale (Bovee, 1982)¹. Cover types included: object cover (boulders, logs, snags); turbulence/foam; depth; and/or overhead (tree canopy, undercut bank, overhangs). Cover quality was qualitatively classified as: high quality cover (typically dense boulders - i.e., greater than 50 percent of the stream cross-section), logs, pool depth greater than 4 feet, and/or tree canopy); low nonexistent cover (exposed ledge, scattered or small boulders and cobbles, and pools less than 1-foot-deep); and medium cover (intermediate between the other two categories).

DATA ANALYSIS

Spatial data were downloaded and entered into an ArcView graphic information system (GIS) platform following quality assurance/quality control (QA/QC). Linear distance of each mesohabitat unit was computed to the nearest foot based on the distance between boundaries following the thread of the Creek. Relative abundance of each mesohabitat was computed as the sum of all similar mesohabitat units.

PRELIMINARY RESULTS

West Canada Creek flows south-southeasterly for approximately 33 miles between Trenton tailrace and the confluence with the Mohawk River, through rolling hills composed of rural forest, agriculture and residential land. This portion of West Canada Creek is free-flowing except for three low head dams in Barneveld, Newport, and Herkimer, New York. Downstream of the Trenton Dam (approximately 1 mile) is the Morgan Dam (Nine Mile Creek Feeder Dam). The Morgan Dam is owned and operated by the New York State Canal Corporation (NYSCC) and is used to divert navigation flows into the Nine Mile Feeder Canal.

Approximately 13 miles downstream of the Morgan 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-kilowatt (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. West Canada

¹ The Brusven scale (Bovee, 1982) is a modification of the originally-proposed Wolman scale (Wolman 1954) that classifies gravels and cobbles into subcategories compatible with most Habitat Suitability Indices used in instream flow studies.

Creek is dominated by low to moderate gradient slope, and alluvial substrates such as gravel, cobble and boulder. There are a few areas where the channel is controlled by bedrock, but these are infrequent and short in length. For purposes of this mesohabitat assessment it appears there are three distinct segments, including: (1) Trenton to Newport; (2) Newport to Kast Bridge, and (3) Kast Bridge to Mohawk River.

Reach 1- Trenton Tailrace to Newport. From Trenton Development tailrace downstream to approximately two miles above Newport, the river is generally approximately 120 feet or less in width and dominated by cobble. There are distinct riffles, runs and occasional pools. Banks are generally forested with little evidence of erosion or slumping. Photo 1 is representative of the location downstream of Morgan Dam.



PHOTO 1 WEST CANADA CREEK, APPROXIMATELY ONE MILE DOWNSTREAM FROM MORGAN DAM

Reach 2- Newport to Kast Bridge. Gradient increases in this section downstream from below Newport to Kast Bridge. At RM 22 the creek bends 90 degrees south by a ledge outcrop, descends a riffle that begins as a steep rapid and enters a reach with extensive riffles and boulder substrates. This section has several long runs punctuated by short, low-gradient riffles that are inundated at slightly higher flows, and substrates such as large cobble and boulder predominate; channel width is variable and exceeds 200 feet in places. There are occasional higher gradient steep rapids that extend for short distances. There is a USGS gage at Kast Bridge (gage no. 01346000). Photos 2 and 3 are representative of the location downstream of Newport.



PHOTO 2 WEST CANADA CREEK, LOOKING UP- AND DOWNSTREAM APPROXIMATELY TWO MILES DOWNSTREAM FROM NEWPORT



PHOTO 3 WEST CANADA CREEK, RIFFLE COMPLEX LOOKING UP- AND DOWNSTREAM APPROXIMATELY TWO MILES UPSTREAM FROM KAST BRIDGE

Reach 3- Kast Bridge to Mohawk River. Below Kast Bridge (RM 7.2) the gradient eases, boulders are less prevalent, and the creek is consistently at least 200-feet-wide. At Herkimer, the river enters the Mohawk River floodplain, confluences with a side arm of the Mohawk at RM 3.0, and abruptly follows an easterly course parallel to the Mohawk River, somewhat meandering through alluvial lowlands. Substrates in this lowermost reach are dominated by large gravel and small cobble. Photo 4 is representative of the location downstream of Herkimer Dam.



PHOTO 4 WEST CANADA CREEK, 0.5 MILE UPSTREAM AND ONE MILE DOWNSTREAM FROM HERKIMER DAM

TRENTON TAILRACE TO CONFLUENCE WITH MOHAWK RIVER (ALL REACHES COMBINED)

The entire study area between Trenton tailrace and the confluence with the Mohawk River, is a total of 172,656 feet (32.7 miles). Most of the overall mesohabitat is comprised of run-riffle complex (30 percent), run (25 percent) and riffle (17 percent), and minor mesohabitats that include rapids and backwaters (Table 1). Detailed mesohabitat, substrate and cover maps are presented in Attachment A. Two re-occurring mesohabitats were encountered in addition to rapids, riffle, run, pool, glide, and backwater mesohabitats. These were riffle-run complex and run-pool complex.



PHOTO 5 EXAMPLE OF A SEGMENT OF A LOW-GRADIENT RIFFLE-RUN COMPLEX ON WEST CANADA CREEK

**TABLE 1 RELATIVE ABUNDANCE OF MESOHABITAT UNITS IN WEST CANADA CREEK
BETWEEN TRENTON TAILRACE AND THE MOHAWK RIVER CONFLUENCE**

MESOHABITAT	LENGTH (FT)	PERCENT OF TOTAL
Riffle-Run complex	51,216	29.7%
Run	42,768	24.8%
Riffle	29,568	17.1%
Pool	19,008	11.0%
Run-Pool complex	14,256	8.3%
Rapids	8,448	4.9%
Backwater	5,280	3.1%
Glide	2,112	1.2%
Total	172,656	100%

Substrates are diverse, but are dominated by large, medium and small cobble (45 percent), followed by boulder (18 percent) and small gravel (8 percent) (Table 2). In some areas where no single substrate was dominant, large gravel and small cobble, and large cobble and small boulder were classified as co-dominant. Fines (6 percent) and bedrock (4 percent) were uncommon. Detailed mesohabitat, substrate and cover maps are presented in Attachment A.

**TABLE 2 RELATIVE ABUNDANCE OF DOMINANT SUBSTRATES IN WEST CANADA CREEK
BETWEEN TRENTON TAILRACE AND THE MOHAWK RIVER CONFLUENCE**

SUBSTRATE	LENGTH (FT)	PERCENT OF TOTAL
Large Cobble	40,392	23.4%
Small Cobble	19,800	11.5%
Medium Cobble	16,632	9.6%
Small Boulder	16,368	9.5%
Large Boulder	15,312	8.9%
Small Gravel	14,256	8.3%
Small Cobble/ Gravel	13,728	8.0%
Fines	10,032	5.8%
Bedrock	7,392	4.3%
Large Cobble/ Small Boulder	5,280	3.1%
Cobble/Fines	4,224	2.4%
Cobble/Boulder	3,168	1.8%
Large Cobble/ Bedrock	2,640	1.5%
Unknown	1,584	0.9%
Large Gravel	1,320	0.8%
Medium Cobble/Small Cobble	528	0.3%
Total	172,656	100%

REACH 1- TRENTON TAILRACE TO NEWPORT

Of a total of 56,496 feet (10.7 miles) of the upper reach area run, the predominant mesohabitats are run (37 percent) and run-pool complex (25 percent); followed by pools (19 percent), and riffles (16 percent) (see Table 3). Glide mesohabitat is a minor feature (3 percent)

TABLE 3 RELATIVE ABUNDANCE OF MESOHABITAT UNITS IN THE UPPER WEST CANADA CREEK BETWEEN TRENTON TAILRACE TO ABOVE NEWPORT

MESOHABITAT	LENGTH (FT)	PERCENT OF TOTAL
Run	21,120	37.4%
Run-Pool Complex	14,256	25.2%
Pool	10,560	18.7%
Riffle	8,976	15.9%
Glide	1,584	2.8%
Total	56,496	100%

Small gravel, and various sized cobbles collectively comprise 80 percent of the dominant substrates in this reach (Table 4). Fines contribute less than 10 percent, and large gravel, bedrock and boulders collectively contribute less than 10 percent to dominant substrates in this reach.

TABLE 4 RELATIVE ABUNDANCE OF DOMINANT SUBSTRATES IN THE UPPER WEST CANADA CREEK BETWEEN TRENTON TAILRACE TO ABOVE NEWPORT

SUBSTRATE	LENGTH (FT)	PERCENT OF TOTAL
Small Gravel	14,256	25.2%
Small Cobble	13,464	23.8%
Large Cobble	9,768	17.3%
Medium Cobble	7,656	13.6%
Fines	4,752	8.4%
Small Boulder	2,112	3.7%
Bedrock	1,584	2.8%
Large Boulder	1,584	2.8%
Large Gravel	1,320	2.3%
Total	56,496	100%

REACH 2 - NEWPORT TO KAST BRIDGE

The middle reach area consists of a total of 78,144 feet (14.8 miles), the reach is comprised of riffle-run complex (Photo 6) (50 percent), followed by run (15 percent); riffle (14 percent); and rapids (11 percent) as the next most common mesohabitat (Table 5). This reflects the higher-gradient character of this creek segment. Pool and glide mesohabitats are minor features.



PHOTO 6 **EXAMPLE OF A SEGMENT OF A LOW-GRADIENT RIFFLE-RUN COMPLEX ON THE MIDDLE REACH OF WEST CANADA CREEK**

TABLE 5 **RELATIVE ABUNDANCE OF MESOHABITAT UNITS IN WEST CANADA CREEK FROM NEWPORT TO KAST BRIDGE**

MESOHABITAT	LENGTH (FT)	PERCENT OF TOTAL
Riffle-Run Complex	39,072	50.0%
Run	11,616	14.9%
Riffle	11,088	14.2%
Rapids	8,448	10.8%
Pool	7,392	9.5%
Glide	528	0.7%
Total	78,144	100%

Large cobble is the single most dominant substrate (23 percent) in this reach, and various sized boulders collectively comprise 36 percent of dominant substrates (Table 6). Fines, small cobble, bedrock, and various mixed co-dominant substrates each contribute less than 10 percent to dominant substrates in this reach.

**TABLE 6 RELATIVE ABUNDANCE OF DOMINANT SUBSTRATES IN WEST CANADA CREEK
FROM NEWPORT TO KAST BRIDGE**

SUBSTRATE	LENGTH (FT)	PERCENT OF TOTAL
Large Cobble	17,952	23.0%
Small Boulder	14,256	18.2%
Large Boulder	13,728	17.6%
Medium Cobble	5,808	7.4%
Bedrock	5,808	7.4%
Cobble/Fines	4,224	5.4%
Fines	3,696	4.7%
Large Cobble/ Small Boulder	3,168	4.1%
Cobble/Boulder	3,168	4.1%
Large Cobble/ Bedrock	2,640	3.4%
Small Cobble	1,584	2.0%
Unknown	1,584	2.0%
Medium Cobble/Small Cobble	528	0.7%
Total	78,144	100%

REACH 3- KAST BRIDGE TO CONFLUENCE WITH MOHAWK RIVER

Of a total of 38,016 feet (7.2 miles) of the lower reach area, riffle-run complex (32 percent); run (26 percent) and riffle (25 percent) are the next most common mesohabitats and are almost evenly represented (Table 7). Pool and backwater mesohabitats are minor features.

**TABLE 7 RELATIVE ABUNDANCE OF MESOHABITAT UNITS IN WEST CANADA CREEK
FROM KAST BRIDGE, NY TO MOHAWK RIVER CONFLUENCE**

MESOHABITAT	LENGTH (FT)	PERCENT OF TOTAL
Riffle-Run Complex	12,144	31.9%
Run	10,032	26.4%
Riffle	9,504	25.0%
Backwater	5,280	13.9%
Pool	1,056	2.8%
Total	38,016	100%

Small cobble/gravel is the single most dominant substrate (36 percent) in this reach, followed by large cobble (33 percent) and small cobble (13 percent); collectively these three categories account for 82 percent of dominant substrates in this reach (Table 8). Fines, medium cobble, large cobble/small boulder co-dominant substrates each account for less than 10 percent of dominant substrates in this reach.

**TABLE 8 RELATIVE ABUNDANCE OF DOMINANT SUBSTRATES IN WEST CANADA CREEK
FROM KAST BRIDGE TO MOHAWK RIVER CONFLUENCE**

SUBSTRATE	LENGTH (FT)	PERCENT OF TOTAL
Small Cobble/ Gravel	13,728	36.1%
Large Cobble	12,672	33.3%
Small Cobble	4,752	12.5%
Medium Cobble	3,168	8.3%
Large Cobble/ Small Boulder	2,112	5.6%
Fines	1,584	4.2%
Total	38,016	100%

LOGGER AND SAMPLING LOCATIONS

LOGGER/TRANSECT LOCATIONS

As per Erie's Revised Study Plan (RSP), Erie deployed two level loggers within the Prospect bypass reach and at six locations downstream from Morgan Dam². The targeted locations of the level loggers were reviewed and discussed during the April 18, 2019 consultation call with USFWS and NYSDEC.

Onset model HOBO Water Level (13 feet) - U20L level loggers were deployed at six locations in the downstream reach of West Canada Creek between April 10 and April 12, 2019. Deployment included encasing the logger in a perforated polyvinyl chloride (PVC) stilling basin which was affixed to a concrete cinderblock in a vertical orientation. Each cinderblock was secured to the shoreline using a ¼-inch steel cable. Deployment sites with natural features in the river that provide protection from high flows and debris, (e.g., downstream from a large boulder or shoreline escarpment) were selected to avoid gear loss or damage. The level loggers are intended to record stage-discharge data in representative habitat in near proximity to where habitat transect data will be subsequently gathered.

The locations of the level loggers for the Prospect bypass reach were discussed with NYSDEC and USFWS during the July 16, 2019 consultation call. During this call, USFWS (John Wiley) recommended that the upper logger be relocated to the Ri_2 reach or some alternative method be implemented to obtain data for this reach relative to flow levels. Erie proposes placing an additional level logger within the Ri_2 reach to collect additional data regarding this location. Attachment B provides the mesohabitat maps reviewed during this consultation call with the updated level logger locations (i.e., addition of level logger in Ri_2).

As documented above, the downstream study area (West Canada Creek from Trenton tailrace to confluence with Mohawk River) is comprised of three segments. The level logger locations were provisionally selected to stratify logger locations among the three segments of the study and were installed to meet the FERC study plan determination mobilization dates. This resulted in

² As discussed during the April 18, 2019 consultation call, Erie deployed level loggers at two locations in the Prospect bypass reach, one at Prospect tailrace, one at Trenton tailrace, and six downstream between Trenton tailrace and the confluence of West Canada Creek with the Mohawk River.

deployment at a time of high river flow that obscured mesohabitat details. Reviewing these locations with the benefit of the mesohabitat survey information, it is evident that the level logger located at RM 19.7 (located in the Newport-Kast Bridge segment) appears to be potentially influenced by backwatering from the Newport Dam impoundment. Therefore, Erie proposes to relocate this level logger upstream of the Newport dam area (~RM 20.3), in a riffle-run complex mesohabitat, which represents over 50 percent of the mesohabitat in this segment. The other five level loggers are located in representative mesohabitats within each respective segment, and therefore, Erie proposes that they remain in their existing locations. Attachment C provides the locations of the level loggers in these reaches relative to the identified mesohabitat units.

MACROINVERTEBRATE SAMPLING LOCATIONS

As proposed in Erie's RSP and discussed during the April 18, 2019 consultation call, to the extent practical, Erie will collect two macroinvertebrate samples in the Prospect bypass reaches, and 8 locations downstream of Trenton distributed at approximately 4-mile intervals. The exact location selected for sampling will target representative mesohabitats (riffle and run) with flowing waters in the littoral zone of the Project's bypass reaches and downstream of the Trenton tailwater to the confluence with the Mohawk River. Sampling is proposed on hard bottom substrate composed of rock, rubble, gravel, and sand; in flowing waters (velocity ≥ 40 cm/sec) less than 1 m deep.

The Trenton bypass reach is largely dominated by large substrates where bed rock and large boulder make up 96 percent of the dominate substrates. Only 4 percent of the reach (Attachment B, Ri_12) meets the criteria for suitable macroinvertebrate sampling habitat, which includes areas of flowing waters over hard substrates containing suitable interstitial habitat (e.g., small boulder (rock), cobble, gravel, and sand) as described in the NYSDEC sampling protocol (NYSDEC 2018). Given the low abundance of suitable habitat and the safe access concerns, Erie is not proposing to collect macroinvertebrate samples in the Trenton bypass reach. Attachment B provides the approximate sampling locations for the macroinvertebrate for the Prospect bypass reach and Attachment C for the downstream reaches (West Canada Creek from Trenton tailrace to confluence with Mohawk River).

MUSSEL SAMPLING LOCATIONS

For the Prospect impoundment up to 10 cells will be sampled to be located in areas containing suitable habitat (i.e., wetted habitat with substrates of cobble size or smaller). For the Prospect bypass reach, two locations will be sampled in P_4 and P_8, as indicated in Attachment B. The downstream reaches will include 20 sampling locations that were randomly selected from identified areas of suitable substrate for mussels as described in the RSP and modified by the SPD. The Trenton bypass reach is dominated by large substrates, bed rock (85 percent), large boulder (11 percent) and small boulder (4 percent), which are unsuitable habitat for mussels. In addition, the Trenton impoundment is dominated by bedrock ledge substrates with unsuitable habitat for mussels, and poses a significant safety risk for divers for field sampling due to the narrow and gorge-like configuration of the impoundment. As such, Erie is not proposing mussel sampling in the Trenton impoundment or bypass reach. Attachment B provides the approximate sampling locations for the mussel surveys for the Prospect bypass reach and Attachment C for the downstream reaches (West Canada Creek from Trenton tailrace to confluence with Mohawk River).

FISH ASSEMBLAGE ASSESSMENT ELECTROFISHING SURVEY LOCATIONS

FERC's SPD requires that Erie sample at four locations to include: one survey location in the Prospect bypassed reach, two survey locations between Morgan dam and Newport, and one survey location downstream of Newport dam. As discussed during the April 18, 2019 consultation call, NYSDEC and USFWS requested modification of the sample locations to include at least 6 locations: downstream Morgan dam; downstream of Newport dam; at three locations at confluence of tributary streams but still in the main stem of the West Canada Creek, to include at the confluence of Mill Creek, White Creek, and Cold Brook, respectively; and sampling over at least one of the unique mesohabitat types. Erie proposes to conduct sampling approximately at the six locations requested by the resource agencies during the April 18, 2019 consultation. The methods employed will be consistent with those described in the RSP and as modified in FERC's SPD. The Prospect bypass and downstream reaches will be sampled using a combination of backpack electrofishing, and minnow traps or seine netting in deeper areas (>3 feet). Minnow traps will be baited and set approximately 24 hours. Attachment B provides the approximate sampling locations for the electrofishing surveys for the Prospect bypass reach Attachment C for the downstream reaches (West Canada Creek from Trenton tailrace to confluence with Mohawk River)

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- Wolman, M.G., 1954. A Method of Sampling Coarse River-Bed Materials. Trans. Am. Geophys. Union, 35: 951-956.
- NYSDEC 2018 (updated May 2018). NYSDEC Division of Water, Standard Operating Procedure: Biological Monitoring of Surface Waters in New York State. 187 pp.

WEST CANADA CREEK PROJECT (P-2701)

AGENCY CONSULTATION CALL AUGUST 9, 2019 - SUPPLEMENTAL INFORMATION

Photos 1 through 6 provide representative photos taken at the Trenton Impoundment during the 12-foot drawdown for the Impoundment Shoreline Characterization Study on August 7, 2019. Figure 1 denotes the locations of these photos.

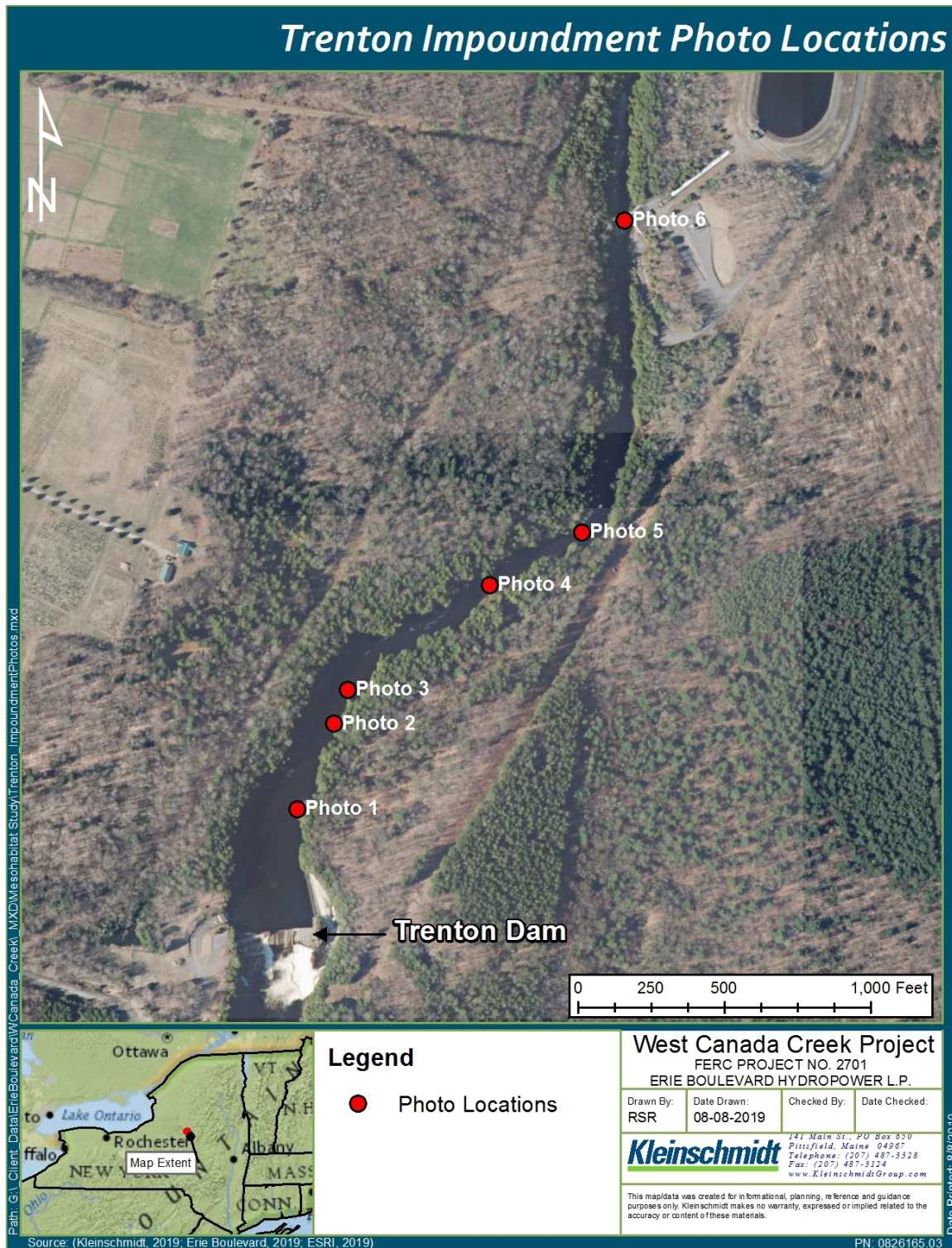


FIGURE 1 LOCATION OF TRENTON IMPOUNDMENT AUGUST 7, 2019 FIELD STUDY PHOTOS



PHOTO 1 LOWER TRENTON IMPOUNDMENT SHORELINE



PHOTO 2 LOWER TRENTON IMPOUNDMENT LOOKING DOWNSTREAM TOWARDS DAM

WEST CANADA CREEK PROJECT (P-2701)
AGENCY CONSULTATION CALL AUGUST 9, 2019 - SUPPLEMENTAL INFORMATION



PHOTO 3 LOWER SECTION OF TRENTON IMPOUNDMENT



PHOTO 4 MIDDLE SECTION OF TRENTON IMPOUNDMENT



PHOTO 5 MIDDLE SECTION OF TRENTON IMPOUNDMENT



PHOTO 6 UPPER TRENTON IMPOUNDMENT DOWNSTREAM OF PROSPECT TAILRACE

WEST CANADA CREEK PROJECT (P-2701)

AGENCY CONSULTATION CALL AUGUST 9, 2019 - SUPPLEMENTAL INFORMATION

Figure 2 denotes the location of the existing and proposed new location for the level logger upstream of the Newport Impoundment.

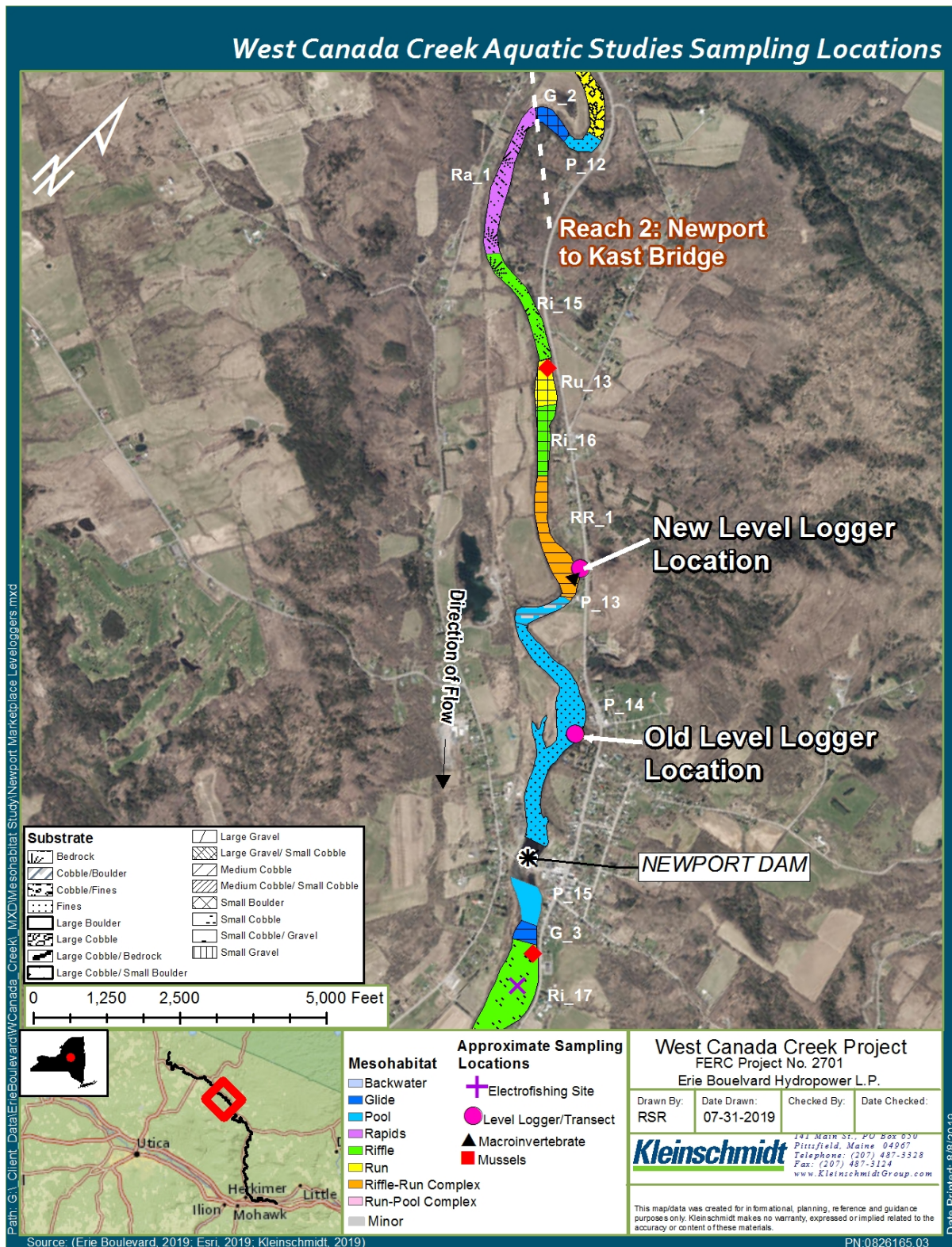
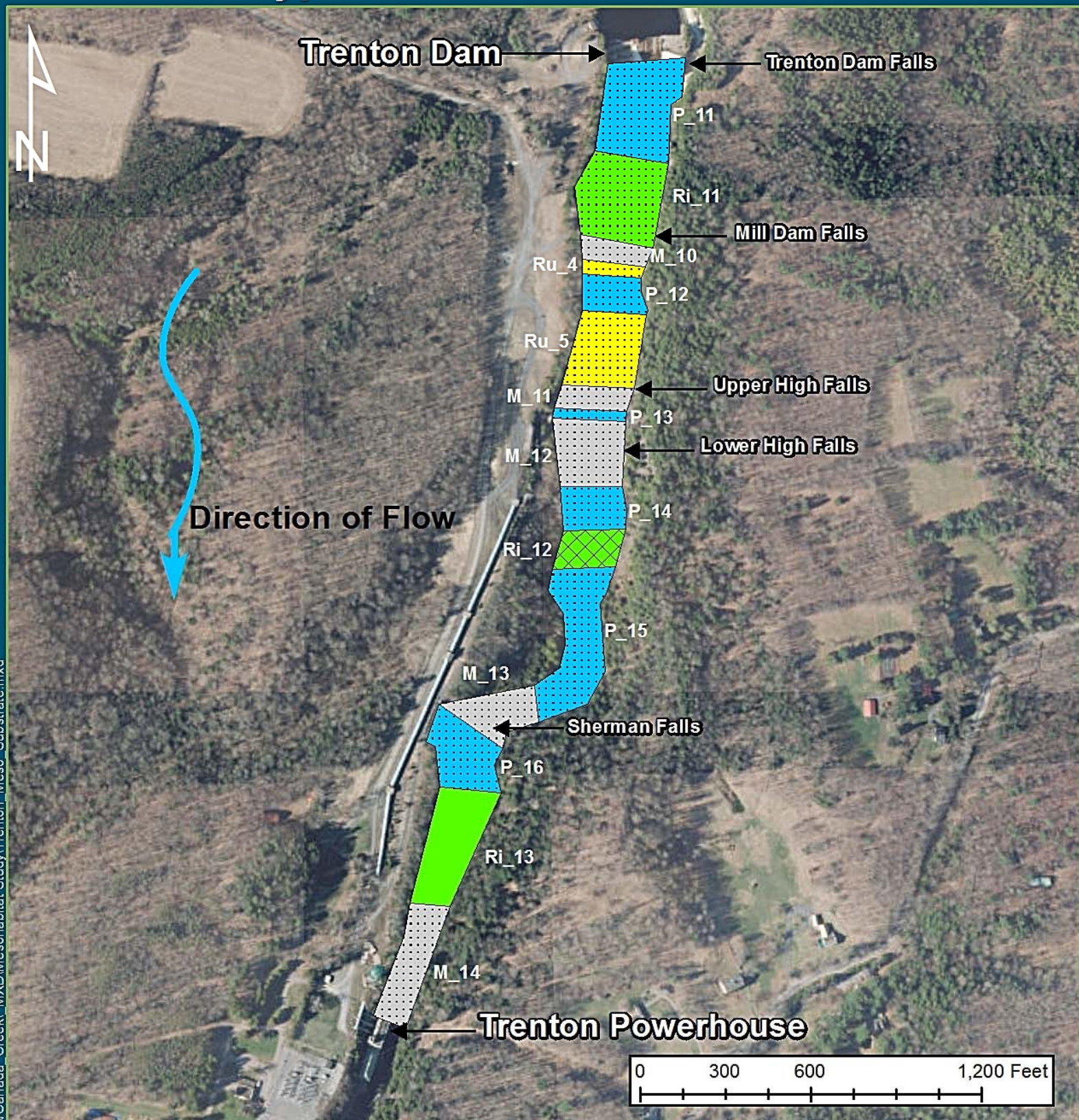


FIGURE 2 PROPOSED LOCATION FOR LEVEL LOGGER UPSTREAM OF NEWPORT IMPOUNDMENT

Trenton Bypassed Reach Mesohabitat & Substrate



Mesohabitat	Substrate
Pool	Large Boulder
Riffle	Ledge
Run	Small Boulder
Ledge	
Minor	

West Canada Creek Project

FERC PROJECT NO. 2701
ERIE BOULEVARD HYDROPOWER L.P.

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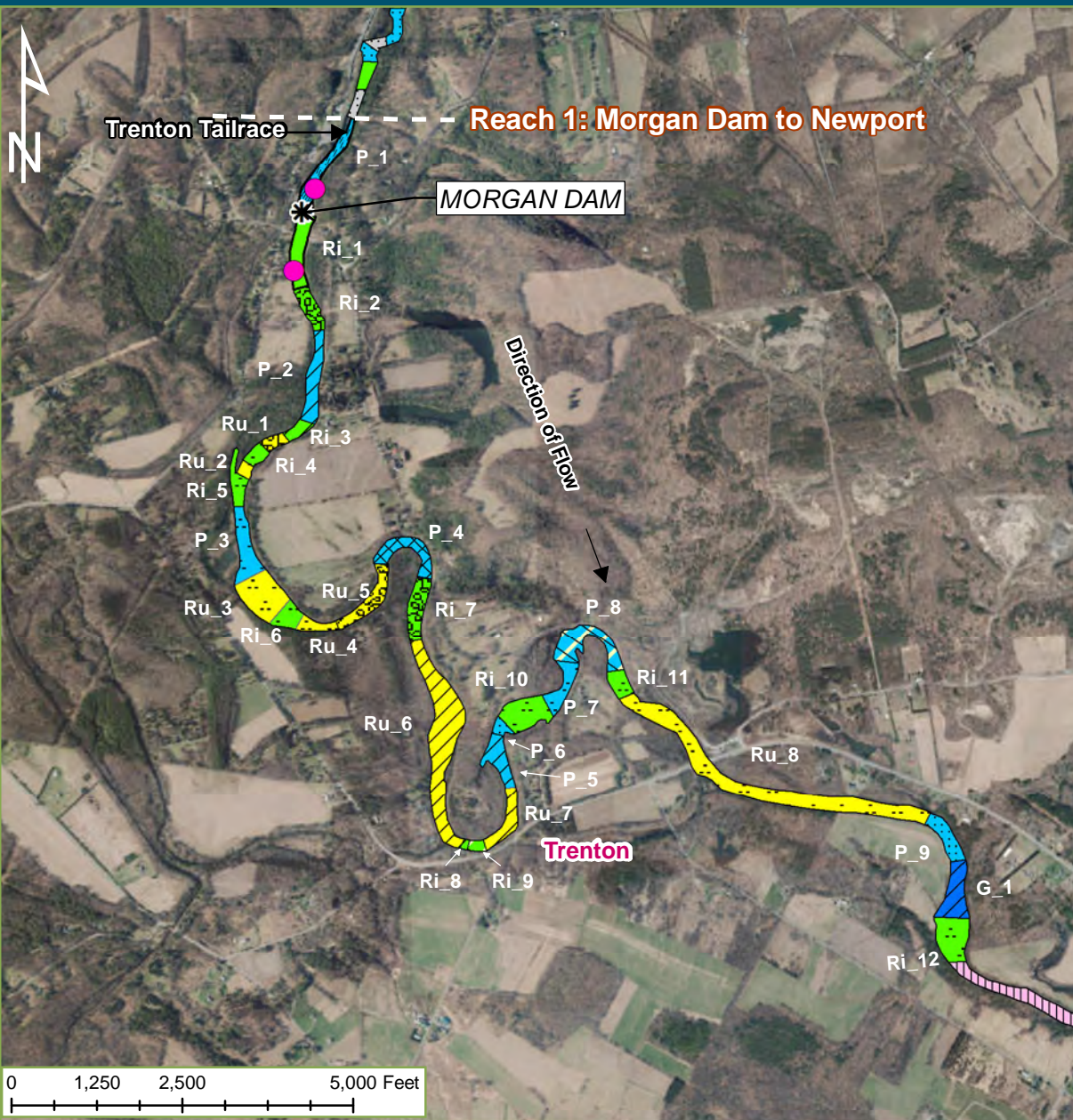
ATTACHMENT A

DOWNSTREAM REACH

DETAILED MESOHABITAT, SUBSTRATE AND COVER MAPS

West Canada Creek Mesohabitat & Substrate

Path: G:\Client_Data\ErieBoulevardWestCanadaCreek\MXD\Mesohabitat Study\West Canada Creek Mesohabitat and Substrate.mxd



● Level Logger	Bedrock
Mesohabitat	Large Boulder
Backwater	Small Boulder
Glide	Large Cobble/Bedrock
Pool	Cobble/Small Boulder
Rapids	Large Cobble
Riffle	Medium Cobble
Riffle-Run Complex	Medium Cobble/Small Cobble
Run	Small Cobble
Run-Pool Complex	Cobble/Fines
Minor	Large Gravel/Small Cobble
	Large Gravel
	Small Gravel
	Fines

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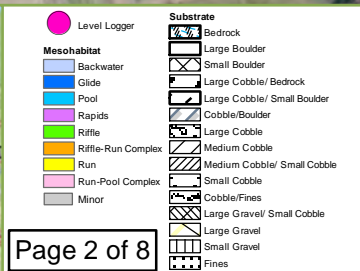
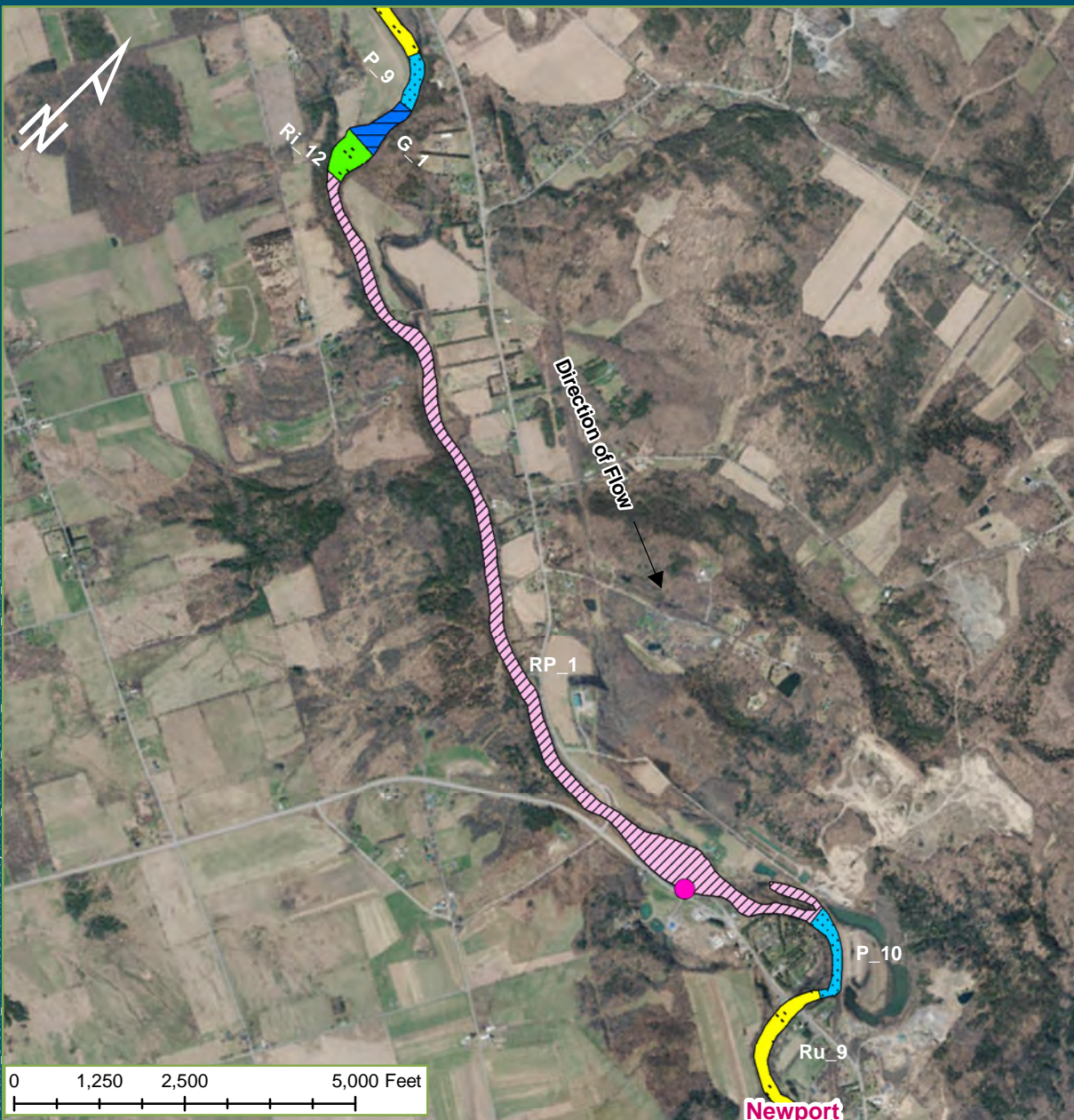
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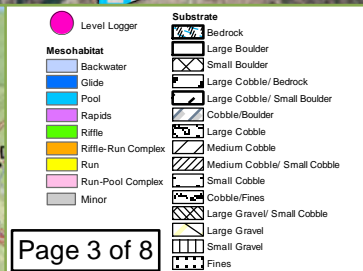
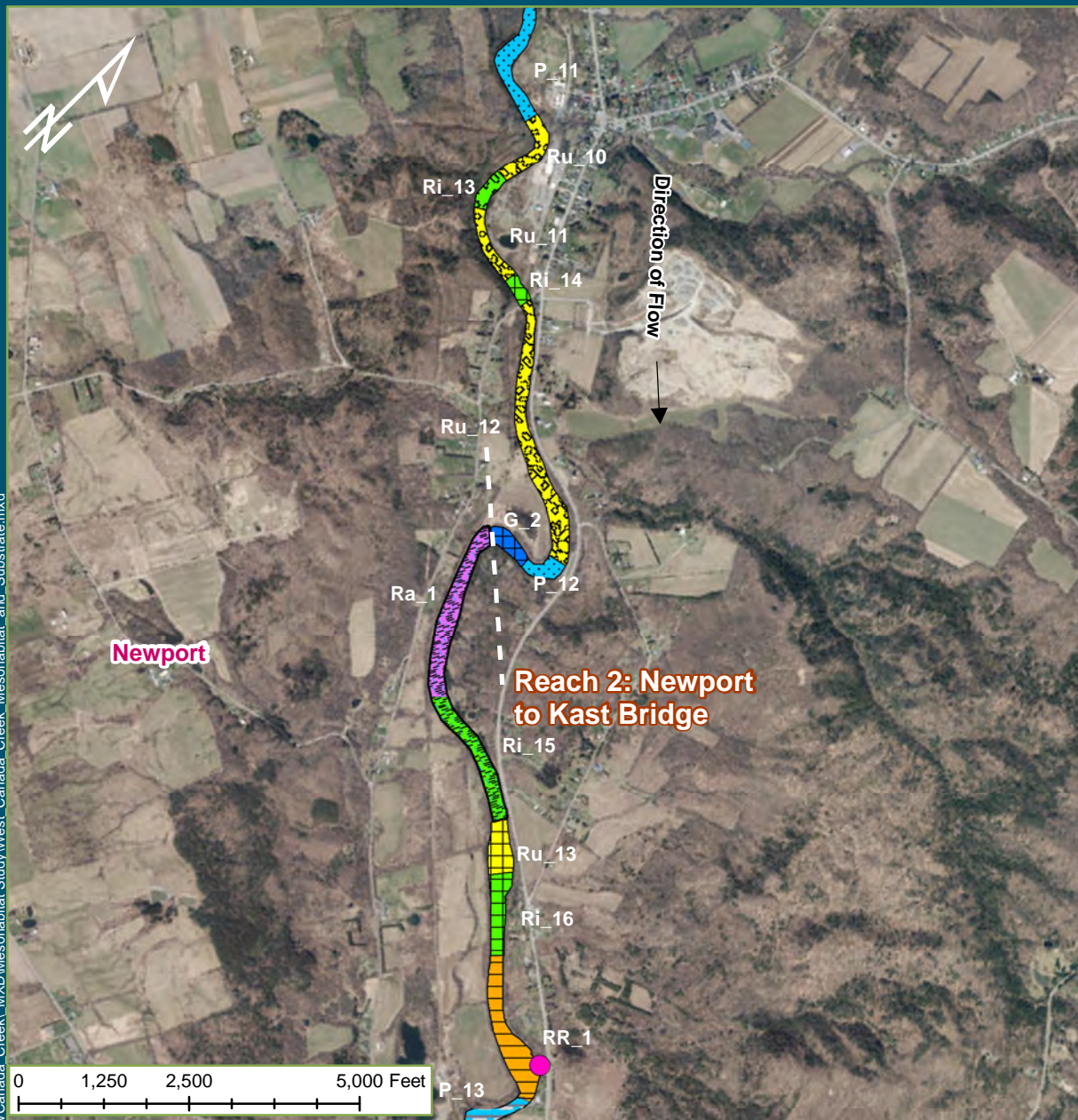
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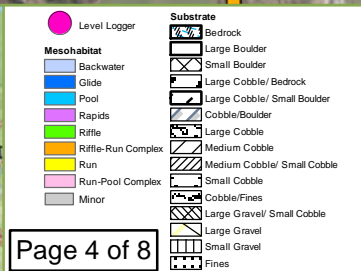
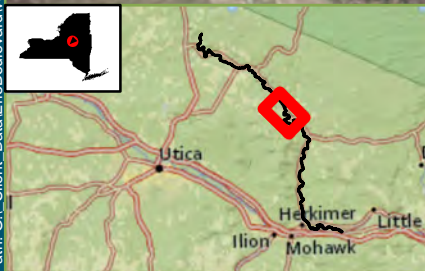
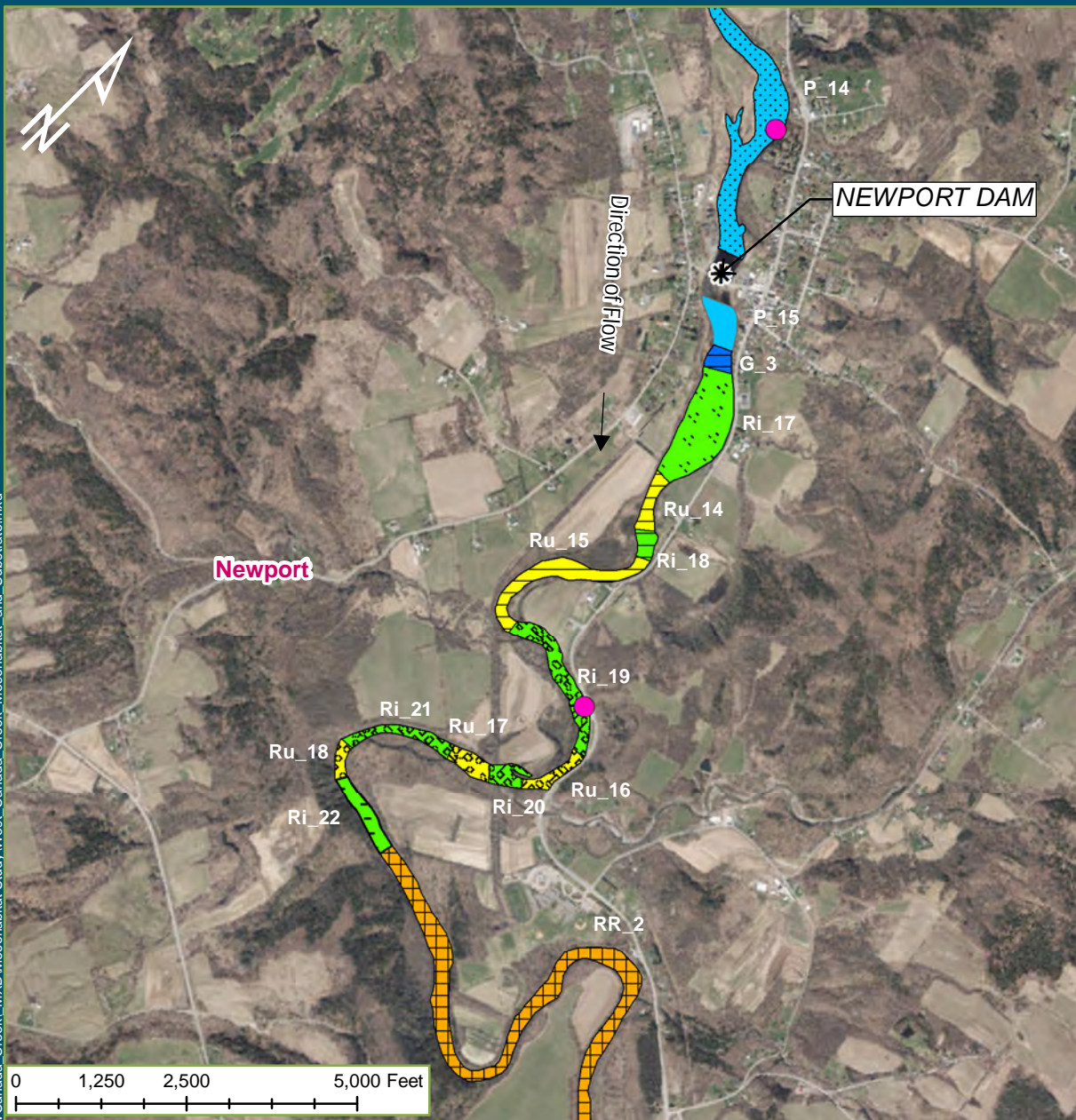
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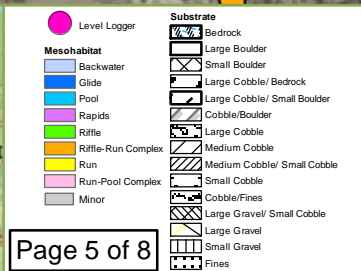
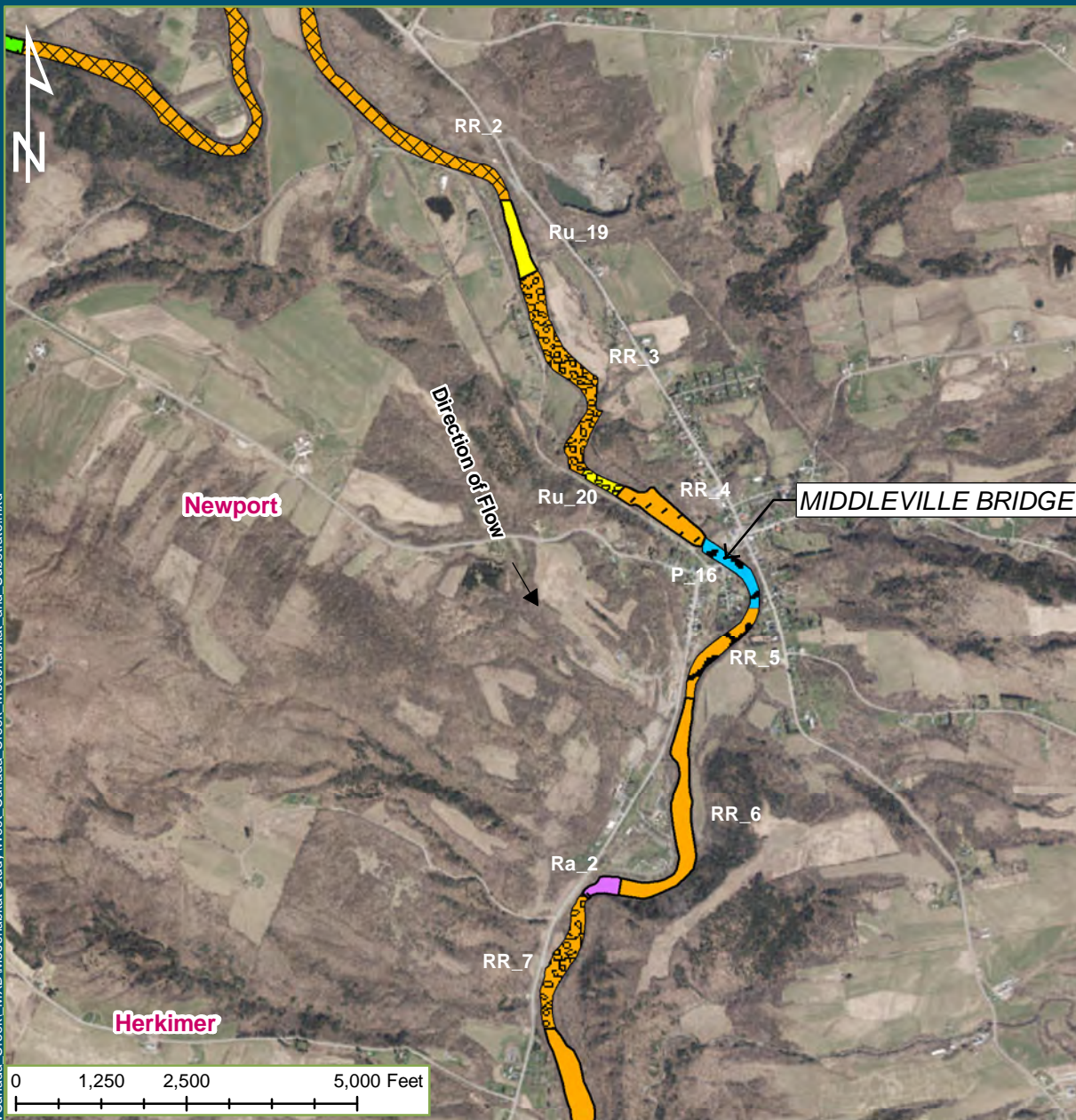
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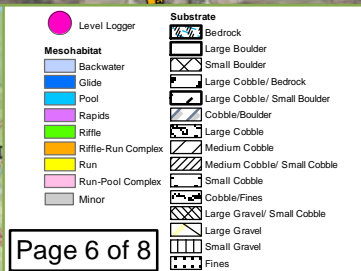
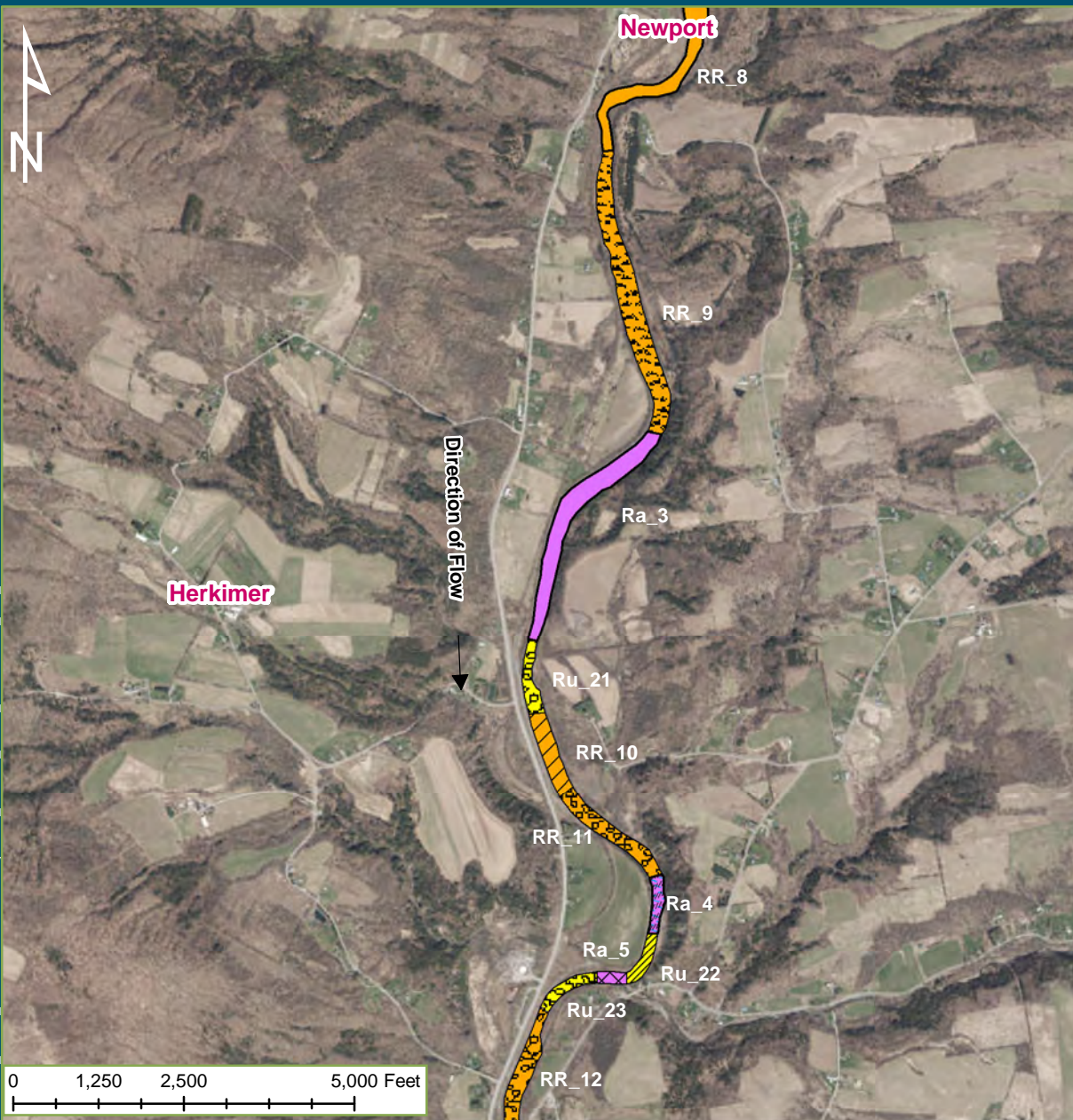
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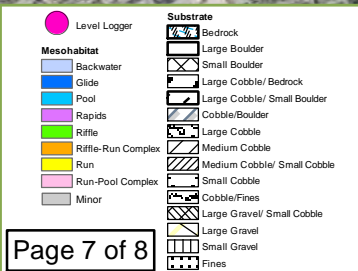
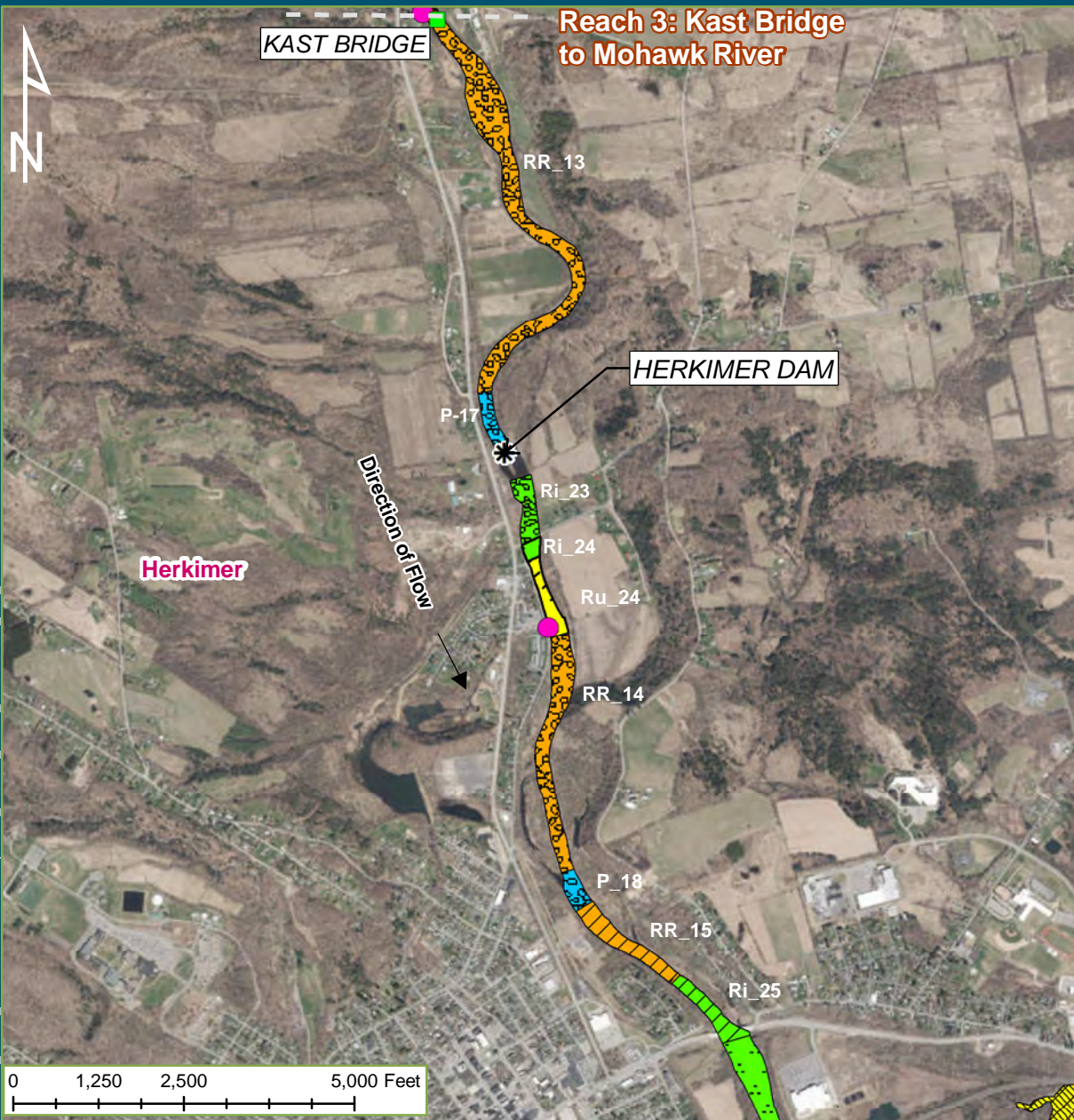
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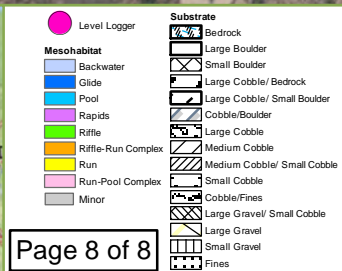
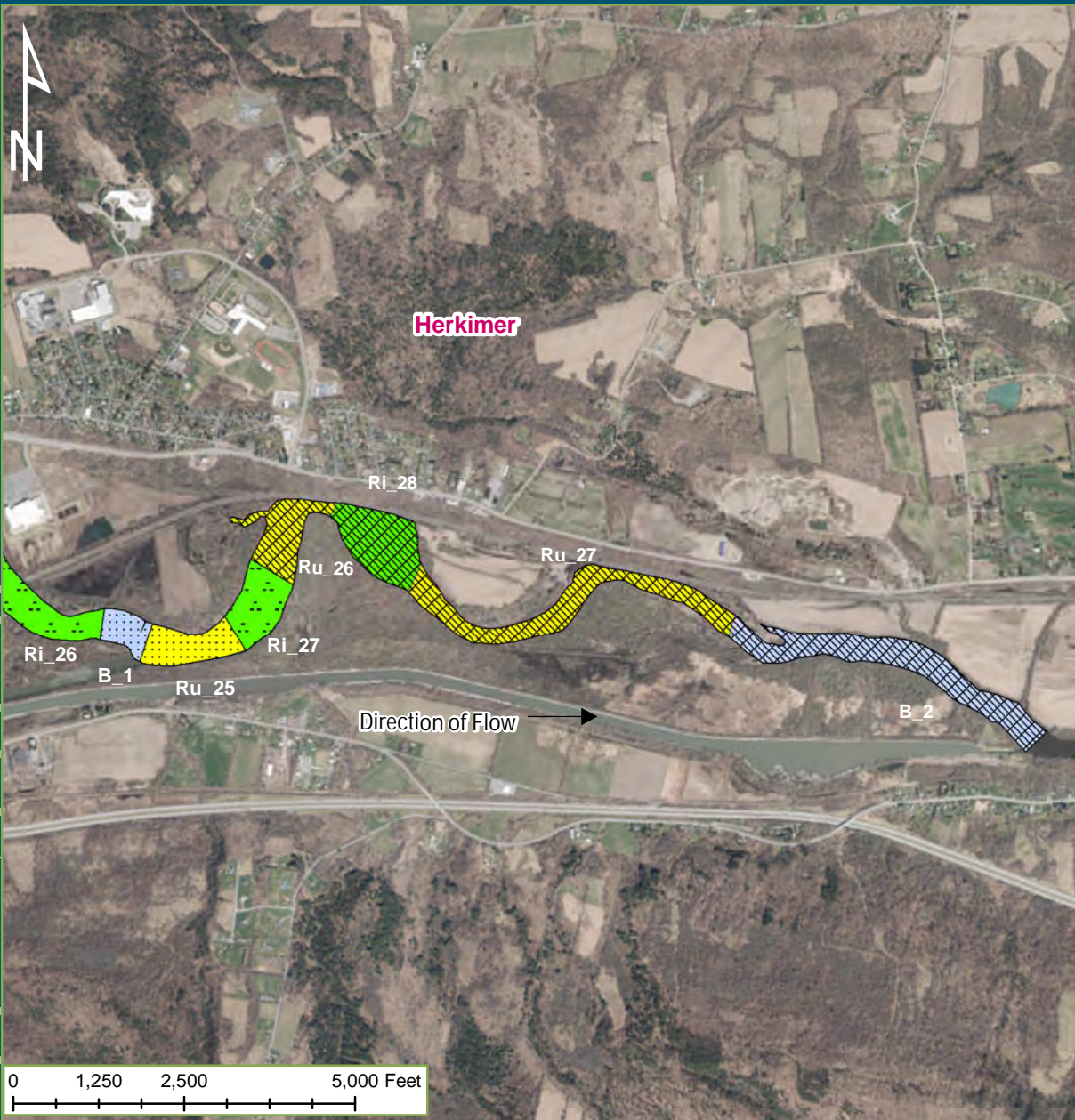
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West Canada Creek Mesohabitat & Cover Quality

--- Reach 1: Morgan Dam to Newport

Trenton Tailrace

P_1

MORGAN DAM

Ri_1

Ri_2

P_2

Ru_1

Ri_4

Ri_5

P_3

Ru_3

Ri_6

Ru_5

P_4

Ru_6

Ri_9

Ri_10

P_7

Ri_11

Trenton

Ru_8

P_9

G_1

Ri_12

Direction of Flow

0 1,250 2,500 5,000 Feet



● Level Logger

Mesohabitat

Backwater

Glide

Pool

Rapids

Riffle

Riffle-Run Complex

Run

Run-Pool Complex

Minor

Cover Quality

High

Low

Moderate

West Canada Creek Project

FERC Project No. 2701

Erie Boulevard Hydropower L.P.

Drawn By:

Date Drawn:

Checked By:

Date Checked:

SAD

07-19-2019

RSR

07-25-2019

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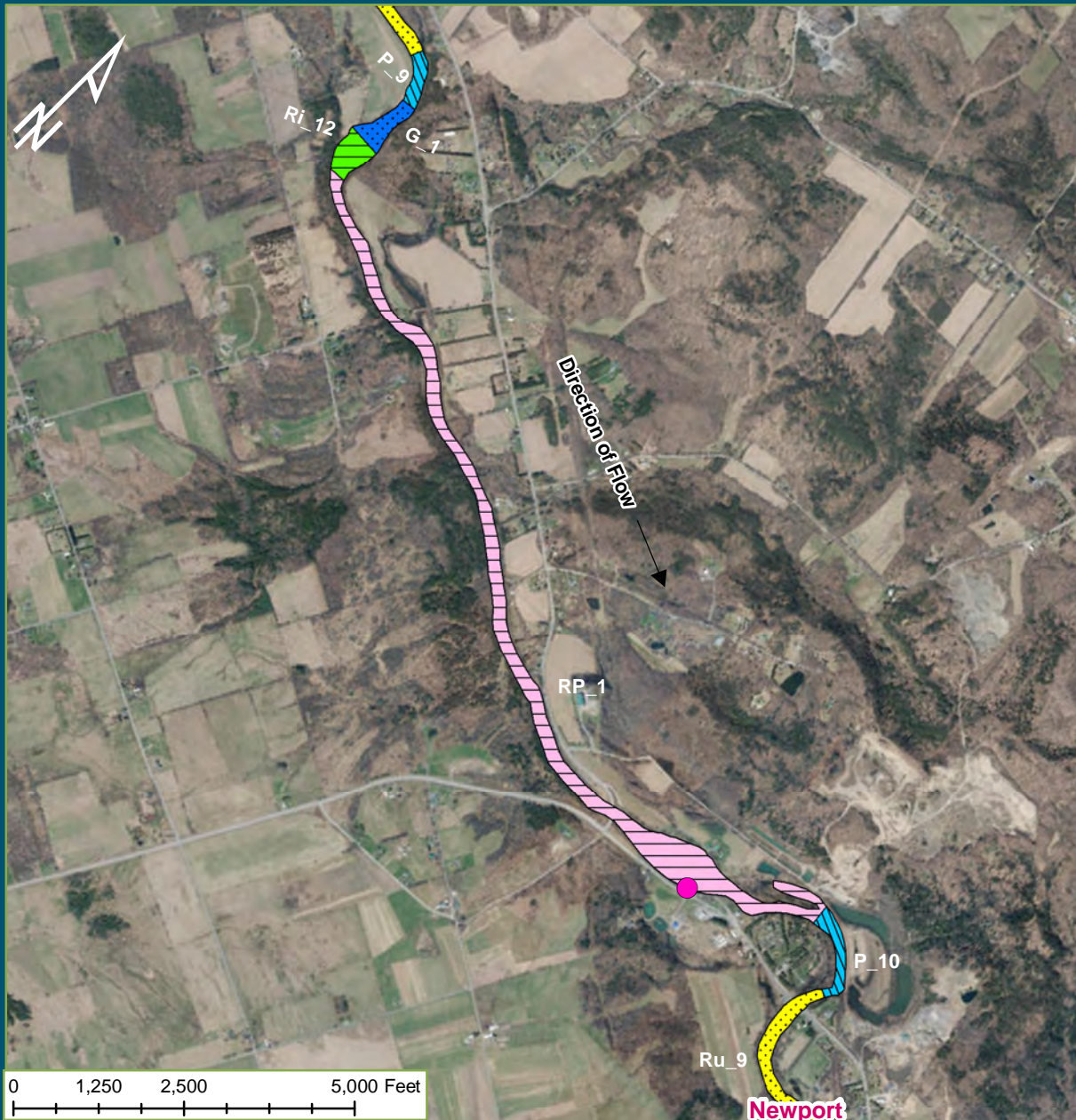
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West Canada Creek Mesohabitat & Cover Quality

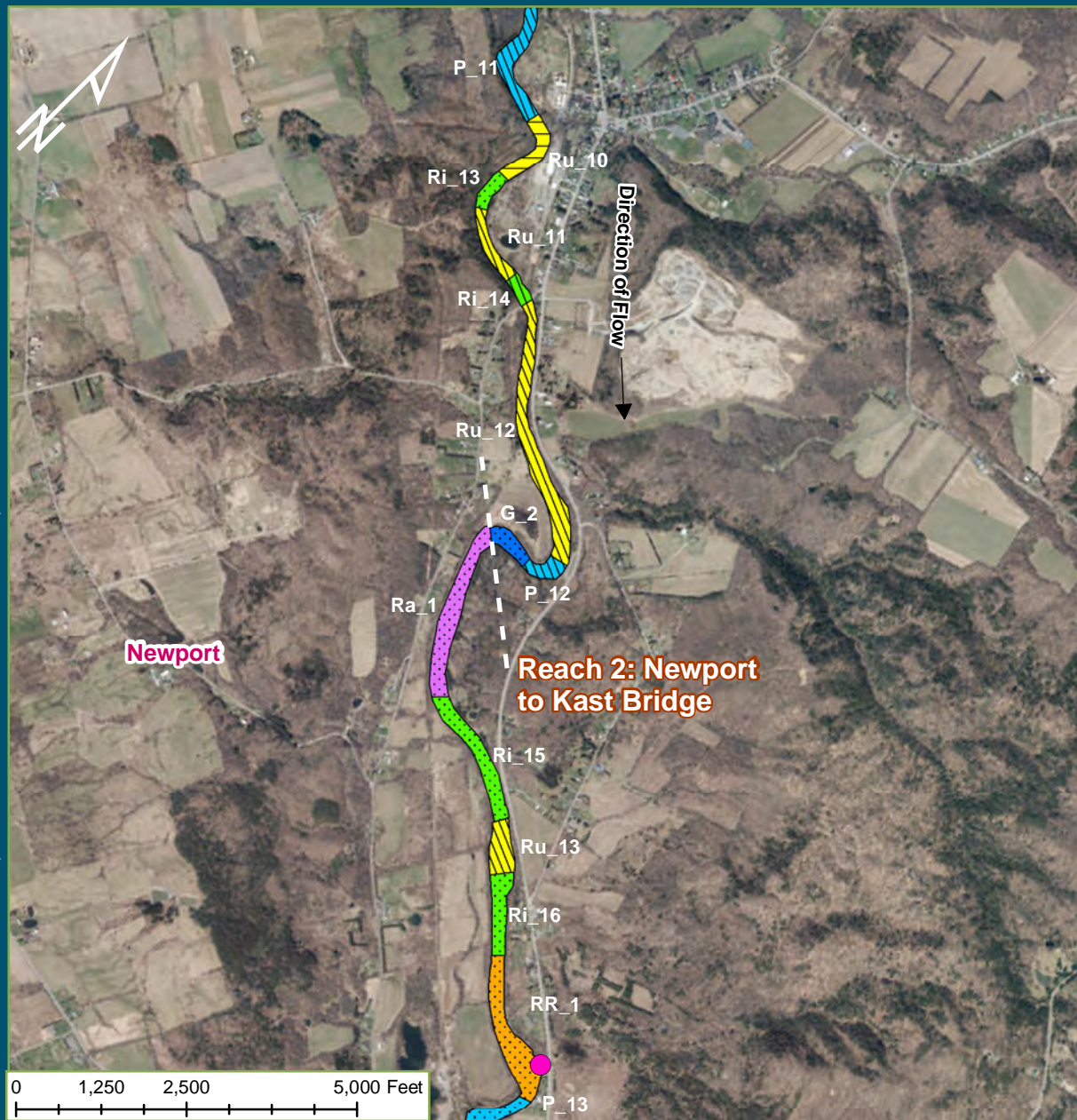
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West Canada Creek Mesohabitat & Cover Quality

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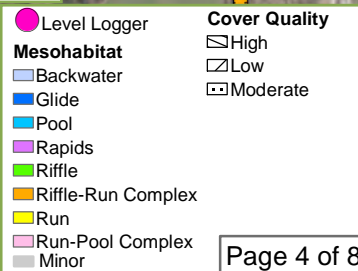
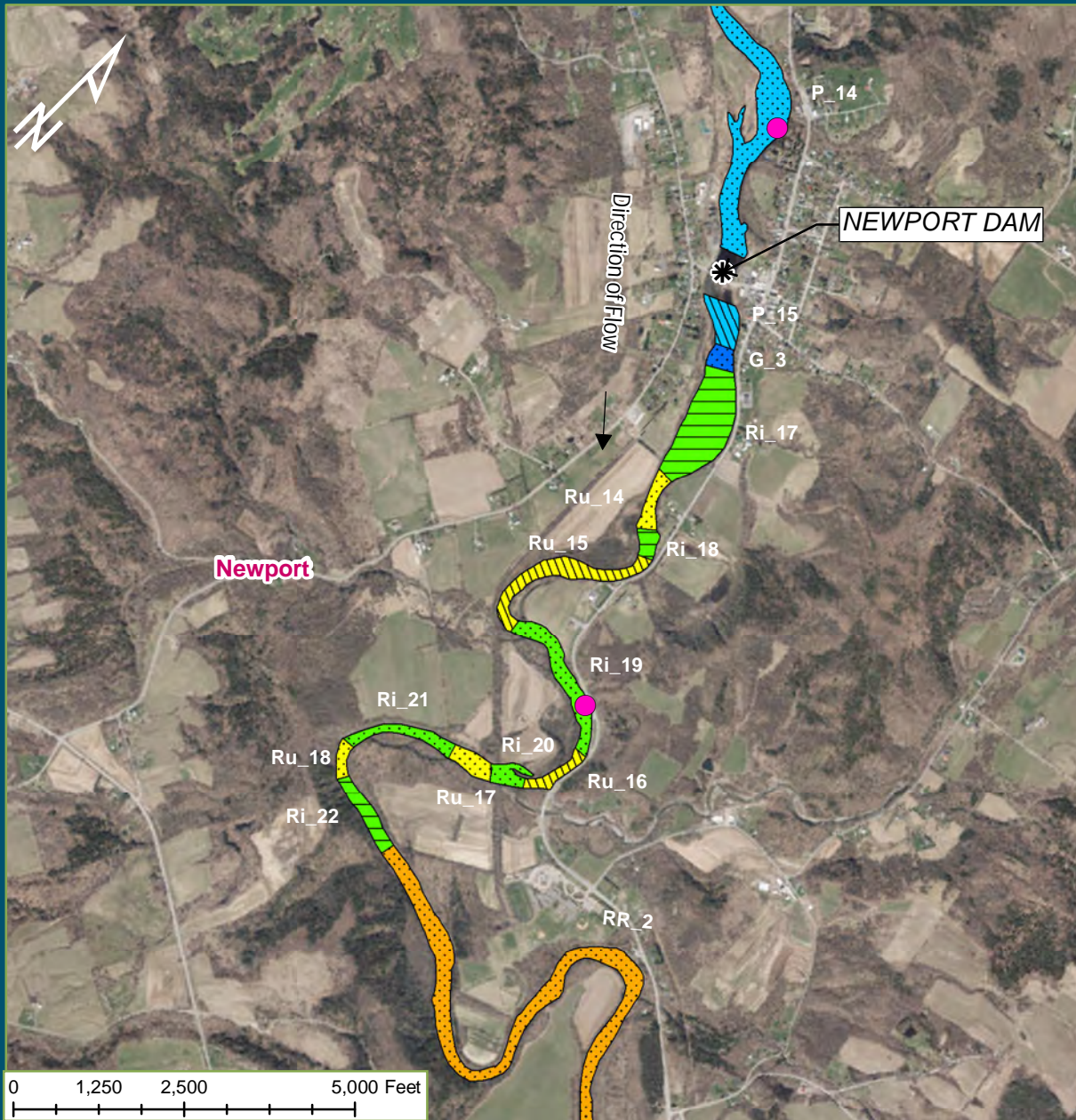
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West Canada Creek Mesohabitat & Cover Quality

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West Canada Creek Project
FERC Project No. 2701
Erie Boulevard Hydropower L.P.

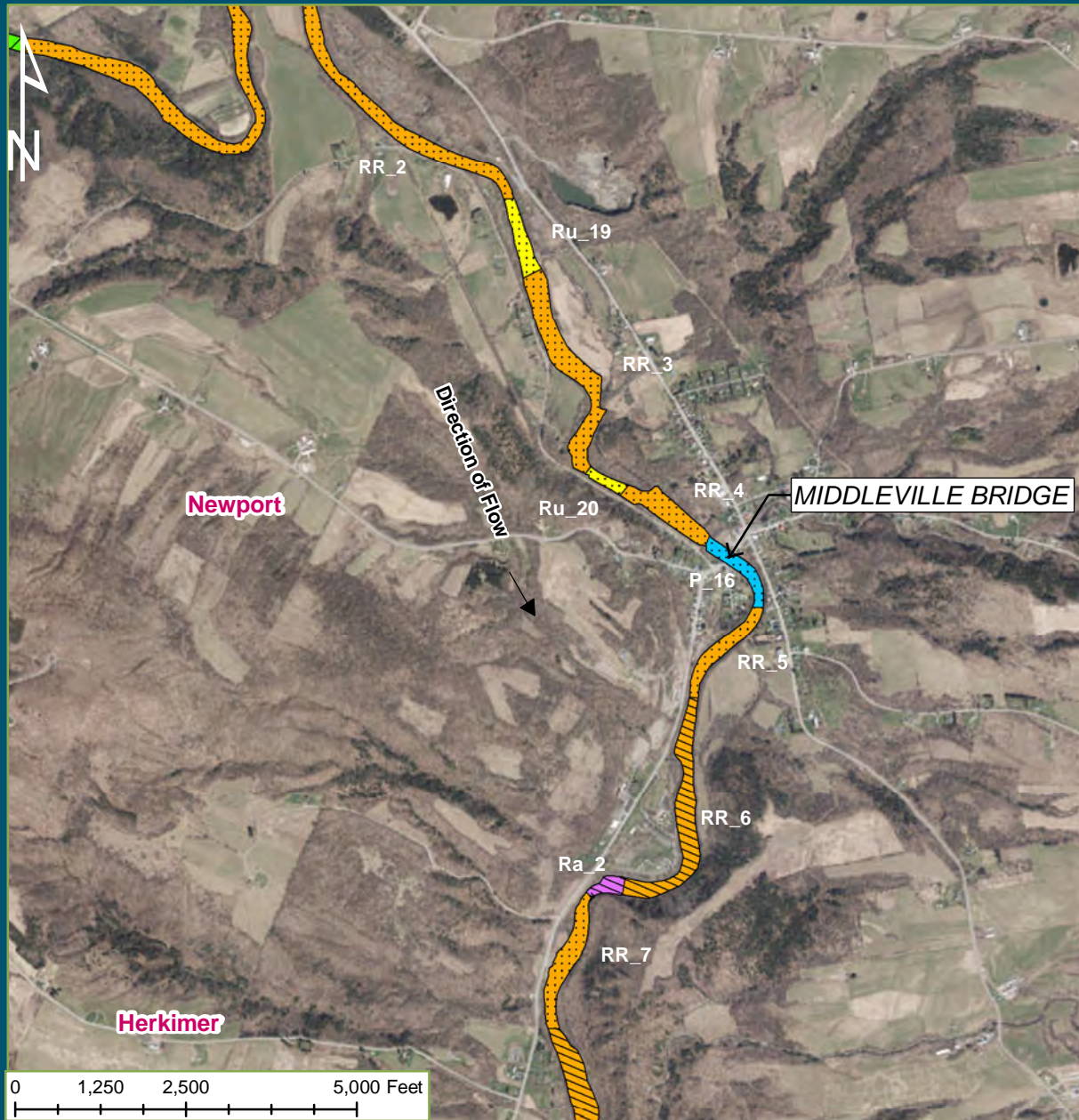
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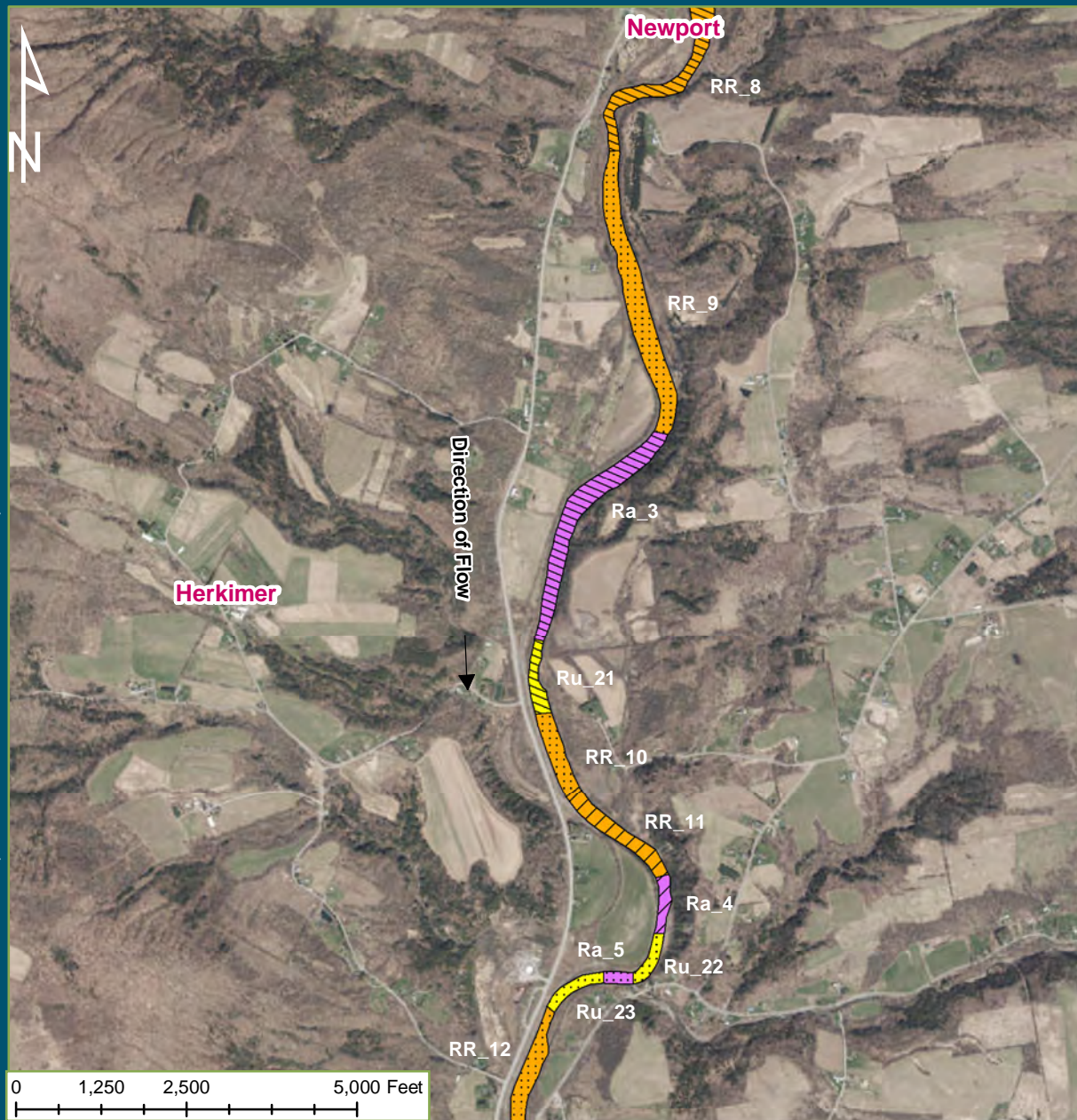
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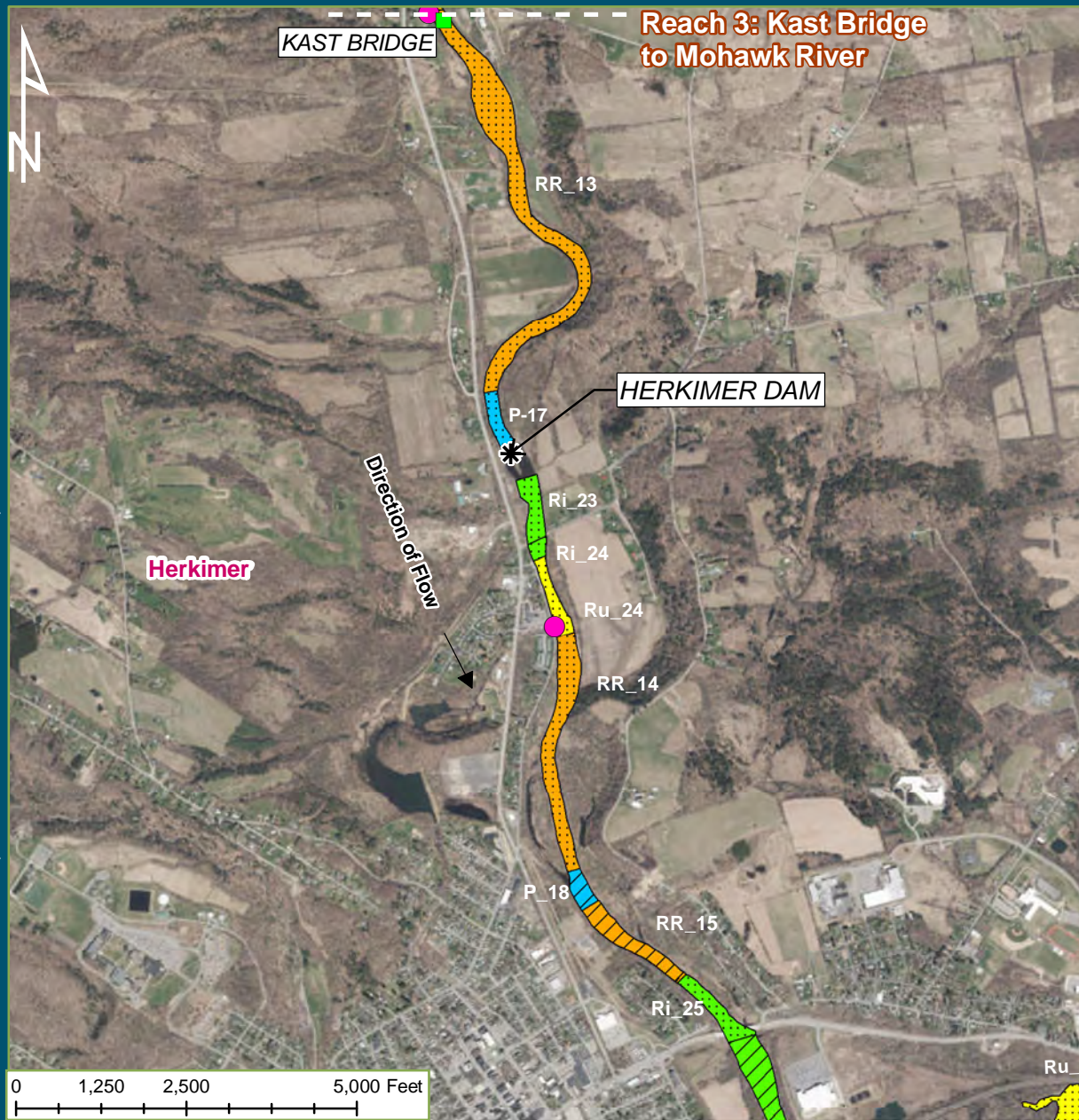
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West Canada Creek Mesohabitat & Cover Quality

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 FERC Project No. 2701
 Erie Boulevard Hydropower L.P.

Drawn By: SAD	Date Drawn: 07-19-2019	Checked By: RSR	Date Checked: 07-25-2019
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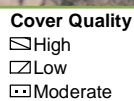
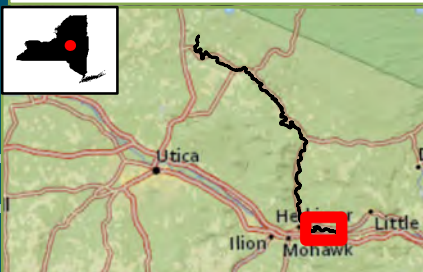
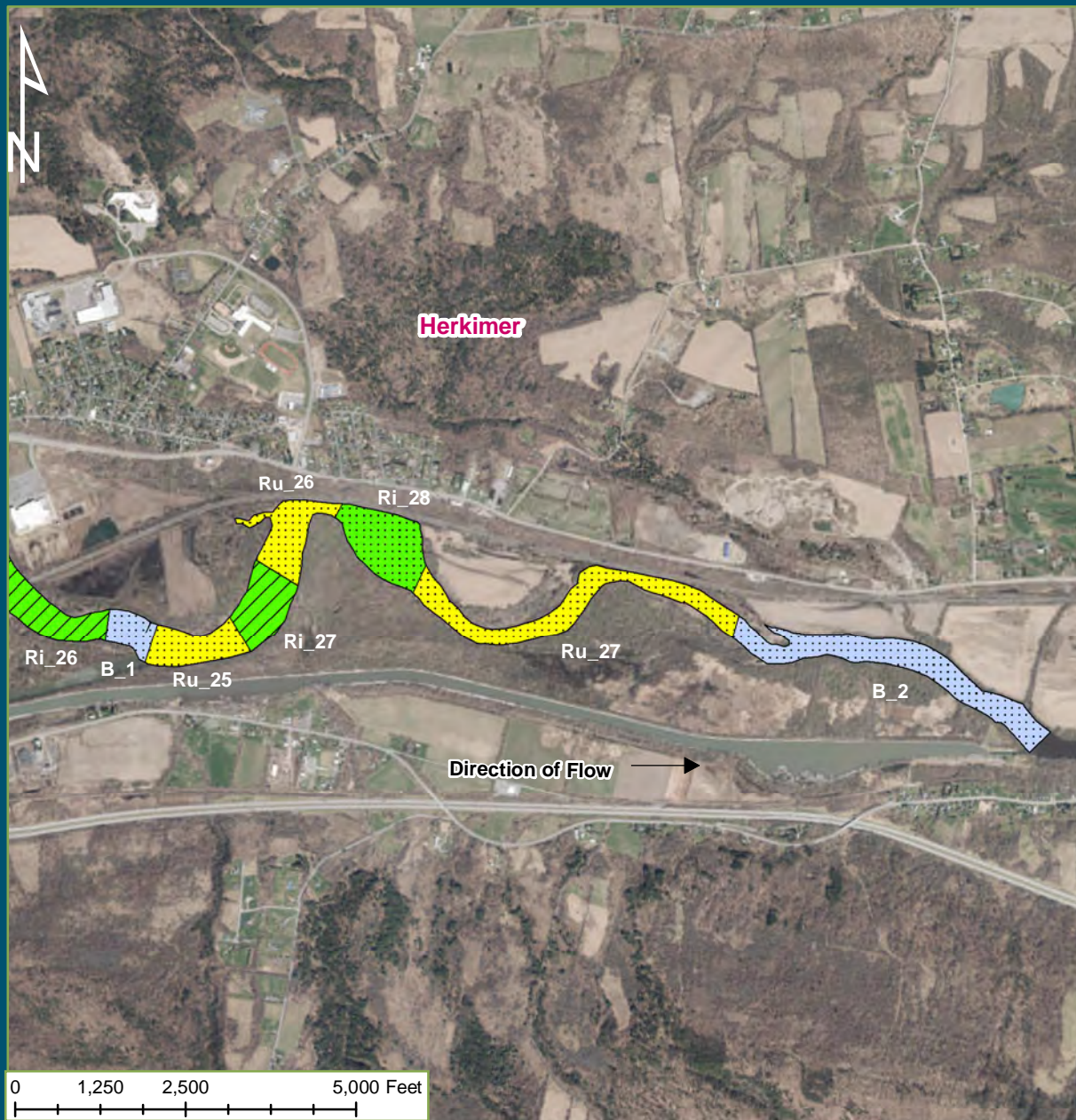
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West Canada Creek Mesohabitat & Cover Quality

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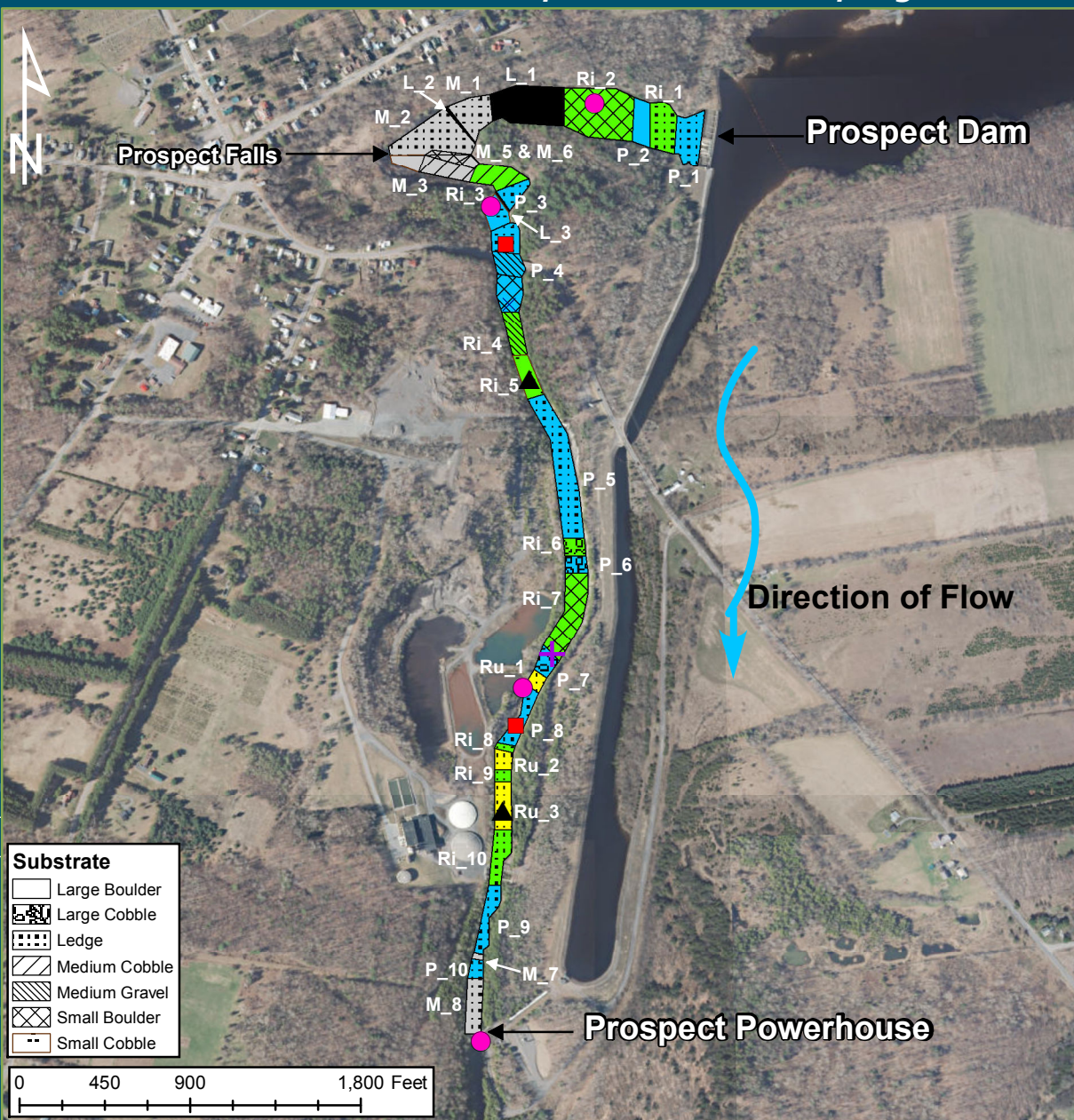
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ATTACHMENT B

**PROSPECT BYPASS REACH
LOGGER AND SAMPLING LOCATIONS**

West Canada Creek Aquatic Studies Sampling Locations



ATTACHMENT C

**DOWNSTREAM REACH
LOGGER AND SAMPLING LOCATIONS**

West Canada Creek Aquatic Studies Sampling Locations

--- Reach 1: Morgan Dam to Newport

Trenton Tailrace

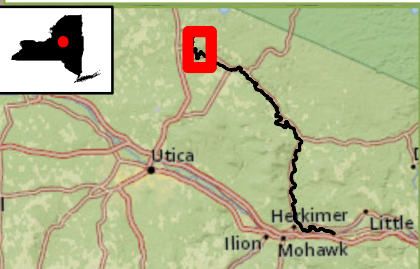
MORGAN DAM

Direction of Flow

Trenton

Substrate	
	Bedrock
	Cobble/Boulder
	Cobble/Fines
	Fines
	Large Boulder
	Large Cobble
	Large Cobble/Bedrock
	Large Cobble/Small Boulder
	Large Gravel
	Large Gravel/Small Cobble
	Medium Cobble
	Medium Cobble/Small Cobble
	Small Boulder
	Small Cobble
	Small Cobble/Gravel
	Small Gravel

0 1,250 2,500 5,000 Feet



Mesohabitat	
	Backwater
	Glide
	Pool
	Rapids
	Riffle
	Run
	Riffle-Run Complex
	Run-Pool Complex
	Minor

Approximate Sampling Locations

	Electrofishing Site
	Level Logger/Transect
	Macroinvertebrate
	Mussels

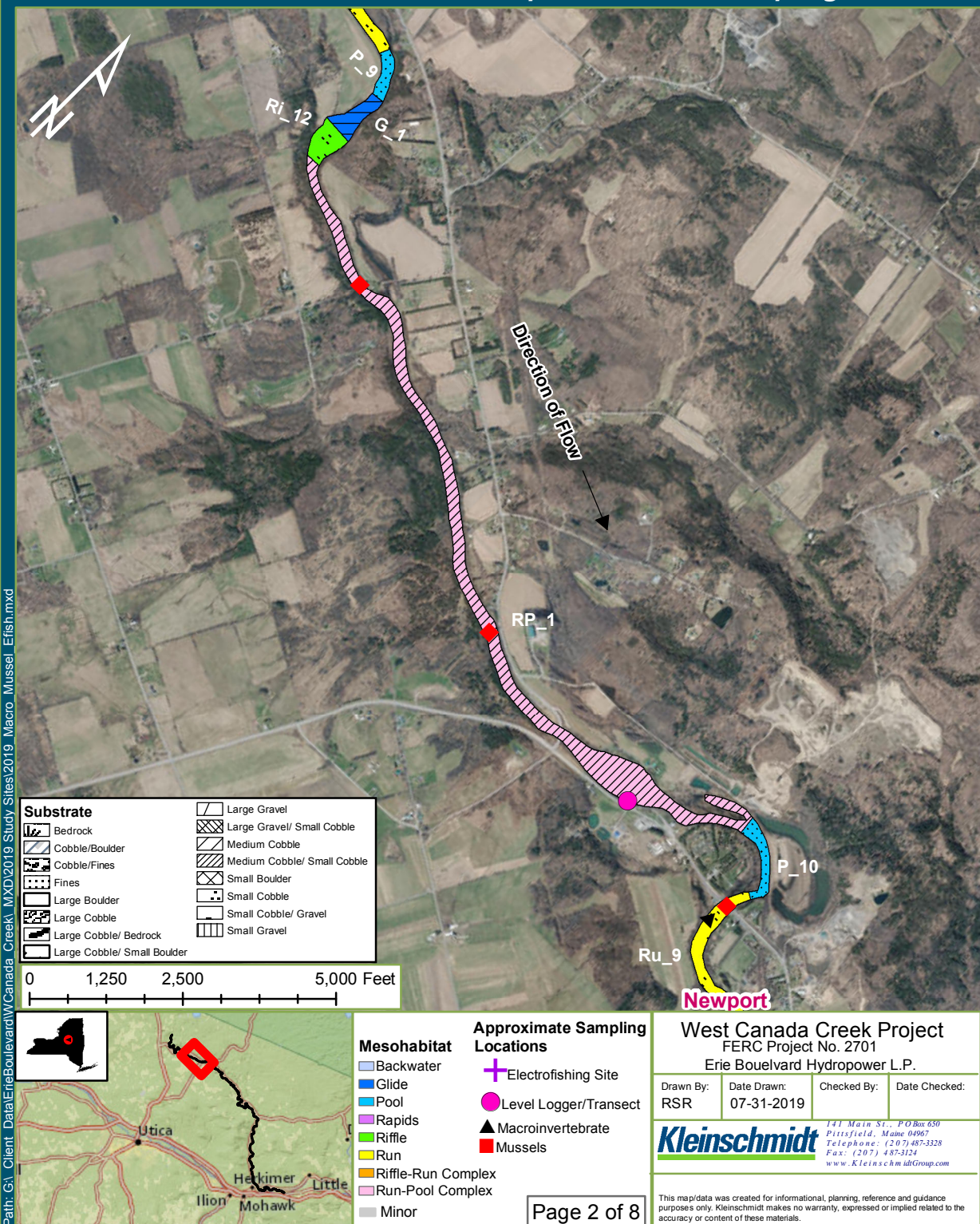
West Canada Creek Project
FERC Project No. 2701
Erie Boulevard Hydropower L.P.

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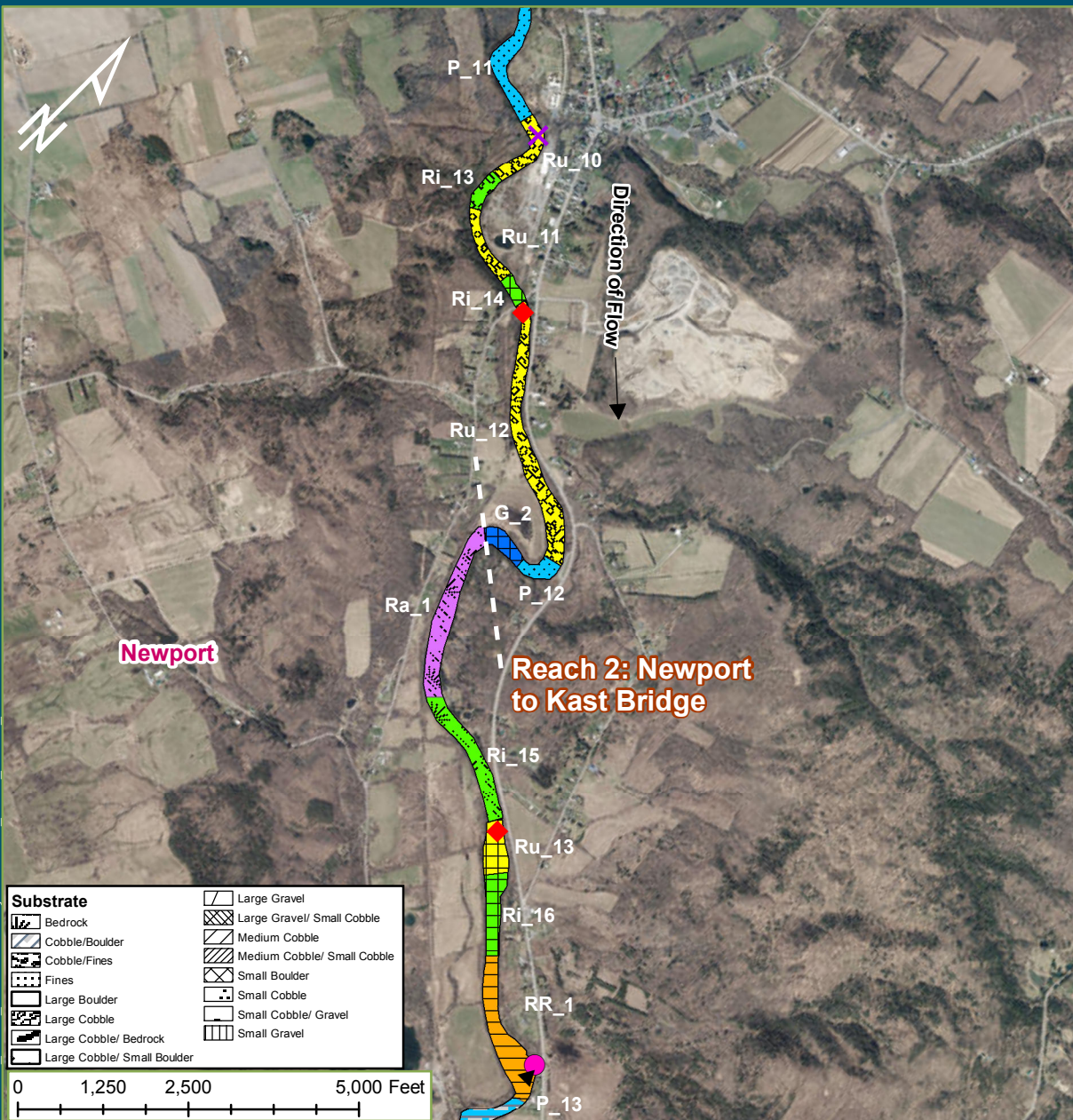
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West Canada Creek Aquatic Studies Sampling Locations



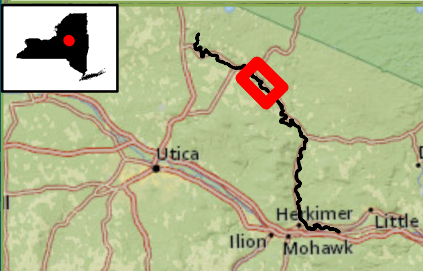
West Canada Creek Aquatic Studies Sampling Locations

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Substrate	
	Bedrock
	Cobble/Boulder
	Cobble/Fines
	Fines
	Large Boulder
	Large Cobble
	Large Cobble/Bedrock
	Large Cobble/Small Boulder
	Large Gravel
	Large Gravel/Small Cobble
	Medium Cobble
	Medium Cobble/Small Cobble
	Small Boulder
	Small Cobble
	Small Cobble/Gravel
	Small Gravel

0 1,250 2,500 5,000 Feet



Mesohabitat	
	Backwater
	Glide
	Pool
	Rapids
	Riffle
	Run
	Riffle-Run Complex
	Run-Pool Complex
	Minor

Approximate Sampling Locations

	Electrofishing Site
	Level Logger/Transect
	Macroinvertebrate
	Mussels

West Canada Creek Project FERC Project No. 2701 Erie Boulevard Hydropower L.P.

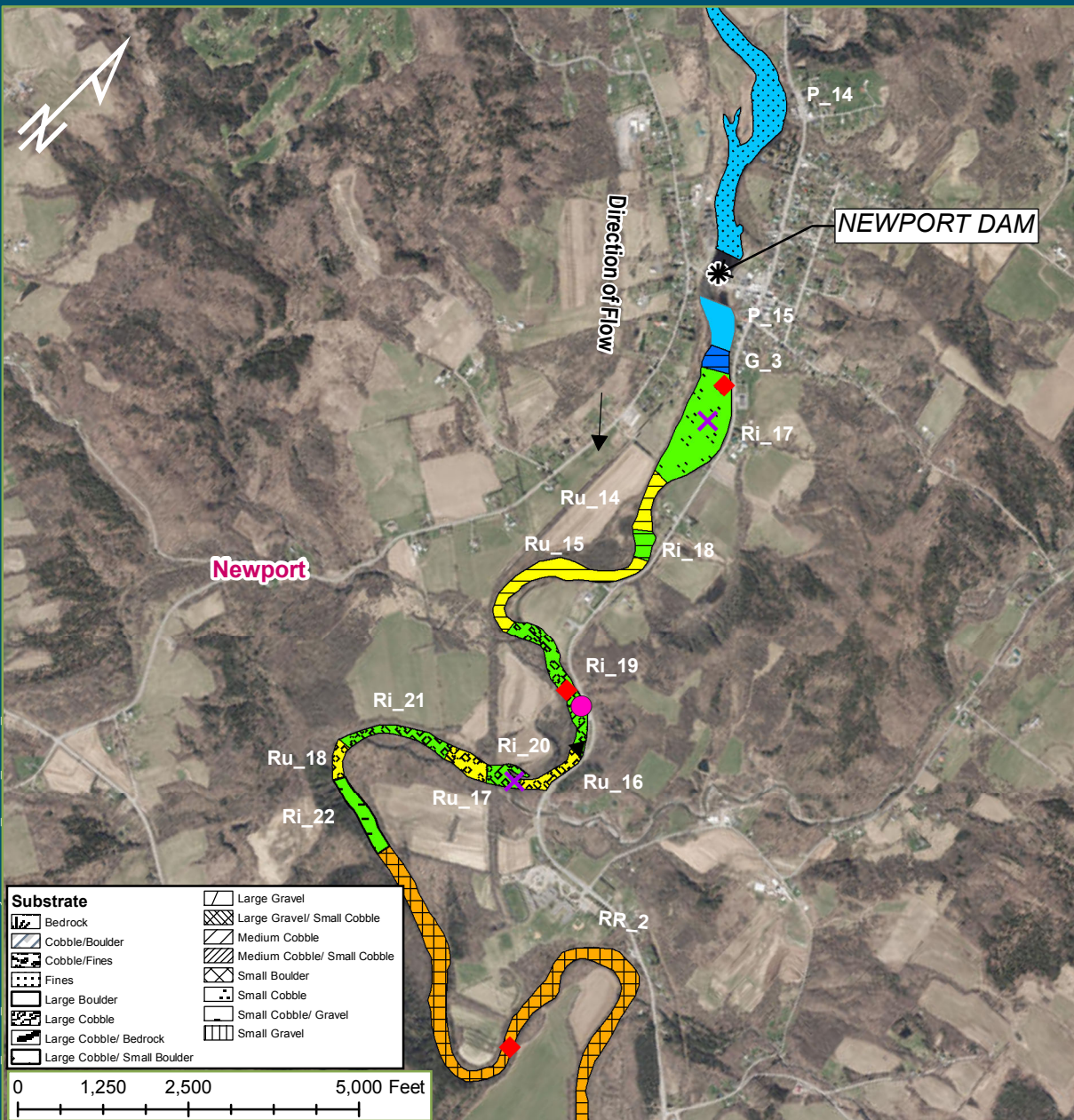
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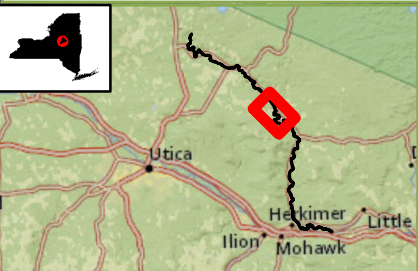
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West Canada Creek Aquatic Studies Sampling Locations

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Substrate	
	Bedrock
	Cobble/Boulder
	Cobble/Fines
	Fines
	Large Boulder
	Large Cobble
	Large Cobble/Bedrock
	Large Cobble/Small Boulder
	Large Gravel
	Large Gravel/Small Cobble
	Medium Cobble
	Medium Cobble/Small Cobble
	Small Boulder
	Small Cobble
	Small Cobble/Gravel
	Small Gravel



Mesohabitat	
	Backwater
	Glide
	Pool
	Rapids
	Riffle
	Run
	Riffle-Run Complex
	Run-Pool Complex
	Minor

Approximate Sampling Locations

- Electrofishing Site
- Level Logger/Transect
- Macroinvertebrate
- Mussels

West Canada Creek Project FERC Project No. 2701 Erie Boulevard Hydropower L.P.

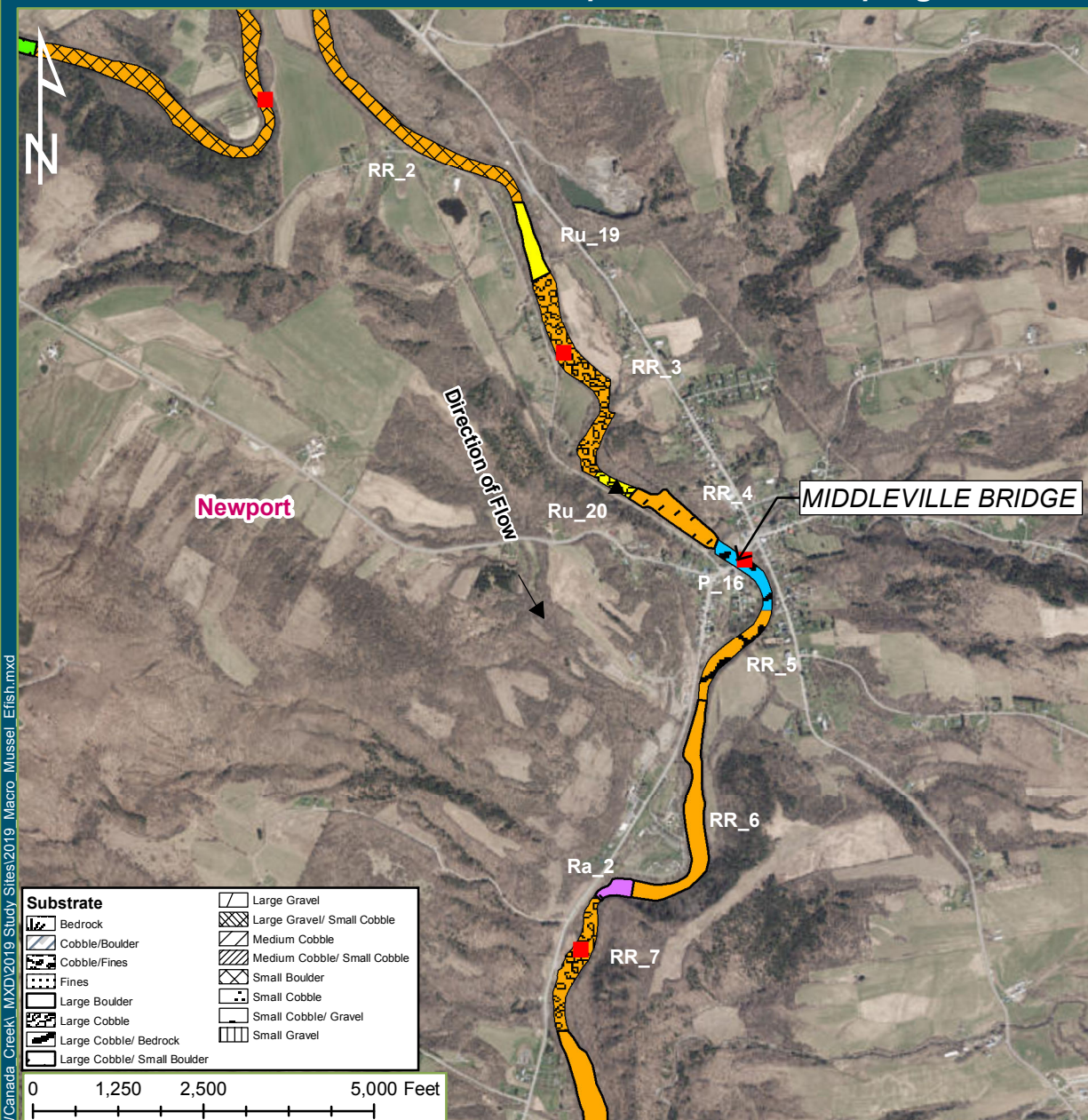
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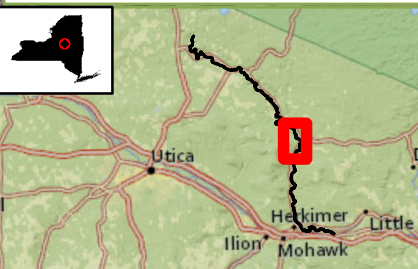
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West Canada Creek Aquatic Studies Sampling Locations



Substrate	
	Bedrock
	Cobble/Boulder
	Cobble/Fines
	Fines
	Large Boulder
	Large Cobble
	Large Cobble/Bedrock
	Large Cobble/Small Boulder
	Large Gravel
	Large Gravel/Small Cobble
	Medium Cobble
	Medium Cobble/Small Cobble
	Small Boulder
	Small Cobble
	Small Cobble/Gravel
	Small Gravel

0 1,250 2,500 5,000 Feet



Mesohabitat	
	Backwater
	Glide
	Pool
	Rapids
	Riffle
	Run
	Riffle-Run Complex
	Run-Pool Complex
	Minor

Approximate Sampling Locations

- Electrofishing Site
- Level Logger/Transect
- Macroinvertebrate
- Mussels

West Canada Creek Project
FERC Project No. 2701
Erie Bouelvard Hydropower L.P.

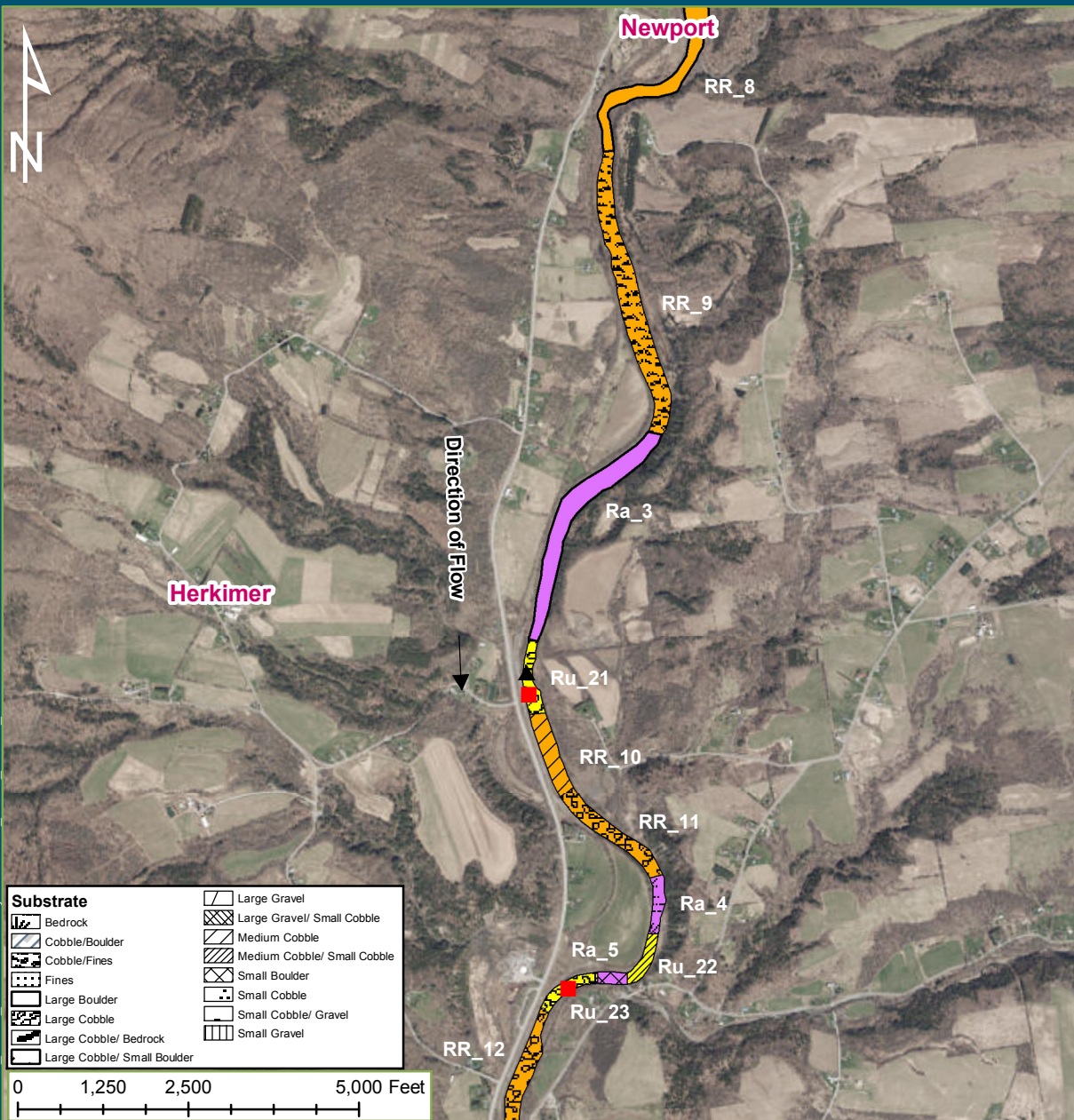
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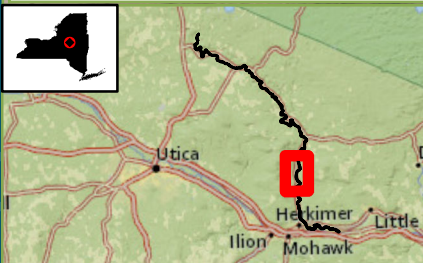
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West Canada Creek Aquatic Studies Sampling Locations



Substrate	
	Bedrock
	Cobble/Boulder
	Cobble/Fines
	Fines
	Large Boulder
	Large Cobble
	Large Cobble/Bedrock
	Large Cobble/Small Boulder
	Large Gravel
	Large Gravel/Small Cobble
	Medium Cobble
	Medium Cobble/Small Cobble
	Small Boulder
	Small Cobble
	Small Cobble/Gravel
	Small Gravel



Mesohabitat	
	Backwater
	Glide
	Pool
	Rapids
	Riffle
	Run
	Riffle-Run Complex
	Run-Pool Complex
	Minor

Approximate Sampling Locations

- Electrofishing Site
- Level Logger/Transect
- Macroinvertebrate
- Mussels

West Canada Creek Project FERC Project No. 2701 Erie Boulevard Hydropower L.P.

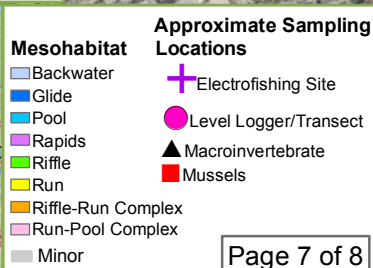
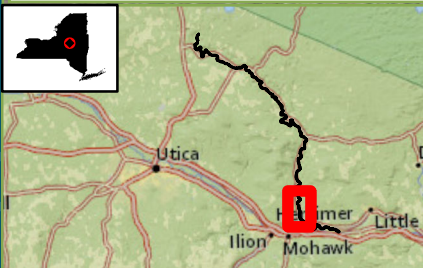
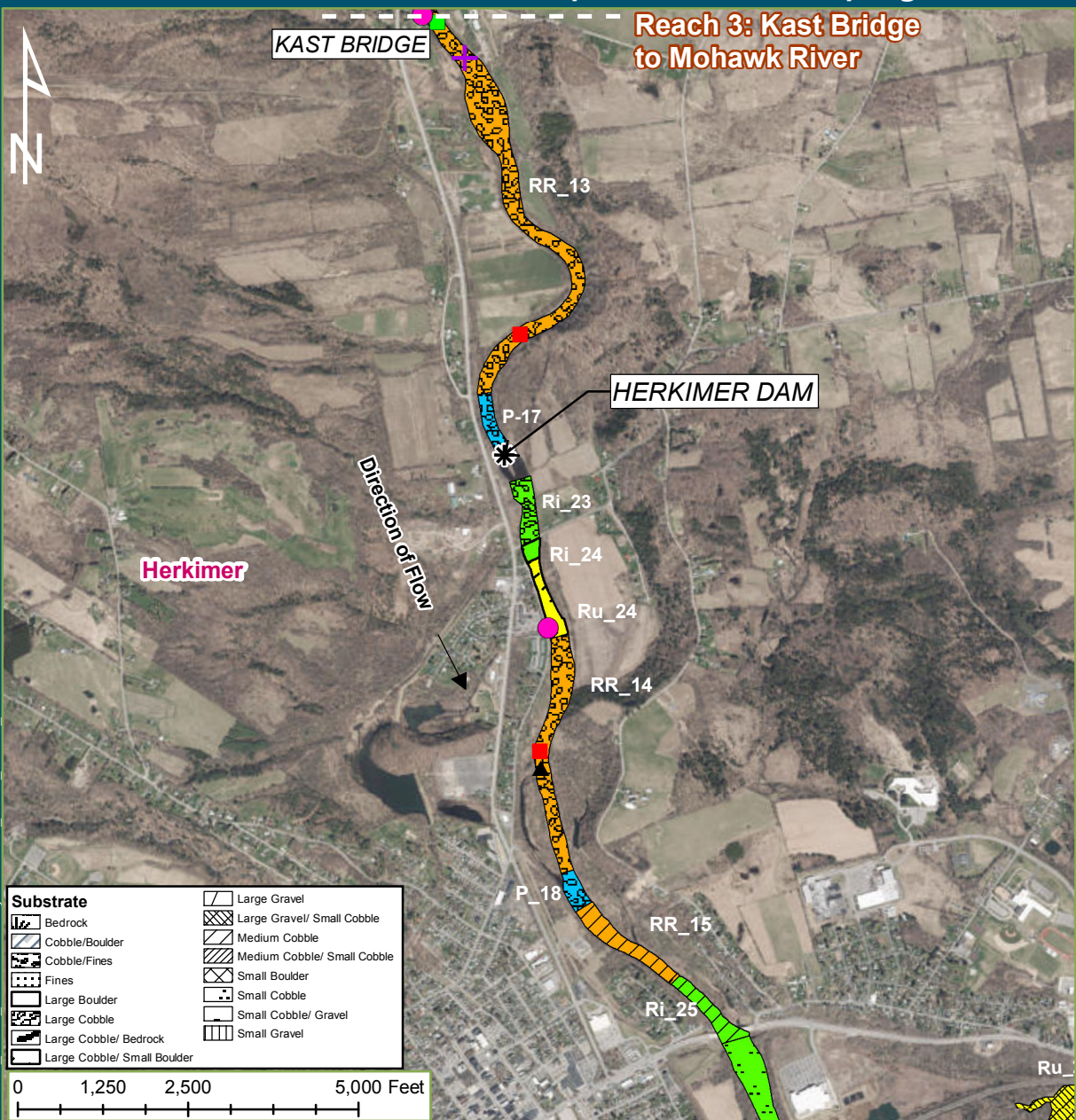
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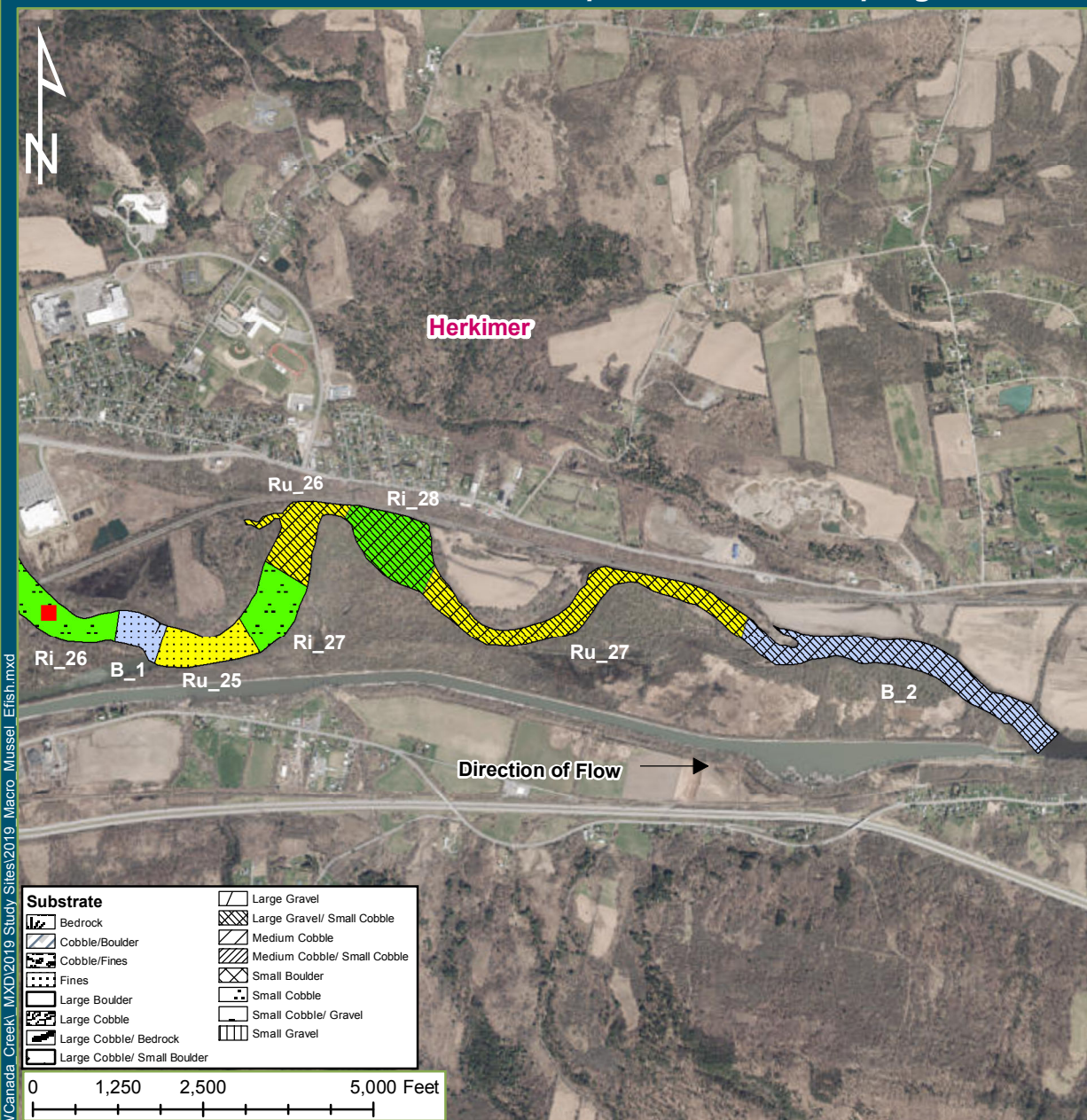
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FERC Project No. 2701
Erie Boulevard Hydropower L.P.

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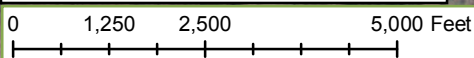
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West Canada Creek Aquatic Studies Sampling Locations



Substrate	
	Bedrock
	Cobble/Boulder
	Cobble/Fines
	Fines
	Large Boulder
	Large Cobble
	Large Cobble/Bedrock
	Large Cobble/Small Boulder
	Large Gravel
	Large Gravel/Small Cobble
	Medium Cobble
	Medium Cobble/Small Cobble
	Small Boulder
	Small Cobble
	Small Cobble/Gravel
	Small Gravel



Mesohabitat	Approximate Sampling Locations
	Backwater
	Glide
	Pool
	Rapids
	Run
	Riffle-Run Complex
	Run-Pool Complex
	Minor
	Electrofishing Site
	Level Logger/Transect
	Macroinvertebrate
	Mussels

West Canada Creek Project
FERC Project No. 2701
Erie Boulevard Hydropower L.P.

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CONSULTATION CALL (AUGUST 8, 2019)
SUPPLEMENTAL MATERIALS

WEST CANADA CREEK PROJECT (P-2701)

AGENCY CONSULTATION CALL AUGUST 9, 2019 - SUPPLEMENTAL INFORMATION

Photos 1 through 6 provide representative photos taken at the Trenton Impoundment during the 12-foot drawdown for the Impoundment Shoreline Characterization Study on August 7, 2019. Figure 1 denotes the locations of these photos.

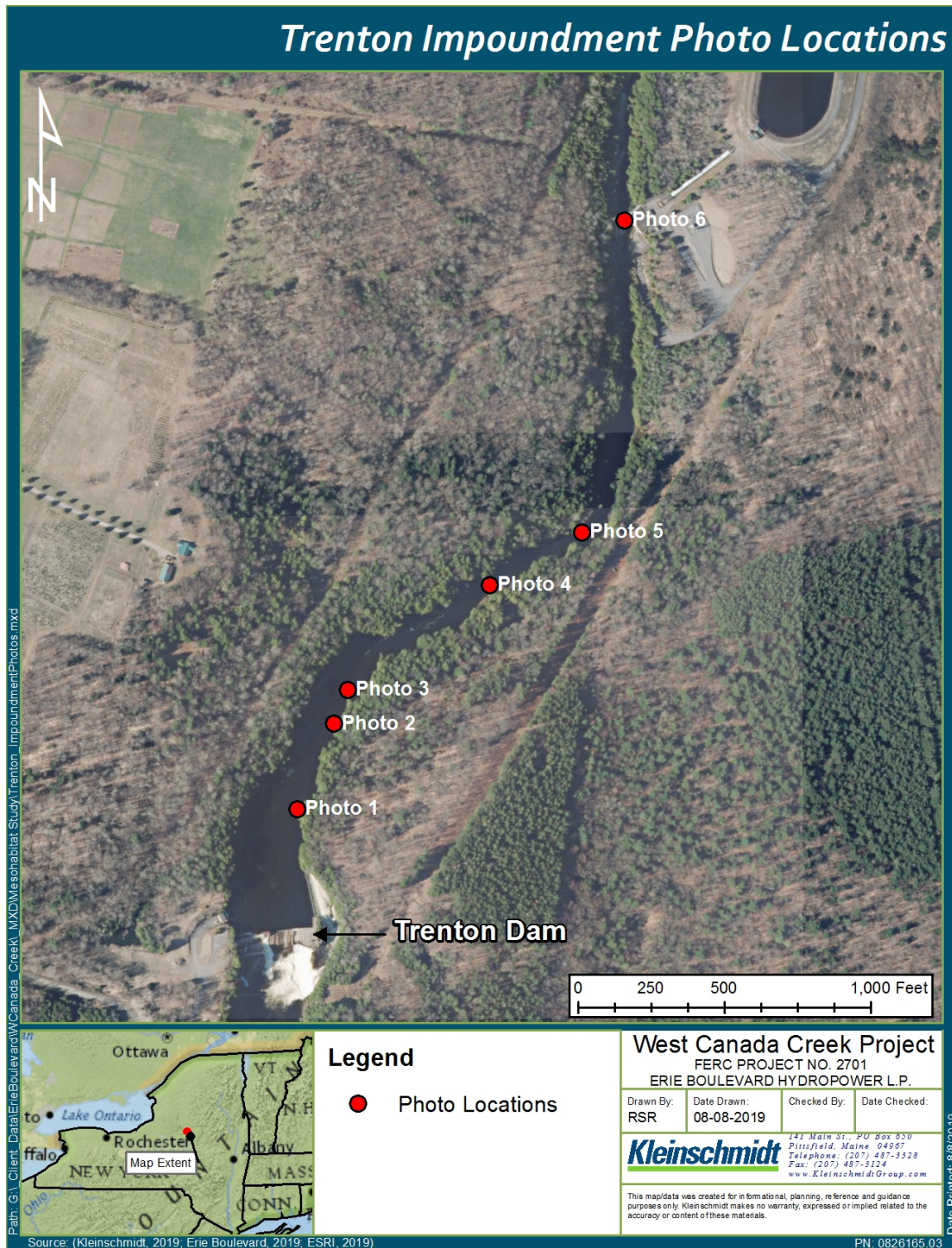


FIGURE 1 LOCATION OF TRENTON IMPOUNDMENT AUGUST 7, 2019 FIELD STUDY PHOTOS



PHOTO 1 LOWER TRENTON IMPOUNDMENT SHORELINE



PHOTO 2 LOWER TRENTON IMPOUNDMENT LOOKING DOWNSTREAM TOWARDS DAM

WEST CANADA CREEK PROJECT (P-2701)
AGENCY CONSULTATION CALL AUGUST 9, 2019 - SUPPLEMENTAL INFORMATION



PHOTO 3 LOWER SECTION OF TRENTON IMPOUNDMENT



PHOTO 4 MIDDLE SECTION OF TRENTON IMPOUNDMENT



PHOTO 5 MIDDLE SECTION OF TRENTON IMPOUNDMENT



PHOTO 6 UPPER TRENTON IMPOUNDMENT DOWNSTREAM OF PROSPECT TAILRACE

WEST CANADA CREEK PROJECT (P-2701)

AGENCY CONSULTATION CALL AUGUST 9, 2019 - SUPPLEMENTAL INFORMATION

Figure 2 denotes the location of the existing and proposed new location for the level logger upstream of the Newport Impoundment.

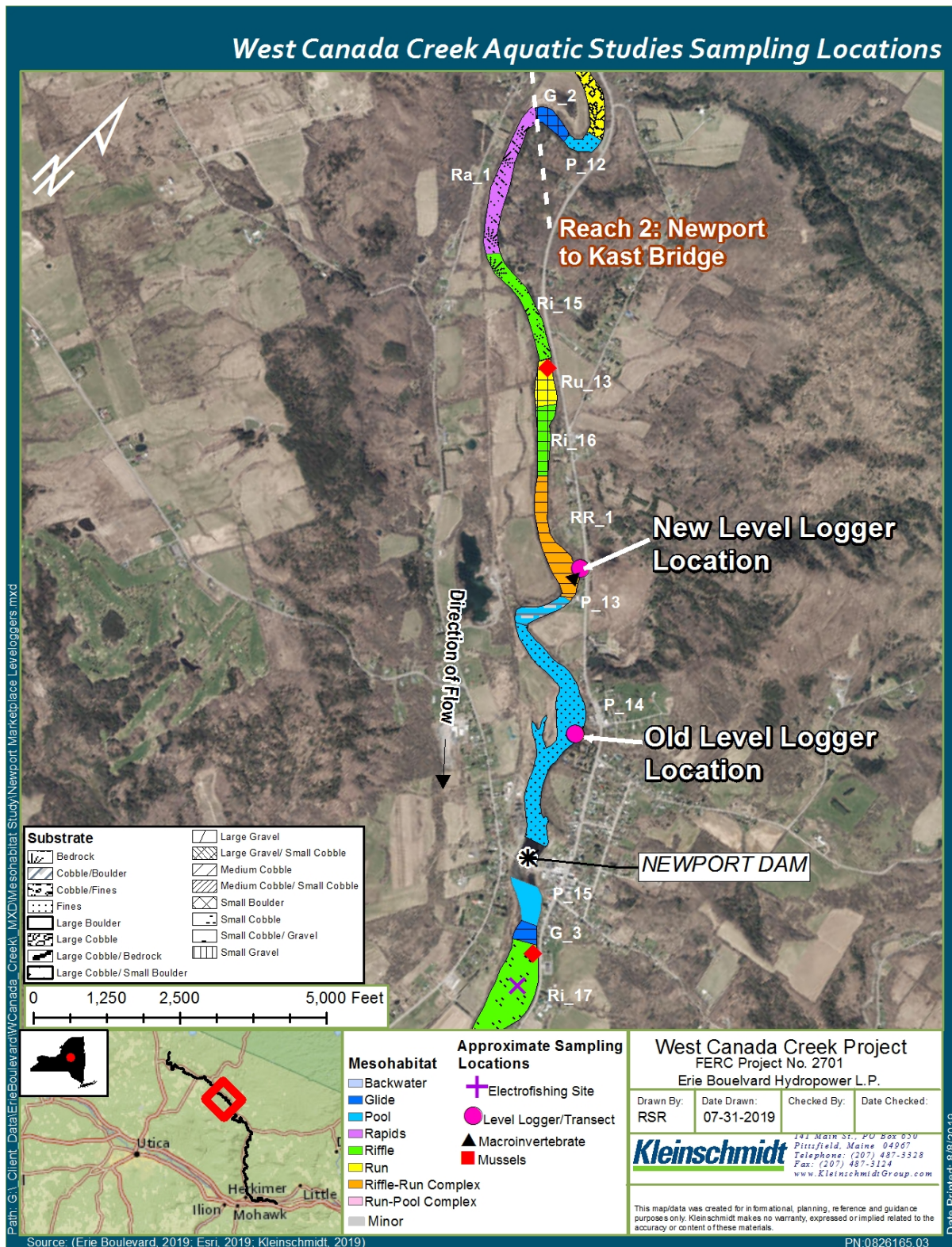
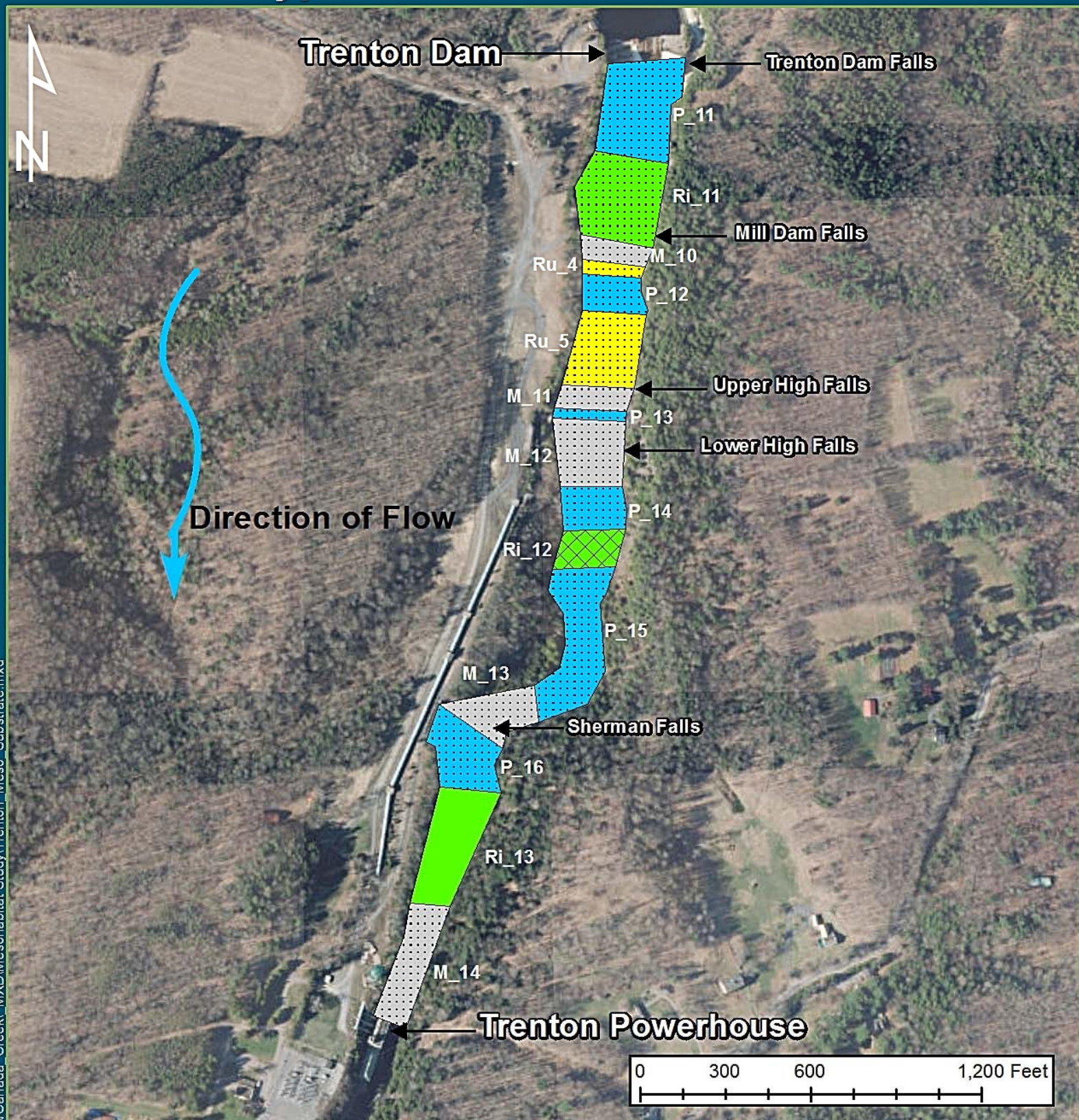


FIGURE 2 PROPOSED LOCATION FOR LEVEL LOGGER UPSTREAM OF NEWPORT IMPOUNDMENT

Trenton Bypassed Reach Mesohabitat & Substrate



Mesohabitat	Substrate
Pool	Large Boulder
Riffle	Ledge
Run	Small Boulder
Ledge	
Minor	

West Canada Creek Project
 FERC PROJECT NO. 2701
 ERIE BOULEVARD HYDROPOWER L.P.

Drawn By: RSR	Date Drawn: 06-20-2019	Checked By: MAH	Date Checked: 06-21-2019
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STUDY PROGRESS REPORT 2

ATTACHMENT C

RECREATION AND AESTHETICS STUDIES CONSULTATION

C1 - MEMO SUMMARIZING SEPTEMBER 9, 2019 CONSULTATION CALL AND PRESENTATION

C2 - MEMO SUMMARIZING SEPTEMBER 12, 2019 CONSULTATION CALL AND PRESENTATION

**C3 - EMAIL (10/29/2010) FROM AMERICAN WHITEWATER CONCURRING WITH WHITEWATER
BOATING STUDY POSTPONEMENT**

**C1 - MEMO SUMMARIZING SEPTEMBER 9, 2019 CONSULTATION CALL AND
PRESENTATION**

**MEETING/CALL SUMMARY
WEST CANADA CREEK PROJECT (P-2701)**

**RECREATION AND AESTHETICS STUDIES CONSULTATION
Conference Call/Meeting Summary**

ATTENDEES:

Todd Phillips, NYSDEC
Dick McDonald, NYSDEC
Jana Lantry, NYSDEC
Nicole Cane, NYSDEC
John Wiley, USFWS
Bob Nasdor, AW
Ken Ziobro, NYTU
Steve Murphy, Brookfield
Rachel Russo, Kleinschmidt
Karen Klosowski, Kleinschmidt
Kayla Easler, Kleinschmidt

DATE: September 9, 2019

Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company (Brookfield) is currently undergoing relicensing for the West Canada Creek Hydroelectric Project (FERC Project No. 2701) (Project) under the Federal Energy Regulatory Commission (FERC) Integrated Relicensing Process (ILP). Erie reached out to the U.S. Fish and Wildlife Service (USFWS), New York State Department of Environmental Conservation (NYSDEC), American Whitewater (AW), New York State Fish and Wildlife Management Board (FWMB), New York Trout Unlimited (NYTU), and the Town of Trenton to establish a Working Group and conduct an initial consultation call on May 29, 2019¹ to review specific consultation topics as identified in FERC's Study Plan Determination (SPD) related to the recreation and aesthetics studies. Following is a summary of key topics discussed during this consultation call. The meeting presentation is provided in Attachment 1 (including the presentation's associated attachments A, B, C and D).

INTRODUCTIONS AND PURPOSE OF CALL

Karen Klosowski (Kleinschmidt) welcomed participants and provided an overview of the agenda. The purpose of the call was to review specific updated topics as identified in FERC's SPD for additional consultation for the recreation and aesthetics related studies previously discussed on May 29, 2019. These studies include: Recreation Use, Needs and Access Study; Whitewater Boating Flow and Access Study; and Aesthetics Flow Assessment Study.

Ms. Klosowski reviewed the specific consultation topics for the recreation and aesthetic studies to be covered during this call, to include:

¹ Participants on the May 29, 2019 included USFWS, NYSDEC, and AW. Minutes of that meeting were previously provided to the working group on July 11, 2019.

- Confirm Recreation Working Group, Whitewater Boating Expert Panel, and Aesthetics Focus Group members.
- Recreation Use, Needs, And Access Study Updates:
 - Facility inventories, spot counts and Prospect boat launch traffic counts.
 - West Canada Creek Project recreation visitor online survey.
 - Upcoming Trenton Trail Days and intercept surveys.
- Whitewater Boating Flow and Access Study Methodology:
 - Expert panel and safety plan.
 - Assessment forms.
 - Prospect land based assessment.
 - Downstream controlled flow assessment.
- Aesthetics Flow Assessment Methodology:
 - Flow assessment participants.
 - Flow ranges for assessment, KOP locations, and controlled flow assessment form.
 - Controlled flow field assessment logistics.

Ms. Klosowski stated that there will be a follow up call for Thursday (September 12th) to focus on the land based whitewater boating access assessment for the Prospect bypass reach.

Recreation Studies Working Group

As discussed in the May 29, 2019 conference call, Ms. Klosowski explained that FERC and agencies asked for the establishment of working groups for the recreation and aesthetic studies. Ms. Klosowski stated that Erie established a Working Group of representatives from these agencies and stakeholders, with an Expert Panel to be established for the Whitewater Boating Flow and Access Study, and a smaller Focus Group to be established for the Aesthetics Flow Assessment. As agreed, to during the previous consultation call, key contacts for the Working Group include: NYSDEC –Todd Phillips, USFWS –John Wiley, and AW –Bob Nasdor. Trout Unlimited - Ken Ziobro agreed to be part of this group during the call (9/9/2019). The Town of Trenton and FWMB have been included in correspondence but have not participated in the consultation outreach. Erie will continue to include representatives from FWMB and Town of Trenton on distribution of recreation and aesthetic study updates and consultation call summaries.

Recreation Use, Needs, and Access Study Update

Ms. Klosowski gave an update on the recreation use, needs, and access study as follows:

Downstream Spot Counts

Facility inventories were completed, and spot counts conducted at the Prospect boat launch and the 10 identified downstream West Canada Creek recreation access sites. A total of 12 spot counts were conducted, including 4 weekdays, 4 weekend days, and 4 holiday weekend days – Memorial Day, Fourth of July and Labor Day (2 counts).

Traffic Counters

A traffic counter was installed at Prospect boat launch from Memorial Day weekend through Labor Day to capture information pertaining to vehicular traffic at this site.

Trenton Trail Days

For the May 18 and 19, 2019 trail days there were approximately 2,300 visitors and Erie conducted approximately 200 intercept surveys. The upcoming Trenton Trail Days is on September 14 and 15, 2019, and intercept surveys will be conducted again during the event.

Mr. Nasdor questioned if Erie was aware of what the flows would be for the Trenton Trail Days event. Mr. Murphy stated that flows provided by the upstream Jarvis Project would not be forecast until the Thursday prior to the event, so Erie could not predict the flow at this time for the Trenton Trail Days. However, to extent possible, Erie will target bypass flows within the range of 200 to 300 cfs.

Recreation Visitor Online Survey

Kleinschmidt reviewed the status of the online survey, stating that the survey will be available online via SurveyMonkey from Memorial Day weekend (May 24, 2019) through the end of Labor Day weekend. The survey was also available in hard copy at the Prospect boat launch via a drop box, as well as information regarding the availability of the survey online. The survey was structured to capture information regarding recreation visitor use and perceptions at the Prospect impoundment and boat launch area, and West Canada Creek below Trenton tailrace downstream to Kast Bridge.

Kleinschmidt received a temporary revocable permit (TRP) from the NYSDEC for posting the survey notification flyer at NYSDEC fishing access locations along West Canada Creek. Sites where the survey notification form was posted included: NYSDEC fishing access spot count sites (DS Rec 3, 4, 6, 7, and 9), NYSDEC Shell Bush Road and Fishing Rock Road fishing access area, and the Prospect Boat Launch.. There were three NYSDEC sites indicated on the map provided by NYSDEC that Kleinschmidt could not locate (see Attachment 1 Presentation, Attachment A). All notifications were removed Labor Day Weekend, per the permit requirements.

To further notify the public about the online survey, Erie requested the posting of the survey notification information on Facebook websites with the following entities:

- Trenton Chamber of Commerce -posted 7/15/2019
- WCC Campsites -posted 7/17/2019
- WCC Tubing -posted 7/16/2019
- WCC Watershed Alliance -posted 7/16/2019
- Trout Power -posted 7/21/2019
- New York Trout Unlimited -requested on 7/17/2019, did not post
- KOA Herkimer Diamond Resort -requested on 7/14/2019, did not post

The online survey was closed September 3, 2019 following Labor Day weekend. A total of 211 surveys were completed, including 179 online surveys and 32 surveys collected from the Prospect boat launch drop box.

Study Results

Information collected from the facility inventory, spot and visitor counts and visitor surveys will be analyzed and summarized in the Recreation Use, Needs, and Access Study Report.

Whitewater Boating Flow and Access Study Methodology

Prospect Bypass Reach – Land Based Assessment

The assessment is to identify potential whitewater features, potential limitations to navigation and safe paddling, potential ingress and egress locations, and safety considerations. A consultation call is scheduled for 1:00 pm on Thursday, September 12th to discuss the approach to the assessment of the Prospect bypass reach. The following participants indicated they would participate in the call: NYSDEC (two participants), USFWS – John Wiley, and AW – Bob Nasdor. The call will include drone footage and pictures of the Prospect bypass reach. Additional information will be sent to participants prior to the call. At this time there is no time/date scheduled for the land-based assessment, but options will be discussed during the September 12th call. If the on-land assessment justifies moving forward to Phase 3, a controlled flow assessment for the Prospect bypass reach, Erie will consult with the Expert Panel to determine controlled flow levels to be studied.

Downstream Reach – controlled flow assessment

Erie proposes the targeted flow assessment releases for the downstream reaches of 600 cubic feet per second (cfs), 1,000 cfs and 1,400 cfs, as discussed during the previous consultation call (May 29, 2019). Based on discussion during the previous call, Erie will be targeting portions of each reach (rather than the entire approximately 28 mile reach from Morgan Dam to Kast Bridge), in order to assist in the logistics of the whitewater boating study. Slide 9 of the presentation shows the two proposed study reaches, one up above Poland and one around Middleville. These were chosen for logistics and for representative stretches of both the upper and lower whitewater boating segments. Originally it was discussed to have 3 days in the field in a row, however it has been broken down into separate times, one day for the upper reach, and 0.5 day for the lower reach.

Erie has been coordinating with Mr. Nasdor (AW) to identify expert panel participants for in-field efforts, including names and contact information. The panel will be no more than 10 people, about 5-6 people per reach for logistical purposes. Prior to the call today, Erie planned on targeting the upper reach on September 16th and the lower reach the week of October 7th. Mr. Nasdor explained that he has reached out to the whitewater boating community to get individuals to help in the assessment. However, due to the schedule and close date of the timing of the event, Mr. Nasdor indicated that the October timeframe would be more achievable than the September dates. The group decided that the focus would be on dates later in October in order to have sufficient flow available for the study and time to obtain participants and work out the field study logistics.

There was discussion that travel times will need to be looked at to make sure there is efficient time to travel and assess each reach. The estimated flow travel time was approximately 6-8 hours from Trenton tailrace to Kast Bridge. Ms. Klosowski stated that during the outreach to the West Canada Creek Campground, the tubing outfit provided a detailed break down or several years' worth of data for use and the outfitter's website has a detailed breakdown of suitable flow conditions for tubing on West Canada Creek. In addition, the study's focus is assessment of flows for whitewater boating opportunities, and FERC's SPD does not specifically call out tubers in the whitewater boating study assessment. With the data that has been submitted by the campground and based on the timing and potential weather conditions, the group agreed that the downstream reach-controlled flow assessment can focus on whitewater boating and tubers would not be involved in the study assessment. However, the existing data from the West Canada Creek Campground will be summarized and referenced in the study report.

There was review and discussion regarding the proposed study reaches. NYSDEC (Dick McDonald and Jana Lantry) raised concerns that use of the NYSDEC fishing access areas for the whitewater boating study could lead participants to think that they can use these fishing access areas for boating access. NYSDEC stated that the NYSDEC fishing access areas are intended just for fishing and not hand-carry boating access. NYSDEC has law enforcement issues in these areas with people using these access areas for tubing access. Ms. Klosowski suggested that Erie could either not use the NYSDEC fishing access sites for the study or would follow-up with NYSDEC (Ms. Lantry and Mr. McDonald) to obtain a permit/authorization for use of these areas for study purposes only. Erie will revisit the study reach and access locations in coordination with AW (Bob Nasdor) and follow-up with NYSDEC if fishing access locations are necessary to allow access to the shorter boating reaches for the study logistical purposes.

The group discussed if there was a way to do just 2 flows not the three flows suggested, and if the expert panel could determine the minimum and optimal flow levels based on assessment of two flows rather than three flows. There was discussion that the study reaches would need to be identified, flow time and logistics reviewed to finalize approach. At this point the objective would be to conduct the controlled flow field efforts assessments within 1.5 days for both reaches. Erie will coordinate with AW (Bob Nasdor) to identify the updated reach sections, and logistics, including dates for the controlled flow study. AW is reaching out to obtain participants and will coordinate with Erie to finalize participants, logistics and the dates for the controlled flow study.

Participants will complete pre-flow assessment form and complete post-flow assessment forms for each flow and study reach. Participants will also complete comparative flow post-evaluation form and focus group discussion after completing all flow runs (see Attachment 1 Presentation, Attachment B). This attachment also includes the mesohabitats that have been surveyed to help identify substrate types in the reaches. Participants were asked to provide Kleinschmidt any feedback on the whitewater boating forms.

Aesthetics Flow Assessment

Environmental Design & Research (EDR), experts in aesthetic resources assessment, will facilitate the aesthetics controlled flow field assessment and documentation. Controlled flow aesthetic assessment of the Project bypass reaches with Focus Group is scheduled for September 24, 2019. Ms. Klosowski stated that Erie is looking for a focus group of up to about 10 participants for the aesthetic flow assessment field evaluation, to include NYSDEC (2

representatives). USFWS, AW, FWMG and Town of Trenton, as interested. As of now the participants are: NYSDEC (2 participants), AW – Mr. Nasdor, and USFWS – Mr. Wiley. Mr. Phillips will follow up with Kleinschmidt with the names of the NYSDEC participants.

Participants will complete an assessment form at the selected KOP locations during leakage conditions and each controlled flow releases. Participants will complete comparative flow post-evaluation form and focus group discussion after completing all flow runs (see Attachment 1 Presentation, Attachment D). There will be comparative flow post evaluation form and focus group discussion after the flow runs.

A total of 7 KOPs were identified: KOP 1 –Prospect Overlook, KOP 2 -Prospect Falls View (updated location), KOP 3 -Trenton Trail Accessible Overlook, KOP 4 -Upper High Falls Overlook, KOP 5 -Lower High Falls Overlook, KOP 6 -Trenton Trail Cradle Overlook, and KOP 7 -Sherman Falls Overlook. For the controlled flow assessment, KOP locations to include KOP locations 1 and 2 at Prospect and KOP locations 4, 5, and 7 at Trenton that show representative views of the waterfalls. In response to input during previous call, KOP 2 was relocated to closer location near Prospect Falls; note that this location is currently not accessible to the public. The new location would be a hike in from Military Bridge Road to an overlook location, this is not a location open that is to public access for safety reasons.

Erie proposes targeted aesthetic flow assessment release of: Prospect bypass reach of leakage, 100 cfs and 200 cfs, and for the Trenton bypass reach of leakage, 200 cfs and 400 cfs. The Presentation (Attachment 1), Attachment C provides a series of representative photographs of the various approximate flows at several of the KOP locations as captured during other field study events. The Prospect bypass reach is shown with flow ranges 100 and 200 cfs, and for the Trenton bypass reach flows are shown for 400 cfs (during the Trenton Trail Days May 18 and 19, 2019).

Preliminary data shows visitor survey responses during the trail days rated the 400 cfs flow as excellent (greater than 70% of the 200 participants) with an average rating of 4.7 (scale of 1 - poor to 5 -excellent) for scenic views (see Attachment C for preliminary data analysis). Respondents also indicated they would prefer flows same (46%) as the existing flow, followed by preferring higher flows (27%), and does not matter (25%).

The stakeholder group suggested that the evaluation remove the leakage flow, as individuals are aware of the aesthetics of the conditions during leakage (and conditions are documented in the photographs) and to assess flows of 100, 200, and 400 cfs at both bypass reaches. Erie countered with assessing the 100, 200 and 400 cfs for the study at Trenton, but to assess 100, 200 and 300 cfs flow for the aesthetics controlled flow study at Prospect bypass reach. The group discussed whether the higher flow should be 400 cfs at Prospect bypass reach, rather than Erie's proposed 300 cfs. Erie will consult with EDR to confirm approach of revised flow ranges and documentation only of leakage conditions (and not field assessment and evaluation). Erie will also consult with EDR to decide the top flow range at Prospect bypass reach for the aesthetics controlled flow assessment.

Action Items

Recreation Study

- Trenton Trail Days – Intercept surveys on September 14 and 15th.

Whitewater Boating Study

- AW to help identify expert boaters for the downstream controlled flow assessment.
- Kleinschmidt to coordinate with AW about logistics and reaches for the controlled flow assessment.
- The target date for the assessment is October 7 and 8, but Erie will finalize in consultation with AW.
- Kleinschmidt to follow up with NYSDEC for access areas for boaters if selected reaches involve NYSDEC fishing access locations.

Aesthetics Flow Assessment

- NYSDEC to follow up with 2 participants

ATTACHMENT 1

**RECREATION CONSULTATION MEETING PRESENTATION
SEPTEMBER 9, 2019**



West Canada Creek Hydroelectric Project (FERC No. 2701)

Study Plan Additional Consultation

September 2019

Purpose of Consultation

Provide an update and discuss specific topics as identified in our previous May 29, 2019 consultation call for the recreation and aesthetics studies, including the following:

- Confirm Recreation Working Group, Whitewater Boating Expert Panel, and Aesthetics Focus Group members.
- Recreation Use, Needs, And Access Study Updates:
 - Facility inventories, spot counts and Prospect boat launch traffic counts.
 - West Canada Creek Project recreation visitor online survey.
 - Upcoming Trenton Trail Days and intercept surveys.
- Whitewater Boating Flow and Access Study Methodology:
 - Expert panel and safety plan.
 - Assessment forms.
 - Prospect land based assessment.
 - Downstream controlled flow assessment.
- Aesthetics Flow Assessment Methodology:
 - Flow assessment participants.
 - Flow ranges for assessment, KOP locations, and controlled flow assessment form.
 - Controlled flow field assessment logistics.

Recreation Working Group

- Erie reached out to the U.S. Fish and Wildlife Service (USFWS), New York State Department of Environmental Conservation (NYSDEC), American Whitewater (AW), New York State Fish and Wildlife Management Board (FWMB), New York Trout Unlimited (NYTU), and the Town of Trenton to establish Working Group.
- Establish a Working Group of representatives from these agencies and stakeholders
 - Expert Panel for the White Water Boating Flow and Access Study
 - Focus Group for the Aesthetics Flow Assessment.
- As agreed to during the previous consultation call, key contacts for the Working Group include:
 - NYSDEC – Todd Phillips,
 - USFWS – John Wiley, and
 - AW – Bob Nasdor.
- Erie has and will continue to include representatives from FWMB, NYTU, and Town of Trenton on distribution of recreation and aesthetic study updates and consultation call summaries.

Recreation Use, Needs, and Access Study Update

Spot Counts

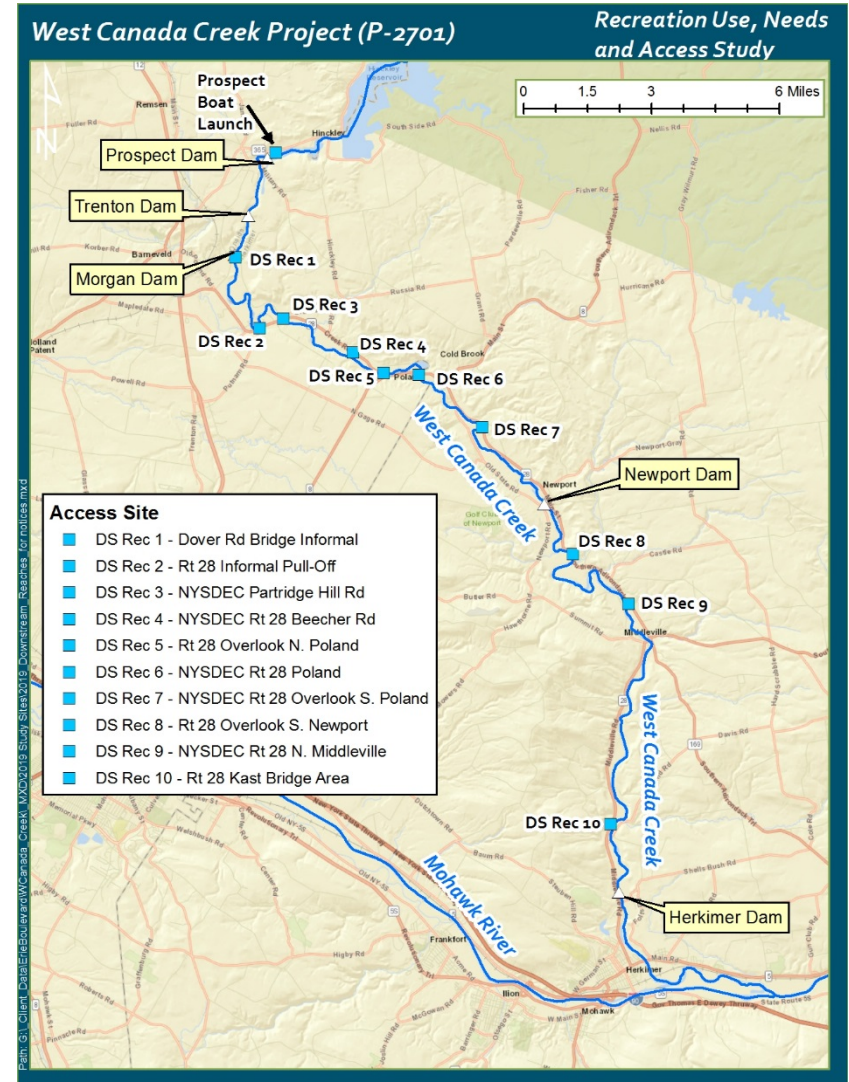
- Facility inventories were completed and spot counts conducted at the Prospect boat launch and the 10 identified downstream West Canada Creek recreation access sites.
- A total of 12 spot counts were conducted, including 4 weekdays, 4 weekend days, and 4 holiday weekend days - Memorial Day, Fourth of July and Labor Day (2 counts).

Traffic Counts

- A traffic counter was installed at Prospect boat launch from Memorial Day weekend through Labor Day to capture information pertaining to vehicular traffic at this site.

Trenton Trail Days

- Upcoming Trenton Trail Days is on September 14 and 15, 2019.
- Intercept surveys will be conducted again during the event.



Recreation Use, Needs, and Access Study Update

Visitor Survey

- Posting of online survey notification flyer
 - Received permit from NYSDEC for posting at fishing access locations.
 - Reviewed NYSDEC access site information provided by NYSDEC (see Attachment A).
 - Sites where survey notification form was posted include:
 - NYSDEC fishing access spot count sites (DS Rec 3, 4, 6, 7, 9)
 - NYSDEC Shell Bush Road and Fishing Rock Road Access Areas
 - Prospect Boat Launch
 - Notification flyers were removed Labor Day weekend.
- Posting online – Erie requested Facebook postings with the following entities:
 - Trenton Chamber of Commerce - posted 7/15/2019
 - WCC Campsites - posted 7/17/2019
 - WCC Tubing - posted 7/16/2019
 - WCC Watershed Alliance - posted 7/16/2019
 - Trout Power - posted 7/21/2019
 - New York Trout Unlimited - requested on 7/17/2019, did not post
 - KOA Herkimer Diamond Resort - requested on 7/14/2019, did not post
- Number of completed surveys
 - Online survey was closed 09/03/2019 following Labor Day weekend.
 - A total of 211 surveys were completed, including 179 online surveys and 32 surveys collected from the Prospect boat launch drop box.

Study Results

- Information collected from the facility inventory, spot and visitor counts and visitor surveys will be analyzed and summarized in the Recreation Use, Needs, and Access Study Report.

Whitewater Boating Flow and Access Study

Prospect Bypass Reach - Land Based Assessment

- Assessment to identify potential whitewater features, potential limitations to navigation and safe paddling, potential ingress and egress locations, and safety considerations.
- Consultation call scheduled for September 12, 2019 at 1:00 pm.
- Identify Expert Panel participants for land based assessment.
- If the on-land assessment justifies a controlled flow assessment for the Prospect bypass reach, Erie will consult with the Expert Panel to determine controlled flow levels to be studied during Phase 3 study.

Whitewater Boating Flow and Access Study

Downstream Reach – Controlled Flow Assessment

Expert Panel

- Erie is working with American Whitewater to identify expert panel participants for in-field efforts, including names and contact information.
- USFWS and NYSDEC participation as observers if interested.
- Total of up to 10 participants (5-6 for each reach) for logistical purposes.

Safety Plan

- Erie is preparing a Project Safety Plan for the field efforts.
- Erie and American Whitewater will review the safety plan and conduct on-site safety review with all field study participants.
- Participants will be required to sign waiver forms.

Whitewater Boating Flow and Access Study

Downstream Reach – Controlled Flow Assessment

Flow Ranges

- Erie proposes the targeted flow assessment releases for the downstream reaches of 600 cubic feet per second (cfs), 1,000 cfs and 1,400 cfs, as discussed during previous consultation call (May 29, 2019).

Field Study Schedule and Approach

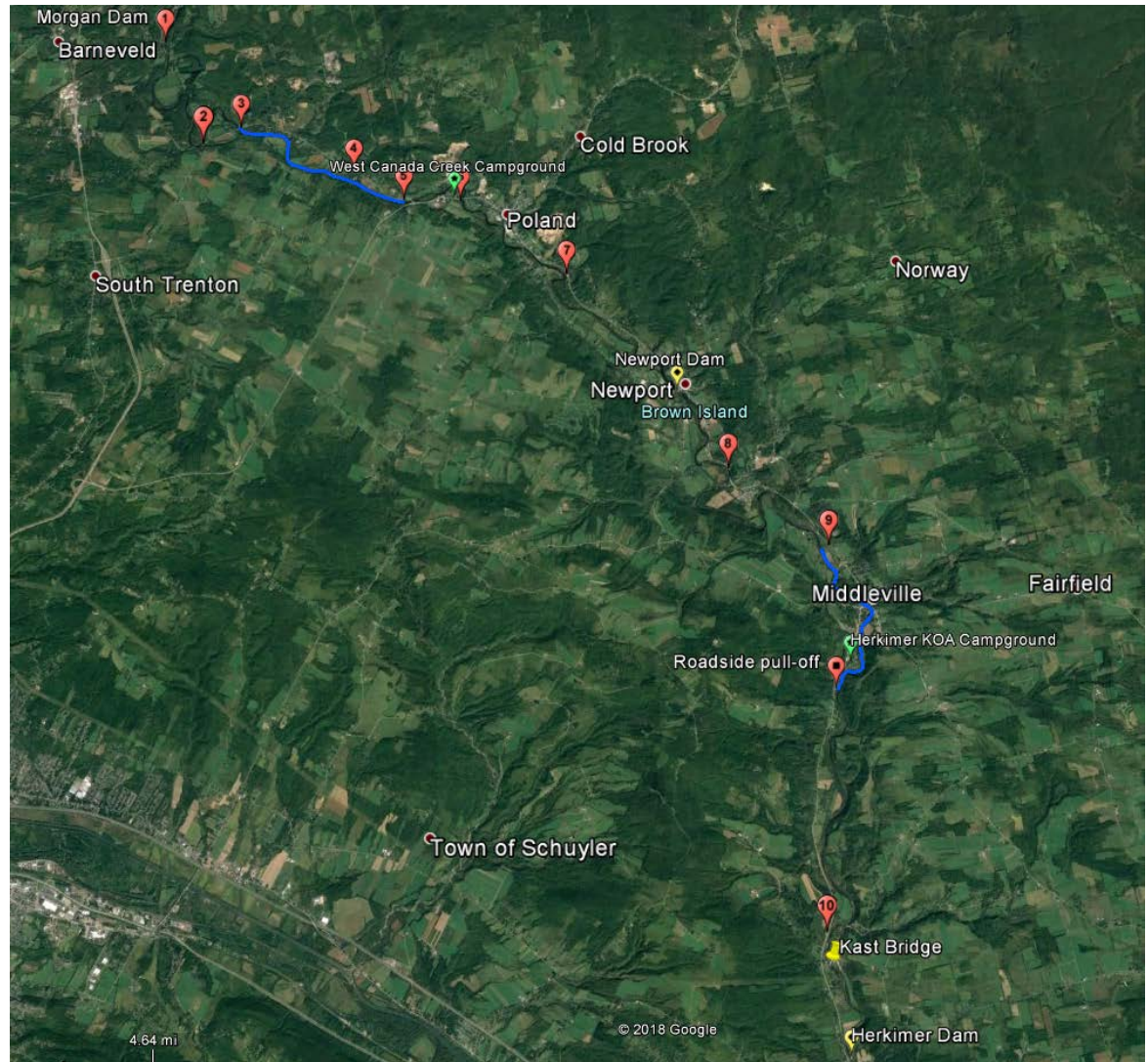
- Erie anticipates the controlled flow assessment will involve:
 - 1 day of field efforts for the reach above Newport– targeted for September 16, 2019.
 - 1.5 day of field efforts for the reach downstream of Newport – targeted for week of October 7.
- Participants to complete pre-flow assessment form and complete post-flow assessment forms for each flow and study reach (see Attachment B).
- Participants to complete comparative flow post-evaluation form and focus group discussion after completing all flow runs (see Attachment B).

Whitewater Boating Flow and Access Study

Downstream Reach – Controlled Flow Assessment

Reaches for Assessment

- Per previous consultation call, conduct runs in representative locations of the two distinct whitewater boating reaches – upper reach and lower reach.
- For reference purposes, Attachment B provides preliminary mesohabitat and substrate maps developed as part of the Aquatic Mesohabitat Survey (from Trenton tailrace to confluence with Mohawk River).

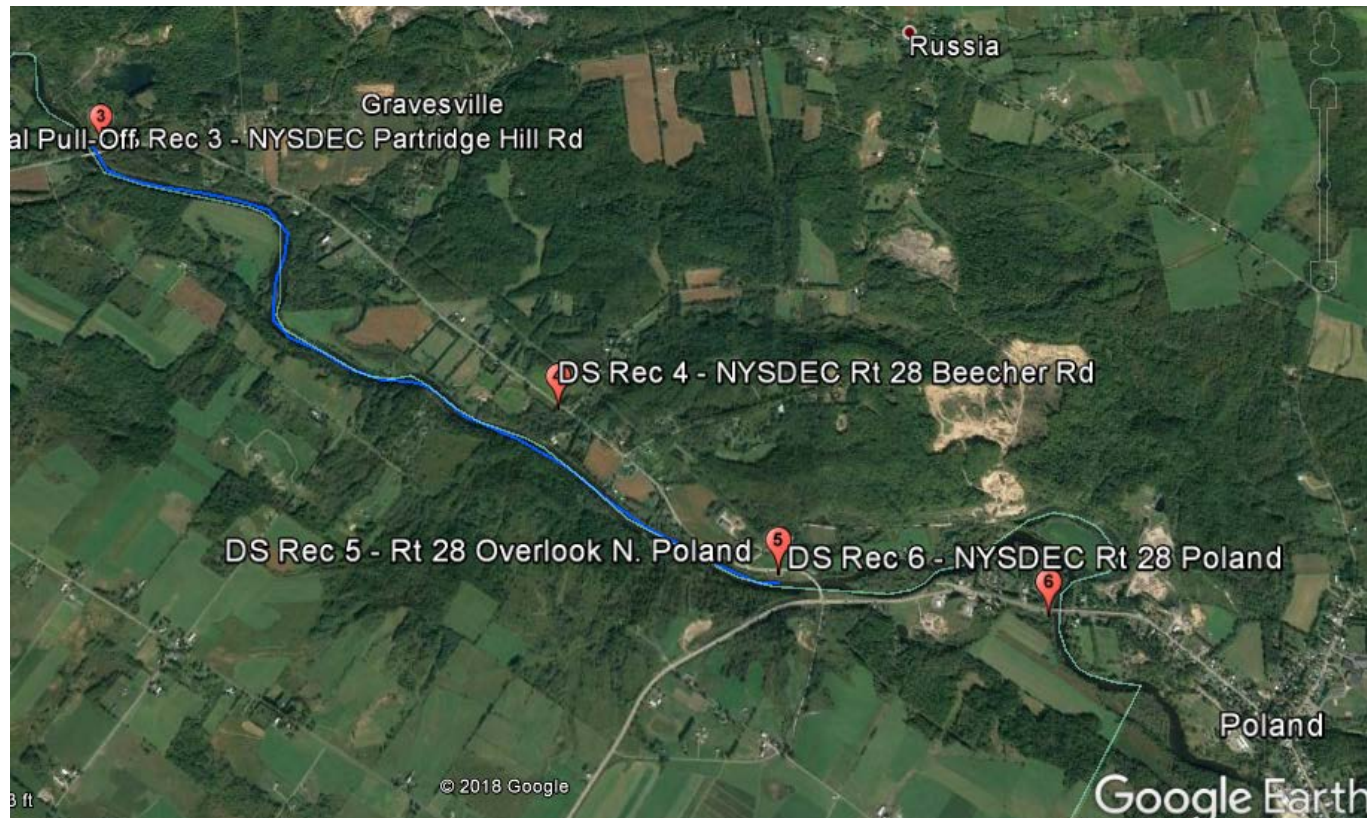


Whitewater Boating Flow and Access Study

Downstream Reach – Controlled Flow Assessment

Upper Reach – portion of Section 1: Dover Road to Route 28 (per AW Class I-II)

- Put-in at DS Rec Site 3 – NYSDEC Partridge Hill Road Access
- Take-out at DS Rec Site 5 Route 28 Overlook North Poland
- Run length approximately 3 river miles

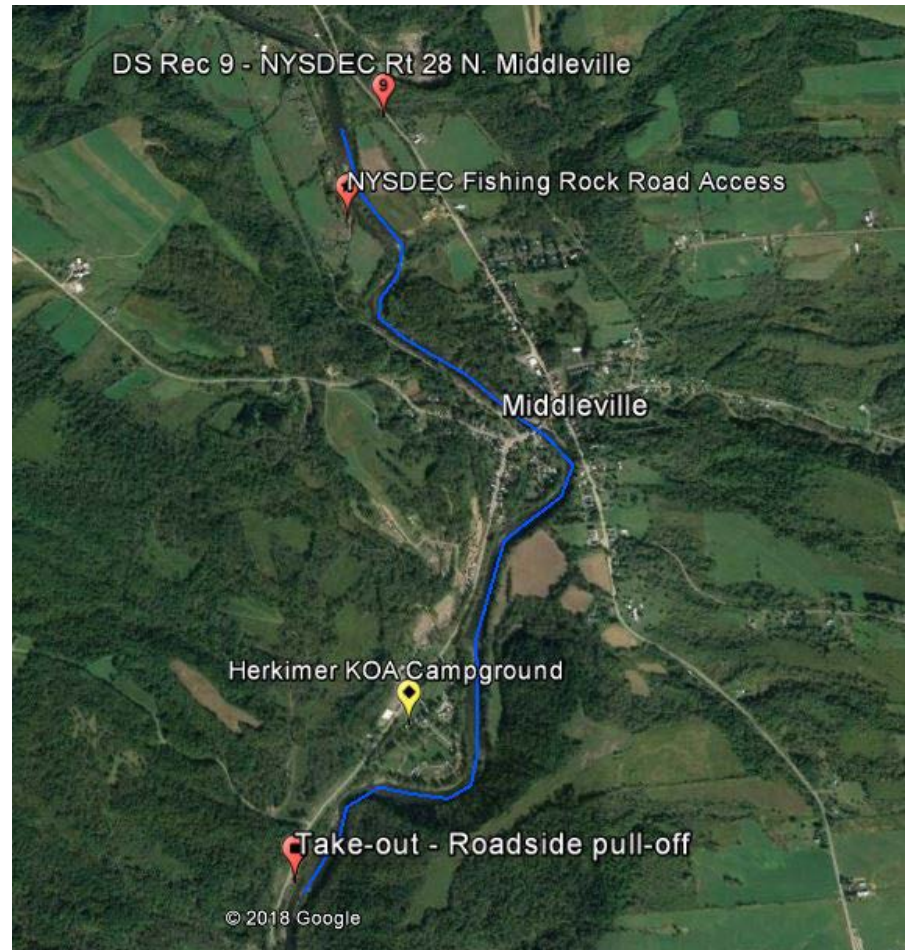


Whitewater Boating Flow and Access Study Methodology

Downstream Reach – Controlled Flow Assessment

Lower Reach – portion of Section 2: Route 29 in Middleville to Route 7/Kast bridge above Herkimer (per AW Class II-II+)

- Put-in at DS Rec Site 9 – NYSDEC Rt. 28 N. Middleville
- Take-out at Rt 28 roadside pull-off below Herkimer KOA campground
- Run length approximately 2.5 river miles



Whitewater Boating Flow and Access Study

Downstream Reach – Controlled Flow Assessment

Logistics

- Confirm number of paddlers and tubers, including names, contact information and level of experience.
- Participants to provide own safety equipment (such as helmets, life jackets, and if needed, wetsuits), boats and transportation.
- Safety briefing at start of each day.
- Participants to complete pre-run information form and post-run assessment forms, as well as comparative evaluation form and focus group discussion after completing all flow runs.

Study Results

- Results of the controlled flow assessment will be summarized in Whitewater Boating Flow and Access Study report.

Aesthetics Flow Assessment

Focus Group Participants

- Identify stakeholders to form a Focus Group for the Aesthetic Flow Assessment release evaluation, including names and contact information.
- Include interested members of working group to include NYSDEC (2 representatives), USFWS, AW, FWMG and Town of Trenton.
- Total number of up to 10 participants.

Flow Assessment Releases

- As stated in Erie's Revised Study Plan, Erie proposes targeted aesthetic flow assessment releases of:
 - Prospect bypass reach – leakage, 100 and 200 cfs.
 - Trenton bypass reach – leakage, 200 and 400 cfs.

Aesthetics Flow Assessment

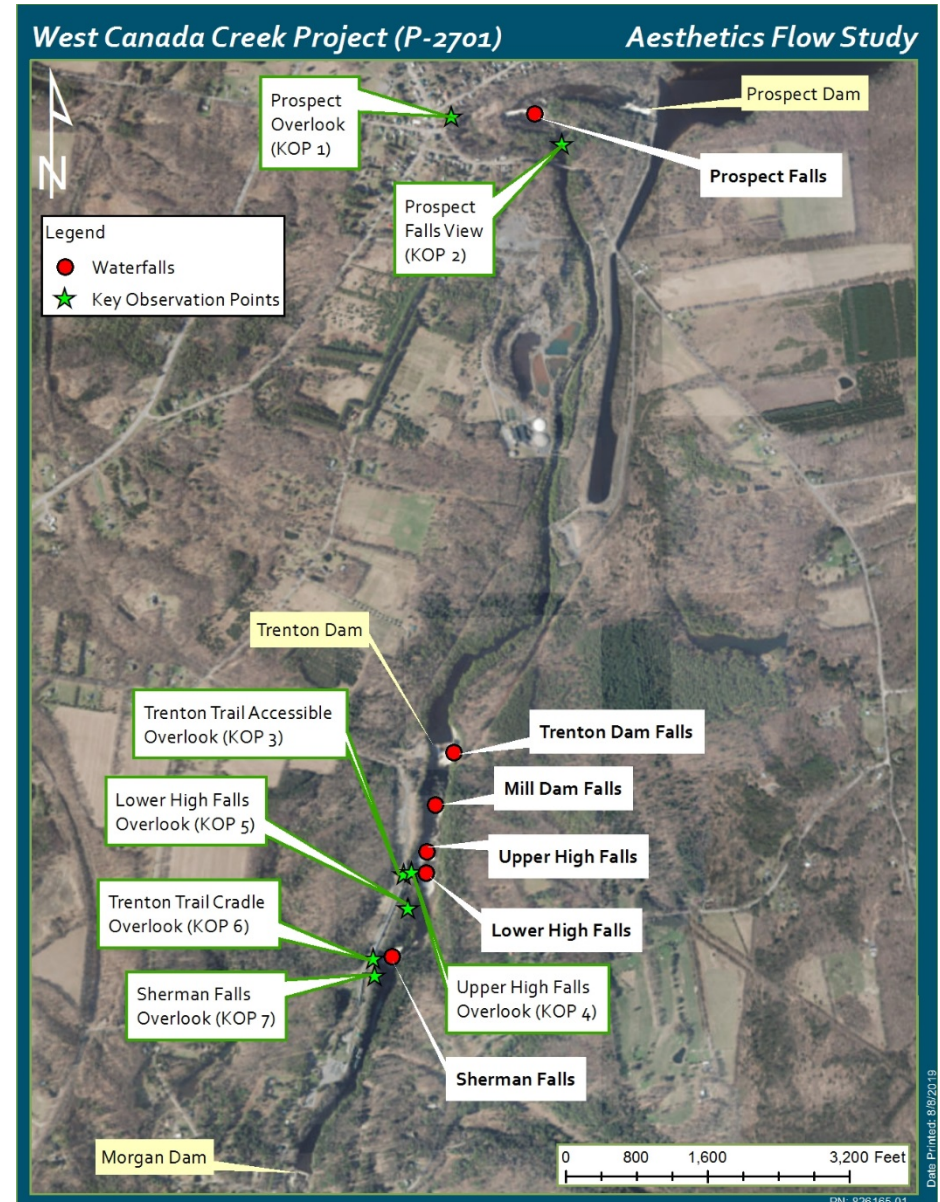
Flow Range Release Rationale

- Attachment C provides a series of photographs of various flows at several of the KOP locations as captured during other field study events.
- For the Prospect bypass reach
 - Based on review of known flow ranges, 100 and 200 cfs provide veiling flow over Prospect falls (see Attachment C).
- For the Trenton bypass reach
 - During Trenton Trail Days (May 18 and 19, 2019) the average flow in the Trenton bypass reach was approximately 400 cfs during the event.
 - Visitor survey responses rated flows as excellent (greater than 70% of the 200 participants) with an average rating of 4.7 (scale of 1 - poor to 5 - excellent) for scenic views (see Attachment C for preliminary data analysis).
 - Respondents also indicated they would prefer flows same (46%) as the existing flow, followed by preferring higher flows (27%), and does not matter (25%).

Aesthetics Flow Assessment

Key Observation Points (KOPs)

- In response to input during previous call, KOP 2 was relocated to closer location near Prospect Falls; note that this location is currently not accessible to the public.
- A total of 7 KOPs were identified:
 - **KOP 1 – Prospect Overlook**
 - **KOP 2 - Prospect Falls View (updated location)**
 - KOP 3 - Trenton Trail Accessible Overlook
 - **KOP 4 - Upper High Falls Overlook**
 - **KOP 5 - Lower High Falls Overlook**
 - KOP 6 - Trenton Trail Cradle Overlook
 - **KOP 7 - Sherman Falls Overlook**
- For controlled flow assessment, KOP locations to include KOP locations 1 and 2 at Prospect and KOP locations 4, 5, and 7 at Trenton that show representative views of the waterfalls.



Aesthetics Flow Assessment

Field Study Schedule and Approach

- Environmental Design & Research (EDR), experts in aesthetic resources assessment, will facilitate the controlled flow field assessment and documentation.
- Controlled flow aesthetic assessment of the Project bypass reaches with Focus Group targeted for September 24, 2019.
- Documentation of aesthetic conditions at selected KOP locations during controlled flow assessment to include both photographic and video documentation.
- Participants to complete an assessment form at the selected KOP locations during leakage conditions and each controlled flow release.
- Participants to complete comparative flow post-evaluation form and focus group discussion after completing all flow runs (see Attachment D).

Assessment Forms

- Attachment D provides the draft flow assessment form for the controlled flow field evaluation, the comparative flow form and focus group discussion questions.

Aesthetics Flow Assessment

Documentation and Assessment of Controlled Flow Releases

Logistics

- Confirm focus group participants attending the field assessment.
- Participants to provide own transportation.
- Safety briefing at start of each day.
- Controlled flow assessment one day of field assessment to include Prospect and Trenton bypass reaches.
- Participants to complete assessment forms, as well as focus group discussion.

Study Results

- Results of the KOP documentation and controlled flow assessment will be summarized in the Aesthetics Flow Assessment Study report.

West Canada Creek Project Study Report and Meeting Schedule

Responsible Party	Pre-Filing Milestone	Date
FERC	Issue Director's Study Plan Determination	3/7/2019
Erie	First Study Season	Spring- Fall 2019
Erie	File Initial Study Report	1/10/2020
All Stakeholders	Initial Study Report Meeting	1/25/2020
Erie	File Initial Study Report Meeting Summary	2/9/2020
Erie	Second Study Season	Spring- Fall 2020
Erie	File Preliminary Licensing Proposal (or Draft License Application)	10/1//20
All Stakeholders	File Comments on Preliminary Licensing Proposal (or Draft License Application)	12/30/2020
Erie	File Updated Study Report	1/10/2021
All Stakeholders	Updated Study Report Meeting	1/25/2021
Erie	File Updated Study Report Meeting Summary	2/9/2021
Erie	File Final License Application	2/28/2021
Erie	Issue Public Notice of Final License Application Filing	3/15/2021



West Canada Creek Project Relicensing Website

<http://www.westcanadacreekproject.com>

Steven P. Murphy

Director, U.S. Licensing

Brookfield

33 West 1st Street South, Fulton, New York 13069

Phone: (315) 598-6130

steven.murphy@brookfieldrenewable.com

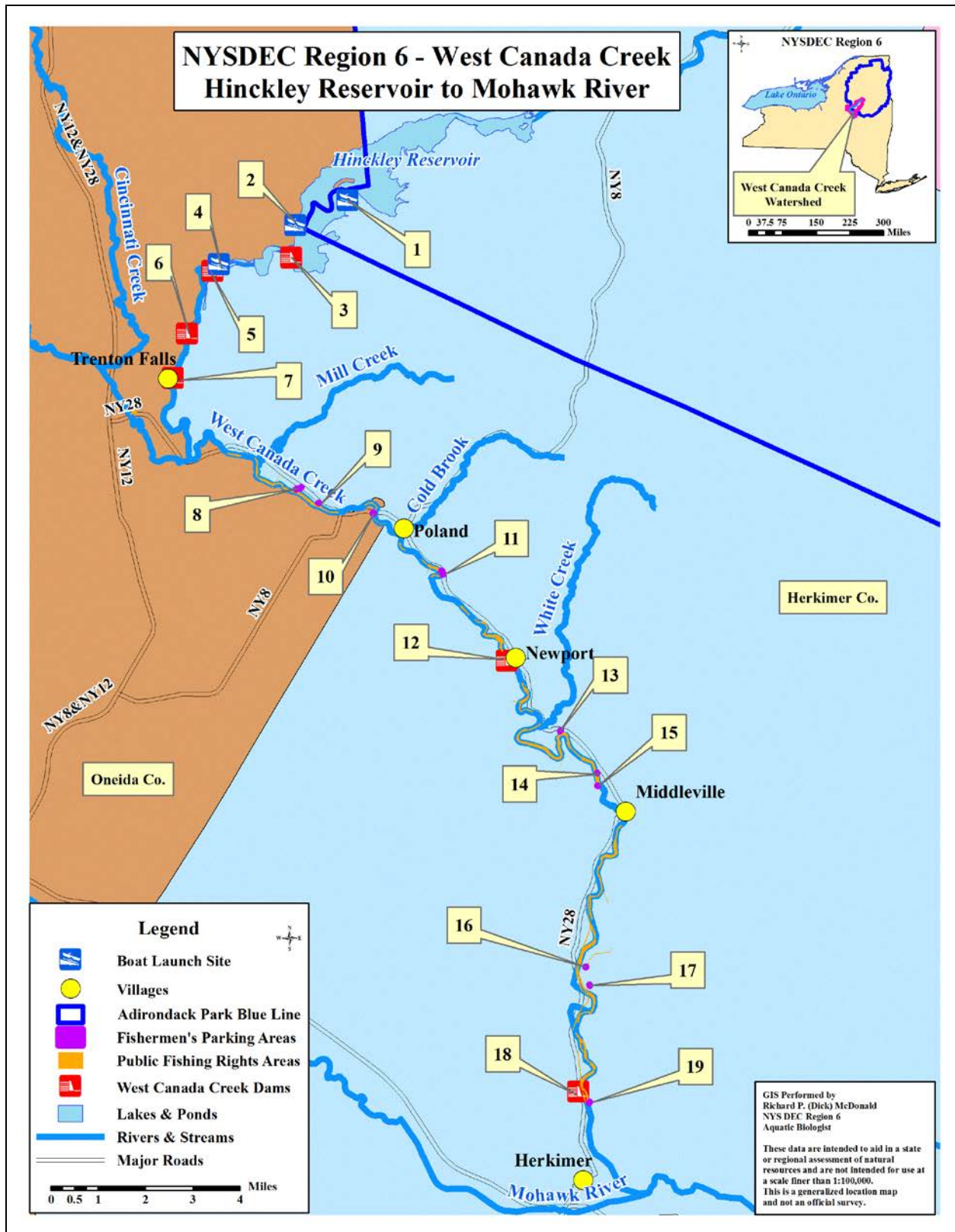
www.brookfieldrenewable.com

ATTACHMENT A
SUMMARY OF NYSDEC PROVIDED
WEST CANADA CREEK ACCESS LOCATIONS

TABLE A-1. SUMMARY OF NYSDEC PROVIDED WEST CANADA CREEK ACCESS LOCATIONS

Spot Count Site Number	Site	Name	Location	Management Entity	Notes/ Survey Notification Posting
NA	1	Trails End Campground Boat	MacArthur Road	Trails End Campground	
NA	2	Hinckley Reservoir Boat	NYS Rte. 365	New York Power Authority	
NA	3	Gregory B. Jarvis (a.k.a.	NYS Rte. 365	New York Power Authority	
NA	4	Prospect Reservoir Boat	NYS Rte. 365	Brookfield Renewable	Posted survey (05/24/2019)
NA	5	Prospect Dam	NYS Rte. 365	Brookfield Renewable	
NA	6	Trenton Falls Dam	Trenton Falls Road	Brookfield Renewable	
NA	7	Ninemile Creek Feeder Dam	Trenton Falls Road	NYS Canal Corporation	
DS Rec 3			Partridge Hill Rd		NYSDEC signage, posted survey (07/05/19)
DS Rec 4	8	Fishermen's Parking Area	NYS Rte. 28	NYSDEC	NYSDEC signage, posted survey (07/05/19)
DS Rec 5??	9	Fishermen's Parking Area	NYS Rte. 28	NYSDEC	Roadside pull-off, No NYSDEC Signage
DS Rec 6	10	Fishermen's Parking Area	NYS Rte. 28	NYSDEC	NYSDEC signage, posted survey (07/05/19)
DS Rec 7	11	Fishermen's Parking Area	NYS Rte. 28	NYSDEC	NYSDEC signage, posted survey (07/05/19)
NA	12	Newport Dam	Bridge Street	Eagle Creek Renewable Energy	
??	13	Fishermen's Parking Area	NYS Rte. 28	NYSDEC	Could not find location
DS Rec 9	14	Fishermen's Parking Area	NYS Rte. 28	NYSDEC	NYSDEC signage, posted survey (07/05/19)
NA	15	Fishermen's Parking Area	Fishing Rock Road	NYSDEC	NYSDEC signage, posted survey (7/27/19)
NA	16	Fishermen's Parking Area	Lynch Road	NYSDEC	Could not find location
NA	17	Fishermen's Parking Area	Rasbach Road	NYSDEC	Could not find location
NA	18	Herkimer Hydro Dam	NYS Rte. 28	ECOsponsible, LLC	
NA	19	Fishermen's Parking Area	Shells Bush Road	NYSDEC	DEC signage, posted survey (7/27/19)

NYSDEC PROVIDED WEST CANADA CREEK ACCESS LOCATIONS



ATTACHMENT B
WHITEWATER BOATING CONTROLLED FLOW STUDY
ASSESSMENT FORMS

PRE-RUN FLOW BOATER INFORMATION FORM
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

Upstream or Downstream Reach: _____

Date: _____

THIS SECTION ASKS ABOUT YOU PERSONALLY

Participant Name: _____

Affiliation: _____

Home Zip Code: _____

Age: _____

Participant Email: _____

Cell Phone: _____

Gender of respondent: ☐ Male ☐ Female ☐ Prefer not to answer

THIS SECTION ASKS ABOUT YOUR BOATING OR TUBING EXPERIENCE

1. What is your primary activity for on-water boating or tubing activity? (*Check one box.*)

☐ Whitewater kayaking

☐ Flatwater kayaking

☐ Whitewater canoeing

☐ Flatwater canoeing

☐ Tubing/rafting

☐ Stand up paddle board (SUP)

☐ Other, *please specify* _____

2. How many total years have you been participating in whitewater boating or tubing activities? (*Fill in blank.*)

_____ years whitewater boating

_____ years tubing

3. How would you rate your skill level with whitewater boating? (*Check one box.*)

☐ Prefer flatwater float trips

☐ Intermediate (Class III whitewater)

☐ Beginner (Class I whitewater)

☐ Advanced (Class IV whitewater)

☐ Novice (Class II whitewater)

☐ Expert (Class V whitewater)

4. How many days per year do you typically spend whitewater boating or tubing? (*Fill in blank.*)

_____ days whitewater boating

_____ days tubing

THIS SECTION (Q 5-18) ASKS ABOUT YOUR EXPERIENCES IN THE REACHES OF WEST CANADA CREEK FROM BELOW MORGAN DAM DOWNSTREAM TO HERKIMER

5. How often do you typically participate in boating or tubing recreation activities on West Canada Creek? (*Check one box.*)

☐ Weekly / At least once per week

☐ At least once per year

☐ Monthly / At least once per month

☐ Less than one time per year

☐ Several times per year

☐ Never

6. During what month(s) do you typically participate in boating or tubing recreation activities on West Canada Creek? (*Check all that apply.*)

☐ January

☐ April

☐ July

☐ October

☐ February

☐ May

☐ August

☐ November

☐ March

☐ June

☐ September

☐ December

PRE-RUN FLOW EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

7. In the past year, how many days have you participated in boating or tubing related recreation activities on West Canada Creek? *(Fill in blank.)*

_____ days whitewater boating

_____ days tubing

8. On a scale from 1 to 5, with 1 being not at all familiar, 3 being moderately familiar, and 5 being very familiar, how would you rate your familiarity with West Canada Creek? *(Circle one number.)*

1	2	3	4	5
Not at all Familiar	Somewhat Familiar	Moderately Familiar	Familiar	Very Familiar

9. How many years of experience do you have participating in boating or tubing related recreation activities on West Canada Creek? *(Fill in blank.)*

_____ years whitewater boating

_____ years tubing

10. What type of watercraft do you primarily use for boating or tubing related recreation activities on West Canada Creek? *(Check one box.)*

☐ 1 Person Open Canoe

☐ Inflatable Kayak

☐ 2 Person Open Canoe

☐ Inflatable Tube

☐ Closed Canoe

☐ Inflatable Raft

☐ Hardshell Kayak

☐ Other, *please specify*: _____

11. What section(s) of West Canada Creek downstream of the Morgan Dam do you typically use when participating in recreation activities? *(Check **all** that apply – please indicate specific location as appropriate.)*

☐ West Canada Creek - Below Morgan Dam to Newport Impoundment

☐ West Canada Creek - Below Newport Dam to Herkimer

☐ Other, *please specify*: _____

☐ I have not paddled the West Canada Creek downstream of the Trenton Development

12. What **put-in** access do you typically use when participating in boating or tubing on West Canada Creek downstream of the Trenton Development? *(Check one box.)*

☐ NYSDEC site, *please specify* _____

☐ Other, *please specify* _____

☐ None - I have not paddled the West Canada Creek downstream of the Trenton Development

13. What **take-out** access site do you typically use when participating in boating or tubing on West Canada Creek downstream of the Trenton Development? *(Check one box.)*

☐ NYSDEC site, *please specify* _____

☐ Other, *please specify* _____

☐ None - I have not paddled the West Canada Creek downstream of the Trenton Development

PRE-RUN FLOW EVALUATION FORM
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

14. What sources do you use to obtain information about flow levels prior to your trips? (*Check all that apply.*)

- | | |
|--|--|
| <input type="checkbox"/> USGS Kast Bridge Gage | <input type="checkbox"/> American Whitewater Website |
| <input type="checkbox"/> Safewaters Website | <input type="checkbox"/> Other, please specify_____ |

15. What flow ranges do you consider **acceptable** (boatable conditions) for your **whitewater boating** recreation activities on West Canada Creek? (*Check all that apply.*)

- | | |
|---|--|
| <input type="checkbox"/> less than 300 cfs | <input type="checkbox"/> >800 cfs to 1,000 cfs |
| <input type="checkbox"/> >300 cfs to 500 cfs | <input type="checkbox"/> >1,000 cfs to 1,200 cfs |
| <input type="checkbox"/> >500 cfs to 600 cfs | <input type="checkbox"/> 1,200 cfs to 1,400 cfs |
| <input type="checkbox"/> >600 cfs to 800 cfs | <input type="checkbox"/> >1,400 cfs |
| <input type="checkbox"/> Other, please specify_____ | <input type="checkbox"/> No Response |

What flow ranges do you consider **optimal** (best conditions) for your **whitewater boating** recreation activities on West Canada Creek? (*Please circle one flow range above.*)

16. What flow ranges do you consider **acceptable** (floating conditions) for your **tubing/rafting** recreation activities on West Canada Creek? (*Check all that apply.*)

- | | |
|---|--|
| <input type="checkbox"/> less than 300 cfs | <input type="checkbox"/> >800 cfs to 1,000 cfs |
| <input type="checkbox"/> >300 cfs to 500 cfs | <input type="checkbox"/> >1,000 cfs to 1,200 cfs |
| <input type="checkbox"/> >500 cfs to 600 cfs | <input type="checkbox"/> 1,200 cfs to 1,400 cfs |
| <input type="checkbox"/> >600 cfs to 800 cfs | <input type="checkbox"/> >1,400 cfs |
| <input type="checkbox"/> Other, please specify_____ | <input type="checkbox"/> No Response |

What flow ranges do you consider **optimal** (best conditions) for your **tubing/rafting** recreation activities on West Canada Creek? (*Please circle one flow range above.*)

17. Have fluctuations in water levels ever affected your ability to participate in boating or tubing recreation activities on West Canada Creek? (*Check one box.*)

- ☐ Yes ☐ No (Skip to Question 19) ☐ No Response

18. If you answered Yes to Question 17, please select how the fluctuations in water level affected your activity. (*Select all that apply*)

- ☐ Decided not to participate in activity
- ☐ Adjusted timing of visit to participate when flows were suitable for recreation activity
- ☐ Participated in a different activity on West Canada Creek
- ☐ Moved to a different location on West Canada Creek
- ☐ Avoided a specific area on West Canada Creek, please specify_____
- ☐ Other, please specify_____

THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!

PRE-RUN FLOW EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

WHITEWATER CLASSIFICATIONS

INTERNATIONAL SCALE OF RIVER DIFFICULTY

(Source: Safety Code of American Whitewater, 2005)

Class I: Beginner (Riffles) - Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.

Class II: Novice- Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed. Rapids that are at the upper end of this difficulty range are designated "Class II+"

Class III: Intermediate - Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims. Rapids that are at the lower or upper end of this difficulty range are designated "Class III-" or "Class III+" respectively.

Class IV: Advanced -Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended. Rapids that are at the lower or upper end of this difficulty range are designated "Class IV-" or "Class IV+" respectively.

Class V: Expert - Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult. Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential. Because of the large range of difficulty that exists beyond Class IV, Class 5 is an open-ended, multiple-level scale designated by class 5.0, 5.1, 5.2, etc. each of these levels is an order of magnitude more difficult than the last. Example: increasing difficulty from Class 5.0 to Class 5.1 is a similar order of magnitude as increasing from Class IV to Class 5.0.

POST-RUN FLOW EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

Date: _____

Participant ID#: _____

THIS SECTION ASKS ABOUT YOUR PARTICIPATION IN WHITEWATER BOATING OR TUBING ON THE WEST CANADA CREEK TODAY

1. What section(s) of West Canada Creek downstream of the Morgan Dam was this run? *(Check one box).*
 - ☐ West Canada Creek - Below Morgan Dam to Newport Impoundment
 - ☐ West Canada Creek - Below Newport Dam to Herkimer
2. What was the flow (cfs) for this run? _____ cfs
3. What type of craft did you use on this run? *(Check one box.)*
 - ☐ 1 Person Open Canoe
 - ☐ 2 Person Open Canoe
 - ☐ Closed Canoe
 - ☐ Hardshell Kayak
 - ☐ Inflatable Kayak
 - ☐ Inflatable Tube
 - ☐ Inflatable Raft
 - ☐ Other, please specify: _____
4. What was your put-in and take-out location and times for this run on the West Canada Creek today? *(Fill in blank.)*

Put-in	Location: _____	Time: _____ am / pm
Take-out	Location: _____	Time: _____ am / pm
5. Was this your first time boating this reach?
 - ☐ Yes
 - ☐ No (Skip to Question 7)
 - ☐ No Response
6. If you answered *No* to Question 5, approximately how many times have you previously run this reach? _____
7. Please evaluate the suitability of this flow on West Canada Creek today for your primary activity for each experience level. *(Circle one rating number for each experience level or check "Don't Know" if you cannot provide a rating. Check one box for flow level rating.)*

Experience Level	Please Rate the Suitability of this Flow for Each Experience Level (Circle one number)						Flow was? (Check one box)		
	Unacceptable	Poor	Neutral	Good	Excellent	Don't Know	Too Low	Just Right	Too High
Class I (Rifles)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class II (Novice)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class III (Intermediate)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class IV (Advanced)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Class V (Expert)	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

POST-RUN FLOW EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

THIS SECTION ASKS ABOUT YOUR EXPERIENCE ON WEST CANADA CREEK TODAY

8. Please evaluate this flow for your primary activity and experience level for each of the following characteristics on *West Canada Creek today*. (Check N/A box if characteristic is not applicable to your activity. Circle one rating number for each characteristic. Check one box for flow level rating.)

Characteristic	N/A	Please Rate Each Characteristic (Circle one number)					Flow was? (Check one box)		
		Unacceptable	Poor	Neutral	Good	Excellent	Too Low	Just Right	Too High
Navigability	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wadeability	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of Rapids	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Depth	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Availability of Whitewater "Play Areas"	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Craft Rate of Travel	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposure of Rocks	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposure of Sand/Gravel Bars	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eddies	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Force of Water	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speed of Water/Current	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety (due to flow levels)	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety (due to debris, other hazards)	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aesthetic Quality	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall Quality	<input type="checkbox"/>	1	2	3	4	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Please provide a brief explanation of your rating of the overall quality of your experience or observation. (Fill in the blank.)

POST-RUN FLOW EVALUATION FORM
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

10. Did you experience, or did you observe any significant problems or specific safety hazards associated with your primary activity during this flow ***on West Canada Creek today?*** (Check one box.)

☐ Yes

☐ No (Skip to Question 12)

☐ No Response

11. Please provide the location and a brief description of any experienced or observed hazards during this flow on West Canada Creek today. (Fill in the blank.)

Location: _____ Description: _____

Location: _____ Description: _____

12. Did you experience, or did you observe any outstanding features or opportunities associated with your primary activity during this flow on West Canada Creek today? (Check one box.)

☐ Yes

☐ No (Skip to Question 14)

☐ No Response

13. Please provide a brief description and location of any experienced or observed outstanding features or opportunities during this flow ***on West Canada Creek today.*** (Fill in the blank.)

Location: _____ Description: _____

Location: _____ Description: _____

14. Compared to ***this flow level***, would you prefer a level that was higher, lower, or about the same for the activity you participated in or observed on West Canada Creek reach? (Circle one number.)

1	2	3	4	5
Much Lower	Lower	No Change	Higher	Much Higher

15. Given the opportunity, would you choose to participate in this activity on West Canada Creek at ***this flow level?*** (Check one box.)

☐ Yes

☐ No

☐ No Response

16. Why or why not? (Fill in the blank.) _____

17. Do you have any additional comments? (Fill in the blank.) _____

THANK YOU FOR YOUR HELP! WE APPRECIATE YOUR TIME TODAY!

POST-RUN FLOW EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

WHITEWATER CLASSIFICATIONS

INTERNATIONAL SCALE OF RIVER DIFFICULTY

(Source: Safety Code of American Whitewater, 2005)

Class I: Riffles - Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.

Class II: Novice - Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed. Rapids that are at the upper end of this difficulty range are designated "Class II+"

Class III: Intermediate - Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims. Rapids that are at the lower or upper end of this difficulty range are designated "Class III-" or "Class III+" respectively.

Class IV: Advanced - Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended. Rapids that are at the lower or upper end of this difficulty range are designated "Class IV-" or "Class IV+" respectively.

Class V: Expert - Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult. Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential. Because of the large range of difficulty that exists beyond Class IV, Class 5 is an open-ended, multiple-level scale designated by class 5.0, 5.1, 5.2, etc. each of these levels is an order of magnitude more difficult than the last. Example: increasing difficulty from Class 5.0 to Class 5.1 is a similar order of magnitude as increasing from Class IV to Class 5.0.

FLOW COMPARISON EVALUATION FORM
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

Date: _____

Participant ID#: _____

1. What section(s) of West Canada Creek downstream of the Morgan Dam was this run? (*Check one box*).
- ☐ West Canada Creek - Below Morgan Dam to Newport Impoundment
- ☐ West Canada Creek - Below Newport Dam to Herkimer
2. Which flows did you participate in? (*Check all that apply*.)
- ☐ 600 cfs ☐ 1,000 cfs ☐ 1,400 cfs
3. What type of craft did you use for your runs? (*Check one box*.)
- ☐ 1 Person Open Canoe ☐ Inflatable Kayak
- ☐ 2 Person Open Canoe ☐ Inflatable Tube
- ☐ Closed Canoe ☐ Inflatable Raft
- ☐ Hardshell Kayak ☐ Other, *please specify*: _____
4. How would you rate your skill level with whitewater boating? (*Check one box*.)
- ☐ Novice (Class II whitewater)
- ☐ Intermediate (Class III whitewater)
- ☐ Advanced (Class IV whitewater)
- ☐ Expert (Class V whitewater)
5. Which of the following best describes your desired experience for this reach? (*Check one*)
- ☐ I am interested in whitewater boating trips that include technical elements (e.g., powerful hydraulics, whitewater “play areas,” challenging rapids)
- ☐ I am interested in family-friendly, non-technical float trips that do not require previous technical boating experience, specialized equipment, or include challenging rapids.
- ☐ I am interested in floating/tubing activities
- ☐ I am interested in other activities, *please specify* _____
6. Please provide overall evaluations for the following flows based on your craft, skill level, and desired experience. Please consider all of the flow-dependent characteristics that contribute to high quality trips (e.g., boatability, challenge, safety, aesthetics, etc.).

Flow	Unacceptable	Poor	Neutral	Good	Excellent
600 cfs	1	2	3	4	5
1,000 cfs	1	2	3	4	5
1,400 cfs	1	2	3	4	5

FLOW COMPARISON EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

7. Based on your desired experience selected in Question 6, your skill level, and craft, please specify the flows that you think would provide the following types of experiences on West Canda Creek. *(You may specify flows which you have not observed, but which you think would provide the type of experience specified.)*

Experience	Flow in cfs
What is the lowest flow that you consider acceptable for a minimum quality experience?	
What flow provides the highest quality (i.e., optimal flow) experience?	
What is the lowest flow that provides a safe experience?	
What is the highest flow that provides a safe experience?	
What is the highest flow you would consider boating?	

8. Compared to other river reaches of similar difficulty, how would you rate the boating opportunity on West Canada Creek (assume optimal flows). (Circle one number for each.)

Compared to river reaches of similar difficulty	Far Below Average	Below Average	Average	Above Average	Much Better than Average	No Response
Other rivers within a one-hour drive	1	2	3	4	5	NA
Other rivers in New York State	1	2	3	4	5	NA
Other rivers in the Northeast	1	2	3	4	5	NA

9. Please provide any additional comments or relevant information regarding the flows that you participated in today.

THANK YOU FOR YOUR PARTICIPATION!

FLOW COMPARISON EVALUATION FORM

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

WHITEWATER CLASSIFICATIONS

INTERNATIONAL SCALE OF RIVER DIFFICULTY

(Source: Safety Code of American Whitewater, 2005)

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Class IV: Advanced -Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended. Rapids that are at the lower or upper end of this difficulty range are designated "Class IV-" or "Class IV+" respectively.

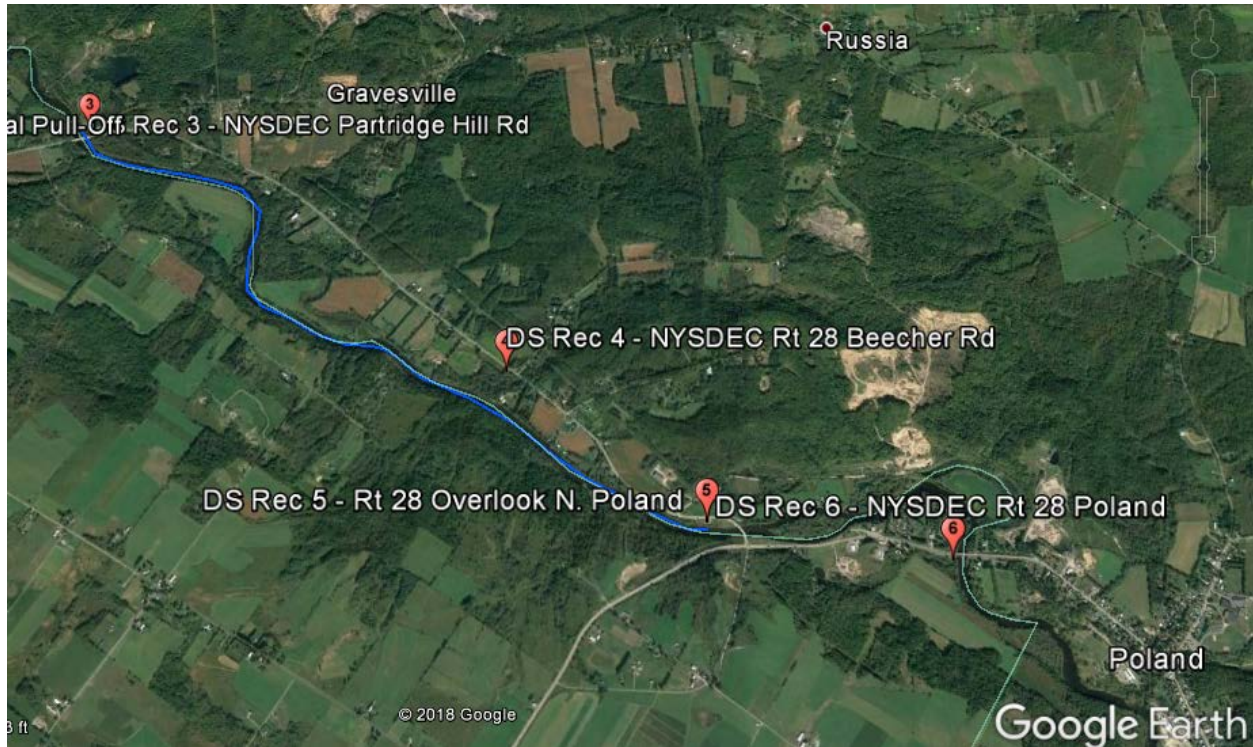
Class V: Expert - Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult. Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential. Because of the large range of difficulty that exists beyond Class IV, Class 5 is an open-ended, multiple-level scale designated by class 5.0, 5.1, 5.2, etc. each of these levels is an order of magnitude more difficult than the last. Example: increasing difficulty from Class 5.0 to Class 5.1 is a similar order of magnitude as increasing from Class IV to Class 5.0.

POST RUN STUDY FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

Topics to be discussed with the expert panel group following completion of the post-run individual evaluation forms:

1. Availability and suitability of the conditions of the put-in and take-out access locations.
2. What are the lowest, highest and optimal flow conditions that provide safe runs.
3. Discuss advantages and disadvantages of each flow.
4. Discuss the potential typical recreation use activity for the various flow ranges.
5. Identify challenging features, play areas, rapids or sections and rate their difficulty.
6. Discuss any encounters with other recreation user groups or any interaction or conflicts.
7. Discuss any safety concerns or considerations.
8. Overall evaluation of the sources of information for flow levels.
9. Overall evaluation of the sources of safety warnings for flow levels.
10. Overall evaluation on the range of water flows available.

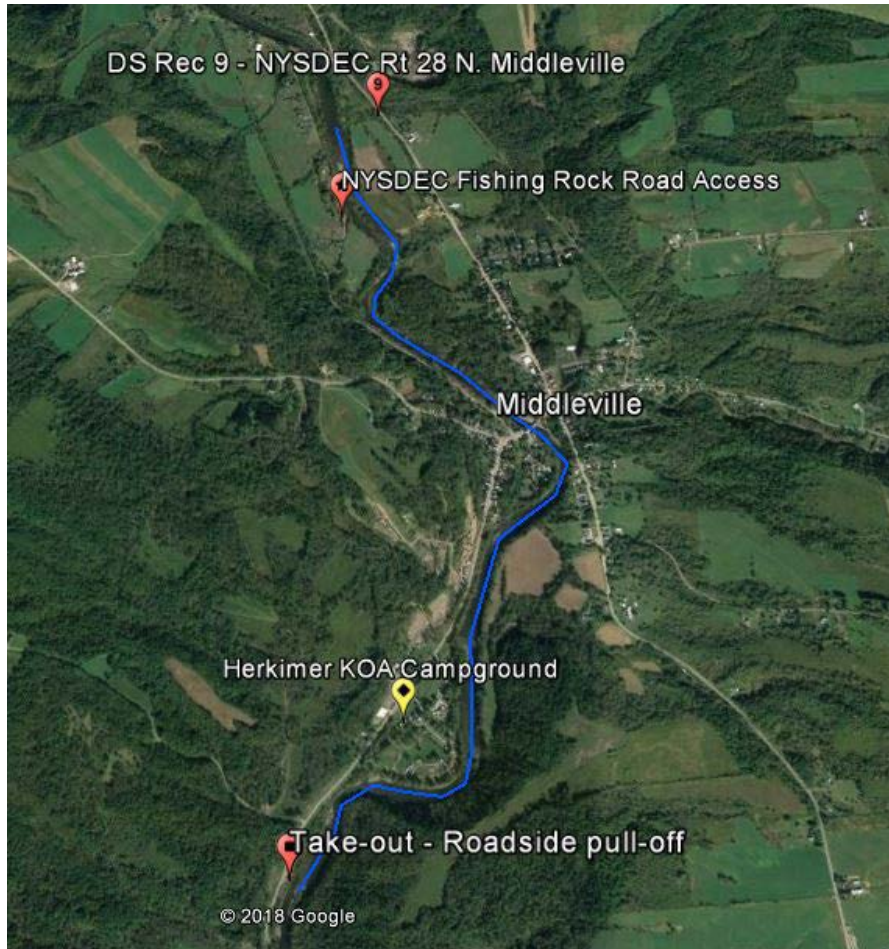
POST RUN STUDY FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY



Upper Reach – portion of Section 1: Dover Road to Route 28 (per AW Class I-II)

- Put-in at DS Rec Site 3 – NYSDEC Partridge Hill Road Access
- Take-out at DS Rec Site 5 Route 28 Overlook North Poland
- Run length approximately 3 river miles

POST RUN STUDY FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY



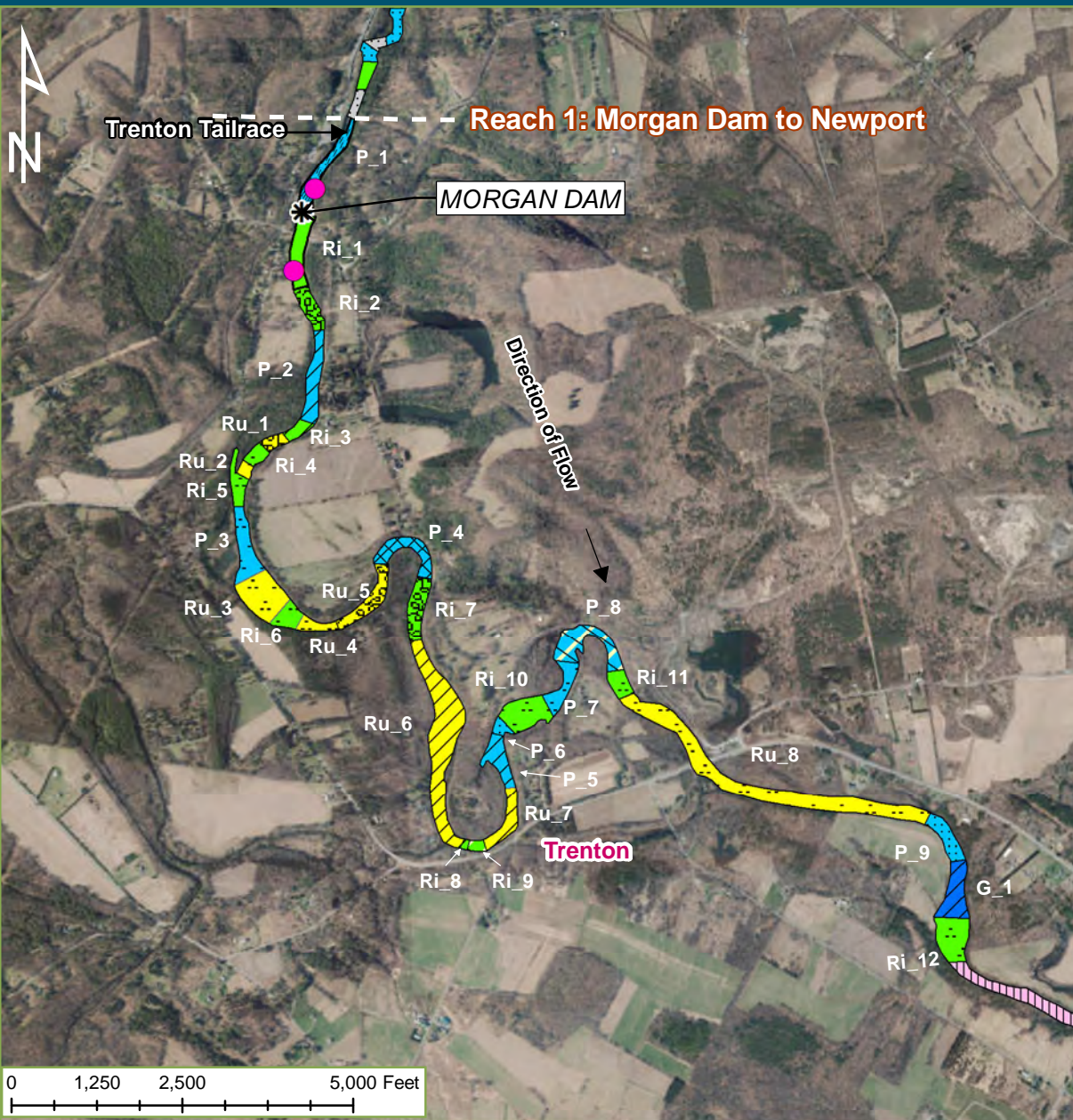
Lower Reach – portion of Section 2: Route 29 in Middleville to Route 7/Kast bridge above Herkimer (per AW Class II-II+)

- Put-in at DS Rec Site 9 – NYSDEC Rt. 28 N. Middleville
- Take-out at Rt 28 roadside pull-off below Herkimer KOA campground
- Run length approximately 2.5 river miles

AQUATIC MESOHABITAT AND SUBSTRATE MAPS FOR REFERENCE PURPOSES

West Canada Creek Mesohabitat & Substrate

Path: G:\Client_Data\ErieBoulevardWestCanadaCreek\MXD\Mesohabitat Study\West Canada Creek Mesohabitat and Substrate.mxd



● Level Logger	Bedrock
Mesohabitat	Large Boulder
Backwater	Small Boulder
Glide	Large Cobble/Bedrock
Pool	Cobble/Small Boulder
Rapids	Large Cobble
Riffle	Medium Cobble
Riffle-Run Complex	Medium Cobble/Small Cobble
Run	Small Cobble
Run-Pool Complex	Cobble/Fines
Minor	Large Gravel/Small Cobble
	Large Gravel
	Small Gravel
	Fines

West Canada Creek Project
 FERC Project No. 2701
 Erie Boulevard Hydropower L.P.

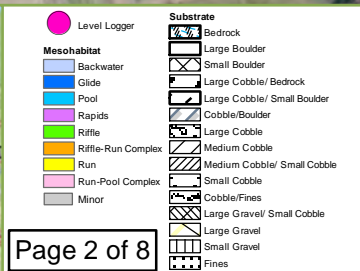
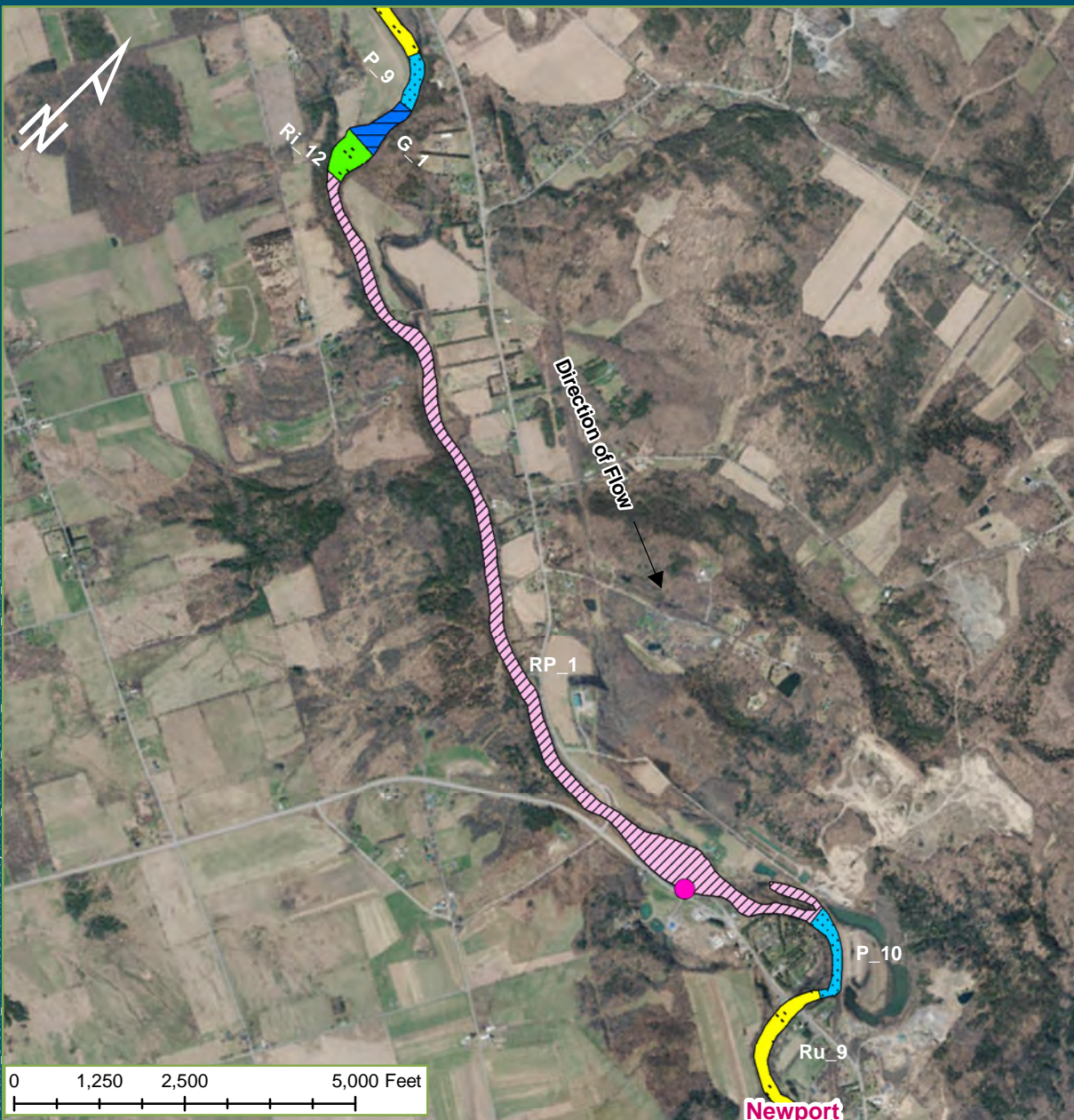
Drawn By: SAD	Date Drawn: 07-19-2019	Checked By: RSR	Date Checked: 07-25-2019
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West Canada Creek Mesohabitat & Substrate

Path: G:\Client_Data\ErieBoulevardWestCanada_Creek_MXD\Mesohabitat Study\West_Canada_Creek_Mesohabitat_and_Substrate.mxd



West Canada Creek Project
FERC Project No. 2701
Erie Boulevard Hydropower L.P.

Drawn By: SAD	Date Drawn: 07-19-2019	Checked By: RSR	Date Checked: 07-25-2019
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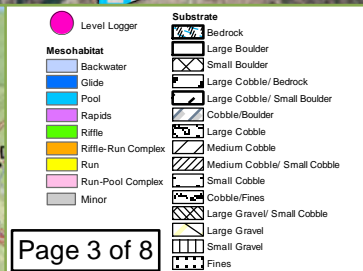
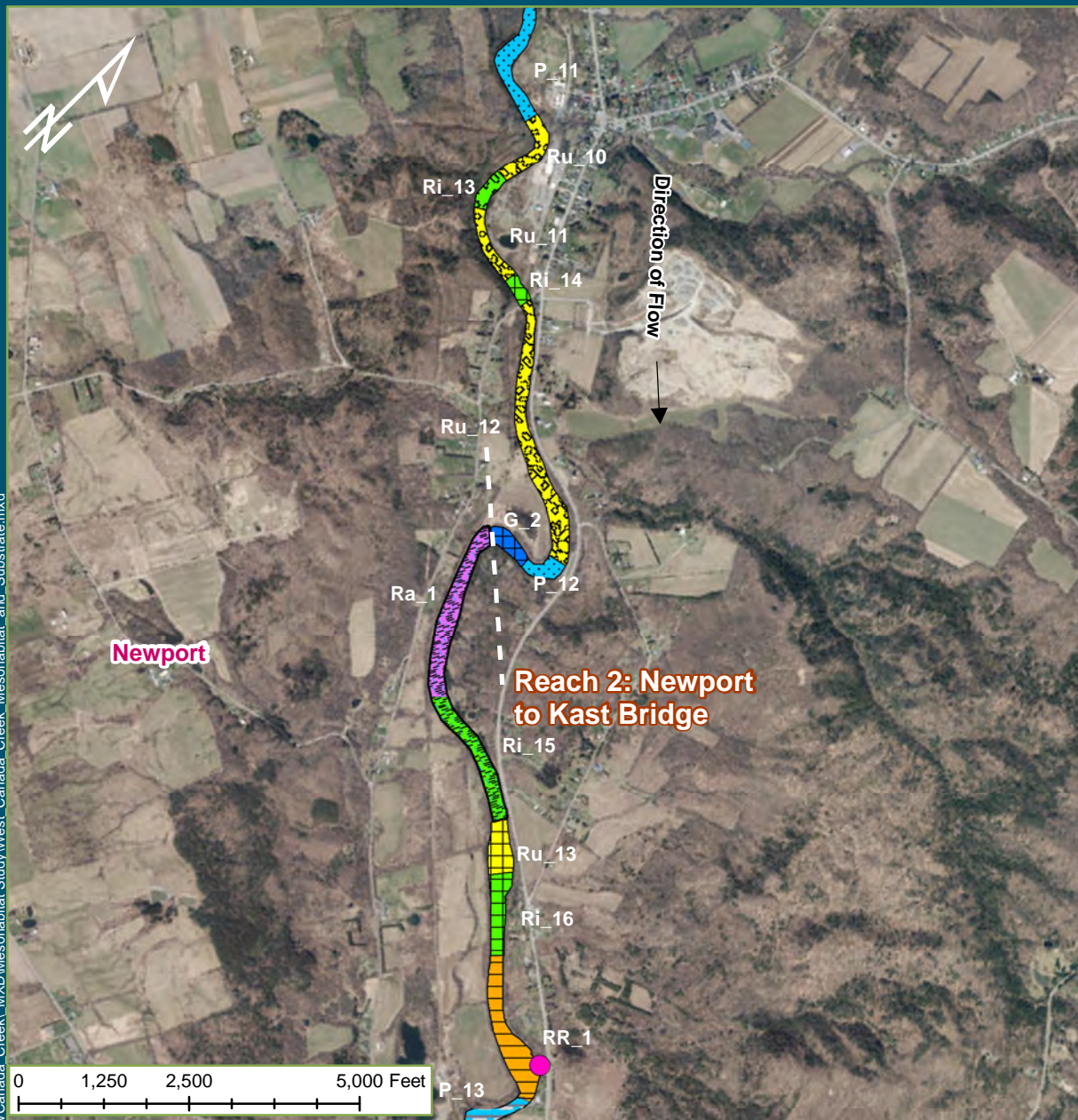
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West Canada Creek Mesohabitat & Substrate

Path: G:\Client_Data\ErieBoulevard\WestCanada_Creek_MXD\Mesohabitat_and_Substrate.mxd



West Canada Creek Project
FERC Project No. 2701
Erie Boulevard Hydropower L.P.

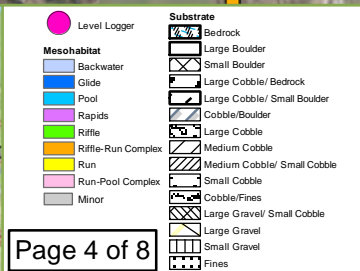
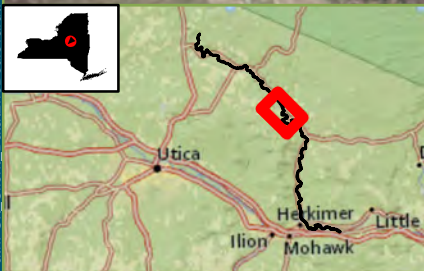
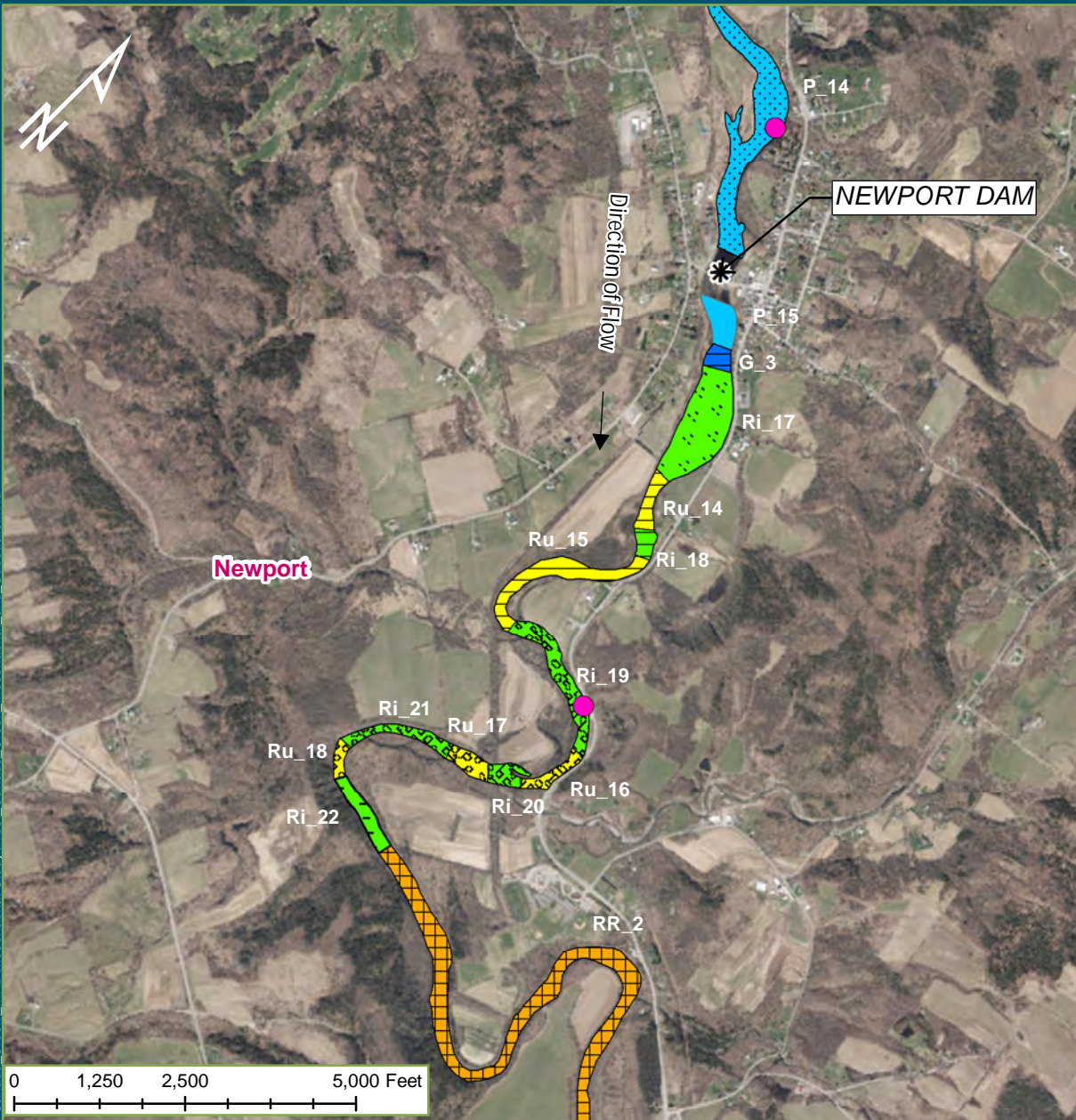
Drawn By: SAD	Date Drawn: 07-19-2019	Checked By: RSR	Date Checked: 07-25-2019
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Kleinschmidt
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 Pittsfield, Maine 04967
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West Canada Creek Mesohabitat & Substrate

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West Canada Creek Project

FERC Project No. 2701

Erie Boulevard Hydropower L.P.

Drawn By: SAD	Date Drawn: 07-19-2019	Checked By: RSR	Date Checked: 07-25-2019
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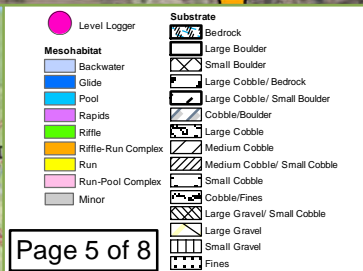
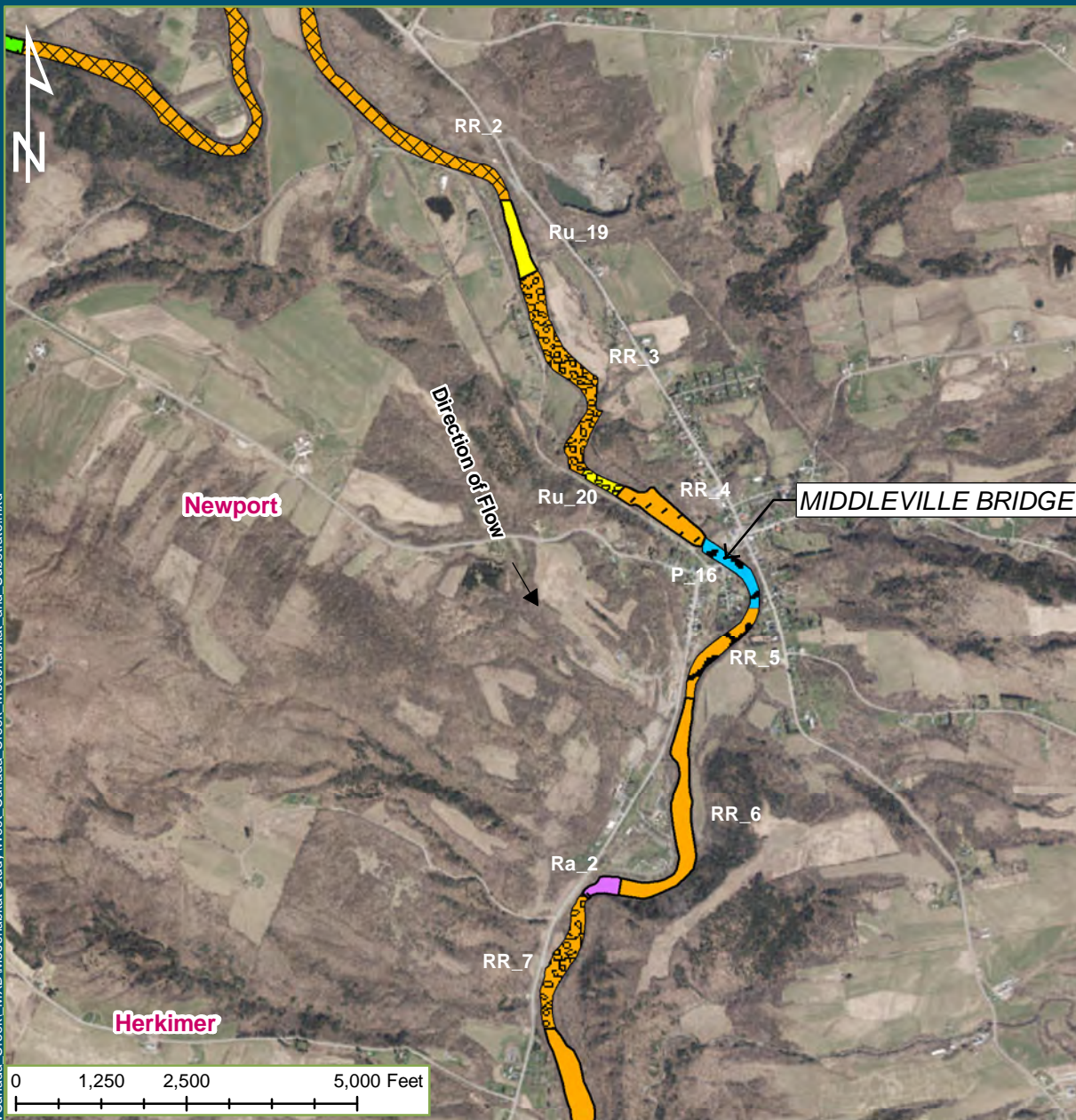
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West Canada Creek Mesohabitat & Substrate

Path: G:\Client_Data\ErieBoulevardWestCanada_Creek_MXD\Mesohabitat Study\West_Canada_Creek_Mesohabitat_and_Substrate.mxd



West Canada Creek Project

FERC Project No. 2701

Erie Boulevard Hydropower L.P.

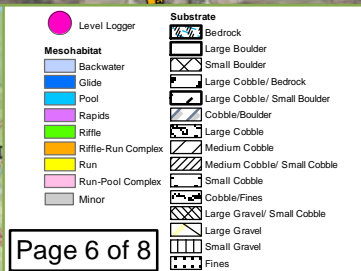
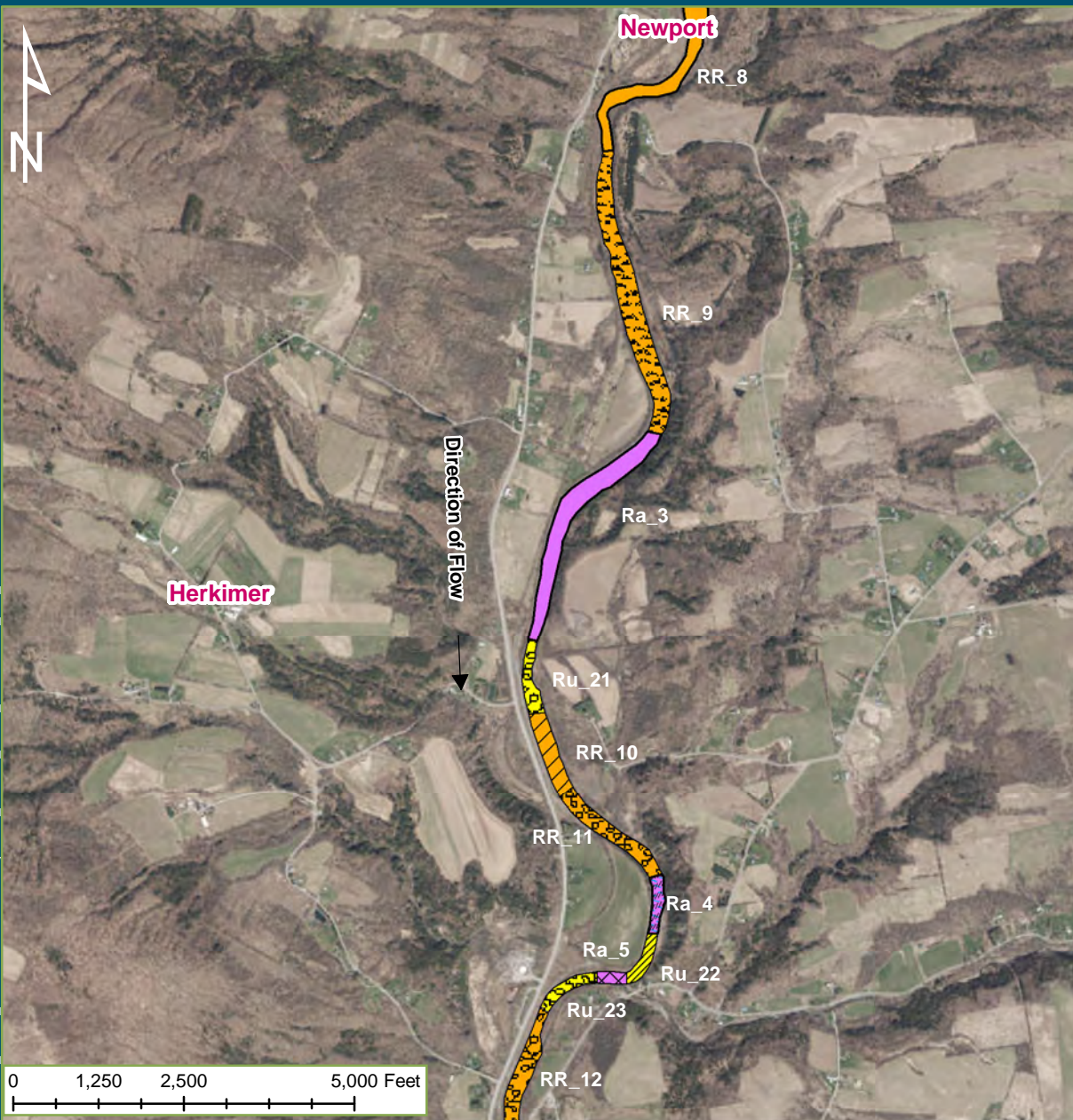
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West Canada Creek Project

FERC Project No. 2701

Erie Boulevard Hydropower L.P.

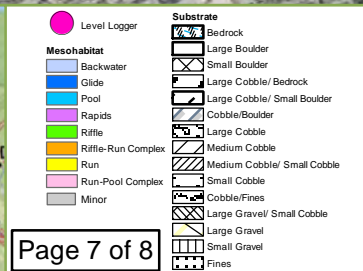
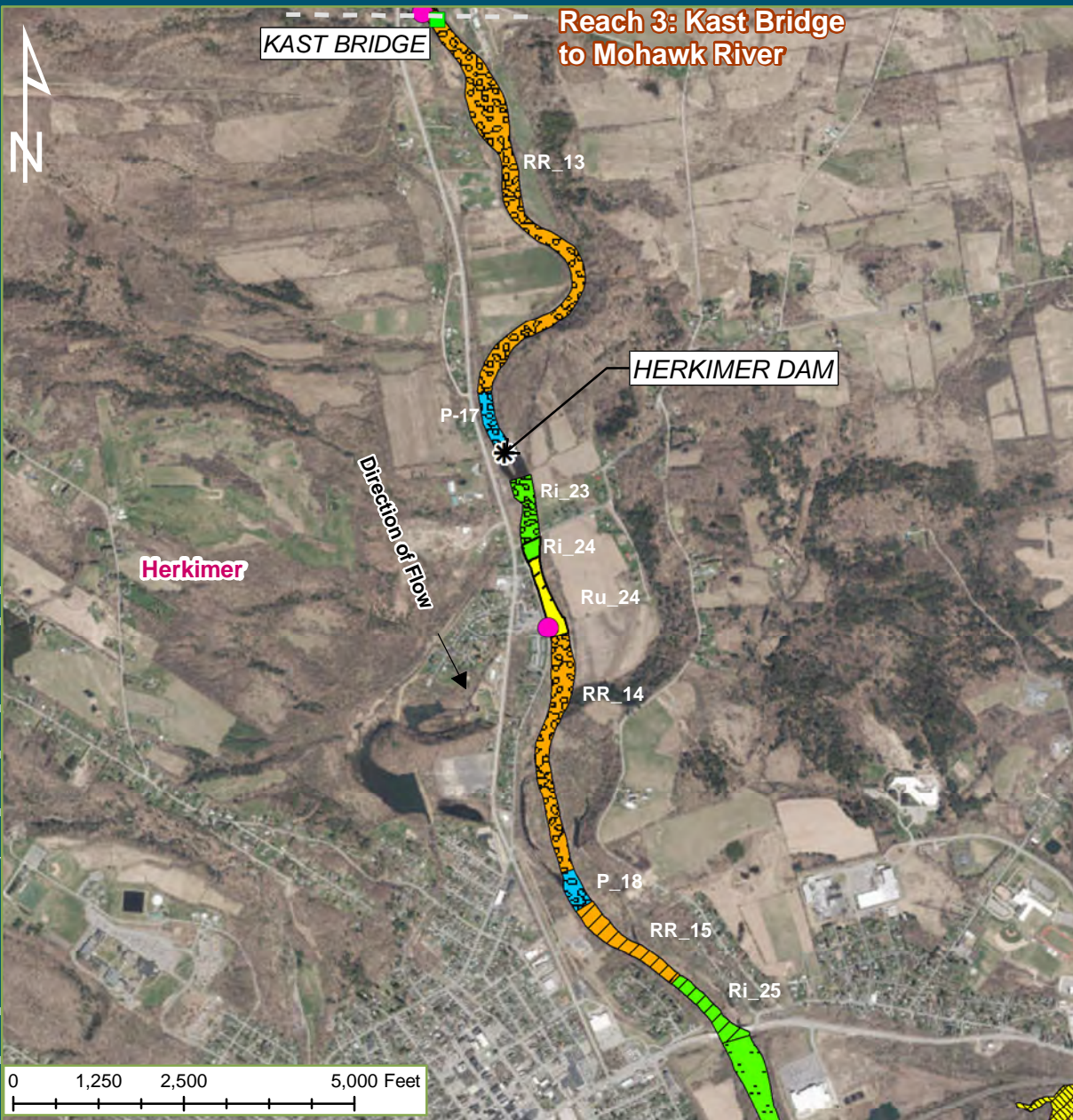
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West Canada Creek Mesohabitat & Substrate

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West Canada Creek Project

FERC Project No. 2701

Erie Boulevard Hydropower L.P.

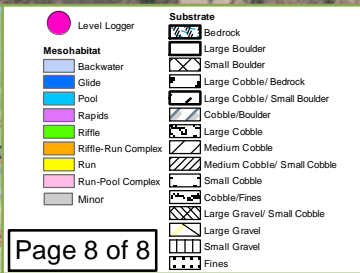
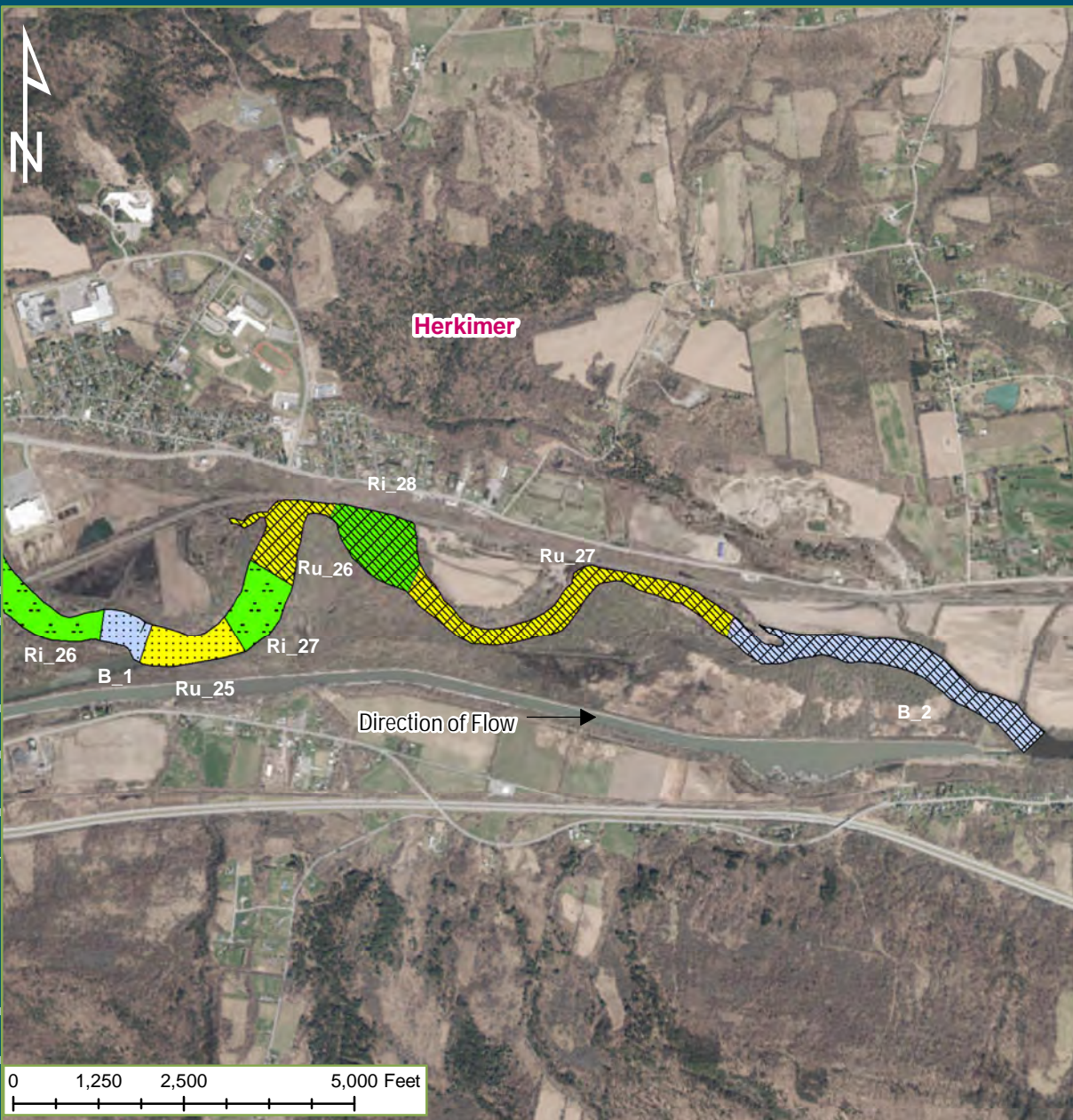
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West Canada Creek Project

FERC Project No. 2701

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ATTACHMENT C
AESTHETICS FLOW ASSESSMENT STUDY

AESTHETIC FLOW PHOTOGRAPHS

AND

TRENTON TRAIL DAYS MAY 18 AND 19, 2019

PRELIMINARY ASSESSMENT OF AESTHETIC FLOW RELATED QUESTIONS

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES

PROSPECT FALLS



Leakage (05/06/2019) from Prospect Overlook



Leakage (05/06/2019) from Prospect Overlook (zoom in picture)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES



Approximately 50 cfs (09/06/2018)



Approximately 100-200 cfs (09/06/2018)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES



Approximately 1,000 cfs (04/25/2019) from Prospect Overlook



Approximately 1,000 cfs (04/25/2019) from Prospect Overlook (zoom in picture)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES



Approximately 1,500 cfs (04/24/2019) from Prospect Overlook



Approximately 1,500 cfs (04/24/2019) from Prospect Overlook (zoom in picture)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES

TRENTON FALLS

Mill Dam/Upper High Falls



Leakage cfs (09/06/2018)



Approximately 100 -200 cfs (09/06/2018)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES



Approximately 400 cfs (05/18/2019)

Lower High Falls



Leakage (09/06/2018)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES



Approximately 100-200 cfs (09/06/2018)



Approximately 400 cfs (05/18/2019)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES

Sherman Falls



Leakage cfs (09/06/2018)



Approximately 100-200 cfs (09/06/2018)

WEST CANADA CREEK PROJECT - AESTHETIC FLOWS PICTURES



Approximately 400 cfs (05/18/2019)

TRENTON TRAIL DAYS MAY 18 AND 19, 2019

PRELIMINARY ASSESSMENT OF AESTHETIC FLOW RELATED QUESTIONS

Flows at Trenton Falls during the event were approximately 400 cfs.

Q15. On a scale from 1-5, how would you rate the overall scenic views of the Trenton Falls Trails today?

Rating	Count	Percent of Total
1 Poor	0	0%
2 Fair	1	0%
3 Satisfactory	9	4%
4 Good	40	20%
5 Excellent	152	75%
Total	202	100%

Average rating of 4.7.

Q16. On a scale from 1-5, how would you rate the scenic views of the following locations along the Trenton Falls trail today?

Rating	Upper High Falls		Lower High Falls		Cradle Overlook		Sherman Falls	
	KOP4	Percent of Total	KOP5	Percent of Total	KOP6	Percent of Total	KOP7	Percent of Total
1 Poor	1	0%	0	0%	0	0%	1	0%
2 Fair	1	0%	3	1%	1	0%	1	0%
3 Satisfactory	5	2%	7	3%	7	3%	15	7%
4 Good	37	18%	42	21%	42	21%	48	24%
5 Excellent	158	78%	150	74%	152	75%	137	68%
6 Did not view	0	0%	0	0%	0	0%	0	0%
Total	202	100%	202	100%	202	100%	202	100%
Average rating	4.7		4.7		4.7		4.6	

(Average rating does not include surveys that did not view the site)

Q17. In general, would you prefer flows that are higher, lower, about the same as today, or does not matter?

Rating	Count	Percent of Total
1 Higher	54	27%
2 Lower	4	2%
3 Same	93	46%
4 Does not Matter	51	25%
Total	202	100%

Average rating of 2.7.

ATTACHMENT D
AESTHETICS CONTROLLED FLOW STUDY
ASSESSMENT FORMS

AESTHETIC FLOW ASSESSMENT FORM
WEST CANADA CREEK AESTHETICS FLOW STUDY

Thank you for participating in the Aesthetic Flow Study for the West Canada Creek Project relicensing. The purpose of this assessment is to conduct a review of identified flow ranges for key identified Key Observation Point (KOP) locations (i.e., view of waterfall areas) adjacent to the Prospect and Trenton bypass reaches (See Figure 1). This assessment will be conducted for leakage, and two additional flows. We will then convene to complete a comparative flow assessment form and a focus group discussion for overall impressions and comparisons of the flow ranges.

PROSPECT BYPASS REACH

Date: _____

Weather: _____

THIS SECTION ASKS ABOUT YOU PERSONALLY

Participant Name: _____

Affiliation: _____

Home Zip Code: _____

Age: _____

Participant Email: _____

Cell Phone: _____

Gender of respondent: ☐ Male ☐ Female ☐ Prefer not to answer

THIS SECTION ASKS GENERAL QUESTIONS

1. Prior to this project have you ever participated in an aesthetic flow assessment:
☐ Yes ☐ No
2. Have you ever visited the Prospect Falls and/or Trenton Falls area located on the West Canada Creek?
☐ Yes ☐ No
3. Have you ever attended Trenton Trail Days to view the falls located on the West Canada Creek?
☐ Yes ☐ No If Yes, how often? _____
4. On a scale from 1 to 5, with 1 being poor and 5 excellent, how would you rate the overall aesthetics of the **Prospect** bypass reach under existing conditions.

1	2	3	4	5
Poor	Fair	Satisfactory	Good	Excellent

If less than satisfactory, please explain why _____

5. On a scale from 1 to 5, with 1 being poor and 5 excellent, how would you rate the overall aesthetics of the **Trenton** bypass reach under existing conditions.

1	2	3	4	5
Poor	Fair	Satisfactory	Good	Excellent

If less than satisfactory, please explain why _____

**THE FOLLOWING SECTIONS ASK QUESTIONS ABOUT
AESTHETIC CHARACTERISTICS OF EACH KOP LOCATION AT SPECIFIC FLOWS**

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 1 Prospect Overlook

Leakage Flow

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 2 Prospect Falls View

Leakage Flow

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 1 Prospect Overlook

Demonstration Flow 1

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 2 Prospect Falls View

Demonstration Flow 1

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 1 Prospect Overlook

Demonstration Flow 2

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 2 Prospect Falls View

Demonstration Flow 2

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

COMPARATIVE FLOW EVALUATION PROSPECT BYPASS REACH

1. Which flows did you participate in? (*Check all that apply.*)

☐ Leakage ☐ 100 cfs ☐ 200 cfs

2. Please provide overall evaluations for the following flows for the **Prospect** bypass reach based on your experience.

Flow	Unacceptable	Poor	Acceptable	Good	Excellent	No Response
Leakage	1	2	3	4	5	NA
100 cfs	1	2	3	4	5	NA
200 cfs	1	2	3	4	5	NA

3. Based on your viewing of the controlled flow ranges, please specify the flows that you think would provide the following types of experiences for the **Prospect** bypass reach. (*You may specify flows which you have not observed, but which you think would provide the type of experience specified.*)

Experience	Flow in cfs
What is the lowest flow that you consider acceptable for a quality aesthetic viewing experience?	
What flow provides the highest quality (i.e., optimal flow) aesthetic viewing experience?	

4. Based on your evaluation of the controlled flow ranges, please indicate the **optimal** flow for aesthetic viewing opportunities for the following KOP locations. Please consider all of the flow-dependent characteristics that contribute to the aesthetic experience (e.g., sound, rock exposure, flow in channel, volume of flow over falls, etc.). (*Please check one flow for each KOP Location.*)

KOP Location	Leakage	100 cfs	200 cfs	Other (please specify)	No Response
Prospect Overlook (KOP 1)					NA
Prospect Falls View (KOP 2)					
Trenton Sherman Falls (KOP 7)					

5. Compared to other rivers with comparable scenic viewing locations, how would you rate the aesthetic viewing opportunity at the **Prospect** bypass reach (assume optimal flows). (*Circle one number for each.*)

Compared to river reaches of similar difficulty	Far Below Average	Below Average	Average	Above Average	Much Better than Average	No Response
Other rivers within a one-hour drive	1	2	3	4	5	NA
Other rivers in New York State	1	2	3	4	5	NA
Other rivers in the Northeast	1	2	3	4	5	NA

AESTHETIC FLOW ASSESSMENT FORM
WEST CANADA CREEK AESTHETICS FLOW STUDY

6. How many times per year should the KOP locations be open to the public for viewing opportunities?
_____ per year

7. During what month(s) should the KOP locations be open to the public for viewing opportunities?
(Please check all below that apply)

- | | | | |
|-----------------------------------|--------------------------------|------------------------------------|-----------------------------------|
| <input type="checkbox"/> January | <input type="checkbox"/> April | <input type="checkbox"/> July | <input type="checkbox"/> October |
| <input type="checkbox"/> February | <input type="checkbox"/> May | <input type="checkbox"/> August | <input type="checkbox"/> November |
| <input type="checkbox"/> March | <input type="checkbox"/> June | <input type="checkbox"/> September | <input type="checkbox"/> December |

8. Please provide any additional comments or relevant information regarding the scenic views and flows that you observed today. _____

THANK YOU FOR YOUR PARTICIPATION!

AESTHETIC FLOW ASSESSMENT FORM
WEST CANADA CREEK AESTHETICS FLOW STUDY

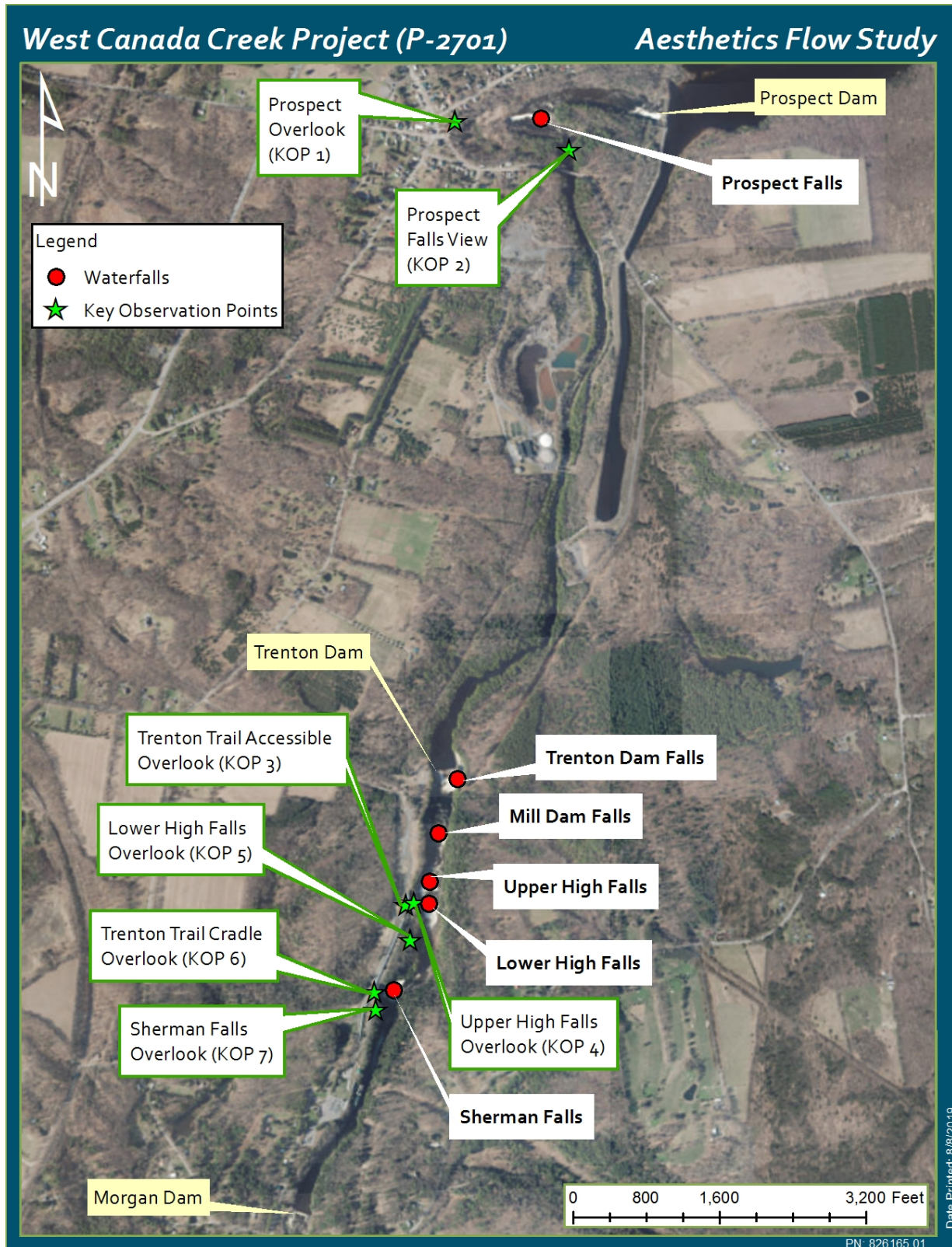


FIGURE 1. LOCATION OF KEY OBSERVATION POINTS (KOP)

AESTHETIC FLOW ASSESSMENT FORM
WEST CANADA CREEK AESTHETICS FLOW STUDY

Thank you for participating in the Aesthetic Flow Study for the West Canada Creek Project relicensing. The purpose of this assessment is to conduct a review of identified flow ranges for key identified Key Observation Point (KOP) locations (i.e., view of waterfall areas) adjacent to the Prospect and Trenton bypass reaches (See Figure 1). This assessment will be conducted for leakage, and two additional flows. We will then convene to complete a comparative flow assessment form and a focus group discussion for overall impressions and comparisons of the flow ranges.

TRENTON BYPASS REACH

Date: _____

Weather: _____

THIS SECTION ASKS ABOUT YOU PERSONALLY

Participant Name: _____

Affiliation: _____

Home Zip Code: _____

Age: _____

Participant Email: _____

Cell Phone: _____

Gender of respondent: ☐ Male ☐ Female ☐ Prefer not to answer

THIS SECTION ASKS GENERAL QUESTIONS

1. Prior to this project have you ever participated in an aesthetic flow assessment:
☐ Yes ☐ No
2. Have you ever visited the Prospect Falls and/or Trenton Falls area located on the West Canada Creek?
☐ Yes ☐ No
3. Have you ever attended Trenton Trail Days to view the falls located on the West Canada Creek?
☐ Yes ☐ No If Yes, how often? _____
4. On a scale from 1 to 5, with 1 being poor and 5 excellent, how would you rate the overall aesthetics of the **Prospect** bypass reach under existing conditions.

1	2	3	4	5
Poor	Fair	Satisfactory	Good	Excellent

If less than satisfactory, please explain why _____

5. On a scale from 1 to 5, with 1 being poor and 5 excellent, how would you rate the overall aesthetics of the **Trenton** bypass reach under existing conditions.

1	2	3	4	5
Poor	Fair	Satisfactory	Good	Excellent

If less than satisfactory, please explain why _____

**THE FOLLOWING SECTIONS ASK QUESTIONS ABOUT
AESTHETIC CHARACTERISTICS OF EACH KOP LOCATION AT SPECIFIC FLOWS**

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 4 Trenton Upper High Falls

Leakage Flow

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 5 Trenton Lower High Falls

Leakage Flow

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 7 Sherman Falls Overlook

Leakage Flow

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 4 Trenton Upper High Falls

Demonstration Flow 1

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 5 Trenton Lower High Falls

Demonstration Flow 1

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 7 Sherman Falls Overlook

Demonstration Flow 1

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 4 Trenton Upper High Falls

Demonstration Flow 2

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 5 Trenton Lower High Falls

Demonstration Flow 2

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

KOP Location No. 7 Sherman Falls Overlook

Demonstration Flow 2

1. Please identify the any unique aesthetic features of this KOP viewing location: _____

2. Please evaluate the flow at this level for each of the following characteristics. (*Circle one number for each item.*)

Attribute	Very Unappealing	Unappealing	No Opinion	Appealing	Very Appealing
Sound level	1	2	3	4	5
Amount of pools/still water in channel	1	2	3	4	5
Amount of turbulence (visibly moving water in channel)	1	2	3	4	5
Amount of exposed rocks/stream-bed	1	2	3	4	5
Contrast between pools and moving water	1	2	3	4	5
Amount of exposed rock at falls	1	2	3	4	5
Wetted channel width (area of the river channel filled with water)	1	2	3	4	5
Water fall size/volume (amount of water going over the falls)	1	2	3	4	5
Overall Aesthetic Rating	1	2	3	4	5

3. In general, would you prefer a flow that was higher, lower, or about the same as this (*check one*):

- | | |
|--|---|
| <input type="checkbox"/> Much lower flow | <input type="checkbox"/> Slightly higher flow |
| <input type="checkbox"/> Slightly lower flow | <input type="checkbox"/> Much higher flow |
| <input type="checkbox"/> About the same flow | <input type="checkbox"/> Does not matter |

4. List specific positive attributes of this flow level: _____

5. List specific negative attributes of this flow level: _____

6. Are there any enhancements that could be implemented at this viewpoint to improve the aesthetic viewing experience? _____

AESTHETIC FLOW ASSESSMENT FORM

WEST CANADA CREEK AESTHETICS FLOW STUDY

COMPARATIVE FLOW EVALUATION TRENTON BYPASS REACH

1. Which flows did you participate in? (*Check all that apply.*)

☐ Leakage ☐ 200 cfs ☐ 400 cfs

2. Please provide overall evaluations for the following flows for the **Trenton** bypass reach based on your experience.

Flow	Unacceptable	Poor	Acceptable	Good	Excellent	No Response
Leakage	1	2	3	4	5	NA
200 cfs	1	2	3	4	5	NA
400 cfs	1	2	3	4	5	NA

3. Based on your viewing of the controlled flow ranges, please specify the flows that you think would provide the following types of experiences for the **Trenton** bypass reach. (*You may specify flows which you have not observed, but which you think would provide the type of experience specified.*)

Experience	Flow in cfs
What is the lowest flow that you consider acceptable for a quality aesthetic viewing experience?	
What flow provides the highest quality (i.e., optimal flow) aesthetic viewing experience?	

4. Based on your evaluation of the controlled flow ranges, please indicate the **optimal** flow for aesthetic viewing opportunities for the following KOP locations. Please consider all of the flow-dependent characteristics that contribute to the aesthetic experience (e.g., sound, rock exposure, flow in channel, volume of flow over falls, etc.). (*Please check one flow for each KOP Location.*)

KOP Location	Leakage	200 cfs	400 cfs	Other (please specify)	No Response
Trenton Upper High Falls (KOP 4)					NA
Trenton Lower High Falls (KOP 5)					
Trenton Sherman Falls (KOP 7)					

5. Compared to other rivers with comparable scenic viewing locations, how would you rate the aesthetic viewing opportunity at the **Trenton** bypass reach (assume optimal flows). (*Circle one number for each.*)

Compared to river reaches of similar difficulty	Far Below Average	Below Average	Average	Above Average	Much Better than Average	No Response
Other rivers within a one-hour drive	1	2	3	4	5	NA
Other rivers in New York State	1	2	3	4	5	NA
Other rivers in the Northeast	1	2	3	4	5	NA

AESTHETIC FLOW ASSESSMENT FORM
WEST CANADA CREEK AESTHETICS FLOW STUDY

6. How many times per year should the KOP locations be open to the public for viewing opportunities?
_____ per year

7. During what month(s) should the KOP locations be open to the public for viewing opportunities?
(Please check all below that apply)

- | | | | |
|-----------------------------------|--------------------------------|------------------------------------|-----------------------------------|
| <input type="checkbox"/> January | <input type="checkbox"/> April | <input type="checkbox"/> July | <input type="checkbox"/> October |
| <input type="checkbox"/> February | <input type="checkbox"/> May | <input type="checkbox"/> August | <input type="checkbox"/> November |
| <input type="checkbox"/> March | <input type="checkbox"/> June | <input type="checkbox"/> September | <input type="checkbox"/> December |

8. Please provide any additional comments or relevant information regarding the scenic views and flows that you observed today. _____

THANK YOU FOR YOUR PARTICIPATION!

AESTHETIC FLOW ASSESSMENT FORM
WEST CANADA CREEK AESTHETICS FLOW STUDY

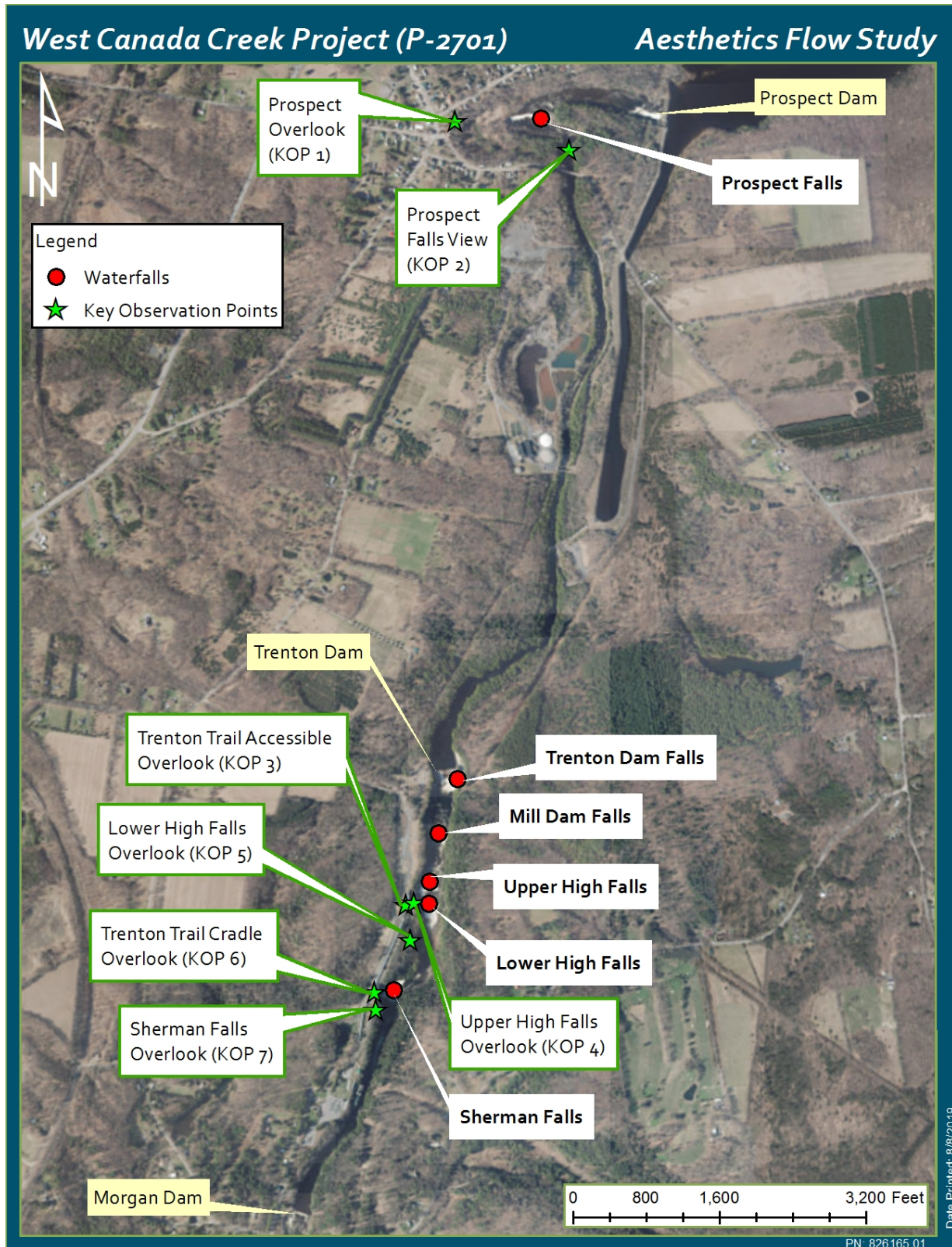


FIGURE 1. LOCATION OF KEY OBSERVATION POINTS (KOP)

FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK AESTHETICS FLOW STUDY

Topics to be discussed with the Focus Group following completion of the individual flow and comparative flow assessment forms:

1. Suitability of the KOP locations
2. Discuss any distinct aesthetic characteristics of each bypass reach
3. What are the lowest, highest and optimal flow conditions for each bypass reach
4. Discuss the positive attributes of the lower flows (i.e., leakage flows)
5. Discuss the negative attributes of the lower flows (i.e., leakage flows)
6. Discuss the positive attributes of the higher flows
7. Discuss the negative attributes of the higher flows
8. Discuss the timing and availability of the KOP locations for scenic viewing opportunities
9. Discuss any enhancements that could be implemented at the KOP locations to improve the overall aesthetic viewing experience
10. Overall evaluation on the range of water flows available

FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK AESTHETICS FLOW STUDY



**C2 - MEMO SUMMARIZING SEPTEMBER 12, 2019 CONSULTATION CALL AND
PRESENTATION**

WEST CANADA CREEK PROJECT (P-2701)

RECREATION AND AESTHETICS STUDIES CONSULTATION WHITEWATER BOATING STUDY - PROSPECT BYPASS REACH Conference Call/Meeting Summary

ATTENDEES: Todd Phillips, NYSDEC
Dick McDonald, NYSDEC
John Wiley, USFWS
Bob Nasdor, AW
Steve Murphy, Brookfield
Rachel Russo, Kleinschmidt
Karen Klosowski, Kleinschmidt
Kayla Easler, Kleinschmidt

DATE: September 12, 2019

Erie Boulevard Hydropower, L.P. (Erie or Licensee), a Brookfield Renewable company (Brookfield) is currently undergoing relicensing for the West Canada Creek Hydroelectric Project (FERC Project No. 2701) (Project) under the Federal Energy Regulatory Commission (FERC) Integrated Relicensing Process (ILP). Erie conducted an agency consultation call with the U.S. Fish and Wildlife Service (USFWS) and New York State Department of Environmental Conservation (NYSDEC), and American Whitewater (AW)¹ to further review and discuss the land-based assessment of the Prospect bypass reach for the Whitewater Boating Flow and Access Study. Following is a summary of key topics discussed during this consultation call. The meeting presentation is provided in Attachment 1 (including the presentation's associated attachments A and B).

INTRODUCTIONS AND PURPOSE OF CALL

Karen Klosowski (Kleinschmidt) welcomed participants and provided an overview of the agenda. The specific consultation topics covered during the call included:

- Confirm participants for on-land assessment.
- Review adjacent land ownership.
- Review general topography and character of adjacent shoreline embankment.
- Discuss anticipated opportunities and limitations for ingress and egress locations.
- Discuss potential whitewater boating features –length of potential boating run and anticipated whitewater features.
- Review on-land assessment approach and associated focus group questions.

Ms. Klosowski confirmed that the participants on the call were representatives for the interested groups for the land-based assessment of the Prospect bypass reach whitewater boating access assessment.

¹ Erie reached out to USFWS, NYSDEC, New York State Fish and Wildlife Management Board (FWMB), American Whitewater (AW), New York Trout Unlimited (NYTU), and the Town of Trenton for participation in call via email and consultation call Outlook invitation.

Ms. Klosowski referred to google earth map images of the parcel data for adjacent landowners to the Prospect bypass reach (provided in presentation Attachment 1, slide 3). The eastern shoreline is comprised of primarily Erie-owned parcels, with one small parcel owned by the Mohawk Valley Water Authority (MVWA) which is in close proximity to, but not adjacent to the Prospect bypass reach. The western shoreline ownership includes a private parcel near military bridge, Town of Trenton lands, Predominantly MVWA lands, and then small portion of Erie lands near the Prospect powerhouse. John Wiley (USFWS) questioned the ownership of the stream reaches themselves. Steve Murphy (Erie) explained that the parcels shown on the figures derived from county parcel/tax map data (Oneida and Herkimer counties). He stated that the West Canada Creek splits the two counties and data may not align or be provided for the stream reach. Erie will see if additional data can be obtained regarding the stream reach land ownership. Mr. McDonald (NYSDEC) provided GIS tax parcel data of a portion of the Prospect bypass reach adjacent land area that shows an example of the stream reach areas of unidentified land ownership (see Attachment 2).

Ms. Klosowski explained that the reaches have been mapped during the Mesohabitat Assessment Study and the Prospect bypass reach results are included in the presentation (see Attachment 1, slide 4). The mesohabitat shows the substrate types including several pools, riffles and runs. The reach between Military Bridge and Prospect Tailrace is approximately 0.8 mile in length, with almost 100% of the eastern shoreline is steep cliff and provides no access and approximately 70% percent of the western shoreline is steep/cliff, remaining predominantly has loose rock; difficult access to stream channel.

Pictures and drone footage can be found in the presentation Attachment 1, Attachment A. Ms. Klosowski reviewed Figures 1-12:

- Figure 1 – looking upstream to Military Bridge Area;
- Figure 2 – looking downstream of Military Bridge, right hand side of the river channel is steep;
- Figure 3 – looking upstream to just below Military Bridge Area - loose rock, steep cliff like areas;
- Figure 4 – looking back upstream to waterfall area;
- Figure 5 – looking downstream from below waterfall area – little less steep on western shoreline;
- Figure 6 – looking further downstream below water fall area - cliff sides;
- Figure 7 – looking further downstream near adjacent MVWA lands – also shows substrate areas;
- Figure 8 – looking further downstream near adjacent MVWA lands;
- Figure 9- looking back upstream;
- Figure 10 – further downstream near adjacent MVWA lands -western shoreline water authority area;
- Figure 11 – looking upstream of Prospect Tailrace; and
- Figure 12 – downstream of Prospect tailrace area.

Mr. Wiley (USFWS) asked why Erie did not look at access between the Prospect tailrace and the Trenton Dam. Ms. Klosowski responded that Erie did not look at this based on the very steep shorelines along both shorelines in this section, and that there are no safely accessible egress areas. Bob Nasdor (AW) recalled an area right above the Trenton dam near the intake area that

may be used to access this location on the river right side (if standing on the dam looking upstream). Mr. Murphy explained that to access the Trenton impoundment for field efforts the Shoreline Characterization study, Erie had to winch boats down into the intake area. Mr. McDonald (NYSDEC) provided photographs he had taken during the initial site visit of the location Mr. Nasdor was referring to, showing the steep shoreline adjacent to the intake area (see Attachment 2).

Mr. Murphy expressed the concern for public safety at this location, looking at the need for rescue access areas with no roadside access. Mr. Nasdor explained that there are other projects where there are rescue points downstream and not necessarily right near a put-in or take-out locations. Mr. Murphy indicated and the group agreed that participants could visit/view this area and other potential whitewater boating ingress and egress locations when in the field for the Aesthetic Study on September 24, 2019, either the afternoon that day or the next morning.

Mr. Murphy expressed that one the biggest challenges for whitewater boating in the Prospect bypass reach is access. Mr. Nasdor stated that the group would need to look at structures in the channel, and obstructions/hazards. Mr. Nasdor proposed having drone footage taken of flows at the falls for at least the higher flows while out at the Aesthetic Study. Mr. Murphy stated that Erie would consider taking drone footage of spills/flows to extent possible during the aesthetic study. Erie will coordinate with interested parties for the field assessment and will Erie will investigate getting drone footage during the Aesthetic study.

ATTACHMENT 1

**RECREATION CONSULTATION MEETING PRESENTATION
SEPTEMBER 12, 2019**



West Canada Creek Hydroelectric Project (FERC No. 2701)

Study Plan Additional Consultation

September 2019

Whitewater Boating Flow and Access Study

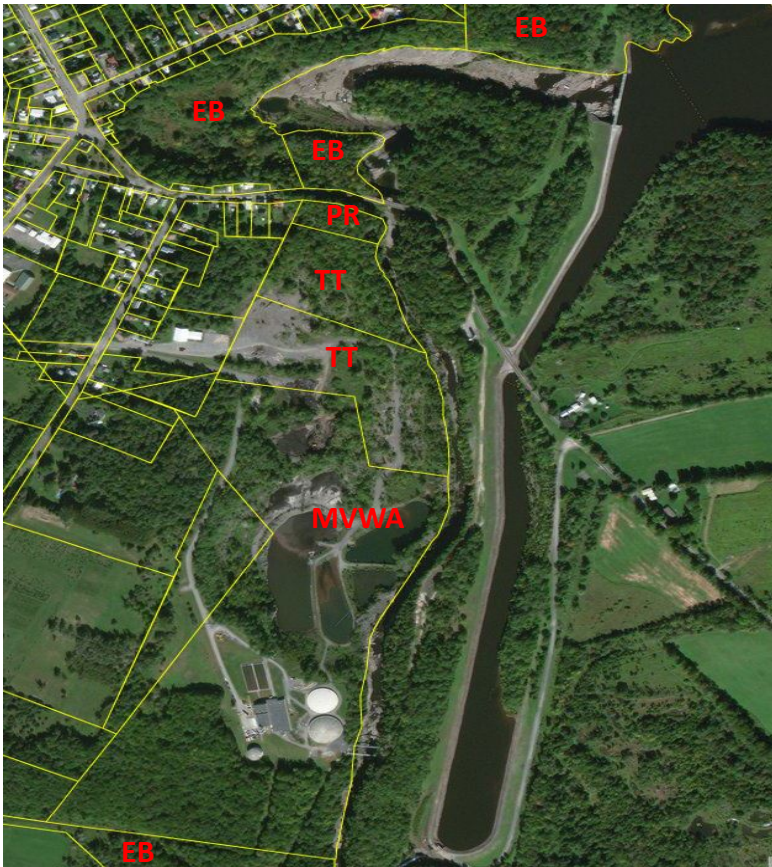
Prospect Bypass Reach - Land Based Assessment

- Expert Panel participants for on-land assessment.
- Assessment to identify potential whitewater features, potential limitations to navigation and safe paddling, potential ingress and egress locations, and safety considerations.
- Topics for discussion:
 - Review adjacent land ownership.
 - Review general topography and character of adjacent shoreline embankment.
 - Discuss anticipated opportunities and limitations for ingress and egress locations.
 - Discuss potential whitewater boating features – length of potential boating run and anticipated whitewater features.
 - Review on-land assessment approach and associated focus group questions.
- Additional study
 - If the on-land assessment justifies a controlled flow assessment for the Prospect bypass reach, Erie will consult with the Expert Panel during the on land assessment to determine controlled flow levels to be studied during Phase 3 study.

Whitewater Boating Flow and Access Study

Prospect Bypass Reach - Land Based Assessment

- Adjacent land ownership (See Attachment A)
 - Western shoreline - private, Town of Trenton or Mohawk Valley Water Authority (water treatment plant)
 - Eastern shoreline - Brookfield and small parcel of MVWA



Source: Google earth; <http://sdg.giscloud.com/map/319017/Oneida>

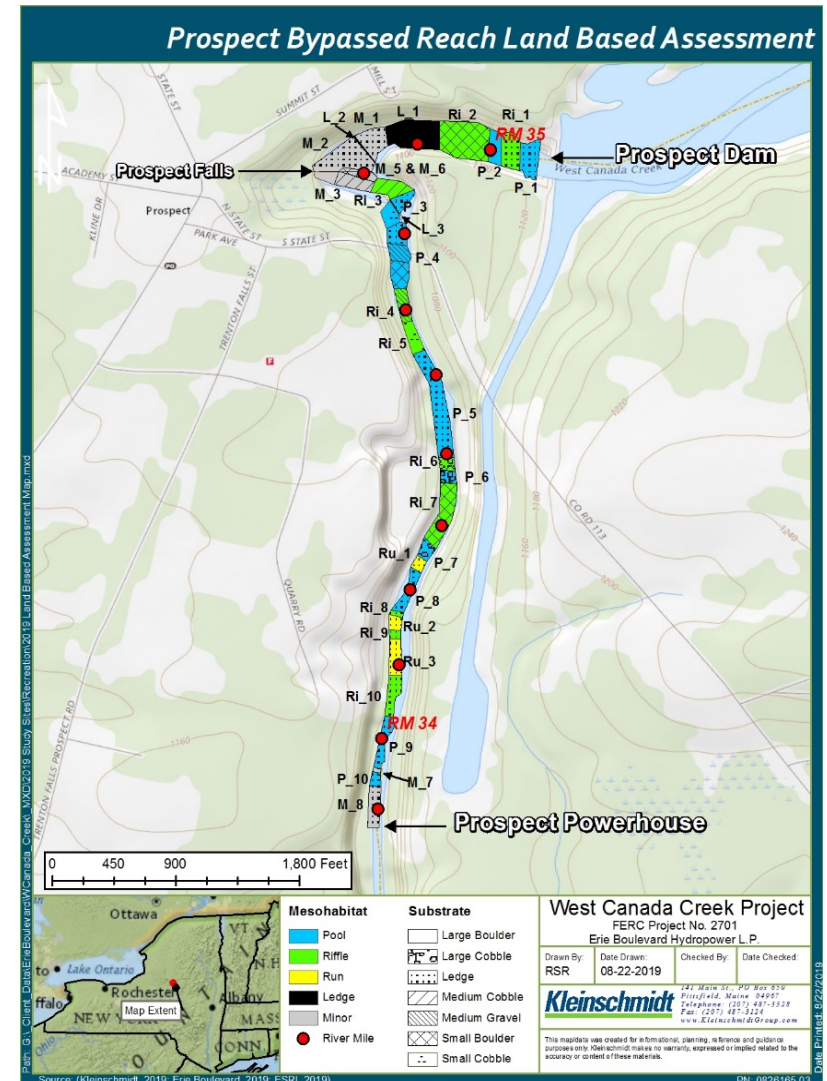


(Source: Google earth; <http://sdg.giscloud.com/map/225030/herkimer>)

Whitewater Boating Flow and Access Study

Prospect Bypass Reach - Land Based Assessment

- Mesohabitat Assessment mapping (Attachment A)
 - Several pools, riffles and runs
- Reach between Military Bridge and Prospect Tailrace
 - This portion of the reach is approximately 0.8 mile in length
 - Almost 100% of the eastern shoreline is steep cliff and provides no access
 - Approximately 70% percent of the western shoreline is steep/cliff, remaining predominantly has loose rock; difficult access to stream channel
- Pictures (see Attachment A) and drone footage
- On-land review and focus group assessment
 - Focus group questions (see Attachment B)
 - Schedule



West Canada Creek Project Study Report and Meeting Schedule

Responsible Party	Pre-Filing Milestone	Date
FERC	Issue Director's Study Plan Determination	3/7/2019
Erie	First Study Season	Spring- Fall 2019
Erie	File Initial Study Report	1/10/2020
All Stakeholders	Initial Study Report Meeting	1/25/2020
Erie	File Initial Study Report Meeting Summary	2/9/2020
Erie	Second Study Season	Spring- Fall 2020
Erie	File Preliminary Licensing Proposal (or Draft License Application)	10/1//20
All Stakeholders	File Comments on Preliminary Licensing Proposal (or Draft License Application)	12/30/2020
Erie	File Updated Study Report	1/10/2021
All Stakeholders	Updated Study Report Meeting	1/25/2021
Erie	File Updated Study Report Meeting Summary	2/9/2021
Erie	File Final License Application	2/28/2021
Erie	Issue Public Notice of Final License Application Filing	3/15/2021



West Canada Creek Project Relicensing Website

<http://www.westcanadacreekproject.com>

Steven P. Murphy

Director, U.S. Licensing

Brookfield

33 West 1st Street South, Fulton, New York 13069

Phone: (315) 598-6130

steven.murphy@brookfieldrenewable.com

www.brookfieldrenewable.com

ATTACHMENT A
PHOTOS OF PROSPECT BYPASS REACH
FOR ASSESSMENT OF WHITEWATER BOATING ACCESS



FIGURE 1. LOOKING UPSTREAM TO MILITARY BRIDGE AREA



FIGURE 2. LOOKING DOWNSTREAM OF MILITARY BRIDGE



FIGURE 3. LOOKING UPSTREAM TO JUST BELOW MILITARY BRIDGE AREA



FIGURE 4. LOOKING BACK UPSTREAM TO WATERFALL AREA



FIGURE 5. LOOKING DOWNSTREAM FROM BELOW WATERFALL AREA



FIGURE 6. LOOKING FURTHER DOWNSTREAM BELOW WATERFALL AREA



FIGURE 7. LOOKING FURTHER DOWNSTREAM NEAR ADJACENT MVWA LANDS



FIGURE 8. LOOKING FURTHER DOWNSTREAM NEAR ADJACENT MVWA LANDS



FIGURE 9. LOOKING BACK UPSTREAM



FIGURE 10. LOOKING FURTHER DOWNSTREAM NEAR ADJACENT MVWA LANDS



FIGURE 11. LOOKING UPSTREAM OF PROSPECT TAILRACE



FIGURE 12. DOWNSTREAM OF PROSPECT TAILRACE

ATTACHMENT B
WHITEWATER BOATING STUDY
PROSPECT BYPASS REACH
FOCUS GROUP DISCUSSION TOPICS

**PROSPECT BYPASS ON-LAND EVALUATION
FOCUS GROUP PARTICIPANT FORM
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY**

Thank you for participating in the on-land assessment of the Prospect Bypass Reach for whitewater boating opportunities. The following are questions to provide information regarding the background and experience levels of the focus group participants.

THIS SECTION ASKS ABOUT YOU PERSONALLY

1. Participant Name: _____
2. Participant Affiliation: _____
3. Home Zip Code: _____
4. Age: _____ ☐ Prefer not to answer
5. Gender of respondent: ☐ Male ☐ Female ☐ Prefer not to answer

THIS SECTION ASKS ABOUT YOUR BOATING EXPERIENCE

1. What is your primary activity for on-water boating activity? (*Check one box.*)

<input type="checkbox"/> Whitewater kayaking	<input type="checkbox"/> Flatwater kayaking
<input type="checkbox"/> Whitewater canoeing	<input type="checkbox"/> Flatwater canoeing
<input type="checkbox"/> Rafting	<input type="checkbox"/> Stand up paddle board (SUP)
<input type="checkbox"/> Other, <i>please specify</i> _____	
2. How many total years have you been participating in on-water boating activities? (*Fill in blank.*)
_____ years boating
3. How would you rate your skill level with on-water boating activities? (*Check one box.*)

<input type="checkbox"/> Prefer flatwater float trips	<input type="checkbox"/> Intermediate (Class III whitewater)
<input type="checkbox"/> Beginner (Class I whitewater)	<input type="checkbox"/> Advanced (Class IV whitewater)
<input type="checkbox"/> Novice (Class II whitewater)	<input type="checkbox"/> Expert (Class V whitewater)
4. How many days per year do you typically participate in on-water boating activities? (*Fill in blank.*)
_____ days whitewater boating
5. What type of watercraft do you primarily use for boating related recreation activities? (*Check one box.*)

<input type="checkbox"/> 1 Person Open Canoe	<input type="checkbox"/> Hardshell Kayak
<input type="checkbox"/> 2 Person Open Canoe	<input type="checkbox"/> Inflatable Kayak
<input type="checkbox"/> Closed Canoe	<input type="checkbox"/> Inflatable Raft
<input type="checkbox"/> Other, <i>please specify</i> : _____	
6. Please provide any comments you may have regarding access to the Prospect bypass reach for whitewater boating opportunities. _____

THANK YOU !

PROSPECT BYPASS REACH FOCUS GROUP DISCUSSION TOPICS

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

Reference Information: Figure 1 provides mesohabitat and substrate data for the Prospect Reach collected as part of the Aquatic Mesohabitat Assessment Study and identifies river mile (RM) locations. Figures 2 and 3 provide adjacent parcel and land ownership information. The International Scale Of River Difficulty Whitewater Classifications is also provided.

The following topics are to be discussed with the expert panel group during the in-field, on-land Prospect bypass reach whitewater boating opportunities evaluation.

THIS SECTION ASKS ABOUT POTENTIAL ACCESS TO THE PROSPECT BYPASS REACH FOR WHITEWATER BOATING ACTIVITIES

1. Discuss and identify on Figure 1 all potential **put-in** or **take-out** access locations.
2. Discuss and identify “**primary put-in**” and “**primary**” **take-out**, i.e., best locations for both ingress and egress to the Prospect bypass reach for whitewater boating activities.
3. Discuss the following for the identified potential “**primary put-in**” location.

Access Trail

- (a) Proximity to public roadway or (potential) parking area.
- (b) Compatibility of access location with adjacent land use/ownership.
- (c) Slope/gradient/stability of potential trail location for transporting boat from vehicle to launch location.
- (d) Length of the potential access trail.

Potential Put-in Location

- (e) Potential for boating staging area.
 - (f) Height above water for launch location.
 - (g) Slope/gradient/stability of streambank at potential put-in location.
4. Discuss the following for the identified potential “**primary take-out**” location.

Potential Access Trail

- (a) Proximity to public roadway or (potential) parking area.
- (b) Compatibility of access location with adjacent land use/ownership.
- (c) Slope/gradient/stability of potential trail location for transporting boat from vehicle to launch location.
- (d) Length of the potential access trail.

Potential Take-out Location

- (e) Potential for boating egress area.
 - (f) Height above water for launch location.
 - (g) Slope/gradient/stability of streambank at potential take-out location.
5. Discuss any additional comments regarding potential access and parking locations for whitewater boating in the Prospect bypass reach.

PROSPECT BYPASS REACH FOCUS GROUP DISCUSSION TOPICS WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

THIS SECTION ASKS ABOUT POTENTIAL WHITEWATER BOATING CHARACTERISTICS FOR THE PROSPECT BYPASS REACH

6. Discuss potential length of the whitewater boating run and identify associated ingress and egress locations.
7. Discuss the overall gradient of the potential whitewater boating run.
8. Discuss the potential type and general location of whitewater boating features (refer to Figure 1).
9. Discuss the potential number, location and length of potential portages (refer to Figure 1).
10. Review the anticipated the potential *International Scale of River Difficulty* experience level and associated estimated flow level based on preliminary assessment.

THIS SECTION ASKS ABOUT SAFETY CONSIDERATIONS FOR BOATING THE PROSPECT BYPASS REACH

11. Review potential areas where emergency egress would be difficult (refer to Figure 1).
12. Identify public safety responder considerations for providing safety/rescue services to the Prospect bypass reach.
13. Review and identify any observed hazards and public safety considerations for boating in the Prospect bypass reach.
14. Discuss any additional comments associated with safety considerations.

THIS SECTION ASKS ABOUT POTENTIAL PUBLIC DEMAND FOR BOATING THE PROSPECT BYPASS REACH

15. What distance would you travel to boat this reach.
16. How many times per year would boat this reach
17. Please describe any unique features that would draw boaters to this location.
18. Please identify other whitewater boating locations within one-hour of the Prospect bypass reach that you have previously boated.

CONCLUSIONS AND WRAP UP

19. Discuss overall impressions of feasibility of whitewater boating opportunities and access.
20. Any additional comments?

PROSPECT BYPASS REACH FOCUS GROUP DISCUSSION TOPICS WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

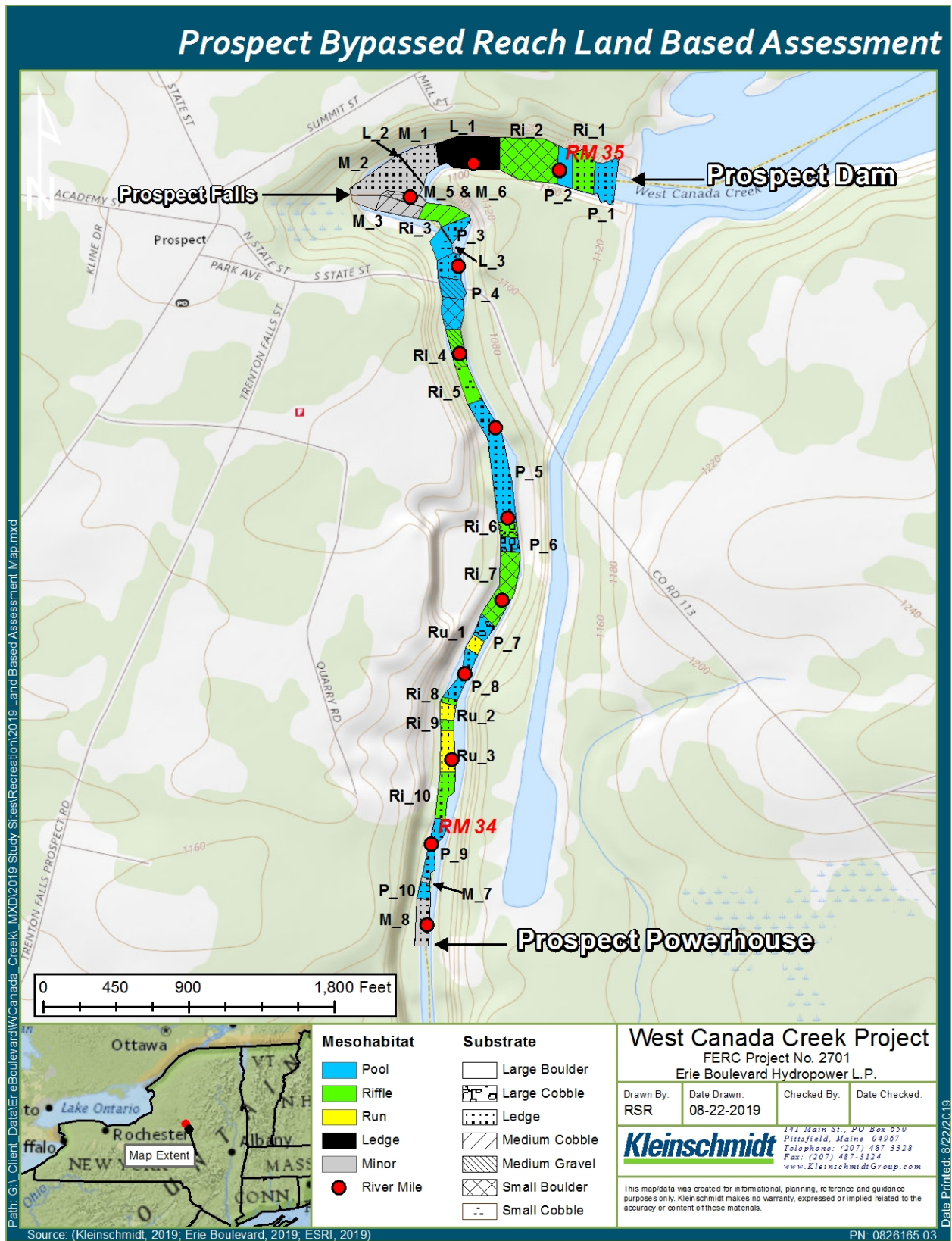


FIGURE 1 PROSPECT BYPASS REACH TOPOGRAPHY, MESOHABITAT AND SUBSTRATES

**PROSPECT BYPASS REACH FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY**



FIGURE 2 PROSPECT BYPASS REACH ADJACENT LAND PARCELS - HERKIMER COUNTY
(Source: Google earth; <http://sdg.giscloud.com/map/225030/herkimer>)

Current Parcel Owner/Managing Entities

- EB - Erie Boulevard
- MVWA - Mohawk Valley Water Authority

**PROSPECT BYPASS REACH FOCUS GROUP DISCUSSION TOPICS
WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY**

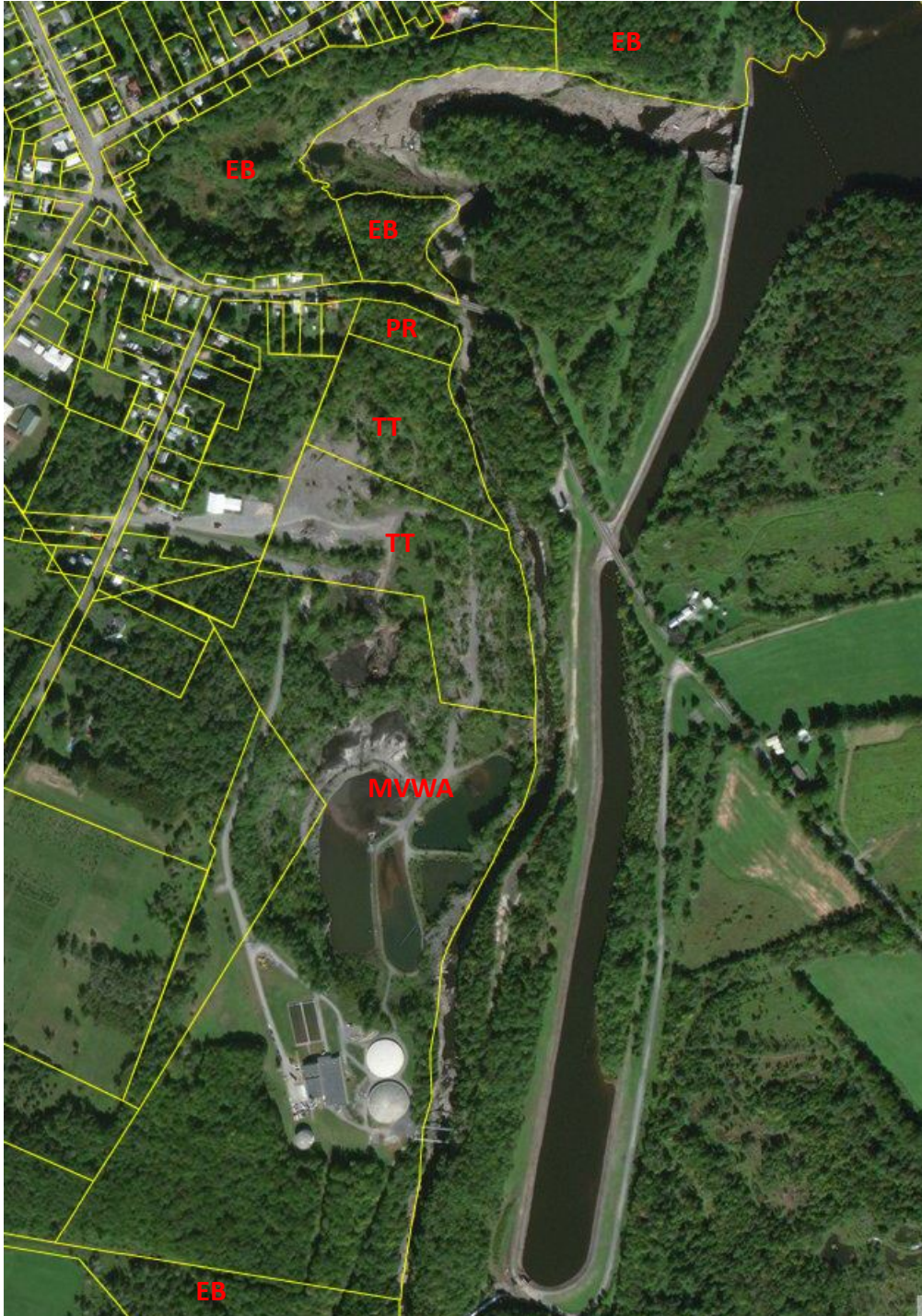


FIGURE 3 PROSPECT BYPASS REACH ADJACENT LAND PARCELS - ONEIDA COUNTY
(Source: Google earth; <http://sdg.gisccloud.com/map/319017/Oneida>)

Current Parcel Owner/Managing Entities

- EB - Erie Boulevard
- TT - Town of Trenton
- MVWA - Mohawk Valley Water Authority
- PR- Private Ownership

PROSPECT BYPASS REACH FOCUS GROUP DISCUSSION TOPICS

WEST CANADA CREEK WHITEWATER BOATING FLOW AND ACCESS STUDY

WHITEWATER CLASSIFICATIONS

INTERNATIONAL SCALE OF RIVER DIFFICULTY

(Source: Safety Code of American Whitewater, 2005)

Class I: Riffles - Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.

Class II: Novice- Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful, is seldom needed. Rapids that are at the upper end of this difficulty range are designated “Class II+”

Class III: Intermediate - Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims. Rapids that are at the lower or upper end of this difficulty range are designated “Class III-” or “Class III+” respectively.

Class IV: Advanced -Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require “must” moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended. Rapids that are at the lower or upper end of this difficulty range are designated “Class IV-” or “Class IV+” respectively.

Class V: Expert - Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex, demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult. Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential. Because of the large range of difficulty that exists beyond Class IV, Class 5 is an open-ended, multiple-level scale designated by class 5.0, 5.1, 5.2, etc. each of these levels is an order of magnitude more difficult than the last. Example: increasing difficulty from Class 5.0 to Class 5.1 is a similar order of magnitude as increasing from Class IV to Class 5.0.

ATTACHMENT 2

**INFORMATION AND PHOTOS
PROVIDED BY NYSDEC DURING
SEPTEMBER 12, 2019
CONSULTATION CALL**

Karen Klosowski

From: McDonald, Richard P (DEC) <richard.mcdonald@dec.ny.gov>
Sent: Thursday, September 12, 2019 2:48 PM
To: Karen Klosowski; Phillips, Todd J (DEC); John Wiley; Lantry, Jana R (DEC); Balk, Christopher J (DEC); Steven Murphy; Kayla Easler; Rachel Russo; 'Bob Nasdor'
Subject: RE: West Canada Creek Project - Whitewater Boating Study - in field controlled flow study
Attachments: West-Canada-Creek_Prospect-Bypass_12Sep2019.gif

Folks,

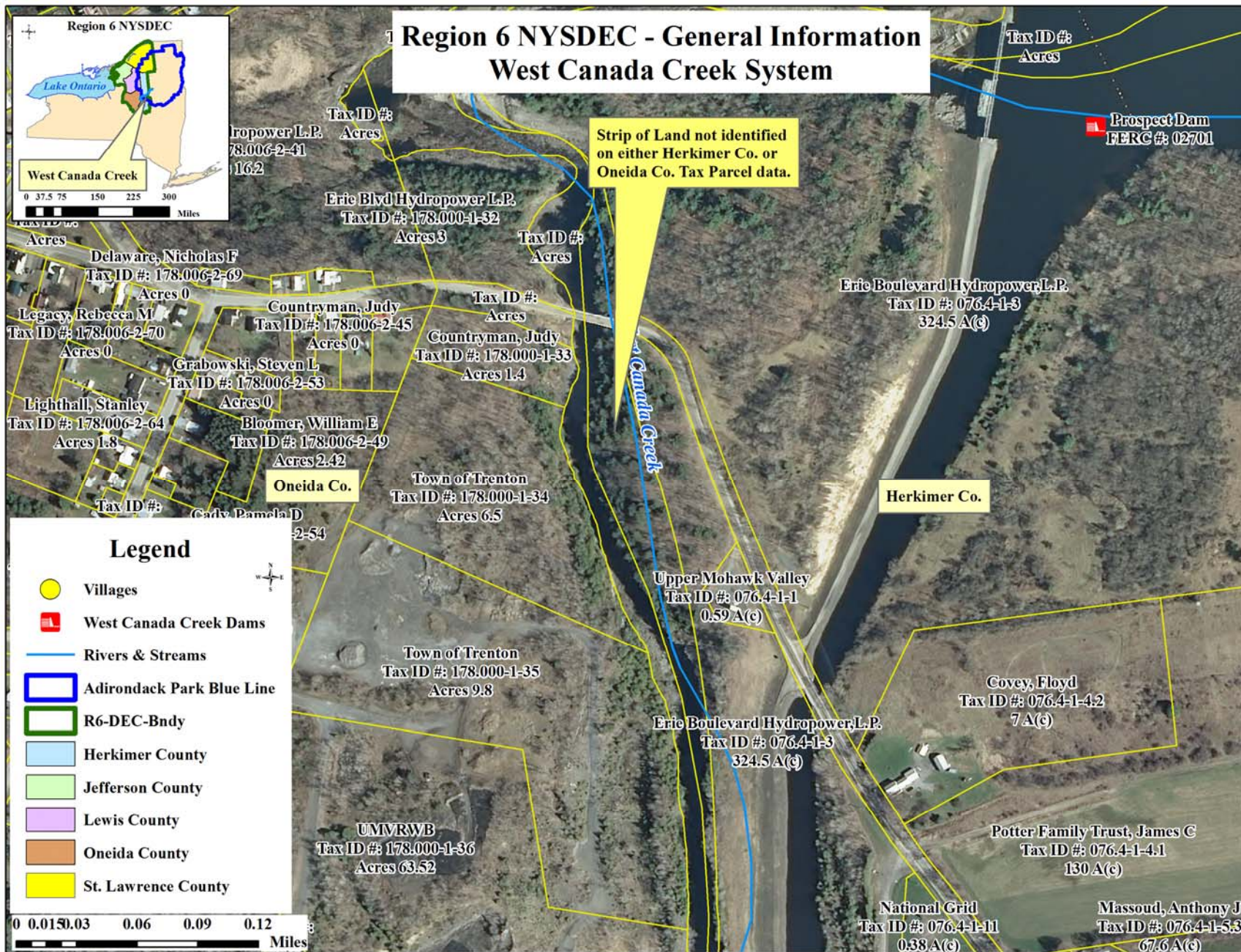
A quick look at the GIS Tax Parcel data for both Herkimer County & Oneida County shows the strip of land in the Prospect Bypass that John Wiley mentioned in our phone call today. It does not show up on either county Tax Parcel layer. I have attached a GIS generated orthoimagery map for your reference.

Sincerely,
Dick McDonald

Richard P. (Dick) McDonald
Biologist 1, Aquatic

New York State Department of Environmental Conservation
317 Washington Street, Watertown, NY 13601
P: (315) 785-2264 | F: (315) 785-2242 | richard.mcdonald@dec.ny.gov

www.dec.ny.gov |  | 



Karen Klosowski

From: McDonald, Richard P (DEC) <richard.mcdonald@dec.ny.gov>
Sent: Thursday, September 12, 2019 1:49 PM
To: Karen Klosowski; Phillips, Todd J (DEC); John Wiley; Steven Murphy; Kayla Easler; Rachel Russo; 'Bob Nasdor'
Subject: RE: West Canada Creek Project - Whitewater Boating Study - in field controlled flow study
Attachments: P5300052.JPG; P5300053.JPG; P5300060.JPG

Folks,

A couple of photos taken on 30 May 2018 from the Trenton Dam.

Sincerely,
Dick McDonald

Richard P. (Dick) McDonald
Biologist 1, Aquatic

New York State Department of Environmental Conservation
317 Washington Street, Watertown, NY 13601
P: (315) 785-2264 | F: (315) 785-2242 | richard.mcdonald@dec.ny.gov

www.dec.ny.gov |  | 







**C3 - EMAIL (10/29/2010) FROM AMERICAN WHITEWATER CONCURRING WITH
WHITEWATER BOATING STUDY POSTPONEMENT**

Karen Klosowski

From: Bob Nasdor | AW <bob@americanwhitewater.org>
Sent: Tuesday, October 29, 2019 7:51 AM
To: Karen Klosowski
Cc: Steven Murphy
Subject: Re: West Canada Creek Whitewater Boating Study - Postponed until 2020 Study Season

Dear Karen and Steve,

I want to confirm that I concur with the decision to postpone the whitewater boating study at West Canada Creek until next year when conditions allow for the release of the target flows. While the postponement is disappointing, I appreciate the collaborative effort to plan the study and recruit participants. I also recognize that the delay will allow us to complete our evaluation of the Prospect bypassed reach next year.

Best regards,
Bob

Bob Nasdor
Northeast Stewardship & Legal Director
American Whitewater
65 Blueberry Hill Lane
Sudbury, MA 01776
bob@americanwhitewater.org
617-584-4566

Join American Whitewater!

On Mon, Oct 28, 2019 at 4:03 PM Karen Klosowski <Karen.Klosowski@kleinschmidtgroup.com> wrote:
Bob

Thank you for all of your efforts to assist with the logistics and scheduling of the West Canada Creek Whitewater Boating Study. As discussed, Erie will be postponing the in-field assessment for the whitewater boating study until the 2020 field season, targeting the May/June/July 2020 time period as weather and flow conditions allow.

As you know per our various consultation calls, multiple dates were scheduled, however, each date was postponed due to field conditions that were not conducive to the controlled flow study (high flow rain events and/or high inflow from Jarvis Project outflows) and participant availability. However, we have made progress in terms of identifying study participants, working out study logistics, and preparing the survey form instruments. This will assist Erie with implementing the field study component next study season.

Erie will provide an update of these efforts and the decision to postpone the field study in the upcoming Study Progress Report.

Thank you again for all of your assistance.

Karen Klosowski
Senior Regulatory Coordinator
[2012 Email Logo]
Office: 315-409-7198
Mobile: 315-283-5066