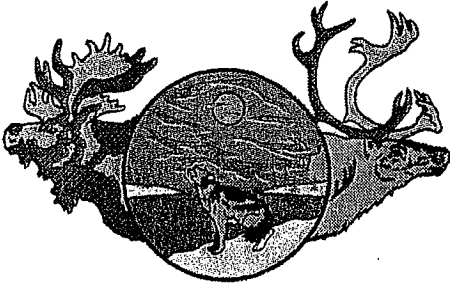


# **APPENDIX 6.1**

## **News Releases, Newsletters and News Articles**



# BLACK LAKE FIRST NATION

P.O. BOX 27

BLACK LAKE, SASKATCHEWAN S0J 0H0

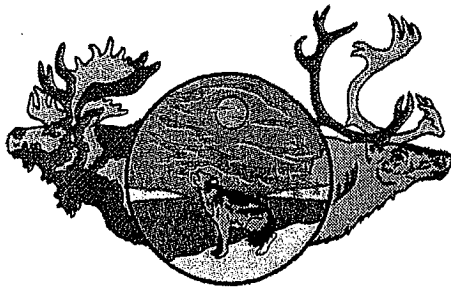
TELEPHONE: (306) 284-2044

FAX: (306) 284-2101

**Press Release**

**Immediate Distribution**

**February 14<sup>th</sup>, 2013**



# BLACK LAKE FIRST NATION

P.O. BOX 27  
BLACK LAKE, SASKATCHEWAN S0J 0H0  
TELEPHONE: (306) 284-2044 FAX: (306) 284-2101

## **Black Lake First Nation Signs Agreement in Principle to Develop Hydro Power Project on Reserve Land**

**February 14<sup>th</sup>, 2013**

Black Lake First Nation (BLFN) Chief and Council announced today that an agreement in principle had been reached with SaskPower to potentially develop the Elizabeth Falls hydroelectric power project – the first power production facility in Saskatchewan largely built on First Nations land.

Located on the BLFN in northern Saskatchewan, the proposed site is adjacent to the Fond du Lac River and near the community of Black Lake. The proposed water diversion design of this hydroelectric facility will eliminate the need for a dam structure on the Fond du Lac River. As such, it will have a small environmental footprint and provide an excellent source of renewable electricity for Saskatchewan.

“It is a great day for Black Lake Band members,” said BLFN Chief Rick Robillard. “We have been working toward this day for many years and are very happy and proud that we are entering this partnership with SaskPower. The profits that we receive from our ownership in this project will help us build a new future for our people,” he said. He added that the project would also provide many jobs for band members during its construction and operation and contribute significantly to the social and economic future of northern Saskatchewan.

It is estimated that the project would generate up to 150 temporary jobs at the peak of its three-year construction phase and up to eight permanent jobs during operations. BLFN and SaskPower have committed to maximizing the participation of BLFN band members and other Athabasca region communities in the employment and contracting opportunities that the project will generate.

“As SaskPower plans and builds for the future we must ensure that our electrical system is able to meet increasingly stringent environmental regulations,” said Robert Watson, SaskPower President and Chief Executive Officer. “New generation projects like this are an opportunity to partner with the First Nations community and work together toward a common goal, while at the same time meeting a growing need for electricity in the North with a clean, renewable source of power.”

The project is subject to further review and assessment including investigation of technical feasibility and capital costs, negotiation of definitive agreements, including agreements between the parties, and authorizations and approvals being obtained. Subject to the successful completion of these matters, construction is expected to begin on the \$300 million project in the second half of 2014. Once constructed, the power plant will have a design capacity of approximately 42 MW.

**For further information contact:**

Chief Rick Robillard  
Black Lake First Nation  
(306) 284-2044  
(306) 961-2189 (mobile)

Ted de Jong  
Elizabeth Falls Hydro Development Corp (EFHDC) – Corporate Executive Officer  
(306) 922-0099 (office)  
(306) 960-8201 (mobile)

Tyler Hopson  
SaskPower - Media Relations Leader  
306-536-2886

## Missinipi Broadcasting Corporation Interview with Chief Rick Robillard

Tuesday February 19, 2013

**Kevin Fontaine MBC Denehoni:** He introduced Chief Rick Robillard from Black Lake, this was his 1<sup>st</sup> interview with Chief Rick Robillard of the Black Lake Denesuline Nation. Today's discussion is on the Elizabeth Falls Hydro Project on the Black Lake Denesuline First Nations. The project is to generate electricity from the Fond du Lac River which will provide services to customers in the far north. Just last week an agreement was signed between Black Lake Denesuline First Nation and SaskPower to start construction of the proposed Elizabeth Falls Hydro Project on the Black Lake Denesuline Nation reserve. With that I would like to introduce Chief Rick Robillard

**Chief Rick Robillard:** good afternoon Kevin.

**Kevin Fontaine:** I understand that you are busy and I would like to thank you for taking time out of your busy schedule to talk to us about the agreement with SaskPower and Black Lake on the EFHP. Just recently you got in as chief and how are you adjusting in your new position.

**Chief Rick Robillard:** I got into the office as chief at the end of June and I have been in this position for about eight months now. There was a lot of work that needed to be addressed, and I still have a lot of work ahead of me.

**Kevin Fontaine:** Can you tell us about the Elizabeth Falls Hydro Project agreement with SaskPower and Black Lake Denesuline First Nation.

**Chief Rick Robillard:** last week we meet with SaskPower, during that time we signed a framework agreement with SaskPower, I'm happy with this agreement for Black Lake First Nation, at the same time last week SaskPower and EFHP Limited Partnership released the news to the media regarding the Elizabeth Falls Hydro Project. This business partnership agreement from my understanding is the 1<sup>st</sup> agreement of its kind between a Crown Corporation and First Nations in Saskatchewan.

**Kevin Fountain:** how did you come to agree on this project?

**Chief Rick Robillard:** I'm excited about the outcome of this project, a lot of work still has to be put in place and the process has begun. The framework agreement has been in negotiations since 2001, former Chiefs and Councilors have been working on this project for almost 13 years and they were seeking partnership with investors. Everyone stayed focus on this deal for so many years and now we have reach framework agreement.

**Kevin Fontaine:** there are some people that are not in favor of this project.

**Chief Rick Robillard:** In 2007 there was referendum vote by the band members more than 51% of the band member voted in favor of this project, we also have to understand that not everyone is in favor of this project.

**Kevin Fontaine:** is the agreement a done deal for the black lake.

**Chief Rick Robillard:** We have been negotiating with SaskPower for a number of years and we have had community consultation, this agreement is called a definite agreement, we are now drafting the

agreement where Black Lake will have 30% ownership of this project and SaskPower to have 70% ownership. The band will receive revenues from this project, we are also going to be leasing the land to SaskPower, which Black Lake band will receive revenues and we will receive yearly increments from SaskPower. In the future Black Lake will get percentage of the revenues that is going to be generated from the Elizabeth Falls Hydro plant. This project is to last 90 plus years.

**Kevin Fontaine:** this project will create jobs for Black Lake, what kind of jobs will be available.

**Chief Rick Robillard:** there will be jobs during construction phase of this project and we are looking at least 150 plus jobs for our band members. This will create jobs for Black Lake band members in the areas of engineering, heavy equipment operators, masonry, bridge building, electricians and so forth.

**Kevin Fontaine:** who do people contact for more information about this project.

**Chief Rick Robillard:** The Elizabeth Falls Hydro Limited Partnership has a Board of Directors; there are 3 councilors, other people from different organizations that are working closely with us. There is Ted de Jong, he is the Corporate Executive Officer from PADC, Geoff Gay from the Athabasca Economic Development Corporation and Betty Hutchinson is our environmental consultant manager. Just recently we hired a Community Liaison Coordinator; she is from the Black Lake First Nation, Linda Sayazie. We also hired a translator for when we have community consultation; he is from Black Lake as well, Ted Robillard. Community Consultation with band members will start in the coming months.

**Kevin Fontaine:** Low unemployment rate on the reserve is so high, this project will bring employment to your reserve in the future, what kind of employment will be offered to your band members.

**Chief Rick Robillard:** The project will create a lot of employment for about four years during the construction phase, once the plant is in full operation there will be about 7 to 8 full time positions that will be filled in the areas of maintenance. Once the cash flow from the revenue shares of the project starts generating to the Black Lake Band, then we may use the money for investment, housing, home renovations. Currently, the federal government is cutting back all of the funds on everything, and we have to start preparing for the future. Federal funding is not going to be around forever and we are not going to benefit from them in the near future. We have to do this on our own, we cannot depend on the federal government for much longer.

**Kevin Fontaine:** review and assessment what is about?

**Chief Rick Robillard:** Currently, we are in the process of setting up training programs for the band members, SaskPower, Black Lake First Nations, and Northlands College are in the process of setting trades training for the Black Lake Reserve, and we are hoping to start training programs this fall. As well, after all these training programs are completed I'm hoping to see some of the band members to make a career choice, and go further on with their education, and career goals. We are also hoping people will go into trades such as electricians, welders, engineers. We have also been working with Golder Associates from Saskatoon they have been doing the Environmental Assessment part of this project for almost two years now. SaskPower has been working closely with Golder Associates to finish the Environmental Assessment so the project may start. Assessment has to be done at the Fond du Lac River, up to Lake Athabasca.

**Kevin Fontaine:** We have to protect the environment as well and what stages is this process at with this project.

**Chief Rick Robillard:** There is a big concern regarding the environment and our elders really expressed their concern, we went to a lot of meetings and we are concern about our water, our fish, our plants, and the animals that live off the land and the water is very important to us in the far north. The environmental assessment is not approved yet. The final report was presented the Ministry of Ocean and Fishery department, and we are waiting on their final approval then we start the construction.

**Kevin Fontaine:** how long will the process take?

**Chief Rick Robillard:** It has taken almost two years to do the environmental assessment in regards to all the living things around us that pertains to the water, fish, plant, birds and animals, everything was assess in the last two years, and we are waiting for approval from the government and we are anticipating to hear from them by this spring or summer.

**Kevin Fontaine:** So when are you going to start the community consultation on your reserve.

**Chief Rick Robillard:** Our first Community Consultation will start tomorrow in Black Lake on Wednesday February 20 at the youth center and I'm hoping to have a lot of people attend this meeting, and on Thursday February 21 a meeting is also set for Stony Rapids, we have invited the mayor, council and community members to attend this meeting. I'm hoping for a good turnout.

**Kevin Fontaine:** Is there anything you would like to share with your fellow colleges and band membership.

**Chief Rick Robillard:** We have started our consultations and we will be in contact with Fond du Lac and Wollaston Lake. We will let people know of when that will take place once we have dates identified. I just want to add one more to this, I just want to let people know that this is a 42 megawatts power plant this will generate power to about 42,000 homes and to the mining industry. So it a big project for Black Lake.

**Kevin Fontaine:** I know people in the far north are struggle with the cost of high power bills, maybe this project will help the people to lower their power bills.

**Chief Rick Robillard:** One of the revenues for Black Lake is to negotiate the best deal for Black Lake and we will try to lower the power bills as much as we possibly can through negotiation. We are still in negotiation with SaskPower and we are trying to get the best possible deal for our band membership. I can't take all of this credit by myself, I would like to thank all the previous Chief and Council on this project and I would like to especially thank my fellow college, Councilor Edwin Boneleye who has been with the band for over 20 years of service and he has guided me throughout this process and I would have never done it without him.

**Kevin Fontaine:** That was Chief Rick Robillard talking about the Elizabeth Falls Project. He spoke in a positive manner and that you will go far with your strong words and wisdom chief Robillard. I would like to thank you for speaking with us today.



Summer 2013

# Tazi Twé

## Hydroelectric Project

### A first in Saskatchewan.

The Tazi Twé Hydroelectric Project is a proposed power generation project in northern Saskatchewan's Athabasca region. The proposed site is located approximately 100 kilometres south of the Northwest Territories border, seven kilometres from the community of Black Lake, adjacent to the Fond du Lac River. Should the project proceed, it will be the first power production facility in Saskatchewan built entirely on First Nations land.

Members of the Black Lake First Nation (BLFN) have been working to advance this project for many years, with the project expected to contribute significantly to the social and economic future of northern Saskatchewan. BLFN invited SaskPower to join as a development partner in 2011, with the partners reaching an agreement in principle in February 2013 – an important step towards a final agreement between the two parties.

The project remains subject to all financial, environmental, community and shareholder approvals. A decision regarding whether or not the project will proceed is scheduled in early 2014. Should the project proceed, construction is expected to begin in the latter part of 2014, with the facility being commissioned in December 2017. The facility is projected to be operational for approximately 100 years.



**Tazi Twé means 'Black Lake' in the Dene language, spoken by the First Nations people of the Athabasca Region.**

Expected to generate between 42 and 50 Megawatts (MW) of power, the Tazi Twé project will help SaskPower to meet a growing need for electricity in Saskatchewan's Far North with a clean, renewable source of power.

### Design will mitigate environmental impact

The proposed design is a 'water diversion' type hydro facility that does not require a dam structure on the Fond du Lac River and as a result will not flood any land. A portion of the river flow will be redirected through a power tunnel to a downstream powerhouse. The project will be

designed to use the natural flow of water as it drops 35 metres from Black Lake to Middle Lake.

Once operational, the facility will have minimal impact on the environment and will not disrupt the practice of traditional activities in the community. Once construction is complete, all areas that are not part of the permanent facilities will be cleaned up, re-contoured and re-vegetated.

Interconnection of this facility to SaskPower's electrical system will require the construction of a new 20 kilometre transmission line, which will be completed by SaskPower.

## Benefits for Black Lake and northern Saskatchewan

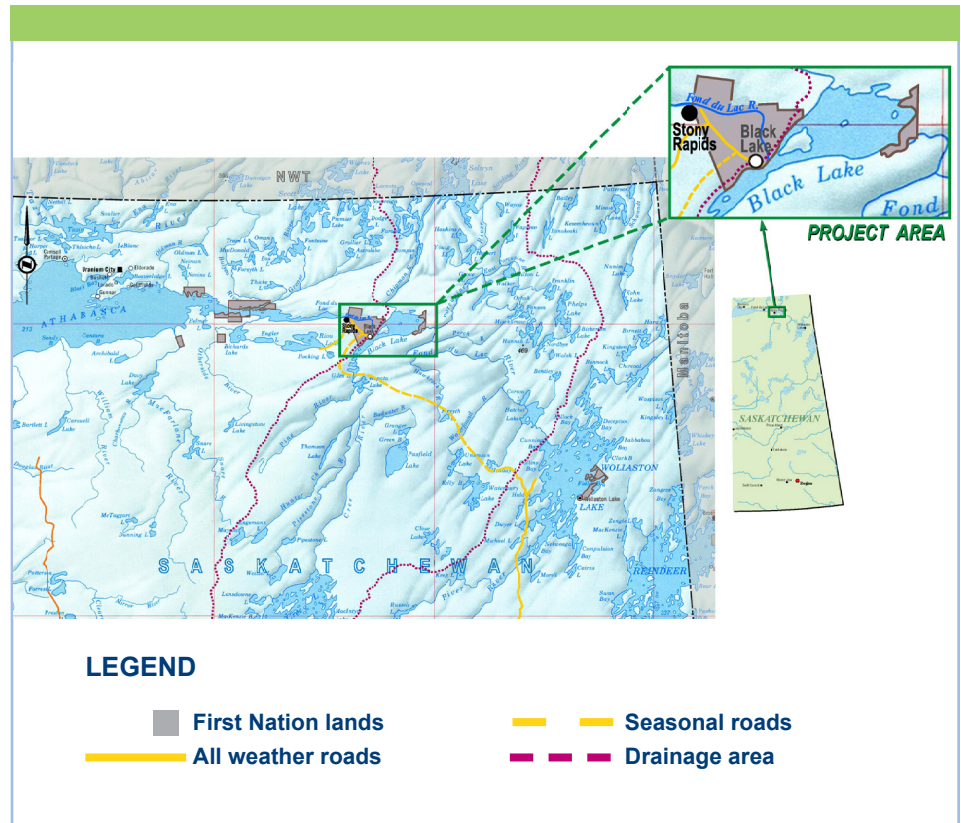
There will be numerous social and economic benefits to the surrounding area if the project proceeds. The project is expected to generate as many as 225 jobs during the three-year construction phase and will require between six and eight permanent employees to operate the facility once operational. The BLFN and SaskPower are currently collaborating to provide pre-employment and job specific training to provide the community with employment opportunities into the future.

The project partners also intend to utilize and maximize Athabasca region contractors, in which the community of Black Lake has ownership interests. Once operational, the BLFN will also receive a return on their investment in the facility.

Both partners are committed to ensuring that all project stakeholders including members of the Black Lake First Nation, Athabasca region communities and contractors, and federal and provincial regulatory agencies understand the project, its potential impacts, as well as the associated benefits.

Public information sessions have taken place in the last six months in the following locations:

- **Public meetings in Black Lake and Stony Rapids** (February 20-21, 2013)
- **Public meeting in Fond du Lac** (February 27, 2013)
- **Workshop in Black Lake** (April 9, 2013)
- **Transmission line open house (hosted by SaskPower) in Black Lake and Stony Rapids** (June 12, 2013)



## Approvals required to proceed

In addition to engagement and discussions with First Nations and other stakeholders, significant work is underway to advance the project through the various approval stages. Cultural and heritage resources are being analyzed, as are wildlife and other ecological resources. Negotiations between the BLFN, through the Elizabeth Falls Hydro Limited Partnership (EFHLP), and SaskPower are ongoing to define the long-term relationship on the project.

The partners and its contractor, Golder and Associates, are preparing regulatory documents for both federal and provincial environmental approvals. Environmental baseline studies were conducted over the past couple of years and the remainder of the approvals are expected to take approximately one year to complete with the submission of the Environmental Impact Statement

in October, 2013 and Federal and Provincial environmental approval by fall 2014.

Implementation of an Early Contractor Involvement Program has been executed, with Peter Kiewit Infrastructure Co. selected as the project's proposed general contractor. Kiewit will work collaboratively with SaskPower and the engineering consultant, the KGS Group, to advance the design and scope of work prior to the project being approved to proceed. Kiewit is working with local contractors to maximize regional contractor involvement.

## More information contact:

Mark Peters  
Manager, Business Development,  
SaskPower  
[mpeters@saskpower.com](mailto:mpeters@saskpower.com)

Ted De Jong  
Corporate Executive Officer  
Elizabeth Falls Hydro Development  
Corporation  
[tdejong@padc.ca](mailto:tdejong@padc.ca)



The issue of First Nations and respecting the needs of traditional land owners is a dominant issue in Canada.

## Working towards a rewarding partnership

Peter Thomas explores the increasing importance of social engagement for small hydro companies in Canada, and details experiences shared during Arena International's recent small hydro conference.

The relatively low cost of hydropower makes Canada a competitive source of renewable energy, and thus the third largest hydroelectric producer in the world. The country produces about 60% of its energy from hydroelectricity, with approximately 475 plants outputting 355TWh/yr. Already, some provinces and territories, such as British Columbia, Manitoba, Newfoundland and Labrador, Quebec and Yukon, produce over 90% of their electricity in this manner.

Perhaps what is most exciting about Canada's hydro market is that it is sure to continue to grow dramatically over the coming years. According to a study commissioned by the Canadian Hydropower Association, Canada has 163,000MW of untapped hydropower potential – more than twice the country's existing capacity.

### First Nations involvement

As with all countries, hydro projects in Canada face some opposition from certain political groups, environmentalists and from local communities. The issue of First Nations – the collective term for indigenous communities across the continent – is dominant in this respect in Canada, as companies and local governments try to manage and respect the needs of the traditional landowners in the regions where hydro projects are planned/exist.

This was one of the key subject matters discussed at Arena International's Small Hydro Canada 2013 conference earlier this year. The event is always heavily researched with previous and prospective delegates so that the agenda can be tailored to address the most prominent issues facing the small hydro sector, particularly in

Canada. Two days of talks brought industry leaders from across the country and further afield, to present and discuss up-to-the-minute advances and concerns that are at the forefront of sector development.

Amongst the talks were presentations focusing on the market future of small hydro – particularly focused on British Columbia (BC), where the event was located this year. Speakers provided insight into both hydrokinetic and marine hydro projects. There were dedicated streams of presentations focusing on securing investment in hydro projects and to optimising turbine efficiency, plus both a presentation and panel discussion on the topic of First Nations communities.

Ranjith (Ran) Narayanasamy, Senior Advisor at SaskPower, presented a potential project –



The Canadian Hydropower Association says a wealth of untapped potential exists across the country.

TaziTwe (aka Elizabeth Falls) hydroelectric project in Saskatchewan. Ran explained how the business development framework has been structured to reflect the aboriginal equity in the project. This is in part due to an increasing desire from the First Nations' communities across the country to participate in power projects as a means for sustainable economic development and community benefits. However, it is also because of increasing support from the Canadian government for First Nations communities. SaskPower and the First Nations Power Authority (a not for profit entity) announced the signing of a 10-year Master Agreement in February 2013. First Nations Power Authority facilitates between SaskPower and First Nations, assisting the development of First Nations-led power projects through a well-defined, mutually beneficial, long-term agreement.

The discussion that followed was chaired by Valerie Helbronner, a Partner at Torys LLP, and included panelists:

- Loch McJannett (Vice President of Operations at Clean Energy BC).
- Thom Fischer (President, Tollhouse Energy Company).
- Judith Sayers (National Chair of Aboriginal Economic Development, University of Victoria).
- Alistair Howard (Manager, Project Development BC, Boralax).
- Bas Brusche (Public Affairs, Innergex).

While community engagement has traditionally been considered the softer side of project management, it has become a fundamental aspect of project plans for many companies. However, Loch argues that only about 25% of developers understand why such consultations and accommodations for First Nations are necessary. Valerie Helbronner agreed, stating that people need to understand that there's a fundamental difference between obtaining a fishing licence and actually respecting and understanding the cultural implications involved.

Brusche pointed out that in BC it is imperative to co-operate with the First Nations communities; otherwise it will severely impact the success of your project. He urged his peers to take the relationship with local communities very seriously, recommending that the more you invest at the outset, the more rewarding the long-term relationship will be. This point was supported by Alistair Howard from Boralax, who highlighted how a town has grown up around their Ocean Falls project over the past 100 years, and that a strong partnership with the community has been key.

### Best practice

While it is clear that there is no set recipe for success when navigating these sensitive issues, Ran Narayanasamy outlined best practice to relationship building as having a strong understanding of the process and protocols, including First Nations representatives in all communications, and being respectful and patient with regards to customs, heritage, and traditions when seeking approval. He stressed the importance of contacting the elders as early as possible and, above all, the need to communicate

Thom Fischer, who works in both Canada, Alaska and Washington, clarified that the legal position in the US is very similar, but perhaps the relationship building is generally more advanced than in Canada. For example, First Nations in Washington have equal authority to the state with regards to fish management, with many projects having 50/50 management divide. Fischer reinforced the need to have a holistic view of the project concept, in order to establish an agreement that benefits everyone. This includes management for the benefit of fish as well as energy production.

Supporting this point, Judith Sayers explained the need to be on the same page in order to progress in a constructive manner. Having spent over a decade working to manage First Nations development, she explained that seeking out

shared values in potential partners is of top importance to First Nations communities. They will typically expect employment opportunities from the project, as well as respect for their environment and traditions.

Referring to his case study, Narayanasamy outlined other additional benefits to the First Nations communities, should a project be managed in a sensitive manner, including increased infrastructure and transportation, supplementary business opportunities, as well as minimal impact to the environment.

As facets of the industry mature, Loch McJannett highlighted how there is much scope to improve the processes. There is tremendous potential, but we need to ensure education to allow appropriate involvement. While Sayers acknowledged that times have changed and that is now easier to bring equity in hydro project partnerships, Valerie Helbronner reminded us that equal equity does not necessarily mean equal control for both parties.

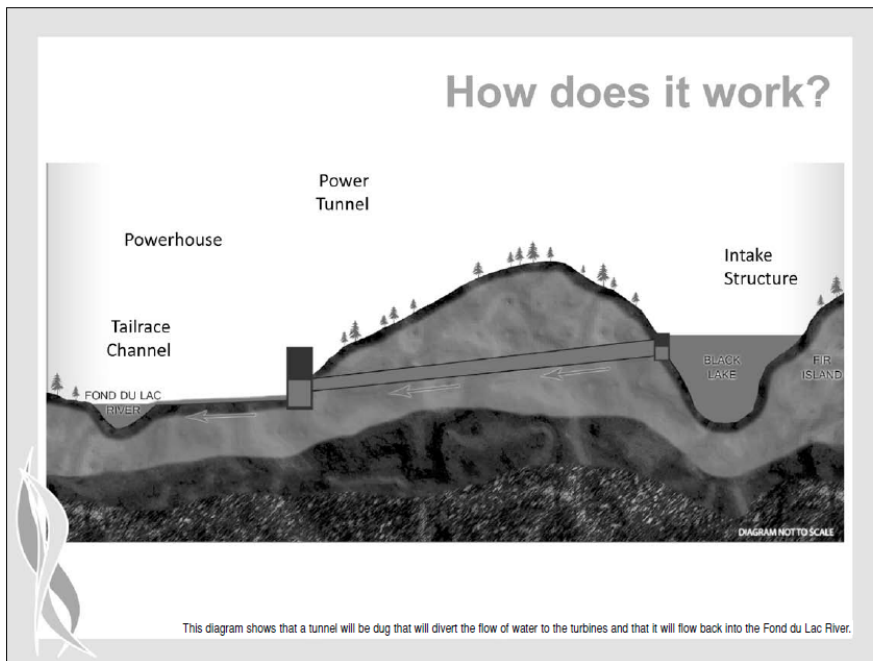
While the discussions at this event were focused on the situation in Canada, engaging with local communities is not an issue unique to Canada. Arena International's annual Small Hydro Latin America event, which took place in Panama in December last year, also raised the discussion of indigenous communities in Latin America and the similar problems which are faced by project developers there. It certainly is an ongoing issue that is far from resolved, and something that project developers have to take an increasing interest in. ■

### Author Information

Peter Thomas is the Conference Producer at Arena International.

Email: [peter.thomas@arena-international.com](mailto:peter.thomas@arena-international.com)

## Black Lake First Nation and SaskPower Sign Agreement-in-Principle to Develop Hydroelectric Project



By Ron Merasty

On February 14, 2013, Black Lake First

Nation chief and council announced that an agreement-in-principle had been reached with SaskPower to potentially develop the

Elizabeth Falls hydroelectric power project, the first power production facility to be largely built on First Nations land.

Located on BLFN in northern Saskatchewan, the proposed site is adjacent to the Fond du Lac River and near the community of Black Lake. The proposed water diversion design of this hydroelectric facility will eliminate the need for a dam structure on the river. As such, it will have a small environmental footprint and provide an excellent source of renewable electricity for Saskatchewan.

"It is a great day for Black Lake band members," Chief Rick Robillard said. "We have been working toward this day for many years and are very happy and proud that we are entering this partnership with SaskPower. The profits that we receive from our ownership in this project will help us build a new future for our people."

He added that the project would also provide many jobs for band members during its construction and operation and contribute significantly to the social and economic future of northern Saskatchewan.

It is estimated that the project would generate up to 150 temporary jobs at the peak of its three-year construction phase and up to eight permanent jobs during operations. BLFN and SaskPower have committed to maximizing the participation of BLFN band members and other Athabasca region communities in the employment and contracting opportunities that the project will generate.

"Given our involvement in many heavy industry businesses in the north, we are pretty confident that we can participate fully in these opportunities," Chief Robillard says. "We have partnerships already in place in mining, construction, catering, trucking, aviation, to name a few."

"New generation projects like this are an opportunity to partner with the First Nations community and work together toward a common goal," said Robert Watson, SaskPower President and CEO.

The project is subject to further review and assessment, including investigation of technical feasibility and capital costs, negotiation of definitive agreements, including agreements between the parties, and construction is expected to begin on the \$300 million project in the second half of 2014. Once constructed, the power plant will have a design capacity of approximately 42 KW.

The framework agreement establishes a 30% interest for the BLFN and 70% for SaskPower. As the definitive agreements have not been negotiated, there could be



Chief Rick Robillard

RON MERASTY PHOTO

potential for this to change, however, BLFN's interest would not be less than 30%.

Chief Robillard is pleased with the terms of the agreement-in-principle, saying, "First, we will be the proud owners of a profitable, long-term business and the profits from this business, we believe will make a big difference to the lives of people in our community and surrounding region. This business will potentially generate hundreds of millions of dollars in profits for our band over its life span."

Chief Robillard stated that as partners in this project, BLFN has an important mandate to properly consult its membership for this project.

"To ensure that this happens, we have developed, in cooperation with our partner, a detailed community consultation plan and that work will begin immediately," he said. In fact, the consultations began on February 20, six days after the announcement.

Public consultation regarding this project will extend beyond Black Lake and will include their two closest neighbours, Stony Rapids and Fond du Lac.

"We have a team formed that will do this work and they will be available for any group interested in the project, to answer questions, to discuss the project and to listen to public concerns," he said.

The project will be subject to all environmental, financial, community and shareholder approvals. Golder and Associates of Saskatoon have been working on the environmental aspect of the project for a couple of years. BLFN will require federal and provincial government approvals to proceed.

"We need to show our people, our Elders, that this project will not cause harm to the environment. They need to know that they will be able to continue to practice their traditional activities, the same as before. The environmental assessment has been underway for almost two years and our partner SaskPower has been funding this work. It will take at least another year to complete," Chief Robillard added.

SaskPower and the BLFN have agreed to a framework on how to proceed. The next steps will be to: 1) Finalize the definitive agreements of the partnership; and, 2) make a final determination if the project will proceed.

"I would like to thank all the previous Chiefs and Council, men and women who have served the community of Black Lake First Nation and remained focused on this project. It will not be fair for our current leadership to take full credit; therefore we would like to share this milestone with them. And especially a huge thank you to Councillor Edwin Boneleye who has served on council and hydro team since the beginning of this project," Chief Robillard stated.



Part of the cascade at the bottom of Elizabeth Falls.

For decades there has been talk about small in-stream power turbines for a number of northern Saskatchewan's many fast-running rivers. SaskPower, the provincial power utility, has been looking for ways to generate more emission-free hydroelectricity in the province, and identified the potential in the north in the 1970s.

Now, the focus is on Black Lake, where the original in-stream turbine idea has become a proposal for a full-fledged power plant, named Tazi Twé (Dené translation of Black Lake). The project would be located at Elizabeth Falls on the Fond du Lac River, which flows from Wollaston Lake via Black Lake into Lake Athabasca.

If completed, this would be the first hydroelectric project to be built in Saskatchewan in 33 years.

#### **2012 deal to proceed**

Interest in a hydro project was reignited by the Black Lake First Nation in the early 2000s. Leaders insisted that the project had to have minimal environmental impact, and that Black Lake water levels should remain as close as possible to natural levels.

Following these guidelines, a prefeasibility study and initial design work were completed between 2001 and 2007.

In November 2007, Black Lake conducted a referendum vote to designate reserve lands for the project.

Policy changes within SaskPower to allow aboriginal investment and procurement made everything more possible.

In February 2012 Black Lake formed the **Elizabeth Falls Hydro Limited Partnership (EFHLP)**, to promote and develop the project. A working relationship between EFHLP and SaskPower enabled baseline environmental studies and preliminary engineering work to proceed. This information was required so the regulatory process could start.

In February 2013, Black Lake and SaskPower signed an agreement in principle for the advancement and potential development of the project. This is not a decision to go ahead; a full partnership agreement will follow.

#### **Environmental Assessment**

Golder Associates was contracted to do the baseline environmental assessment. They spent two years looking at the

grayling population as well as plants and animals in the area, and identifying historic and archaeological sites.

Also in February 2013 a project description was submitted to the Canadian Environmental Assessment Agency (CEAA) and Saskatchewan Environment. The draft EIS is available on the CEAA website, or at hamlet or band offices in Stony Rapids, Black Lake, Hatchet Lake, Fond du Lac, and Métis Nation offices in Stony Rapids, Uranium City and Camsell Portage.

#### **Community involved**

Community information meetings were held in Black Lake and Stony Rapids, and in Fond du Lac, to inform residents and get feedback. "We are looking for guidance about things like where the bridge, construction camp and road access should be, as well as where waste rock from excavating the tunnel should be stored and how it should be profiled," says Ted de Jong, CEO of EFHLP.

On April 9, a workshop in Black Lake provided further explanation on topics of interest identified at the earlier meetings. Three days later, the business aspects of the project were discussed with Black Lake residents.

#### **\$300 million project**

The proposed project is a two-turbine hydroelectric project that would supply between 42 and 50 megawatts (mW) (to be determined) to the provincial grid. That's enough power for 8,000 homes.

The project cost is estimated at \$300 million; SaskPower would carry 70% of that debt, with Black Lake responsible for the rest. The power would be sold back to SaskPower at something below the rates

**Black Lake's  
Tazi Twé  
power  
project  
developing**

charged to customers; they would recoup their investment by re-selling the power.

### 36-metre drop

It's called a diversion-type project; there will be no dam, and no change in water levels upstream in Black Lake. A rock weir will be constructed at the outlet of Black Lake to maintain water levels in the lake.

The powerhouse would use the 36-metre head (difference in water level between Black Lake and Middle Lake) to turn the turbines. The water intake will be near Fir Island, well down the river. A 2.5 -km tunnel will carry water from the intake to the powerhouse, located near where the river enters Middle Lake. The water will re-enter the river as a tailrace. No water volume will be lost; between 30% of the flow in summer and 50% winter flow will be diverted through the tunnel, depending on the season, says de Jong. There will be no physical disturbance of the river; water level drops in the main river will be most pronounced in shallow areas, while grayling prefer the deeper pools.

### Comparative size

This project will have more than double the total generating capacity of the three dams near Uranium City which currently supply the grid. The Wellington Dam near Uranium City, built in 1939, generates 4.8 mW. The nearby Waterloo Dam, built in 1961, can produce 8 mW, while the Charlot River Dam near Camsell Portage, built in 1980, can produce 10 mW.

By comparison, the Island Falls powerhouse near Sandy Bay has a capacity of 101 MW. The largest hydroelectric project in the province, the E.B. Campbell dam, has a capacity of 288 MW.

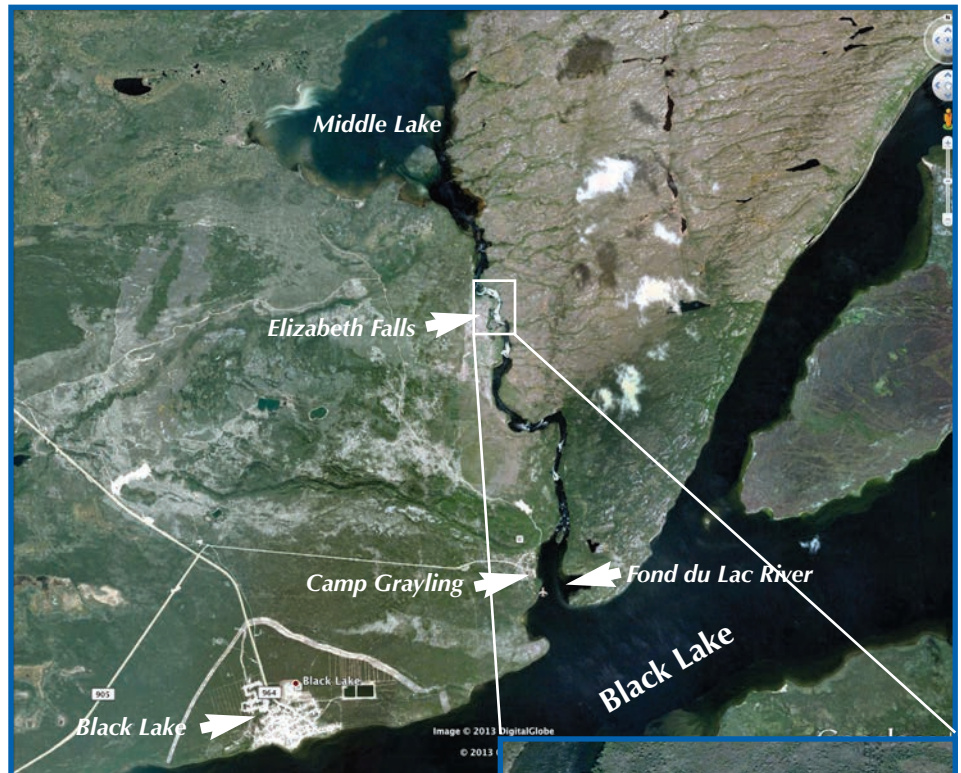
Saskatchewan's largest fossil fuel generating station by far, Boundary Dam, can generate up to 824 MW.

### Construction next year?

Subject to regulatory approval, construction could begin in late 2014, with power generation starting in 2017.

"A construction date is a moving target. Construction cannot start until all regulatory approvals are in place," says de Jong. "We are working on an aggressive schedule for the EIS, the engineering work and the partnership agreement". An engineering firm has been engaged to develop the design of the project.

While Black Lake will be the only direct partner, other benefits like construc-



Location of Elizabeth Falls. Source: Google Earth.

tion jobs, business opportunities and training will be shared with other Athabasca communities.

The project is expected to create 150 jobs during the three-year construction period, and eight permanent jobs over the facility's estimated operational life of 90-100 years.

### Debt financed

Under the agreement, SaskPower will carry 70% of the estimated \$300 million cost of the project. Black Lake plans to raise the remainder through debt financing based on the strength of its equity and the partnership agreement. Revenues will be split according to the terms of the agreement.

The project will not mean cheaper power for customers in the communities of Black Lake or Stony Rapids. While they feel they pay higher rates than the rest of the province, in reality they pay the same rates but use more power, partly because of a generally colder climate.

Power from the Tazi Twé project will be fed into the provincial grid via the Athabasca Transmission Line, which runs from the Uranium City dams to the area around Key Lake.

### Training and social impacts

The organization is cognizant of the impact on Black Lake of a large increase in cash flow in the community during construc-



tion. "We have to advise the community on how to deal with that, and with potentially magnified addictions problems. We also have to get people ready to work through skills training," says de Jong.

Training should start this fall. "We have commitments from the Ministry of Economy, Northlands College and AANDC for about 60 pre-employment skill training seats this fall.

"Hopefully, these skills will translate into employability at the mines once this project is built," de Jong adds.

The corporation also wants to identify suitable candidates to train into the 4-5 permanent plant operator positions.

# **APPENDIX 6.2**

## **Letters of Introduction to Selected Special Interest Group**



## Tazi Twé Hydroelectric Project

August 7<sup>th</sup>, 2013

**Cree River Lodge**

P.O. Box 272  
White Fox, Saskatchewan  
S0J 3B0

**Attention: Patrick Babcock**

**Re: Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Mr. Babcock,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River as it enters Middle Lake.

The purpose of the Project is to help meet the growing demand for electricity by residential, commercial and industrial customers in northern Saskatchewan.

The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. As a licensed outfitter within 50 kilometers of the proposed Project, we wish to notify you of the Project and invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca)) or attending a community meeting in Stony Rapids tentatively scheduled for mid-September 2013. Date, time and location of the community meeting will be posted on the website later this month.

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Ted de Jong  
CEO, EFHDC

cc. Mark Peters, SaskPower  
Betty Hutchinson, EFHLP, PIP Manager



## Tazi Twé Hydroelectric Project

August 29th, 2013

**Blackmur's Athabasca Fishing Lodges**

#13 – 52112 Range Road 222,  
Sherwood Park, Alberta  
T8C 1H6

**Attention: Cliff and Stella Blackmur**

**Re: Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Cliff and Stella,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River as it enters Middle Lake.

The purpose of the Project is to help meet the growing demand for electricity by residential, commercial and industrial customers in northern Saskatchewan.

The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. As a licensed outfitter within 50 kilometers of the proposed Project, we wish to notify you of the Project and invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca)) or attending a community meeting in Stony Rapids tentatively scheduled for mid-September 2013. Date, time and location of the community meeting will be posted on the website in the near future.

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Ted de Jong  
CEO, EFHDC

cc. Mark Peters, SaskPower  
Betty Hutchinson, EFHLP, PIP Manager



## Tazi Twé Hydroelectric Project

Sept 6, 2013

**Athabasca Health Authority**

P.O. Box 124  
Black Lake, SK.  
S0J 0H0

**Attention: Jennifer Conley**

Re: **Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Ms Conley,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

The purpose of the Project is to help meet the growing demand by residential, commercial and industrial customers for electrical power in northern Saskatchewan.

The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. As the health authority of the region, we would invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca))

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC

Signed copy via post



## Tazi Twé Hydroelectric Project

Sept 6, 2013

**Athabasca Keepers of the Water**

Jesse Cardinal, Coordinator

780-404-5315 ·

[jepaca1@hotmail.com](mailto:jepaca1@hotmail.com)

**Attention: Jesse Cardinal**

**Re: Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Mr. Cardinal,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

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The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. We would invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca))

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC



# Tazi Twé

Hydroelectric Project

Sept 6, 2013

**AREVA Resources Canada**

PO Box 9204  
817 45th Street West  
Saskatoon, Saskatchewan S7K 3X5

**Attention: Vincent Martin**

Re: **Tazi Twé Hydroelectric Project – Public Involvement Program**

Dear Mr. Martin,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

The purpose of the Project is to help meet the growing demand by residential, commercial and industrial customers for electrical power in northern Saskatchewan.

The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. We would invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca))

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC



## Tazi Twé Hydroelectric Project

Sept 6, 2013

**Cameco Corporation**  
2121 - 11th Street West  
Saskatoon, Saskatchewan  
S7M 1J3

**Attention: Tim Gitzel**

Re: **Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Mr. Gitzel,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

The purpose of the Project is to help meet the growing demand by residential, commercial and industrial customers for electrical power in northern Saskatchewan.

The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. We would invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca))

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC



## Tazi Twé Hydroelectric Project

Sept 6, 2013

Canadian Parks and Wilderness Society  
Gord Vaadeland, Executive Director  
(306) 469 -7876  
gvaadeland@cpaws.org

**Attention: Gord Vaadeland**

Re: **Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Mr. Vaadeland,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

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Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC



## Tazi Twé Hydroelectric Project

Sept 6, 2013

**New North**

Box 1018  
207 La Ronge Avenue  
La Ronge, SK S0J 1L0

**Attention: Al Loke**

Re: **Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Mr. Loke,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

The purpose of the Project is to help meet the growing demand by residential, commercial and industrial customers for electrical power in northern Saskatchewan.

The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. As a northern organization, we would invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca))

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC

Signed copy via post



# Tazi Twé

Hydroelectric Project

Sept 6, 2013

**Saskatchewan Environmental Society**

220 20 St W  
Saskatoon, SK S7M 0W9

**Attention: Allyson Brady**

Re: **Tazi Twe Hydroelectric Project – Public Involvement Program**

Dear Ms. Brady,

This letter is to advise you that Black Lake First Nation (BLFN), through its wholly owned business corporation (Elizabeth Falls Hydro Development Corporation) and SaskPower are proposing the development of a 42 – 50 megawatt hydroelectric project to be located entirely on BLFN reserve lands – Chicken Indian Reserve #244. The proposed hydroelectric project is considered a water diversion project, whereby a portion of the water that would normally flow from Black Lake to Middle Lake along the Fond du Lac River would be diverted by way of an underground tunnel to a power generation station. After passing through the power station, the water is then returned back to the Fond du Lac River near the mouth of Middle Lake.

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The Project is subject to an environmental assessment under the Environmental Assessment Act (Saskatchewan) and the Canadian Environmental Assessment Act, 2012. We would invite you to learn more about the Project by visiting our website ([www.tthp.ca](http://www.tthp.ca))

Should you have any questions, please contact the undersigned at your convenience.

Sincerely,

Betty Hutchinson  
Manager, Aboriginal and Public Consultation Program

cc. Mark Peters, SaskPower  
Ted de Jong, CEO EFHDC

Signed copy via post

# **APPENDIX 6.3**

## **Community Information Sessions**

## **Presentation**



**Elizabeth Falls Hydroelectric Project**

**The Elizabeth Falls Hydro Limited Partnership invites you to come and learn about the proposed Elizabeth Falls Hydroelectric Project**

**Date: December 6, 2010**

**Time: 2 PM to 6 PM**

**Location: Black Lake, School Gym**

**Date: December 7, 2010**

**Time: 4 PM to 9 PM**

**Location: Stony Rapids, Waterfront Lodge**

**Refreshments and snacks will be provided**



# Elizabeth Falls Hydroelectric Project

Elizabeth Falls Hydro Limited Partnership



# Introduction

- The EFHLP is proposing to build a hydroelectric generating station located on the Fond du Lac River, between Black Lake and Middle Lake.
- Today we're here to provide information about the project and its current status.
- The project is in the early stages so we may not have all the answers at this time to your questions.
- All questions are welcome and will be recorded to provide documentation as part of the environmental assessment study and for us to follow up on with future meetings.
- We want your feedback – sheets are available at the door



# History

- Interest began in the early 1970's.
- Lack of demand for power in the north and the cost to reach markets in the south made the development uneconomical.
- In February 2004, a Feasibility Study was initiated.
- In September 2009, the Elizabeth Falls Hydro Limited Partnership (EFHLP) was formed.
- The EFHLP Board has 5 directors from Black Lake First Nation and 6 independent directors from a variety of business and electric utility backgrounds



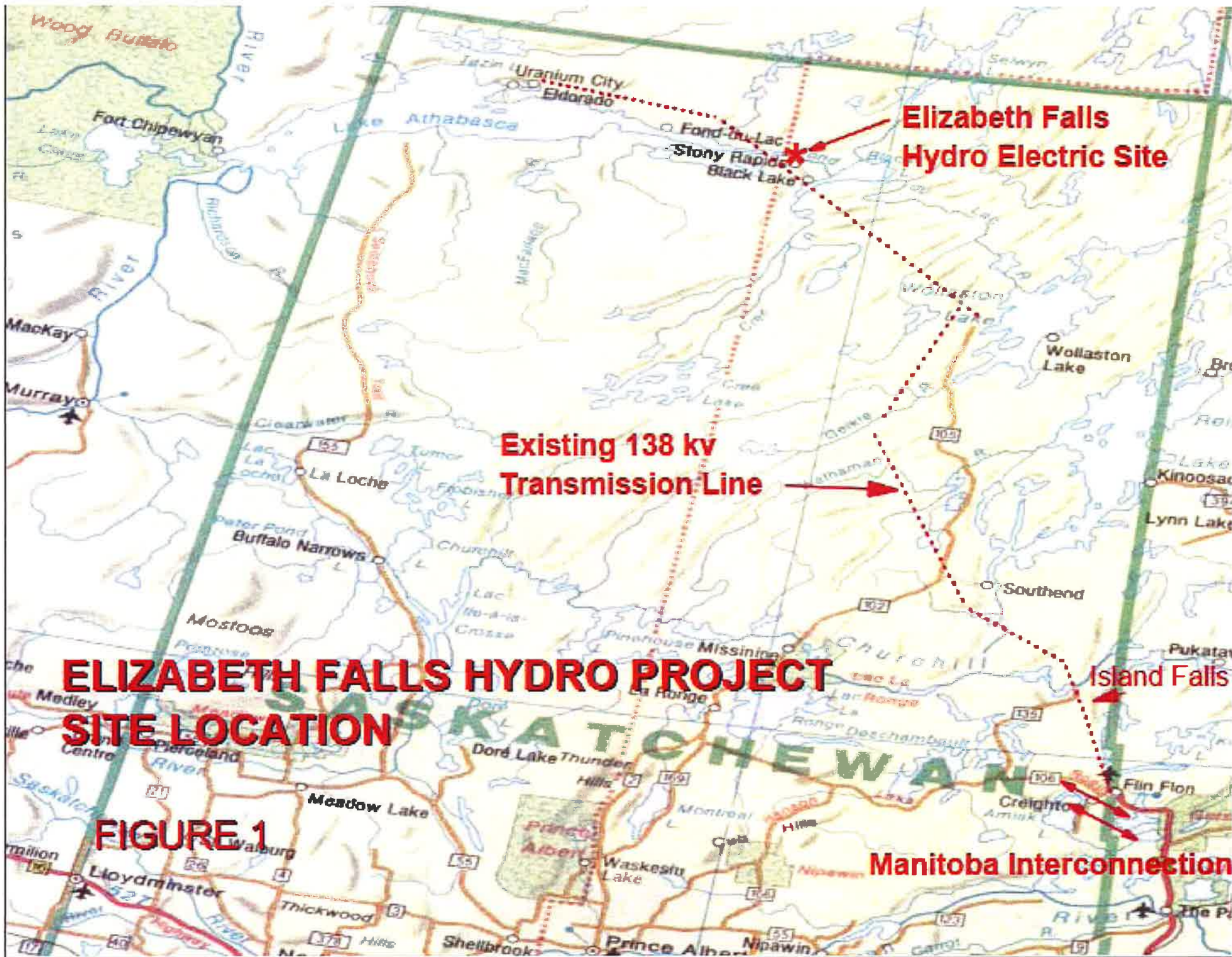
# 2010

- Signing of an MOU with SaskPower this spring , provided bridge financing to facilitate the environmental studies, technical and financial feasibility studies and administration.
- SaskPower will be the off taker of the power produced at Elizabeth Falls
- The project schedule is approximately 6 years:
  - 3 years for the environmental and technical feasibility studies
  - 3 years for construction of the facilities
- Our objective is to have a partner in place before the end of 2011



# About the Project

- The Elizabeth Falls Hydroelectric Project is a green power initiative that will help Saskatchewan meet a portion of its renewable energy needs.
- Black Lake First Nation guidelines for the project are, minimum impact:
  - on the water levels of Black Lake
  - on flows in the Fond du Lac River.
- Cost estimate is 250 – 300 million - depends on factors not yet determined.
  - Tunnel rock use/disposal
  - Construction of a weir



**Elizabeth Falls  
Hydro Electric Site**

**Existing 138 kv  
Transmission Line**

**ELIZABETH FALLS HYDRO PROJECT  
SITE LOCATION**

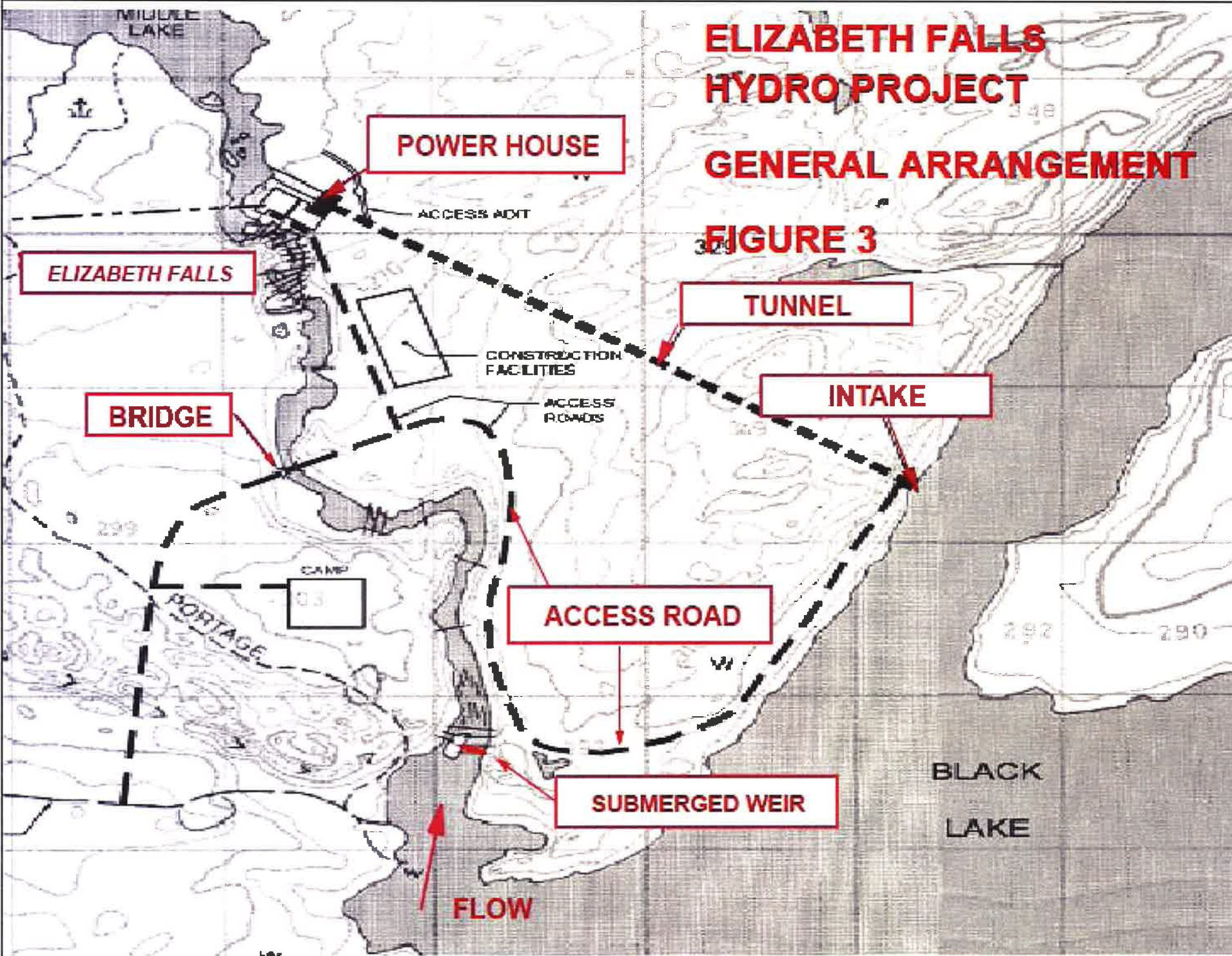
**FIGURE 1**

**Manitoba Interconnection**

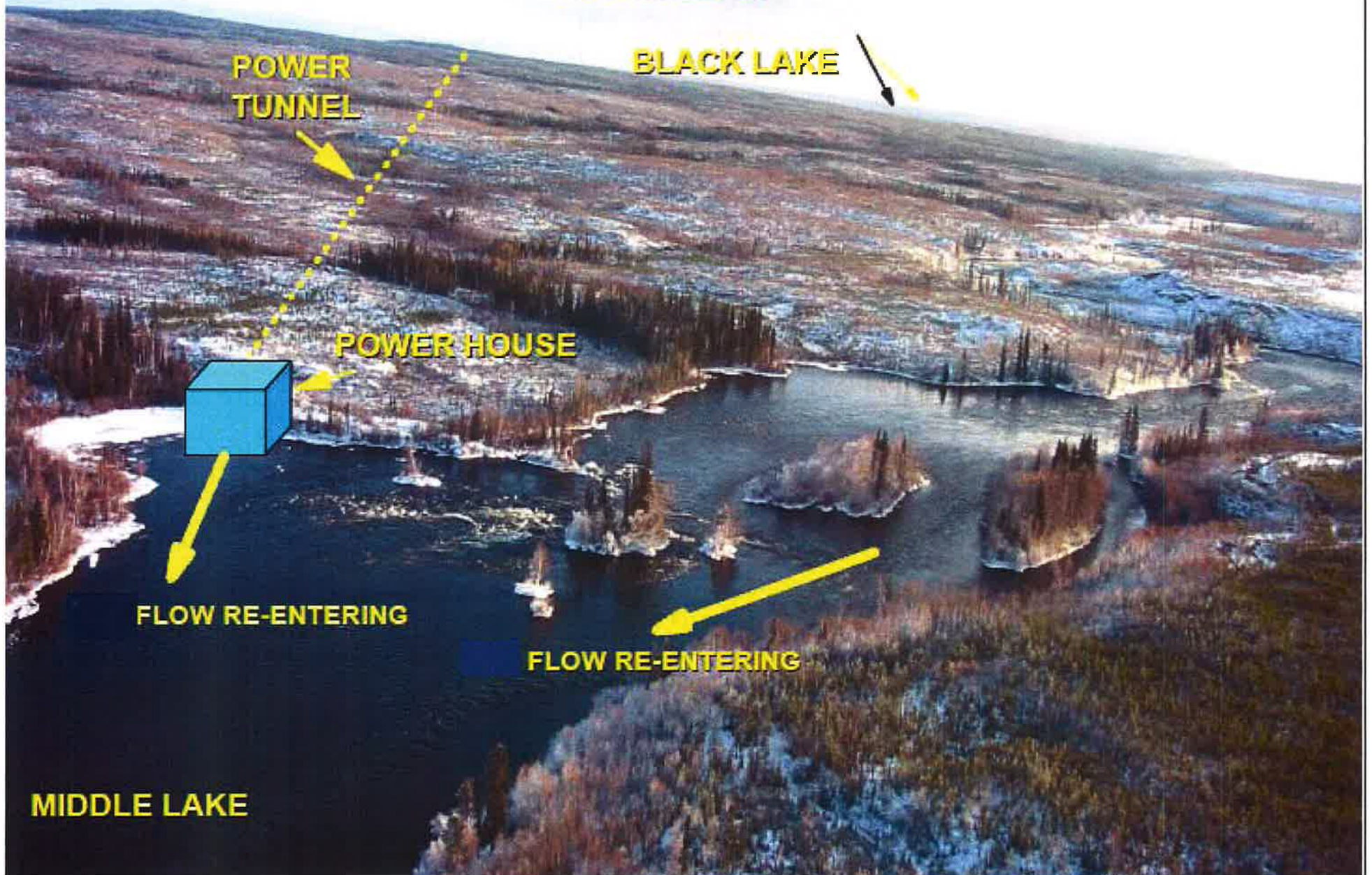
**Island Falls**

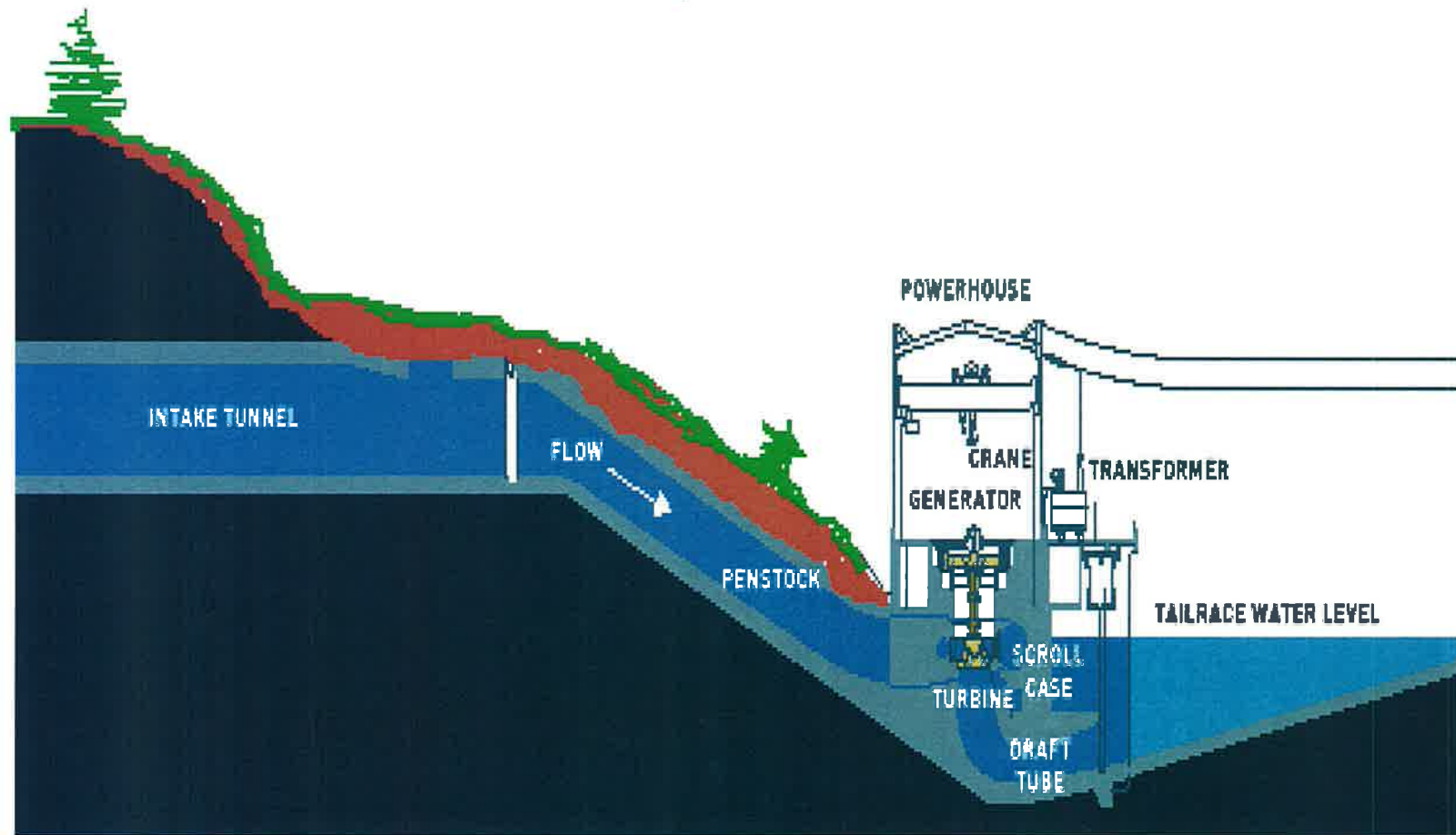
# ELIZABETH FALLS HYDRO PROJECT GENERAL ARRANGEMENT

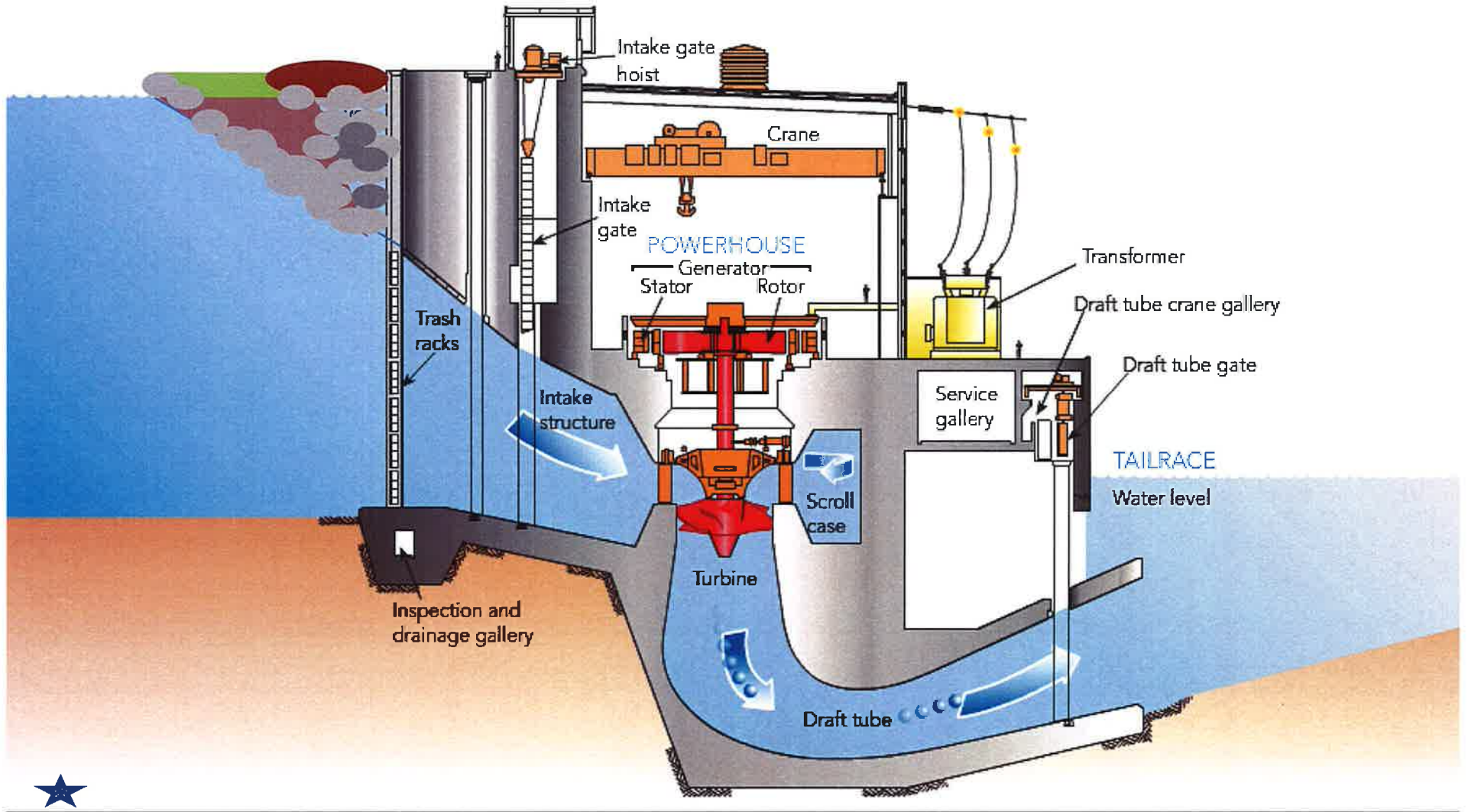
FIGURE 3



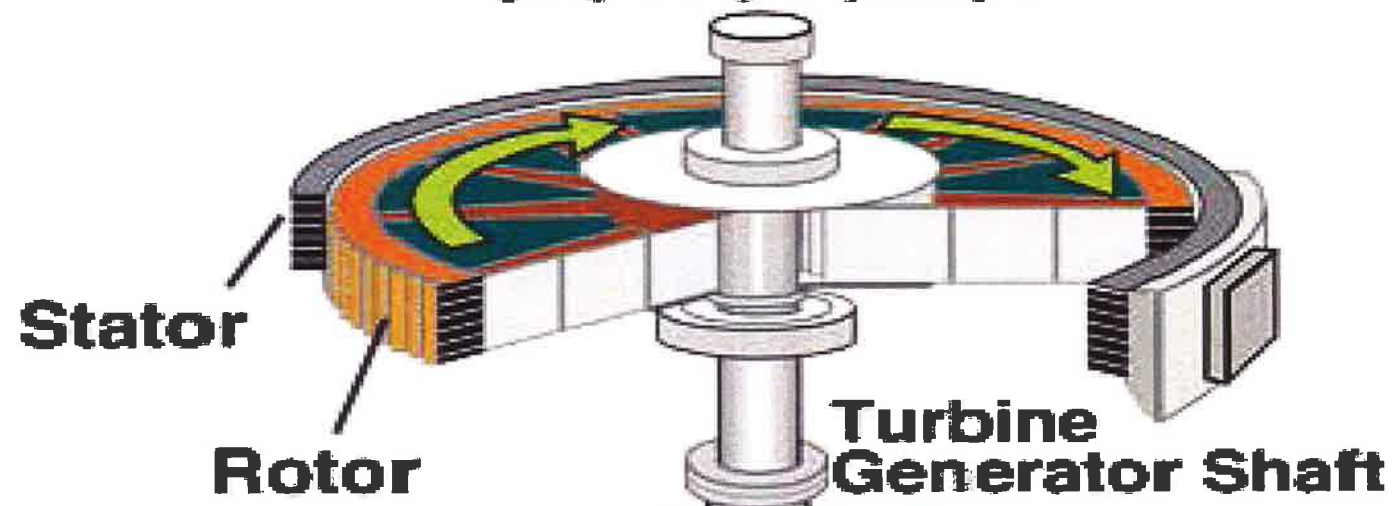
# ELIZABETH FALLS HYDRO PROJECT POWERHOUSE IMPRINT FIGURE 6



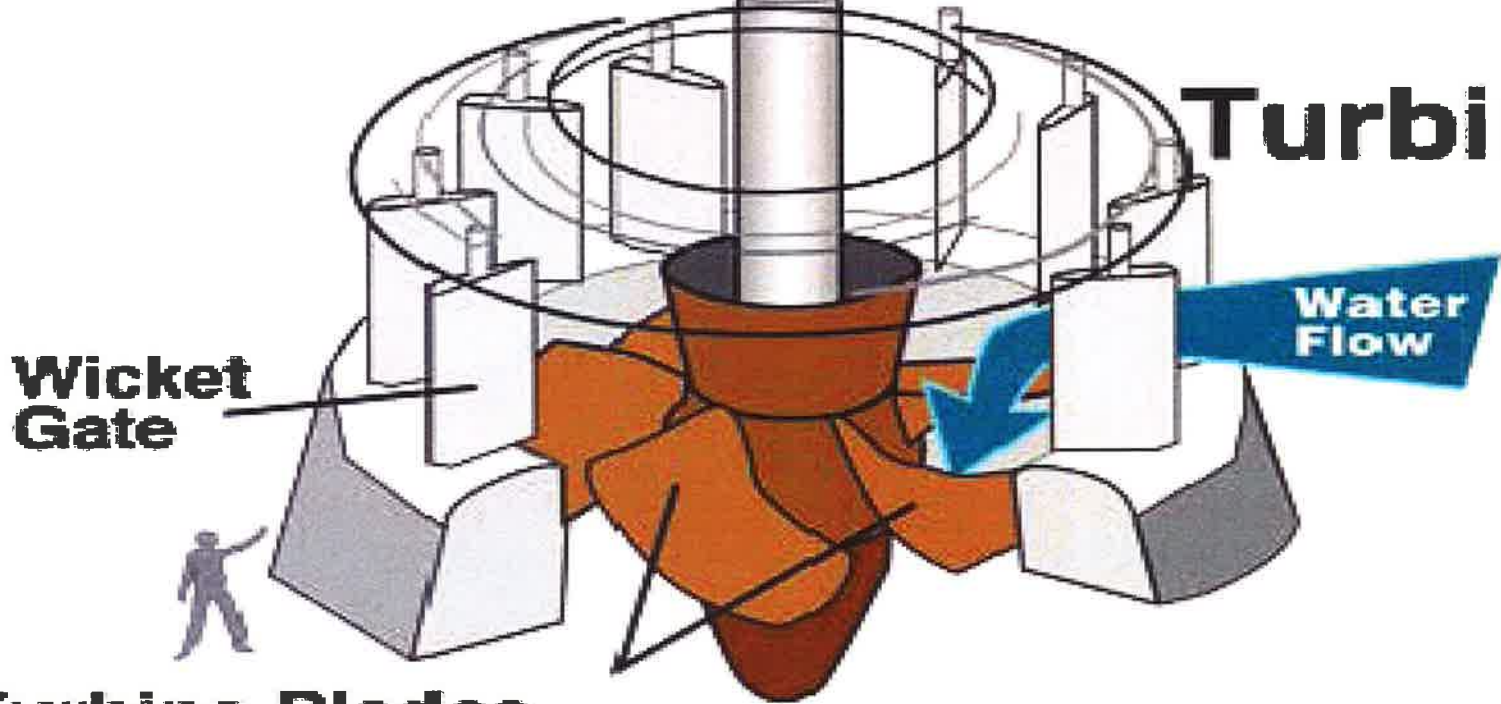




# Generator



# Turbine



**Turbine Blades**



# Environmental Impact Assessment

- An Environmental Assessment (EA) is the process by which Project interactions with the existing biophysical and socio-economic environments are evaluated to identify what types of changes may be caused by the Project.
- The EA process involves a number of components including:
  - Issue scoping
  - Engagement with public, First Nations, Métis groups and regulatory agencies
  - Baseline (or existing conditions) data collection and required scientific studies
  - Identifying recommended mitigation practices, procedures and policies
  - Analyzing and predicting positive and negative impacts

# Environmental Studies

- Baseline studies examine the existing environment and socio-economic conditions.
- The information collected as part of the baseline program includes:
  - Heritage Resources
  - Landscape and Soils
  - Socio-Economic
  - Surface Water
  - Water Quality
  - Fish and Aquatic Life
  - Wildlife and Plants
  - Aesthetics
  - Traditional Knowledge
- Baseline environmental studies were started in 2010.

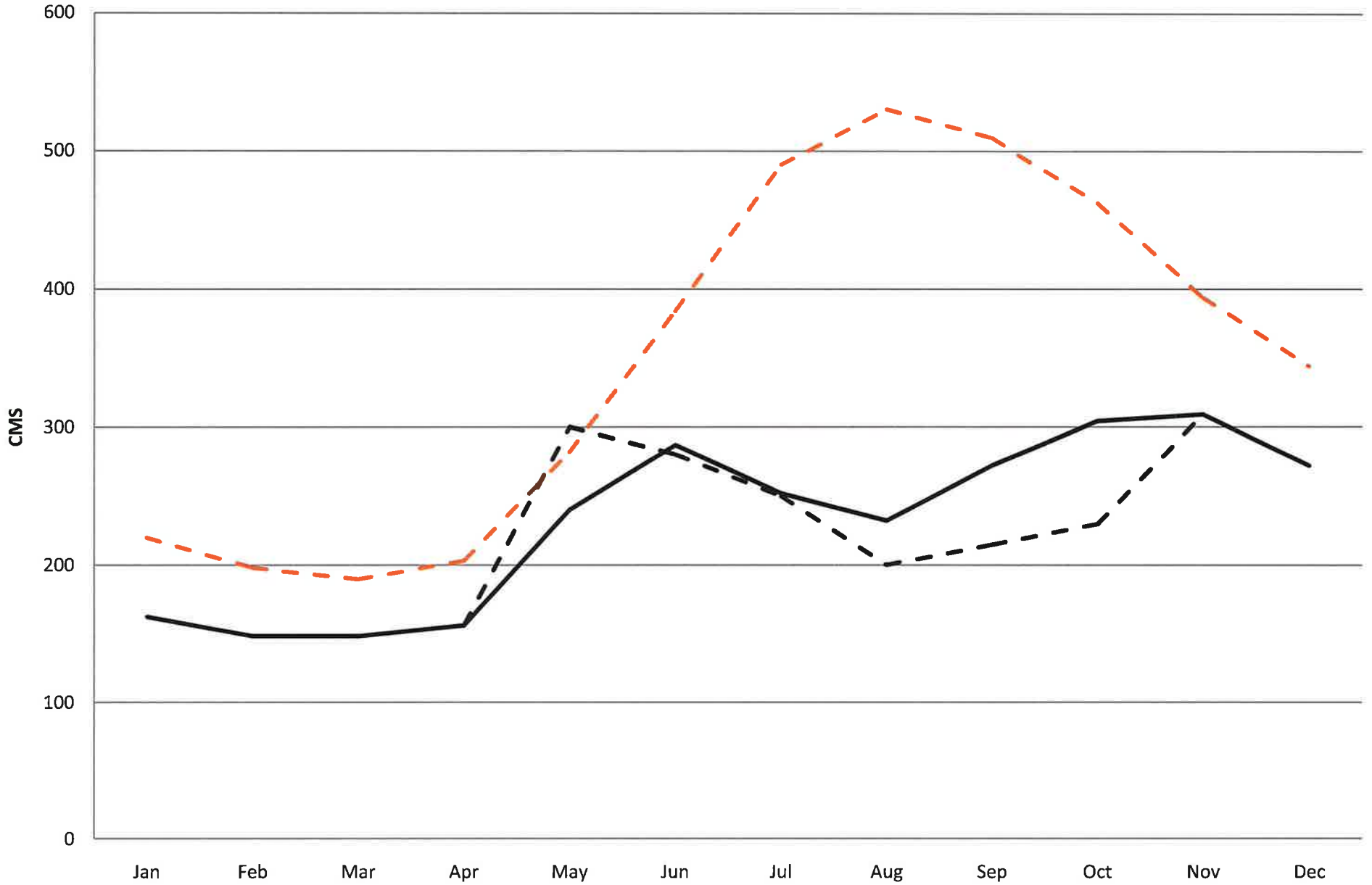




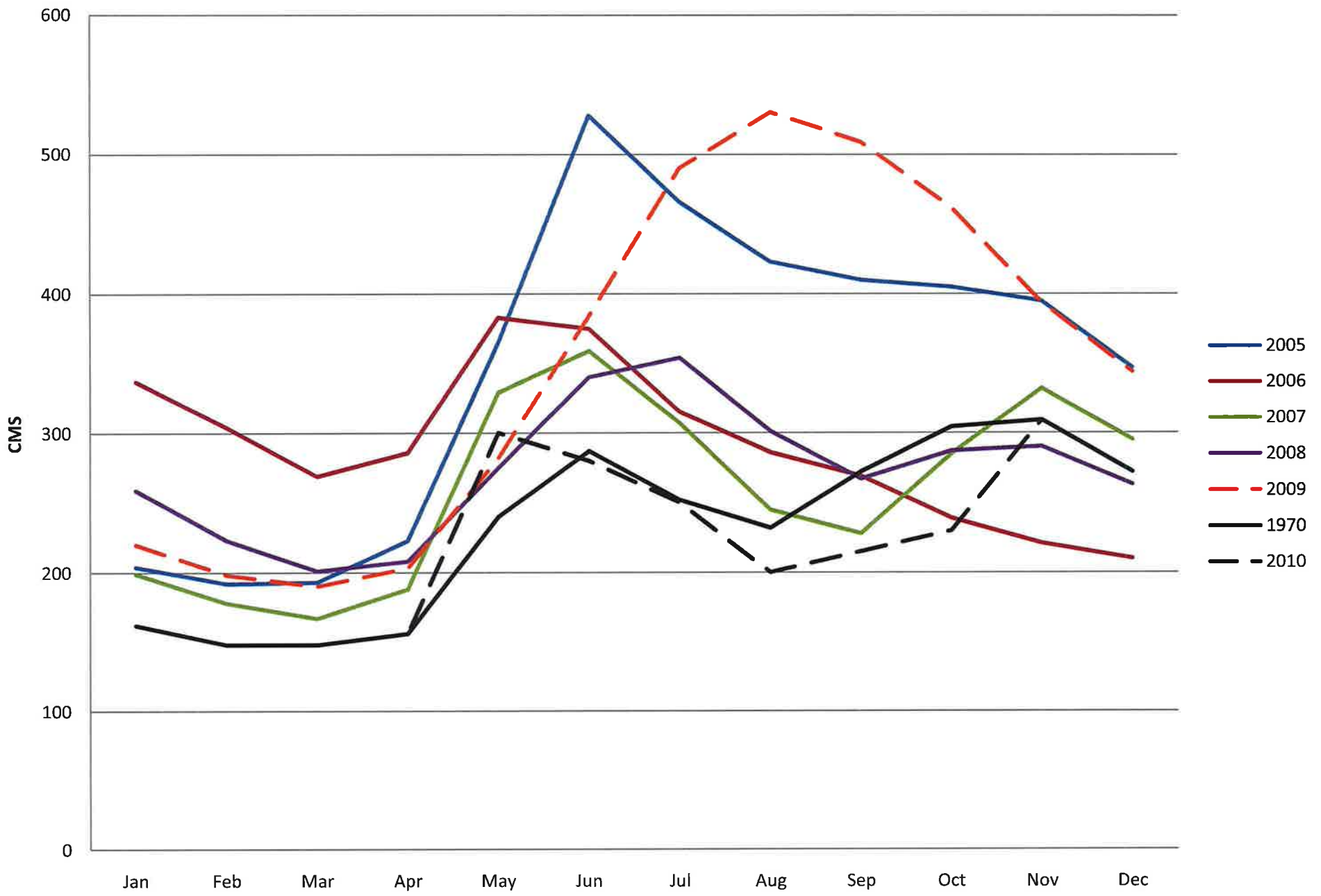
# Engagement Activities

- Public engagement and involvement is an important part of the EA and permitting process.
- Engagement activities that EFHLP has and will continue to use include:
  - Information sessions/open house meetings
  - Community visits
  - Formal and informal discussions at public meetings
  - Meetings/workshops and targeted discussions with governmental and regulatory agencies and non-governmental organizations

# Low (1970), 2009 & 2010 Fond du Lac River



# Fond du Lac River - Low (1970) plus 2005 to 2010



## Posters



# Welcome

- Thank you for attending our Community Information Session for the Elizabeth Falls Hydroelectric Project
- We have invited you here to :
  - Introduce ourselves
  - Provide information about the Project
  - Provide information about the Environmental Assessment process
  - Receive your comments and/or questions





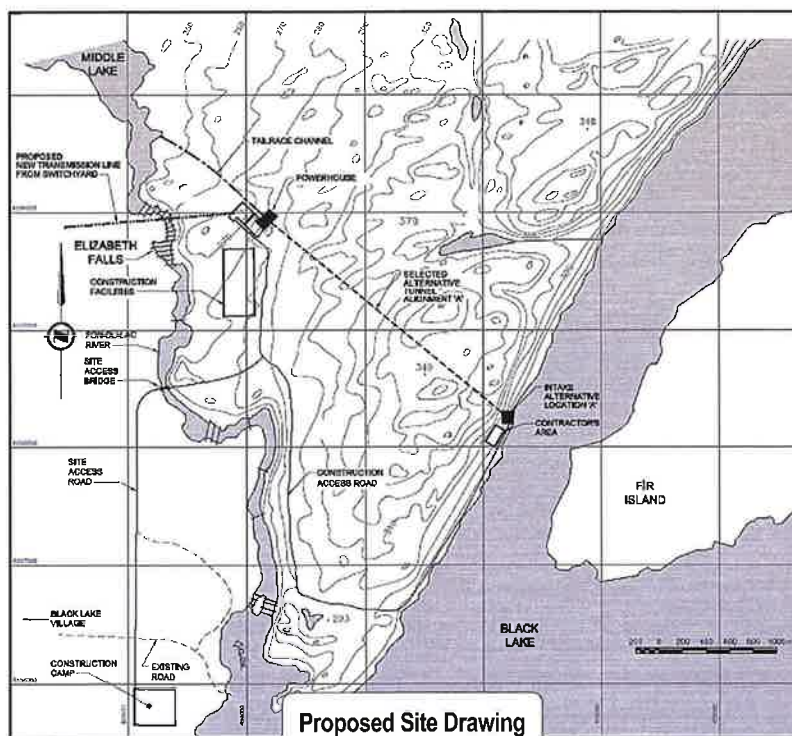
## **The History of the Project and the Elizabeth Falls Hydro Limited Partnership**

- Interest in developing a hydroelectric generating station at Black Lake began in the early 1970's; however, the lack of demand for power in the north and the remoteness of the site from the markets in the south made the development unattractive at that time.
- In 2001, Black Lake First Nation expressed the wish to assess the feasibility of constructing a generating station that would have minimum impact on the water levels of Black Lake and flows in the Fond du Lac River.
- In February 2004, the Black Lake First Nation was given approval by INAC to proceed with a Feasibility Study. The Feasibility Study for the Project was completed in December 2005 and considered the Project to be technically sound and economically viable.
- In September 2009, the Elizabeth Falls Hydro Limited Partnership (EFHLP) was formed. The general partner is the Elizabeth Falls Hydro Development Corporation and the limited partner is the Black Lake Denesuline First Nation.
- A Memorandum of Understanding was signed in April 2010 with SaskPower. If the Project proves to be an economical supply option a contract would be negotiated for SaskPower to buy the electricity provided by the Project, to fulfill a growing need for electricity in northern Saskatchewan.



## Elizabeth Falls Hydroelectric Project Overview

- The Elizabeth Falls Hydroelectric Project is a green power initiative that would allow SaskPower to meet a portion of its long-term supply needs with a renewable energy source.
- The proposed Project includes a hydroelectric generating station located on the Fond du Lac River, between Black Lake and Middle Lake in northern Saskatchewan.
- Following a review of the feasibility study the Black Lake First Nation expressed concern that the levels of Black Lake remain as near as possible to the natural levels existing before construction.





## **The History of the Project and the Elizabeth Falls Hydro Limited Partnership**

- The proposed Project includes the construction and operation of a 42-50 MW hydroelectric generating station.
- The feasibility study concluded that the Project could be built using the natural flow regime of Black Lake.
- The concept would use a power tunnel to carry flow from Black Lake to a powerhouse located upstream of Middle Lake.
- The proposed Project will be designed and operated to minimize the impact of the Project on the existing physical and social environment.



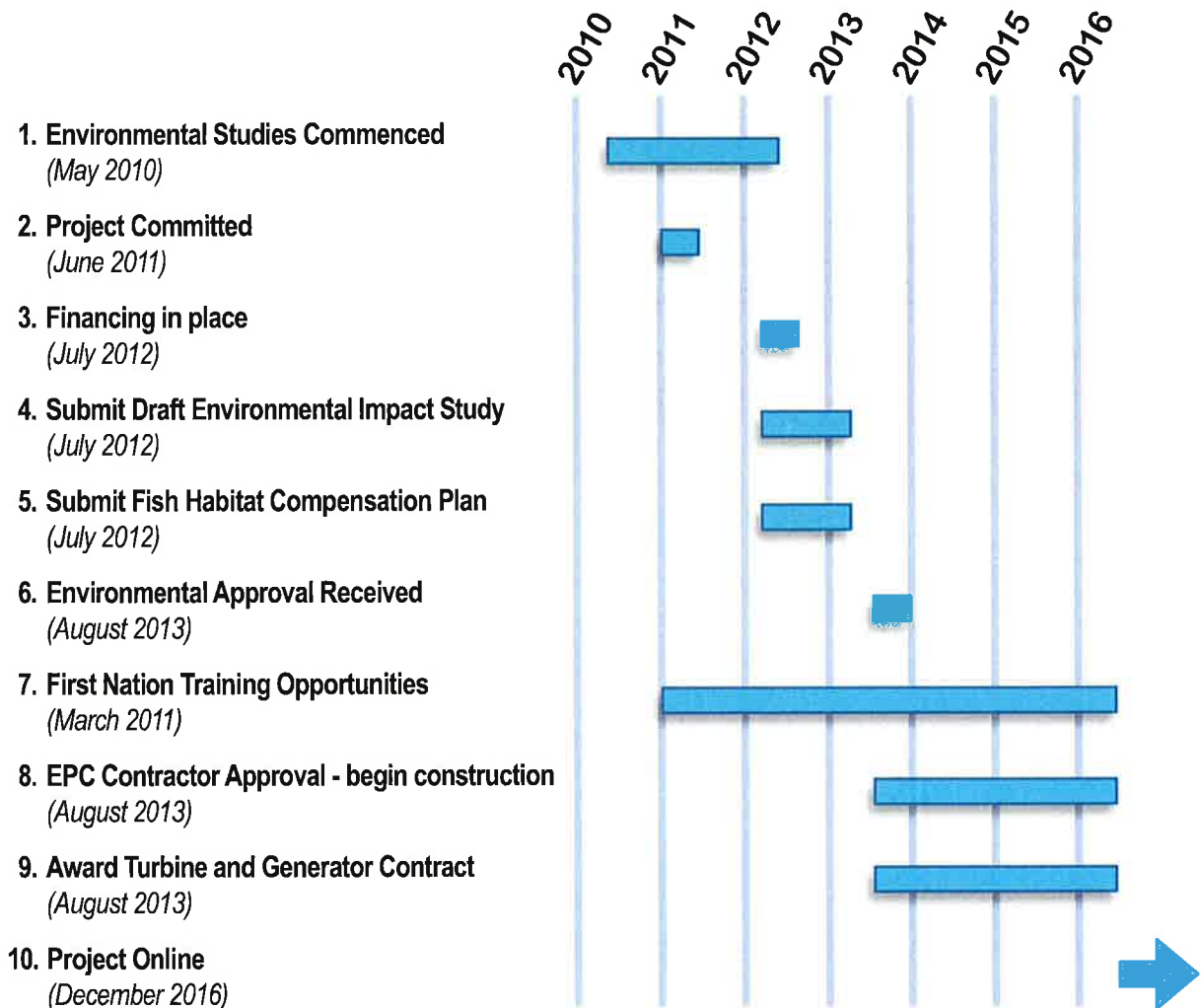


## **What is an Environmental Assessment?**

- An Environmental Assessment (EA) is the process by which Project interactions with the existing biophysical and socio-economic environments are evaluated to identify what types of changes may be caused by the Project.
- The EA process involves a number of components including:
  - Issue scoping
  - Engagement with public, First Nations, Métis groups and regulatory agencies
  - Baseline (or existing conditions) data collection and required scientific studies
  - Identifying recommended mitigation practices, procedures and policies
  - Analyzing and predicting positive and negative impacts
- The details of each component are presented to regulatory agencies and the public in a document referred to as an Environmental Impact Statement (EIS)
- Once the EIS has been submitted the regulatory agencies will determine if a project is acceptable and can proceed.
- The Project will be reviewed jointly by the Canadian Environmental Assessment Agency and the Saskatchewan Ministry of Environment.



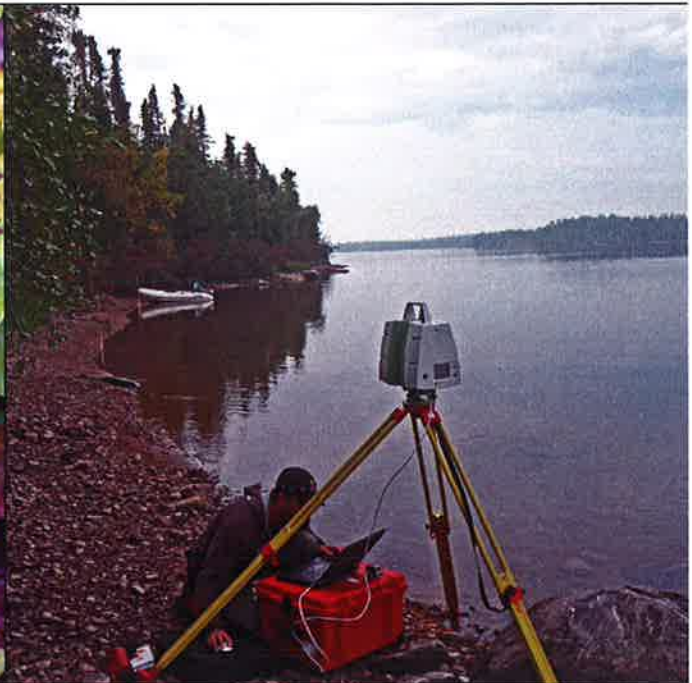
## How Long Will This Take?





## Environmental Studies

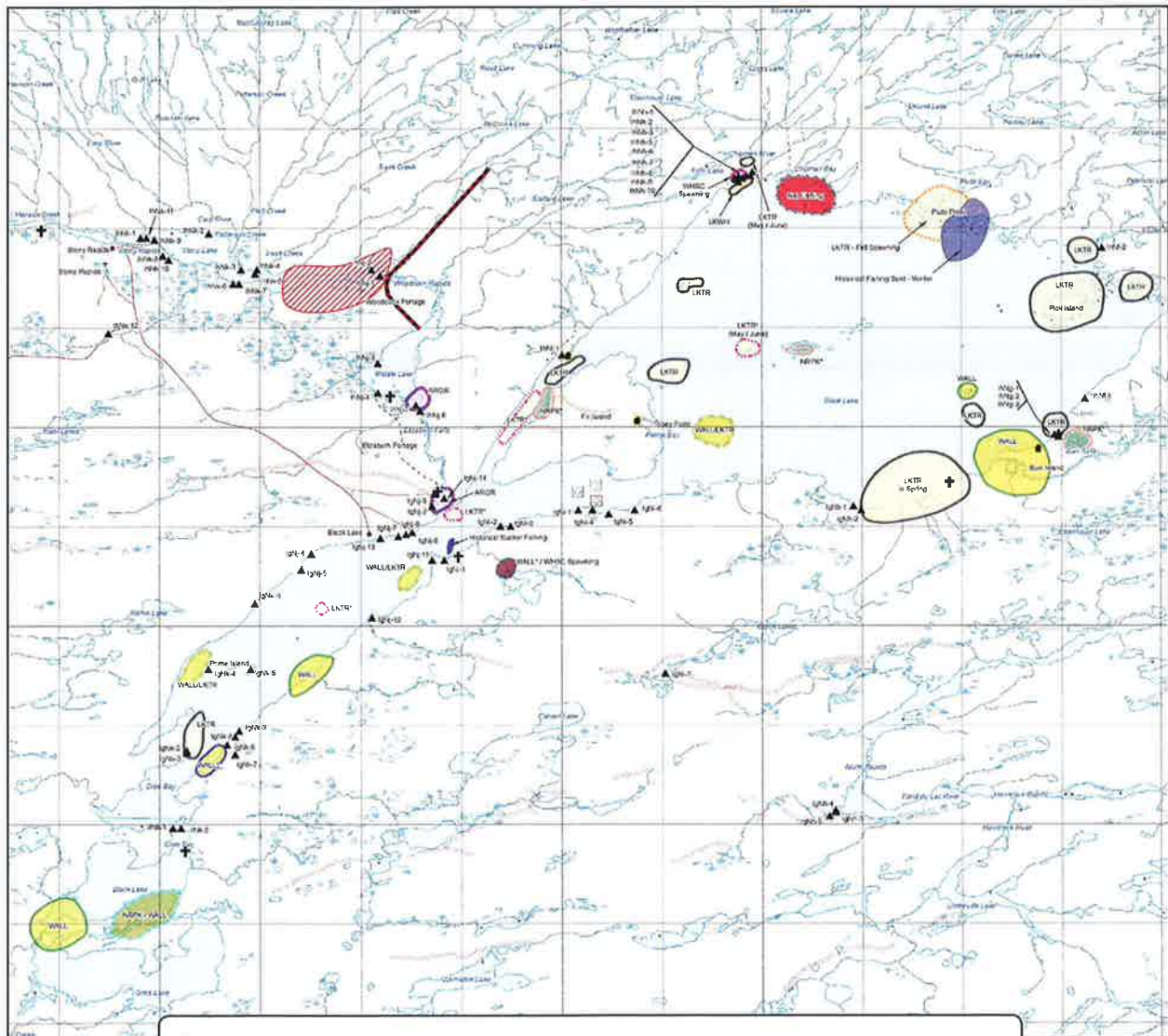
- Baseline studies examine the existing environment and socio-economic conditions.
- The information collected as part of the baseline program includes:
  - Heritage Resources
  - Landscape and Soils
  - Socio-Economic
  - Surface Water
  - Water Quality
  - Fish and Aquatic Life
  - Wildlife and Plants
  - Aesthetics
  - Traditional Knowledge
- Baseline studies were started in 2010 and include:
  - Fish and aquatic life
  - Water quality and quantity
  - Rare plants and soil condition





# Elizabeth Falls Hydroelectric Project

## Traditional Knowledge



| Legend |        |  |                    |  |   |
|--------|--------|--|--------------------|--|---|
|        | Esker  |  | Intermittent Water |  | Heritage Resource                             |
|        | Road   |  | Lake               |  | Cabin   |
|        | Trail  |  | Flooded Area       |  | Grave Site                                    |
|        | Stream |  |                    |  | Reef  |
|        | Wakind |  |                    |  | Old Winter Dog Team Road                      |
|        |        |  |                    |  | Goose Hunting                                 |
|        |        |  |                    |  | NRPK* - Northern Pike (Camp Grayling)         |
|        |        |  |                    |  | NRPKWALL - Northern Pike and Walleye          |
|        |        |  |                    |  | Net Fishing                                   |
|        |        |  |                    |  | ARGR - Arctic Grayling                        |
|        |        |  |                    |  | LKTR - Lake Trout                             |
|        |        |  |                    |  | LKTR - Lake Trout Fall Spawning               |
|        |        |  |                    |  | LKTR* - Lake Trout (Camp Grayling)            |
|        |        |  |                    |  | LKWH - Lake Whitefish                         |
|        |        |  |                    |  | NRPK* - Northern Pike (Camp Grayling)         |
|        |        |  |                    |  | NRPKWALL - Northern Pike and Walleye          |
|        |        |  |                    |  | Net Fishing                                   |
|        |        |  |                    |  | WALL - Walleye                                |
|        |        |  |                    |  | WALL* - Walleye (Camp Grayling)               |
|        |        |  |                    |  | WALL*WHSC - Walleye and White Sucker Spawning |
|        |        |  |                    |  | WALL/LKTR - Walleye and Lake Trout            |
|        |        |  |                    |  | WHSC - White Sucker                           |
|        |        |  |                    |  | Historical Fishing Spot - Winter              |
|        |        |  |                    |  | Historical Sucker Fishing                     |



## Engagement in the EA Process

- Public engagement and involvement is an important part of the EA and permitting process.
- EFHLP is initiating early communication and involvement with non-regulatory and regulatory groups and organizations, including:
  - Public, First Nations and Métis Communities (local communities, and other concerned members of the public)
  - Non-governmental organizations
  - Governmental and regulatory agencies
- The intent of these engagement activities are to:
  - Provide information on the Elizabeth Falls Hydroelectric Project to potentially impacted people and other concerned members of the public
  - To actively seek comments from the general public, First Nations and Métis communities regarding existing environmental and socio-economic conditions in the local area
  - Document and incorporate public issues in the EIS



## Engagement Activities

- Engagement activities that EFHLP has and will continue to use include:
  - Information sessions/open house meetings
  - Community visits
  - Formal and informal discussions at public meetings
  - Meetings/workshops and targeted discussions with governmental and regulatory agencies and non-governmental organizations





## **Economic Benefits and Employment Opportunities**

- The proposed Elizabeth Fall Hydro Project will provide revenue for the Black Lake First Nation, which will help them move closer to economic independence, provide a foundation for other economic initiatives/ opportunities and contribute to better quality of life and social benefits for the residents of Black Lake and surrounding communities.
- A hydroelectric project requires skilled labour.
- The Project will provide local residents with opportunities to train and participate directly and indirectly in the construction of the Project to the fullest extent possible.
- Further training initiatives would be provided to assist Black Lake First Nation and other community members in attaining jobs during the operations phase of the power Project.





Elizabeth Falls Hydroelectric Project

## **Contact Information**

**If you would like to receive additional information about EFHLP's proposed Elizabeth Falls Hydroelectric Project please fill out a comment form with your name and address,**

**or**

**Contact us:**

**Chief Donald Sayazie**  
Black Lake First Nation  
Tel: 306.284.2044

**Ted de Jong**  
Acting CEO, EFHLP  
Tel: 302.922.0099

**Al Schreiner**  
Project Manager, EFHLP  
Tel: 306.537.3172

## **Photoplates**



Edwin Boneley Presenting at the Black Lake School Gymnasium



Al Schreiner Presenting at the Waterfront Lodge in Stony Rapids

## **Black Lake Community Meeting**

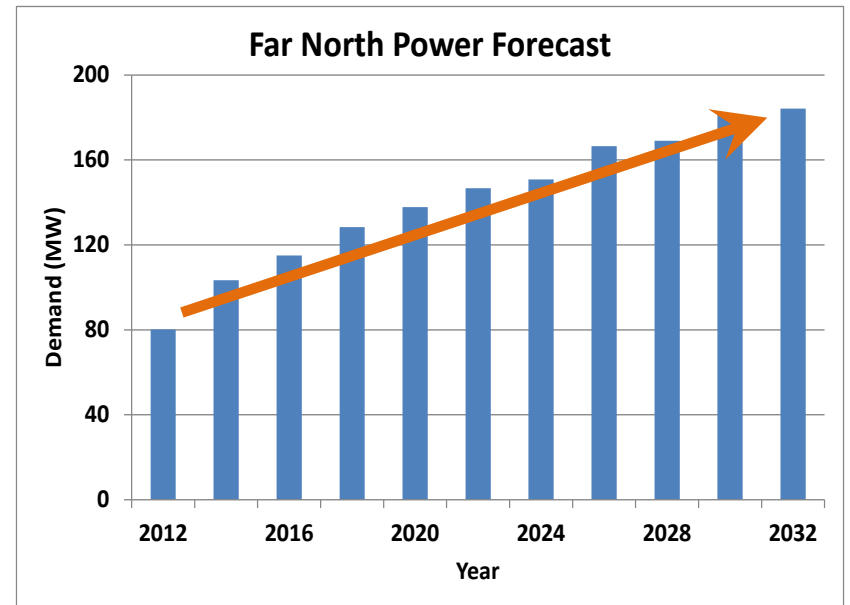
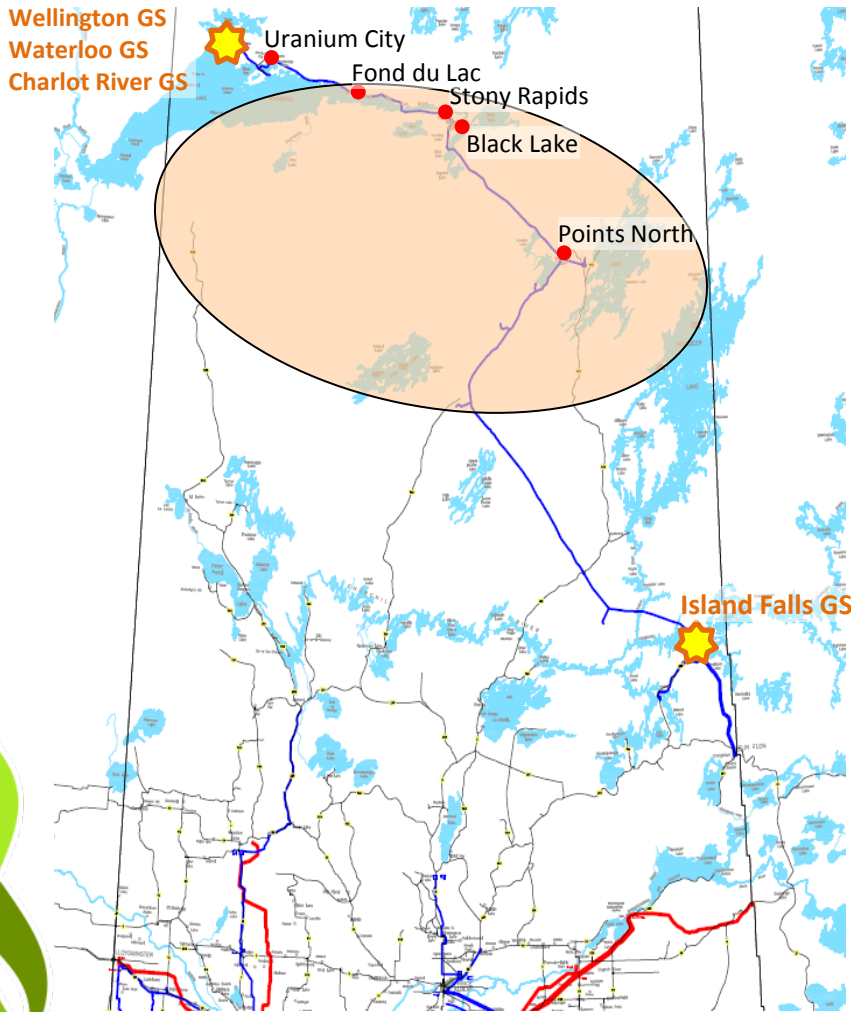


# Tazi Twé Hydroelectric Project

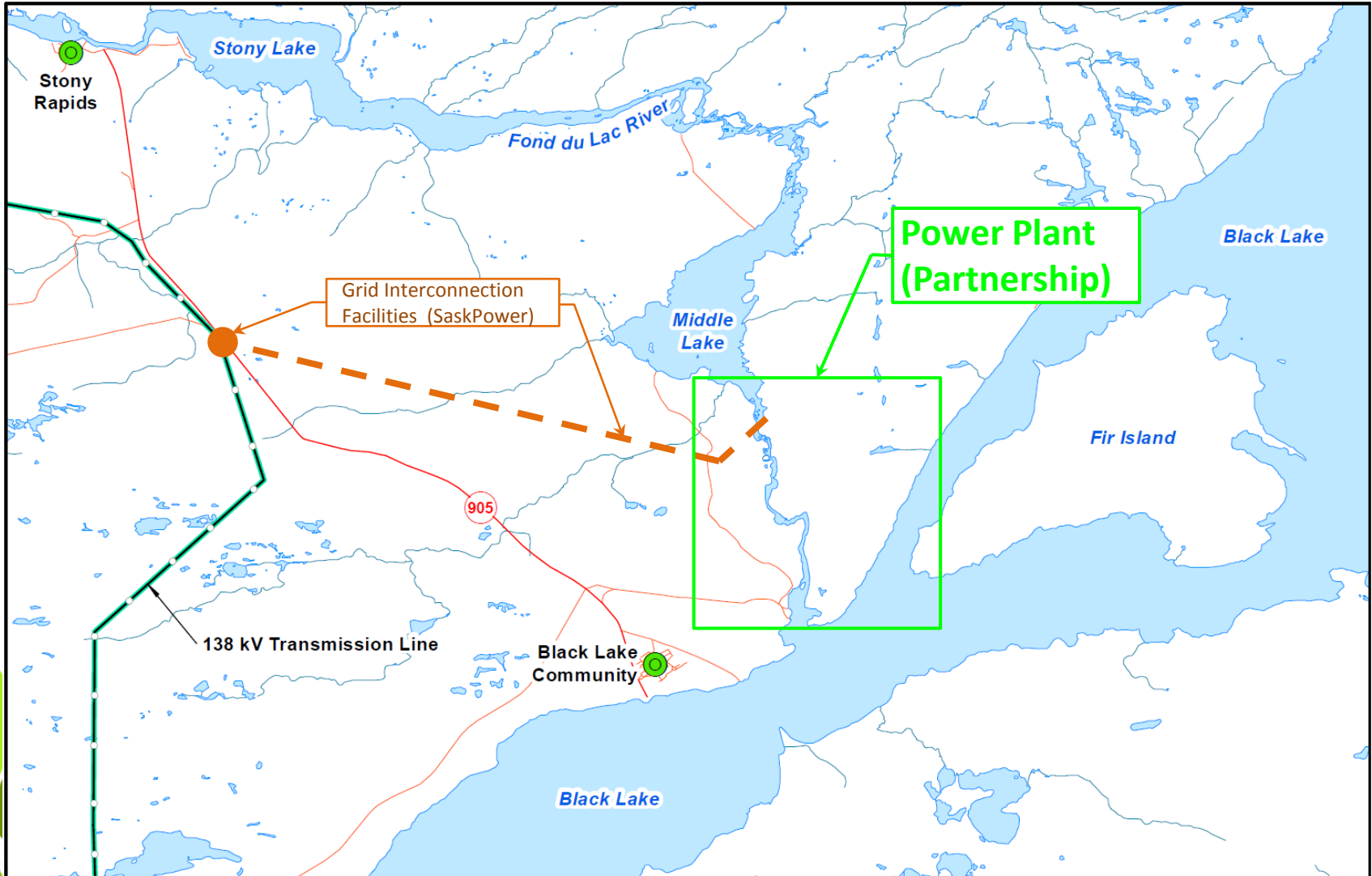
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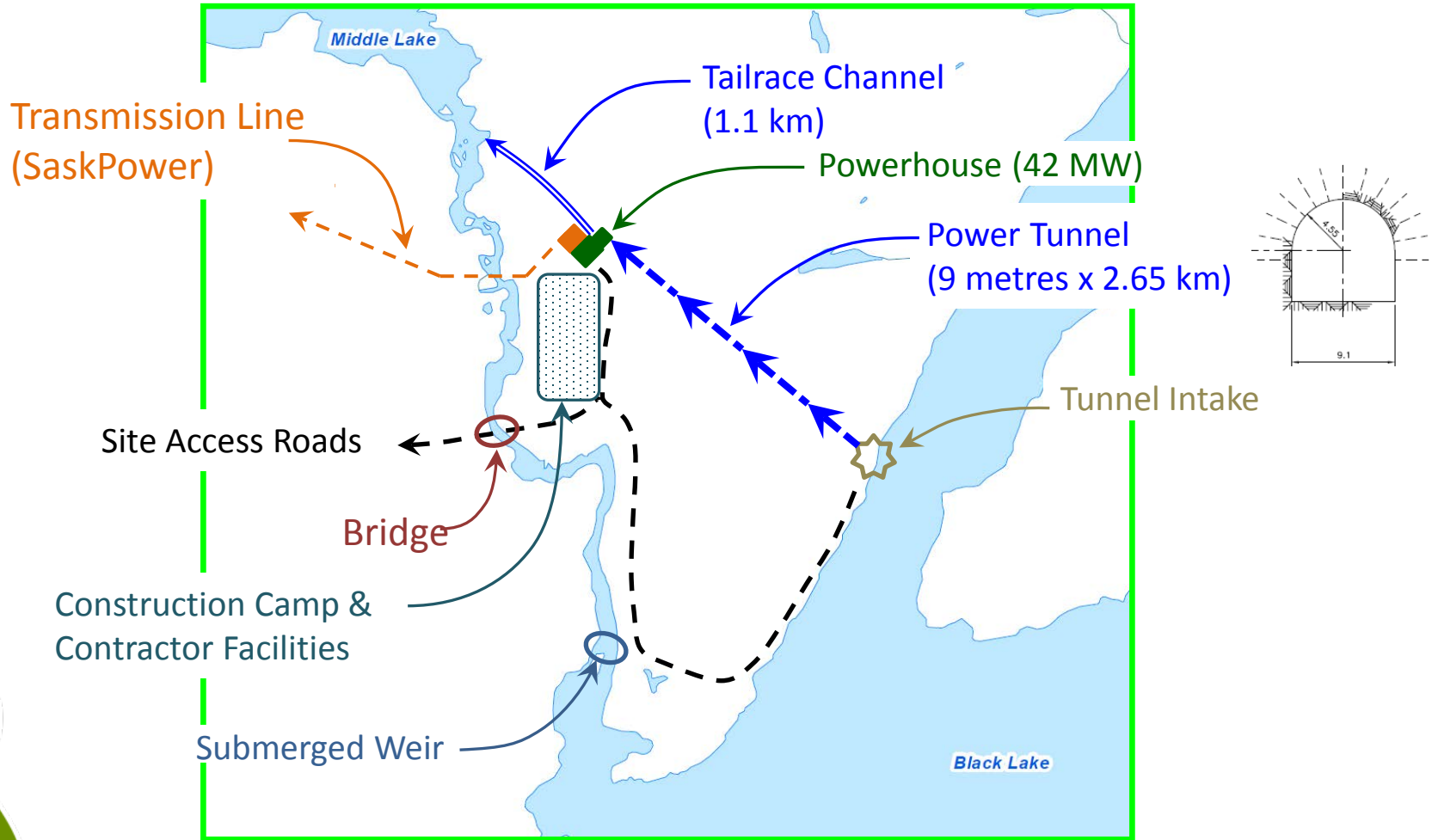
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# What is the Project



# What is the Project

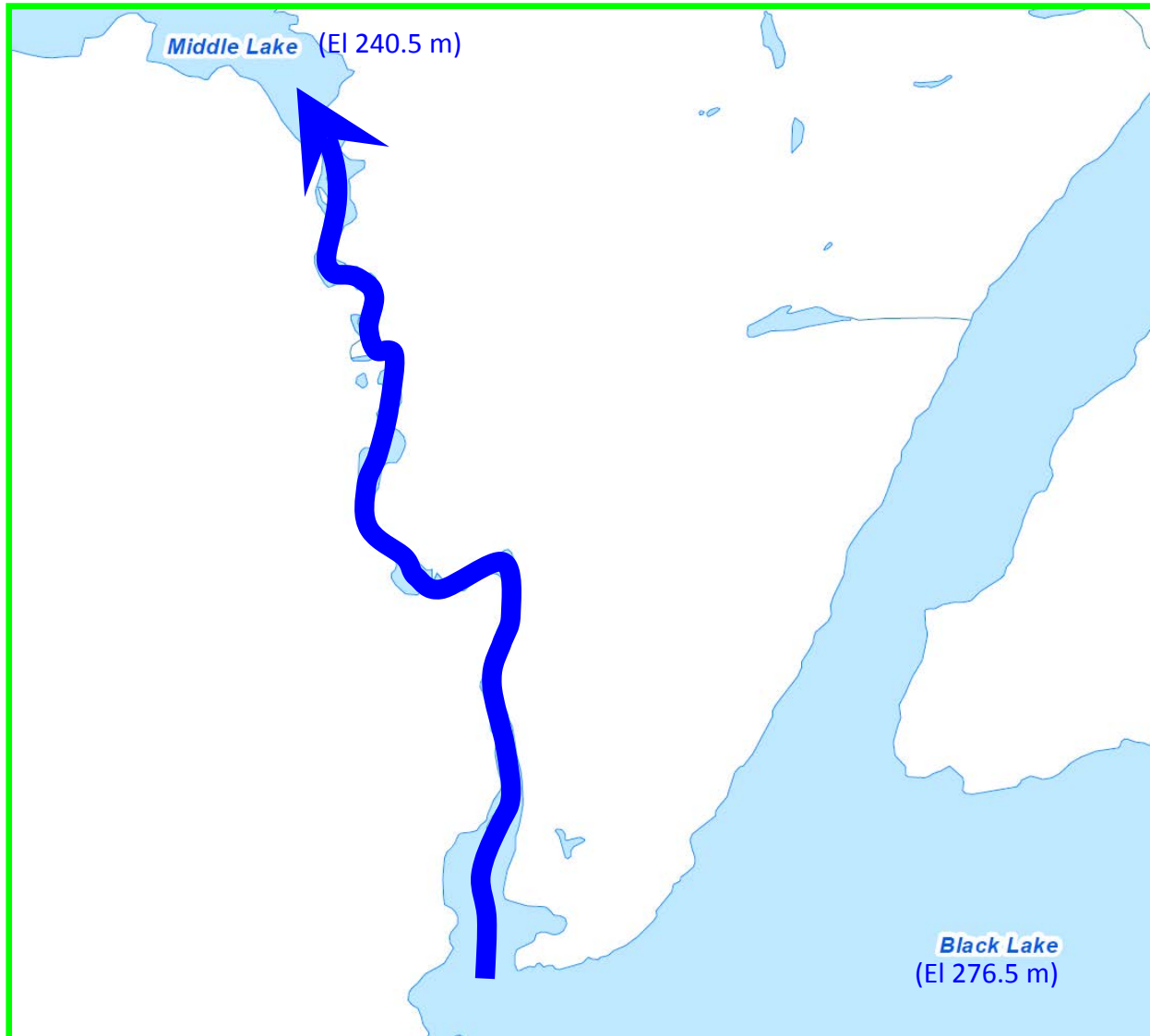


# Project Summary

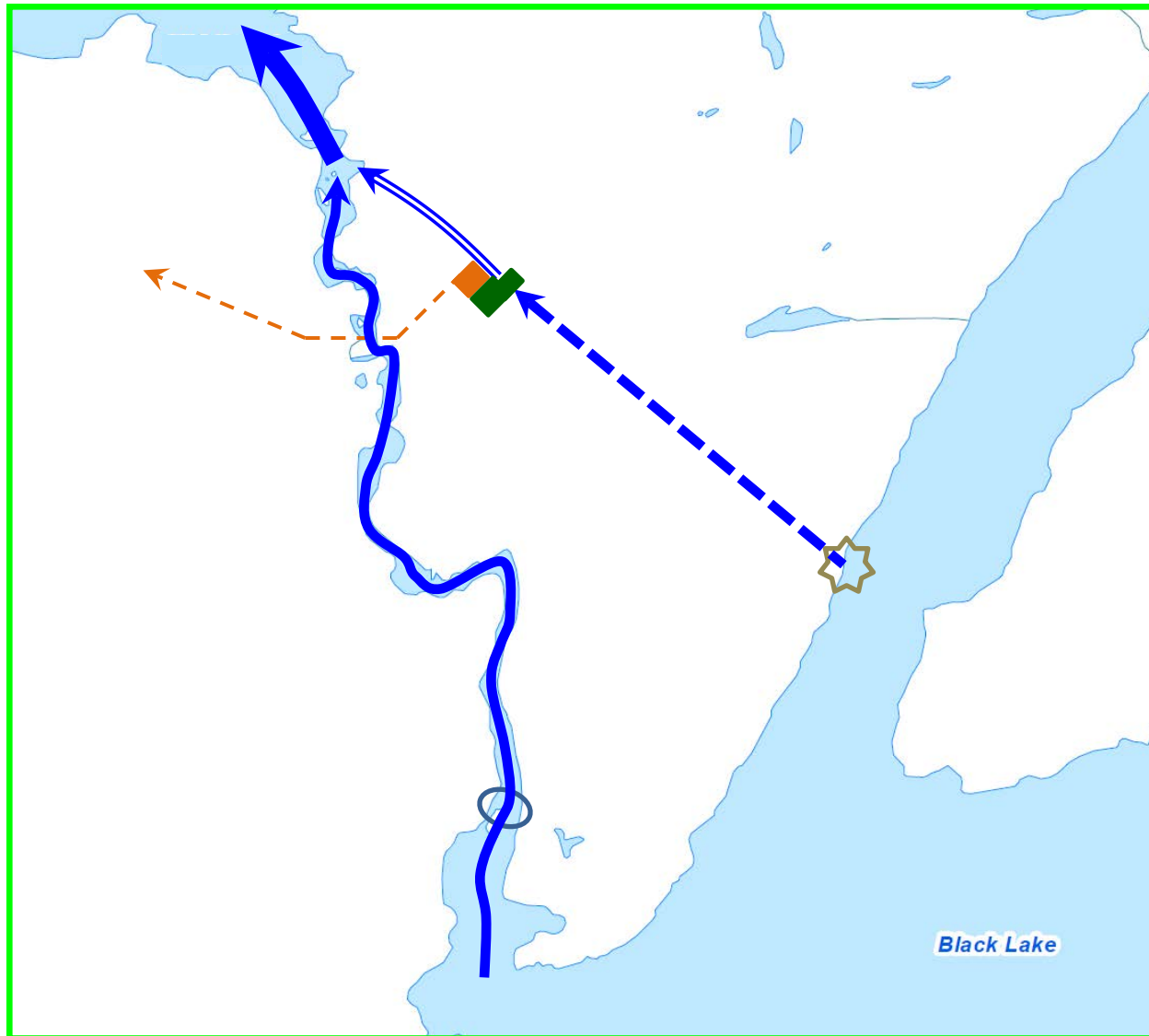
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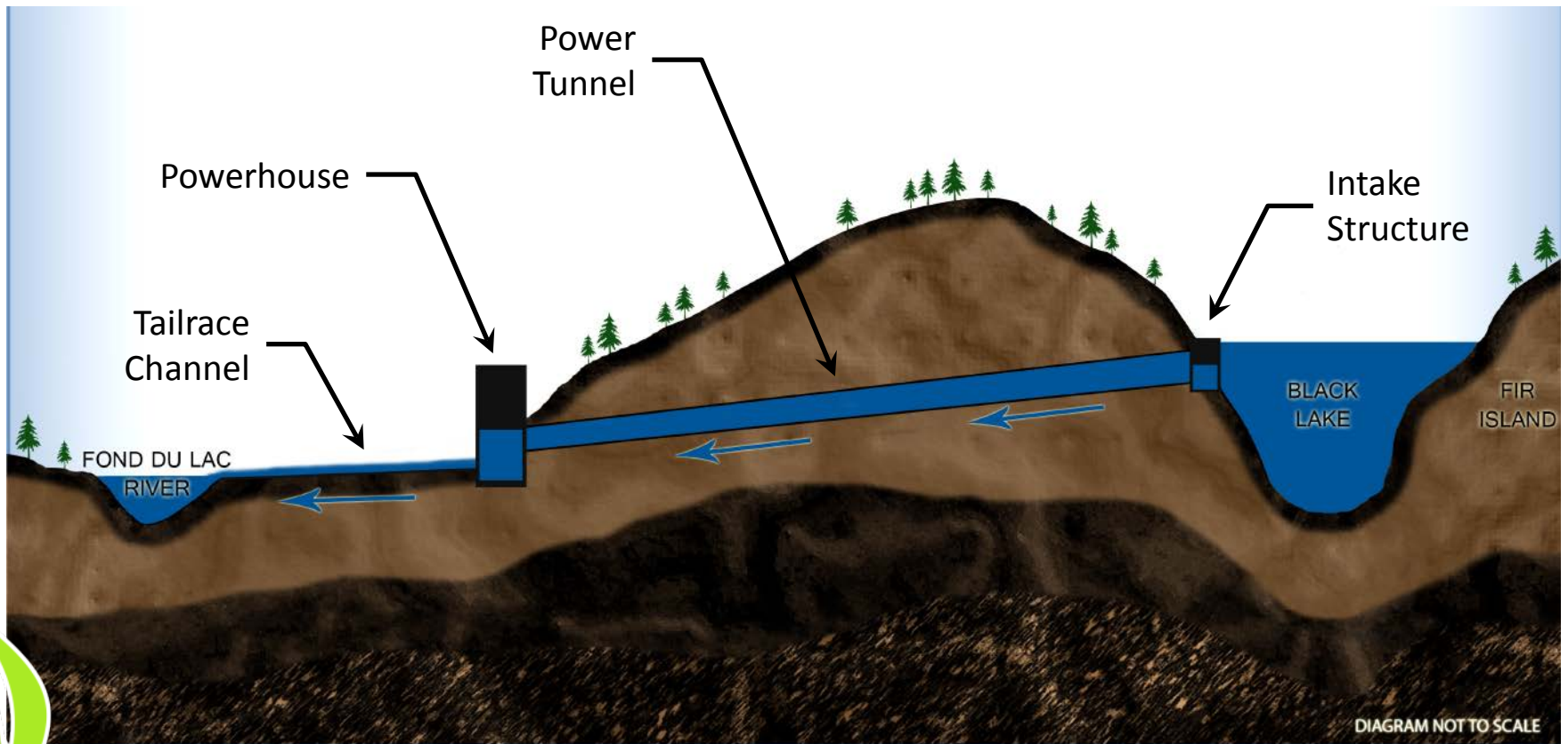
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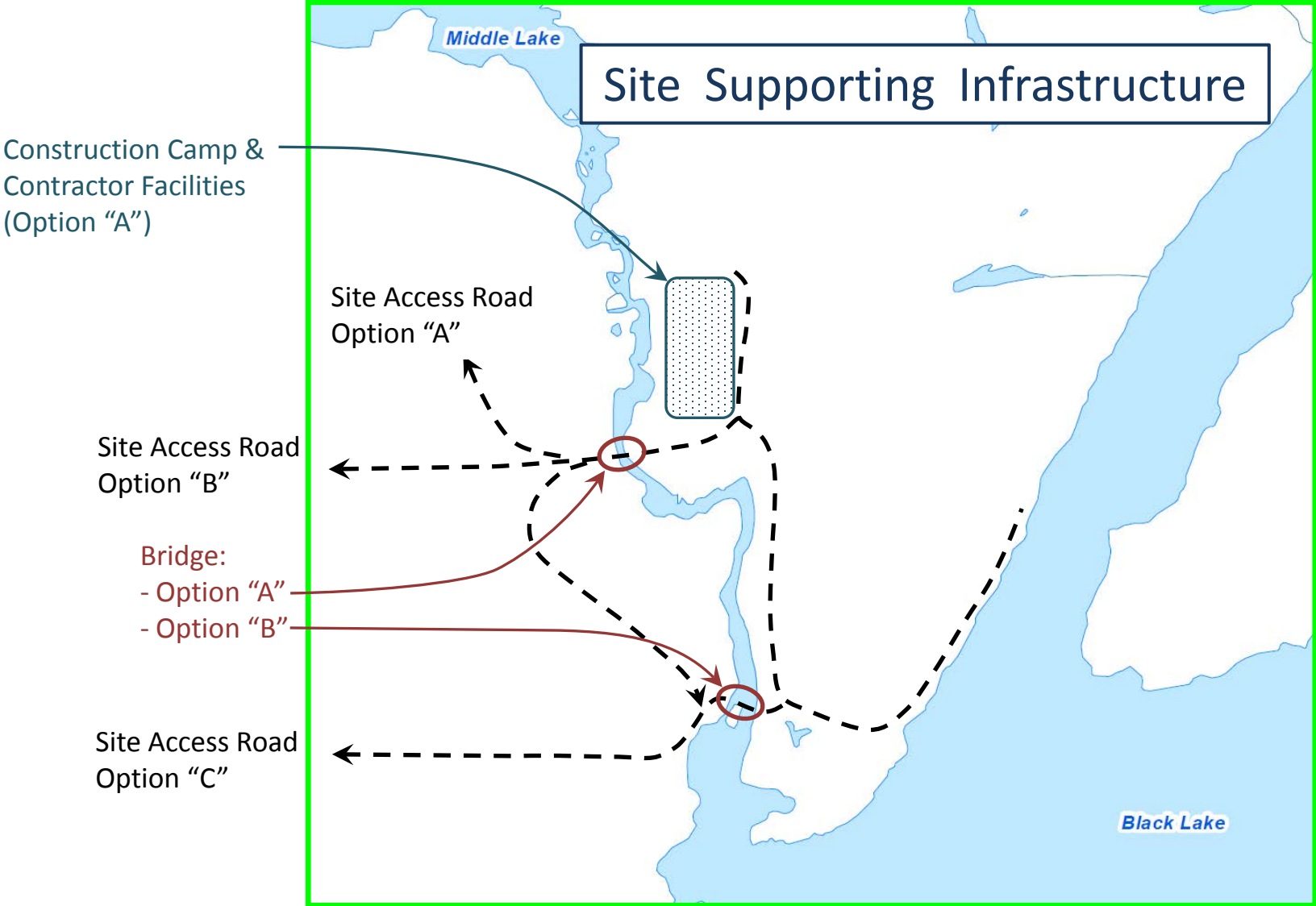
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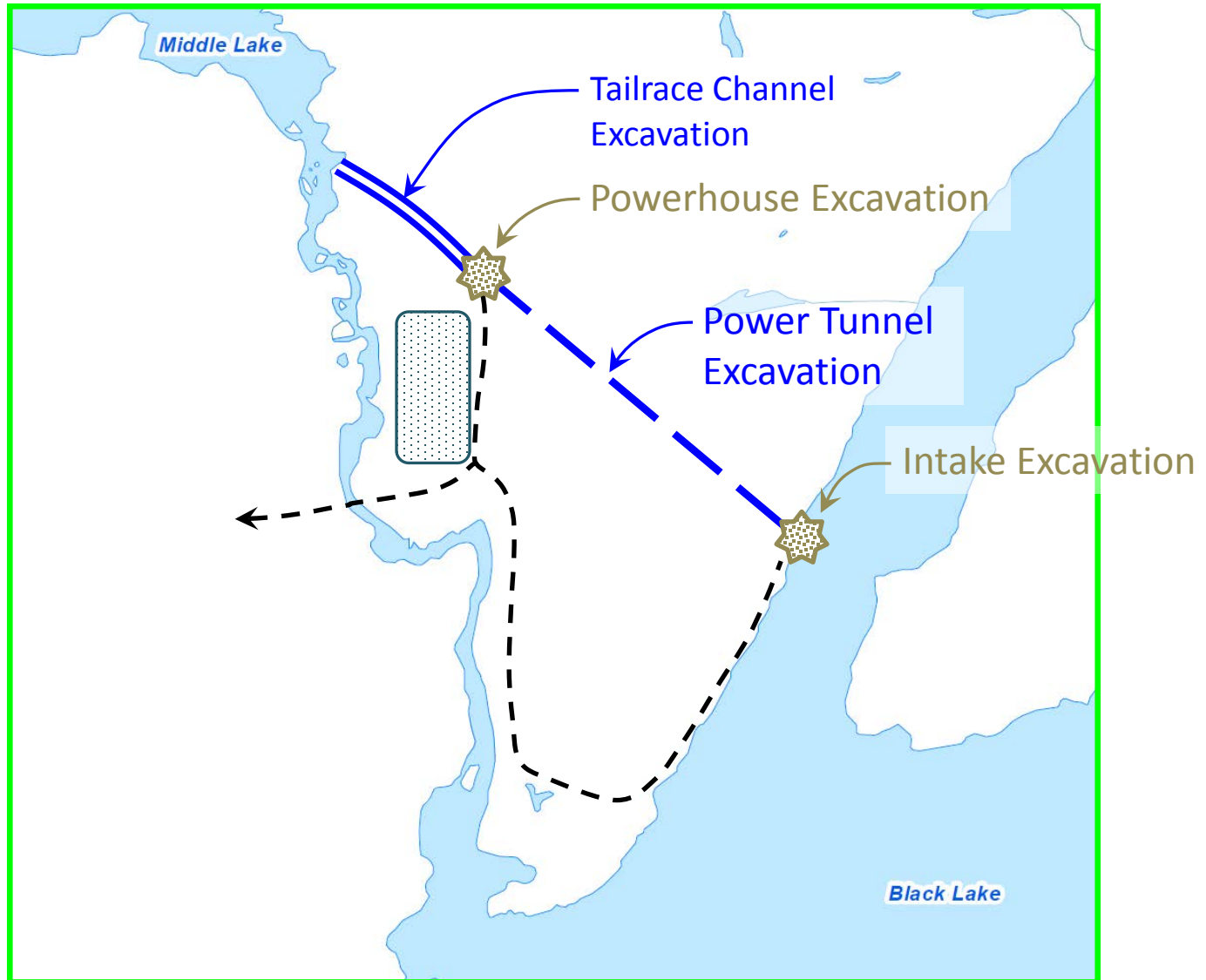
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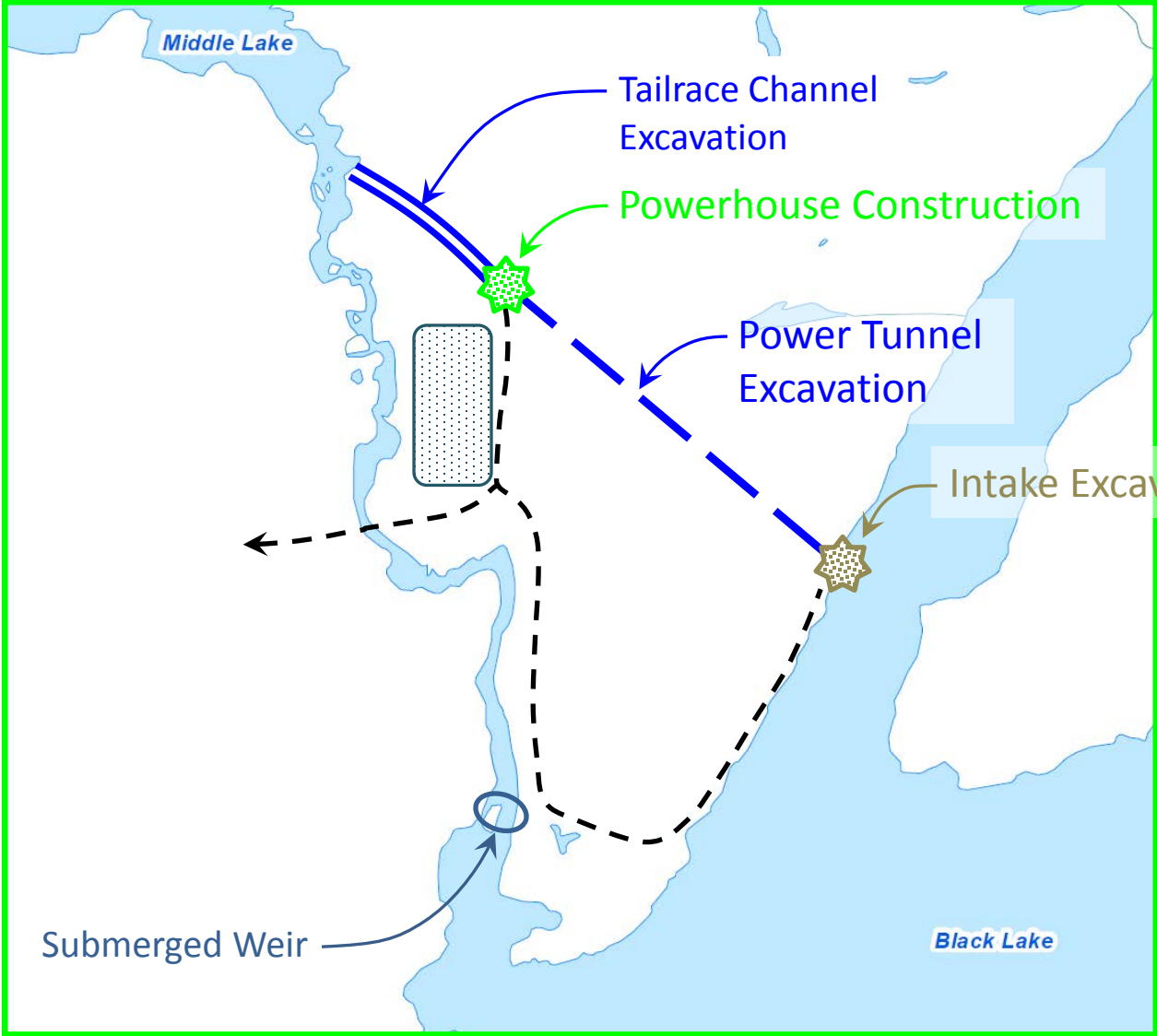
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# Grayling Island Average Spring Flow



# Grayling Island

## Low Spring Flow



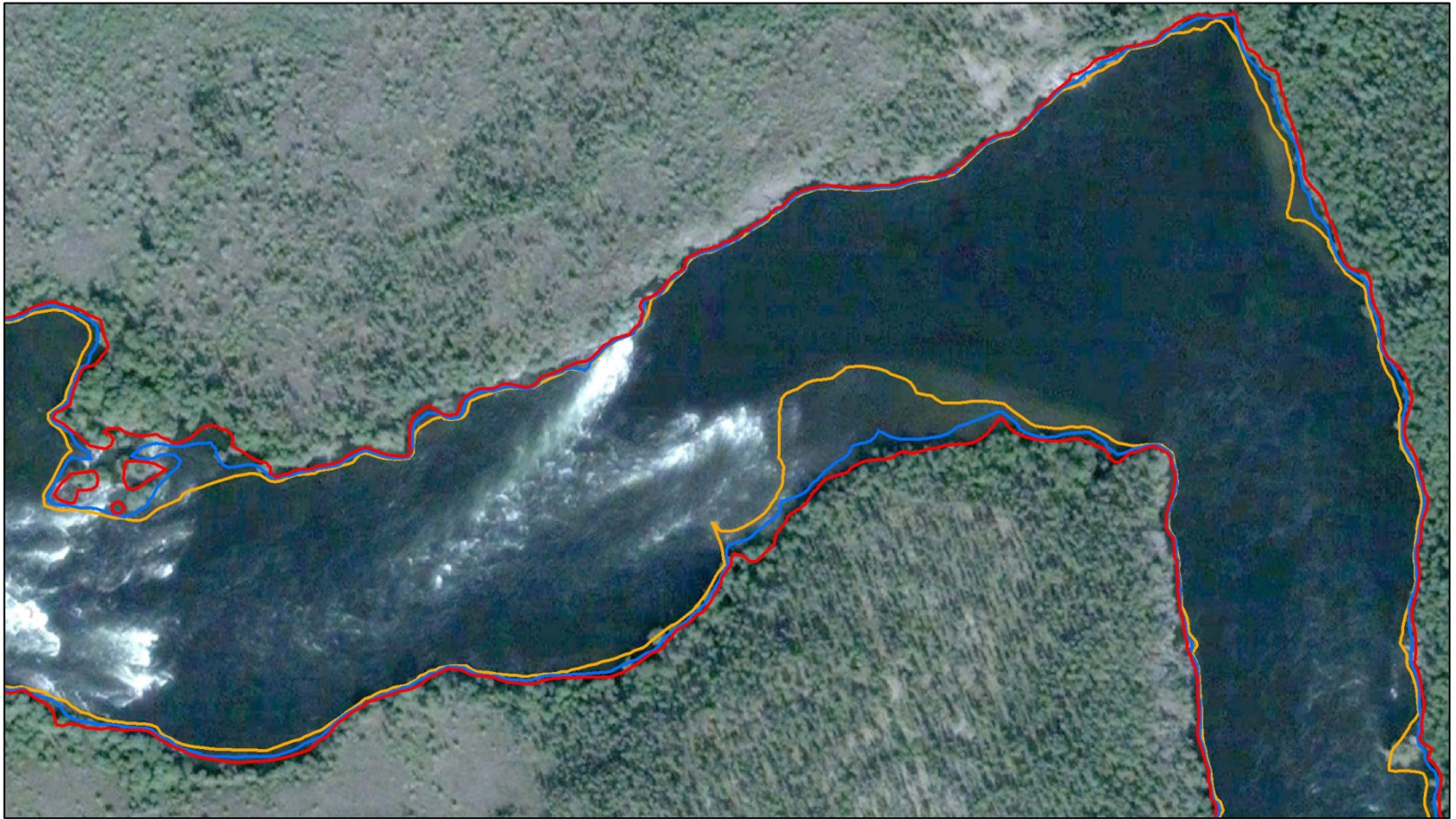
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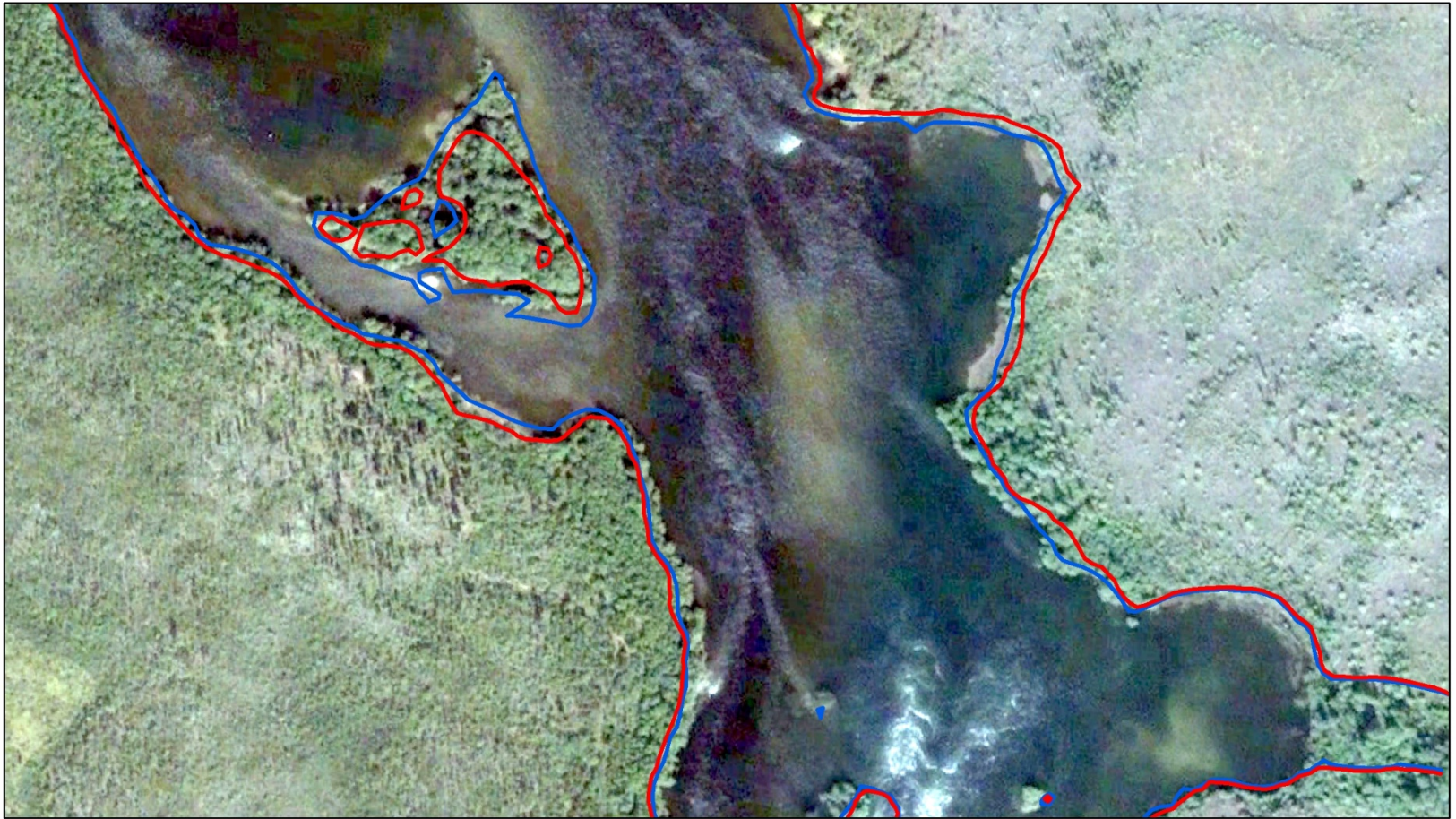
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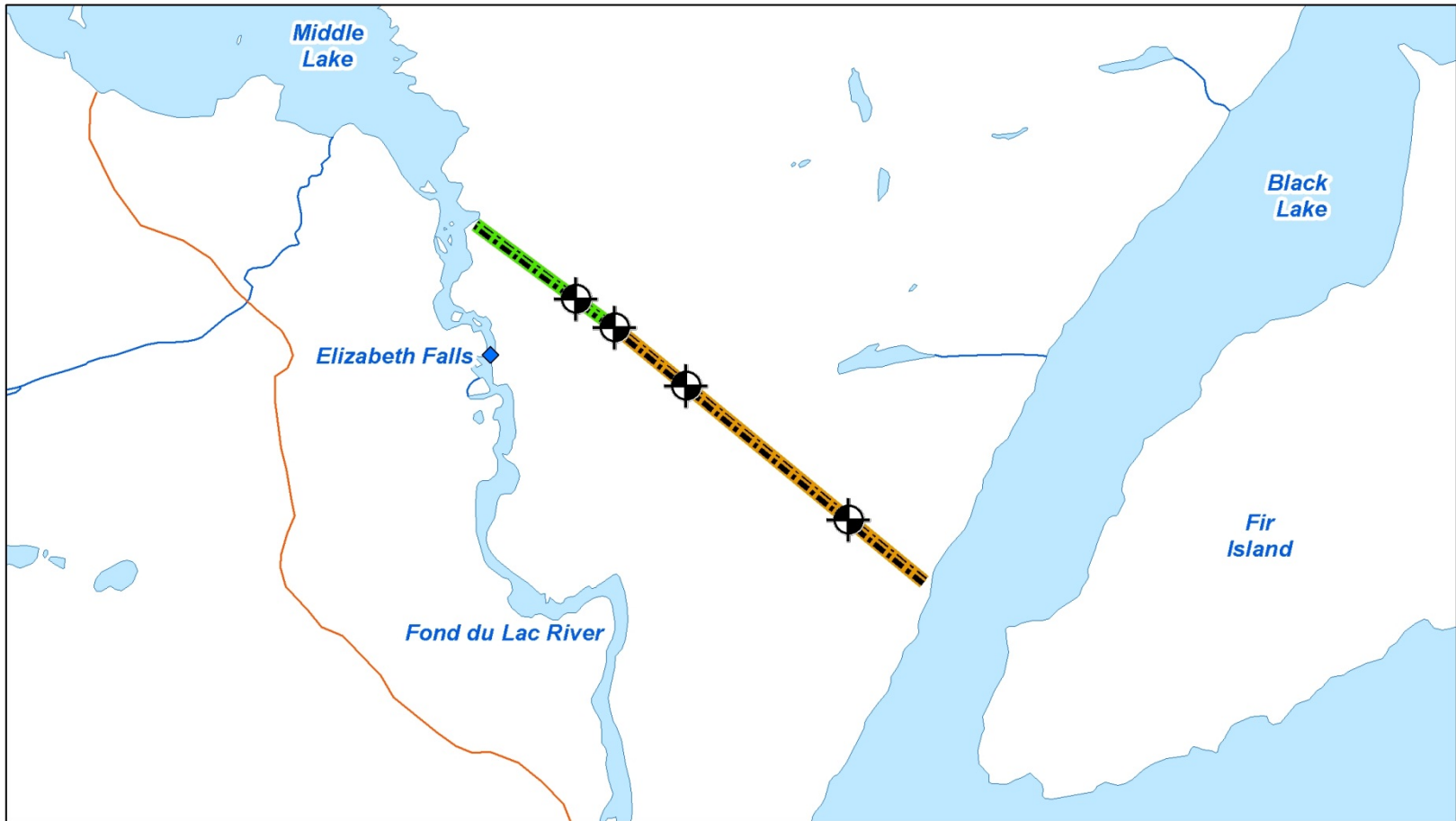


# Outlet to Middle Lake

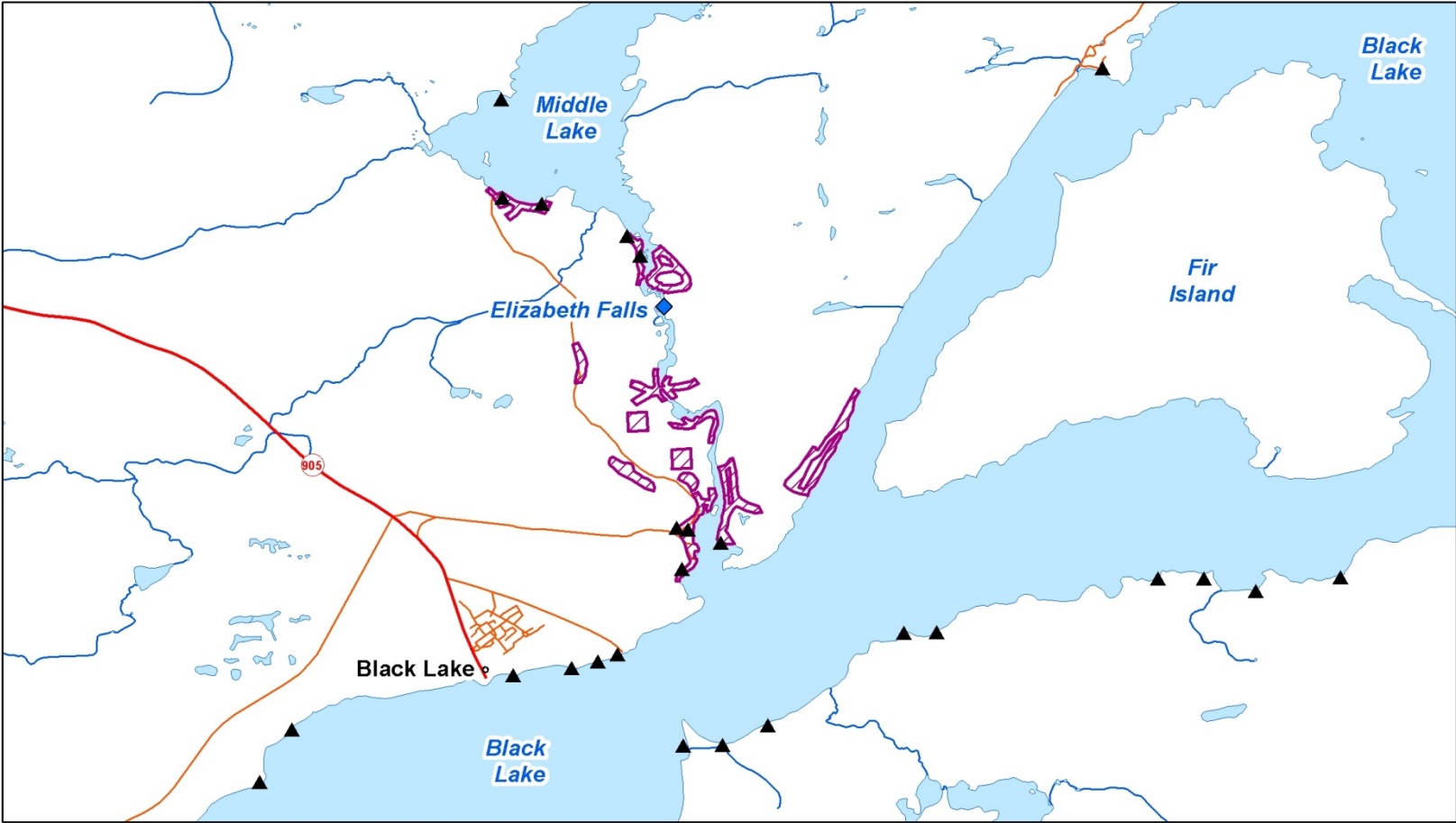
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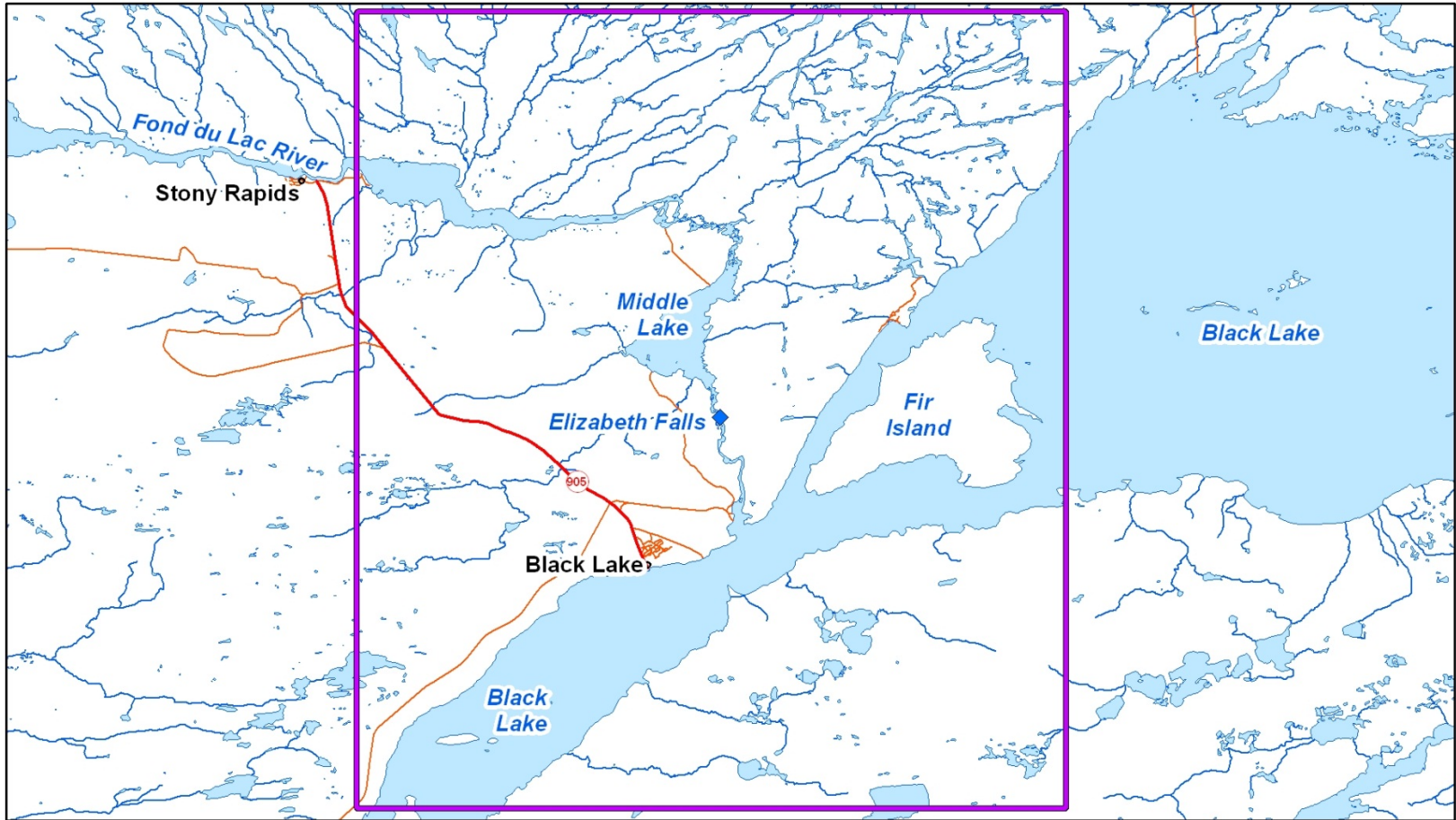
# Geological Survey Locations



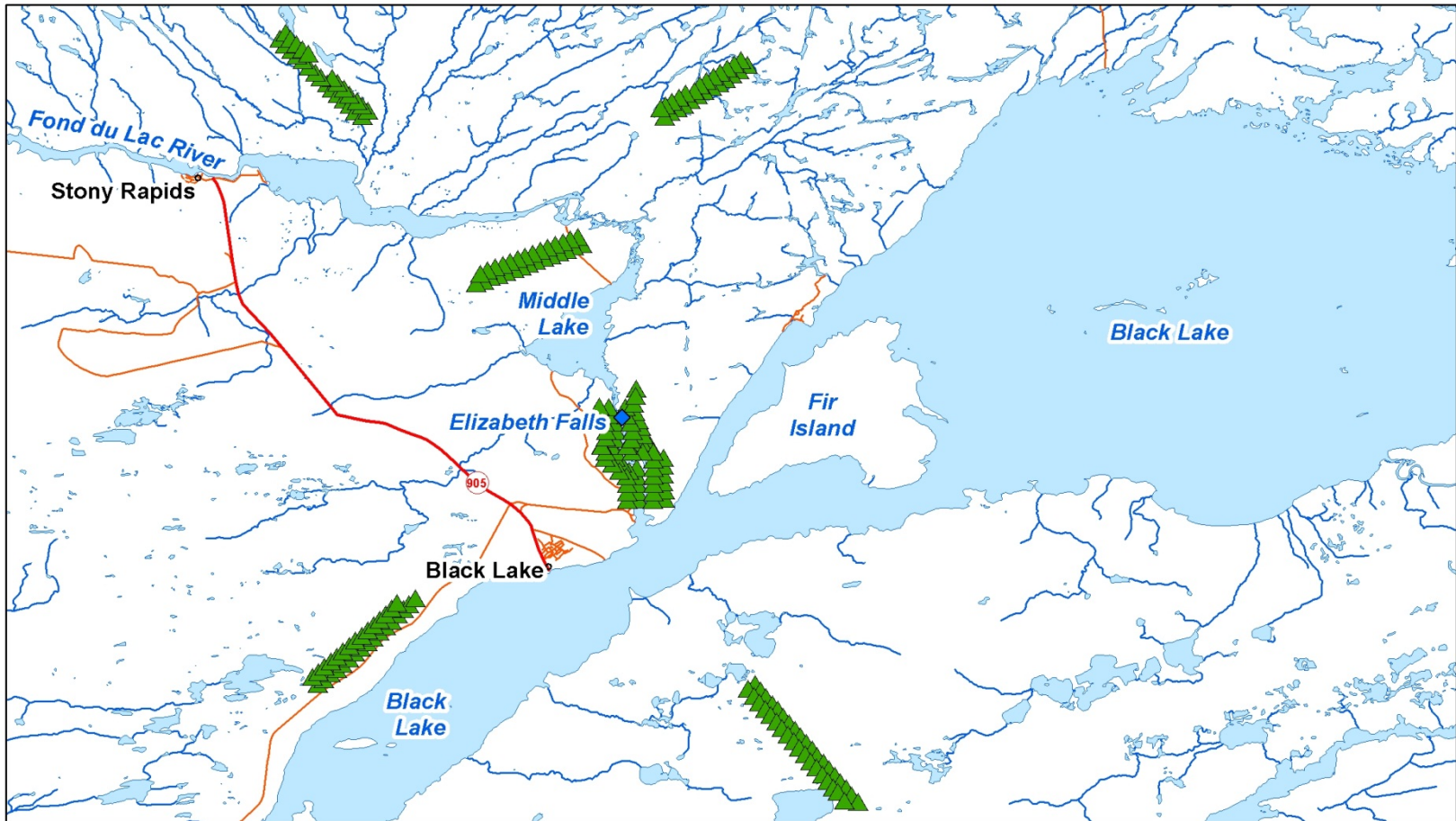
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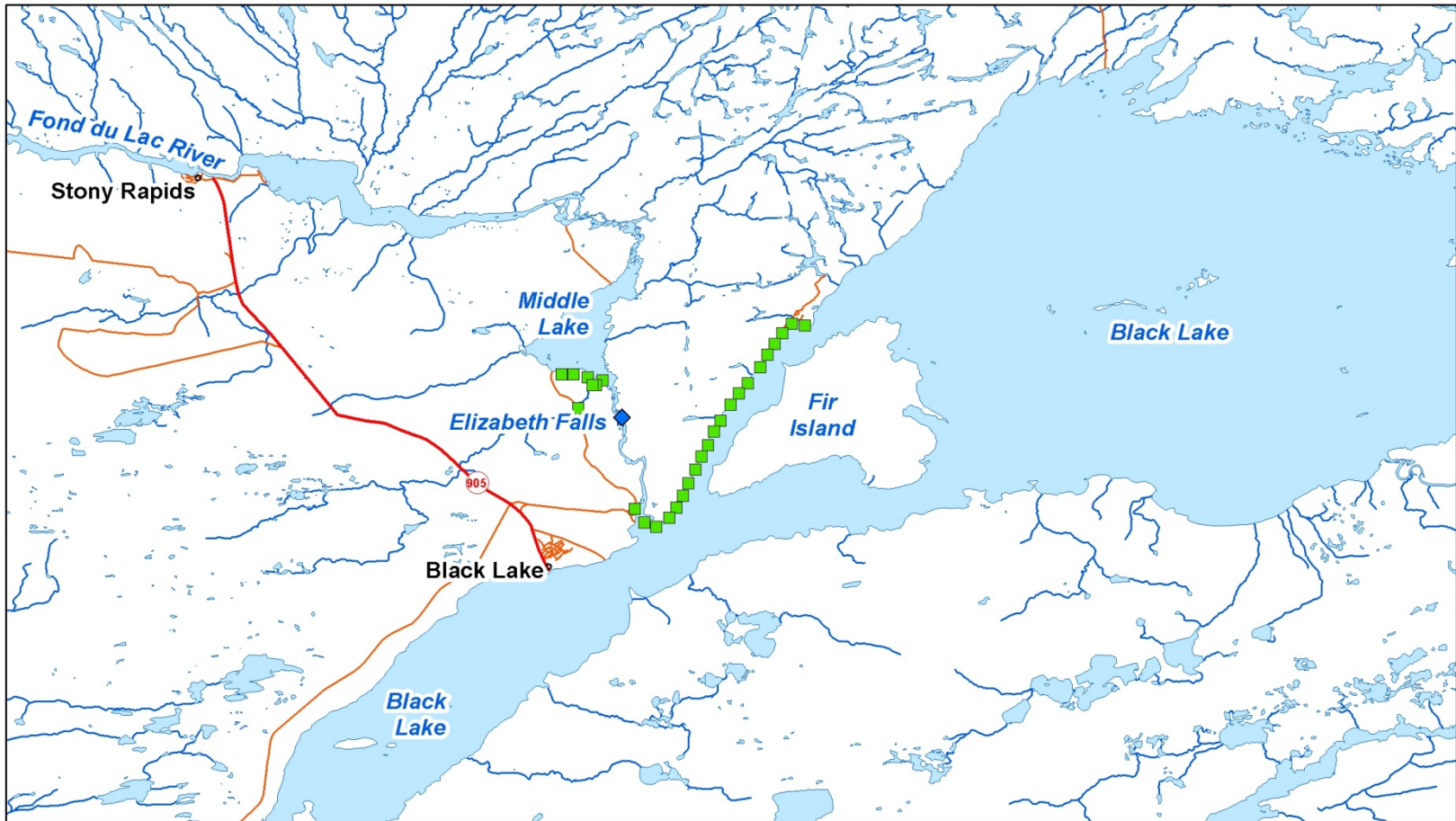
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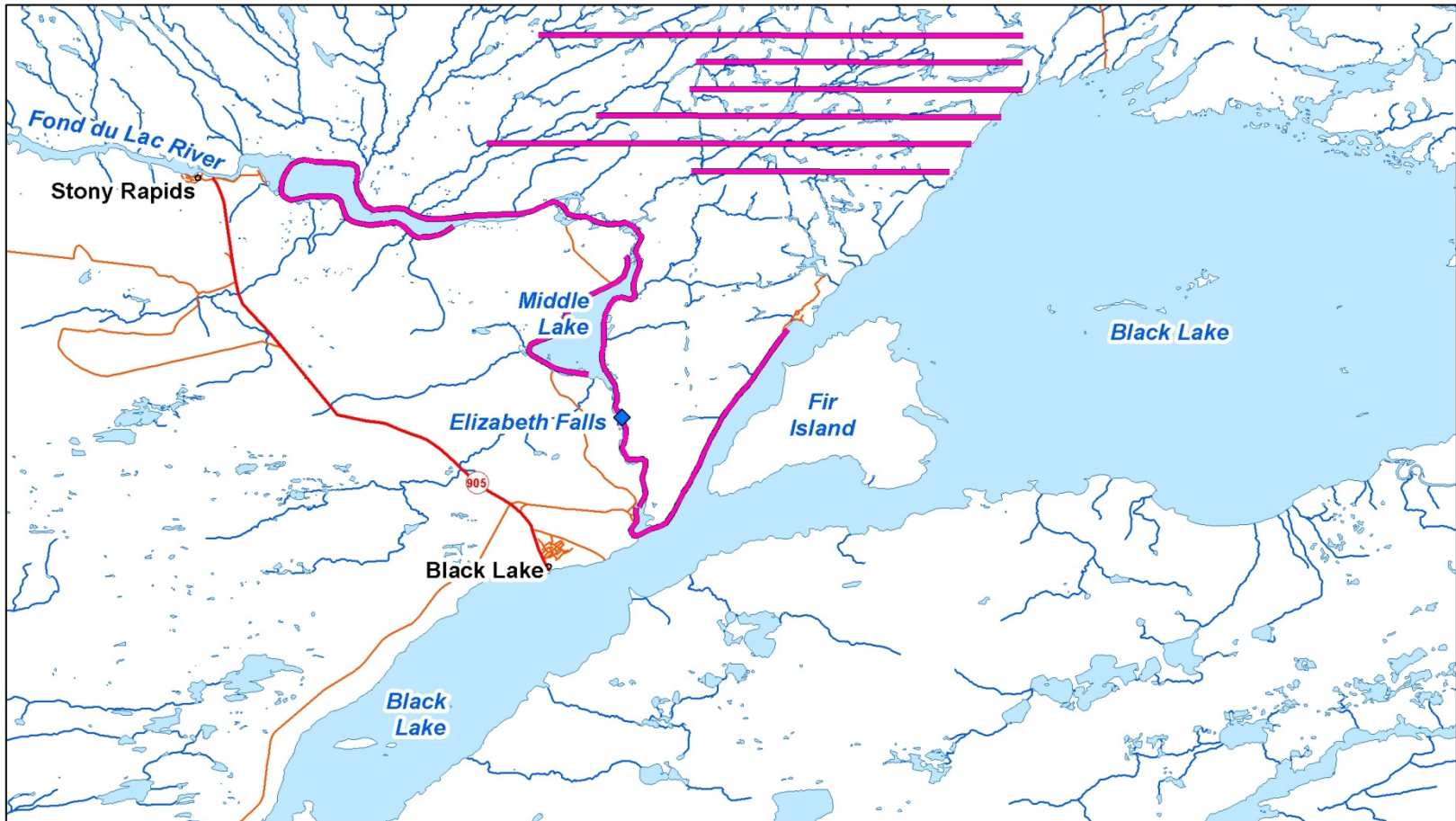
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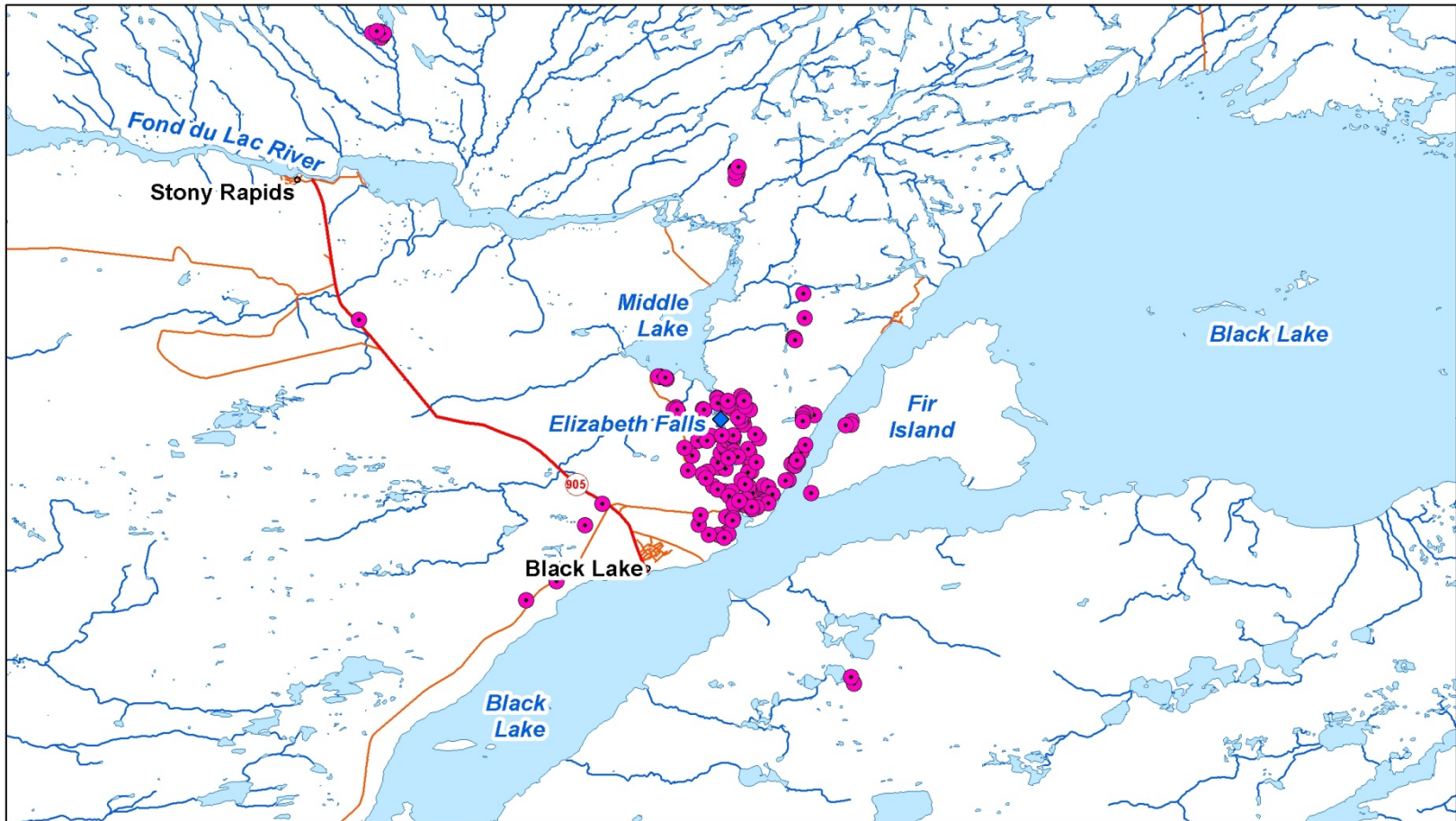
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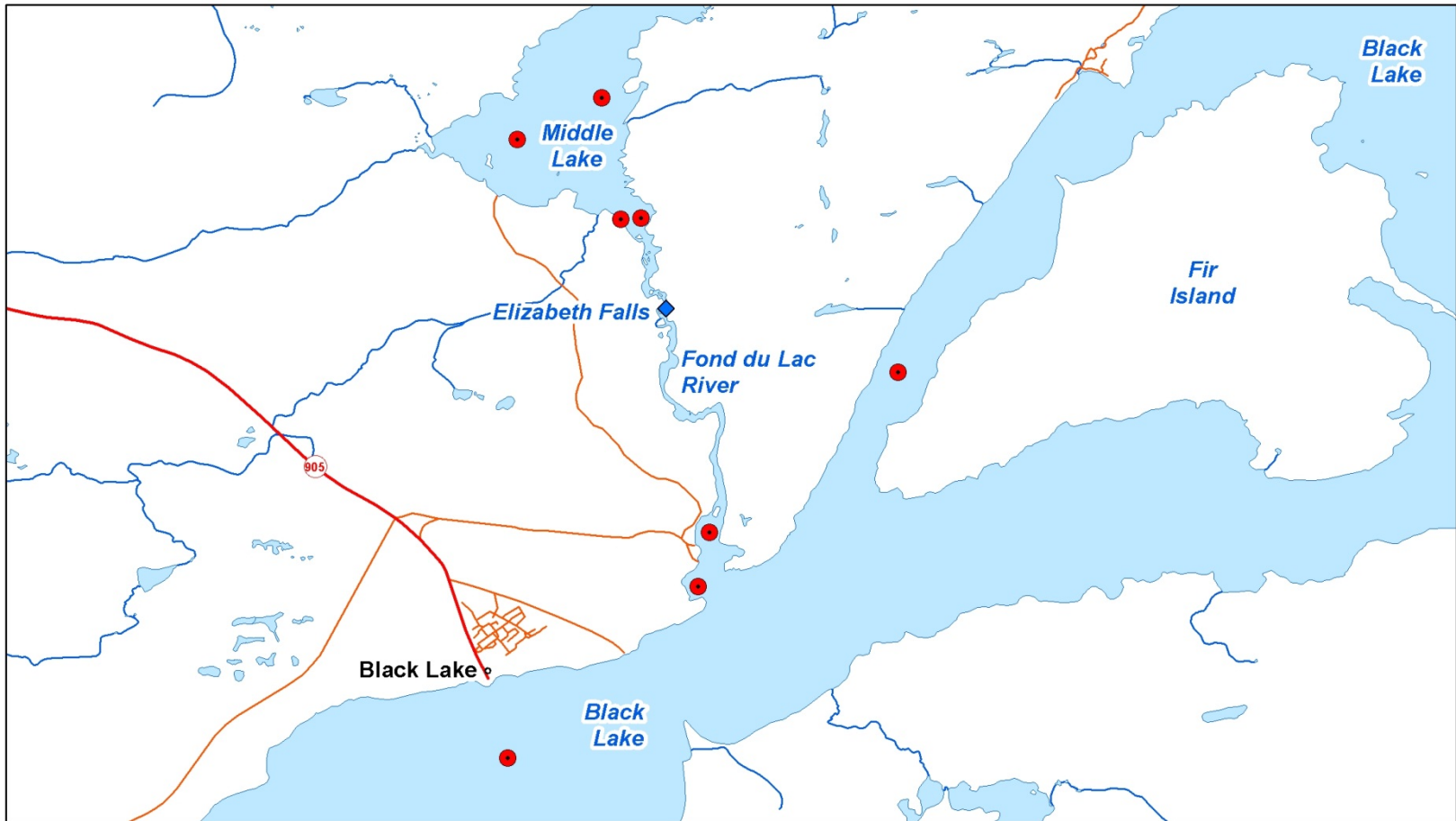
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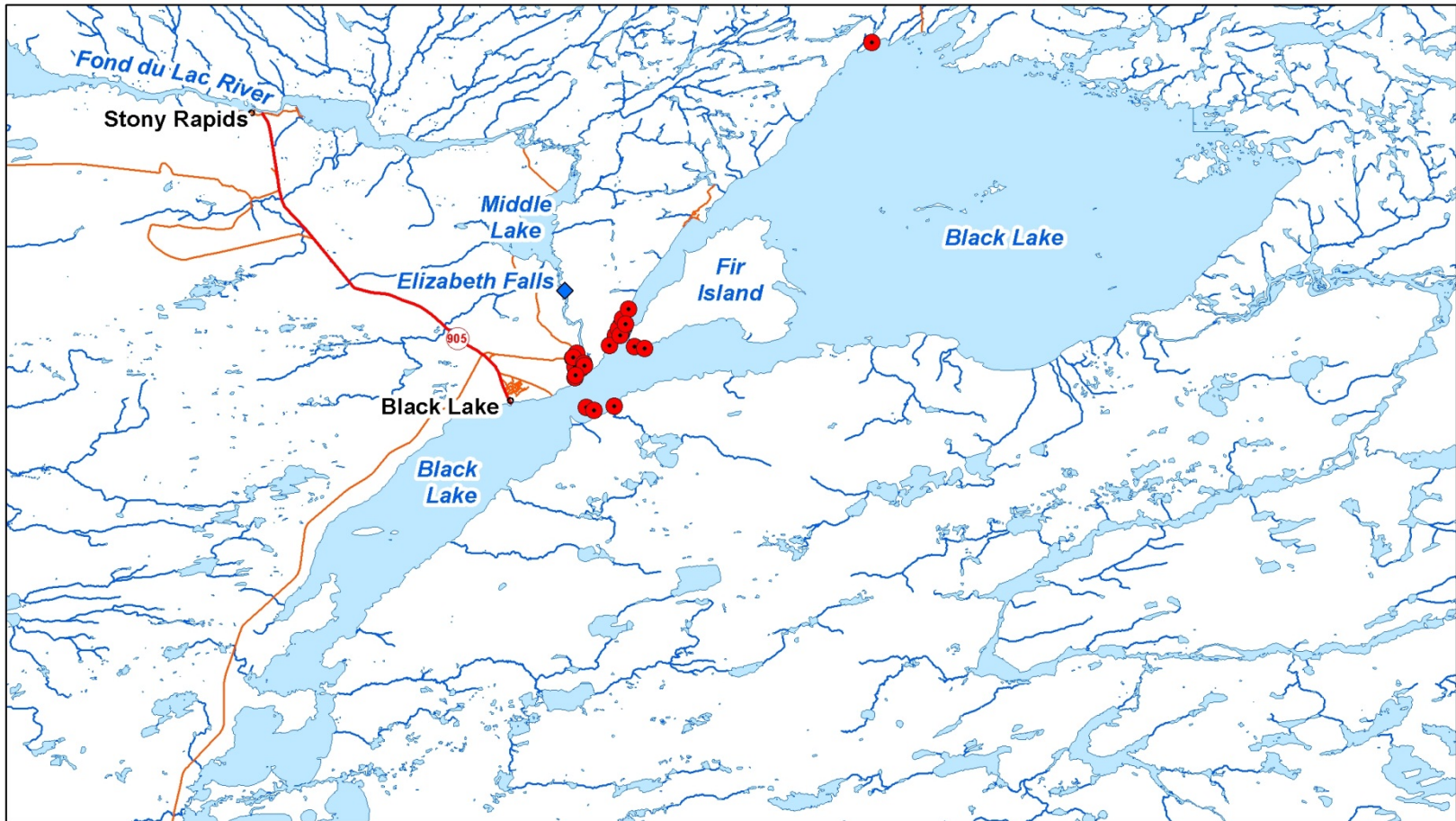
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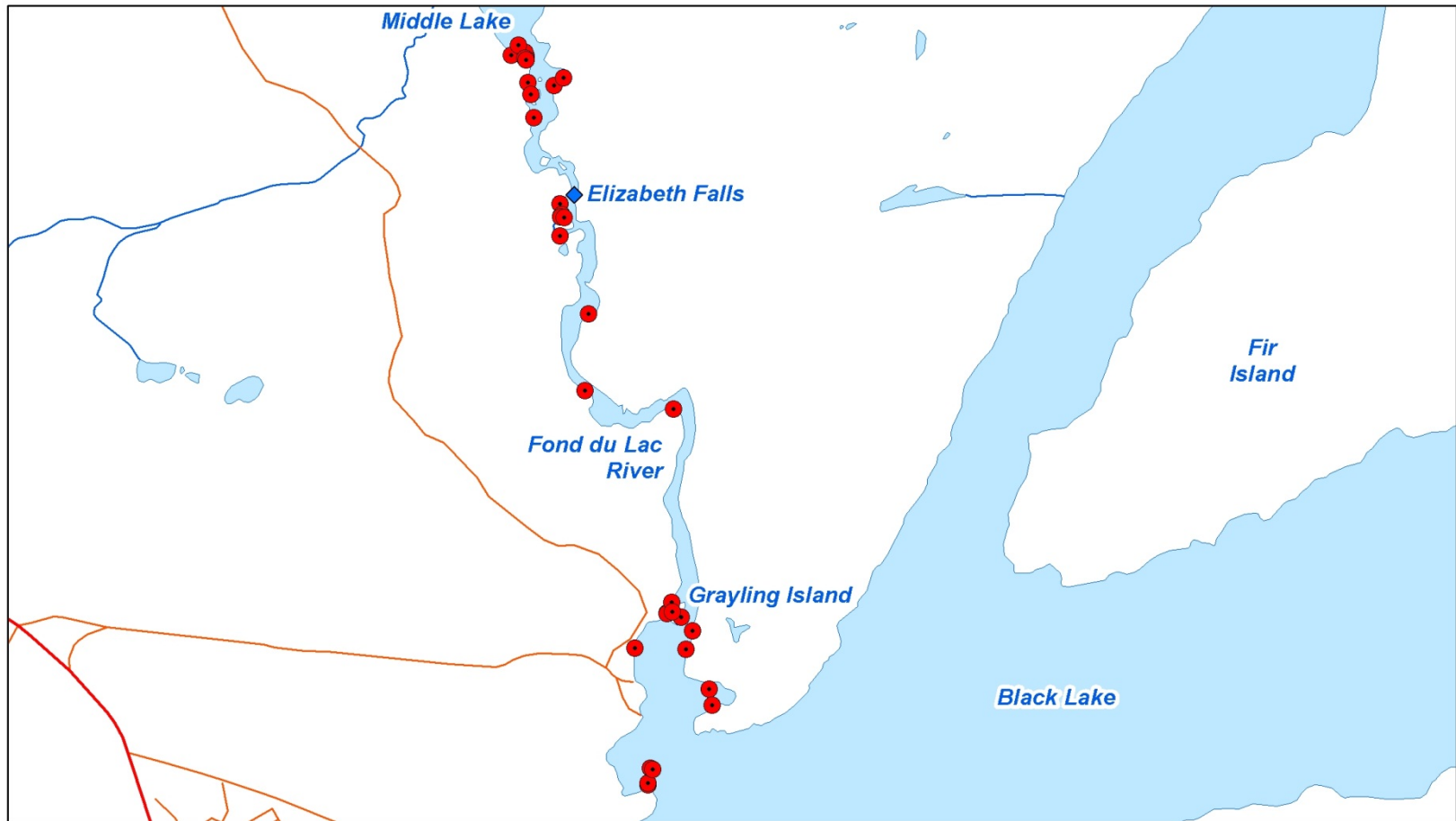
# Water Quality Sampling Locations



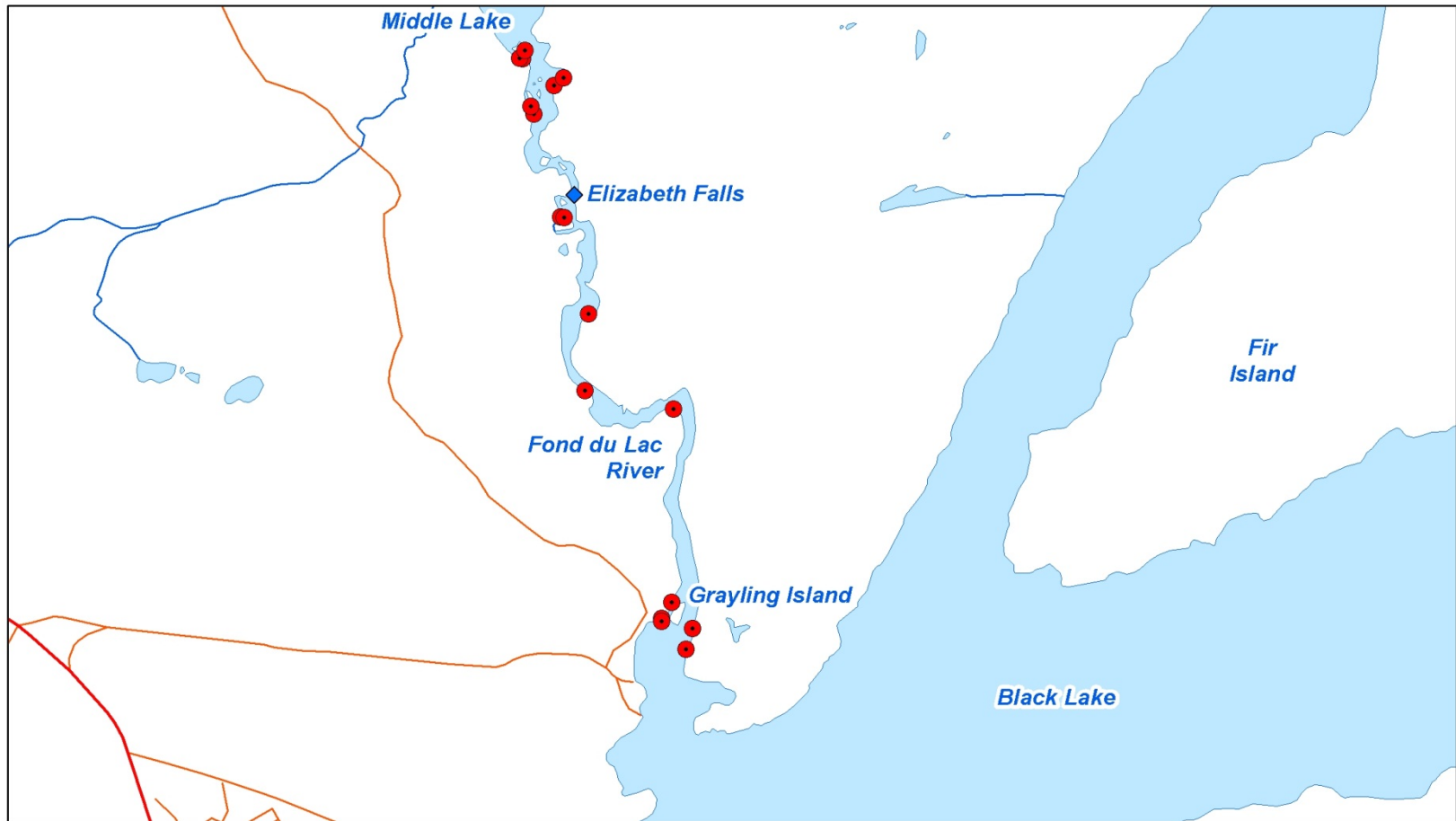
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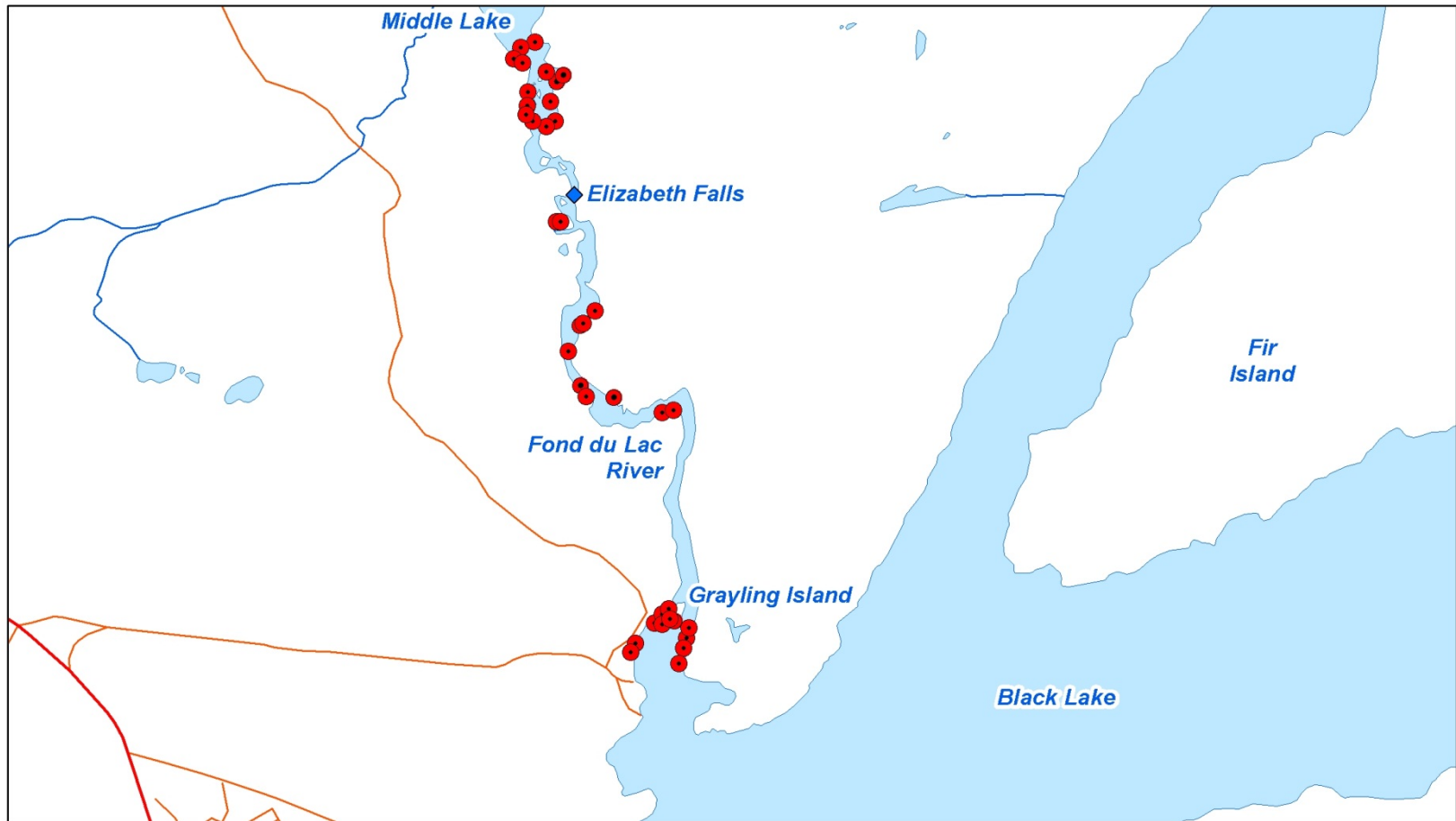
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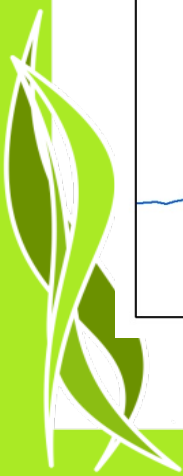
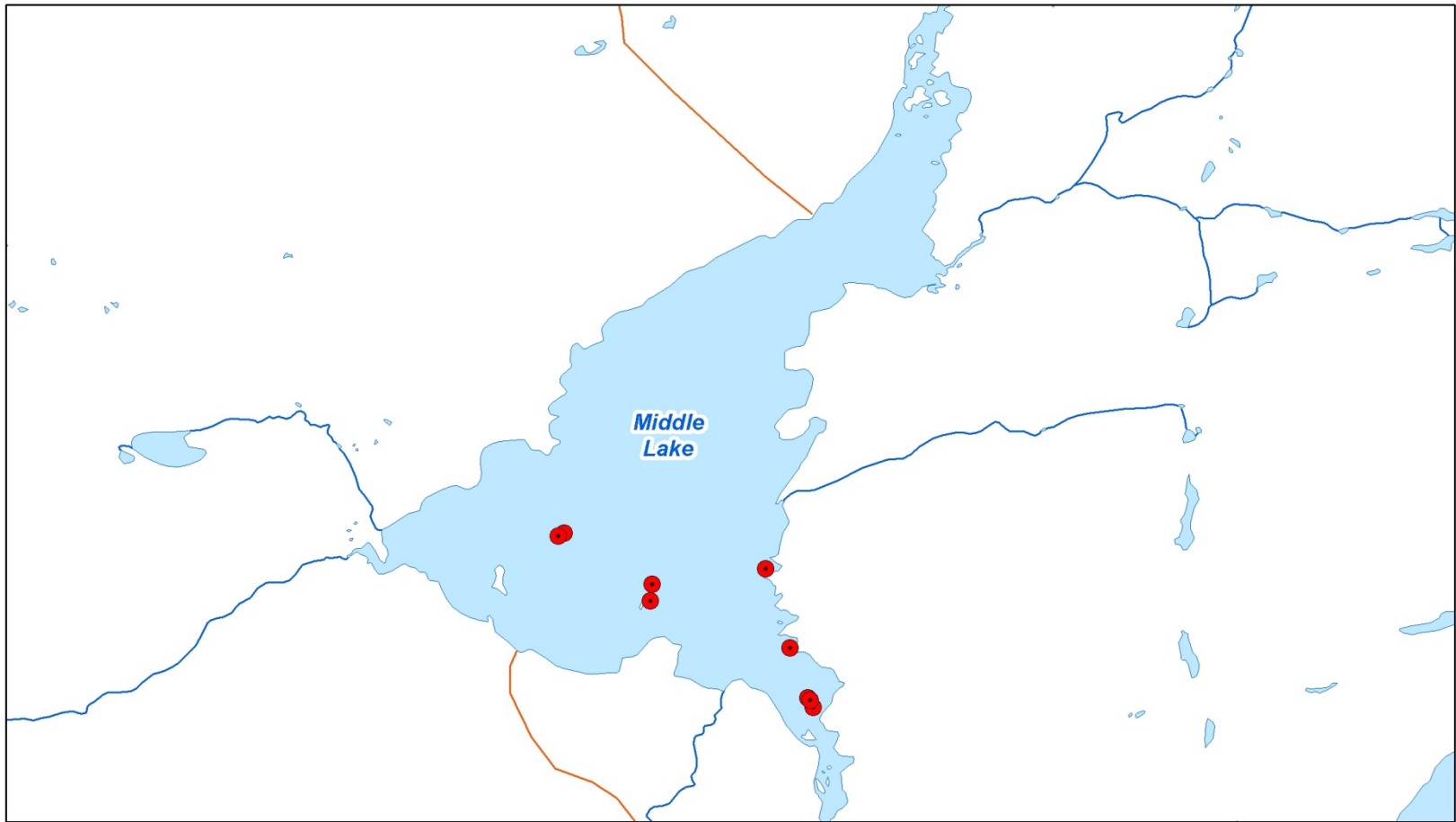
# Fond du Lac River Arctic Grayling Spawning Surveys



# Fond du Lac River Arctic Grayling Egg Surveys



# Middle Lake General Fish Sampling



# A Special Thank You To:

- Boniface Kasakan
- Gilbert Ettibar
- Billy J. Sayazie
- Jonus Sayazie
- Justin Broussie
- William Toutsaint



# Next Steps

- More Community Meetings & Workshops
  - Project details
  - Progress updates
- Submit Environmental Impact Statement ... June 2013
- Finalize Design and Cost Estimate ... September 2013
- Project Go / No Go Decision ... January 2014
- Environmental Approval ... August 2014
- Start Construction ... Fall 2014
- Plant In-Service ... December 2017



# What does this mean for the Community?

- Opportunities for employment
  - Construction (3 – 4 years) ... peak workforce estimated at 150
  - Operations (90+ years) ... 6 – 10 permanent positions
  - Employment and skills training to prepare Black Lake members for construction and operating jobs
- Business opportunities for the region, community and individuals
- Profits from ownership in the Hydro Project going to build a better Community
- A plant to be proud of that:
  - Is renewable and sustainable source of power
  - Minimal environmental disturbance
  - Provides clean, safe and reliable energy for the residents and industry in Northern Saskatchewan



# Closing

- Thank you for coming
- Please ask questions ... Let us know what you think
- We want your feedback
  
- Follow – up Meeting:
  - Community Meeting #2 ... April 2013





## **Stony Rapids Community Meeting**

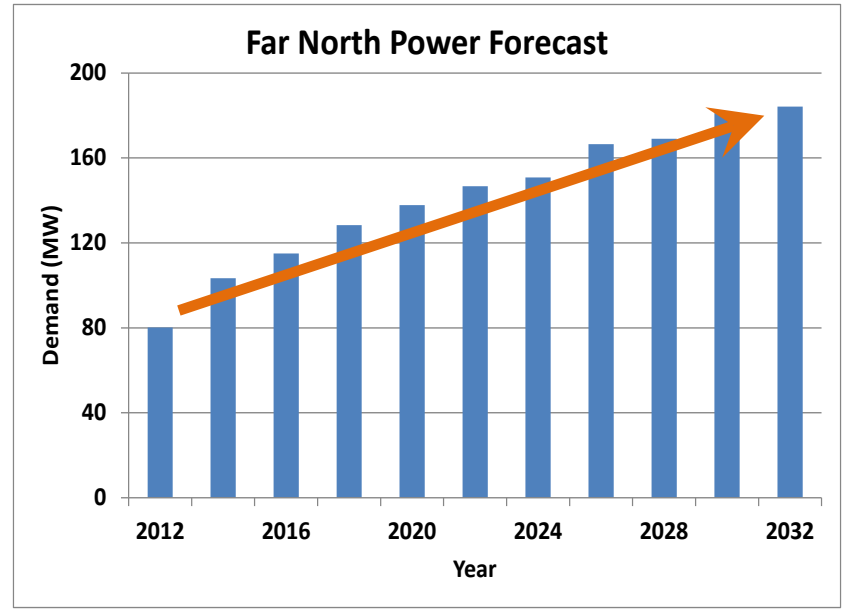
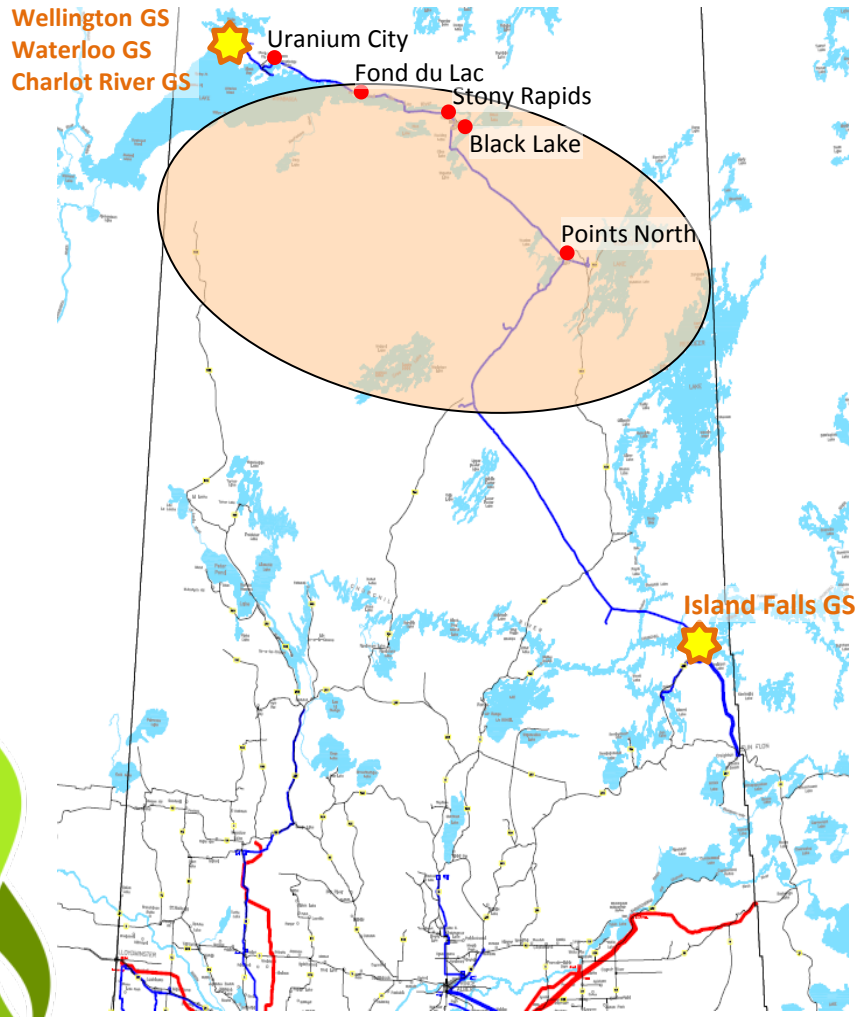


# Tazi Twé Hydroelectric Project

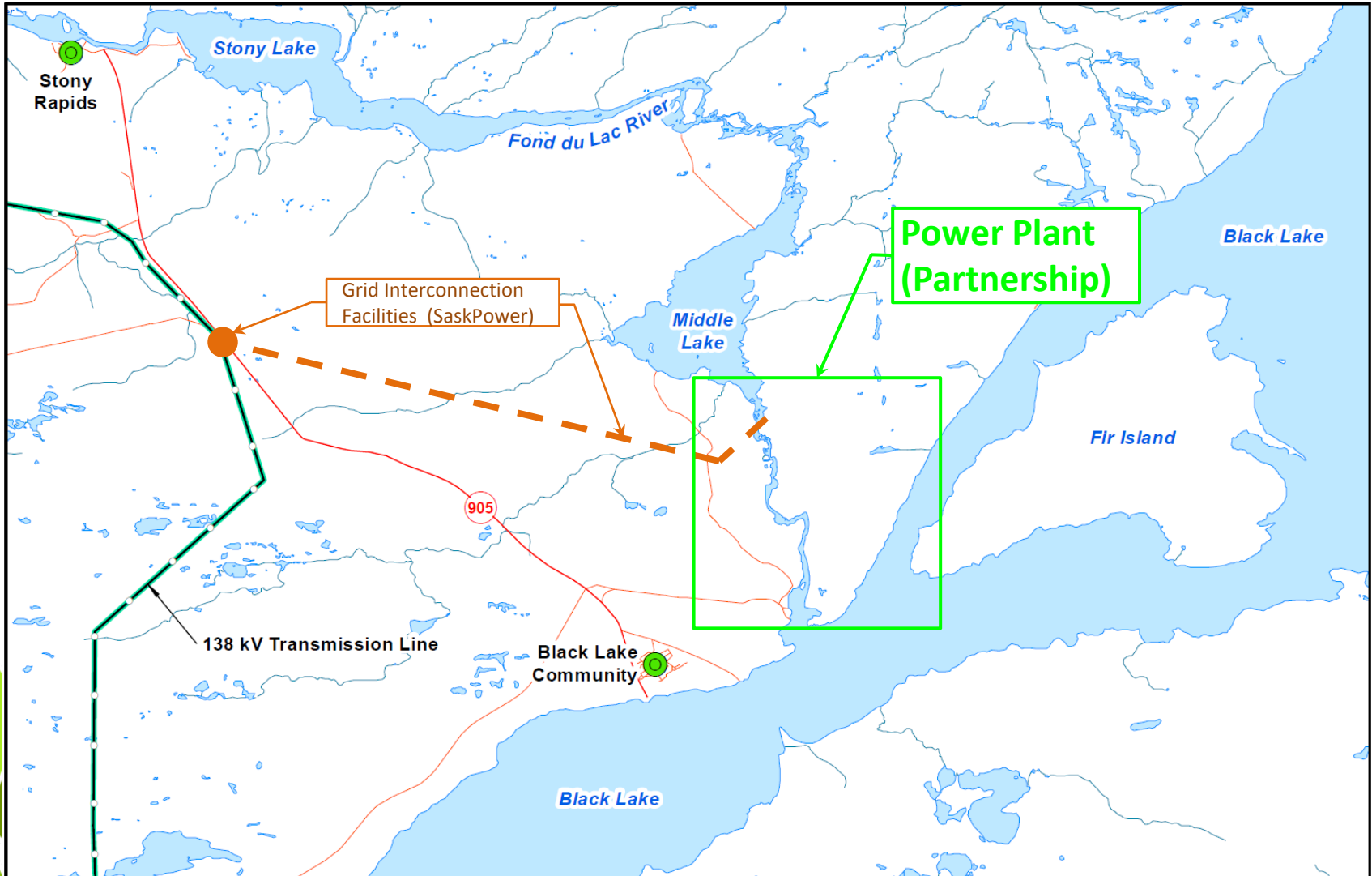
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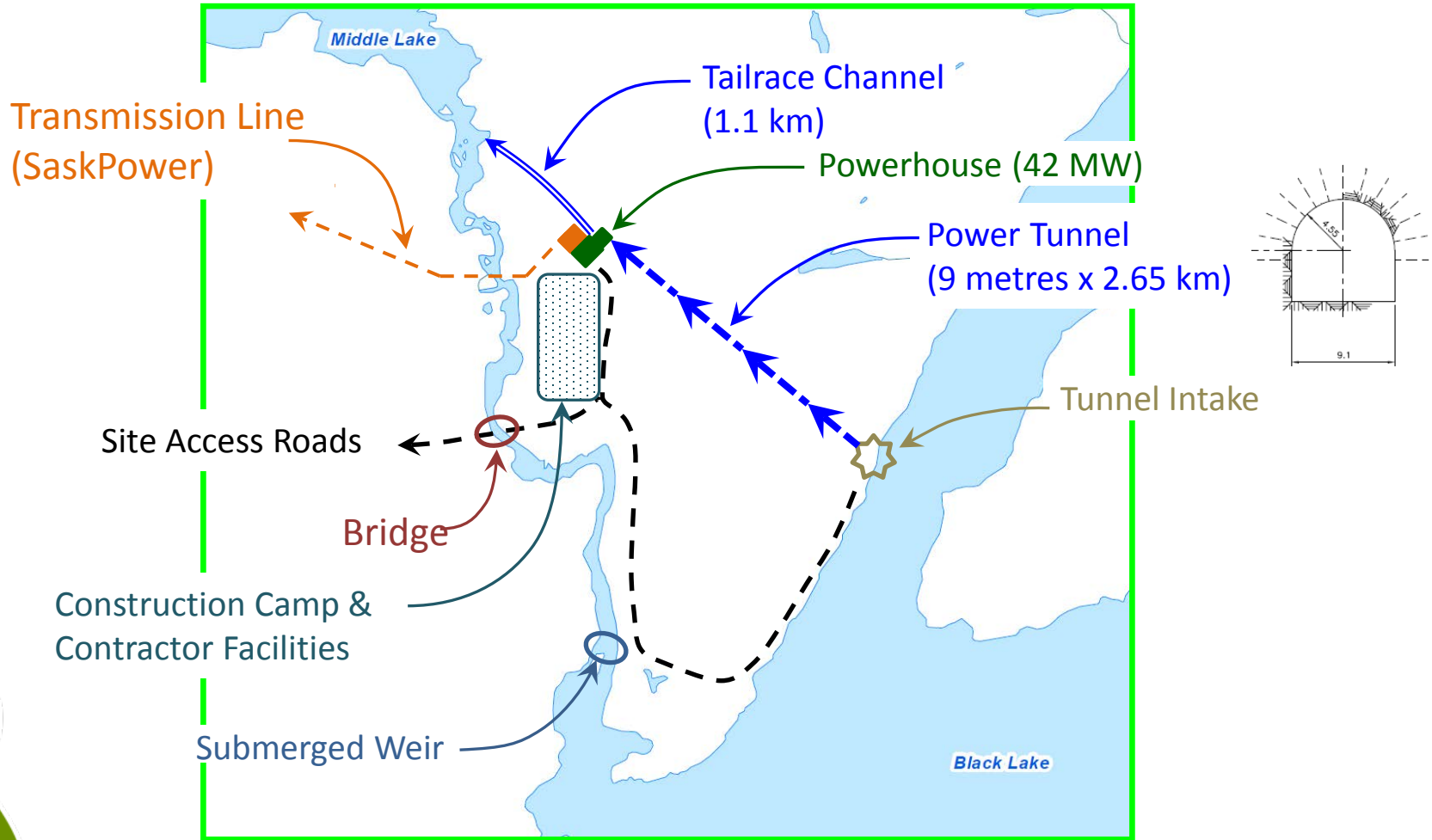
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# What is the Project



# What is the Project

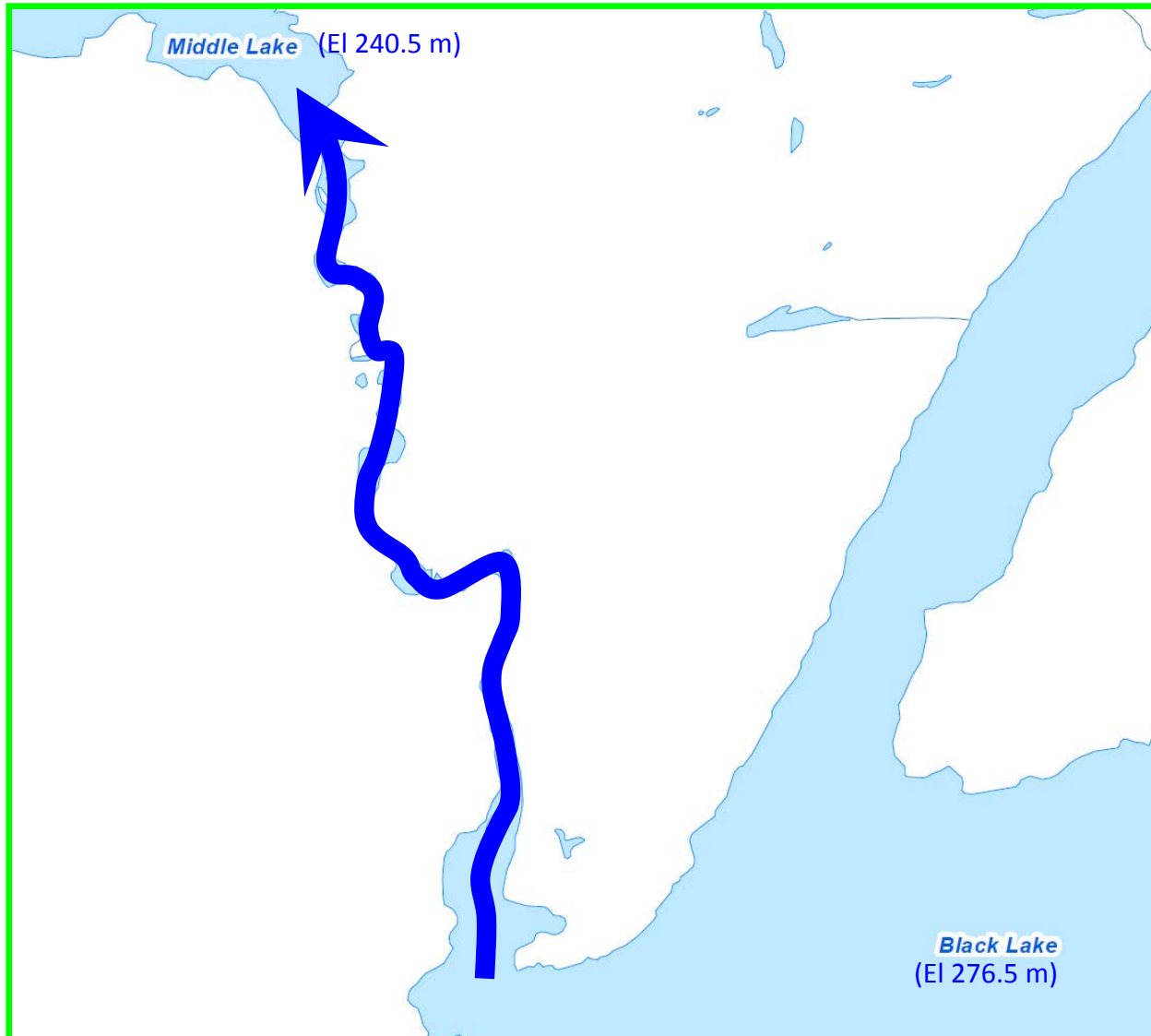


# Project Summary

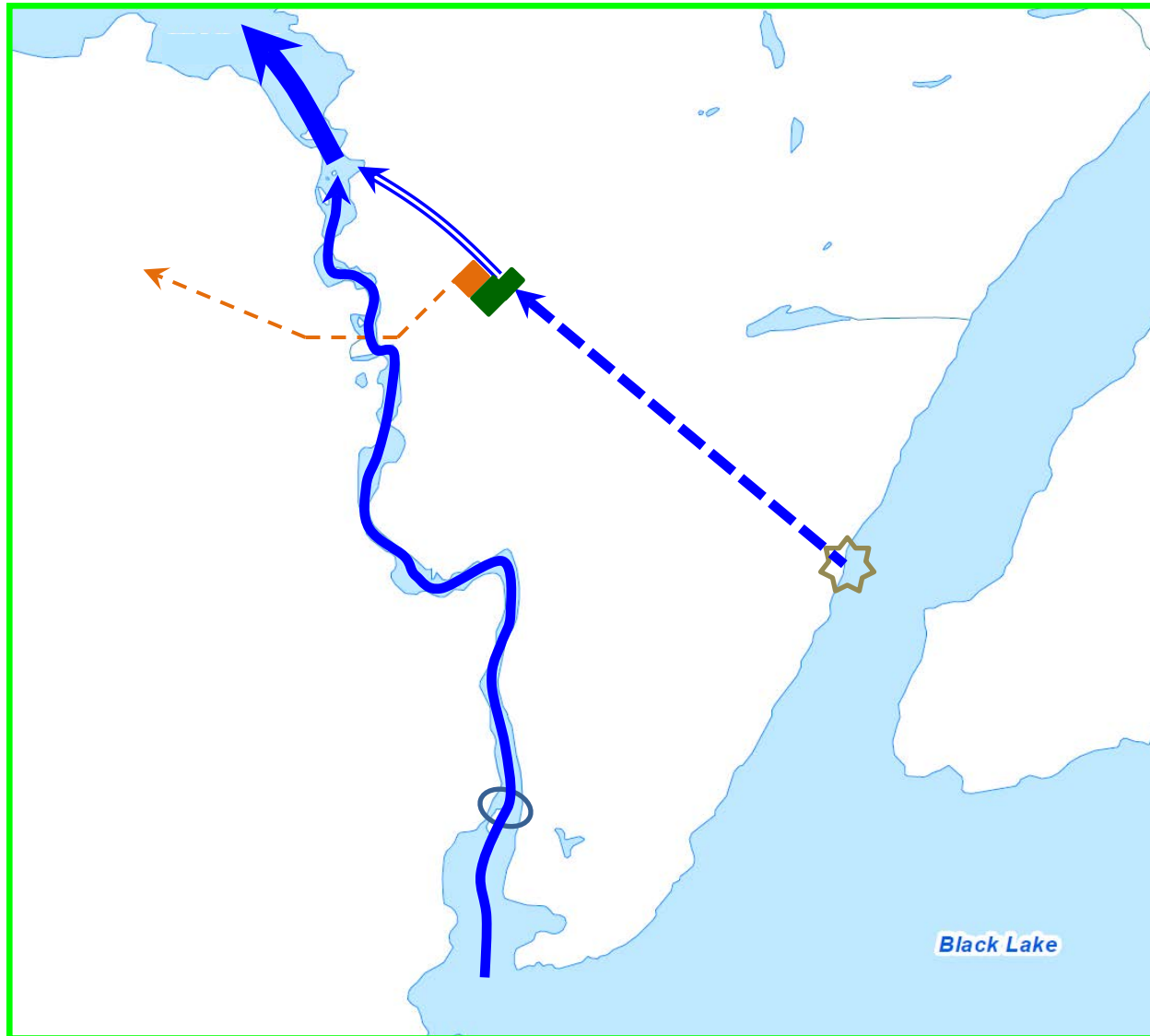
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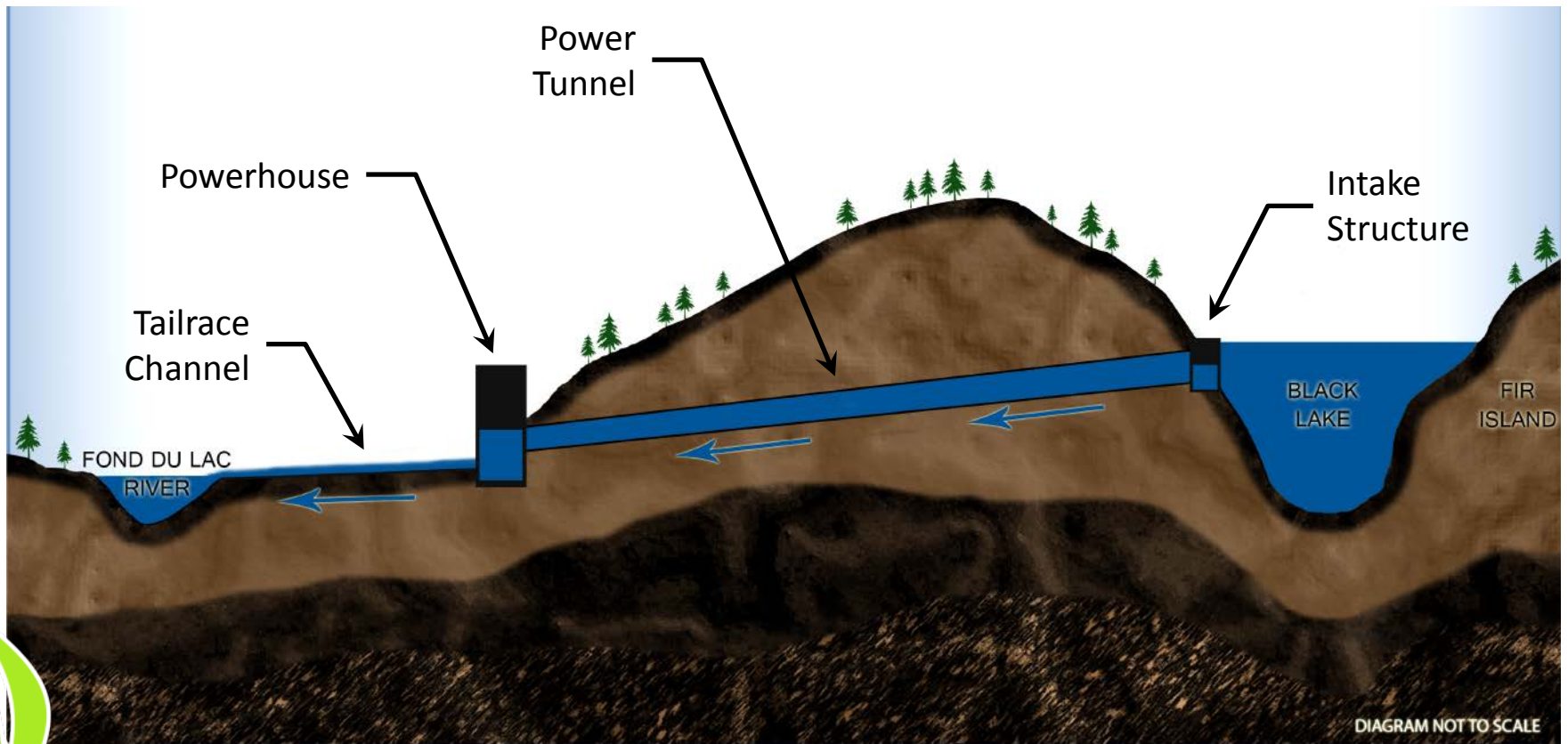
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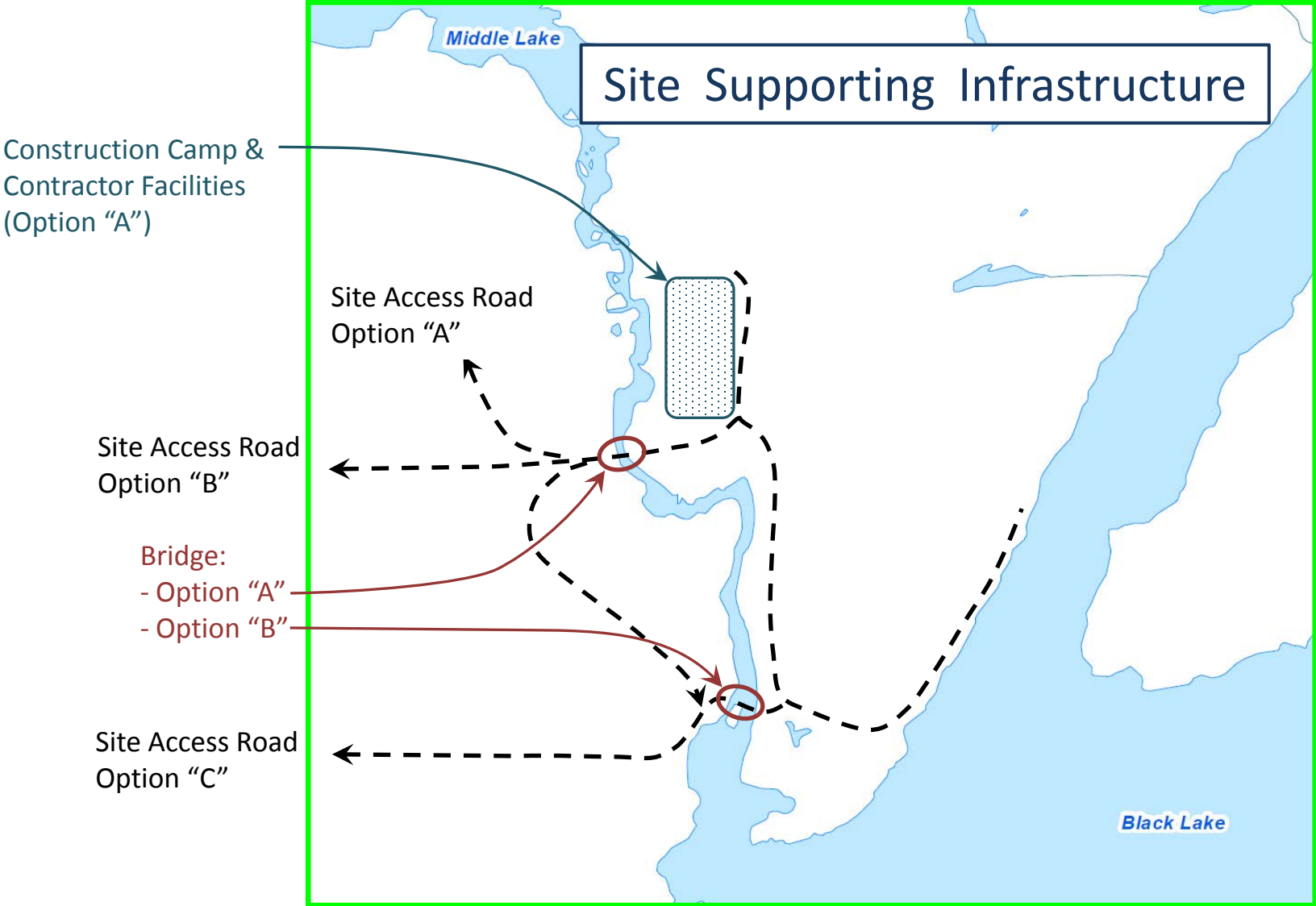
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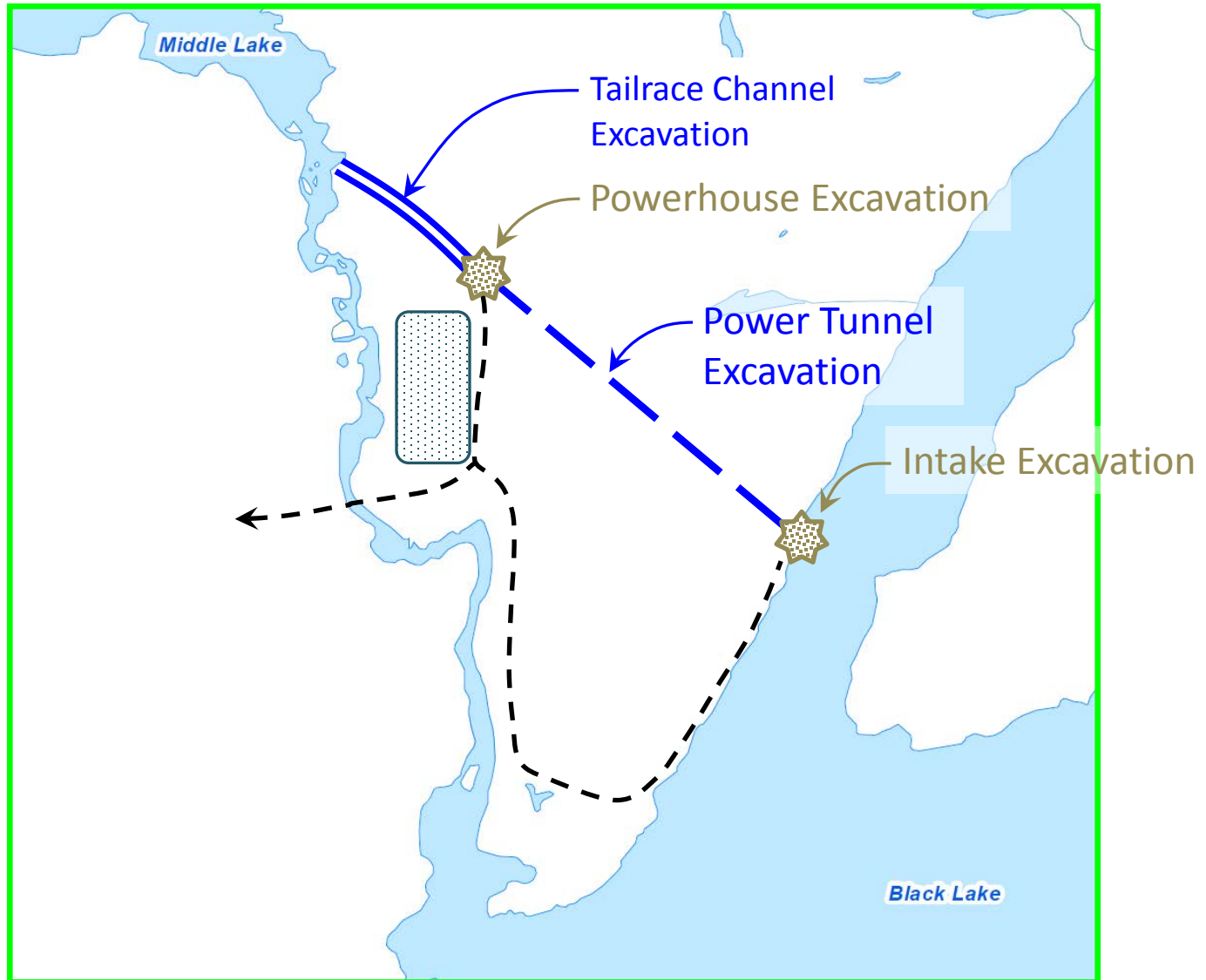
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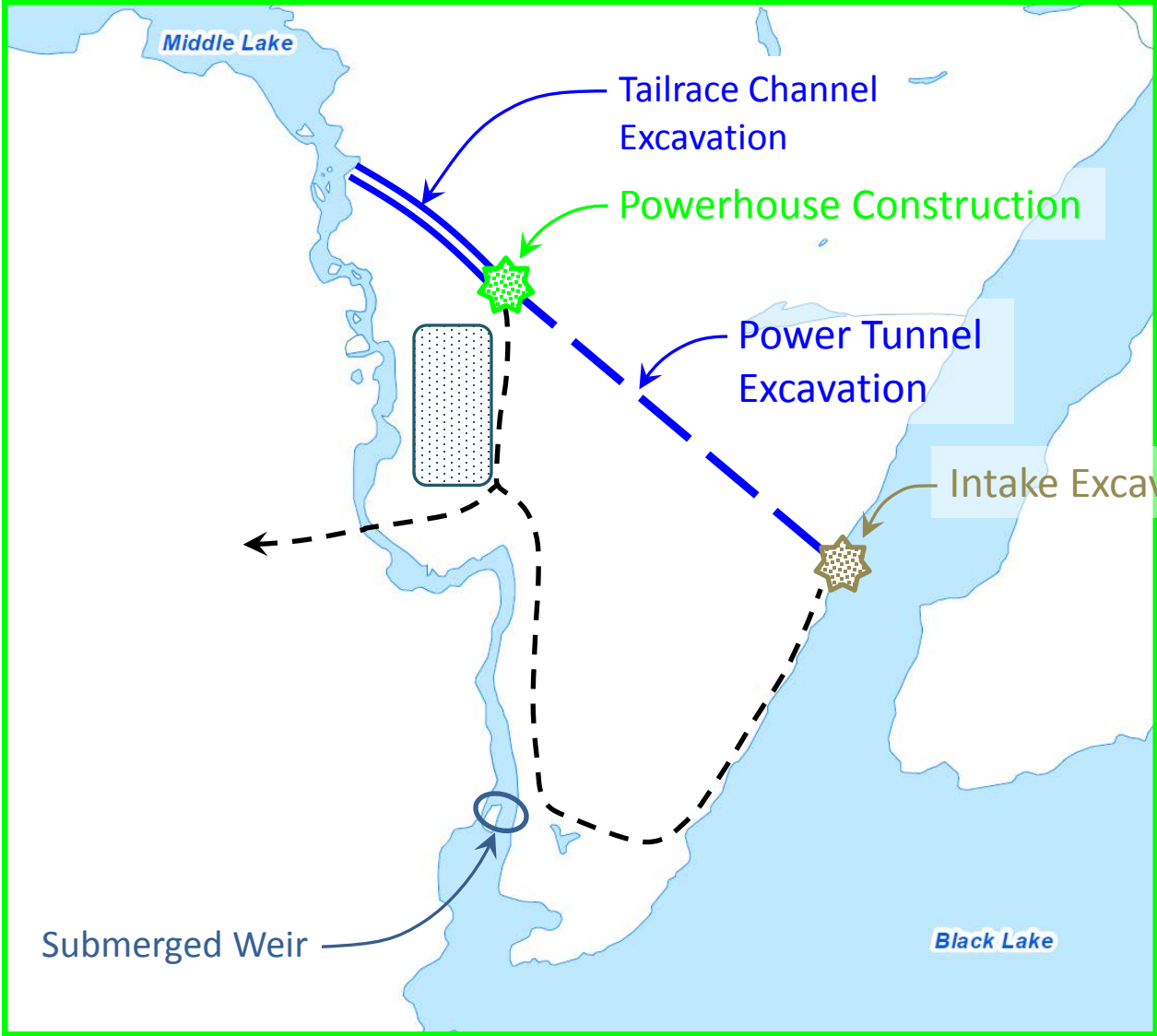
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# Grayling Island Average Spring Flow



# Grayling Island

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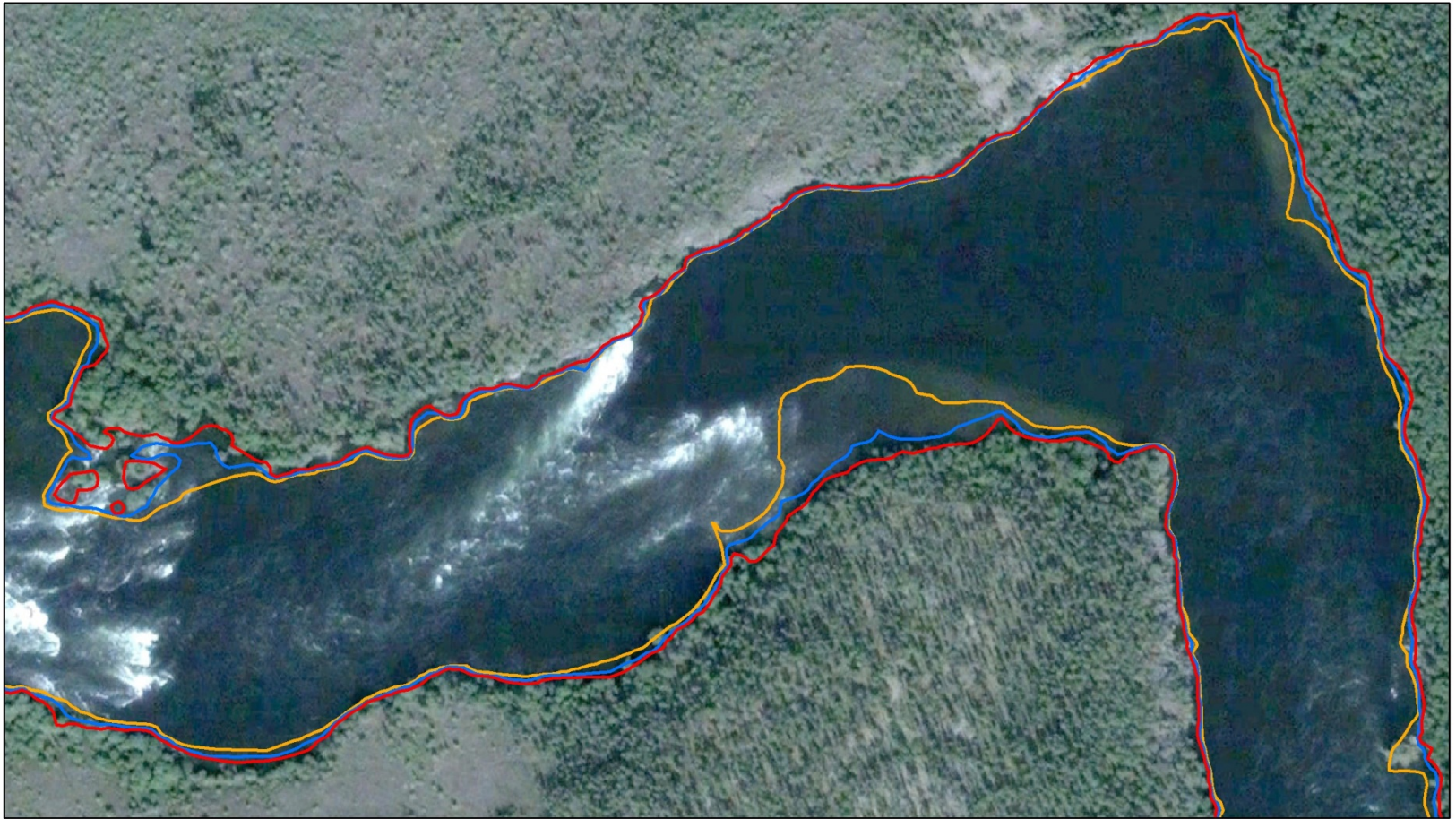
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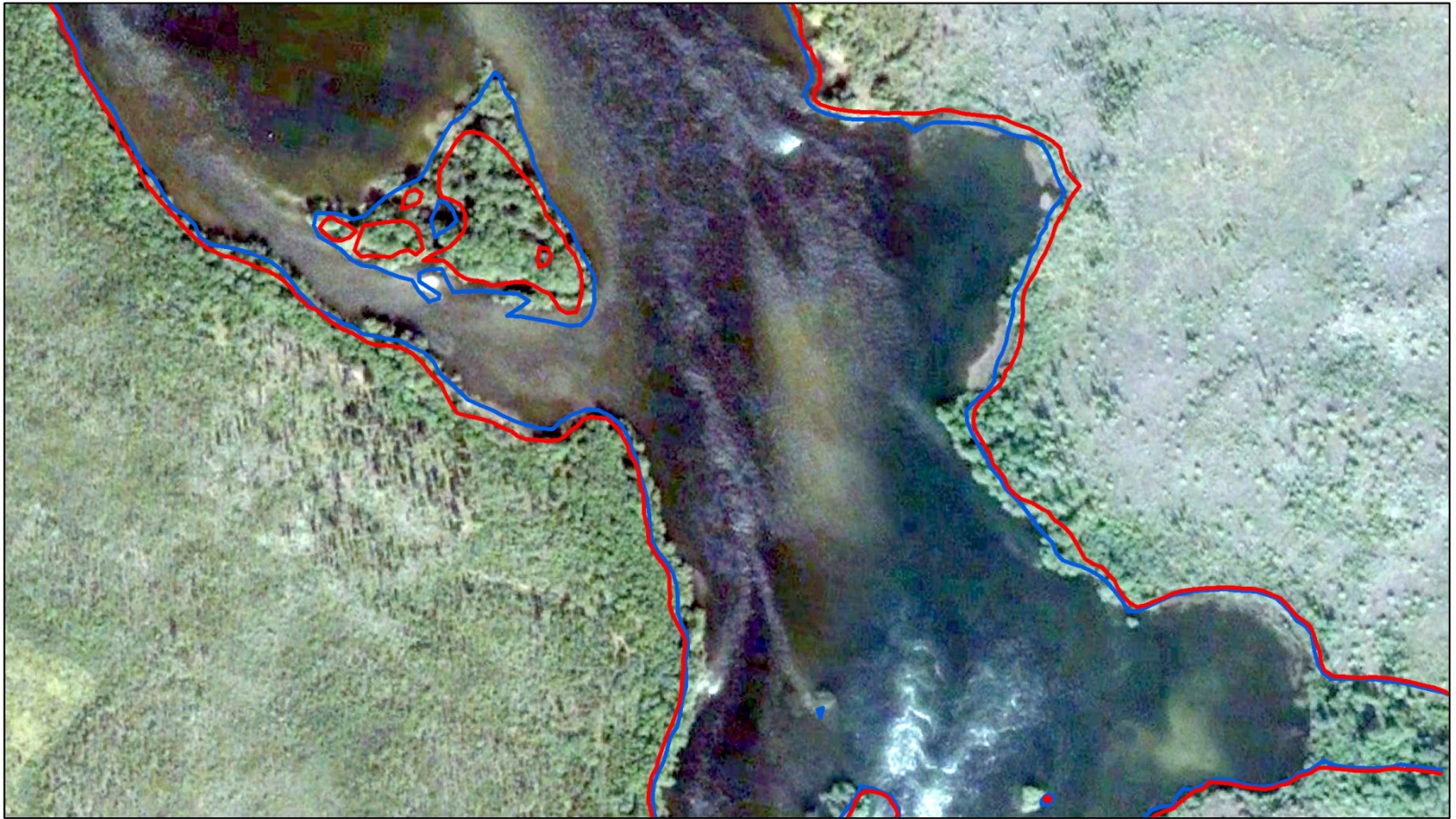
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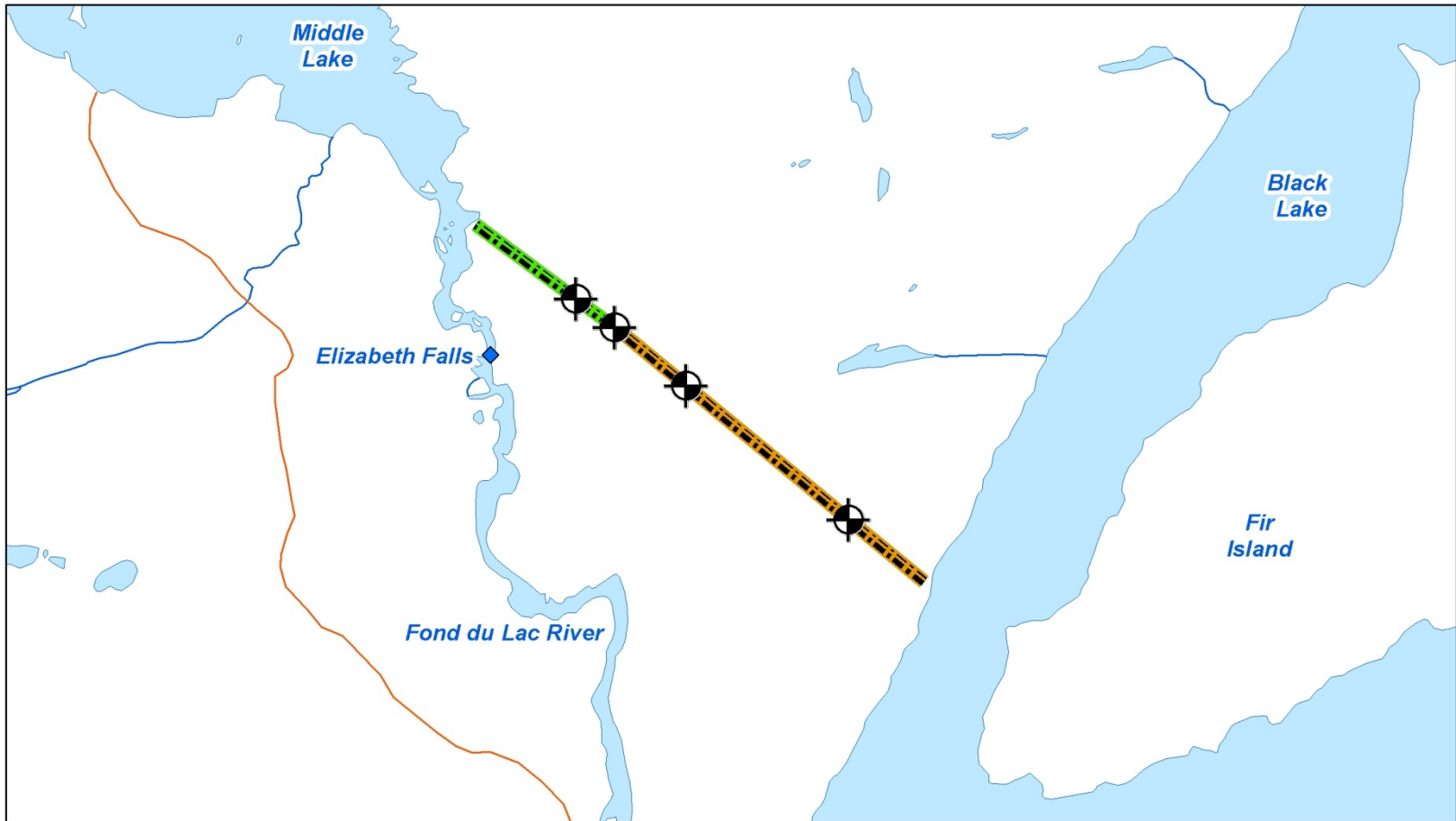


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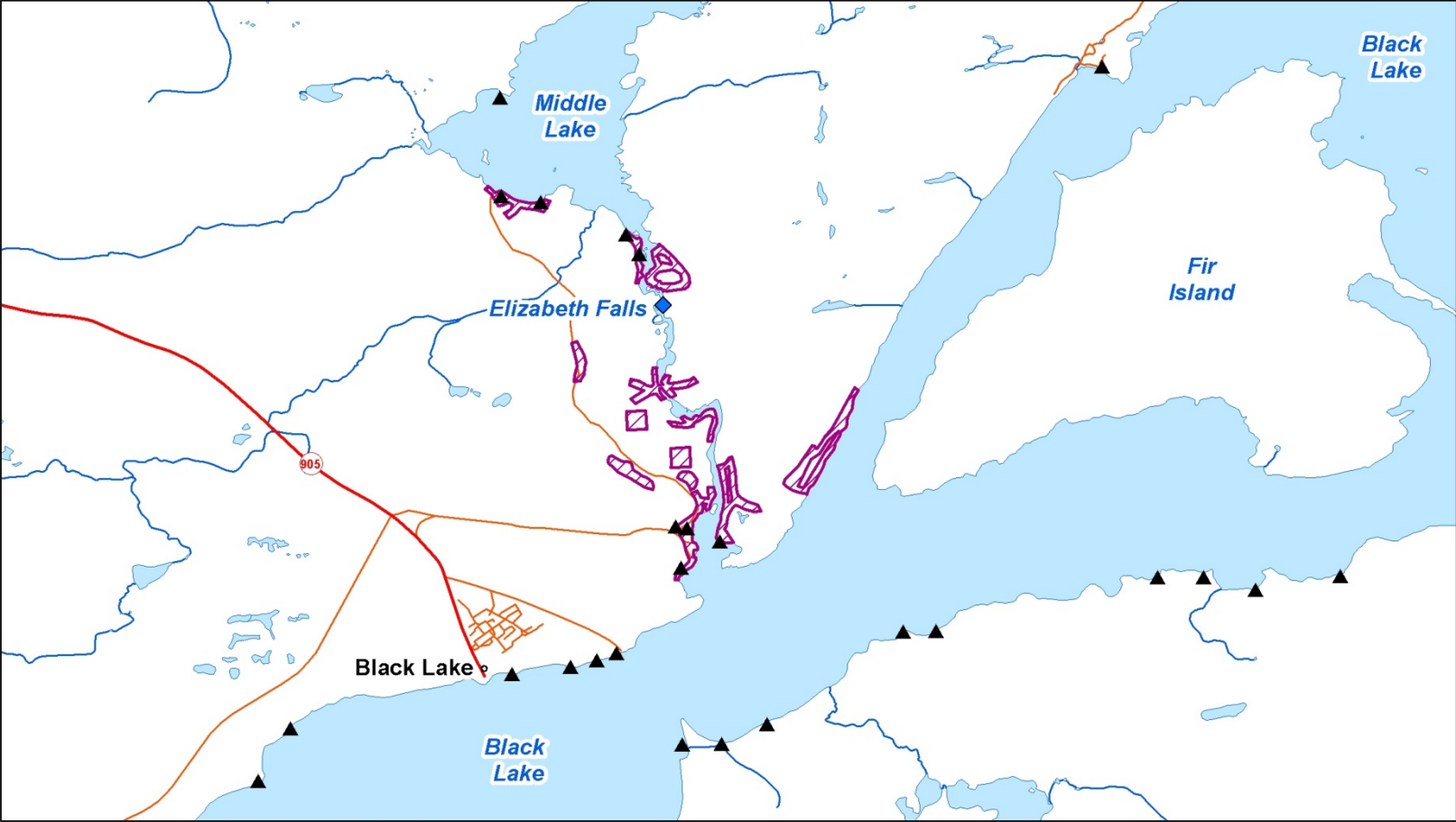
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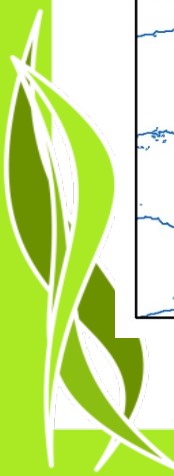
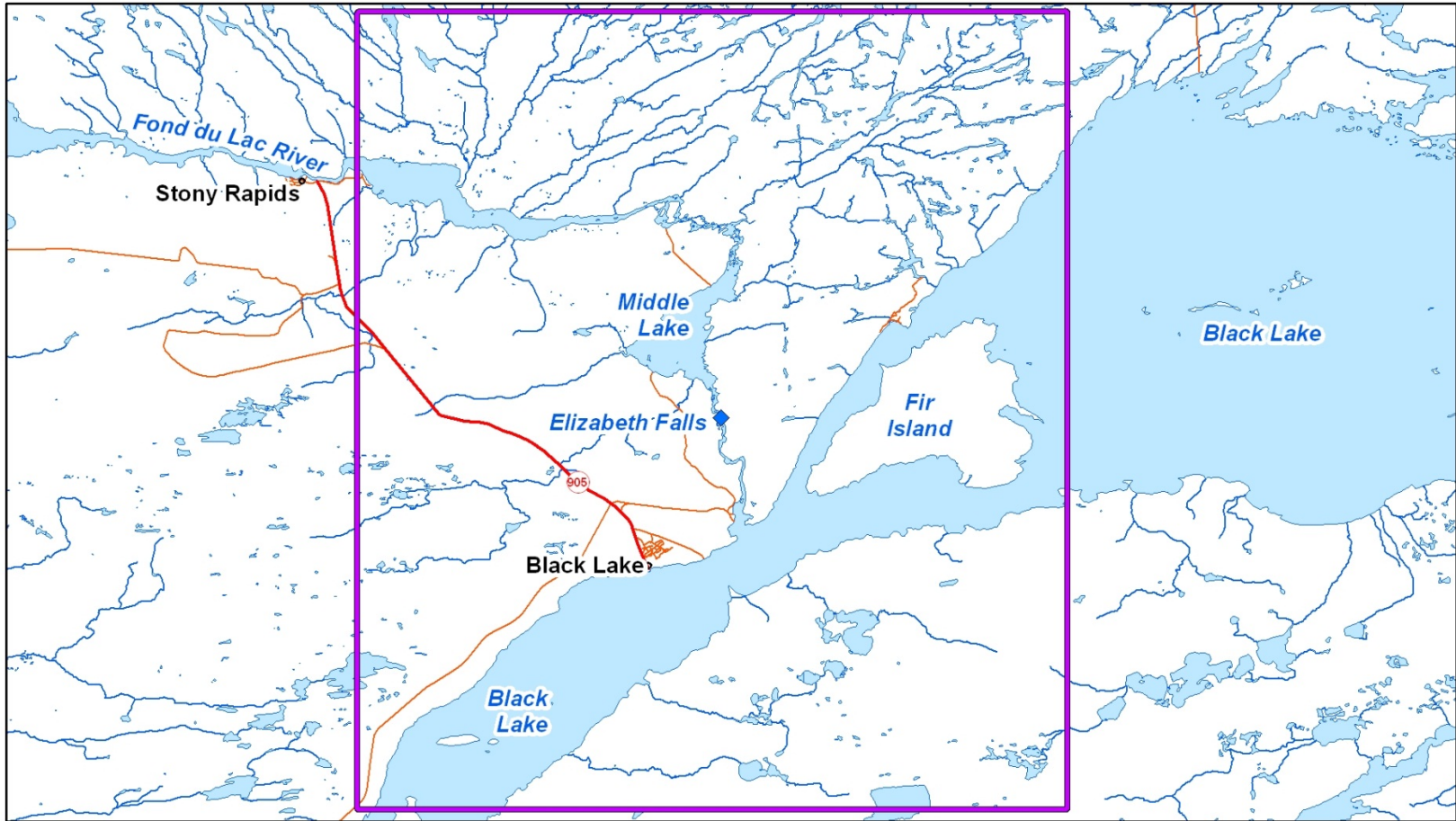
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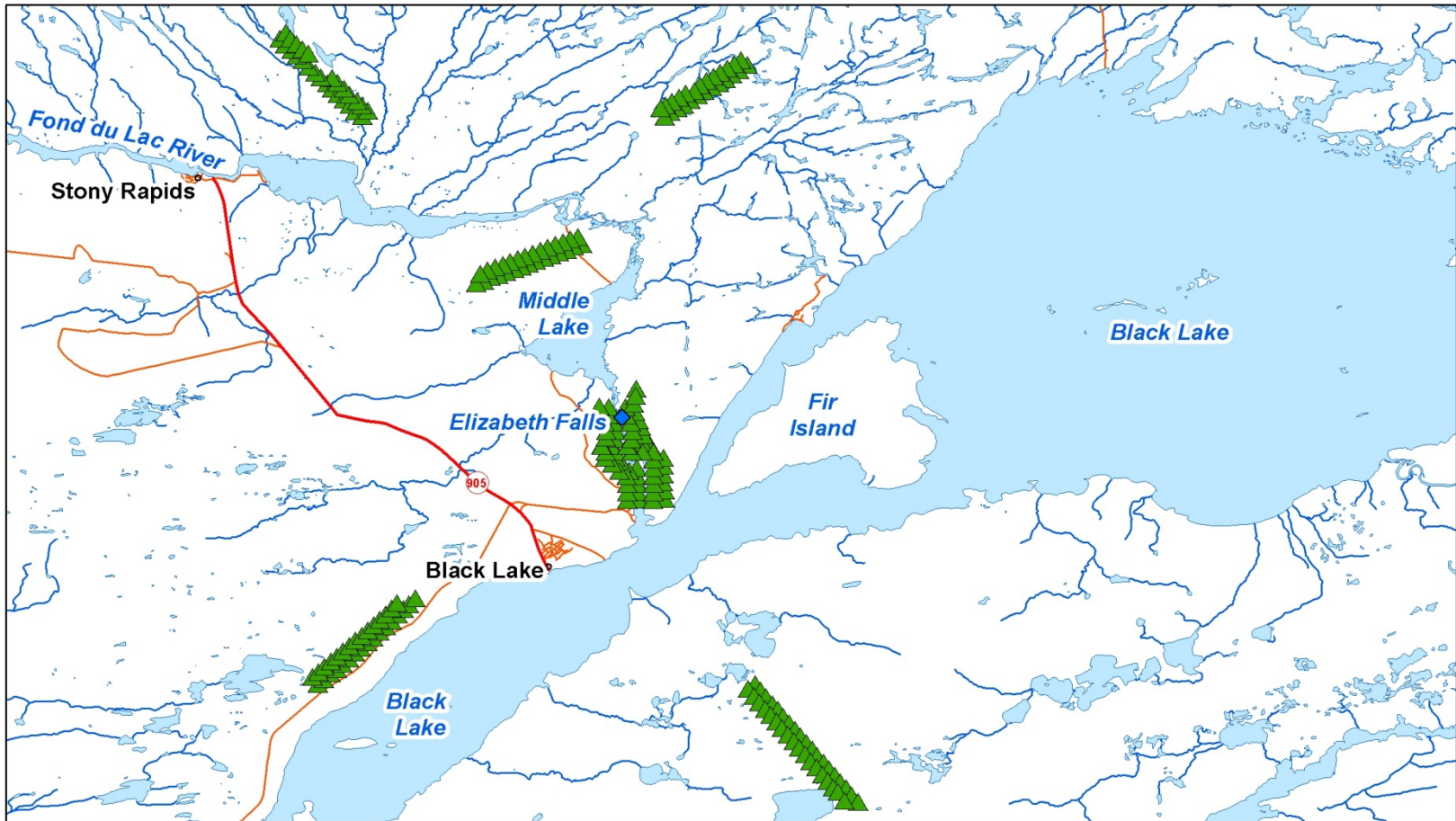
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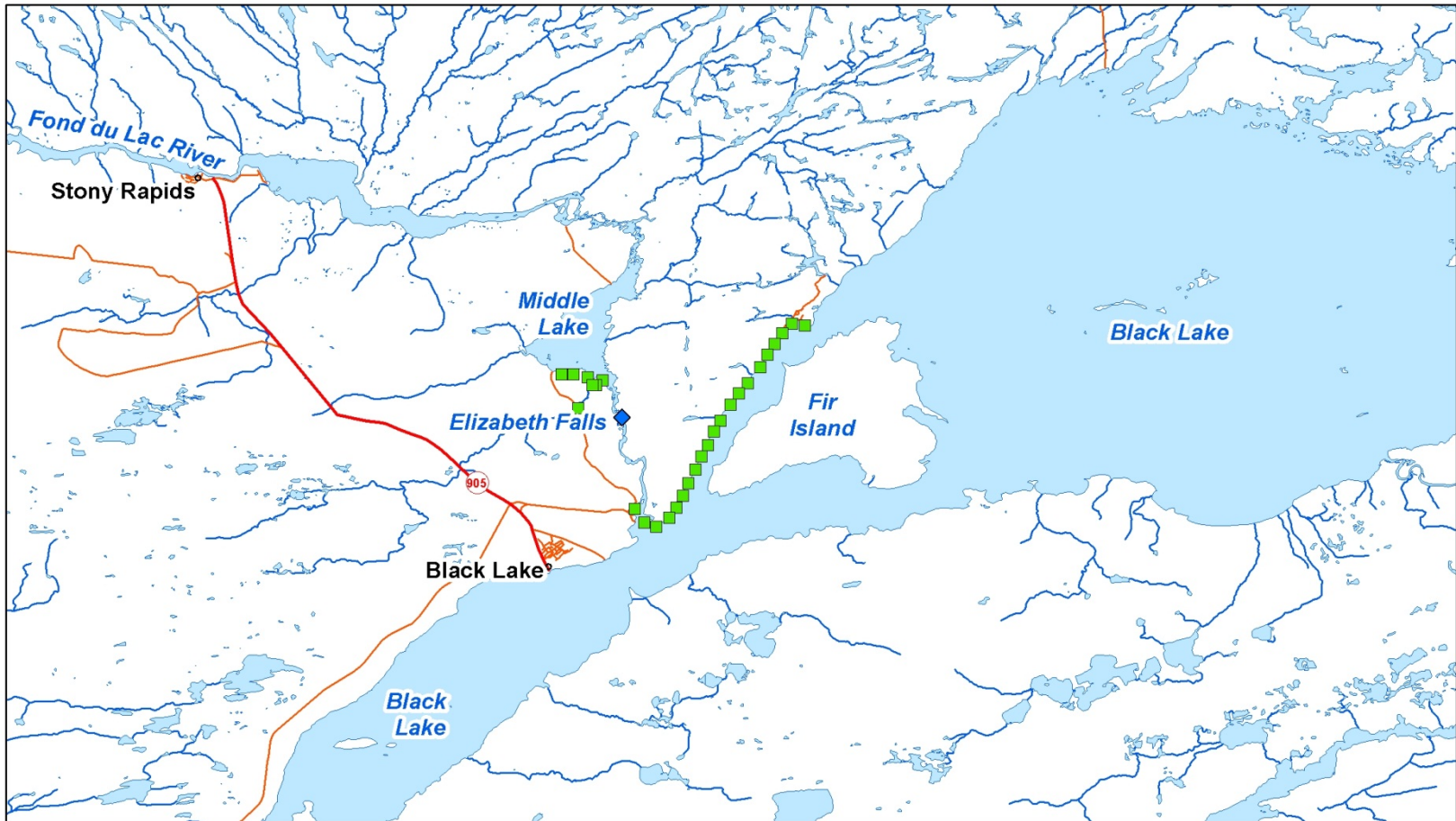
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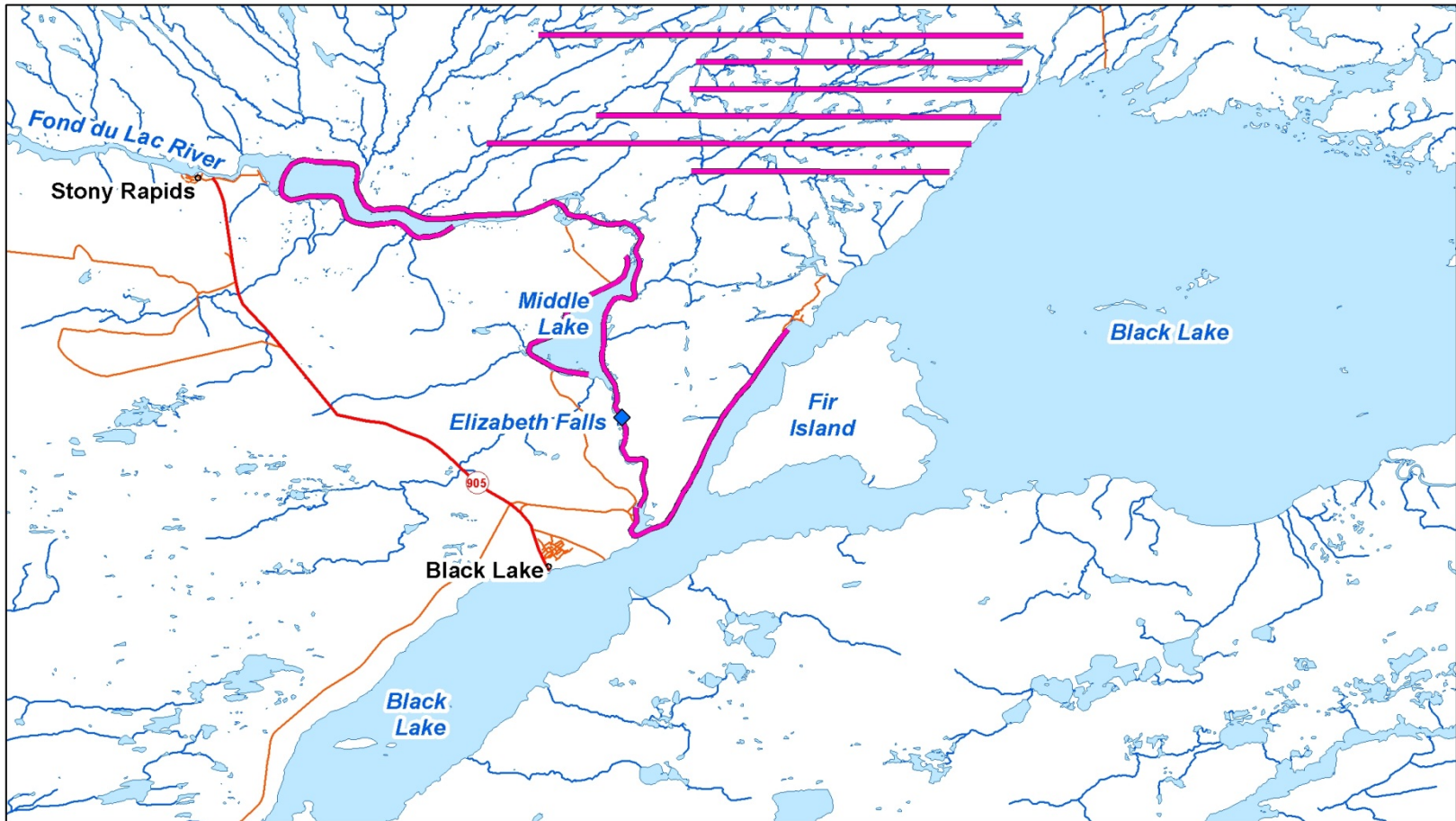
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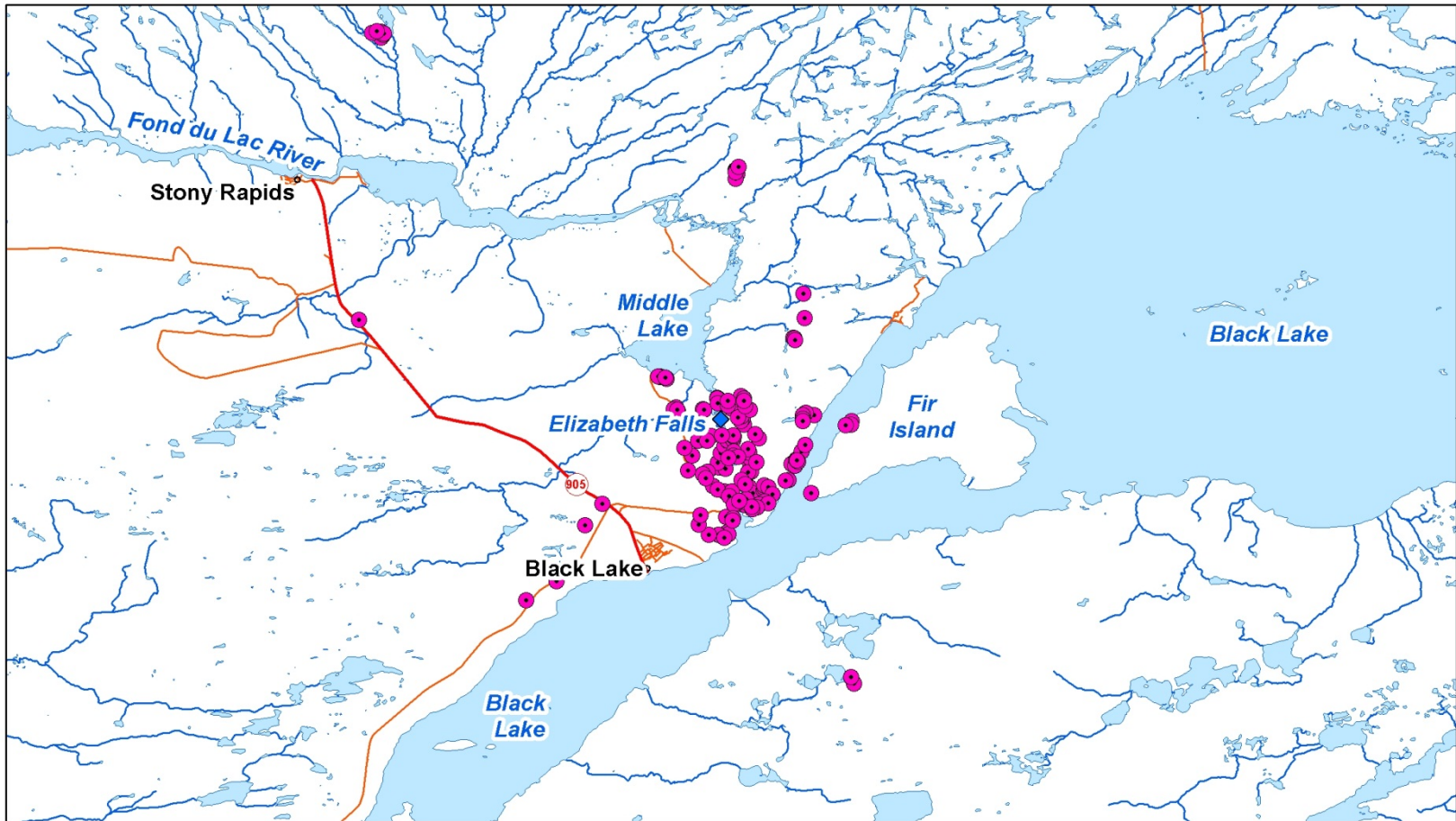
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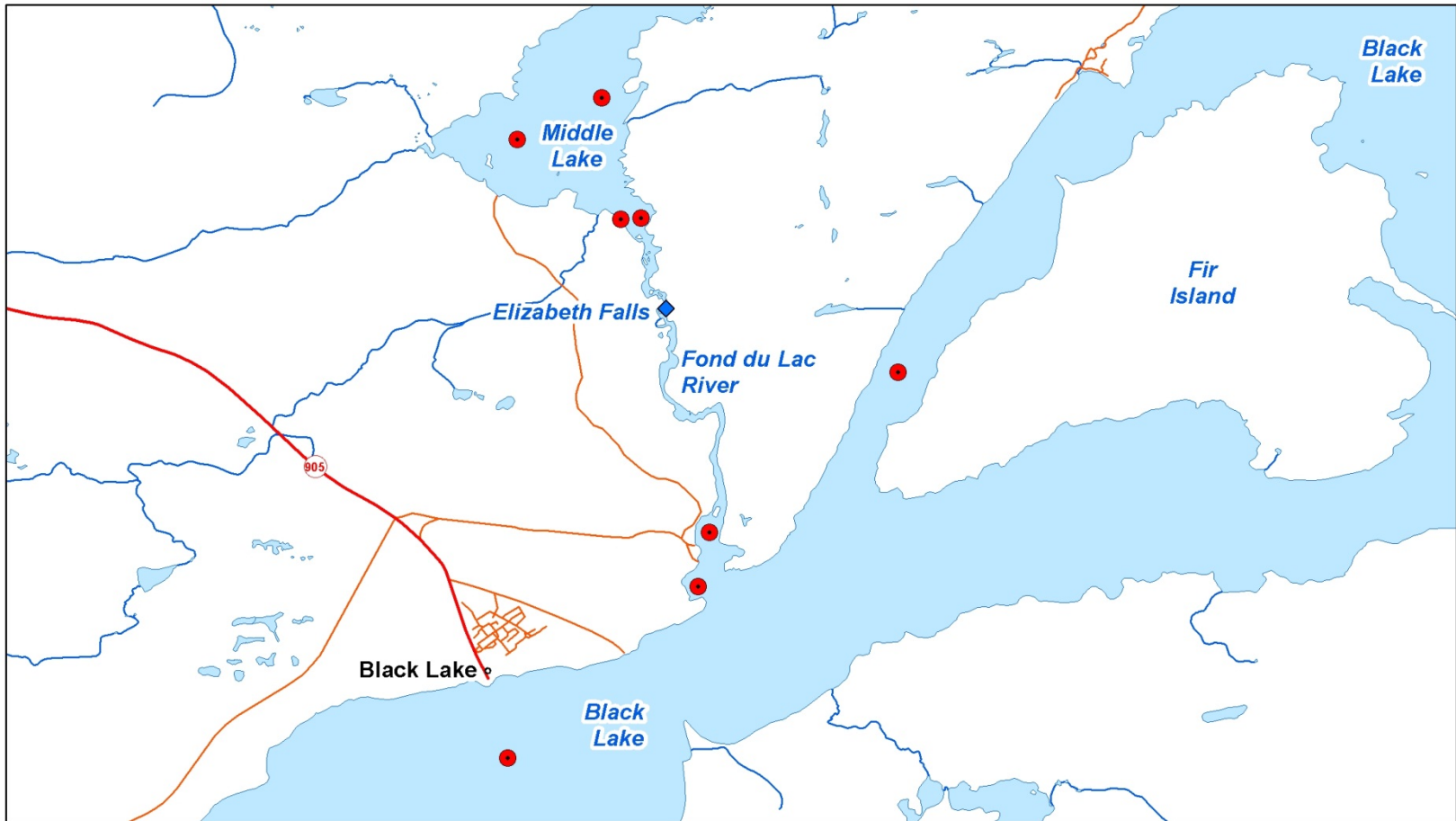
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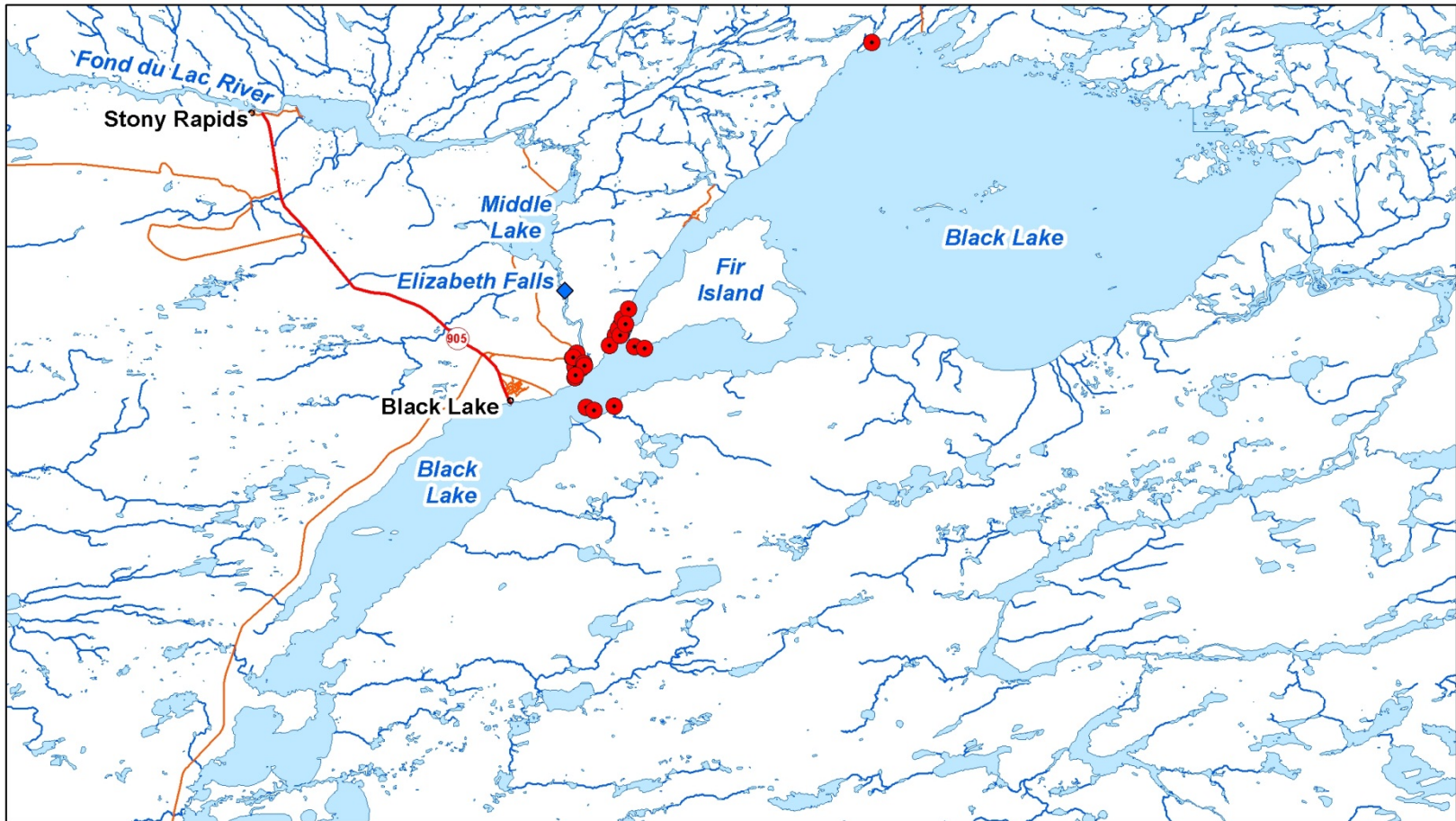
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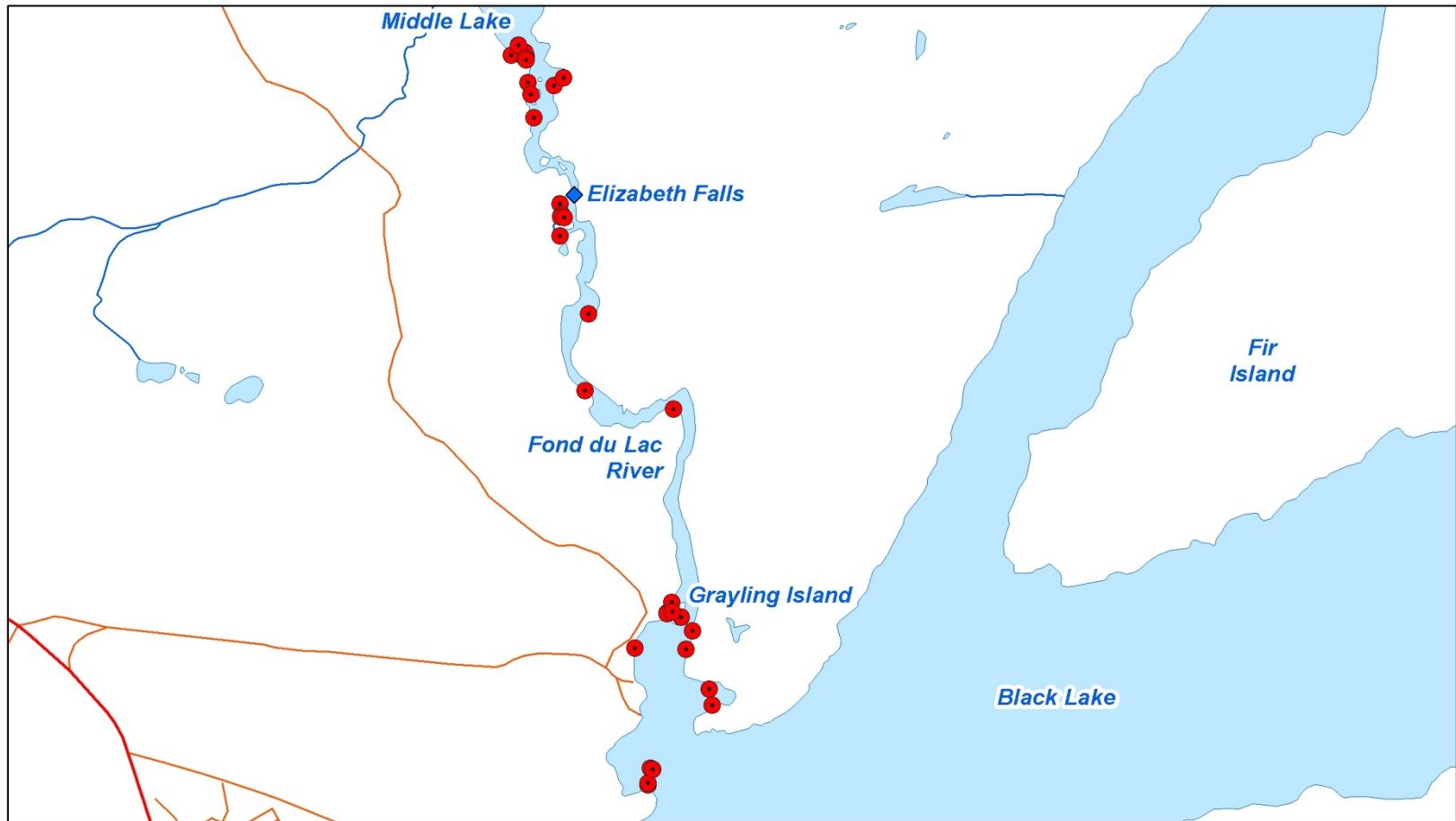
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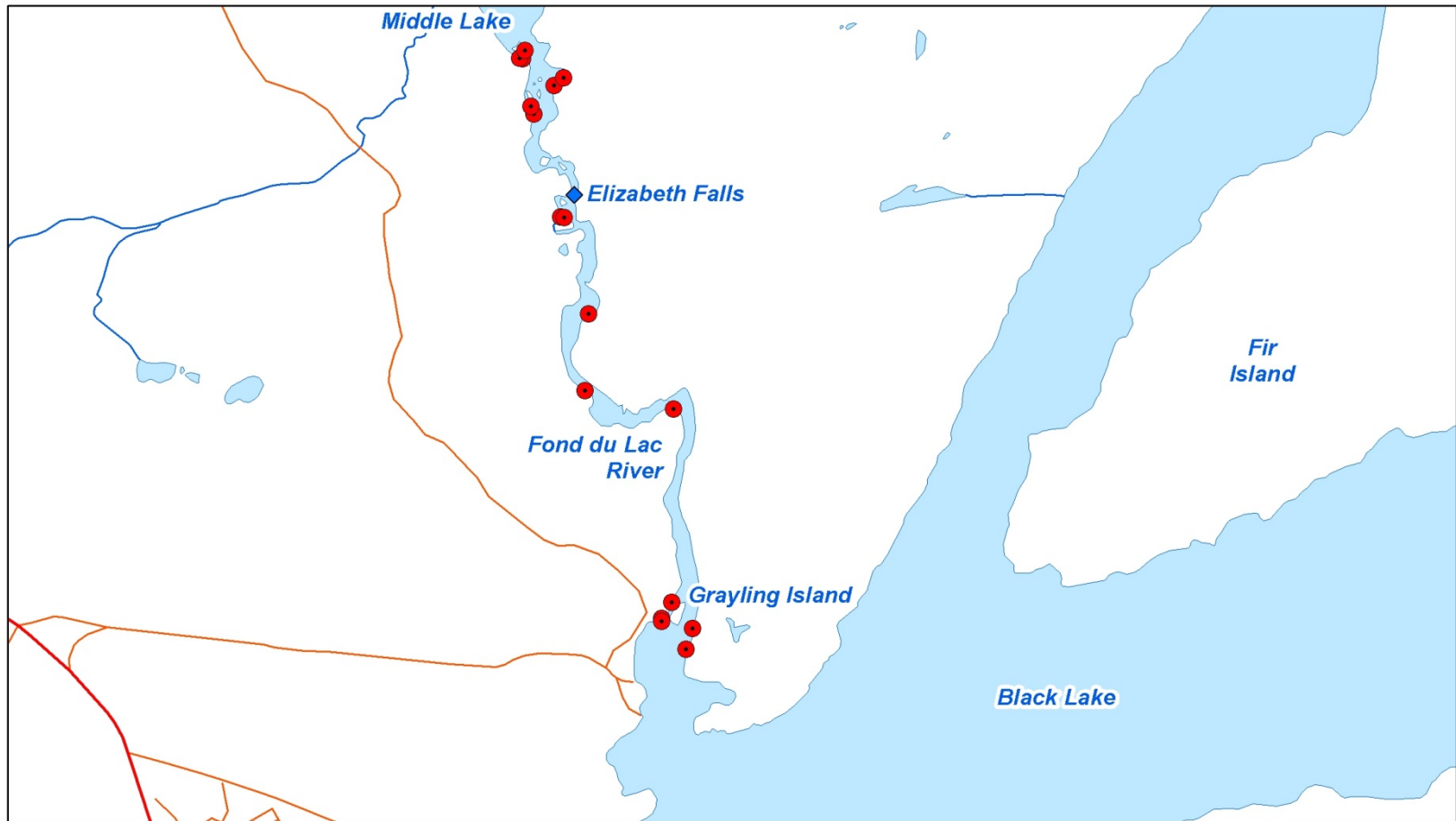
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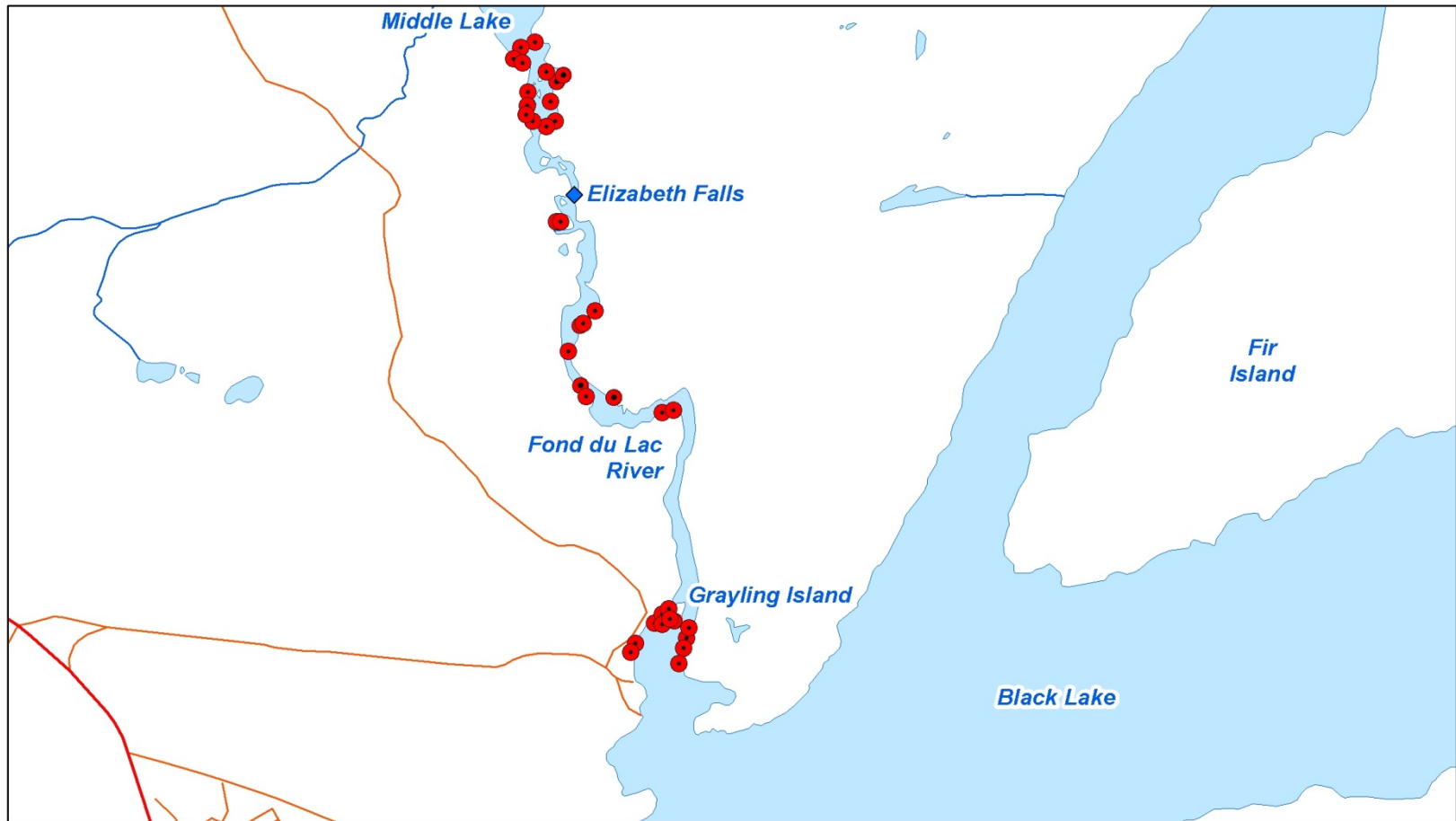
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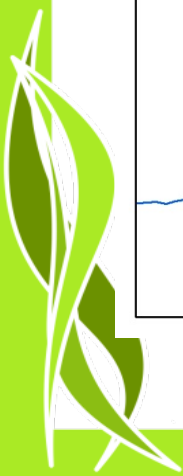
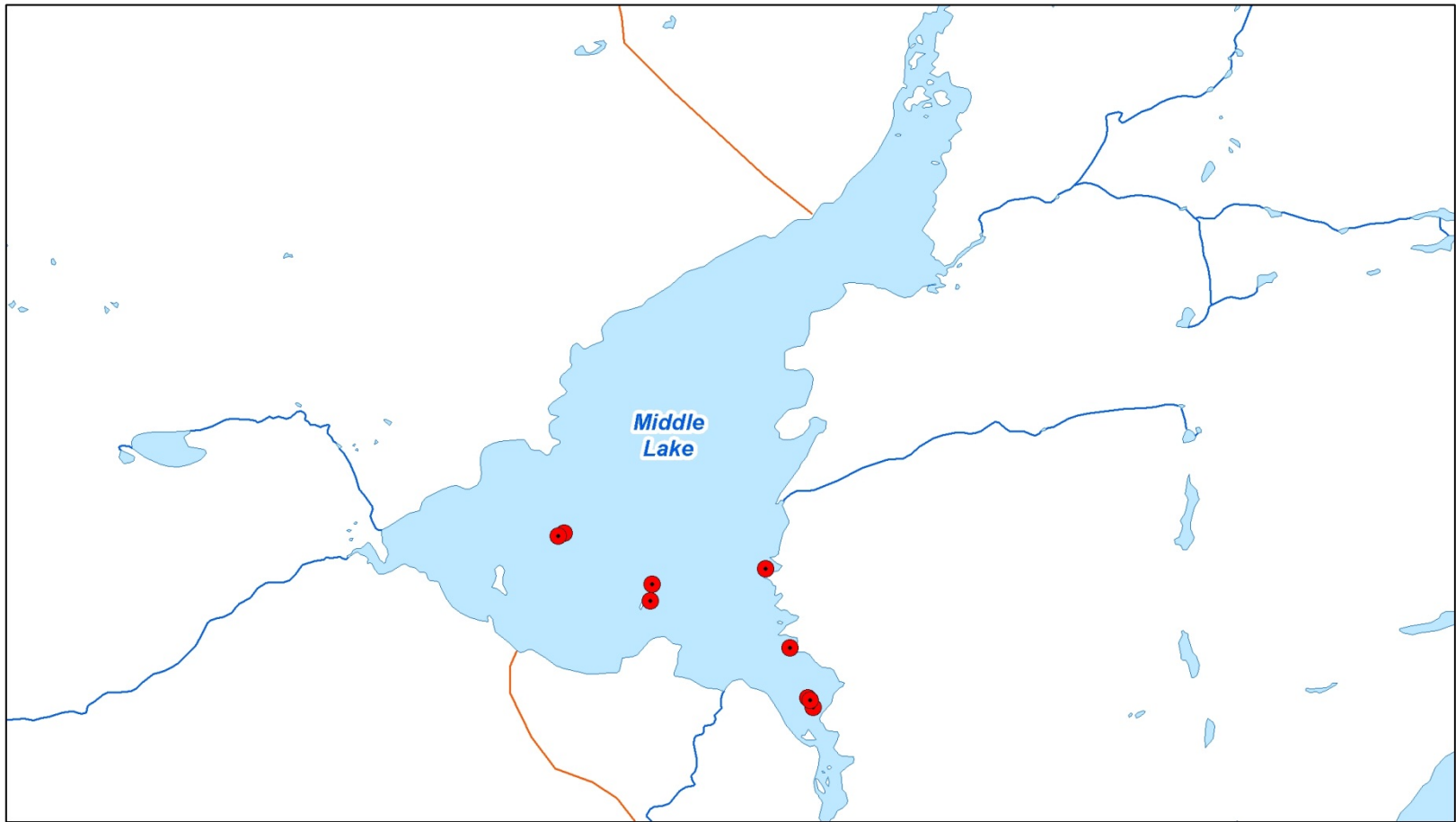
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# Next Steps

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# What does this mean for the Community?

- Economic activity ... accommodations, materials, transportation, storage, etc
- Opportunities for employment
  - Construction (3 – 4 years) ... peak workforce estimated at 150
- Business and contracting opportunities
- Minimal impact to the environment
- Negligible impact to Fond du Lac River flows past your community



# Closing

- Thank you for coming
- Please ask questions ... Let us know what you think
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- Follow – up Meetings:
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## **Fond du Lac Community Meeting**

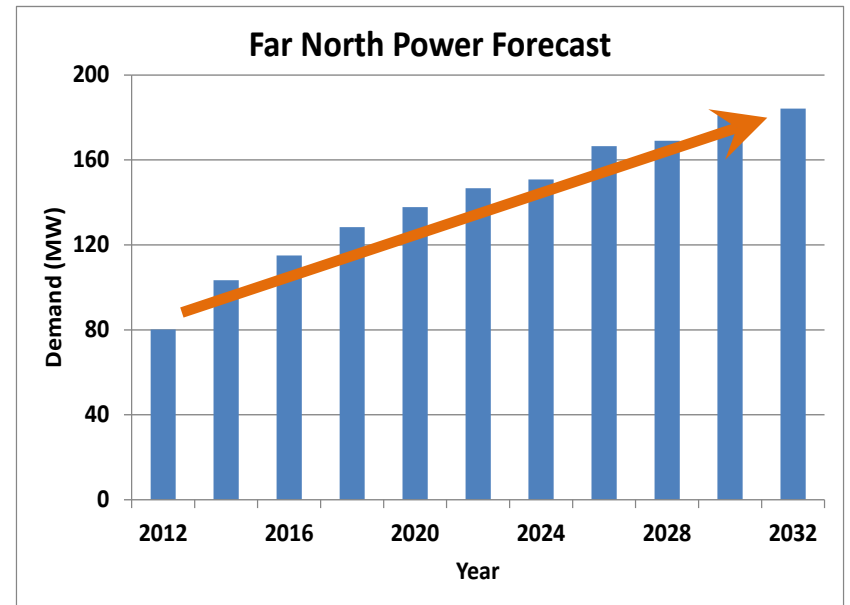
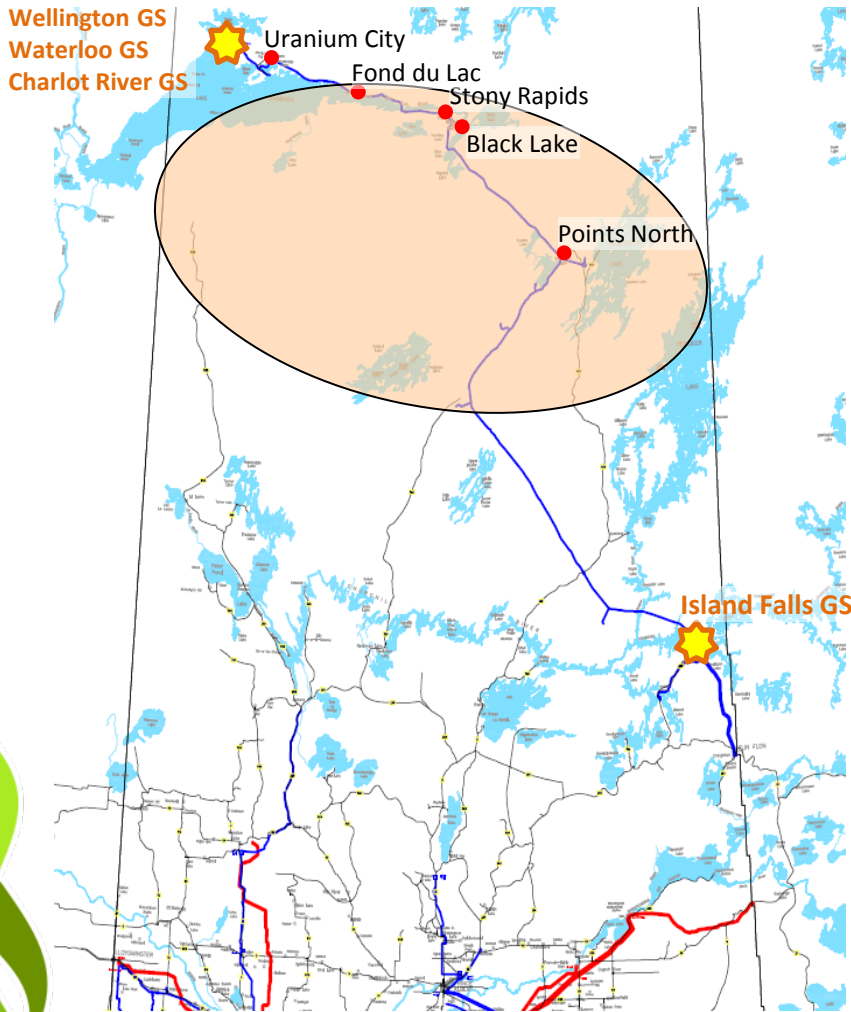


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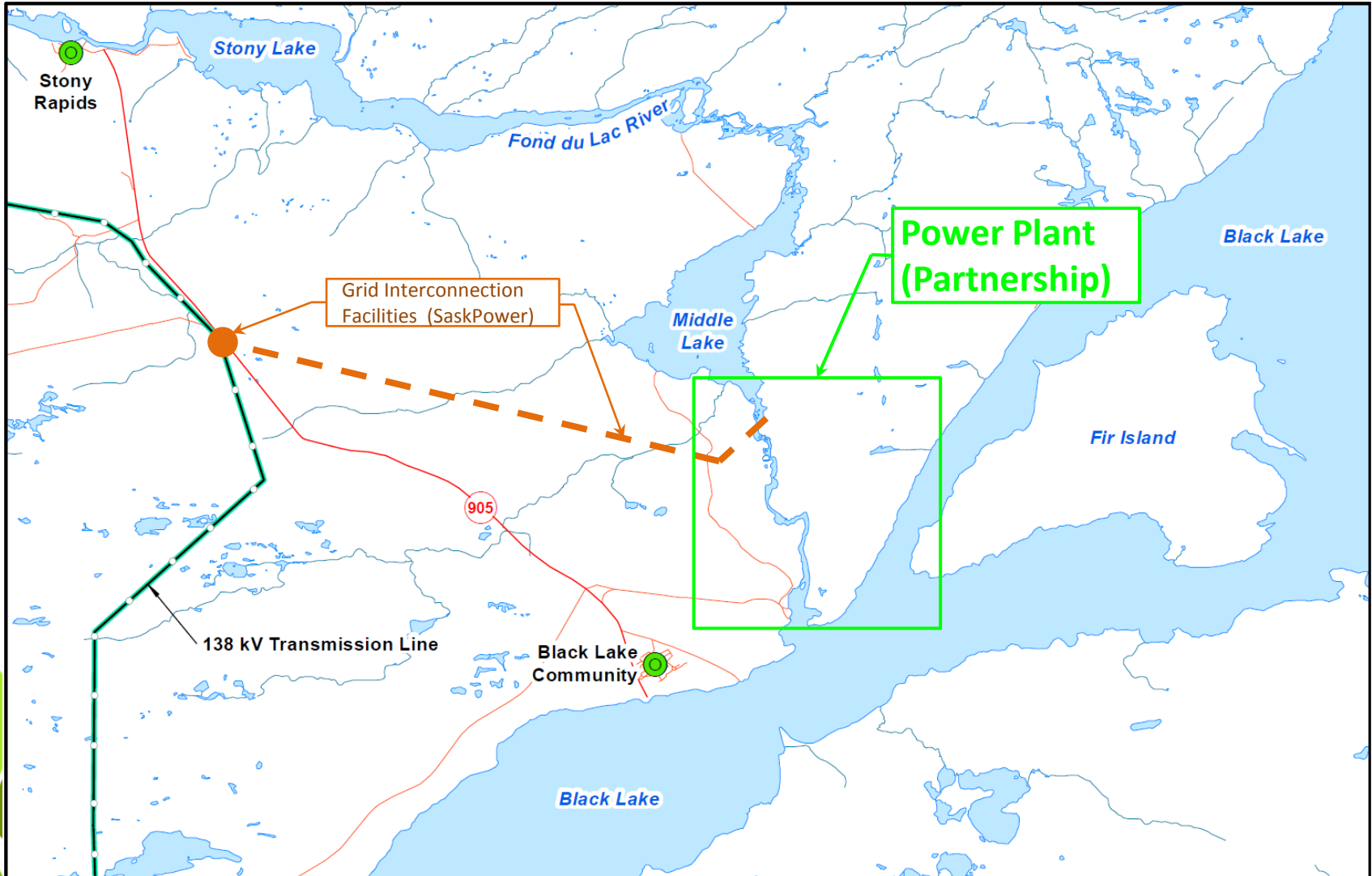
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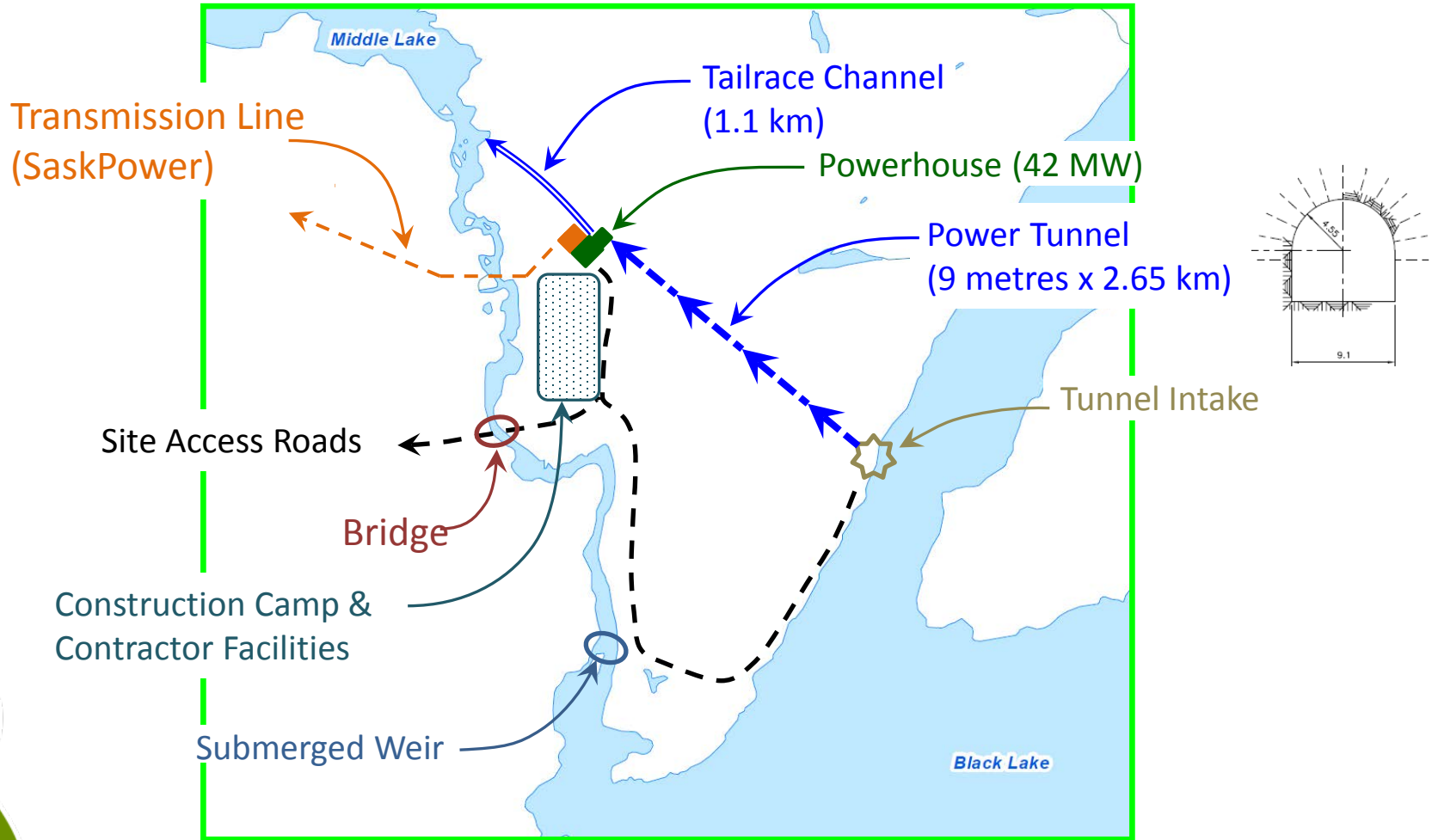
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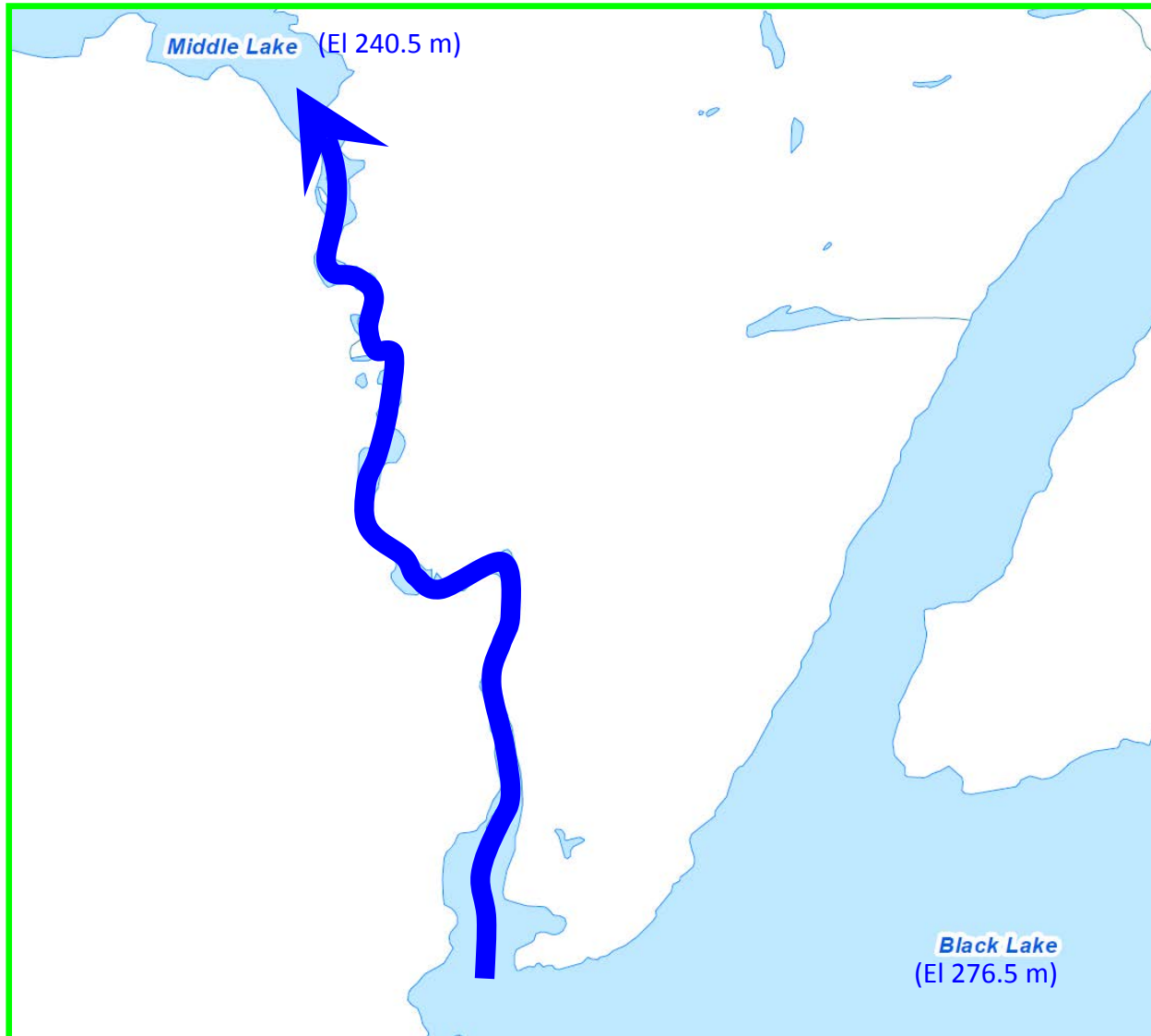


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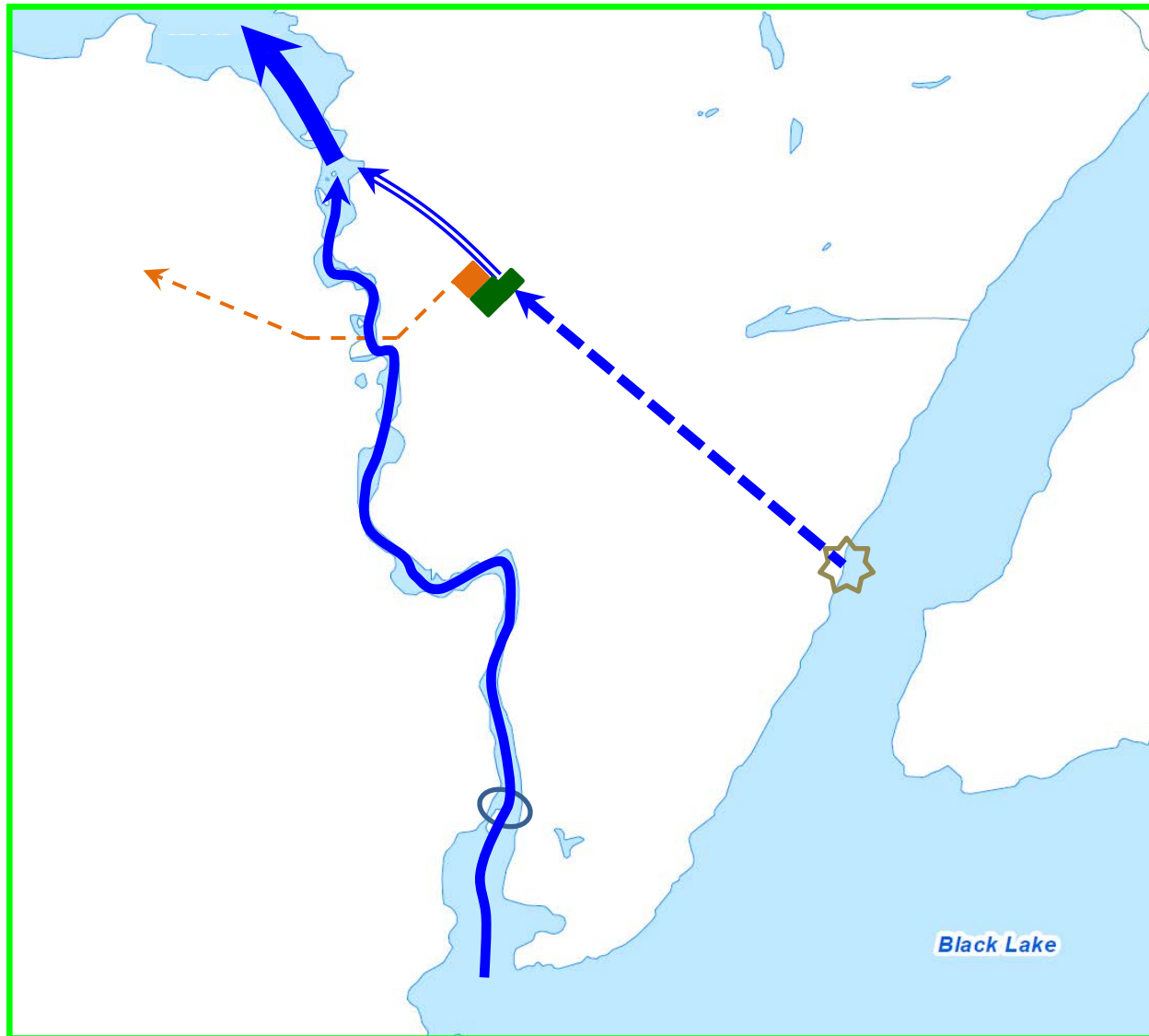
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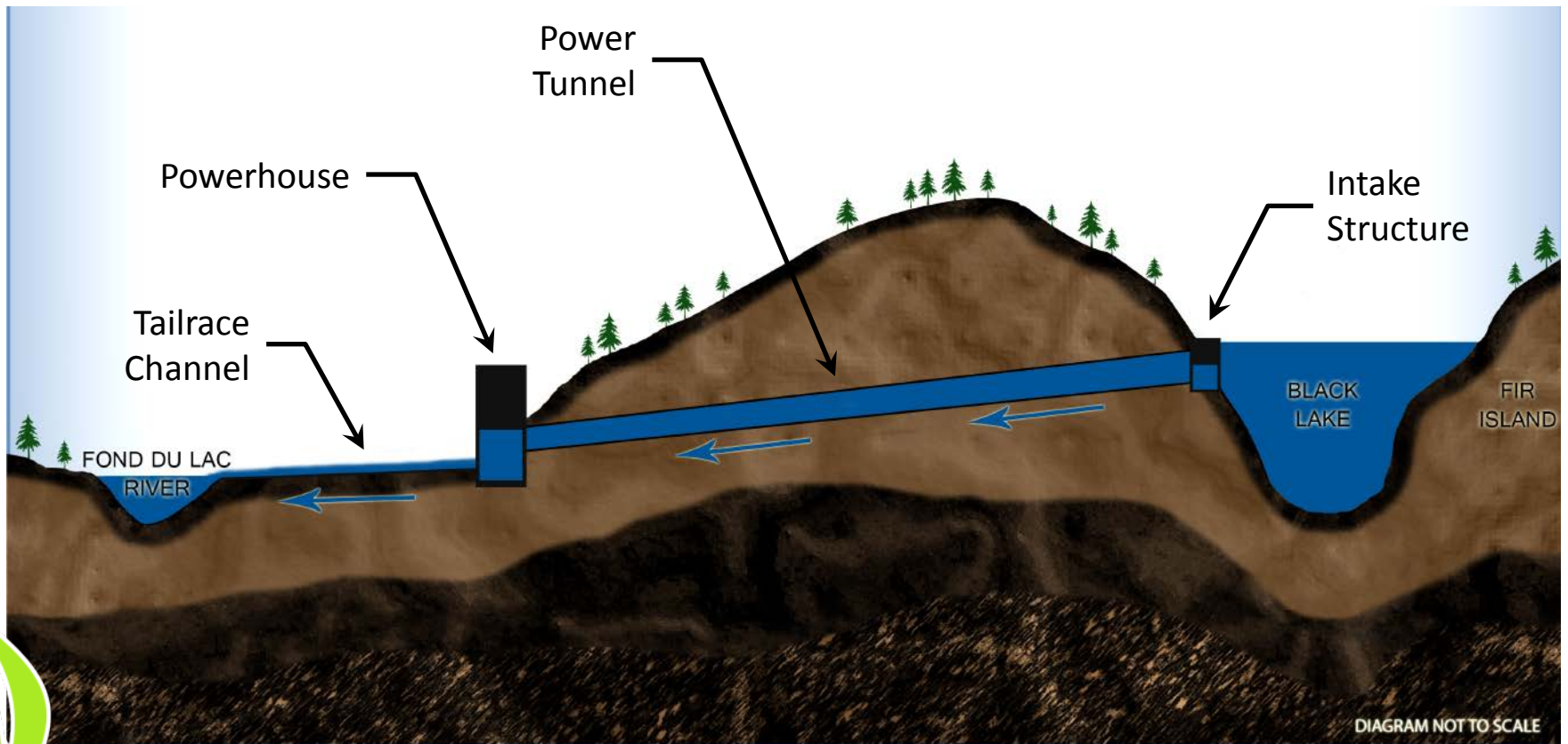
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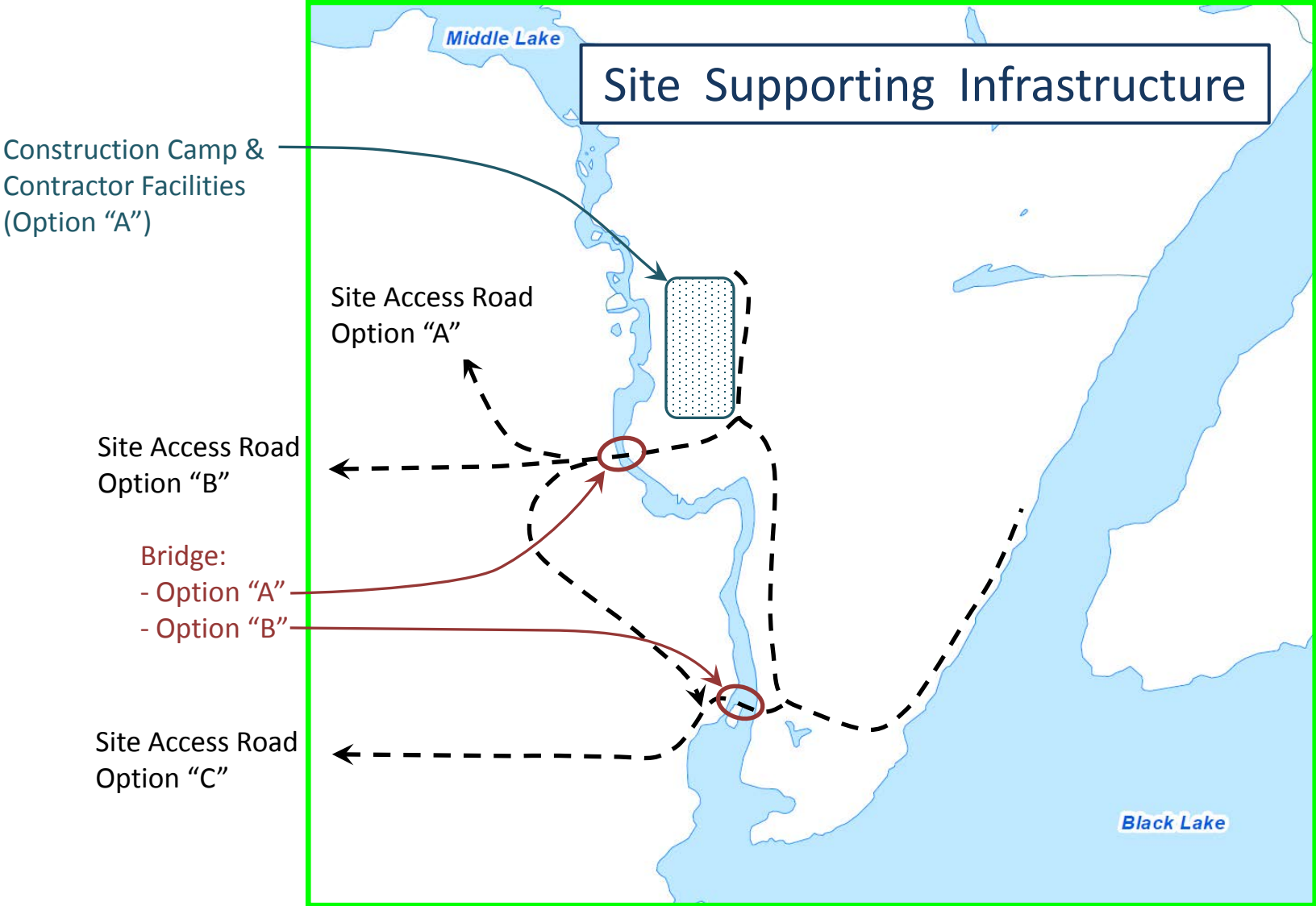
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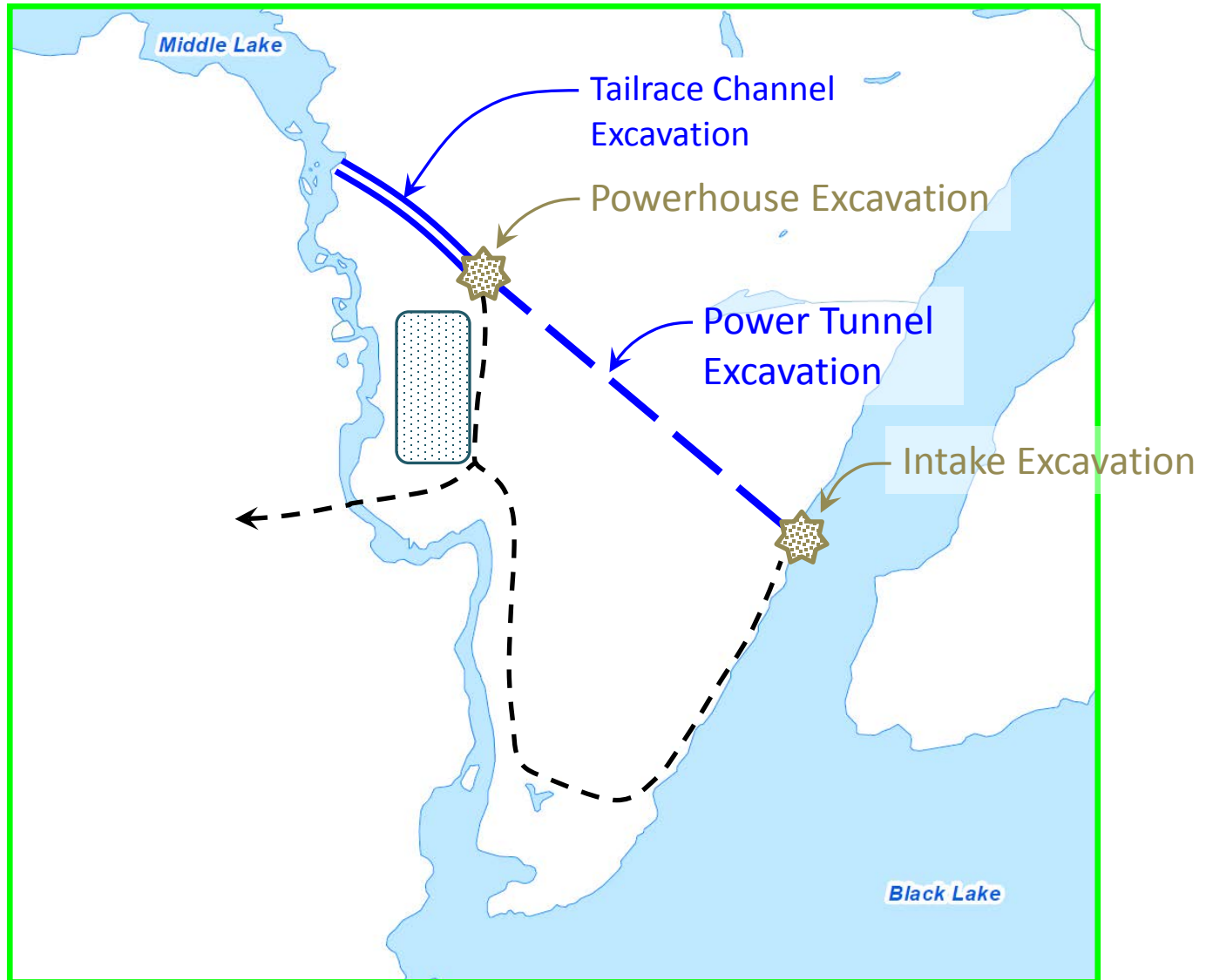
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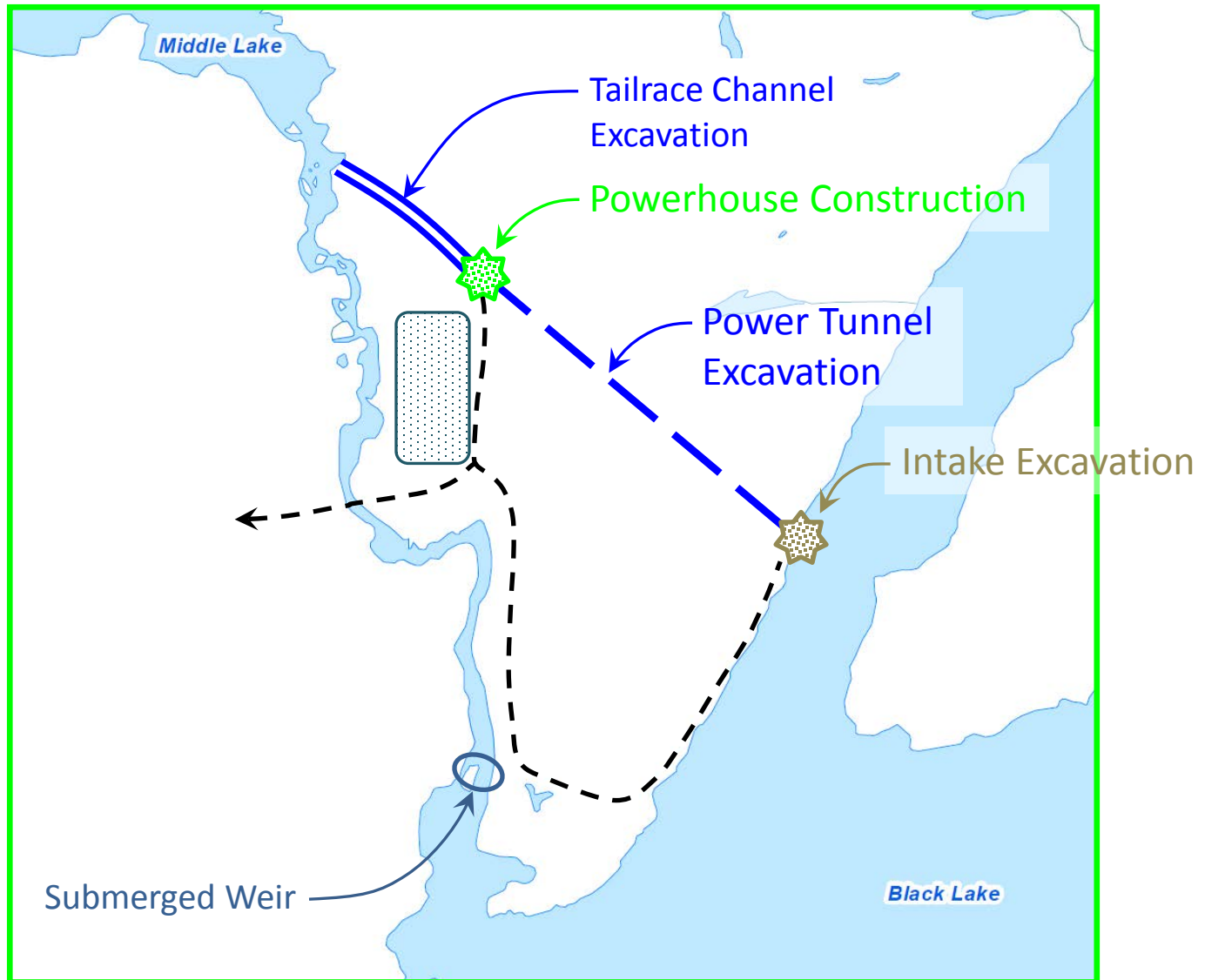
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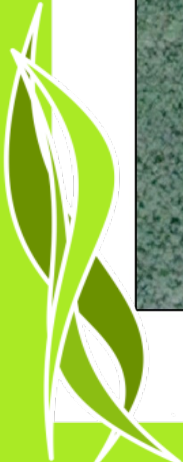


# Grayling Island Average Spring Flow



# Grayling Island

## Low Spring Flow



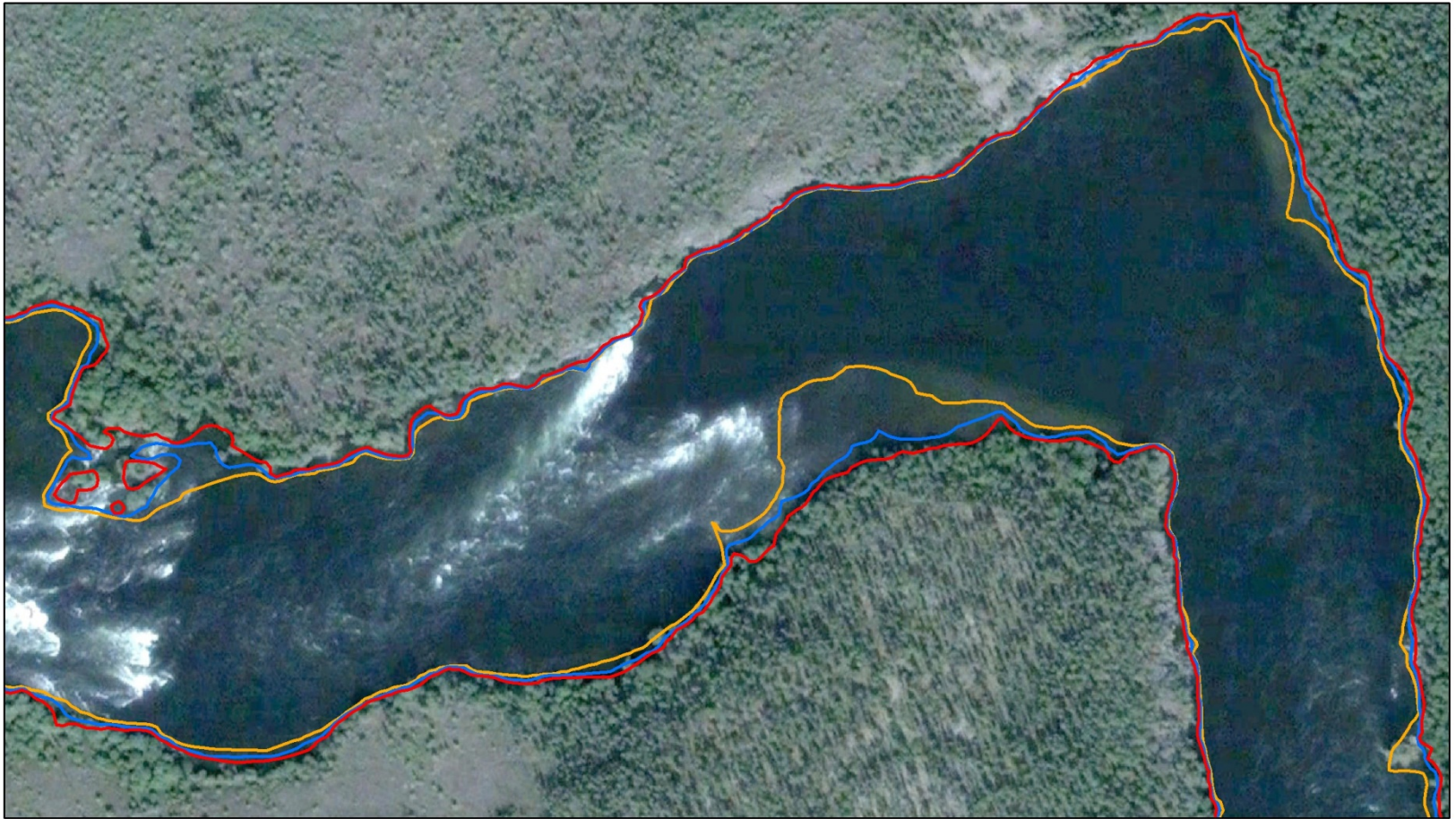
# Grayling Island

## Average Spring Flow with Project



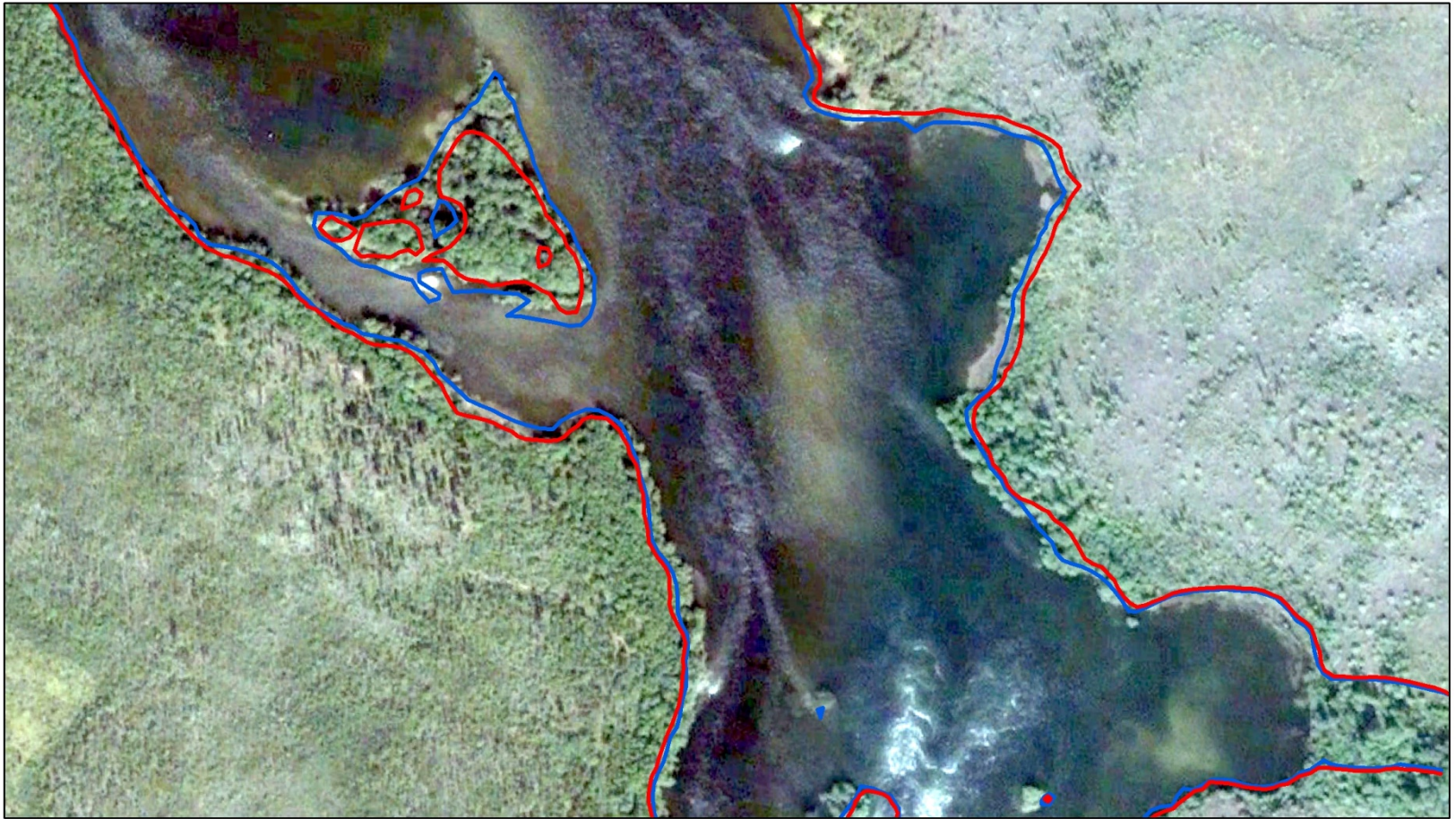
# Upstream of 1<sup>st</sup> Grayling Hole

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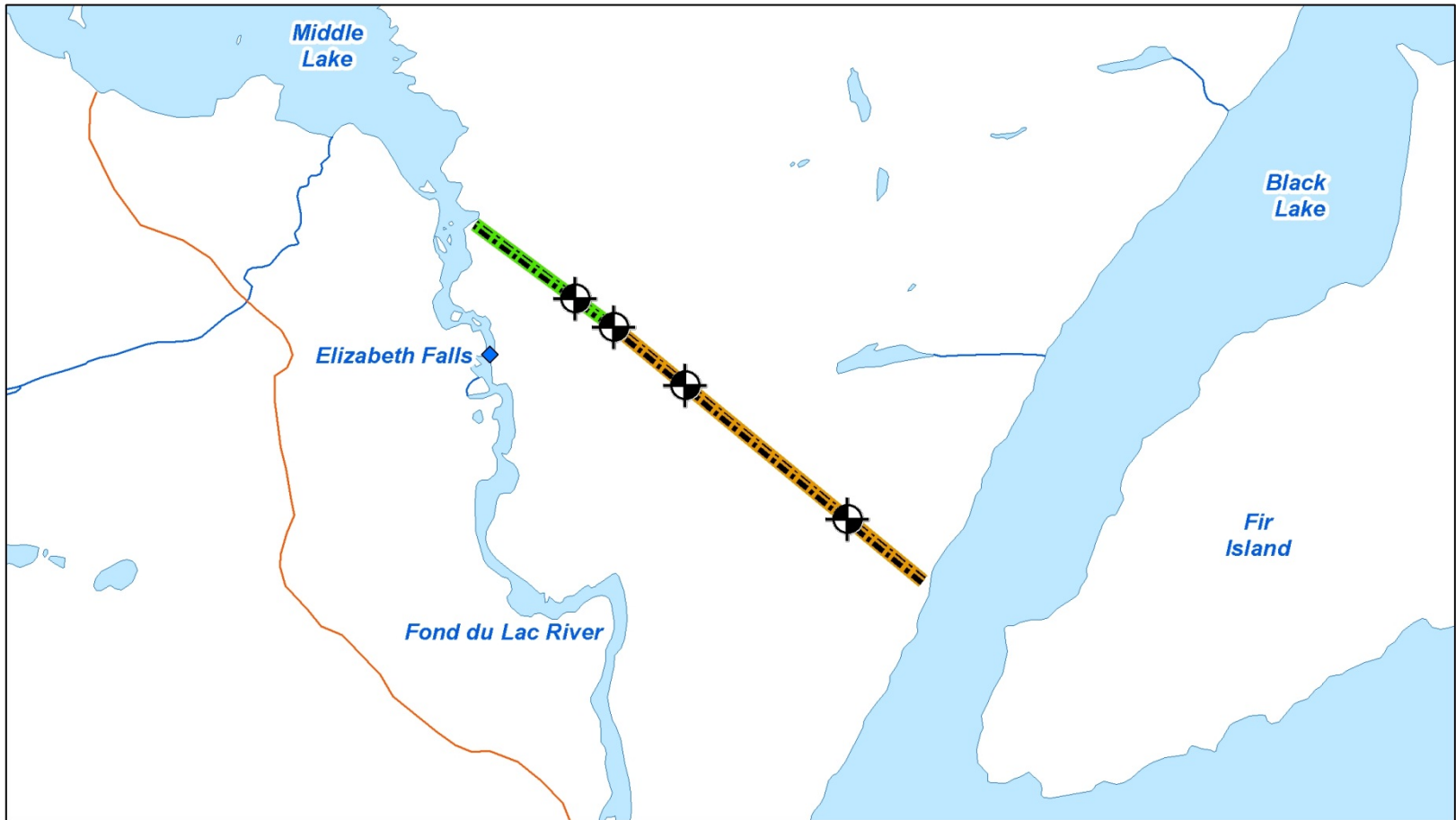


# Outlet to Middle Lake

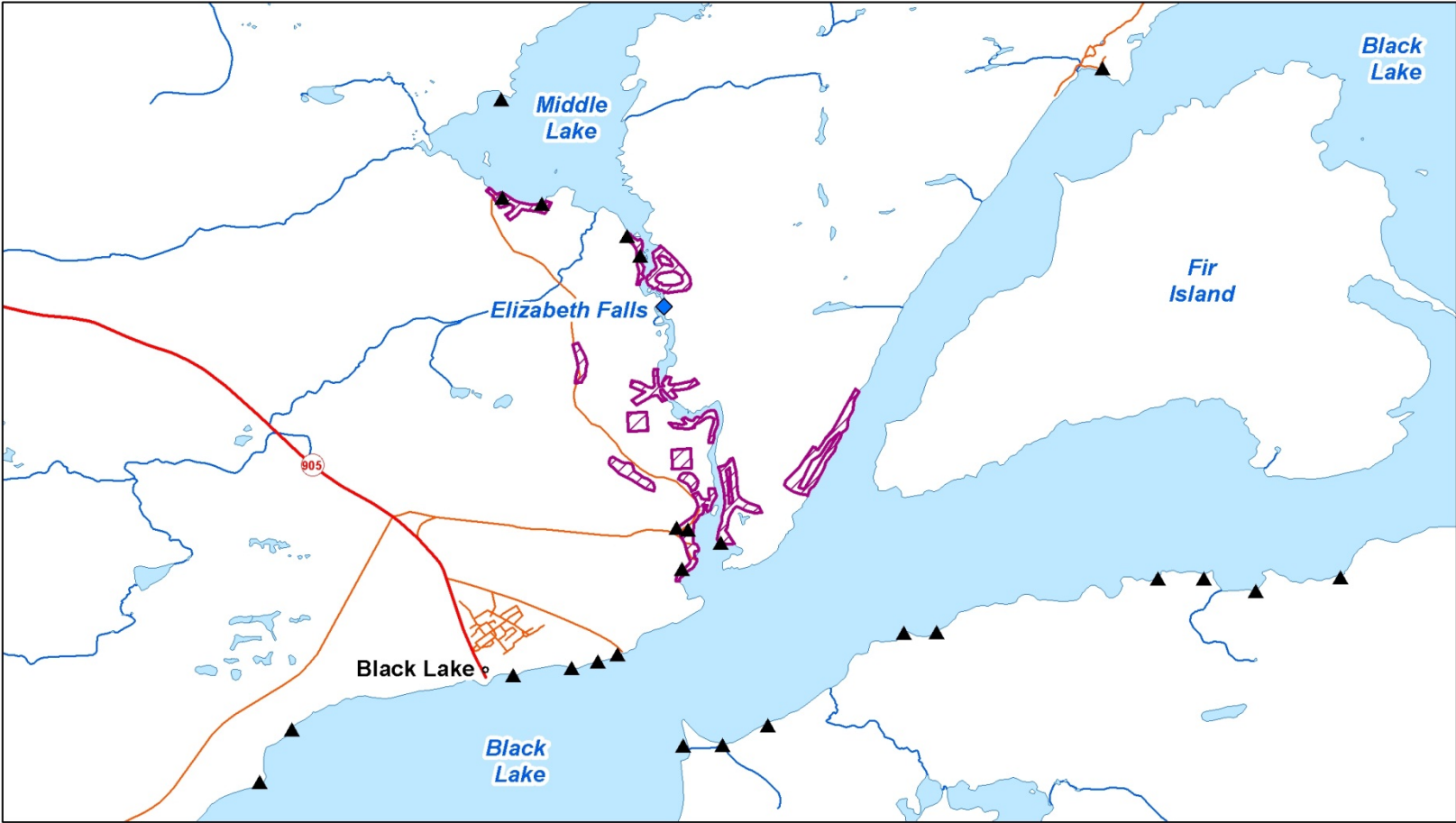
## Average and Low Spring Flows



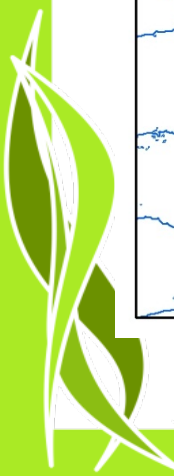
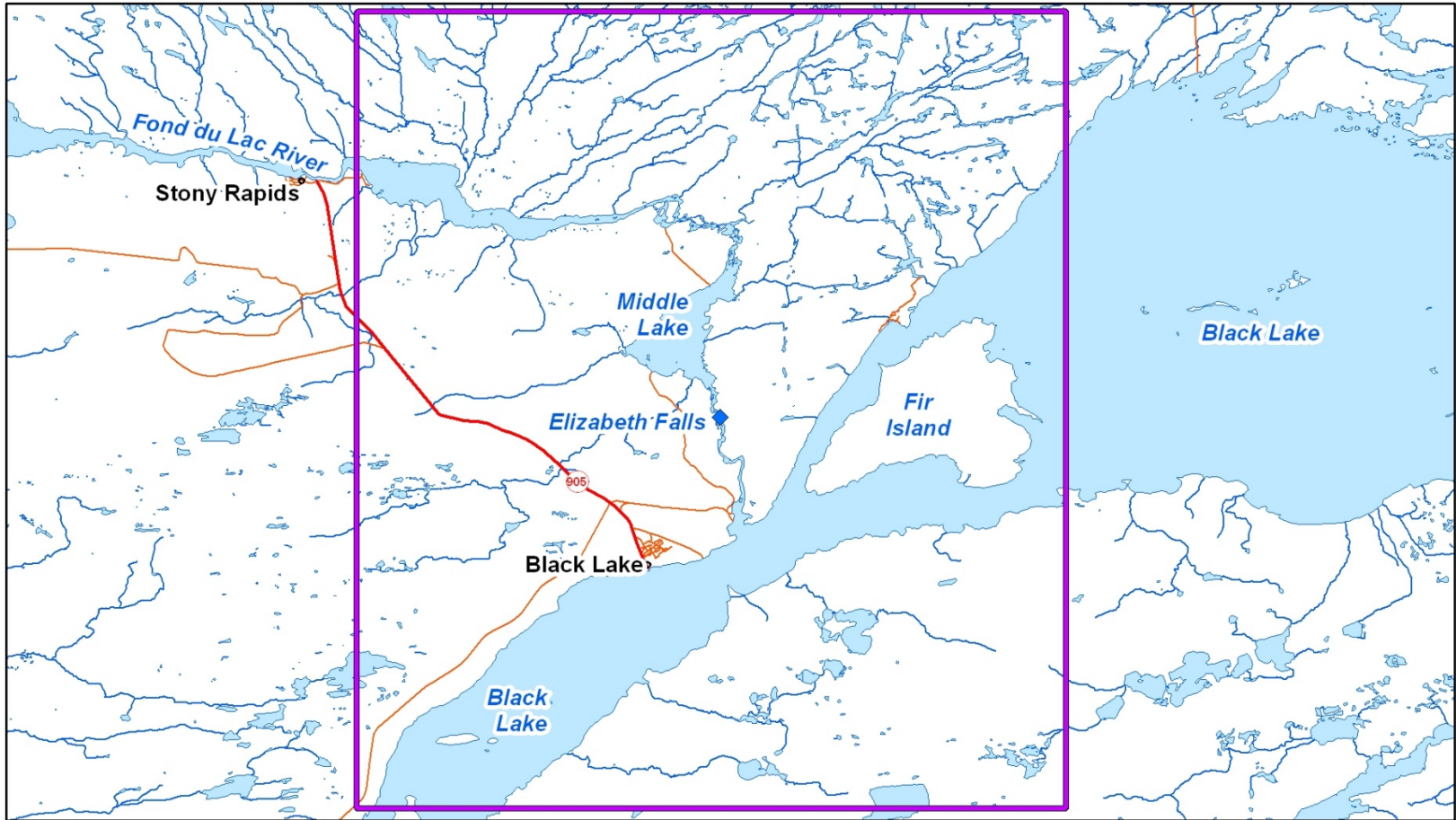
# Geological Survey Locations



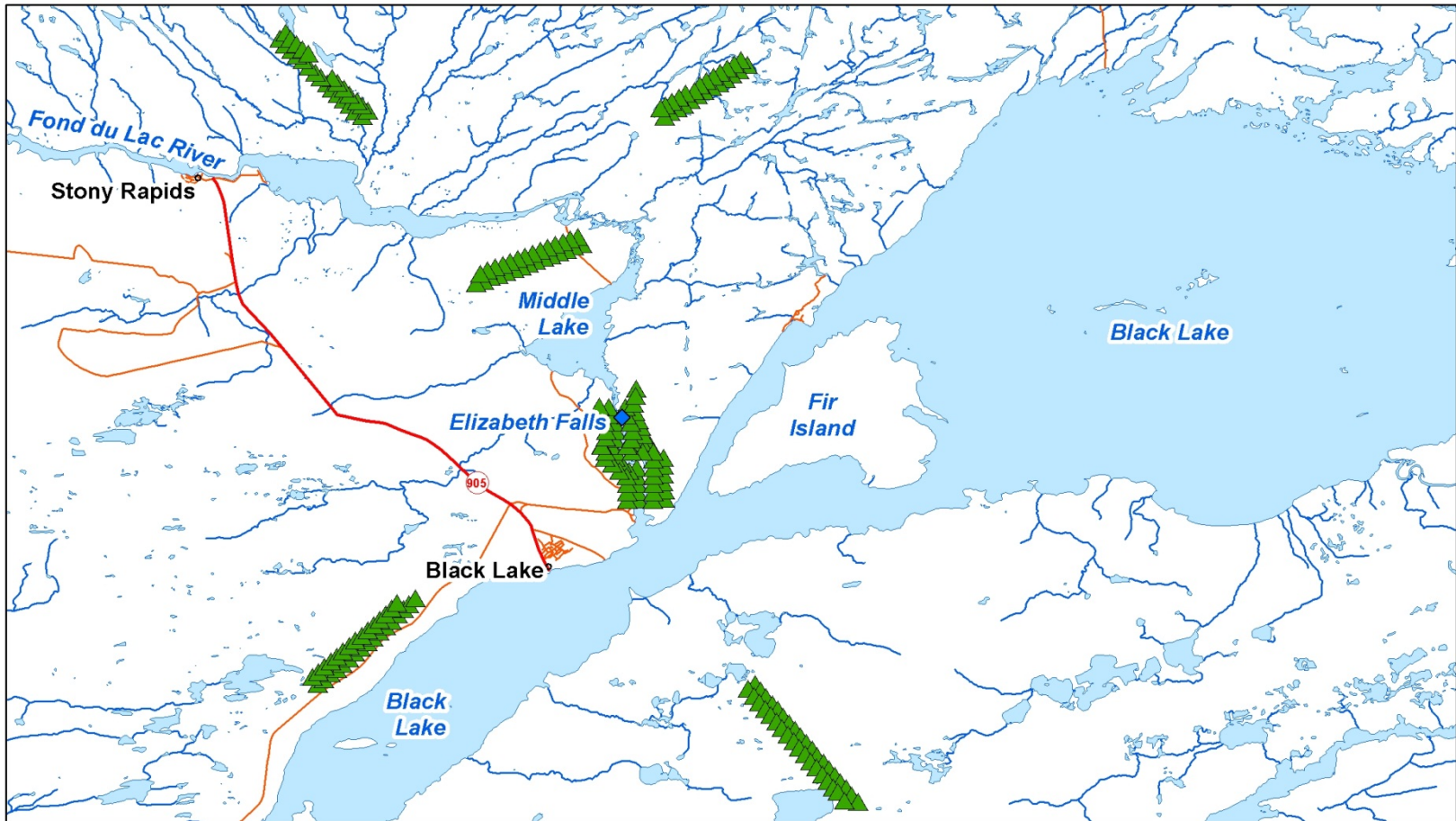
# Heritage Sites and Survey Locations



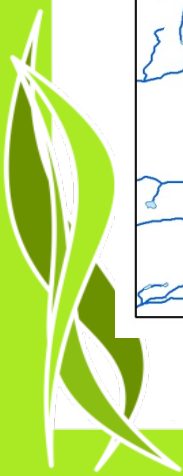
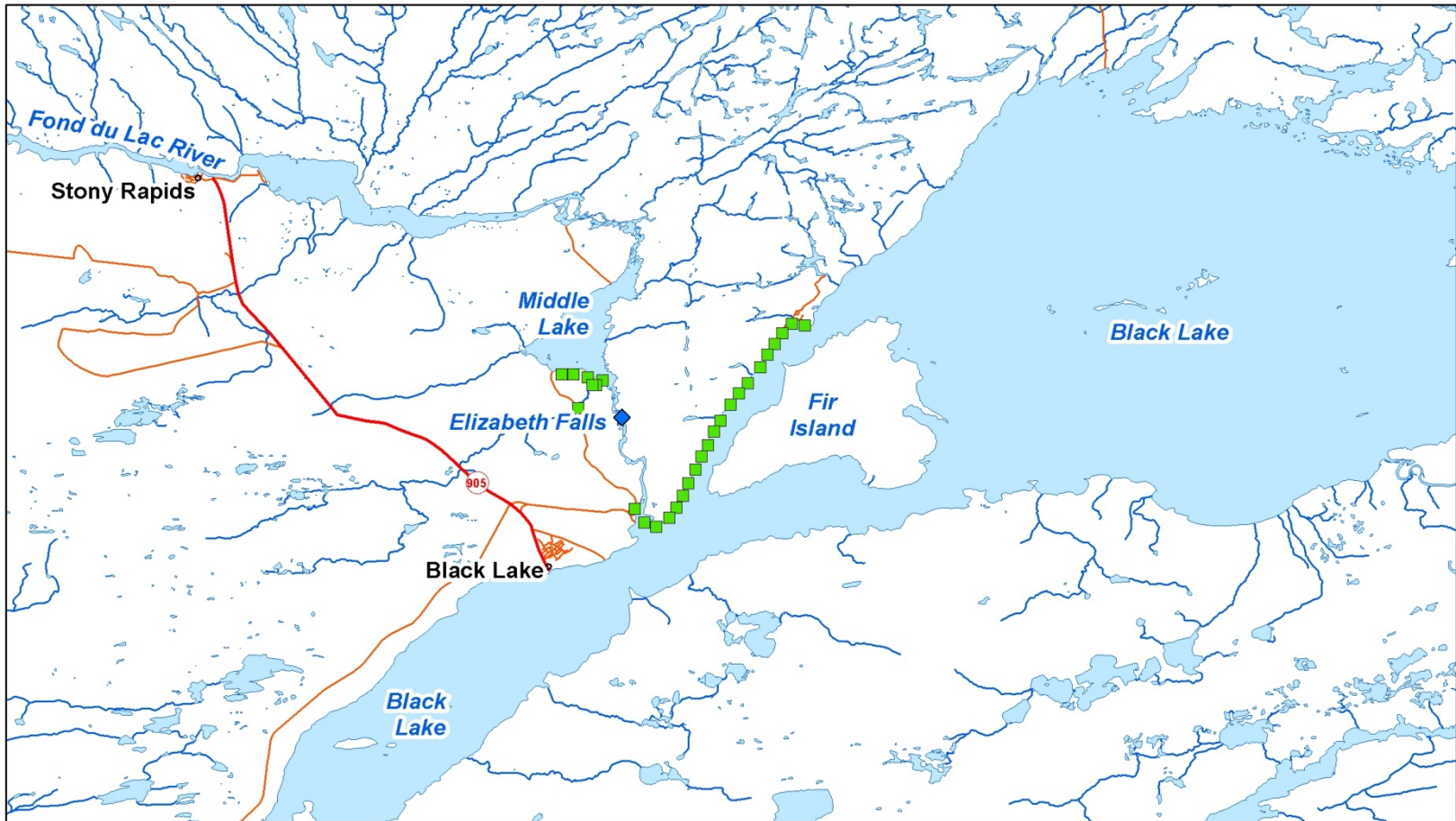
# Moose and Caribou Aerial Survey



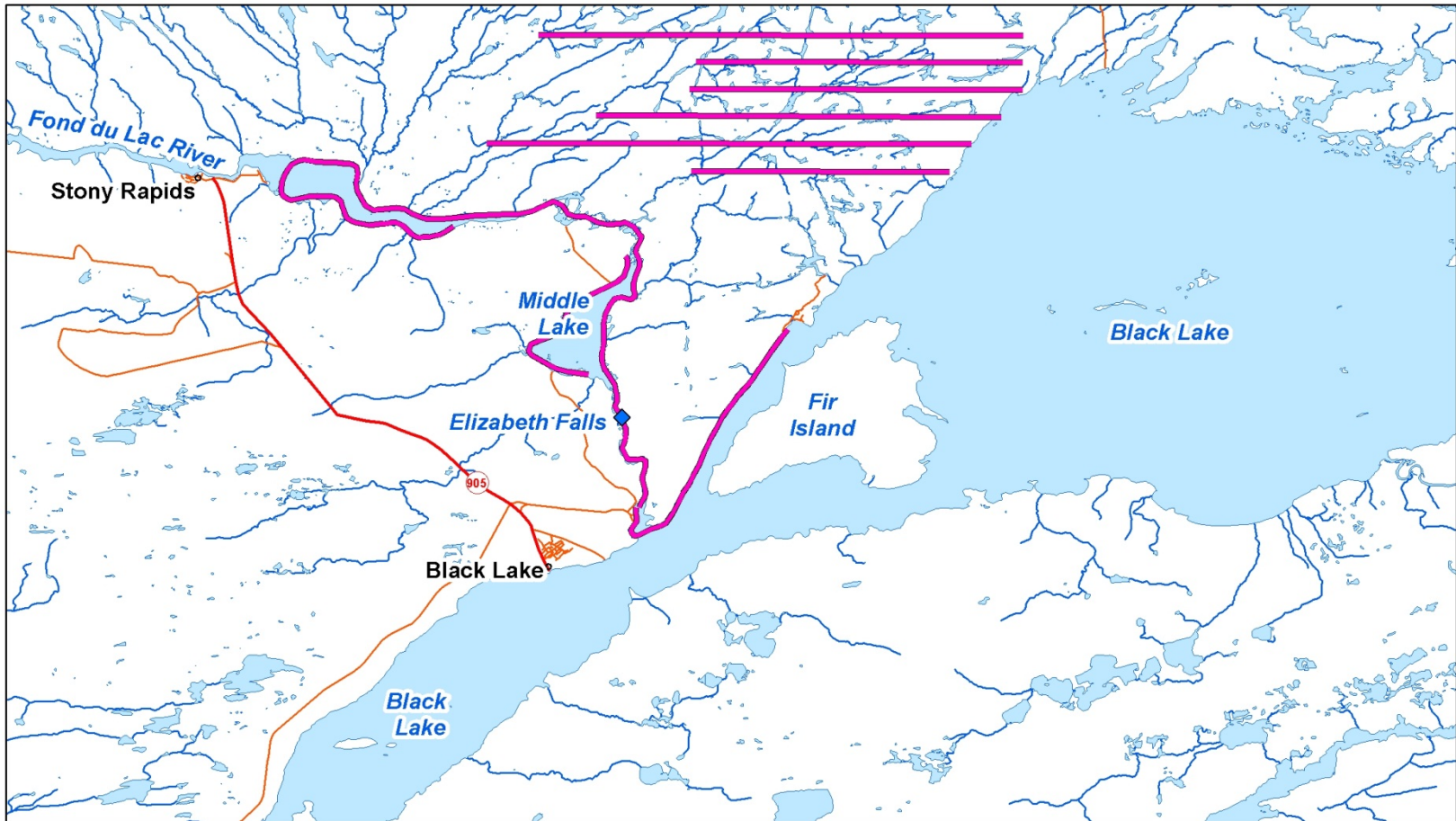
# Upland Breeding Bird Survey Locations



# Frog Survey Locations



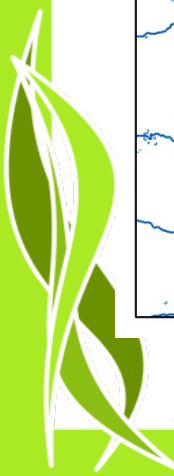
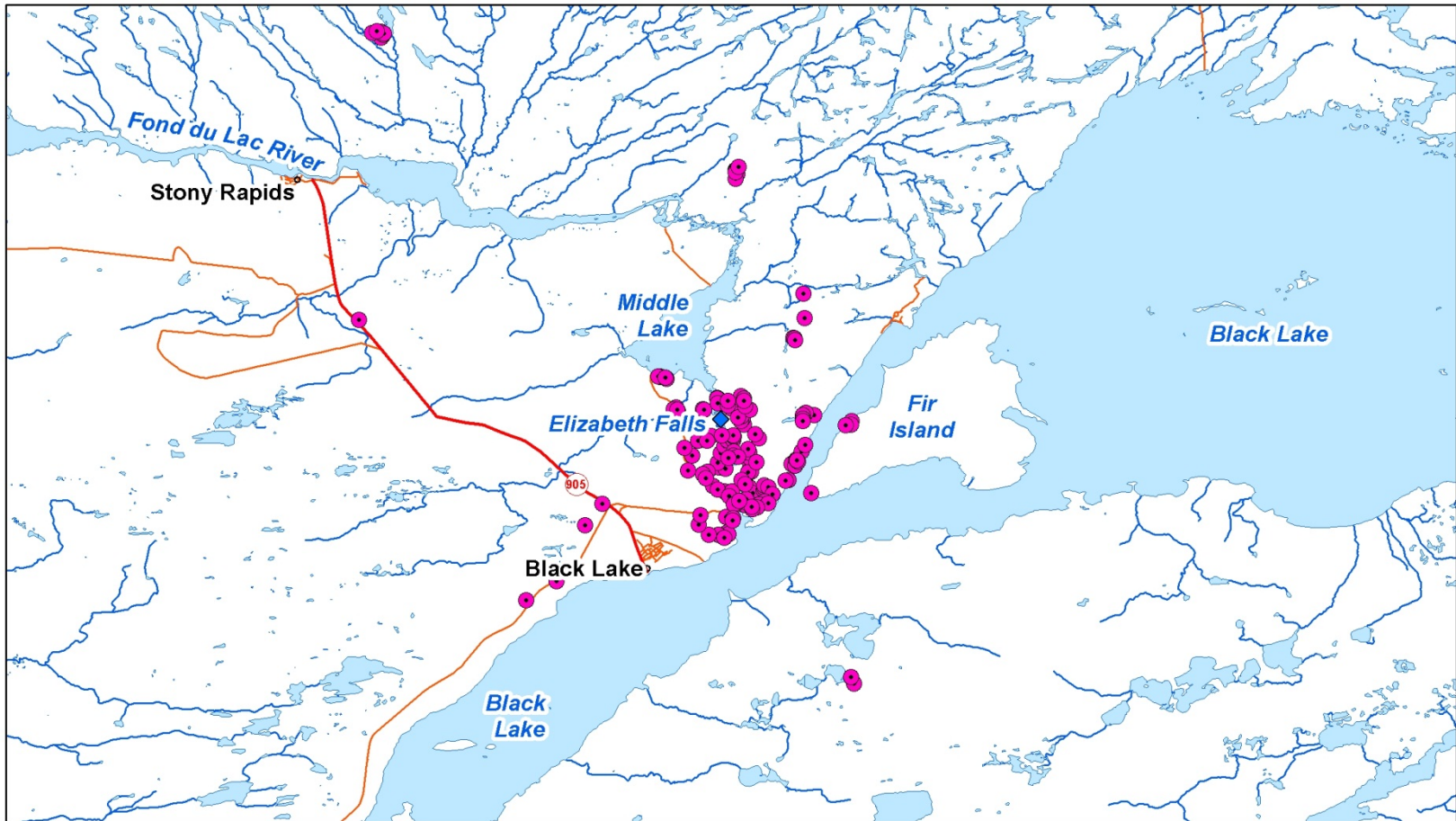
# Waterbird Aerial Surveys



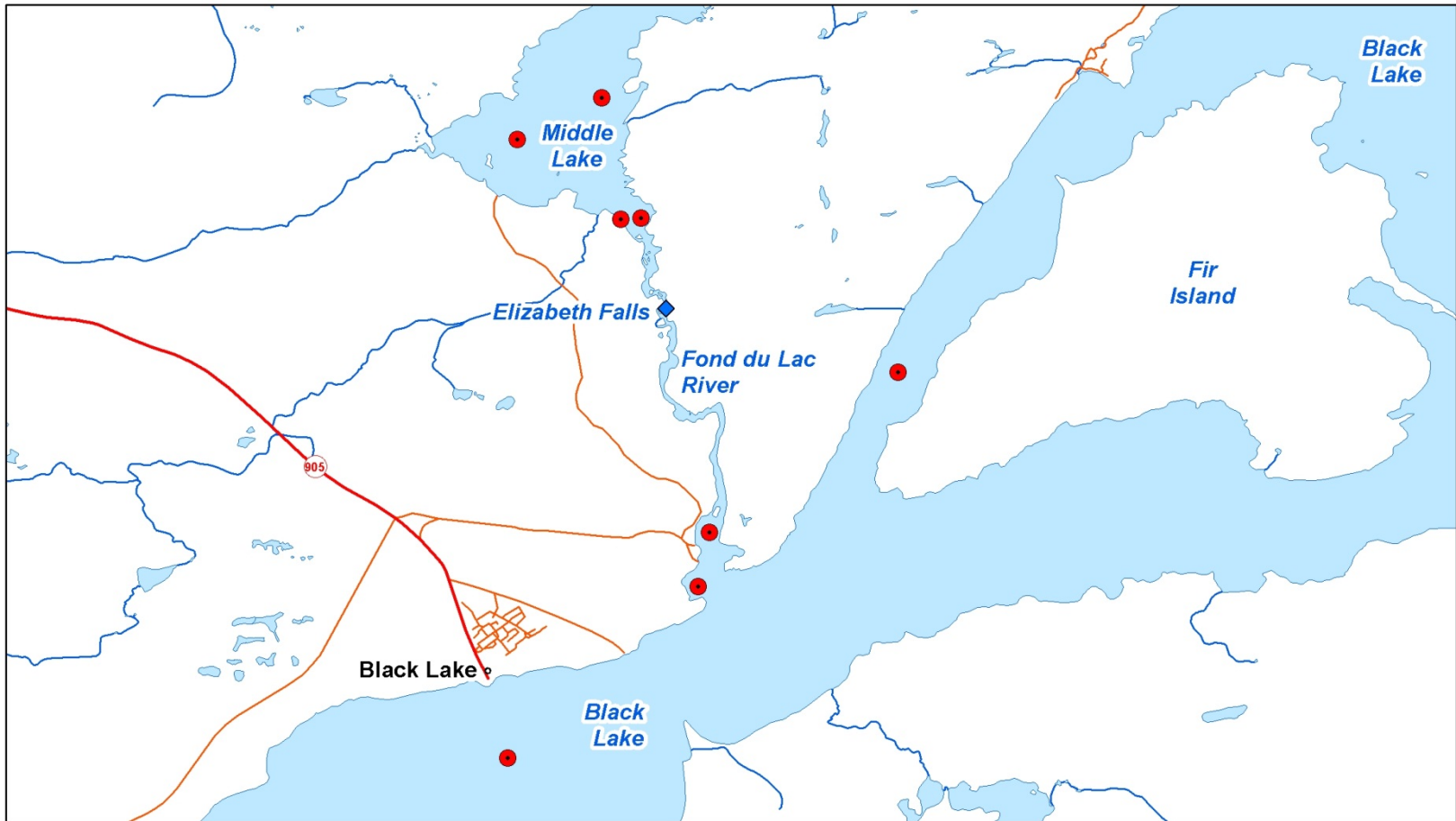
# Winter Track Count Surveys



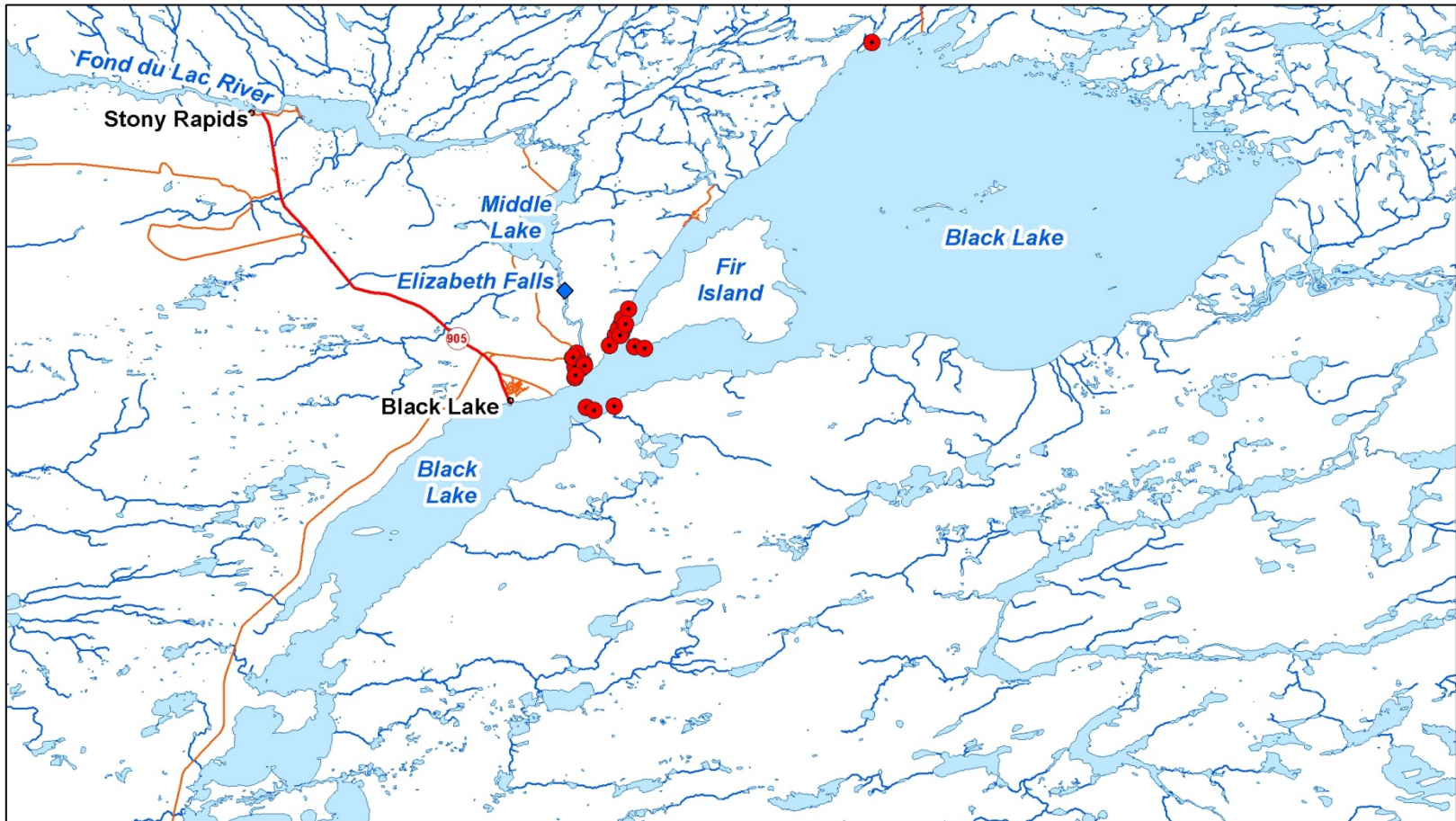
# Vegetation and Soil Survey Locations



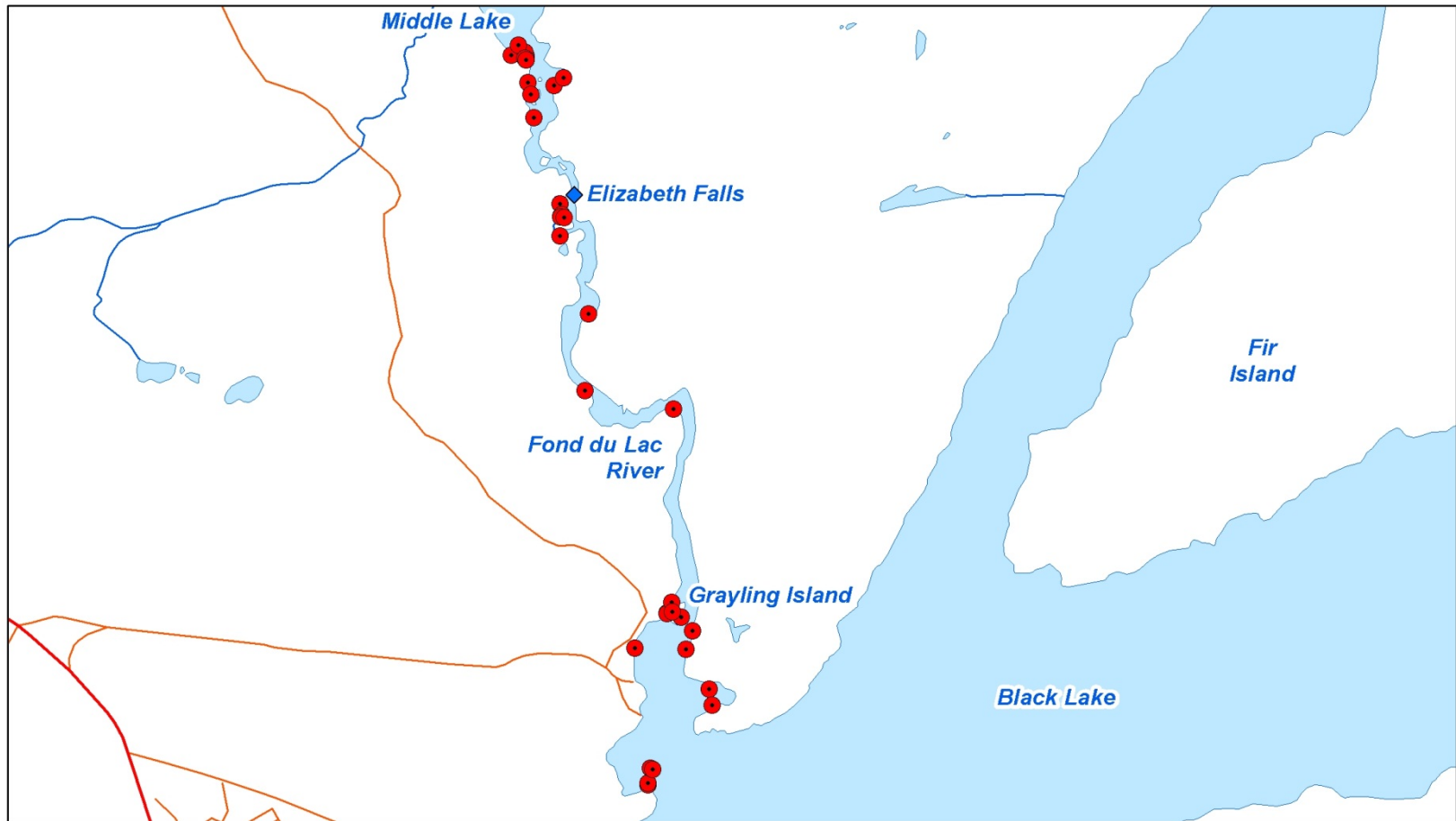
# Water Quality Sampling Locations



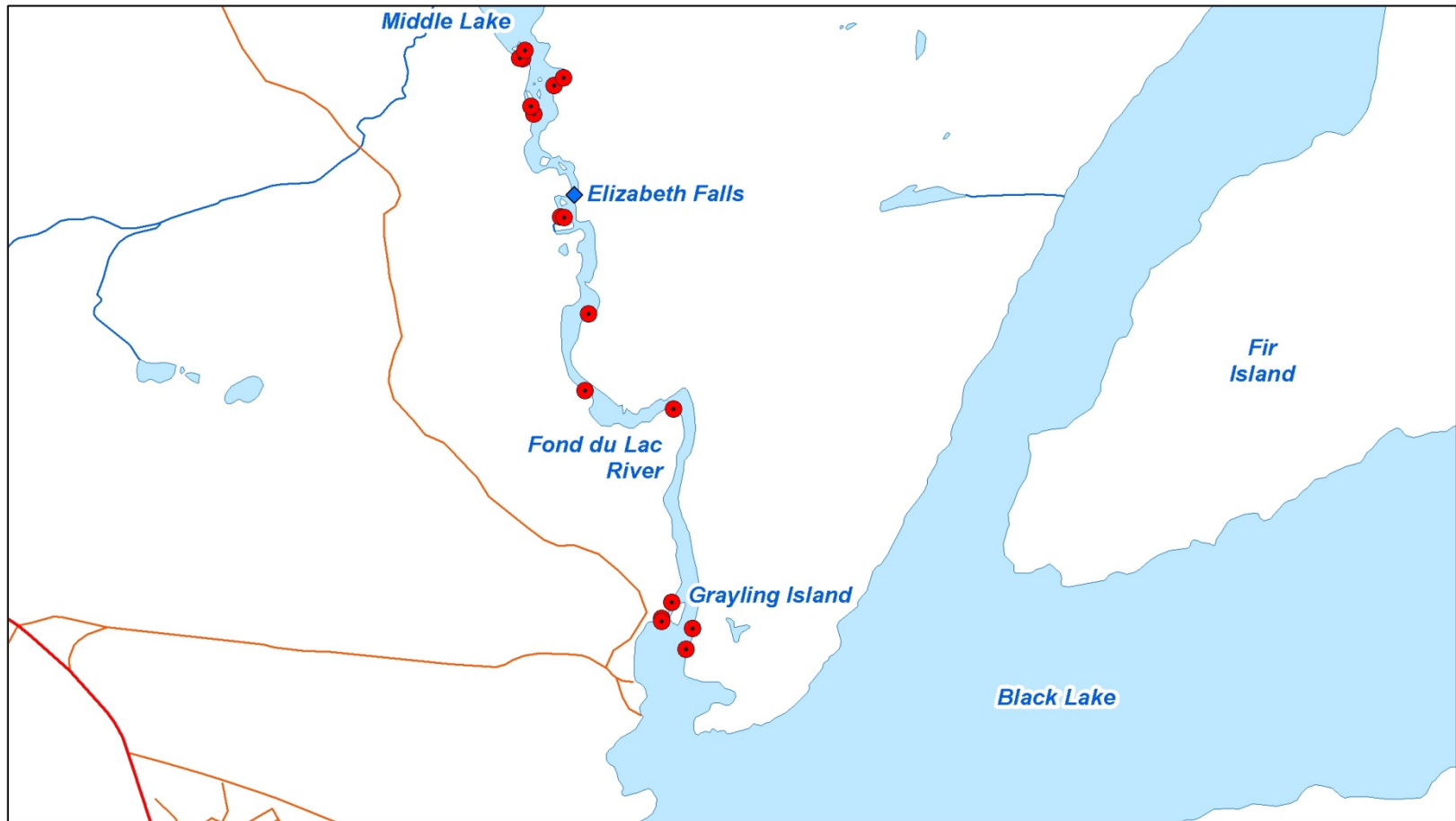
# Black Lake General Fish Sampling



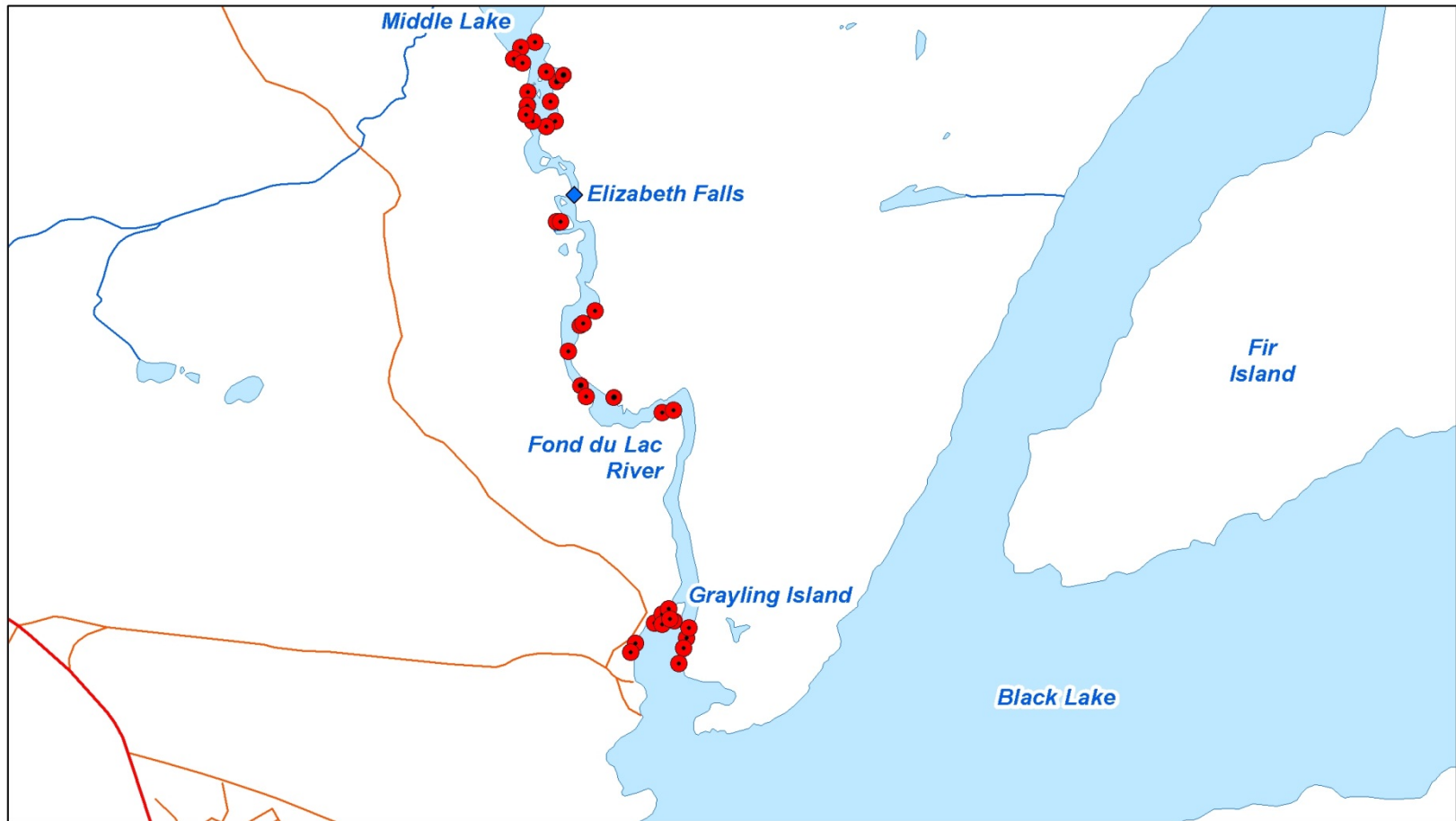
# Fond du Lac River General Fish Sampling



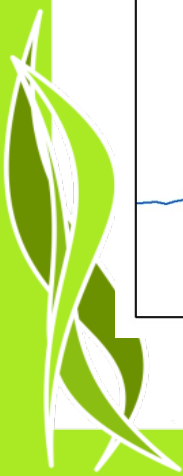
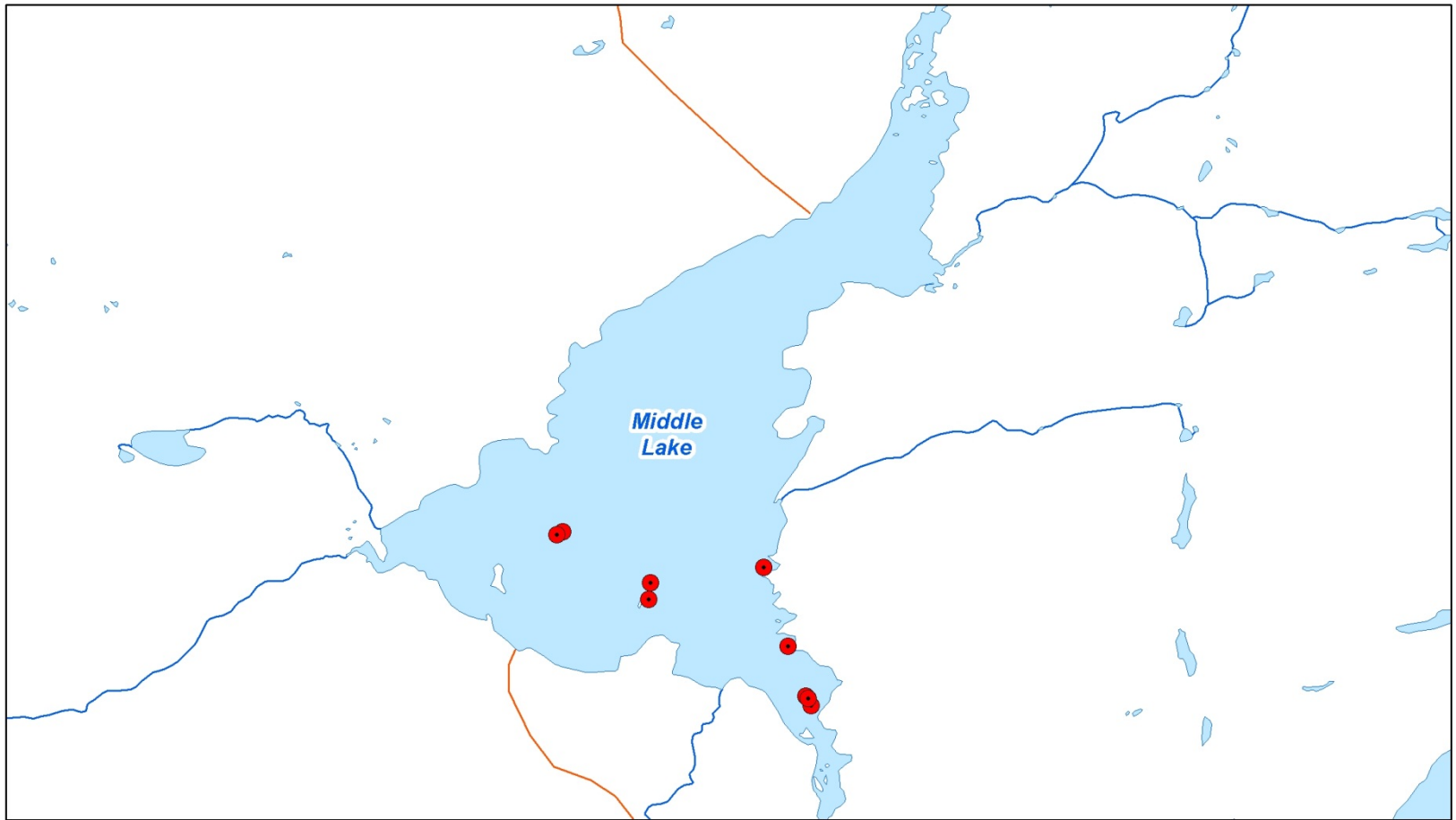
# Fond du Lac River Arctic Grayling Spawning Surveys



# Fond du Lac River Arctic Grayling Egg Surveys



# Middle Lake General Fish Sampling



# Next Steps

- More Community Meetings & Workshops
  - Project details
  - Progress updates
- Submit Environmental Impact Statement ... June 2013
- Finalize Design and Cost Estimate ... September 2013
- Project Go / No Go Decision ... January 2014
- Environmental Approval ... August 2014
- Start Construction ... Fall 2014
- Plant In-Service ... December 2017



# What does this mean for the Community?

- Opportunities for employment
  - Construction (3 – 4 years) ... peak workforce estimated at 150
- New business opportunities for Athabasca based companies owned by the Athabasca First Nations
  - Points Athabasca Contracting, etc
- Minimal impact to the environment
- Negligible impact to Fond du Lac River flows past your community



# Closing

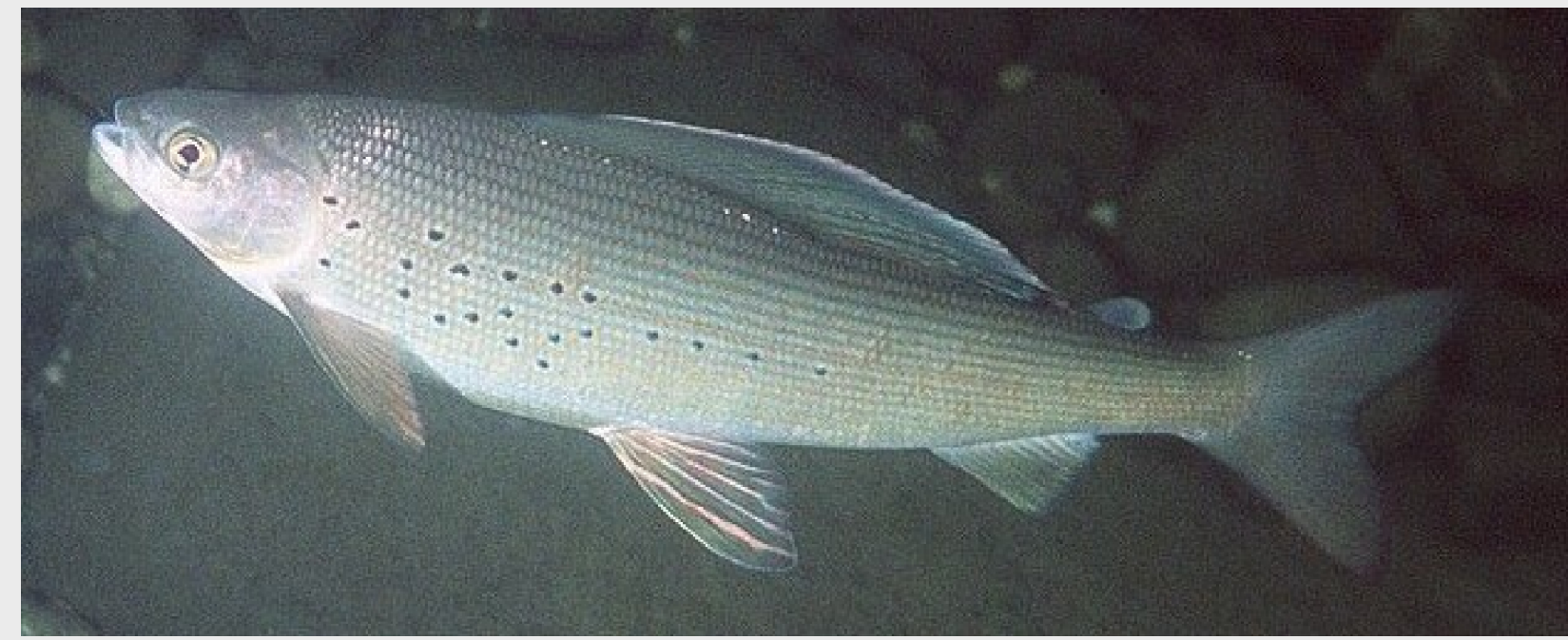
- Thank you for coming
- Please ask questions ... Let us know what you think
- We want your feedback
  
- Follow – up Meeting:
  - Community Meeting #2 ... April 2013



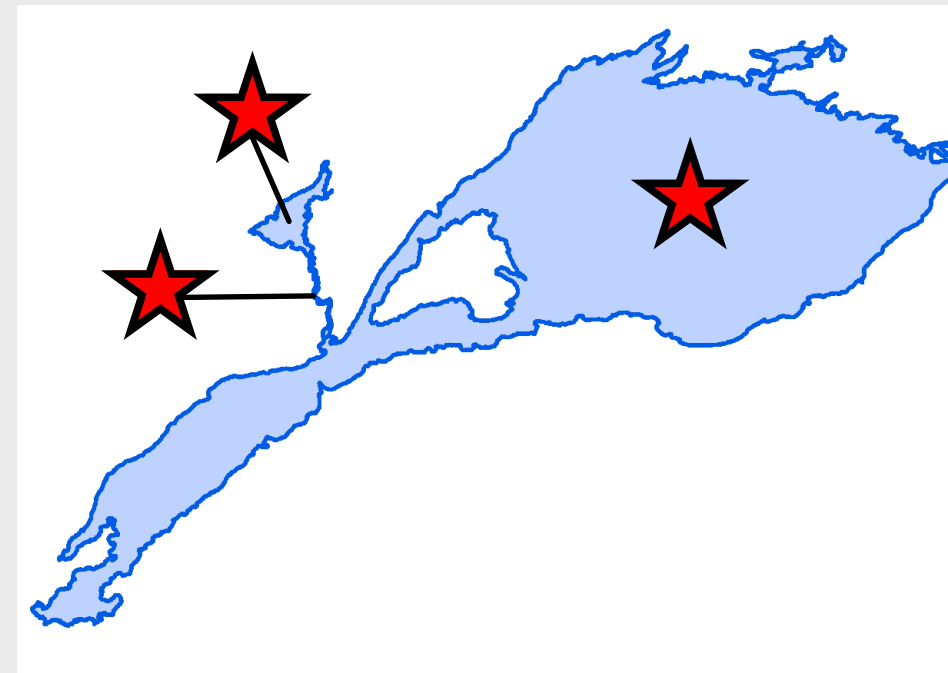


## Posters

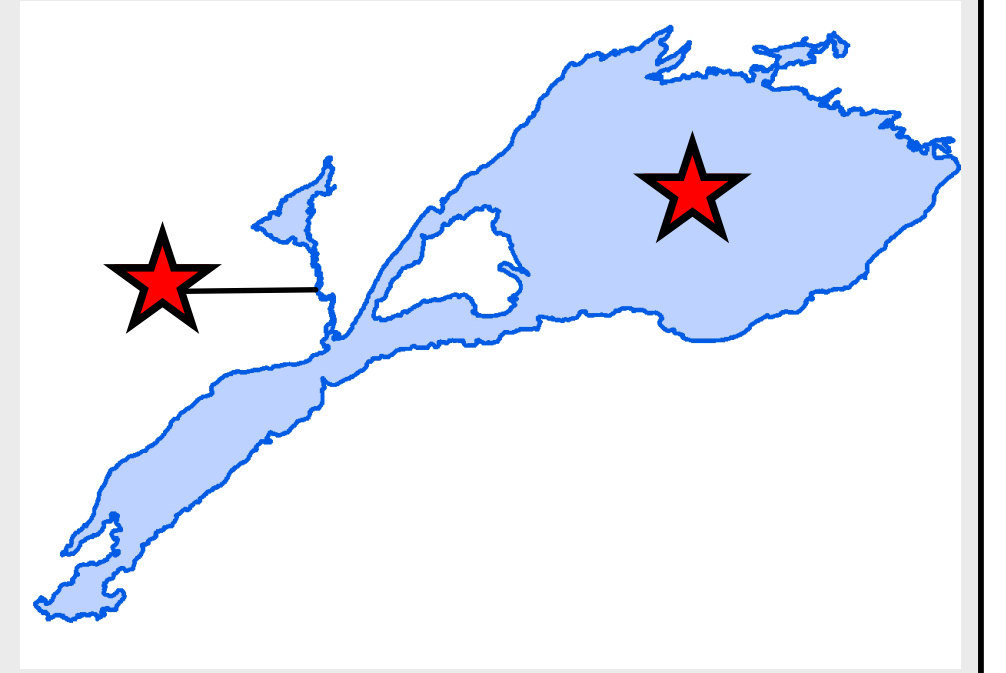
# FISH IN THE ELIZABETH FALLS STUDY AREA



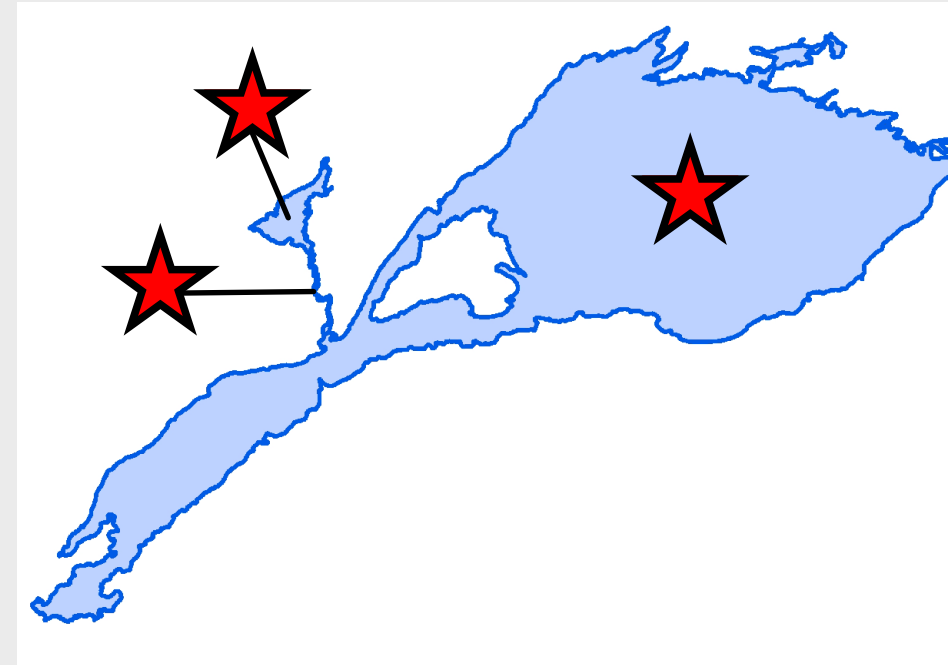
**Arctic Grayling**  
*(Grayling)*



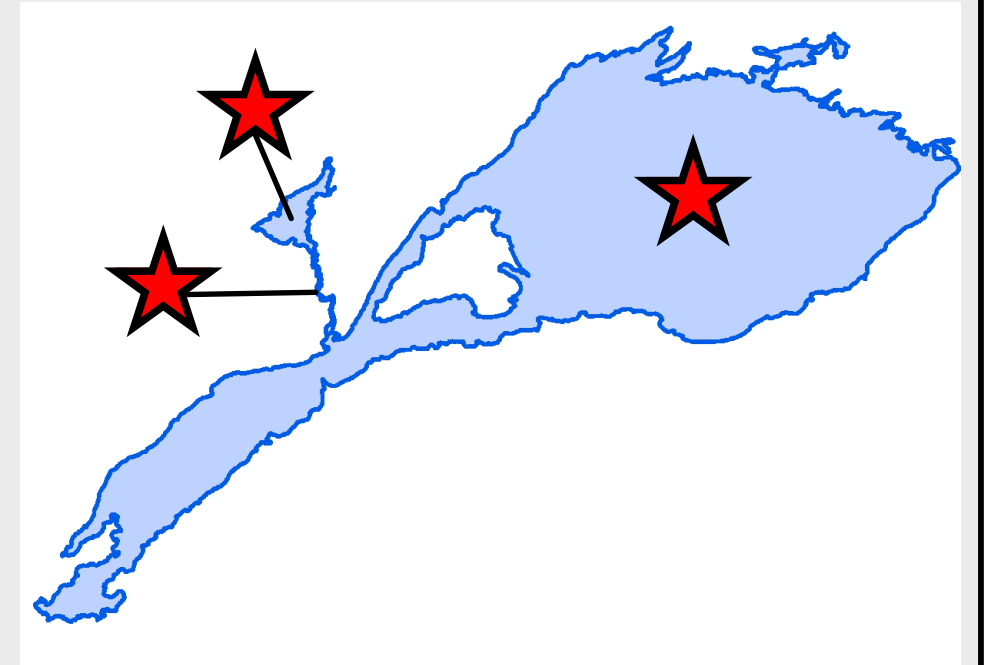
**Round Whitefish**  
*(Round Fish)*



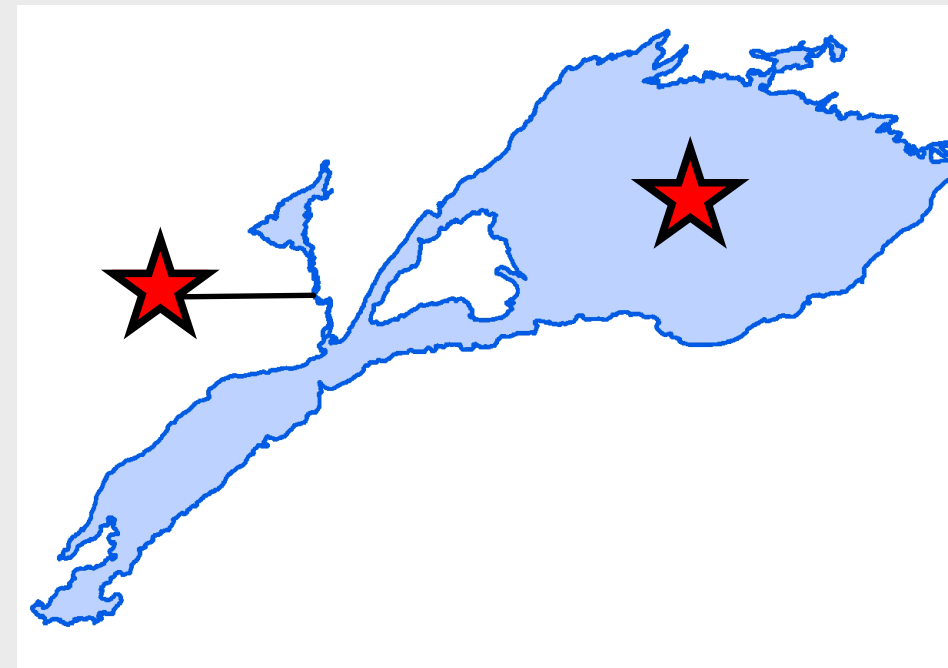
**Burbot**  
*(Maria, Ling, Freshwater Cod)*



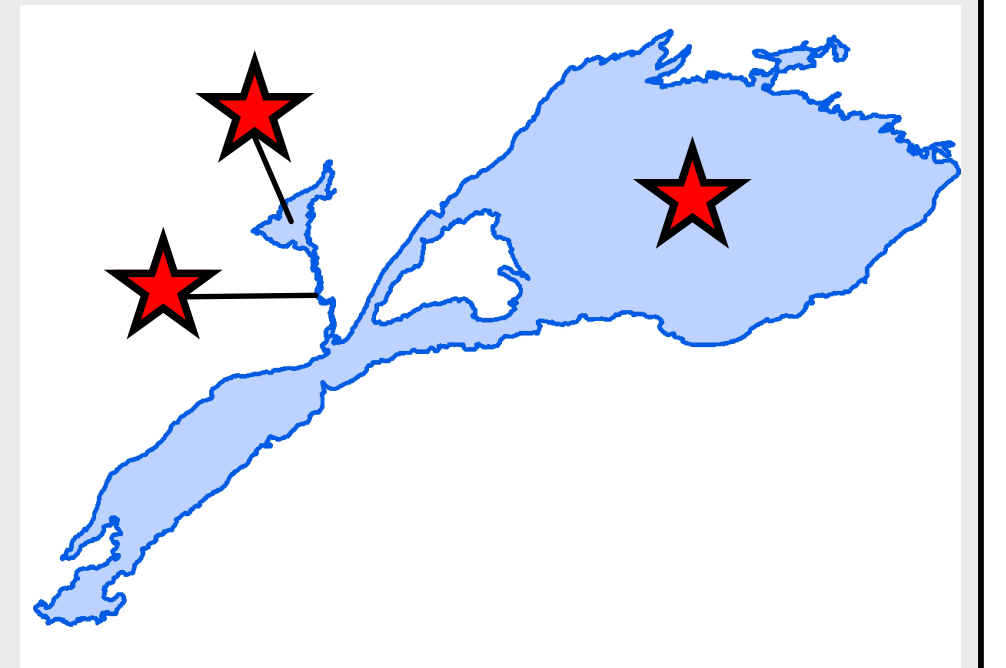
**Northern Pike**  
*(Pike, Jack, Jackfish)*



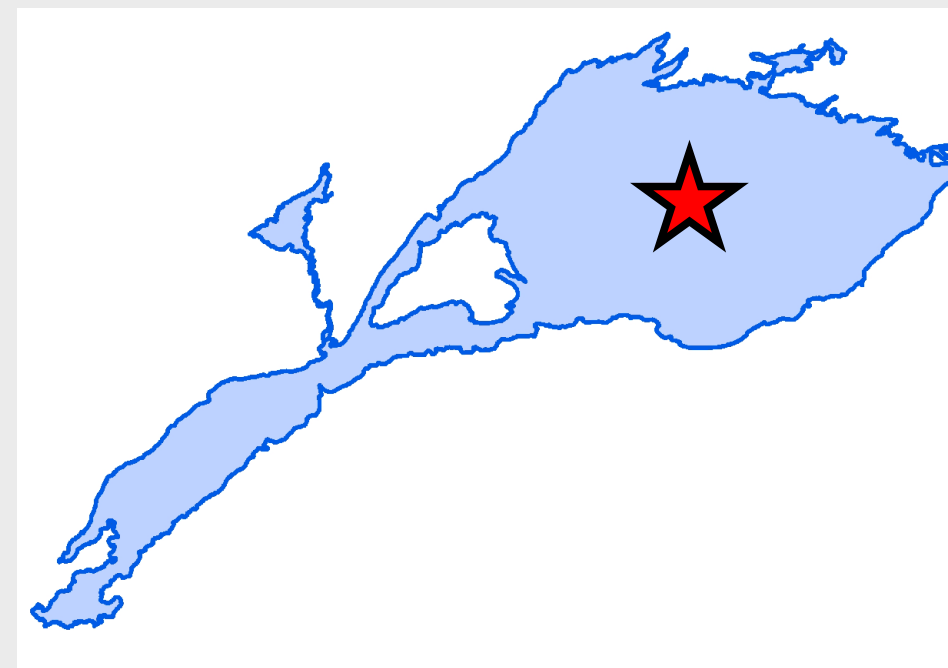
**Cisco**  
*(Lake Herring, Tullibee)*



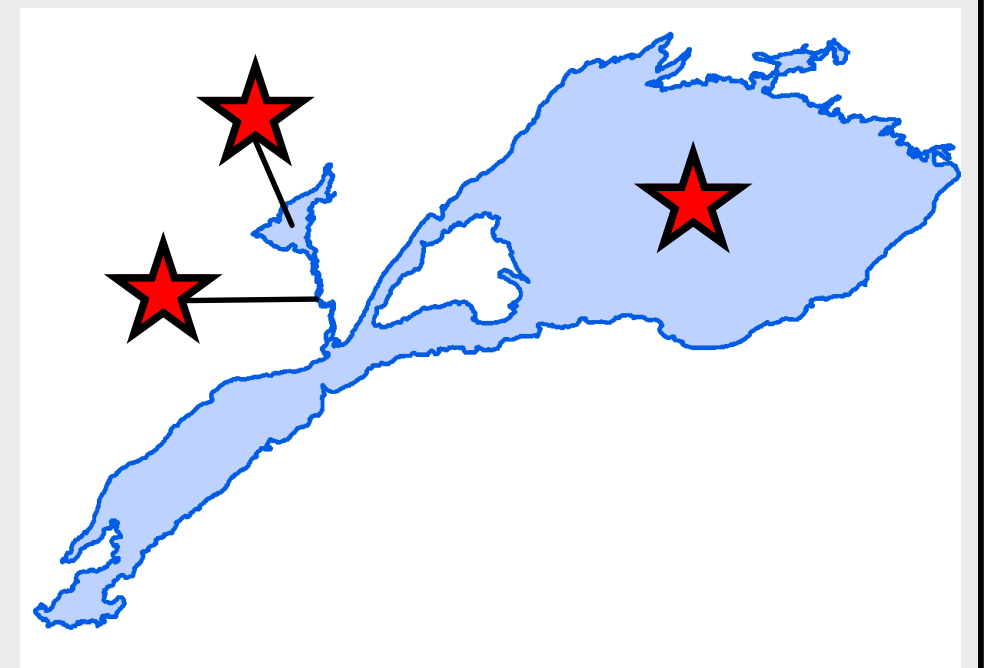
**Walleye**  
*(Pickerel)*



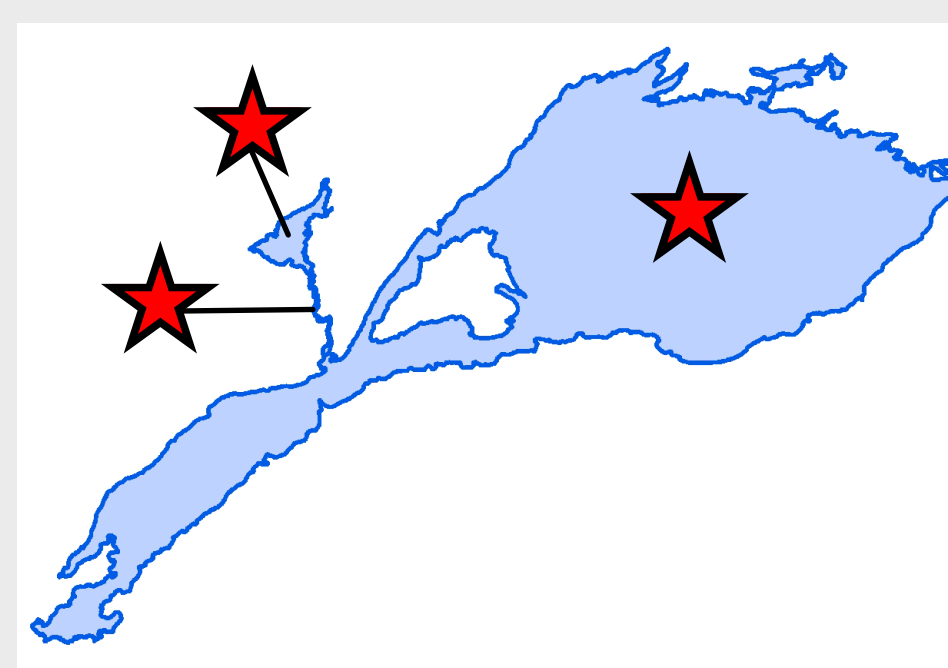
**Lake Trout**  
*(Trout, Laker)*



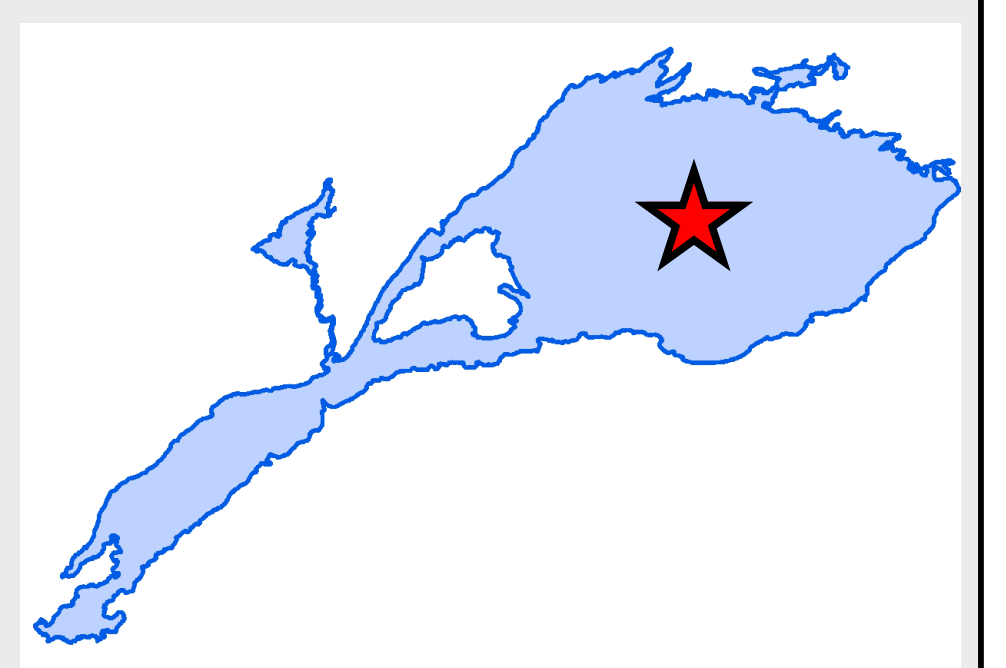
**White Sucker**  
*(Common Sucker, Sucker, Mullet)*



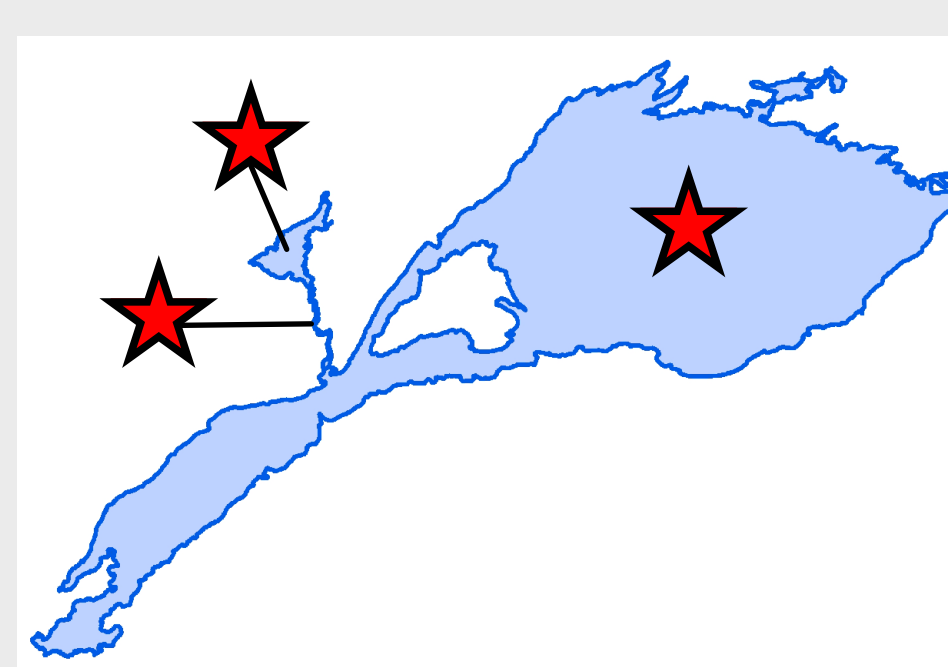
**Lake Whitefish**  
*(Common Whitefish, Whitefish)*

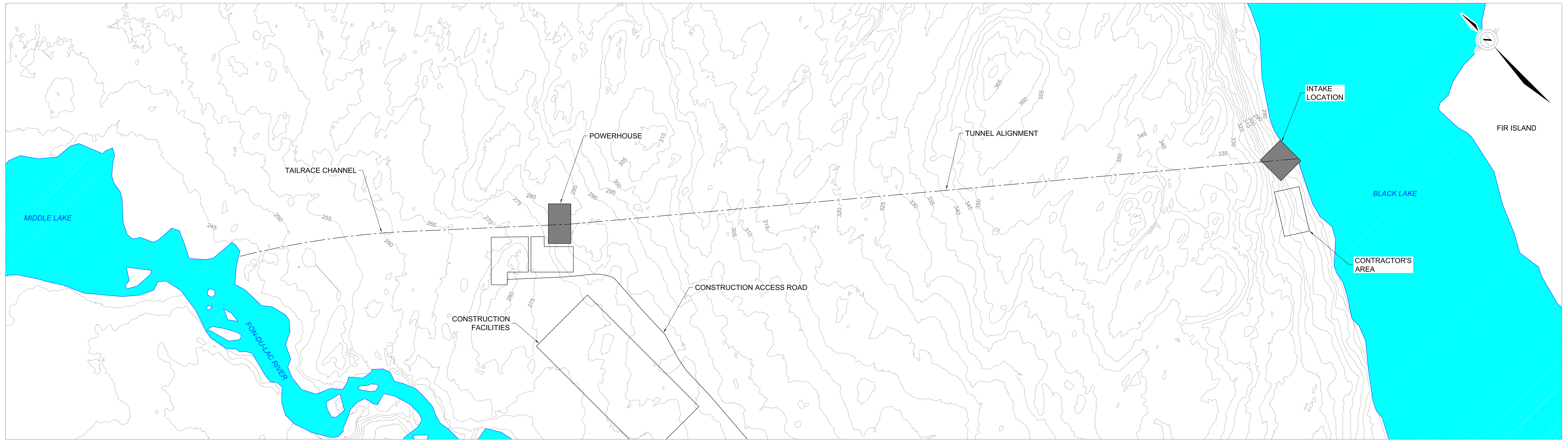


**Yellow Perch**  
*(Perch)*

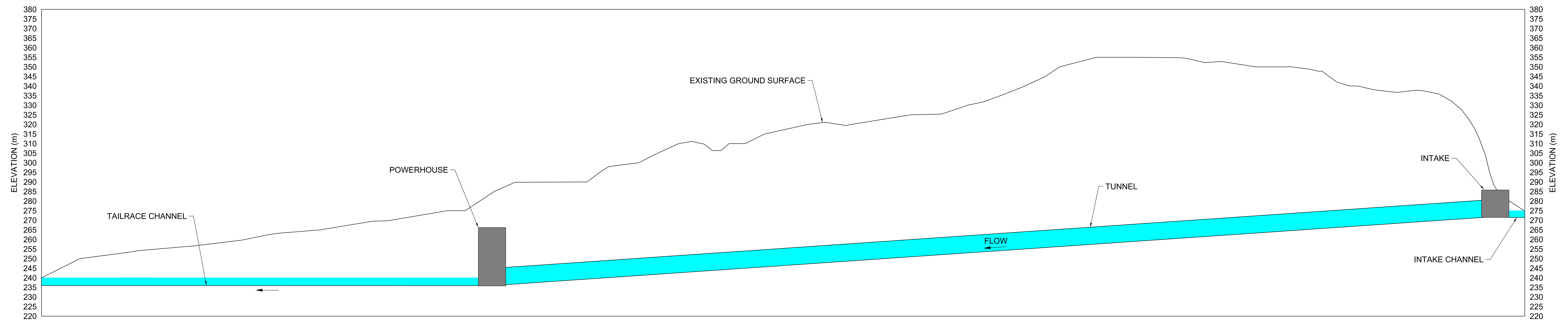
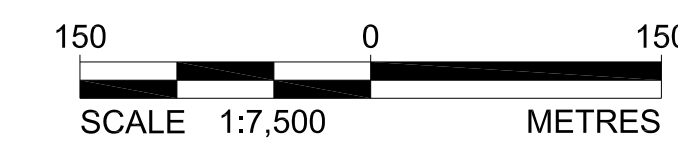


**Longnose Sucker**  
*(Northern Sucker, Red Sucker)*





**PLAN VIEW**



**PROFILE**



## Photoplates



Participants at Black Lake Community Session



Participatnts at Black Lake Community Session



Poster Viewing at Black Lake Community Session



Presentation at Stony Rapids Community Session



Participants at Fond du Lac Community Session

## **Presentation**

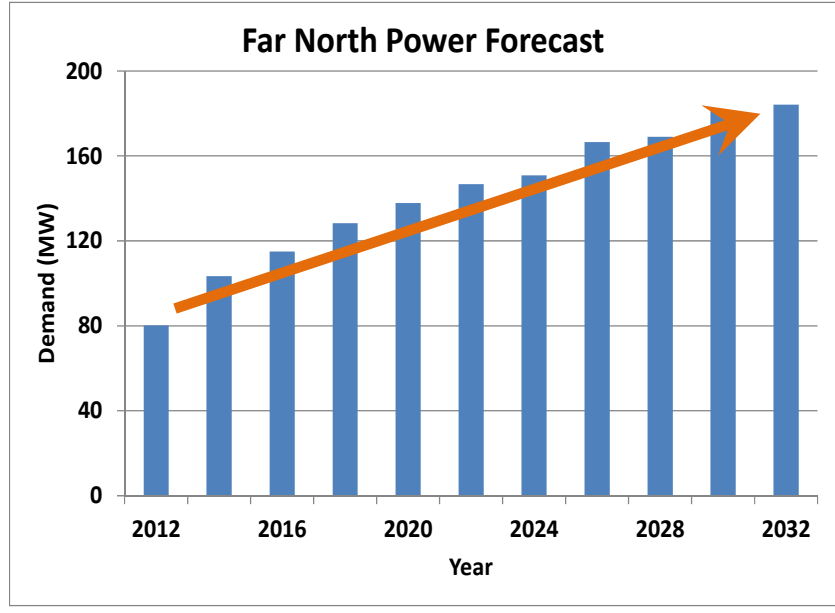
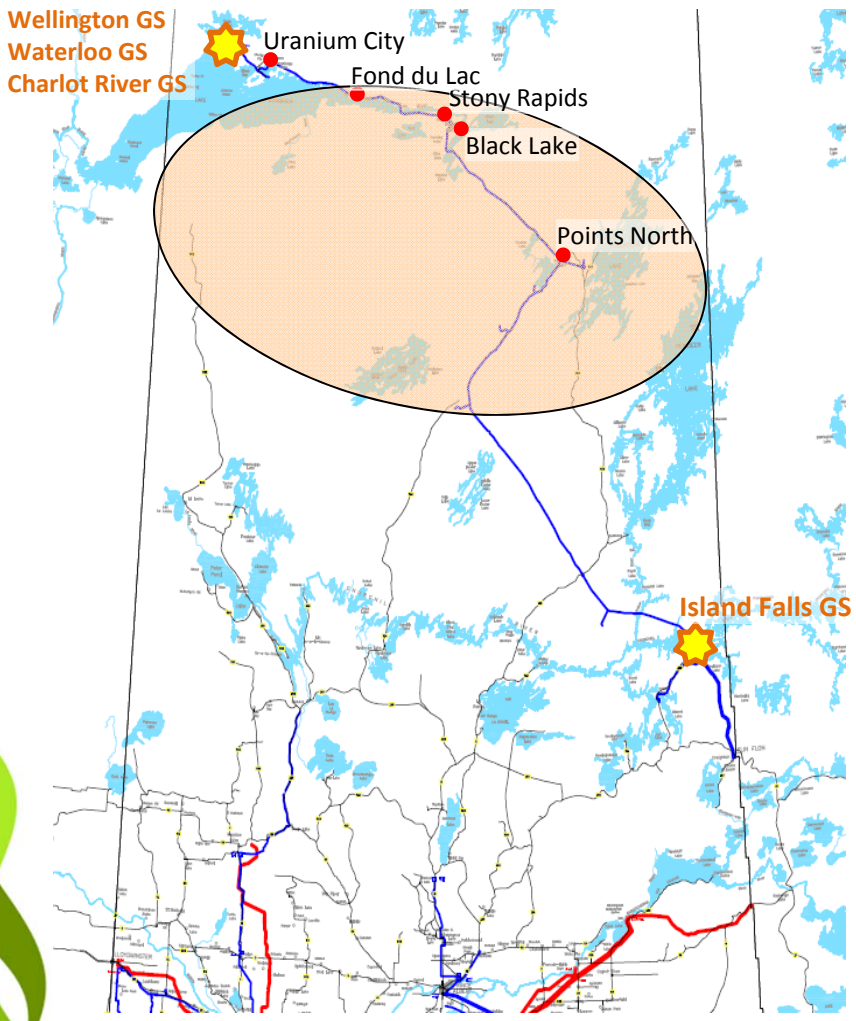


## Tazi Twé Hydroelectric Project

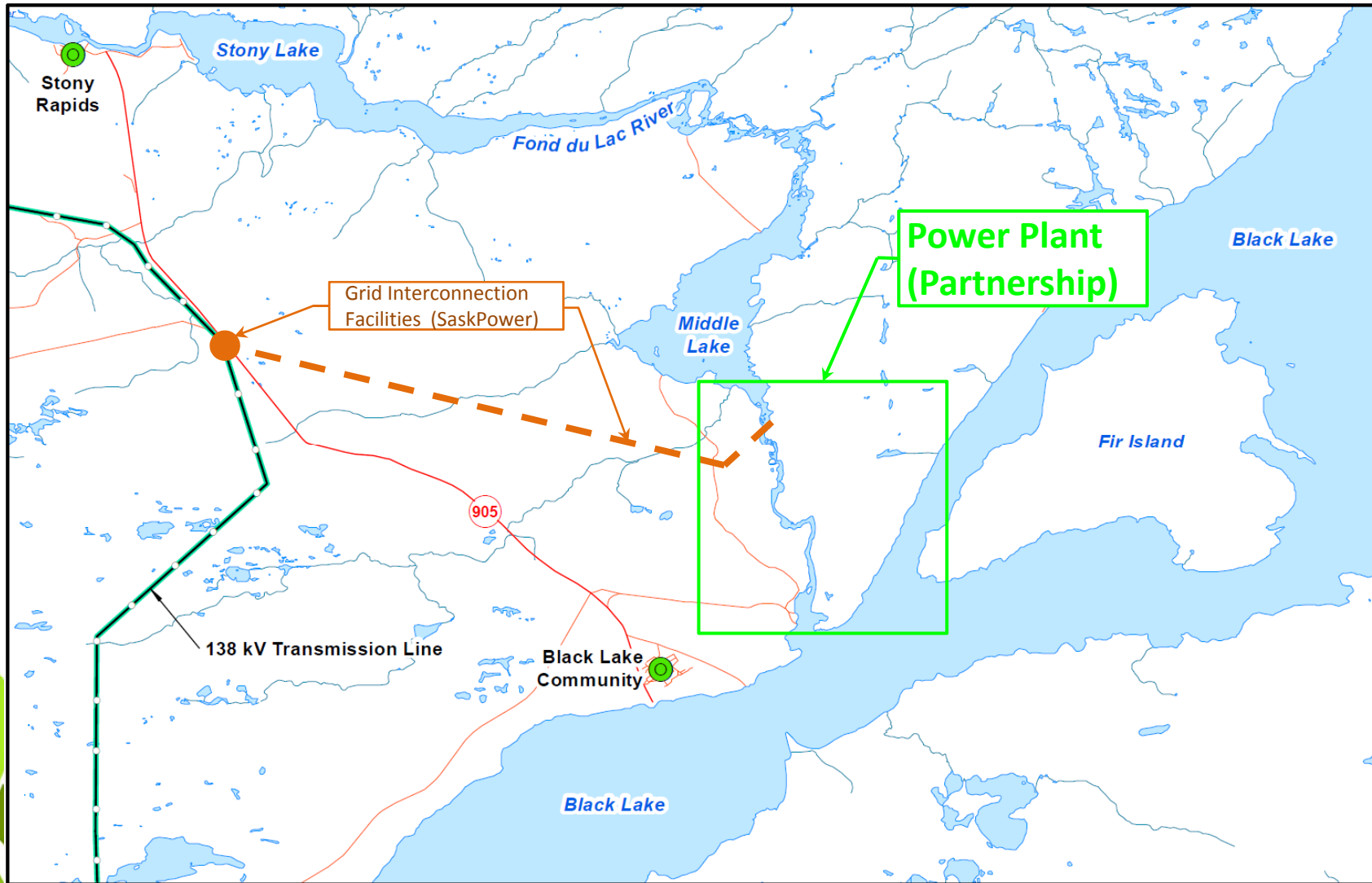
# Why Now?

## Increasing Demand for Power:

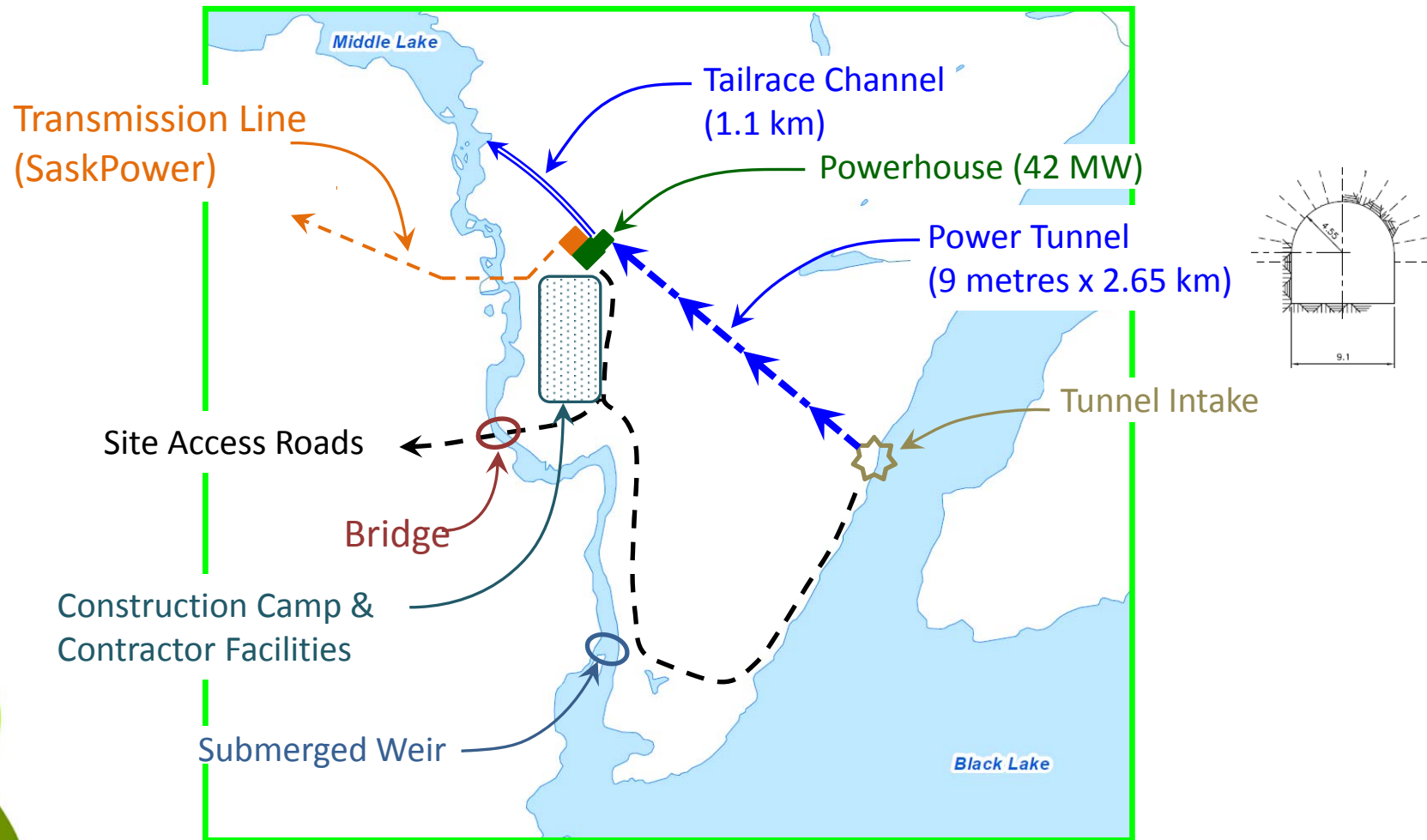
- Industrial Activity 
- Population Growth



# What is the Project



# What is the Project

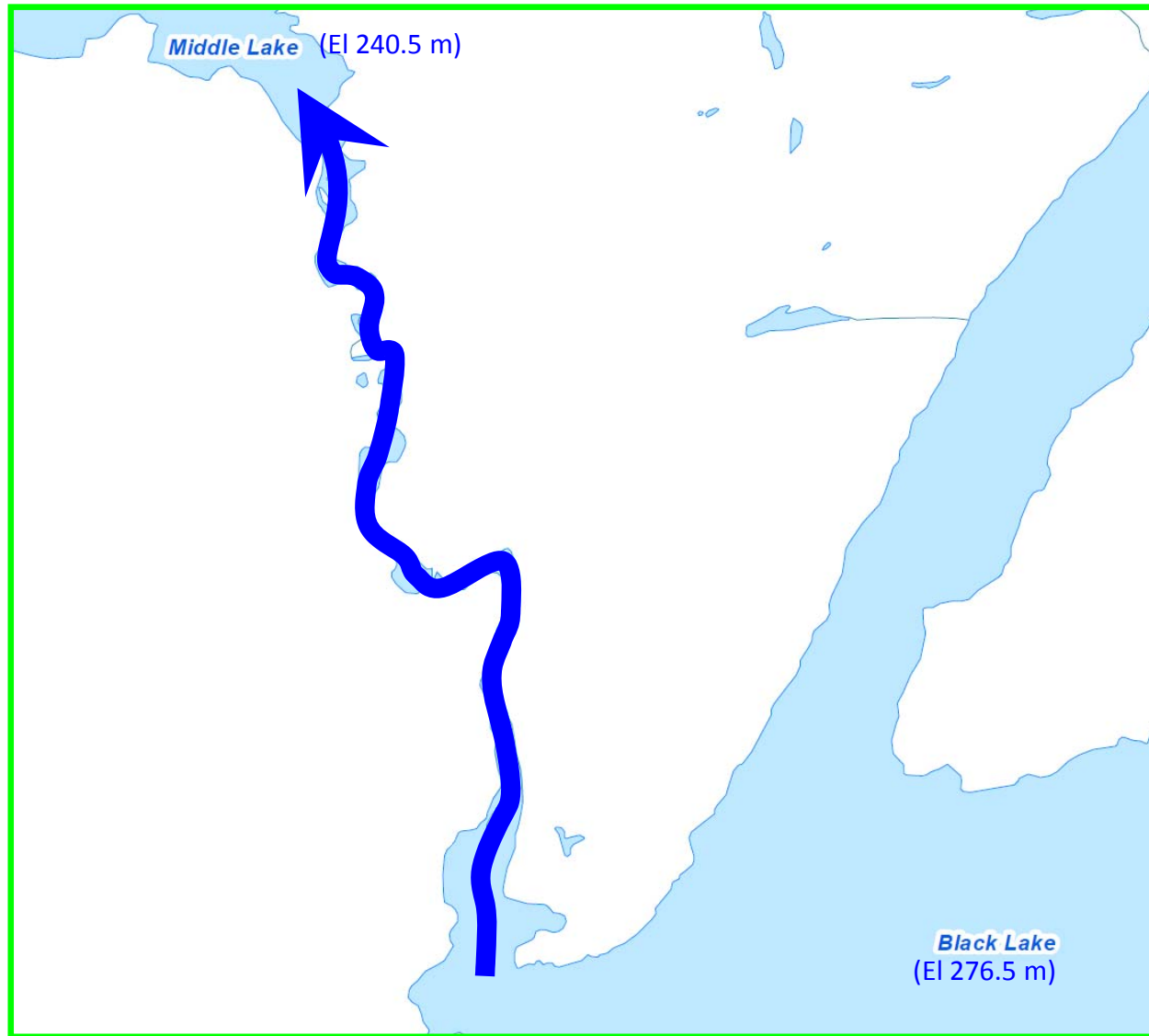


# Project Summary

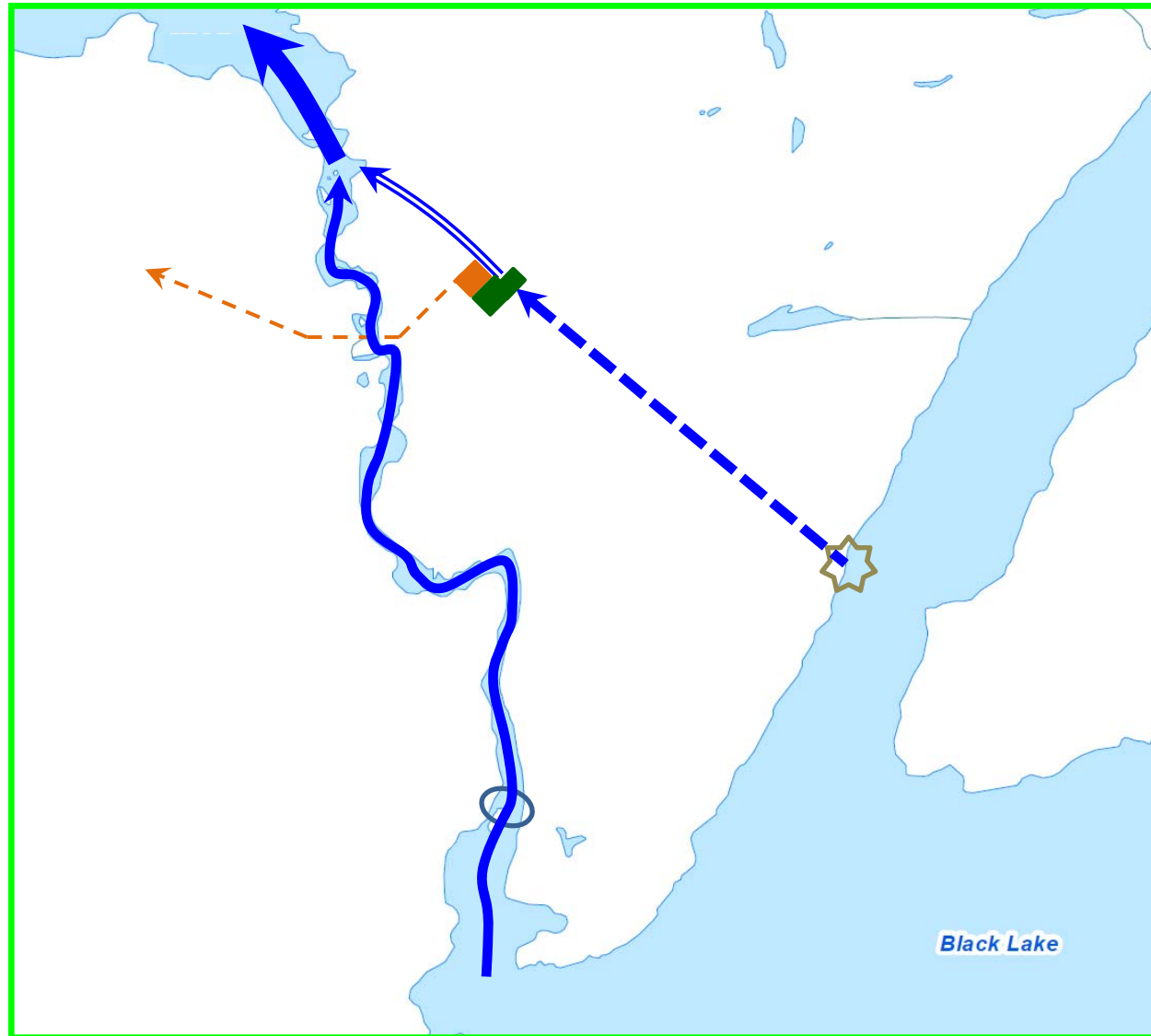
- 42 MW Hydroelectric Power Facility
- Located entirely on Black Lake First Nation land
- Water diversion power plant
- No dam
- Zero flooding
- Black Lake water levels will remain within historical range



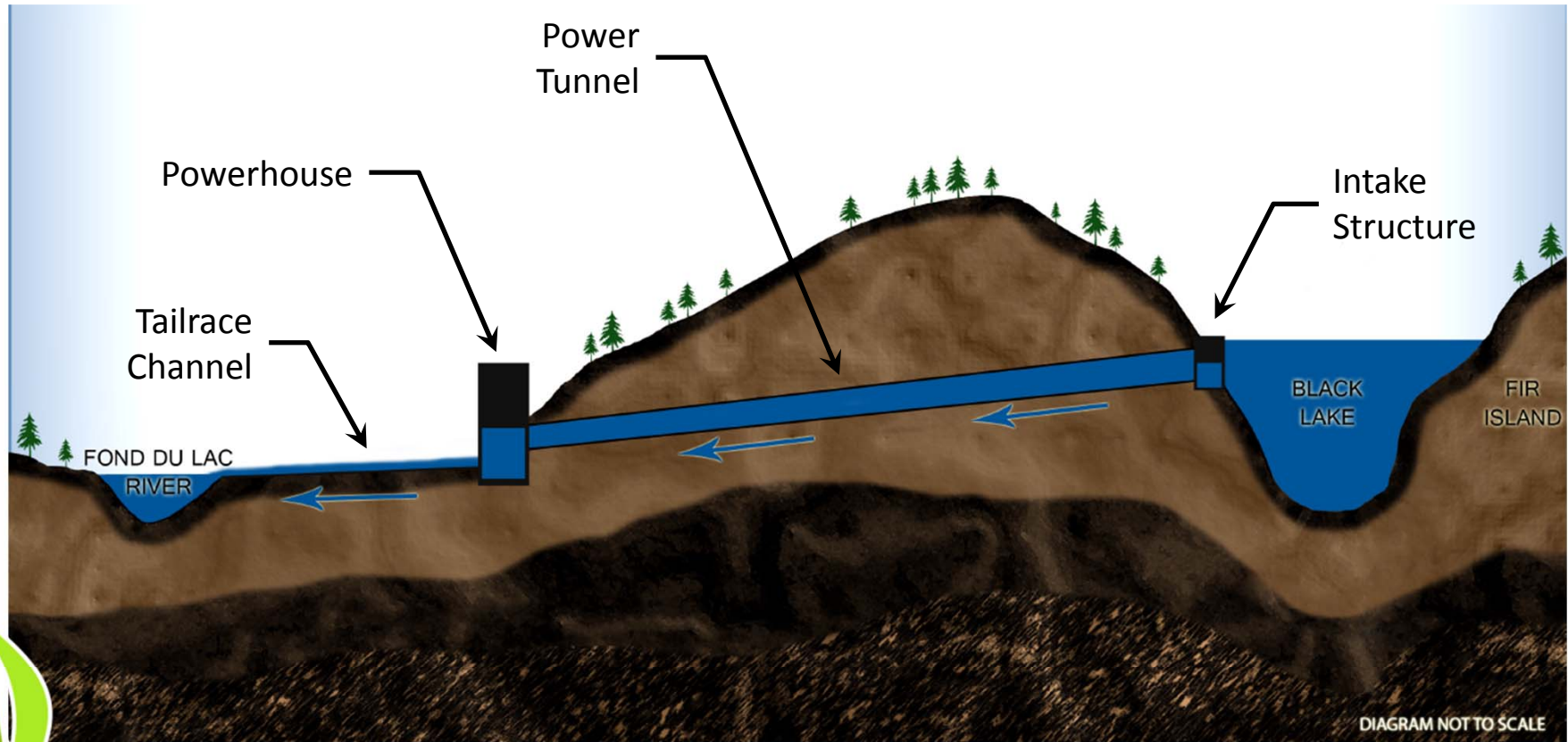
# How does it work?



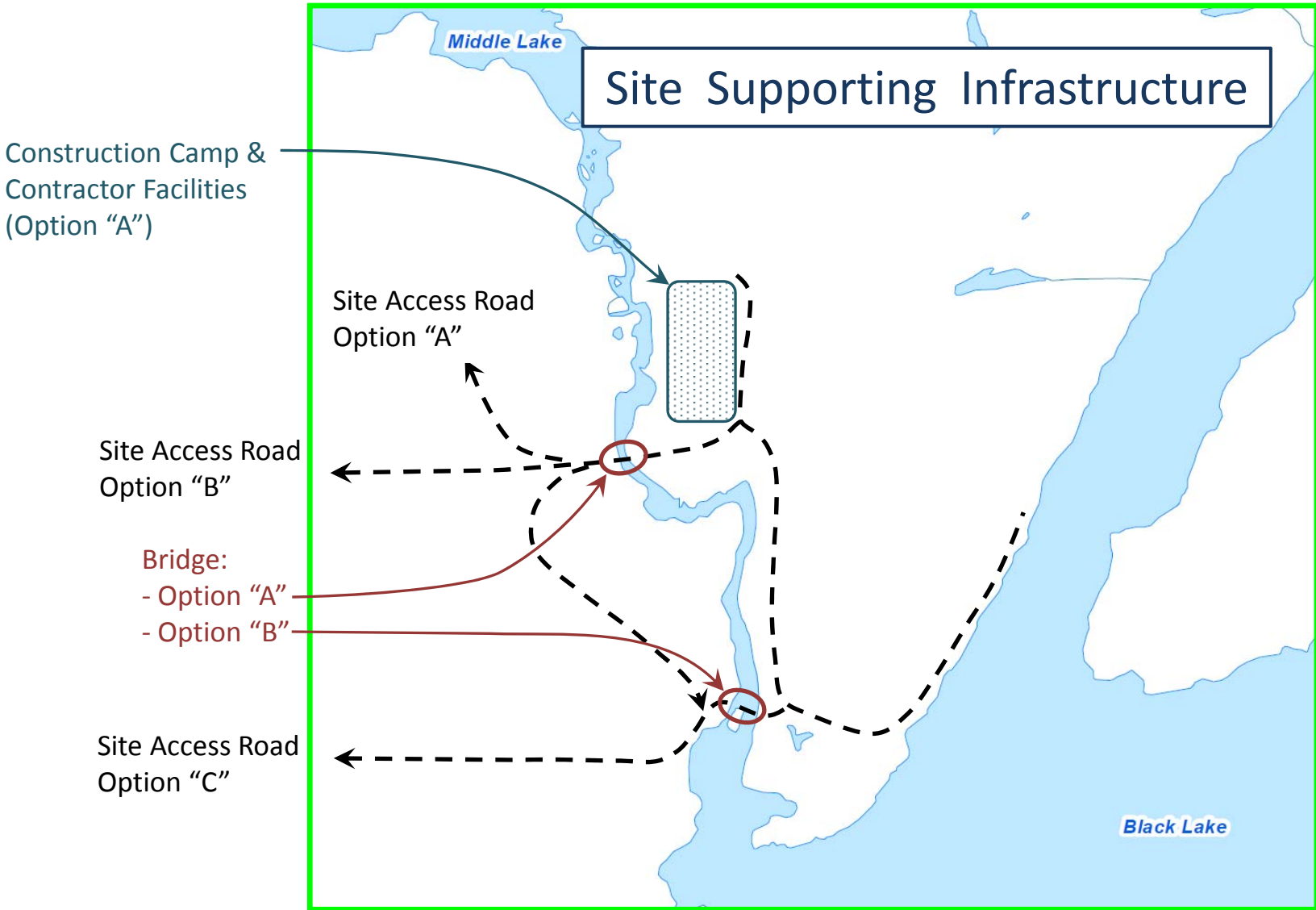
# How does it work?



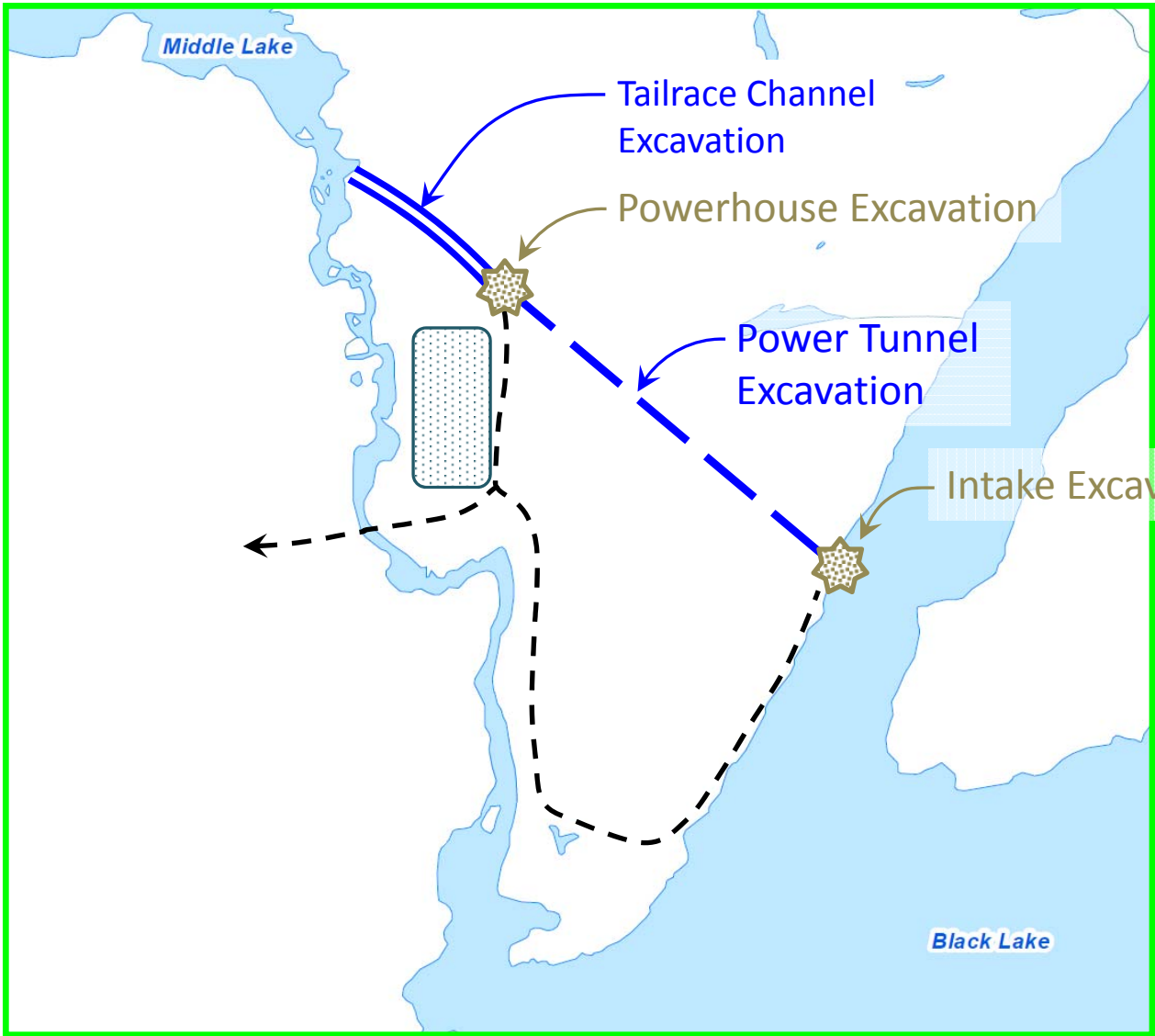
# How does it work?



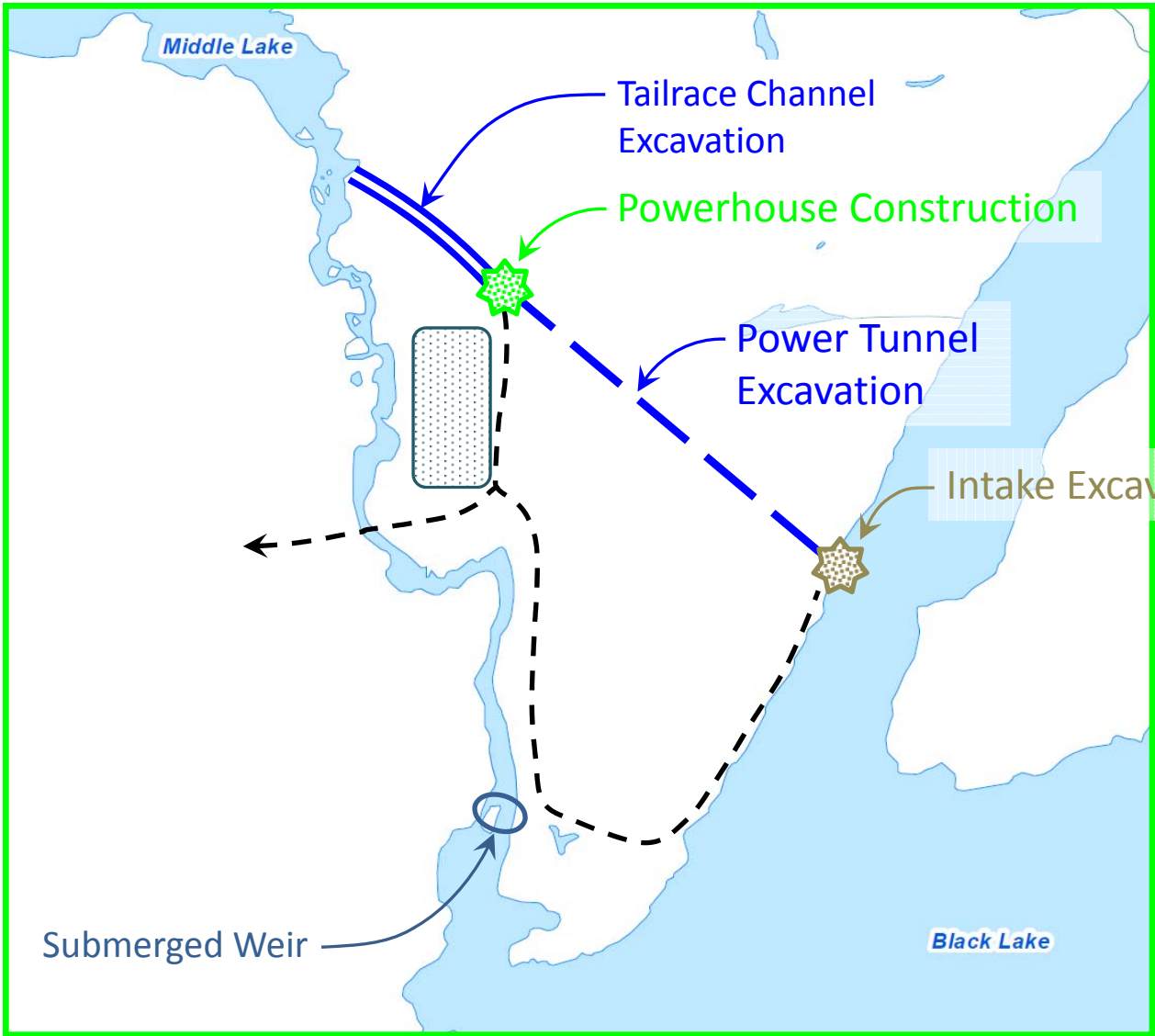
# How will it be built?



# How will it be built?



# How will it be built?



# Next Steps

- More Community Meetings & Workshops
  - Project details
  - Progress updates
- Submit Environmental Impact Statement ... August 2013
- Finalize Design and Cost Estimate ... September 2013
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- Environmental Approval ... August 2014
- Start Construction ... Fall 2014
- Plant In-Service ... December 2017



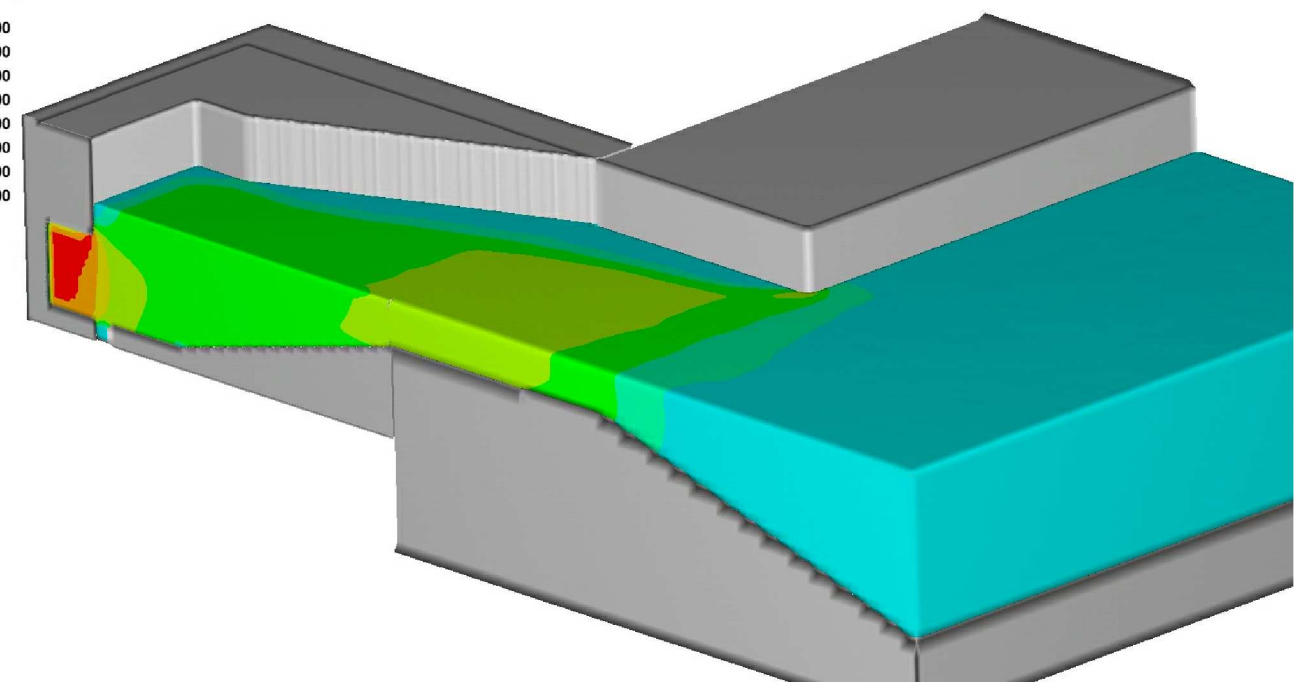
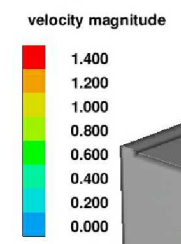
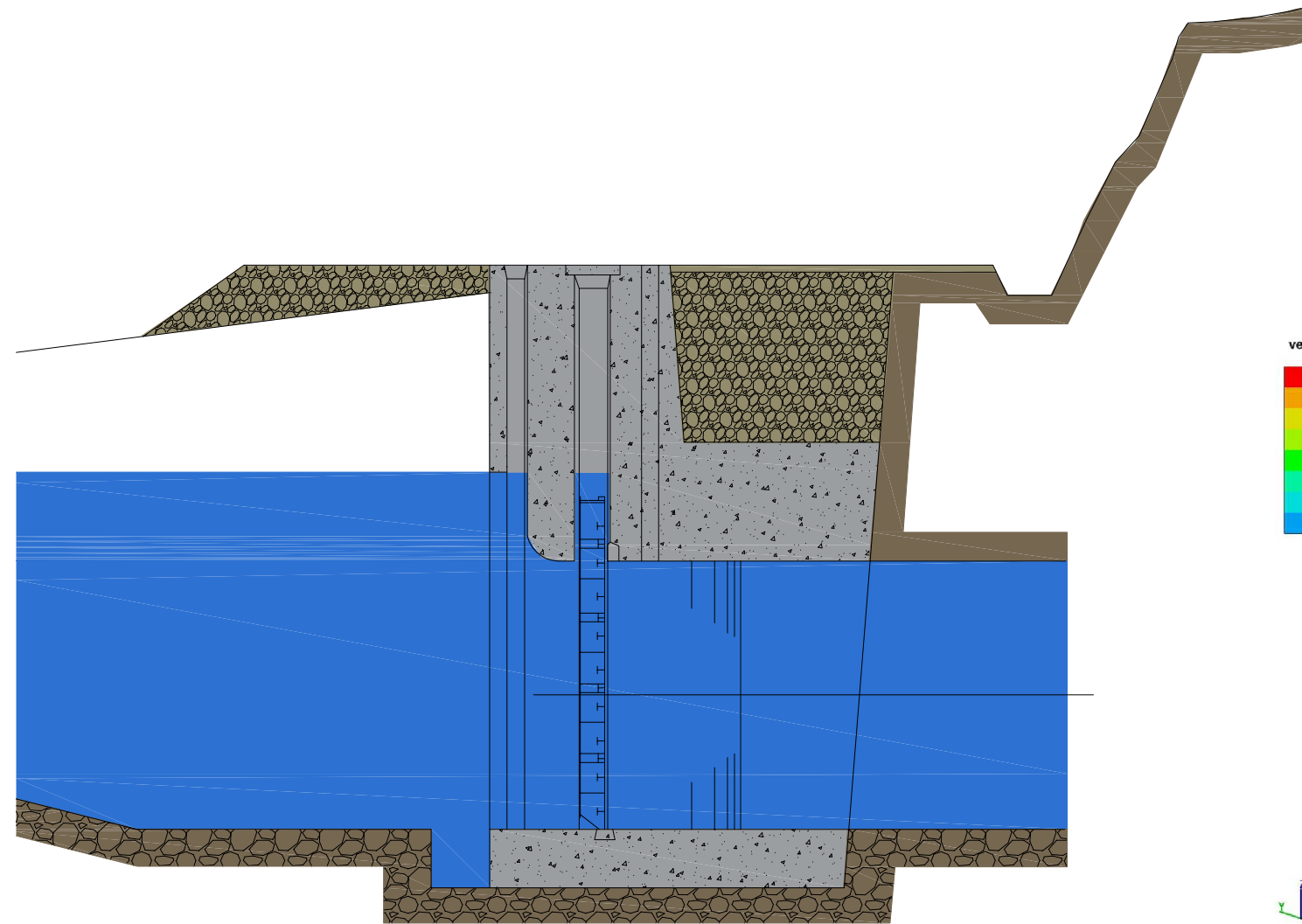
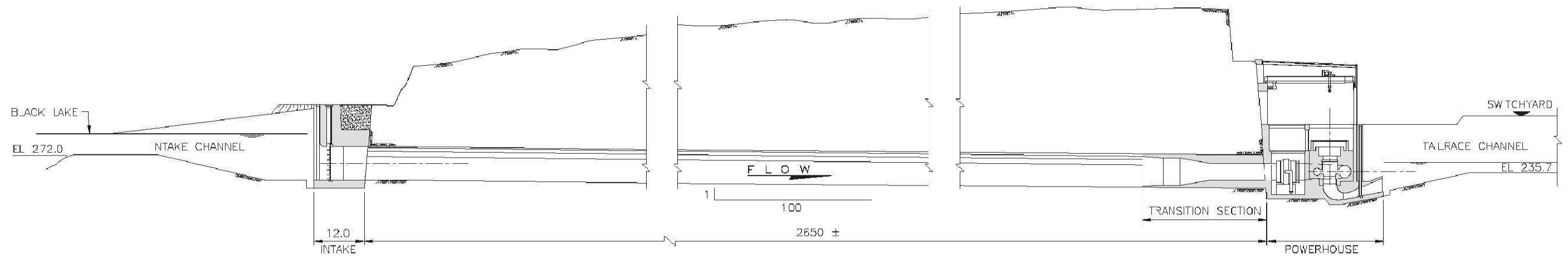
# Purpose of this Workshop

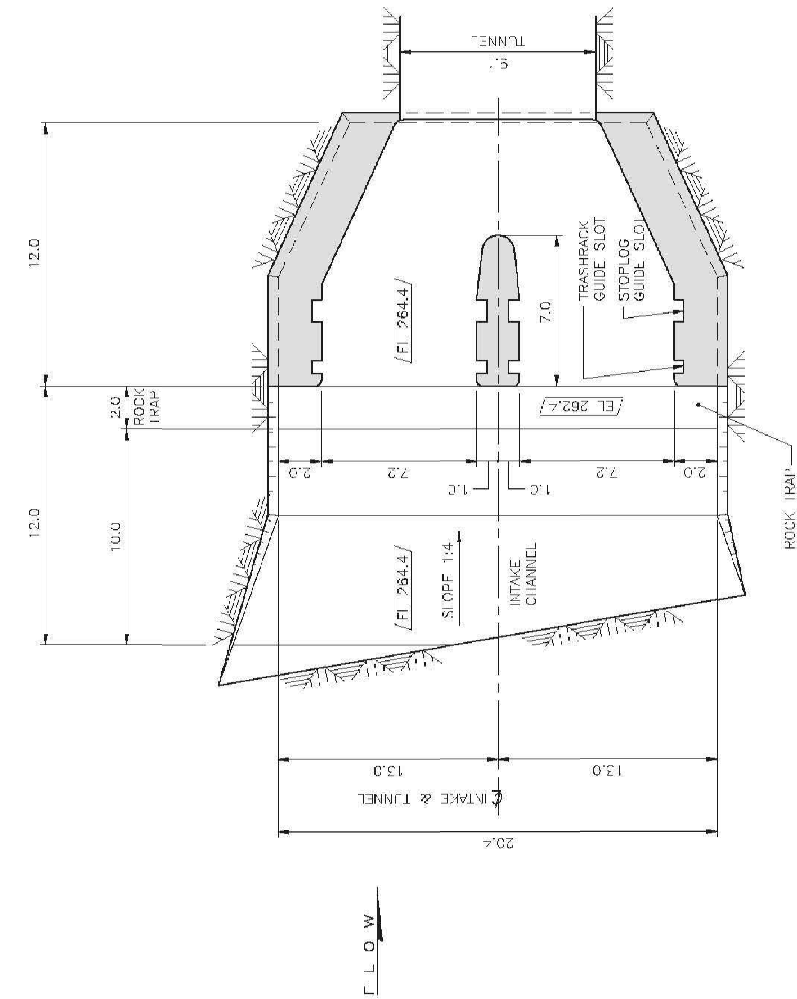
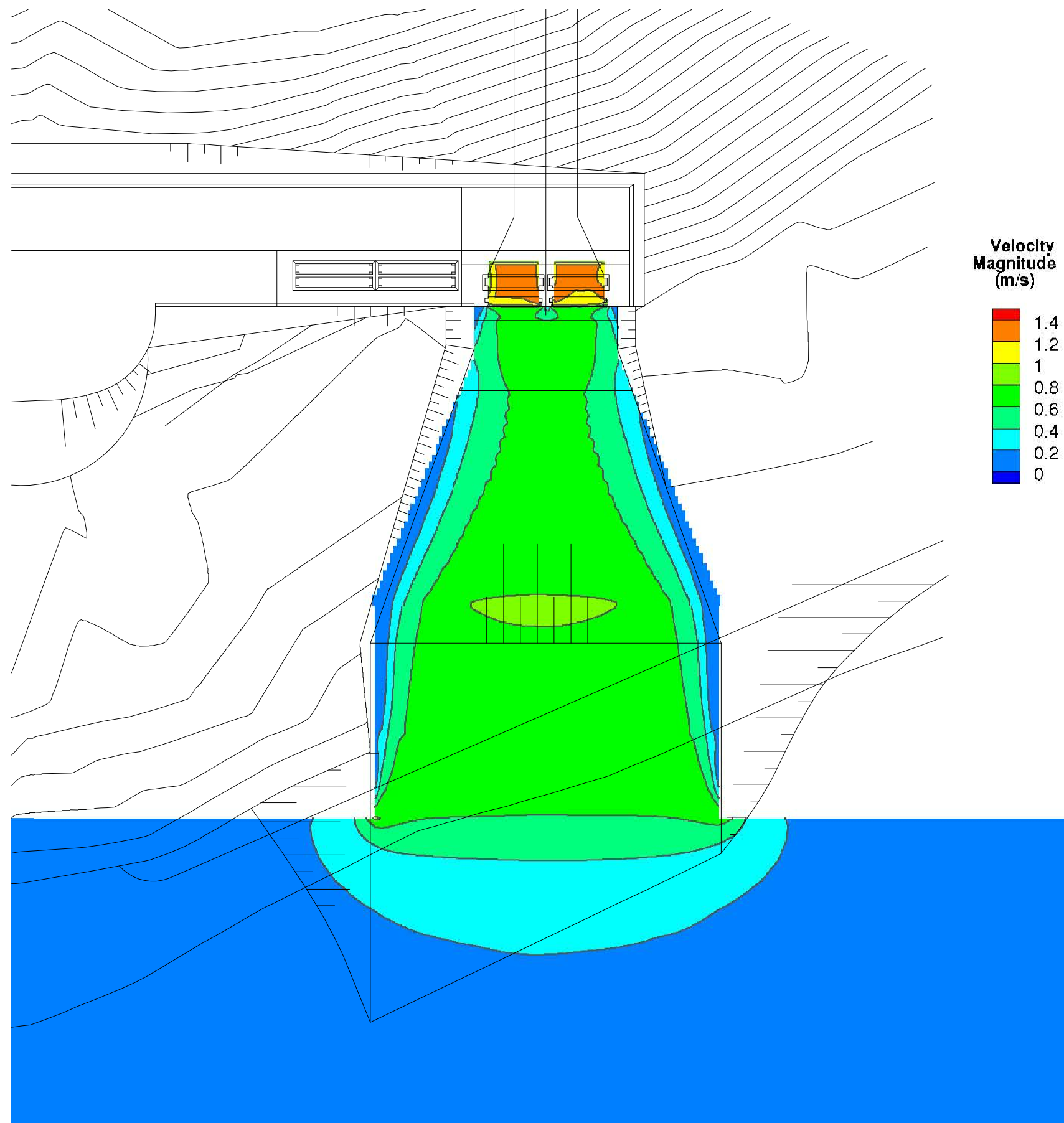
- Address concerns raised at prior Community Meeting (Feb 2013)
- Provide additional information about certain project components
- Gather feedback from community
- Feedback will be used to advance the design of the project



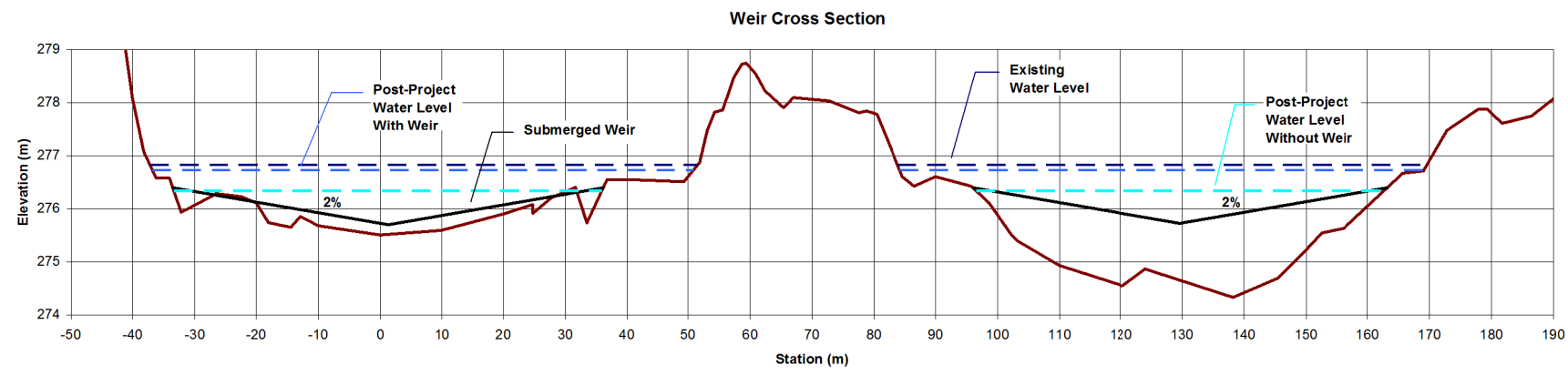


## **Intake Structure**

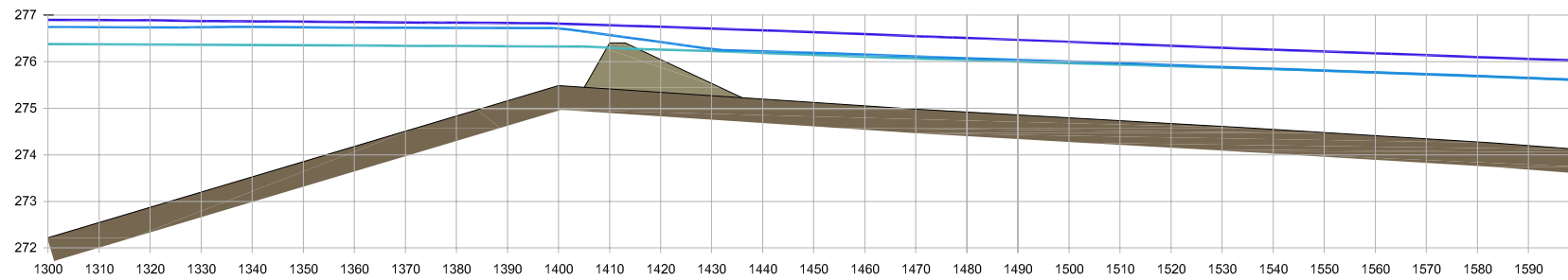
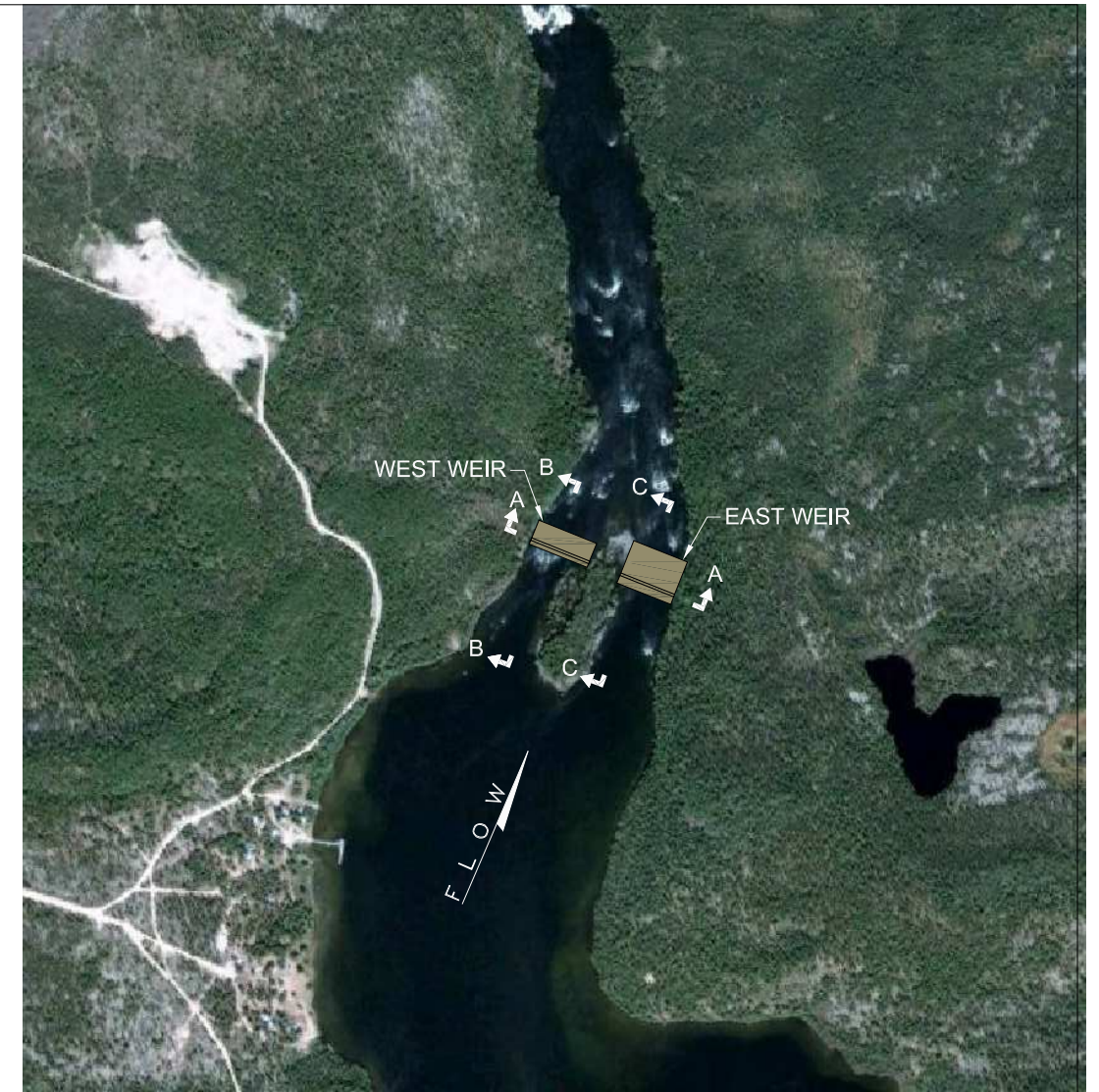




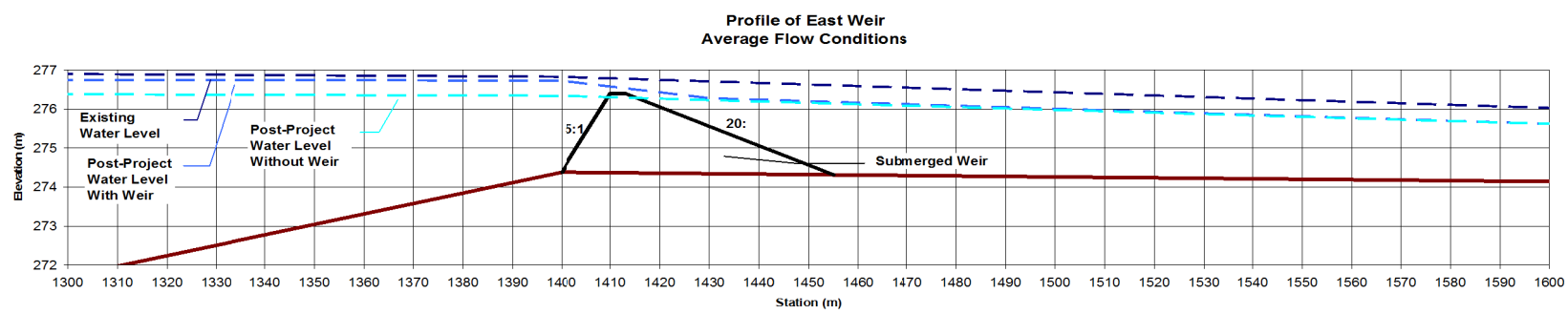
## **Submerged Weir**



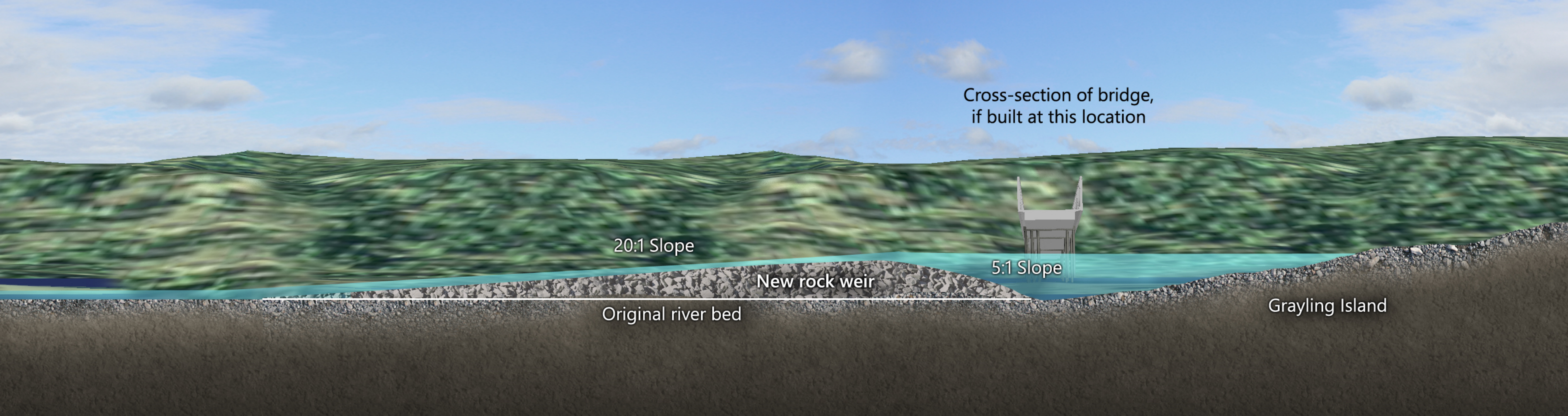
SECTION A-A - WEIR CROSS SECTION



SECTION B-B - WEST WEIR



SECTION C-C - EAST WEIR



Cross-section of bridge,  
if built at this location

20:1 Slope

New rock weir

5:1 Slope

Original river bed

Grayling Island



Submerged Weir (Example1)



Submerged Weir (Example2)



Submerged Weir (Example3)



Submerged Weir (Example4)

## Riverscape

Middle Lake

# Fond du Lac River Cross Section Locations

G'  
G  
F  
F'  
E  
E'

Tailrace

Powerhouse

Elizabeth Falls

Tunnel

Fond du Lac River

Proposed Water Intake

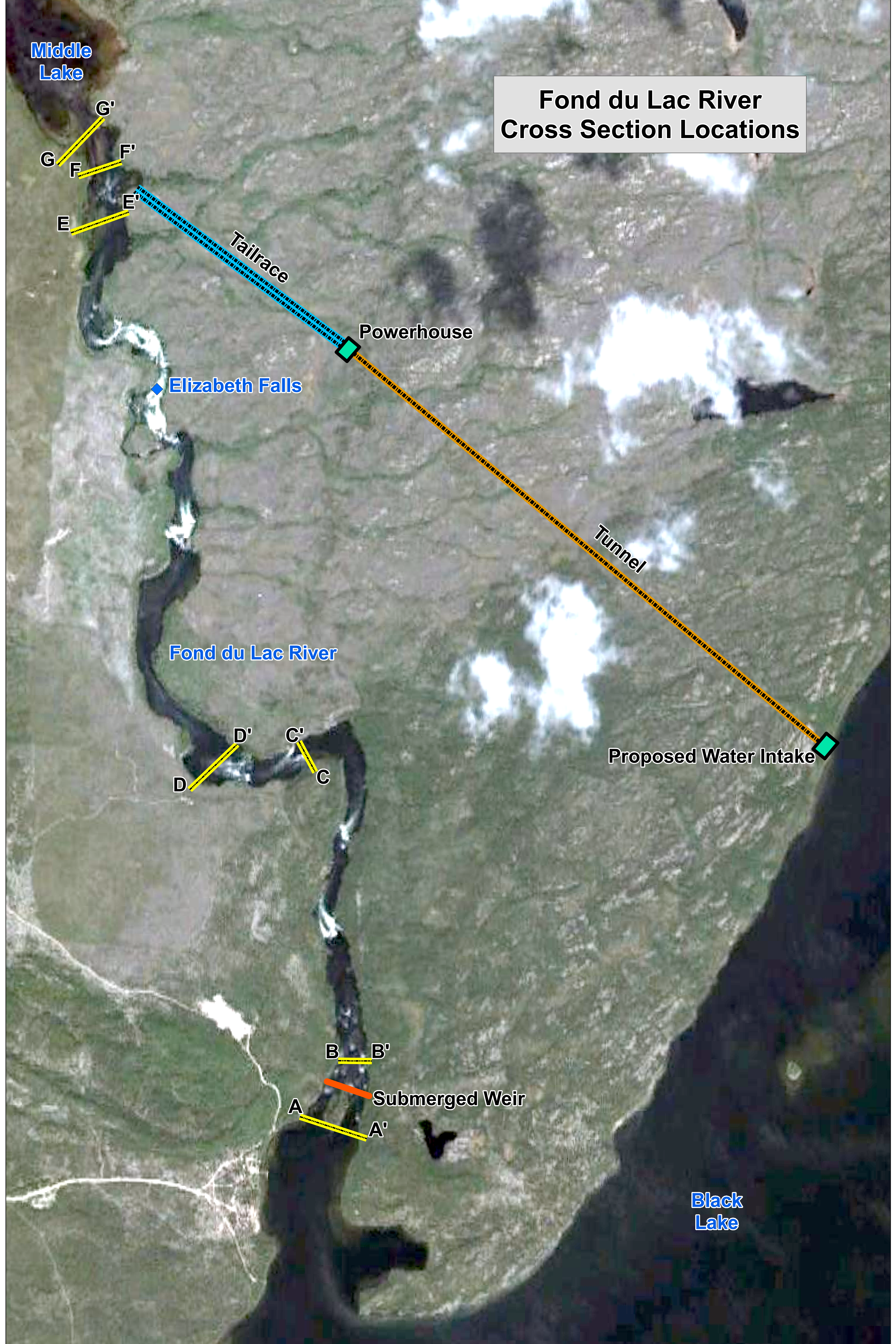
D'  
D  
C'  
C

B  
B'

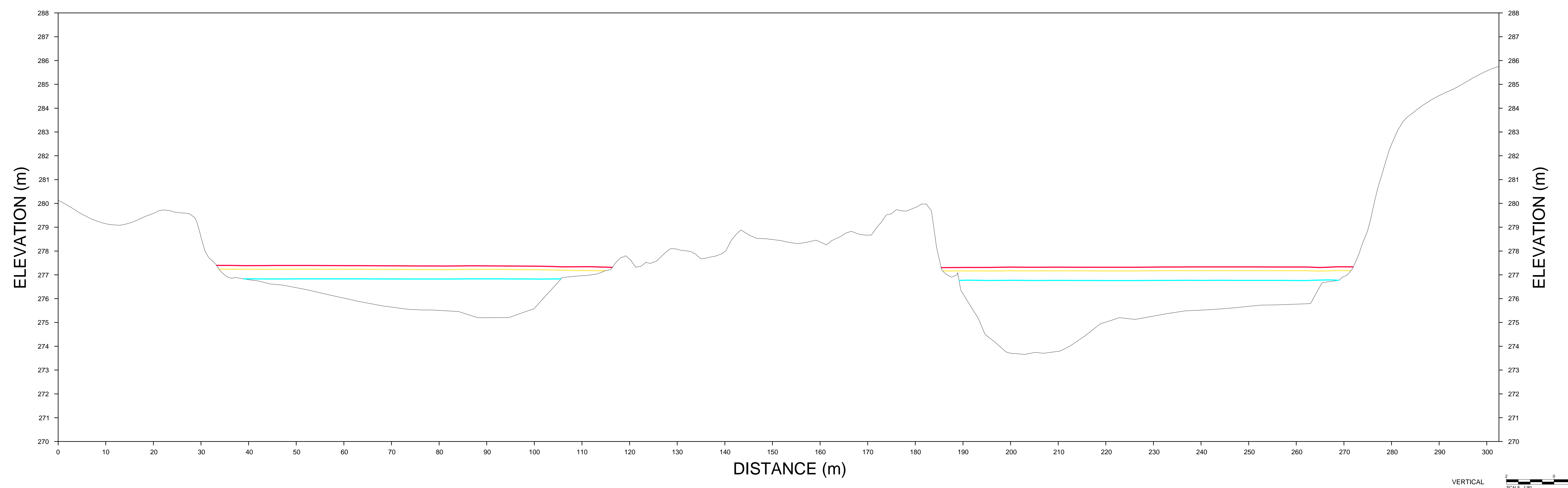
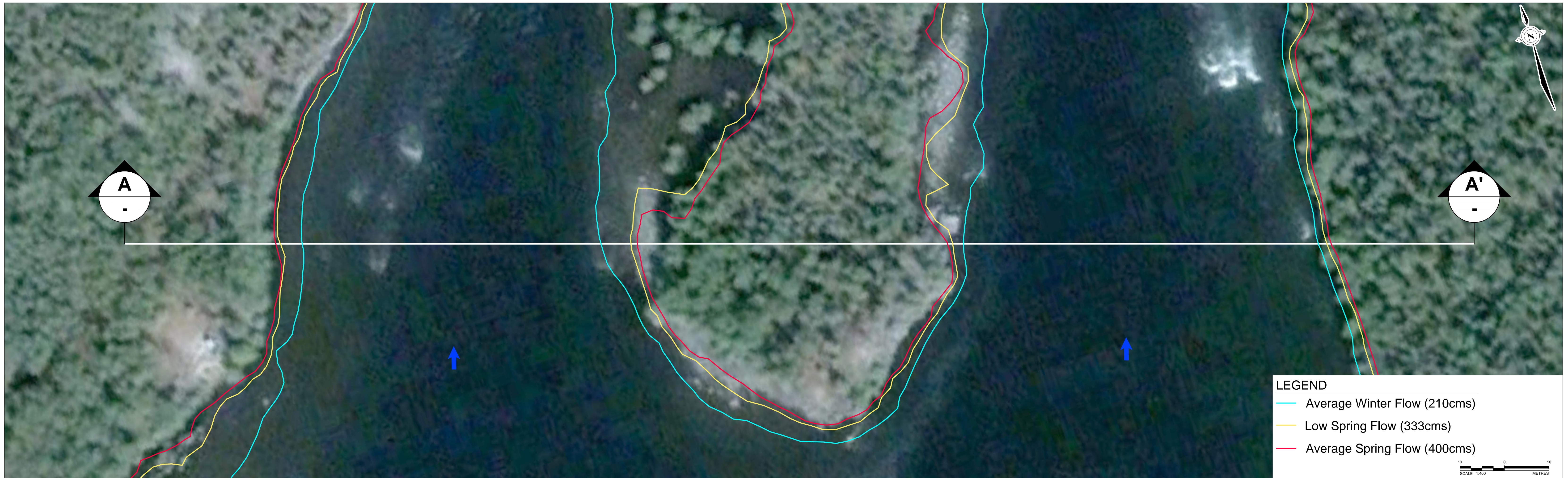
Submerged Weir

A  
A'

Black Lake

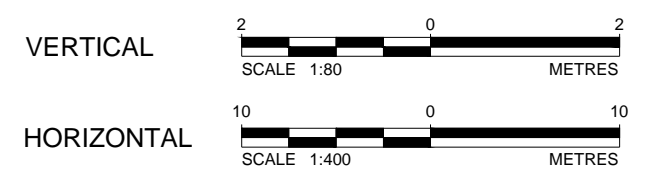
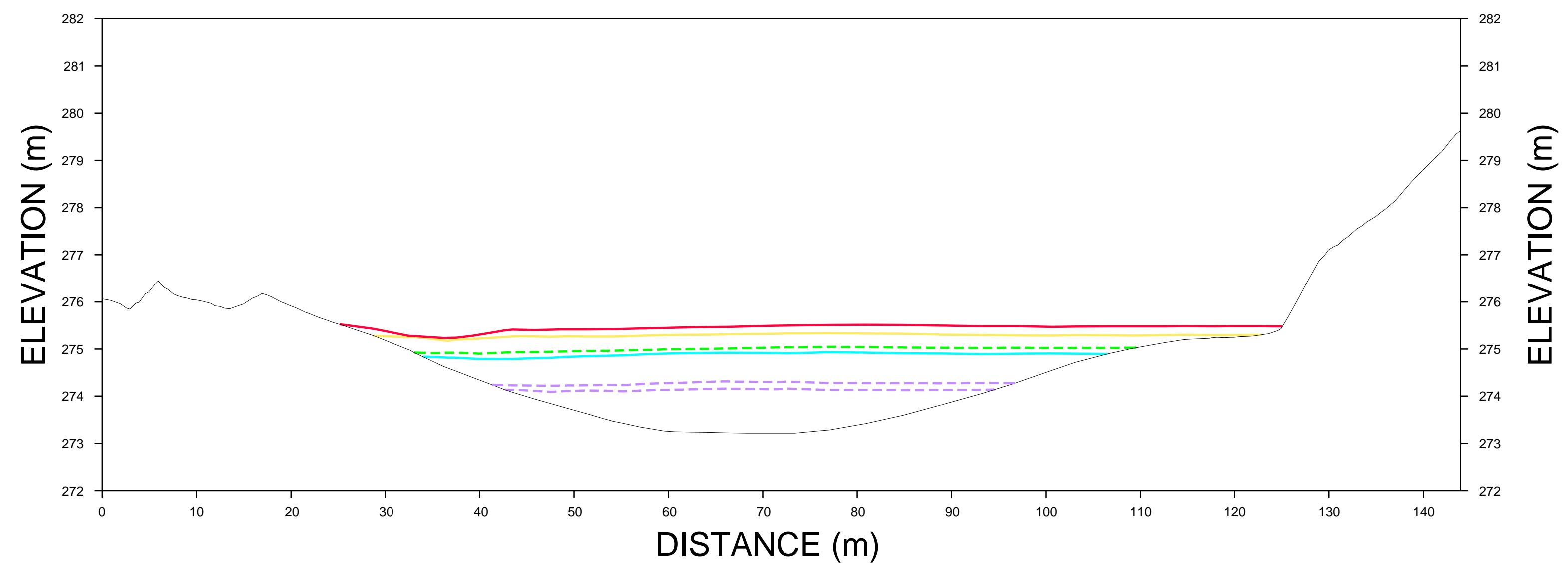
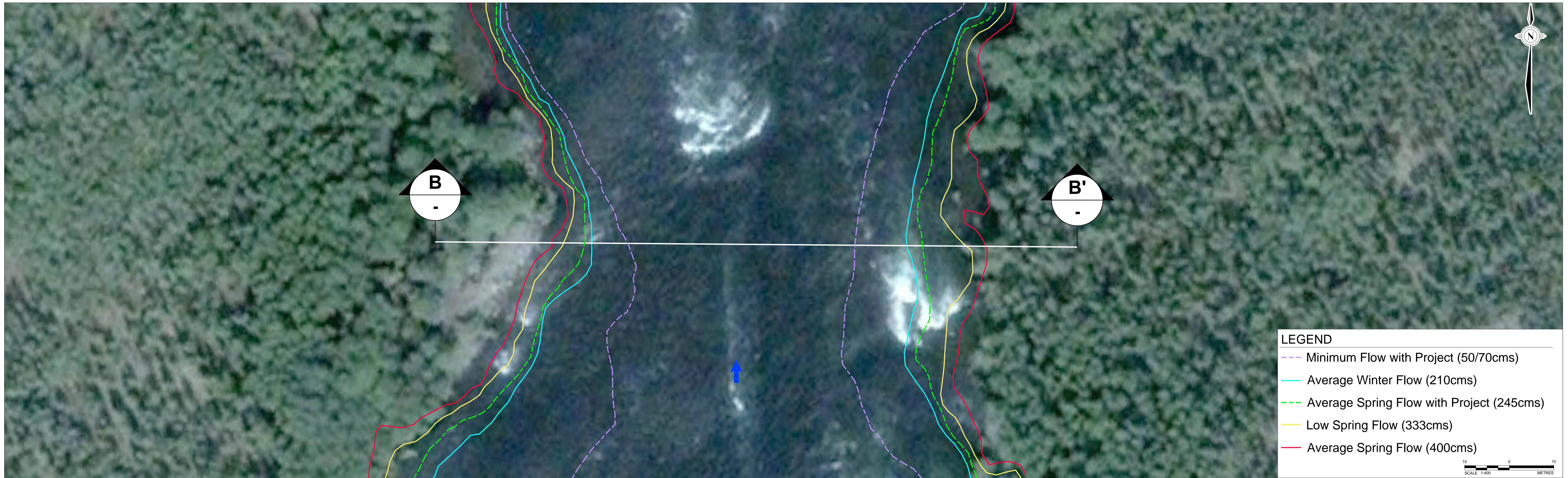


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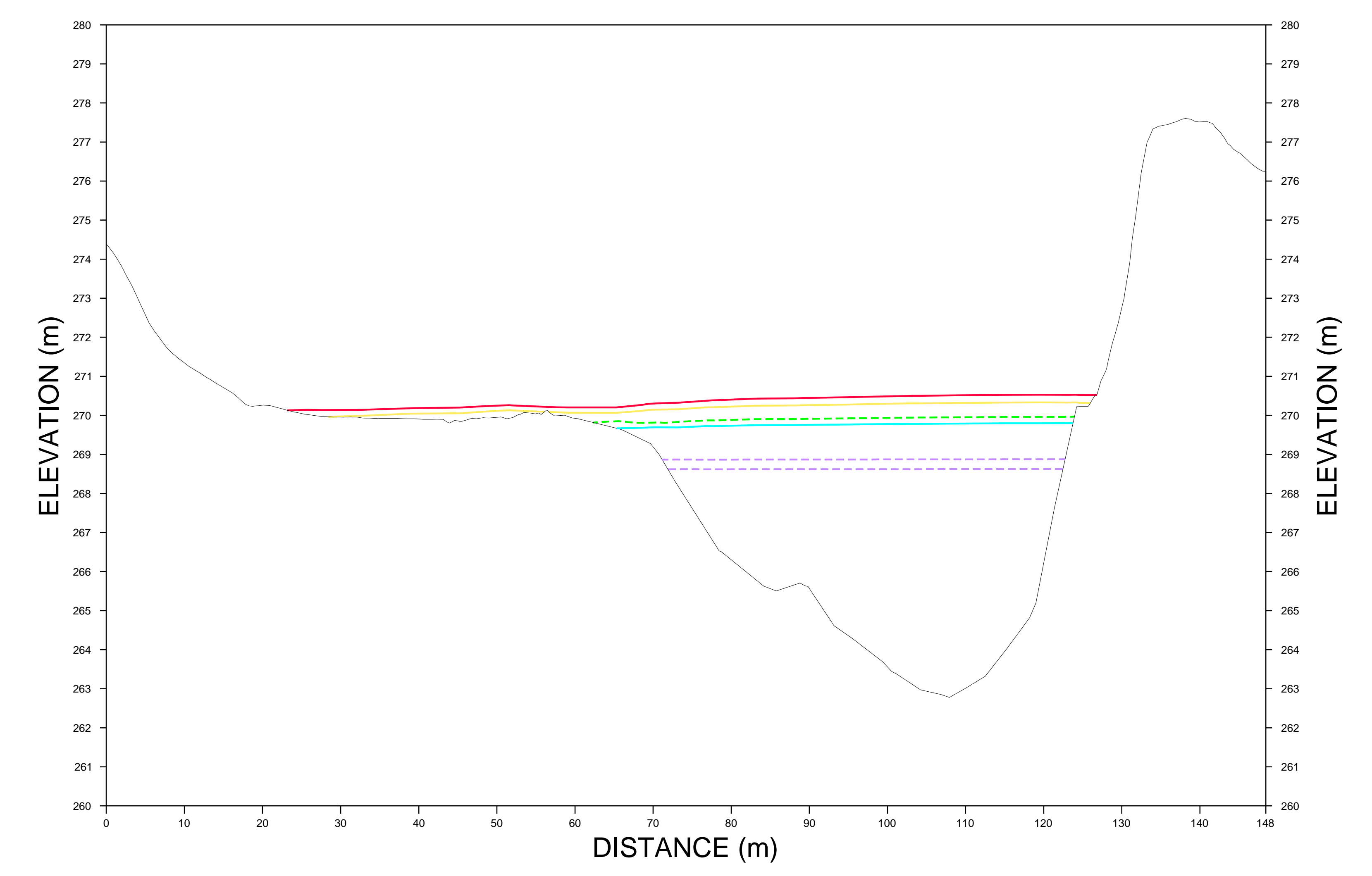
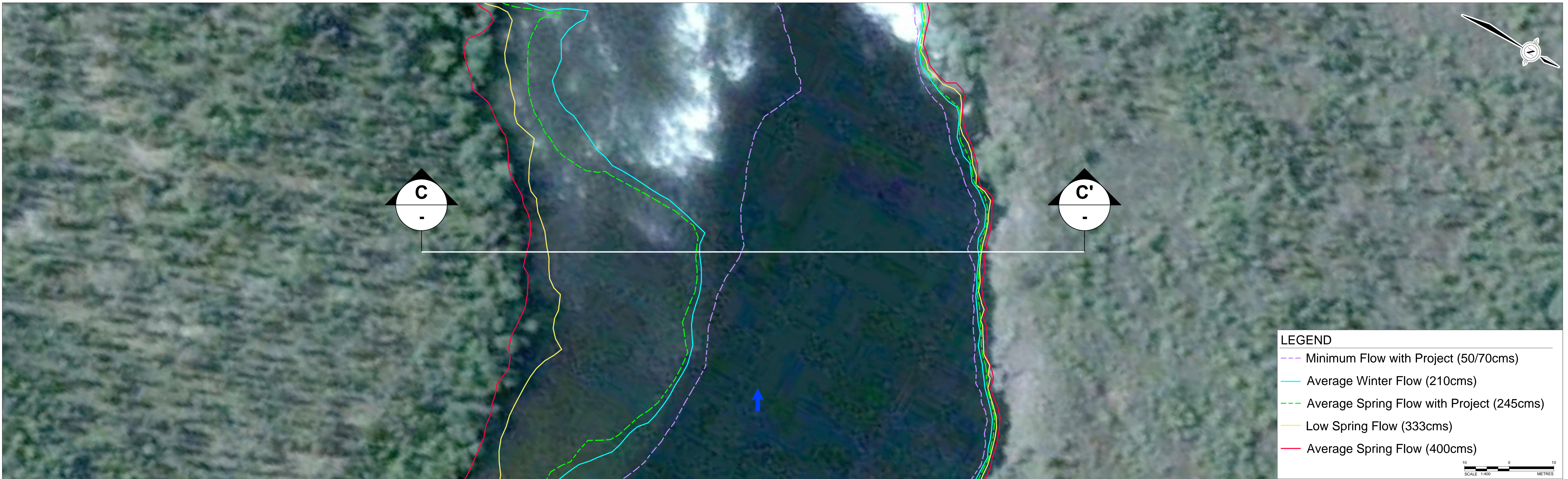


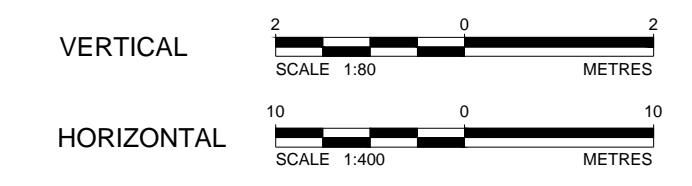
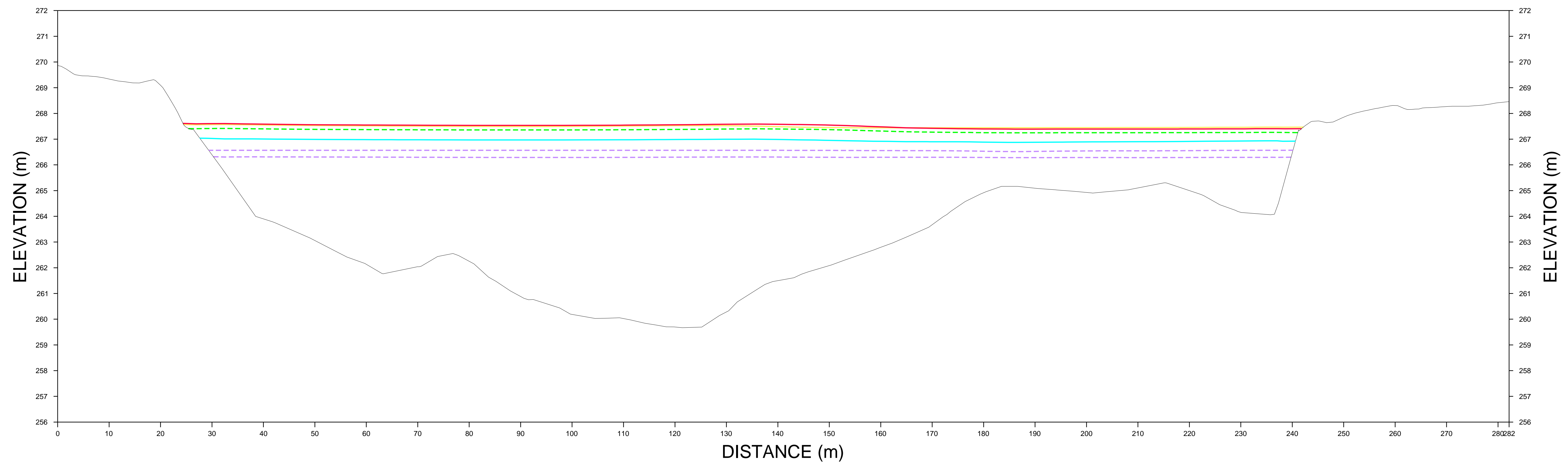
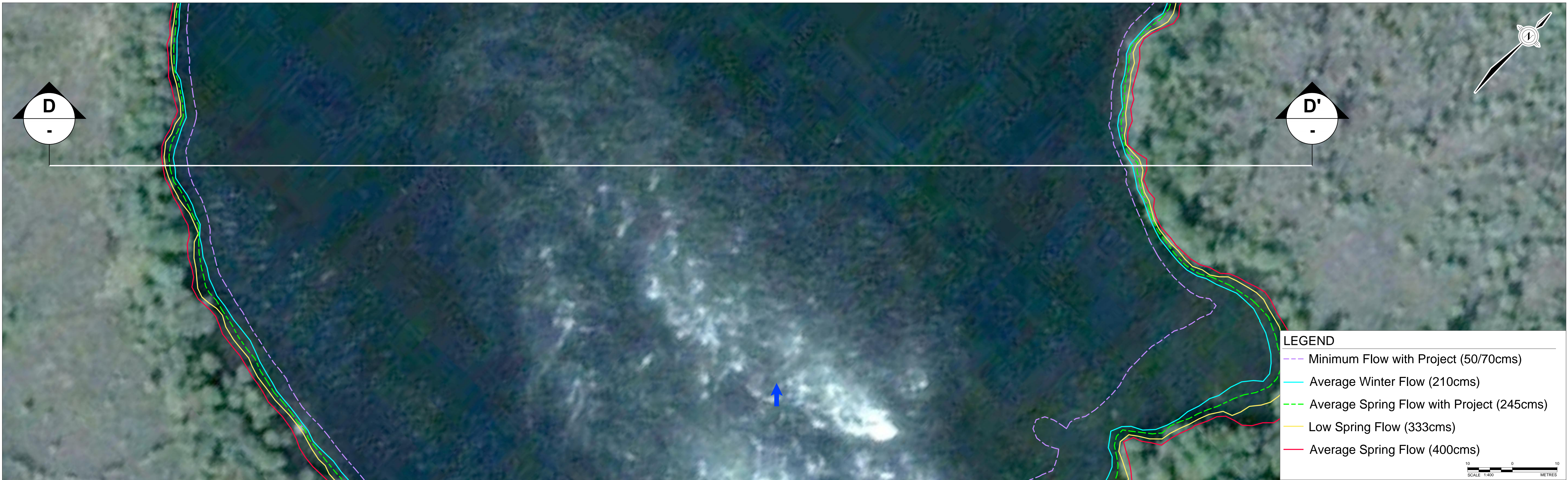
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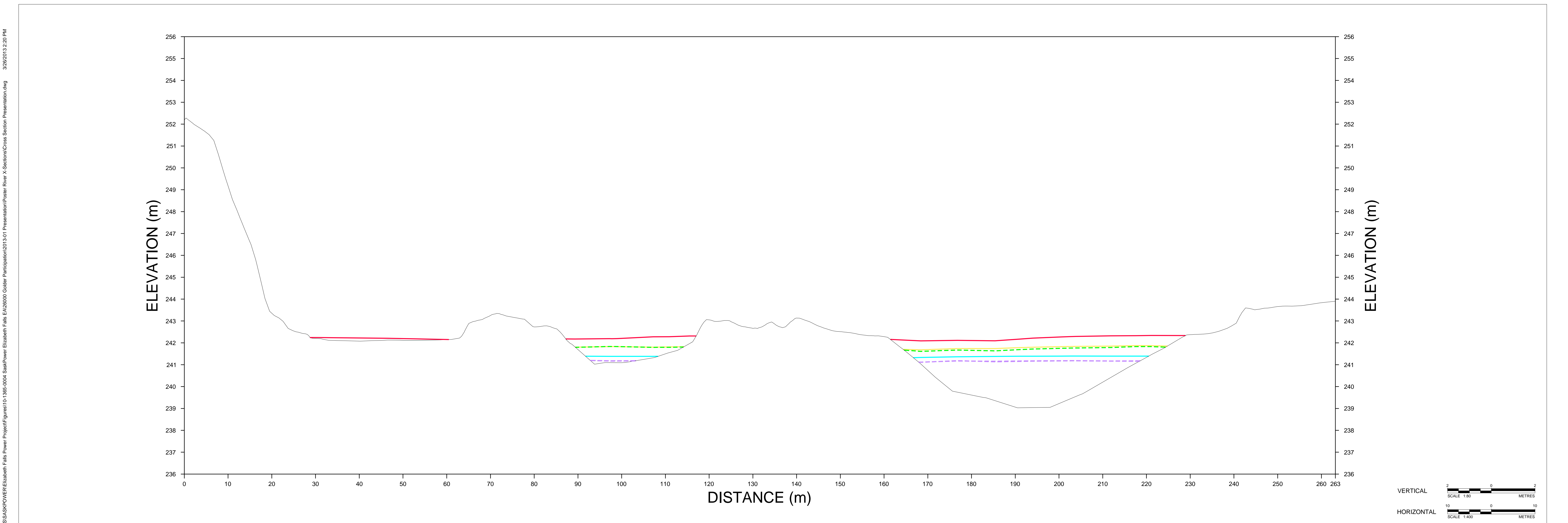
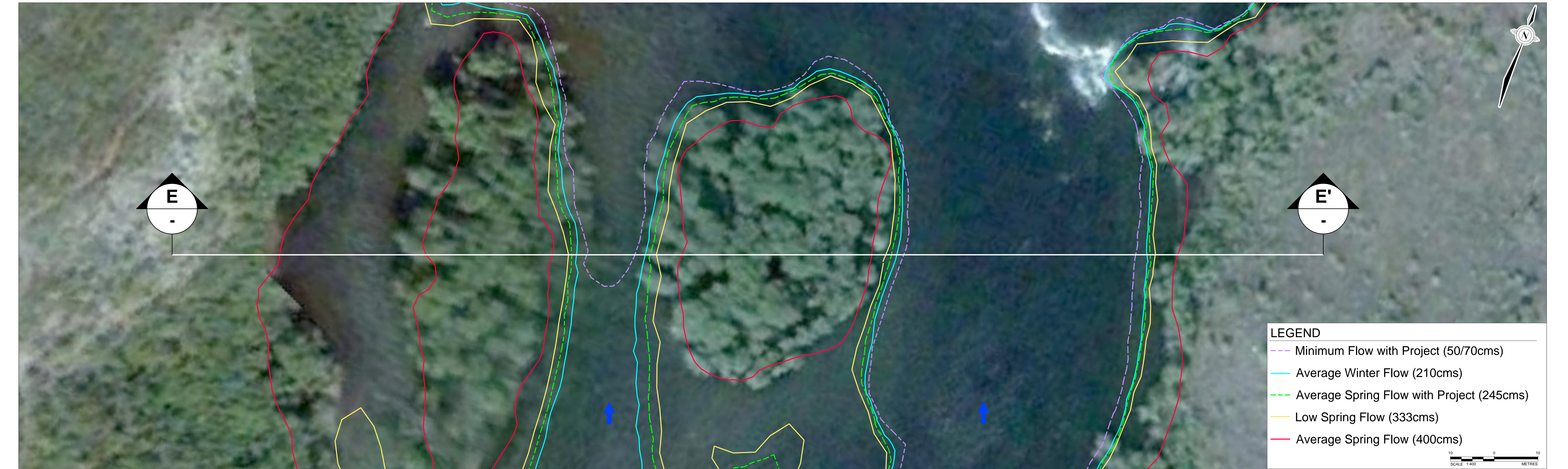
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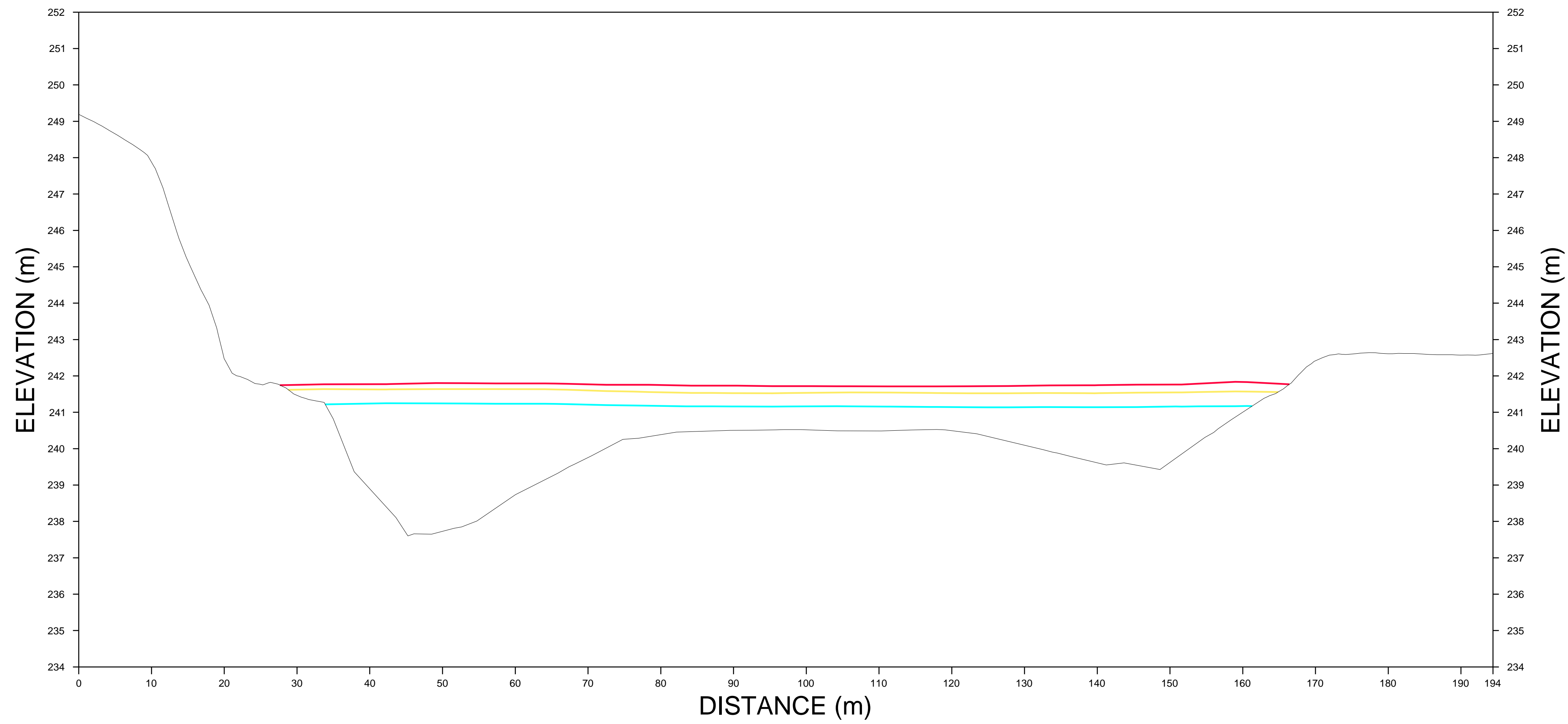
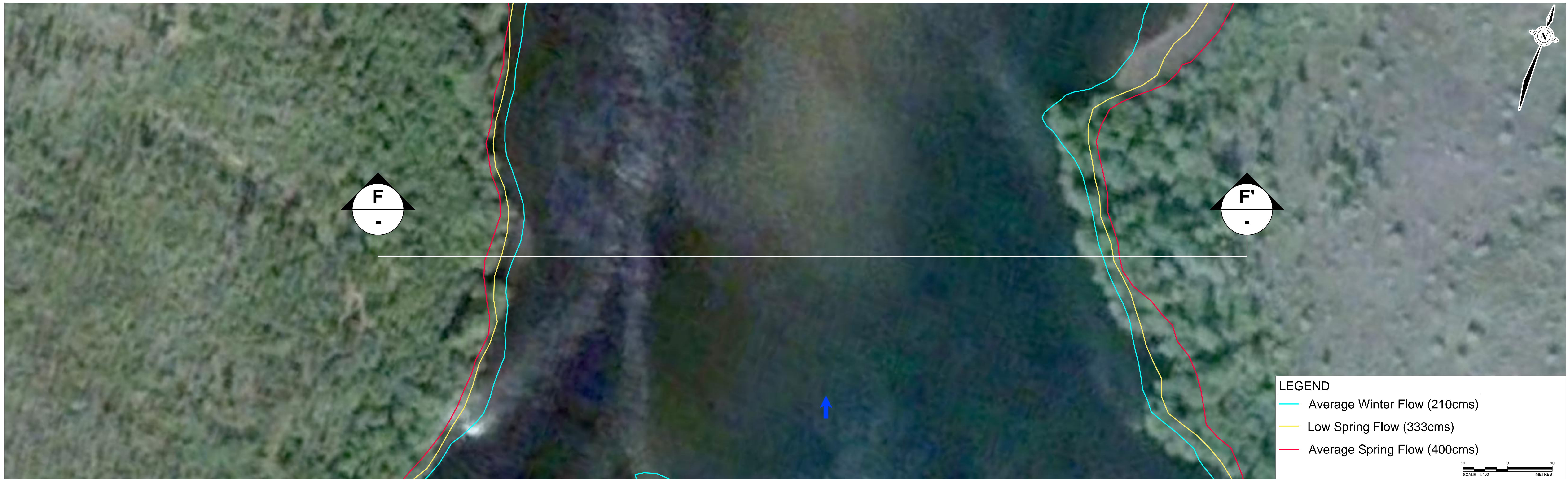




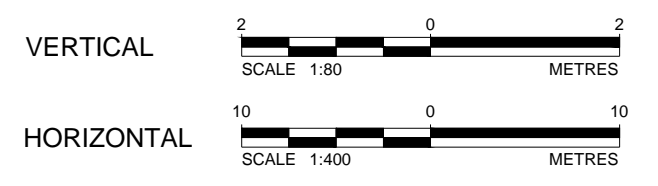
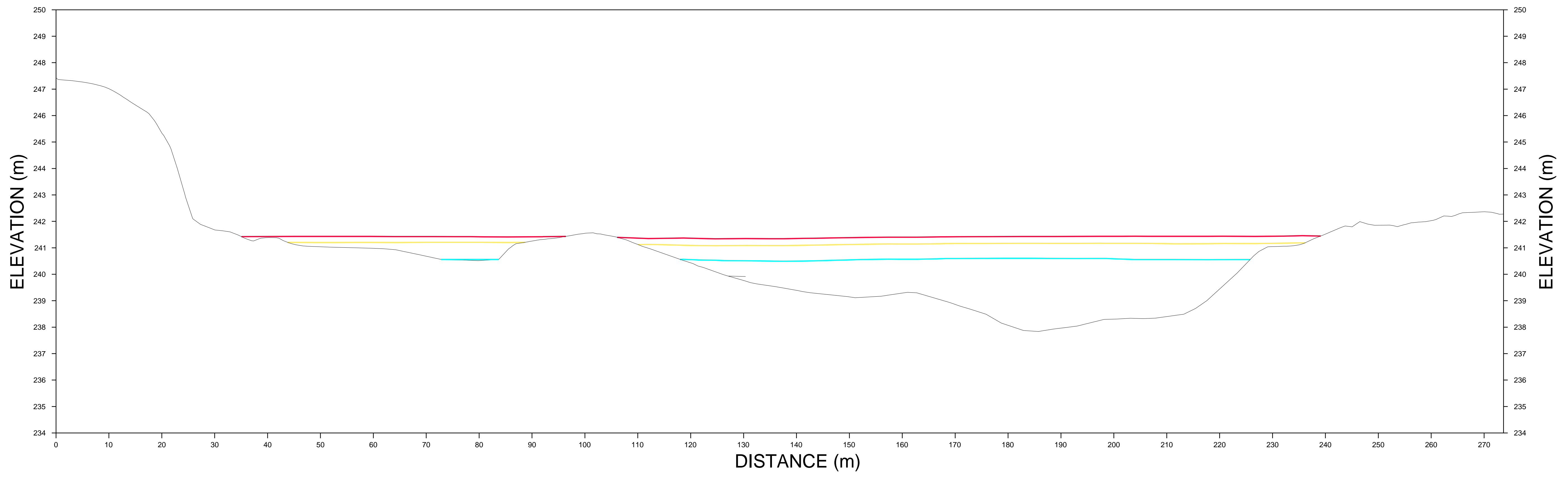
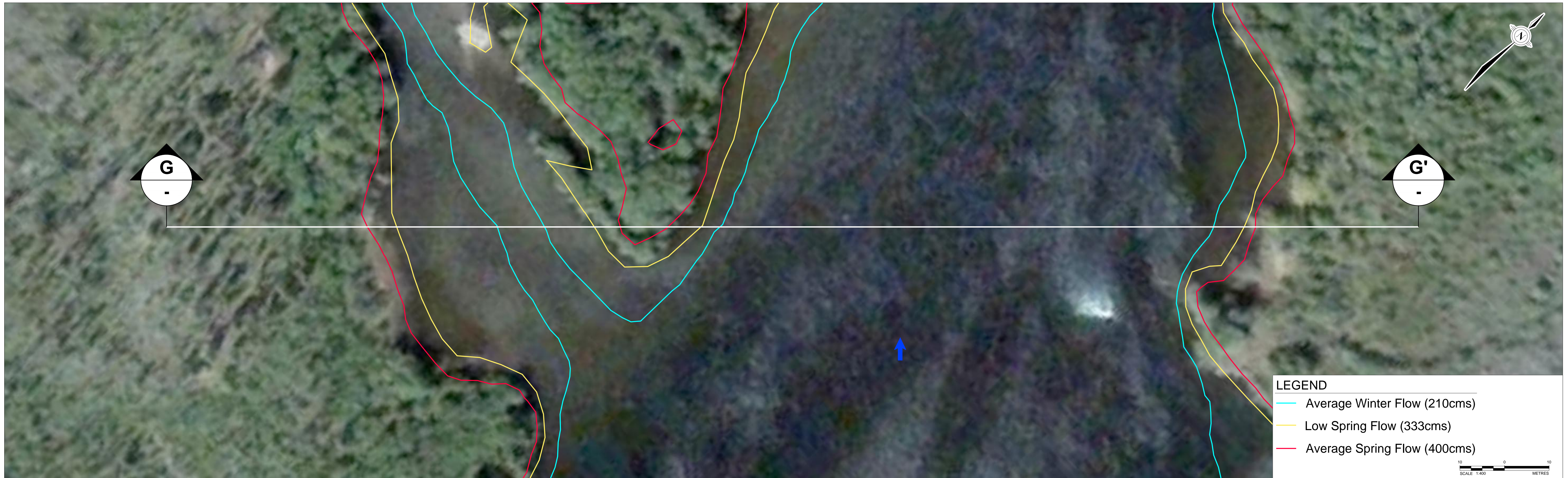
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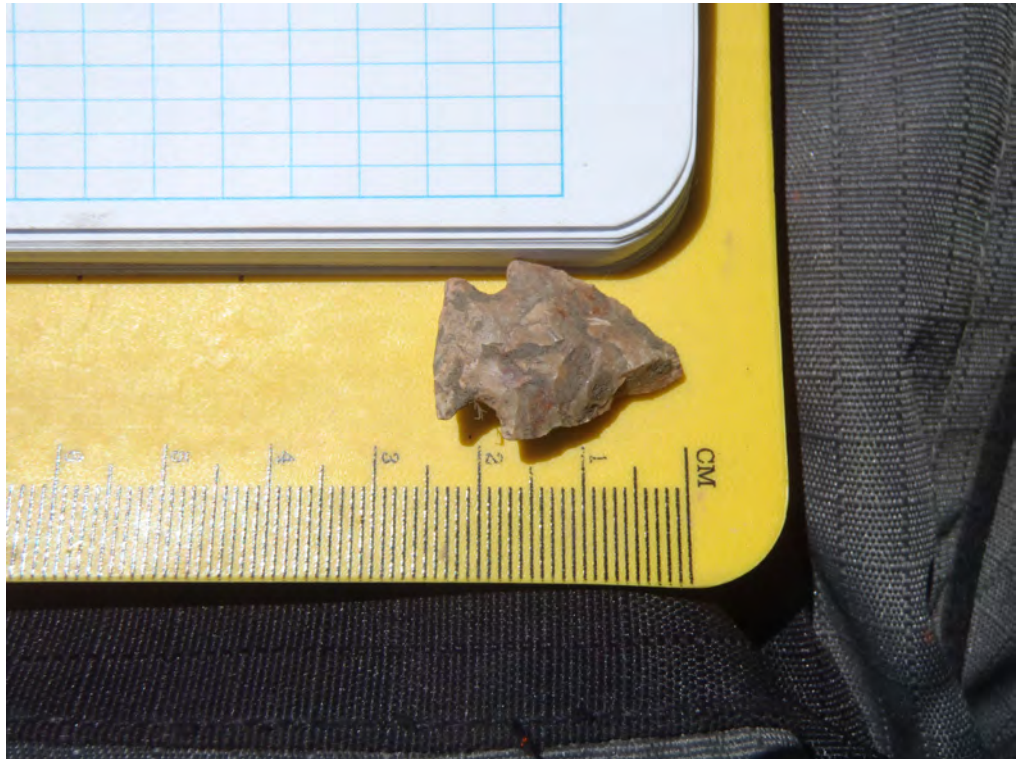

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## **Valued Components**










# Land Use Valued Components (VC)

|   | Valued Component   | Level of Concern |
|---|--|------------------|
| <p><b>Land and resource use</b></p>                   | <p>Consideration of activities on the land that are important to people, like hunting, fishing, trapping, and gathering.</p>     |                  |
| <p><b>Atmospheric Environment (Air and Noise)</b></p> | <p>Air quality is linked closely to other disciplines such as surface water quality, fish habitat, soils, vegetation, wildlife and people. Noise levels can also have impacts on people and wildlife.</p> <p><b>Air Quality</b></p>  <p><b>Noise</b></p>   |                  |
| <p><b>Heritage Resources</b></p>                      | <p>Heritage resources are important because they reveal past and present land use, cultural identity, and relationship with other cultures and the social and biophysical environments.</p> <p>(Historical and pre-contact archaeological sites, architecturally significant structures and paleontological resources)</p>   |                  |
| <p><b>Other Land Use VC's</b></p>                     |  |                  |

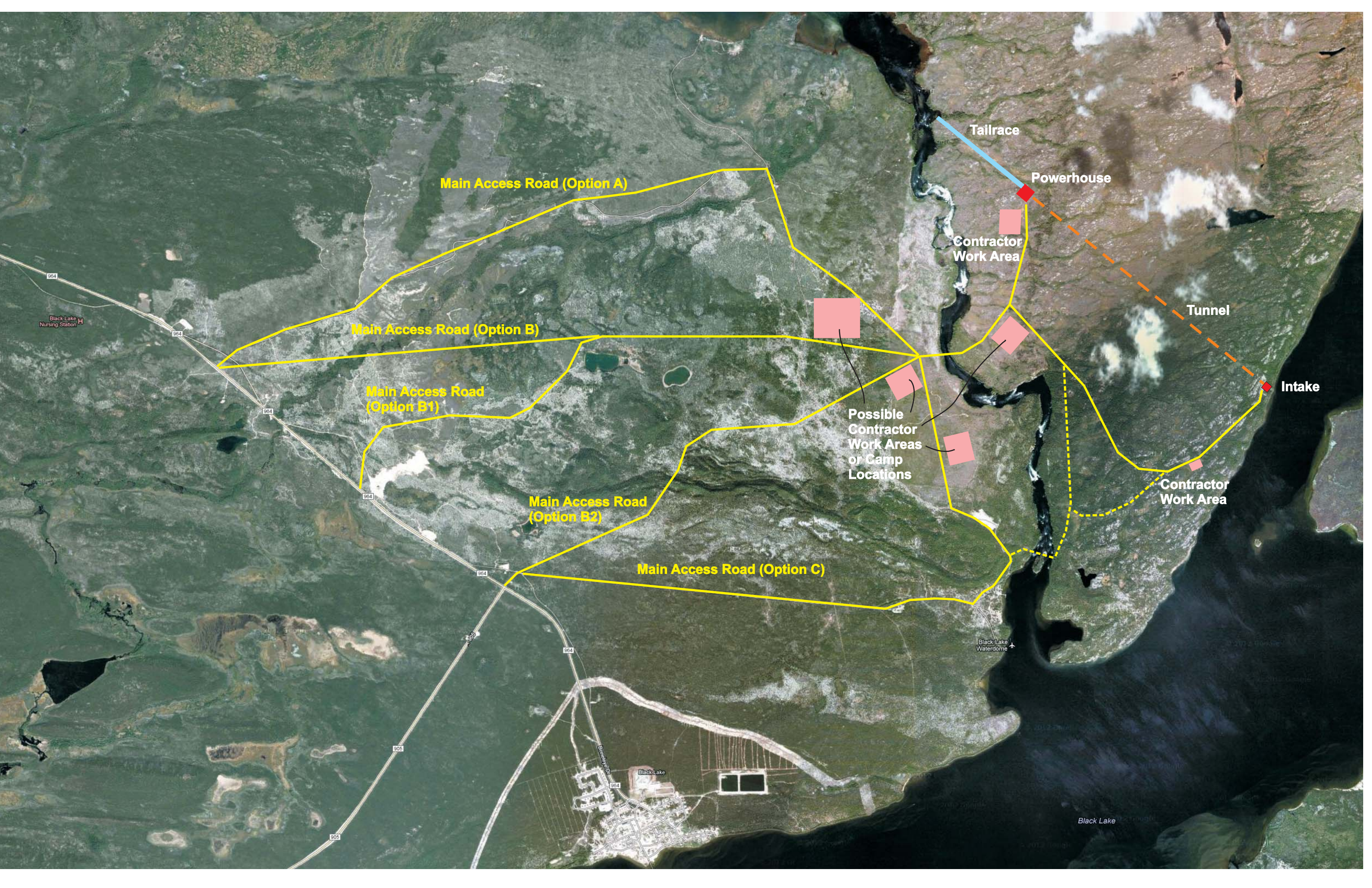
# Socio-Economics Valued Components (VC)

|  | Valued Component   | Level of Concern |
|--|--|------------------|
| <b>Economy</b>                               | <b>Economic and employment opportunities generated by the Project.</b>   |                  |
|  | <b>Education and training</b>   |                  |
|  | <b>Employment and income</b>    |                  |
|  | <b>Business and contracting</b>    |                  |
| <b>Infrastructure and Community Services</b> | <b>Other economic VC's</b>   |                  |
|  | <b>Consideration of the infrastructure in the local communities near the Project (e.g. transportation infrastructure, social, health and security services).</b>   |                  |
| <b>Community well-being</b>                  | <b>Consideration of the overall quality of life and community well-being</b>    |                  |
| <b>Other Socio-Economic VC's</b>             |  |                  |

# Water Resources Valued Components (VC)

|                                  | Valued Component  | Level of Concern |
|----------------------------------|---|------------------|
| <b>Hydrology</b>                 | <p>The availability of surface water (water levels, water flows, and volume within lakes, rivers and wetlands) to sustain aquatic life.</p>   |                  |
|                                  | <p><b>Water levels</b></p>    |                  |
|                                  | <p><b>Water flows</b></p>    |                  |
| <b>Groundwater</b>               | <p>Changes to groundwater can affect groundwater-surface water dynamics, which result in strong connections between groundwater quantity and quality and components of the surface water and terrestrial environments, and the people that use these resources.</p>   |                  |
| <b>Surface Water Quality</b>     | <p>The quality of surface waters is important to the health of local community members, aquatic ecosystems and biota that depend on water resources.</p>   |                  |
| <b>Fish</b>                      | <p>Numerous fish species were identified during baseline investigations (within Black Lake, Fond du Lac River and Middle Lake)</p>  |                  |
|                                  | <p><b>Commercial and Domestic Fish Species</b><br/>(Whitefish, Lake trout, Northern pike, Walleye, Sucker species)</p>    |                  |
|                                  | <p><b>Sport Fish Species</b> (Arctic grayling, Lake trout, Northern pike, Walleye)</p>                                   |                  |
| <b>Other Water Resource VC's</b> |   |                  |

## Road Bridge Camp



Tailrace

Powerhouse

Main Access Road (Option A)

Contractor Work Area

Main Access Road (Option B)

Tunnel

Main Access Road (Option B1)

Possible Contractor Work Areas or Camp Locations

Intake

Main Access Road (Option B2)

Contractor Work Area

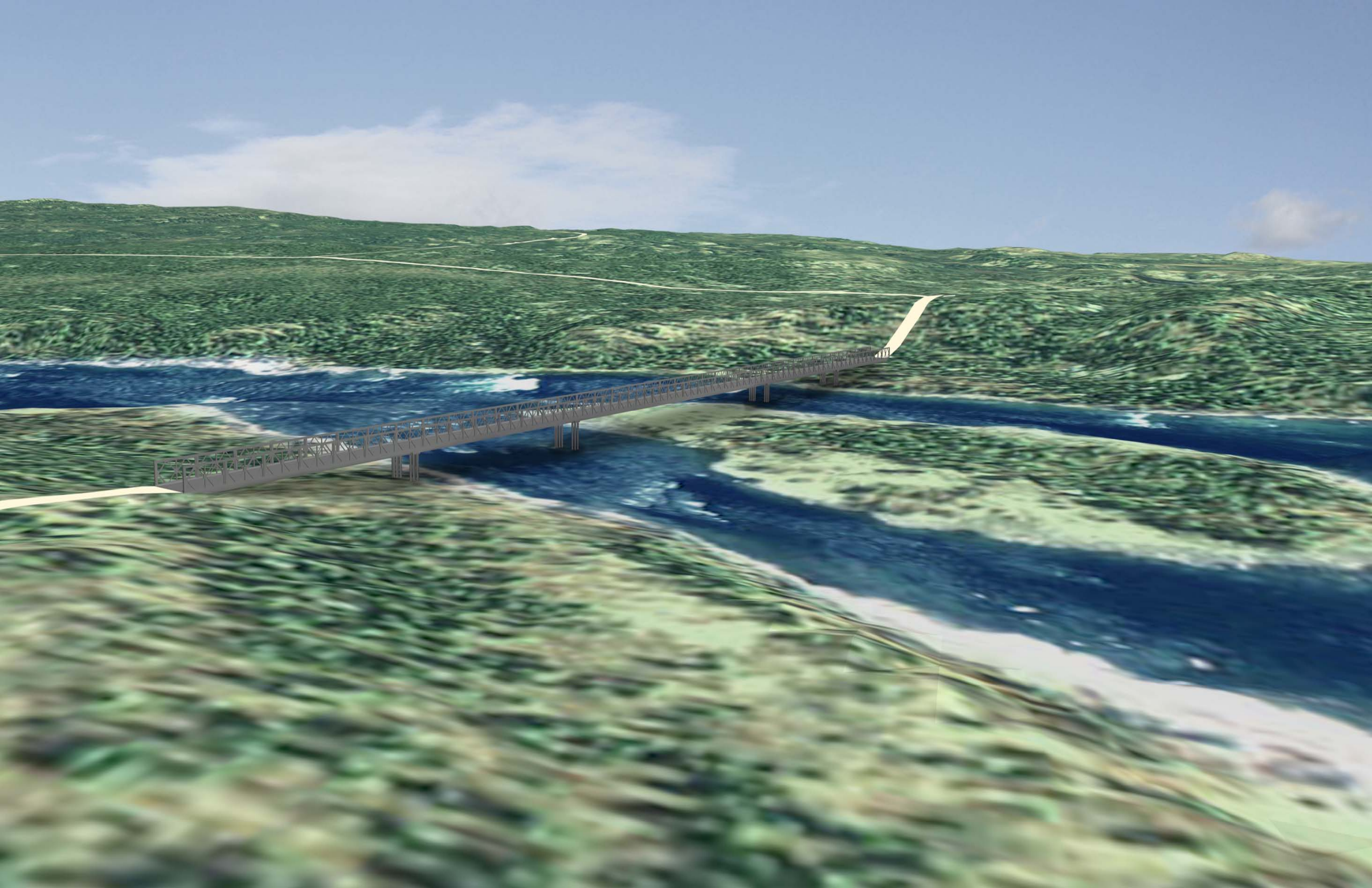
Main Access Road (Option C)

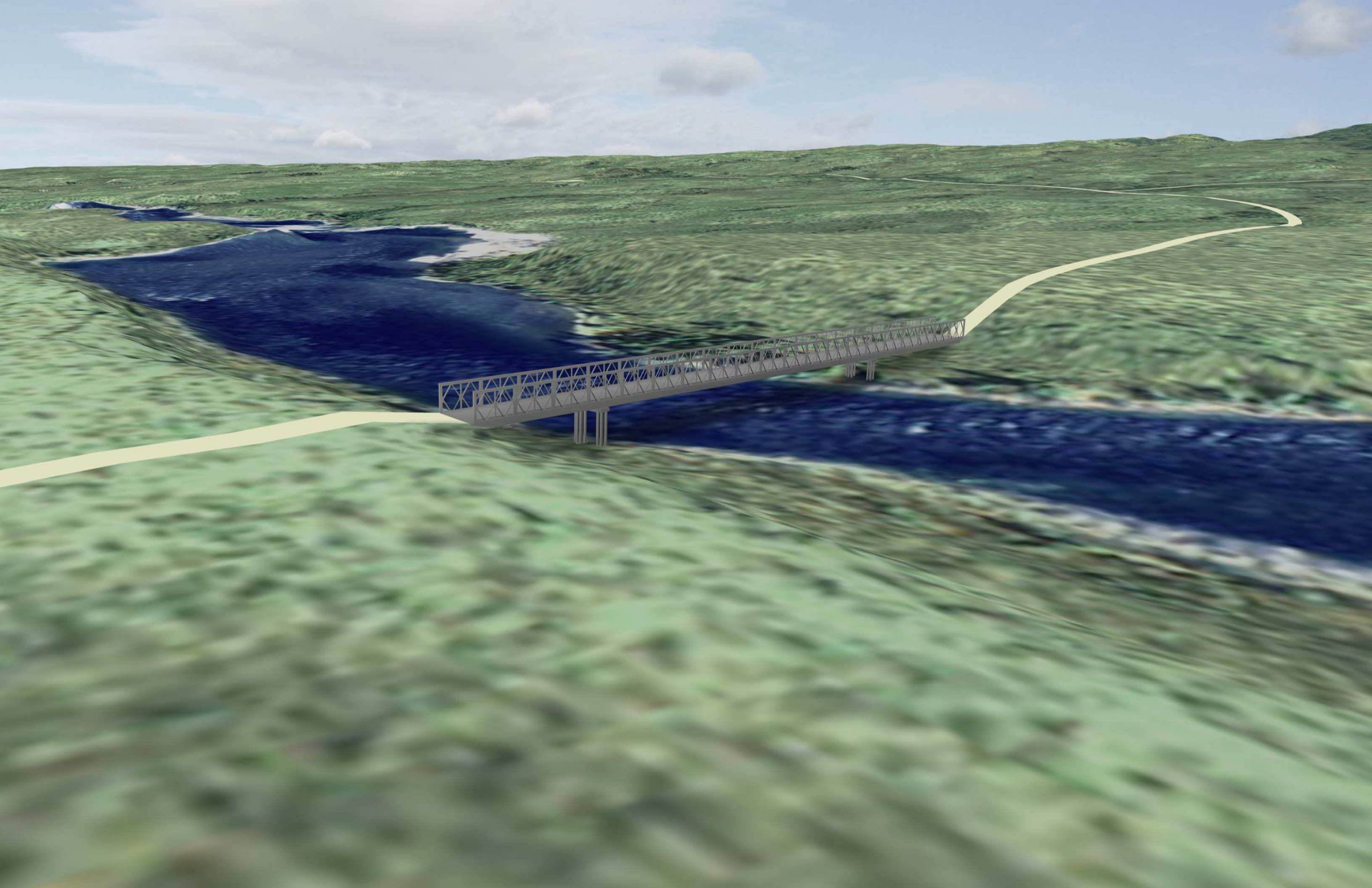
Black Lake Waterdome

Black Lake Nursing Station

Black Lake

Black Lake



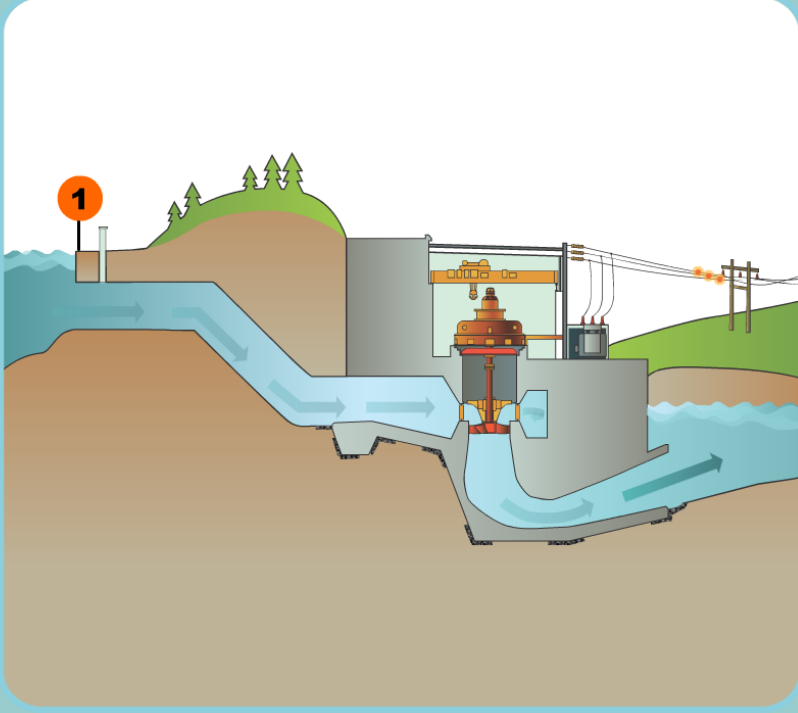






Concept

## **Powerhouse Operation**



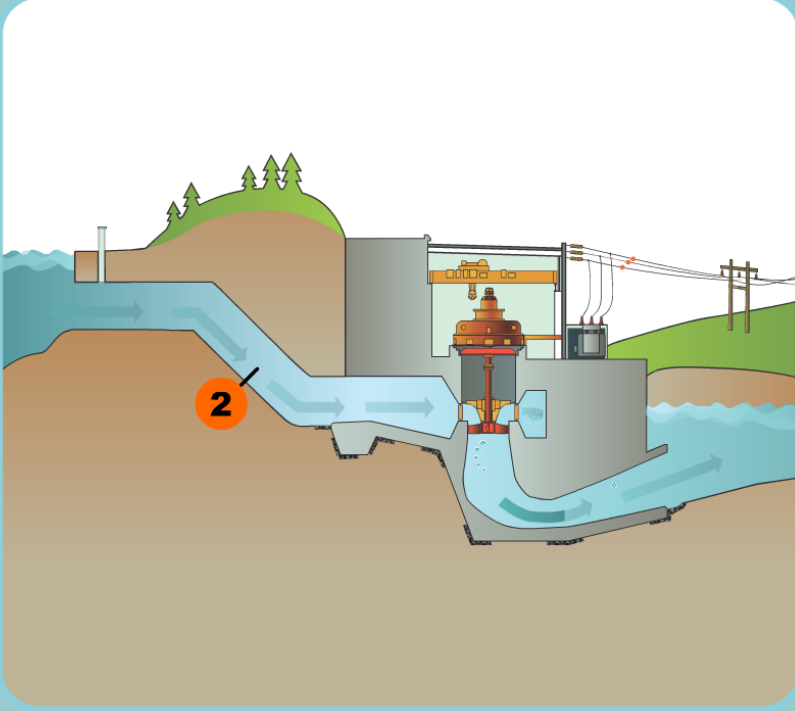
**1**

**Low Impact Hydroelectric Power Station**

1 2 3 4 5 6

**Diverting Water from Source**

An intake structure diverts water from the lake through the power tunnel to the powerhouse.

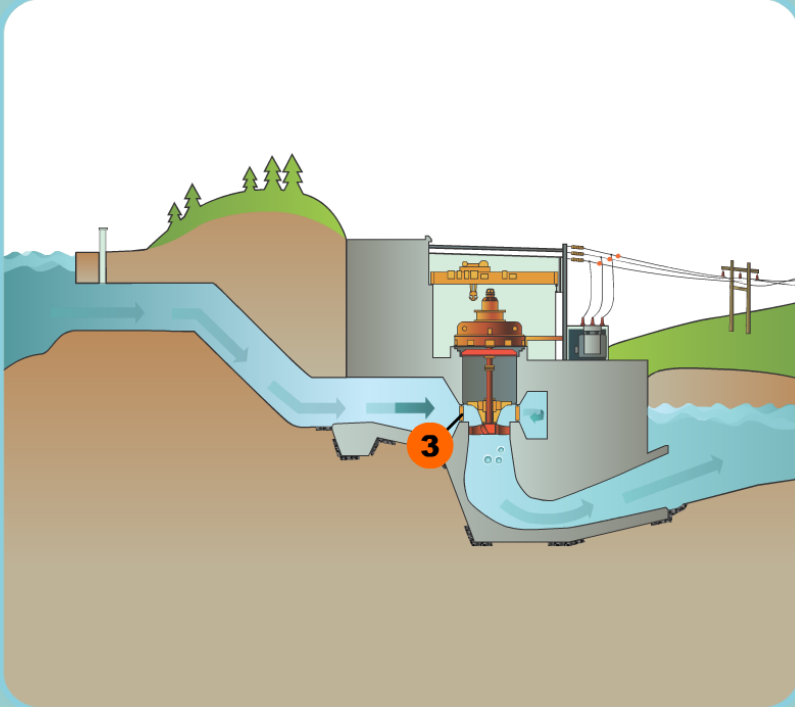


**Low Impact Hydroelectric Power Station**

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**Harnessing Power**

The volume of water moving through the powerhouse and the height (or difference in elevation) between the water source and the downstream tailrace (called "Head") creates a force that is used to generate electricity.

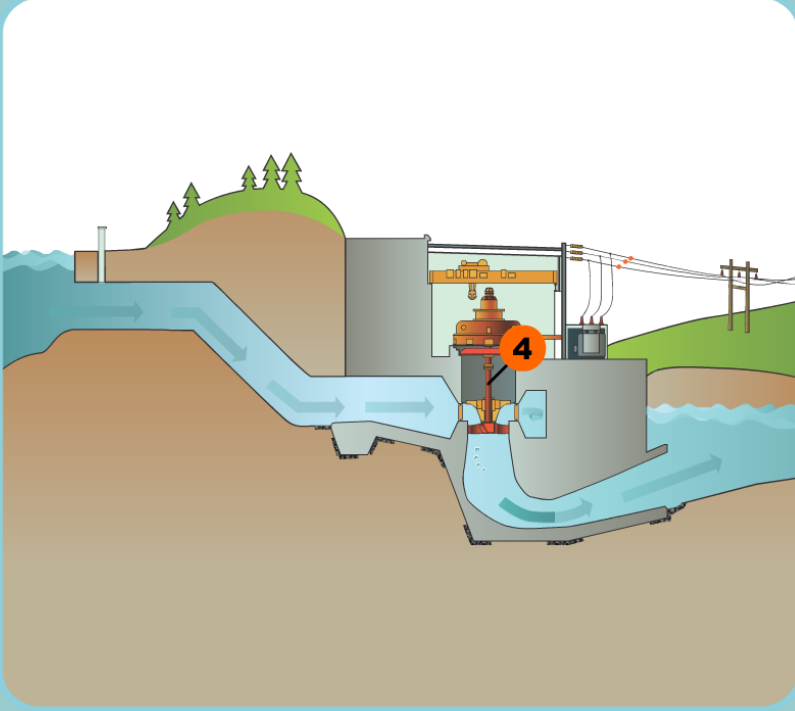


**Low Impact Hydroelectric Power Station**

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**Controlling Water**

Wicket gates control the amount of water directed towards the turbine, which has blades that turn the turbine shaft.

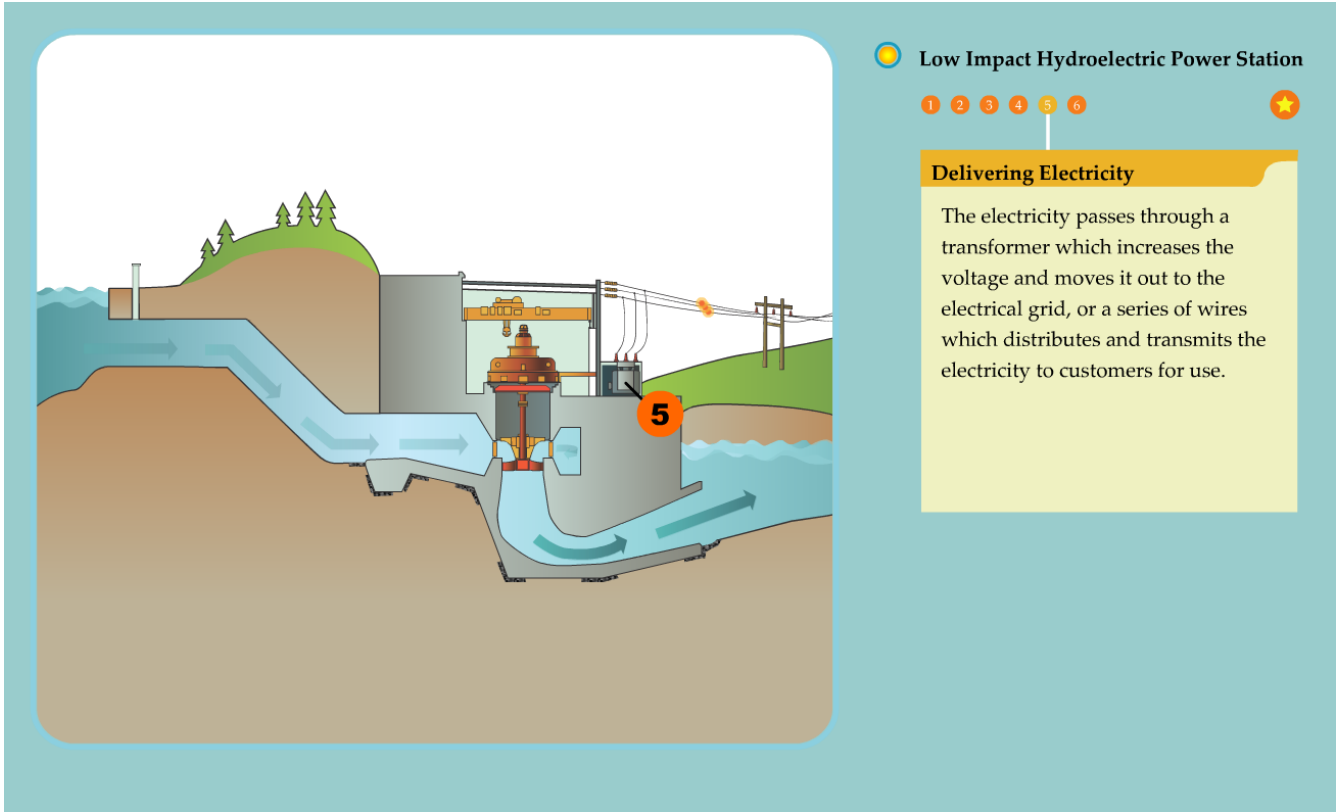


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**Generating Power**

The turning turbine shaft causes the generator to turn, which produces electricity.

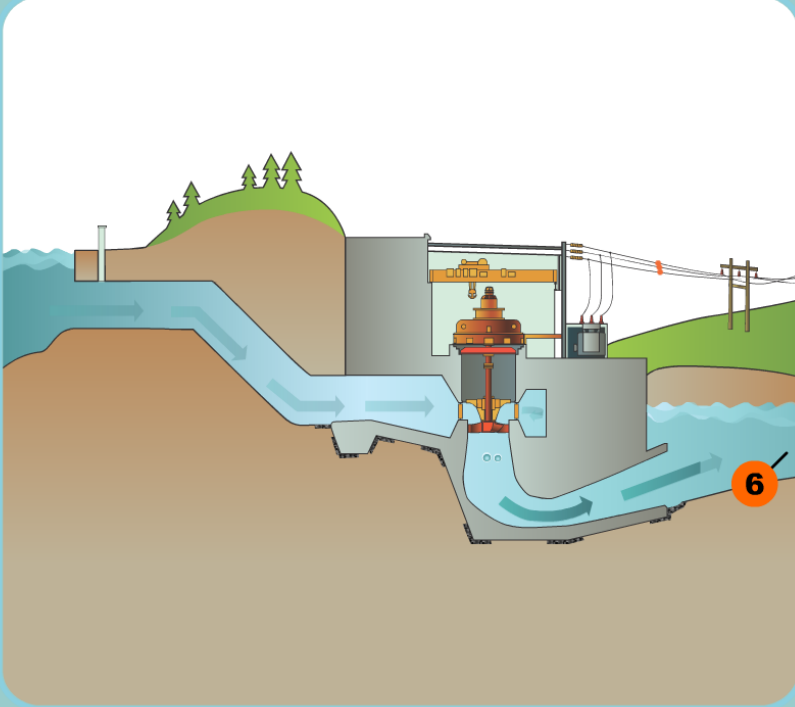


**Low Impact Hydroelectric Power Station**

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**Delivering Electricity**

The electricity passes through a transformer which increases the voltage and moves it out to the electrical grid, or a series of wires which distributes and transmits the electricity to customers for use.



**Low Impact Hydroelectric Power Station**

1 2 3 4 5 6

**Returning Water to Source**

After the water has passed through the powerhouse a channel called a "tailrace" directs the water from the powerhouse back to the downstream river.

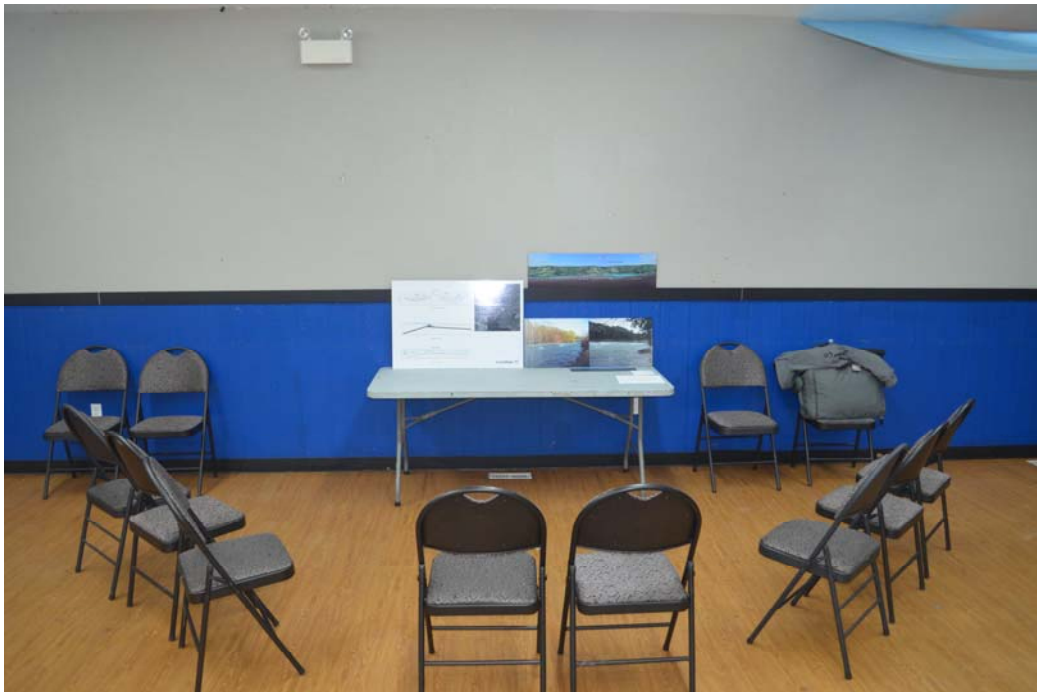
This power generation process has minimal impact on the environment.

6

## Photoplates



Intake Station at April Workshop in Black Lake



Submerged Weir Station at April Workshop in Black Lake



Riverscape Station at April Workshop in Black Lake





Road, Bridge, Camp Station at April Workshop in Black Lake

## **Presentations**

# Tazi Twé Hydroelectric Project

**Community Meeting #2**

**Black Lake First Nation**

**October 29<sup>th</sup>, 2013**

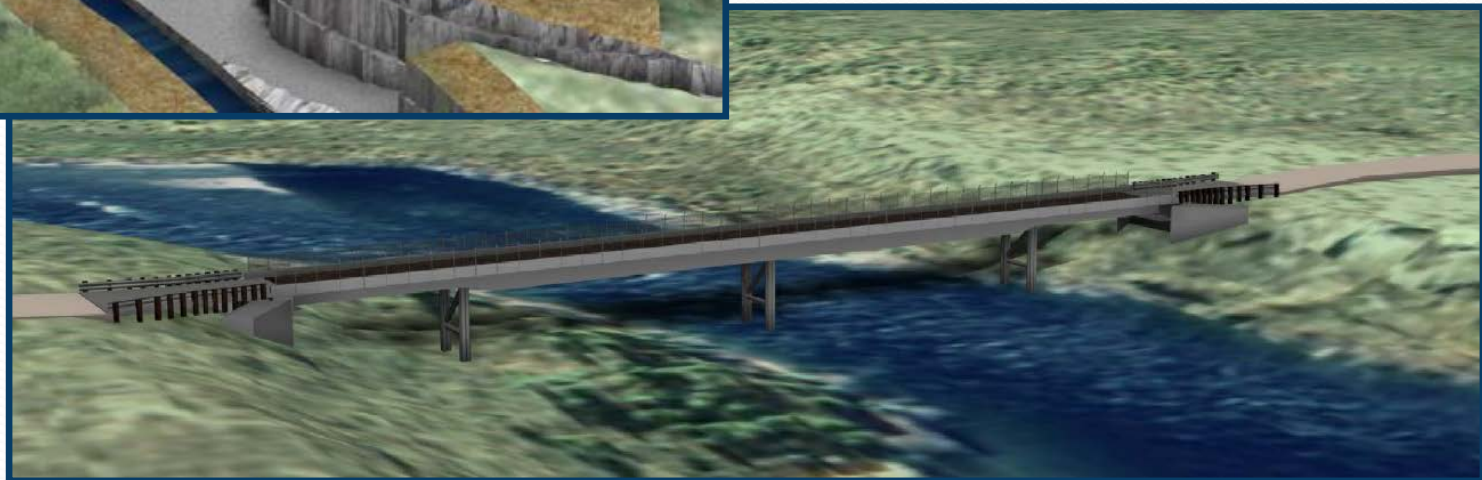
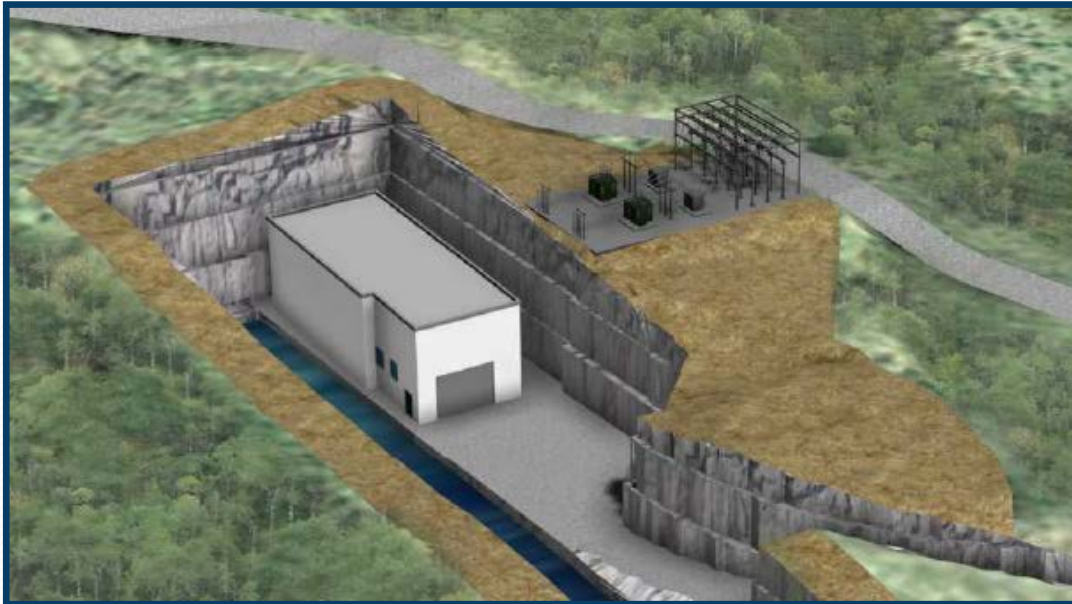
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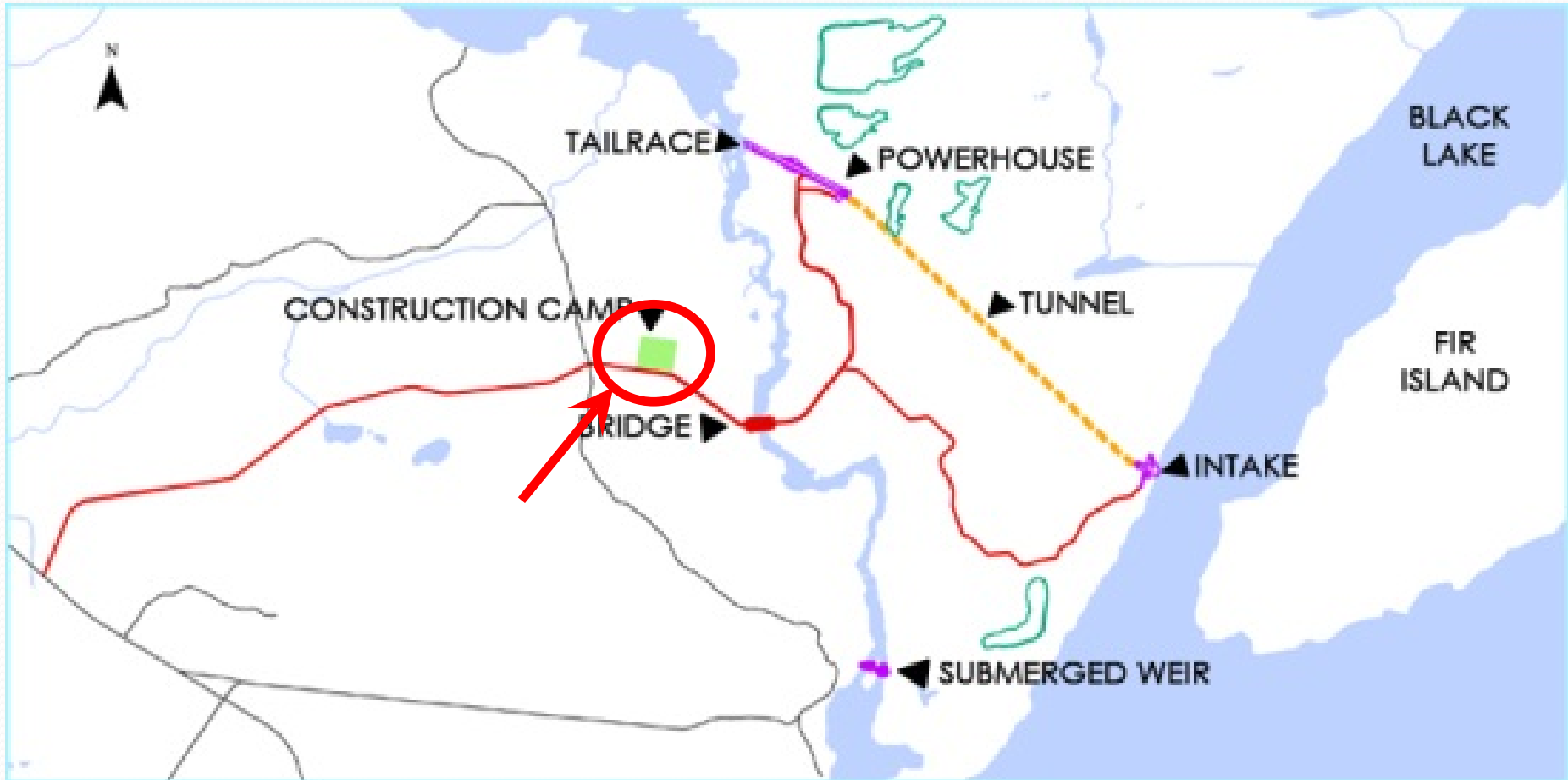
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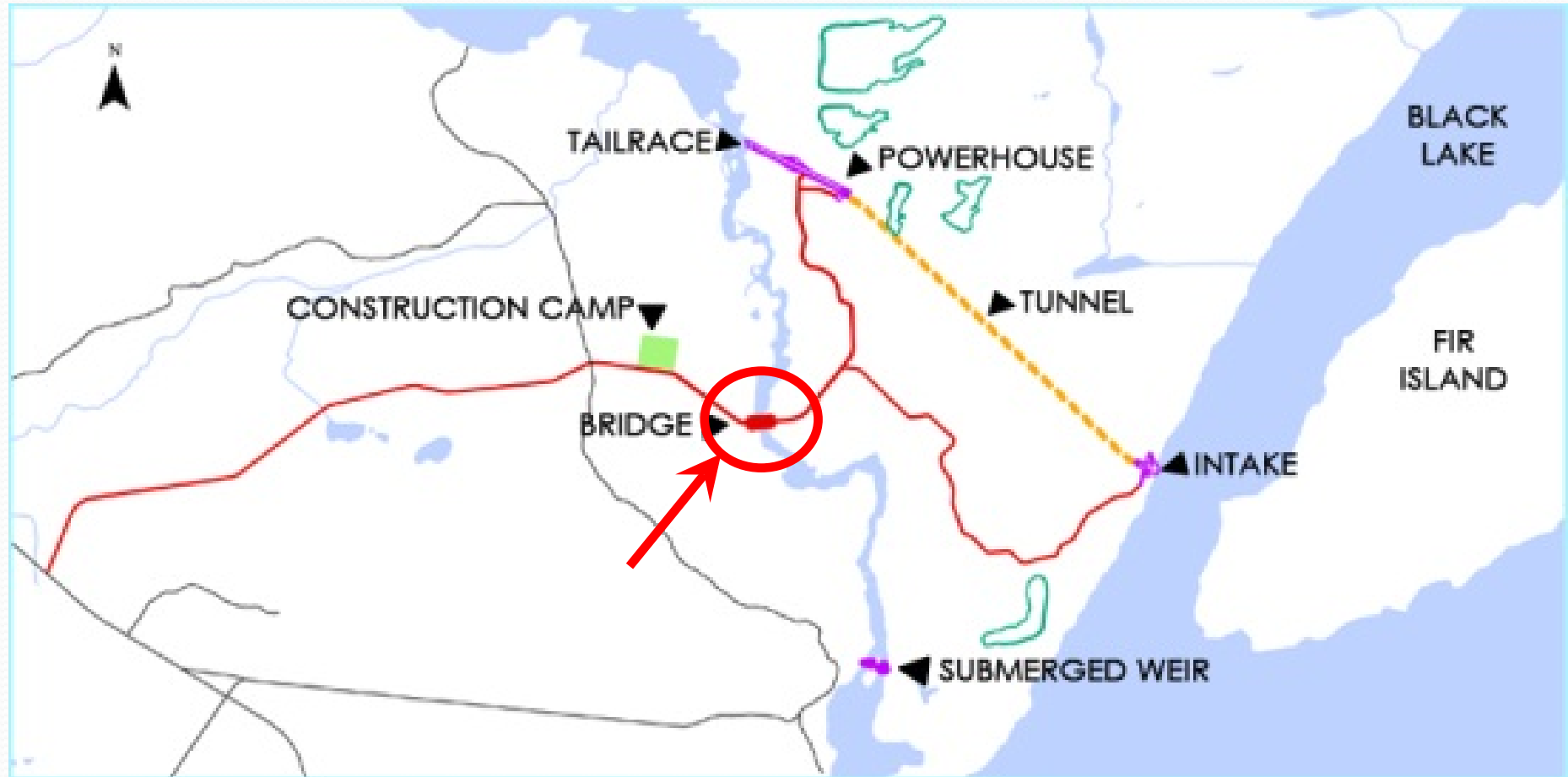
# Site Access Roads



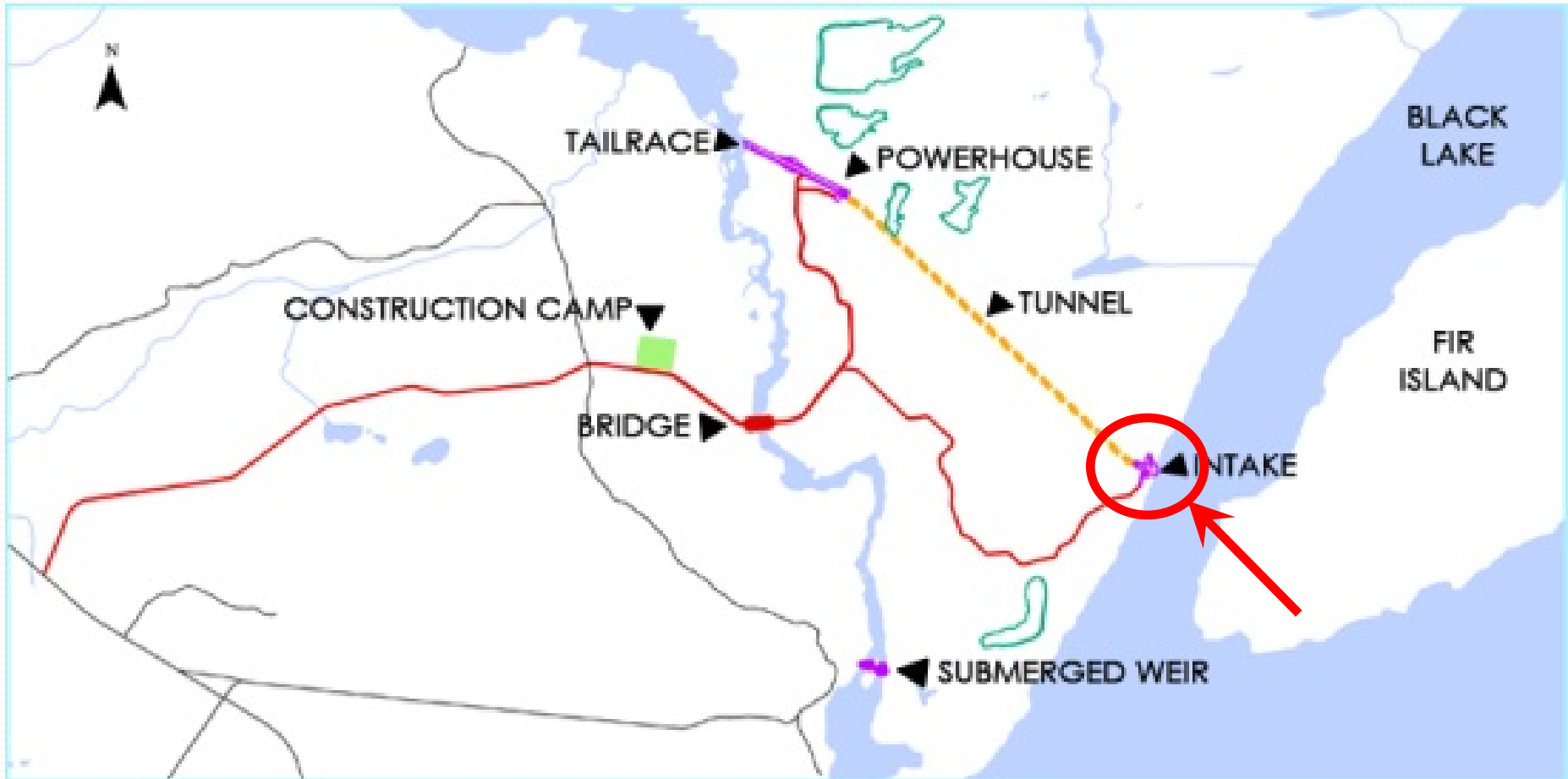
# Construction Camp



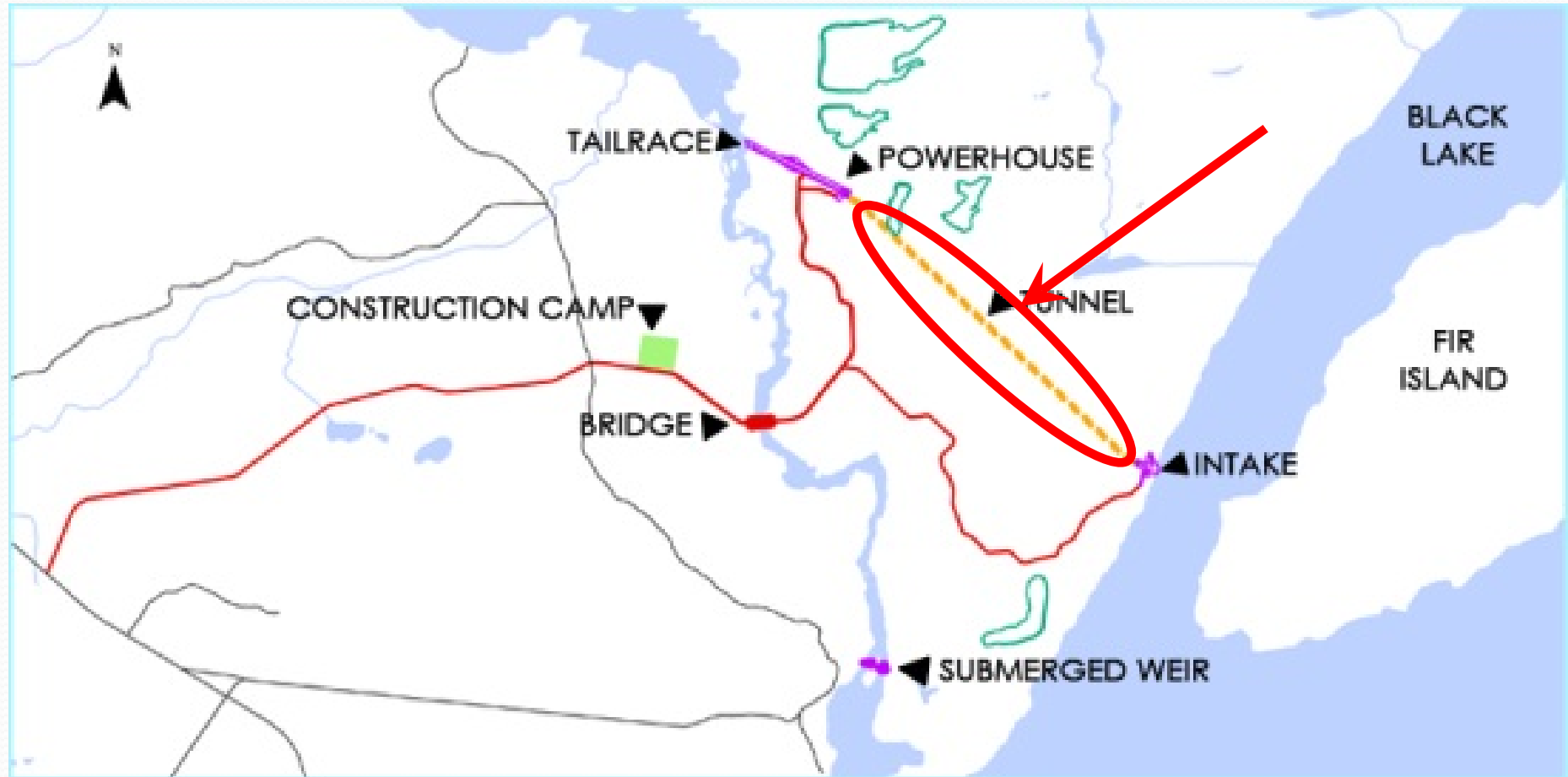
# Bridge



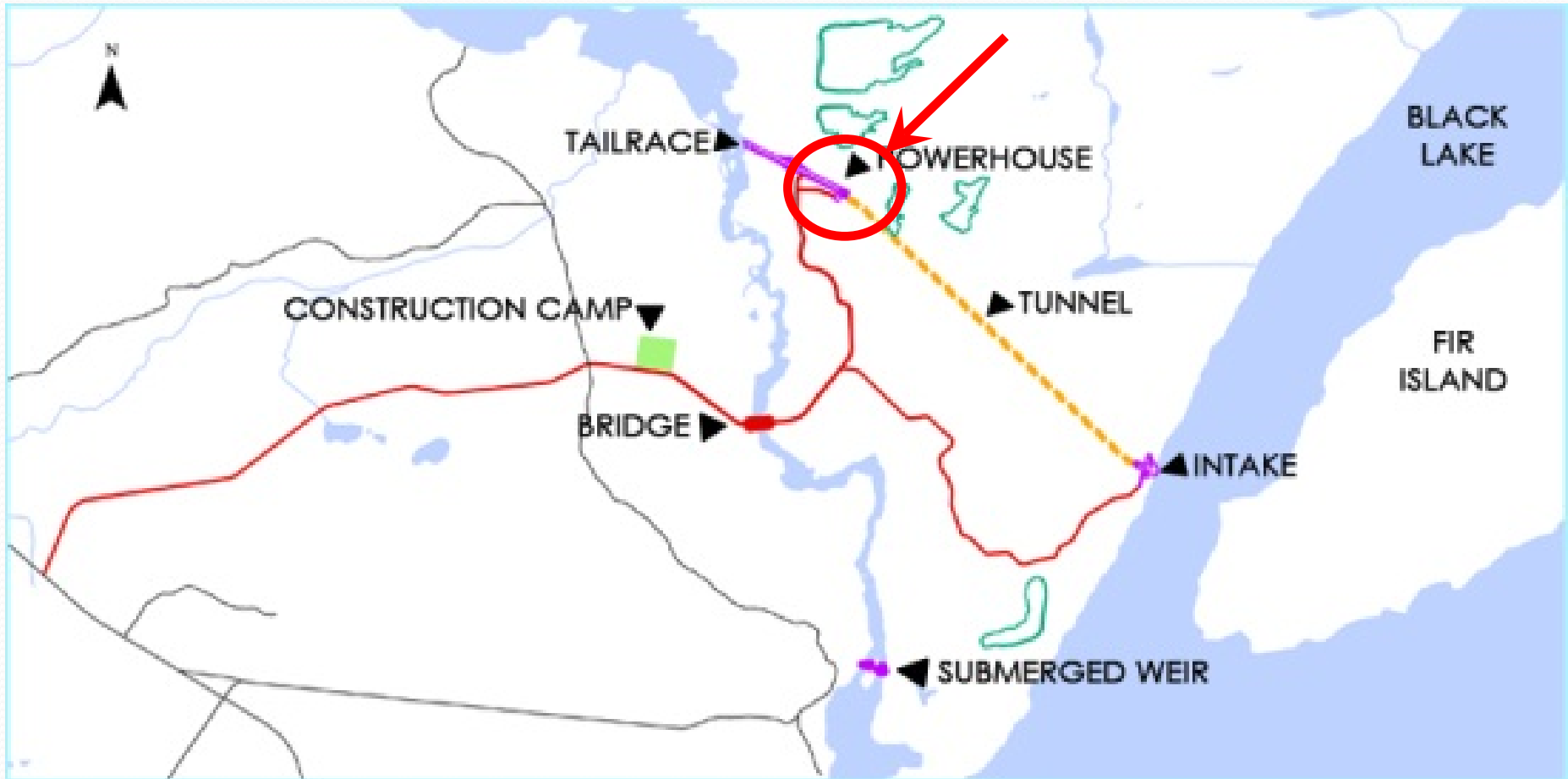
# Intake



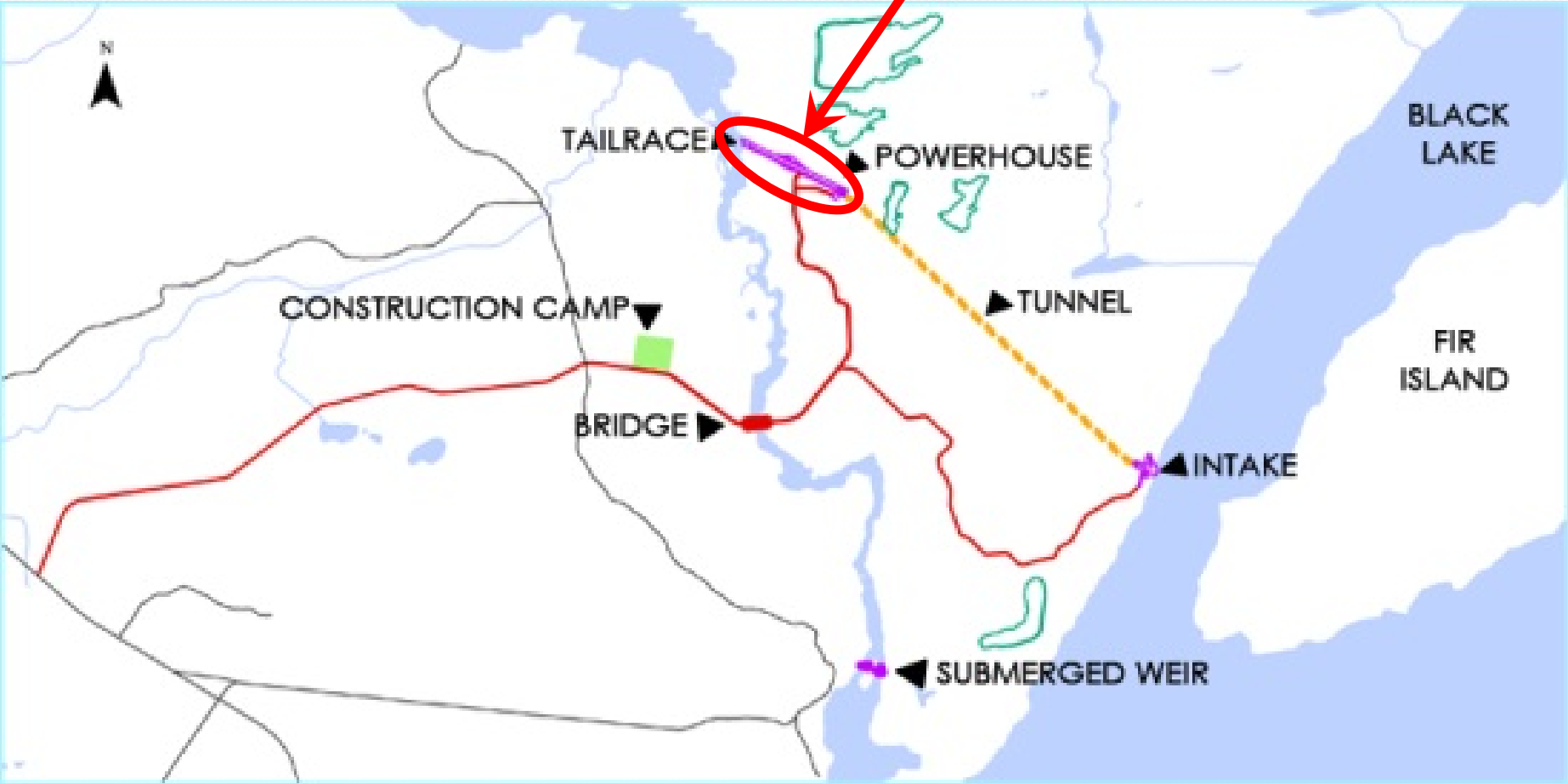
# Tunnel



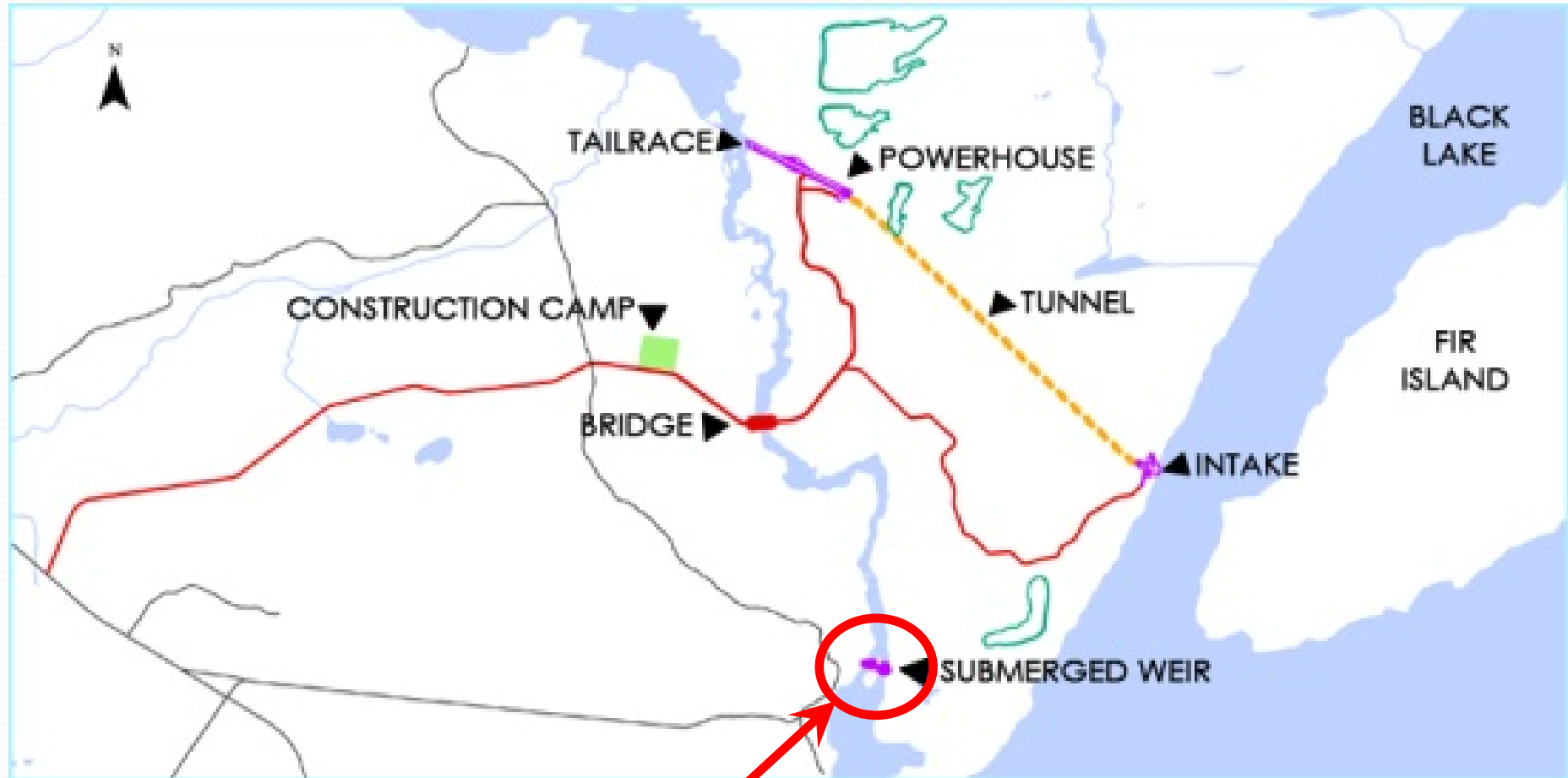
# Powerhouse



# Tailrace

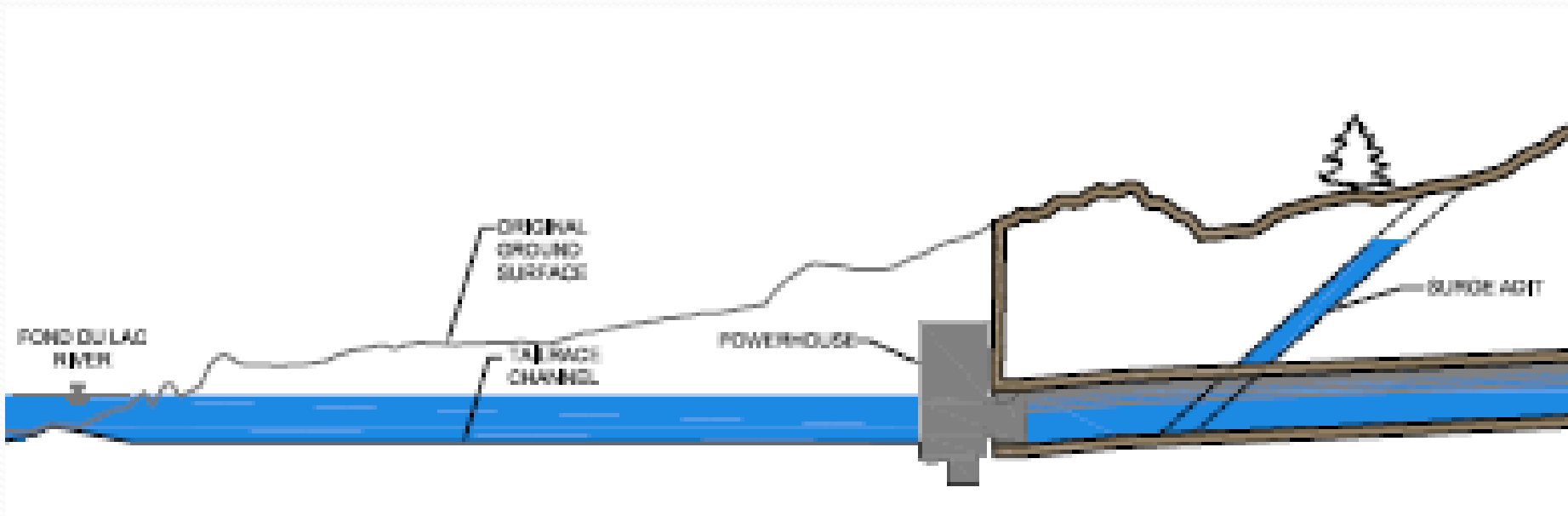


# Submerged Weir



# Surge Facility

- The surge facility consists of a tunnel adit providing water storage and pressure relief for the water conveyance system.



# Black Lake / Middle Lake Impacts

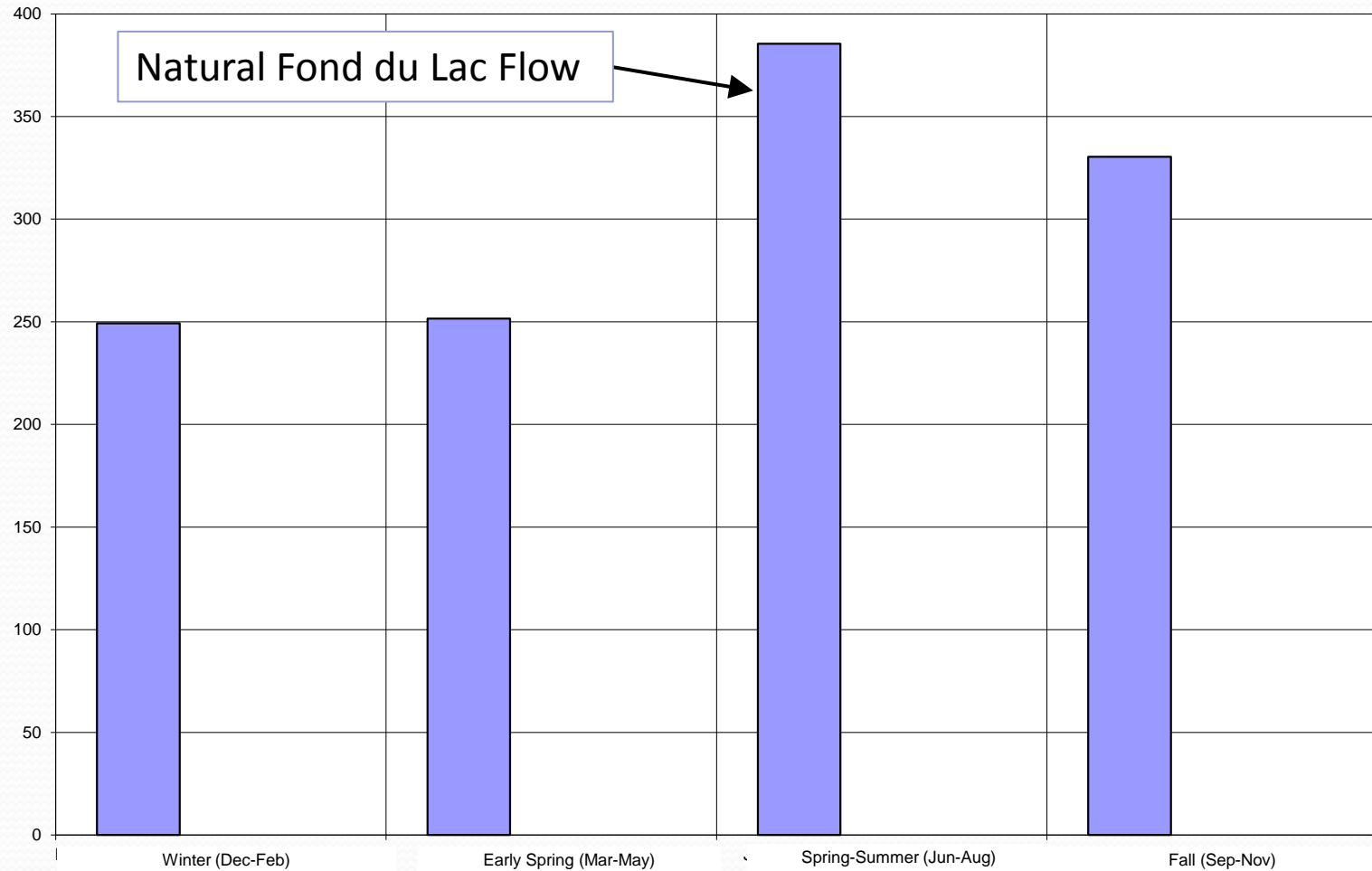


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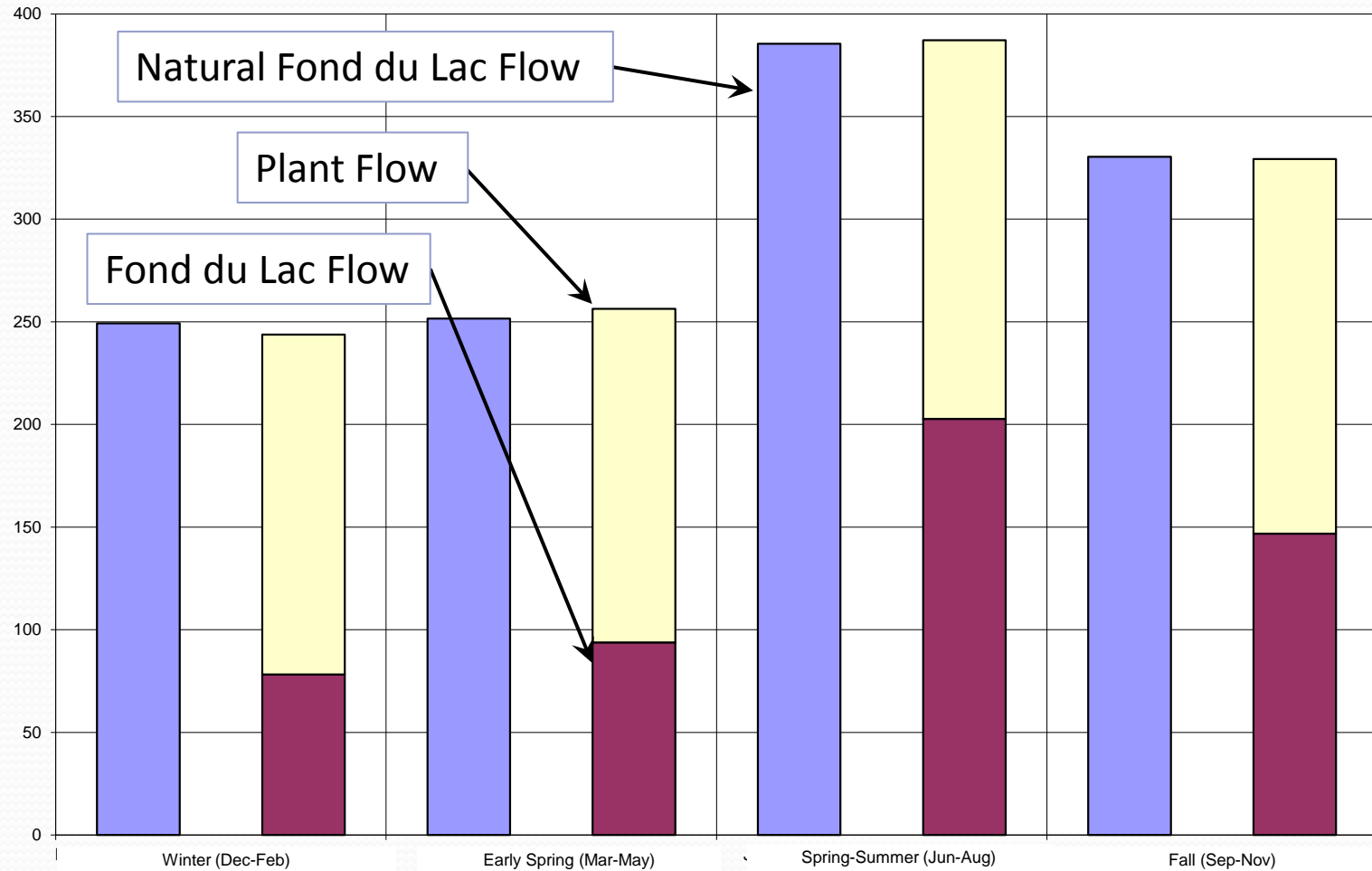
# Water Flow

Seasonal Average Flow

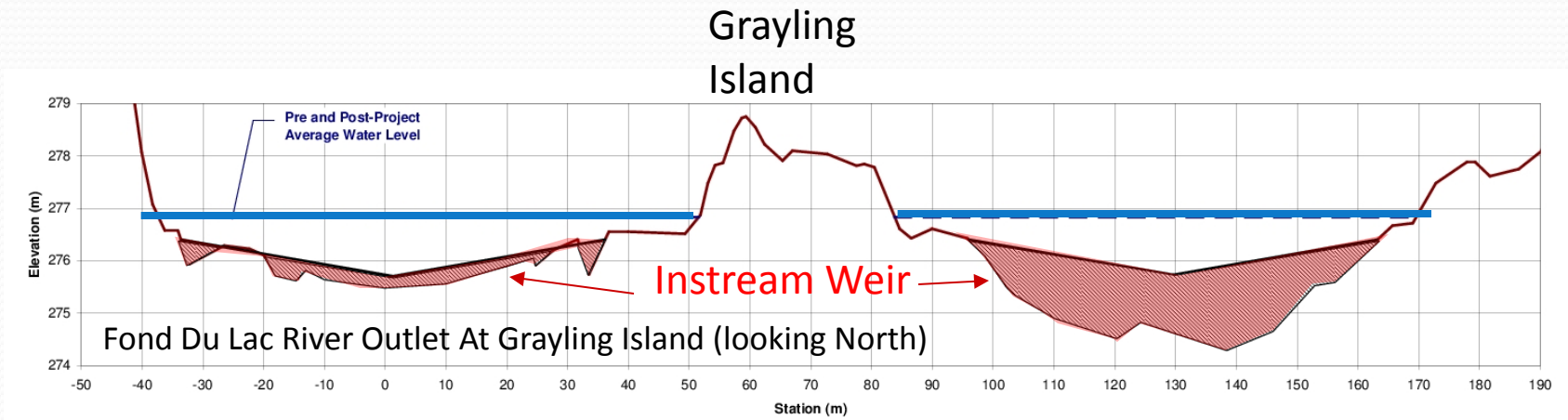


# Water Flow

Seasonal Average Flow



# Why Levels and Flows Are Unchanged

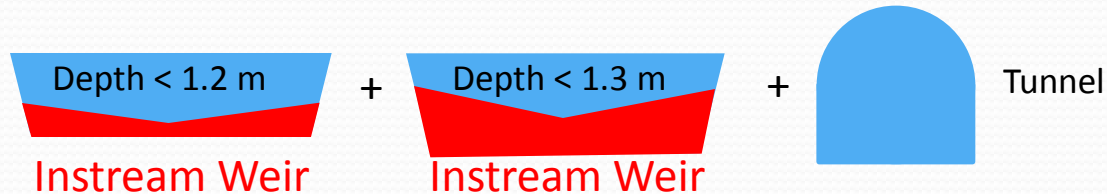


## Fond du Lac Channel at Grayling Island

Natural Channel  
(Pre-development)



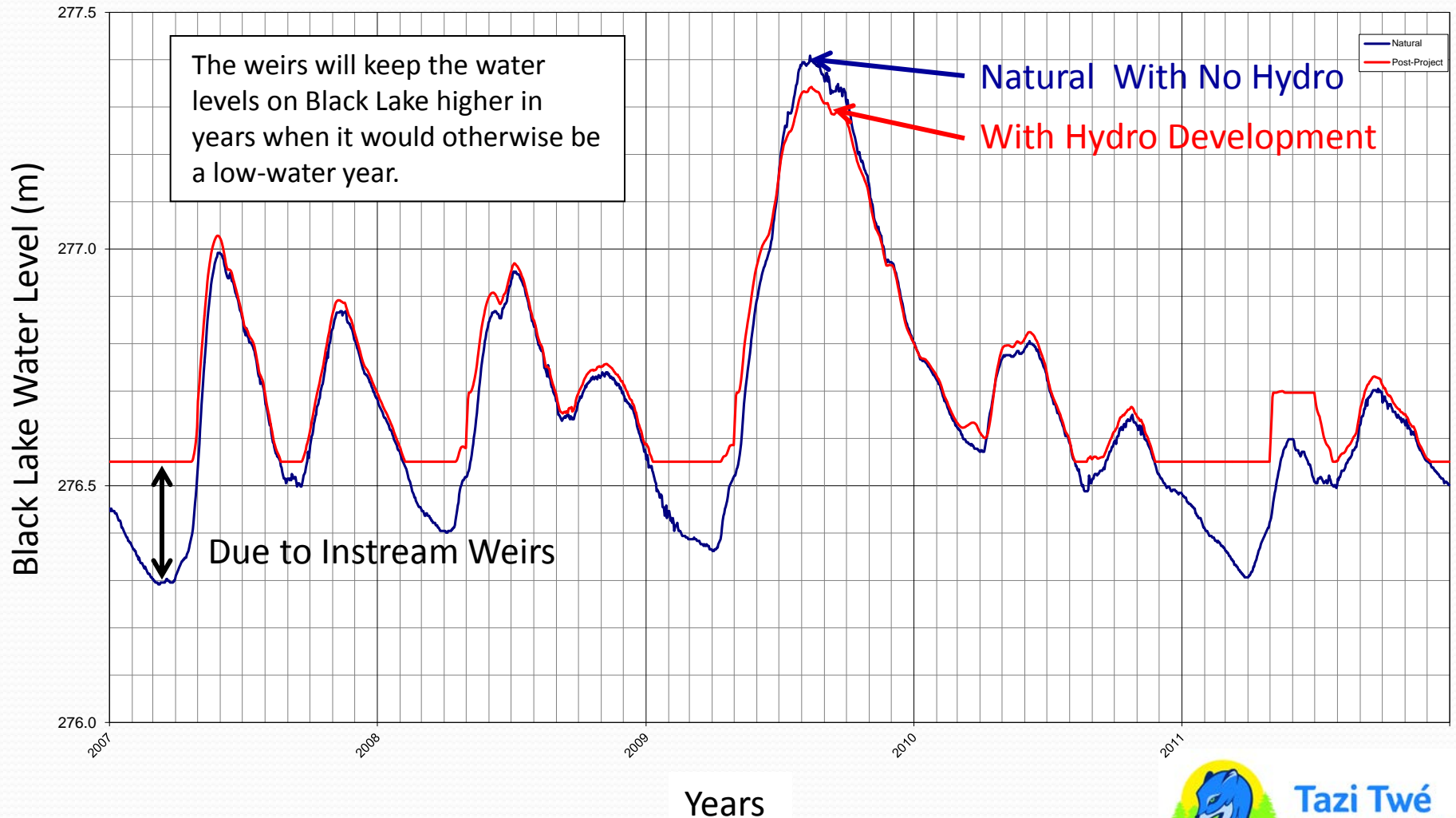
Hydro Project  
(Post-development)



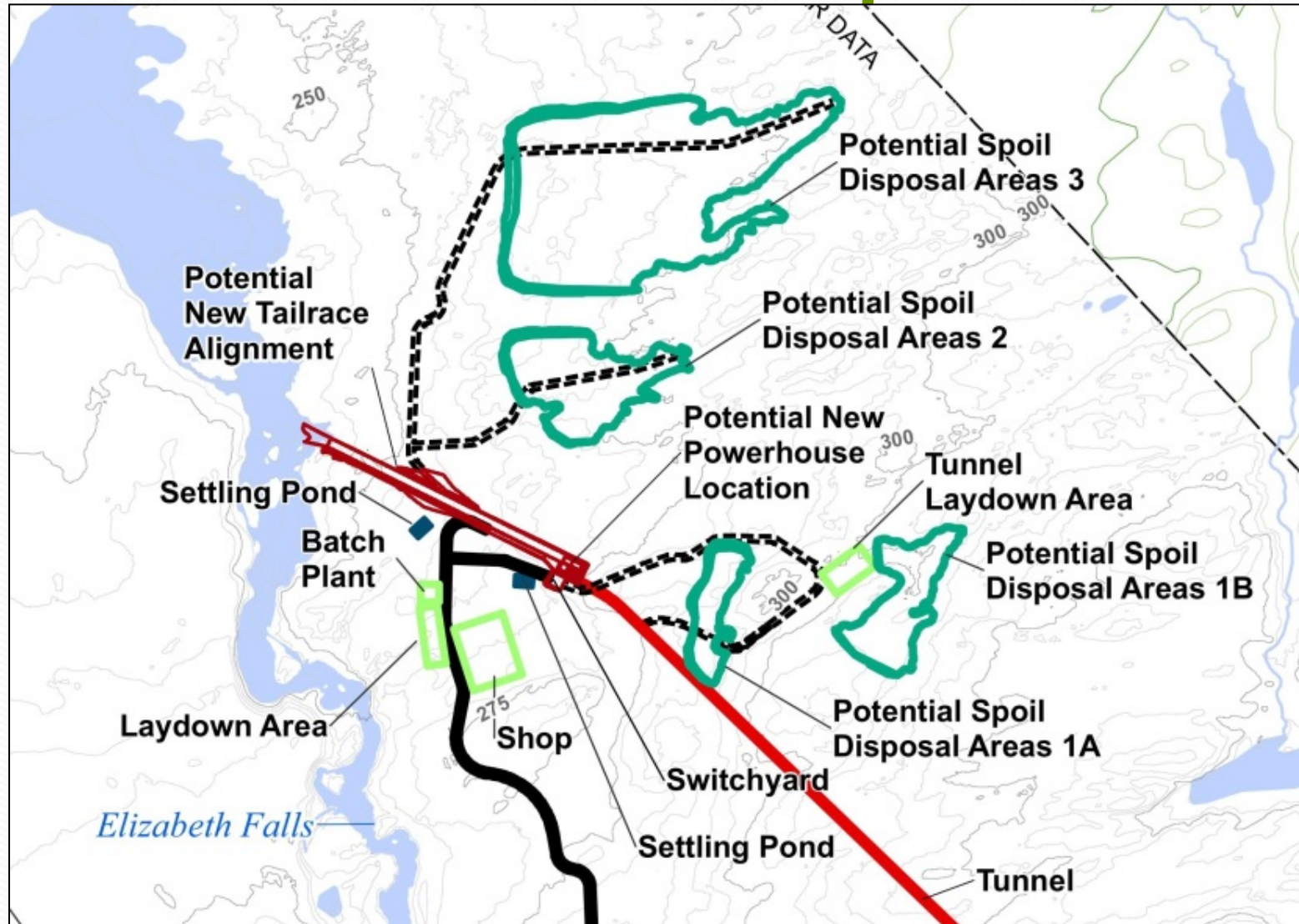
**WILL HAVE EQUAL FLOW CAPACITY !**

# Black Lake Levels

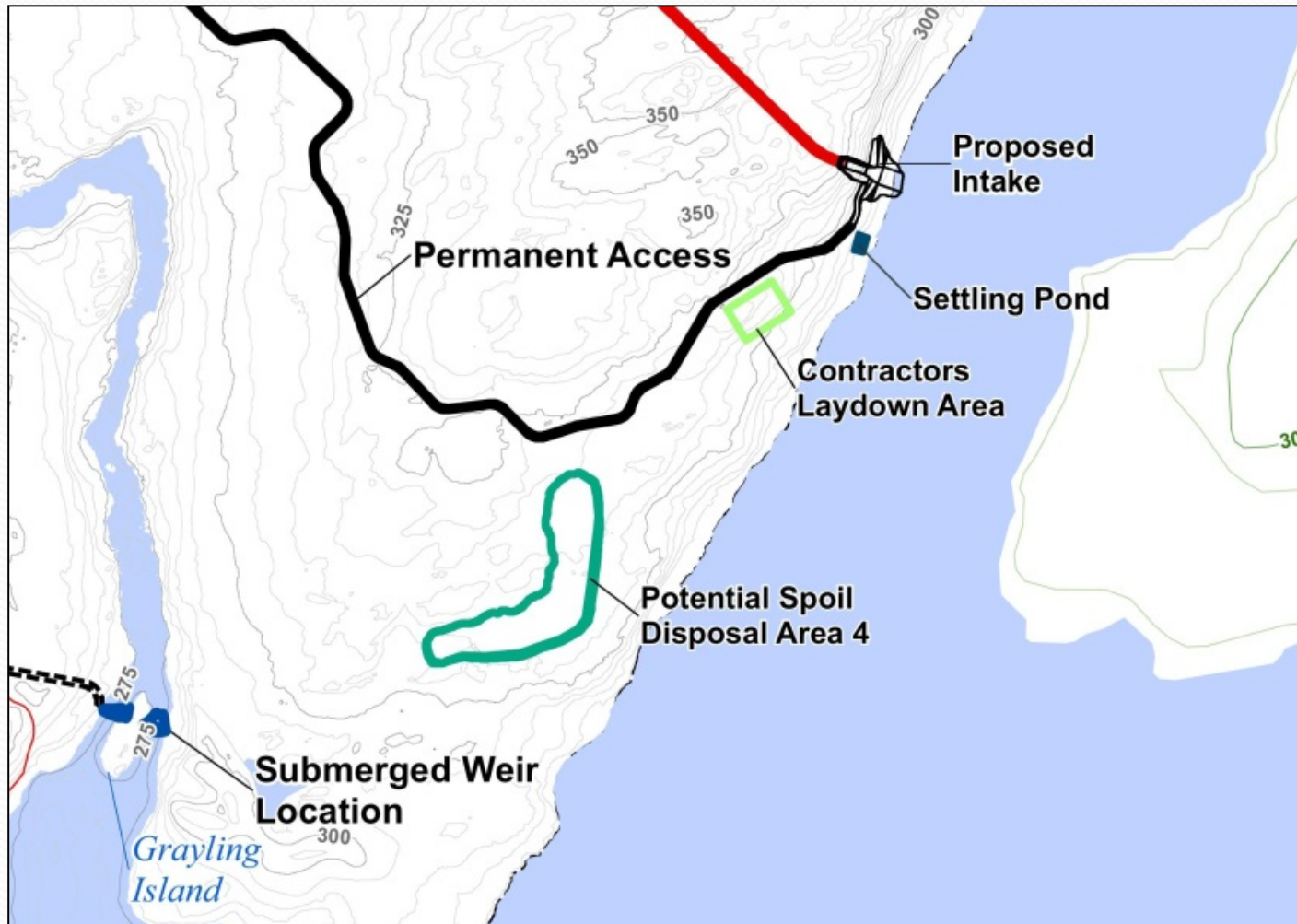
Black Lake Water Levels With and Without Hydro Development (2007 to 2011)



# Excavation Material Disposal Areas



# Excavation Material Disposal Areas



# Estimated Excavation Quantities

| Structure    | Rock Excavation (m <sup>3</sup> )* | Overburden (m <sup>3</sup> ) | Total (m <sup>3</sup> ) | Truck Loads (12 m <sup>3</sup> per load) |
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| <b>Total</b> | <b>1,074,000</b>                   | <b>118,000</b>               | <b>1,192,000</b>        | <b>99,334</b>                            |

\* Totals presented above for rock excavation include a bulking factor of 30%

# Excavation Materials – ARD and ML

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FIELD SAMPLING, SUMMER 2013



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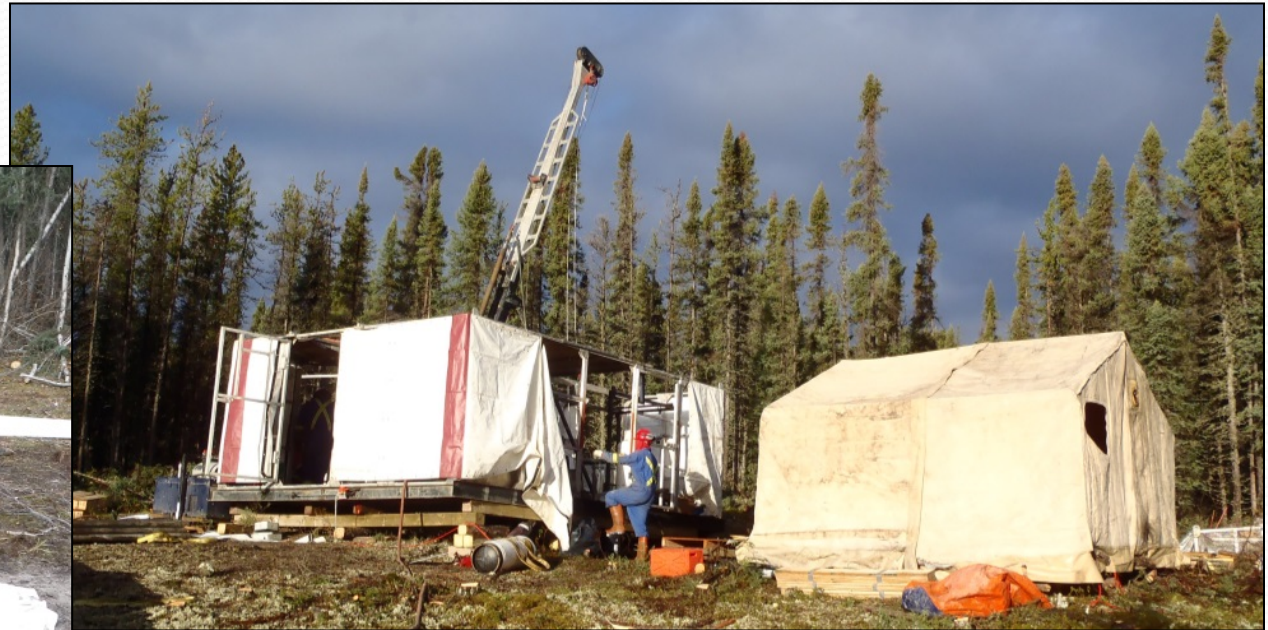
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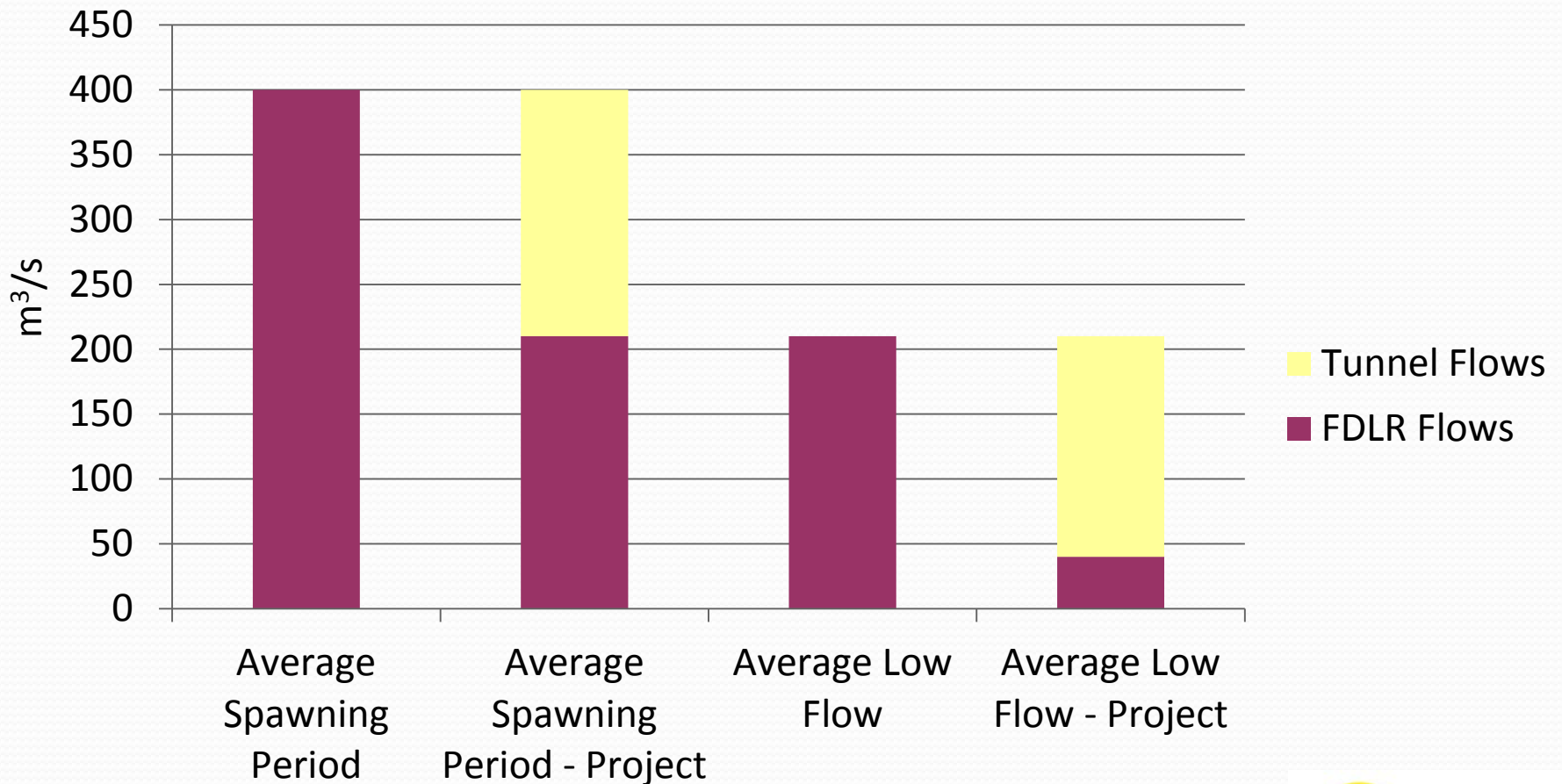
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# Impact on the River



# Fond du Lac River Flows



# Fond du Lac River

Average Spawning Season Flow – 400 m<sup>3</sup>/s



# Fond du Lac River – With Project

Average Spawning Season Flow – 210 m<sup>3</sup>/s



# Fond du Lac River – With Project

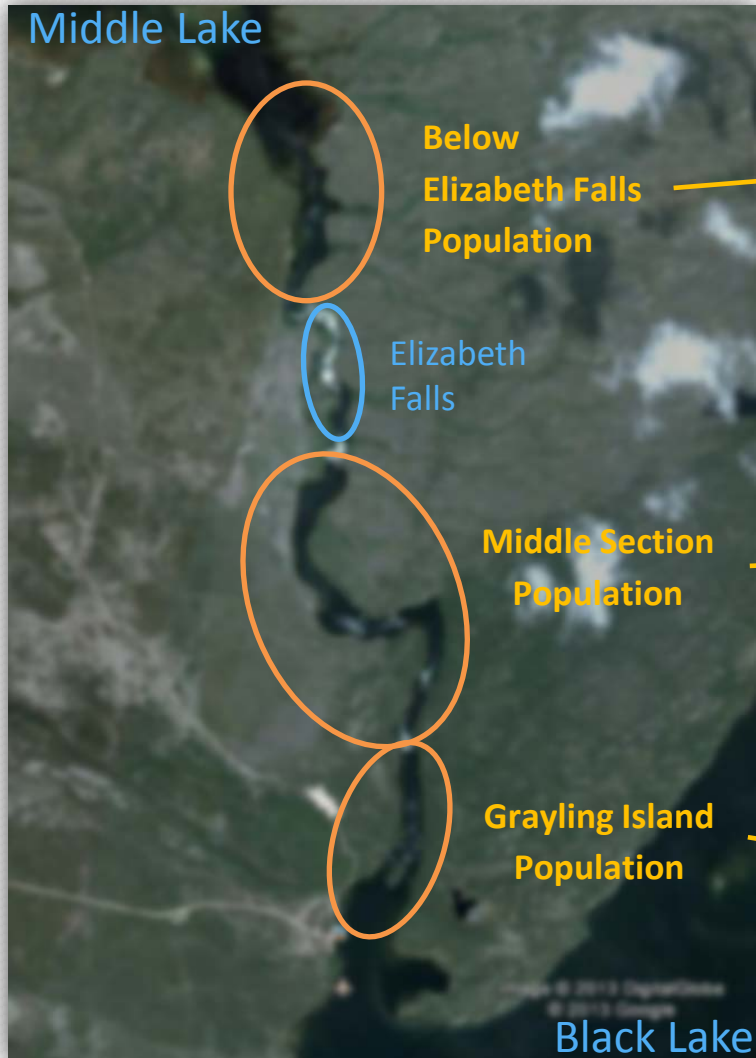
## Lowest Flow – 40 m<sup>3</sup>/s



# Impact on the Fish



# Fond du Lac River – Arctic Grayling Populations



Spawning habitat is downstream of the tailrace outlet so is maintained by natural flows and water levels in the recombined river.

The by-passed section of the river will have reduced flows due to operation of the project.

Spawning habitat is maintained at a suitable depth by installation of the submerged weir.

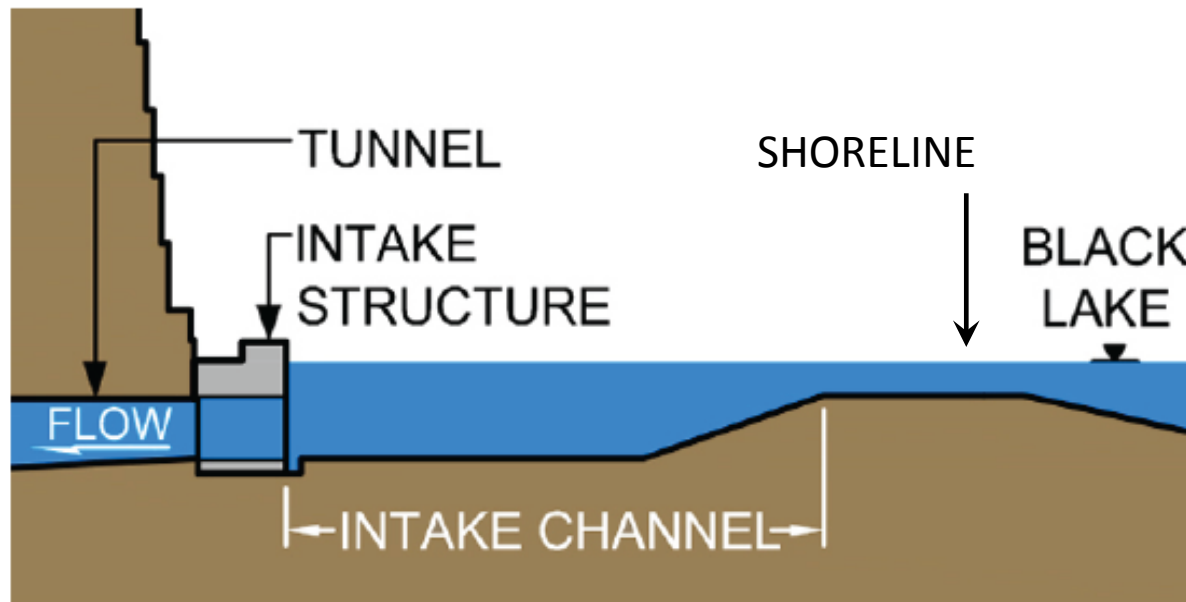
# Fond du Lac River – Grayling Habitat (between submerged weir and tailrace)

- **Spawning Habitat**
  - Reduce by less than 20%
- **Overwintering Habitat**
  - Will increase by 20 - 37%



# Black Lake Tunnel Intake Structure

- Located on Black Lake back from shoreline
- Designed to bring in water from a shallow depth (surface to 5 m)



# Next Steps



# Environment – Regulatory Approval

- Provincial and Federal governments have different processes.
- Environmental Impact Statement (EIS)
  - Expect to submit by mid December 2013
- Environmental Decision ... late 2014

# Project Next Steps

- Aboriginal and Public Involvement ... **Ongoing**
  - Project details
  - Progress updates
- Community Engagement Process ... **Ongoing**
  - Project Benefits (trust, employment, contracting)
- Submit Environmental Impact Statement ... **December 2013**
- Finalize Design and Cost Estimate ... **January 2014**
- Project Approvals by the Partners ... **February → April 2014**
- Start Construction ... **late 2014**
- Plant In-Service ... **December 2017**

# Closing

- Thank you for coming and listening
- We want your comments and feedback
- Visit with our project team at the displays ...  
Ask questions

Reconvene in 30 minutes for group discussion

For More Information

Visit the Tazi Twé Website

<http://tthp.ca>

# Tazi Twé Hydroelectric Project

**Community Meeting #2**

**Stony Rapids, SK**

**October 30<sup>th</sup>, 2013**

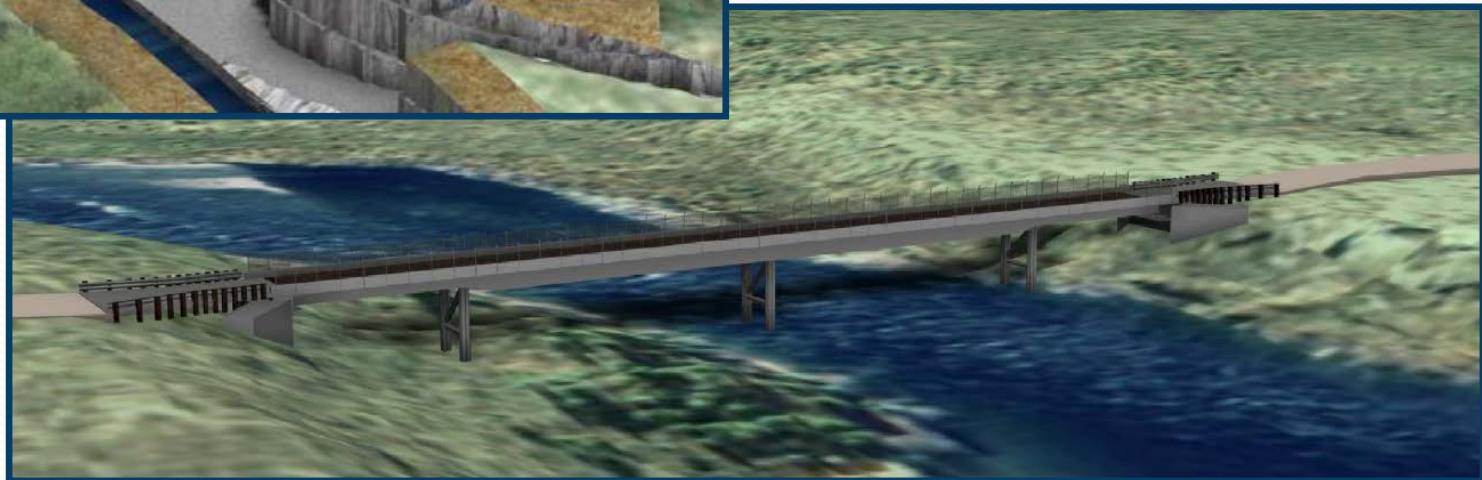
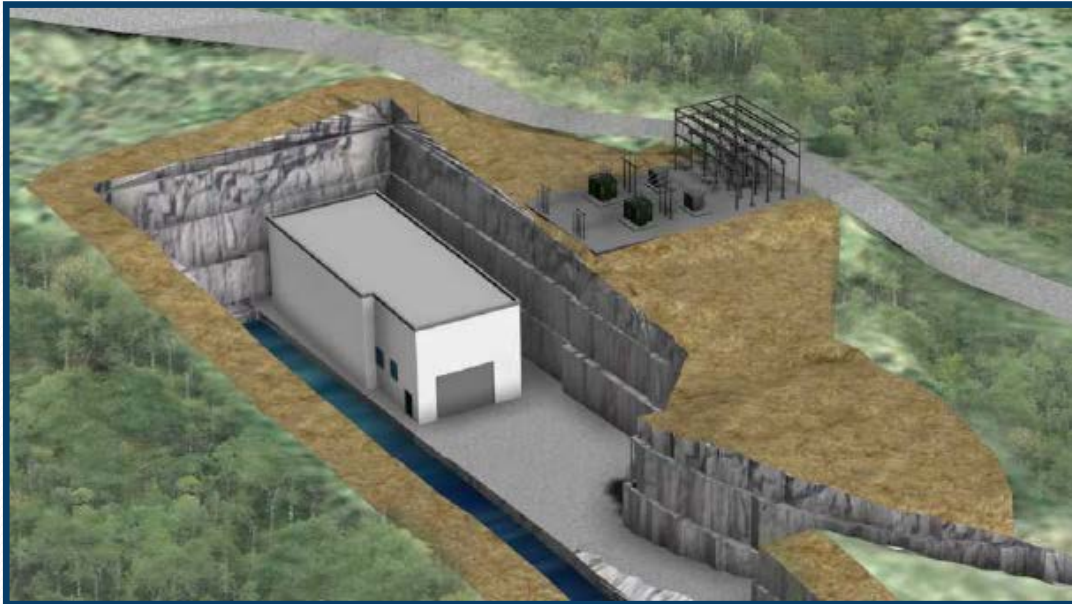
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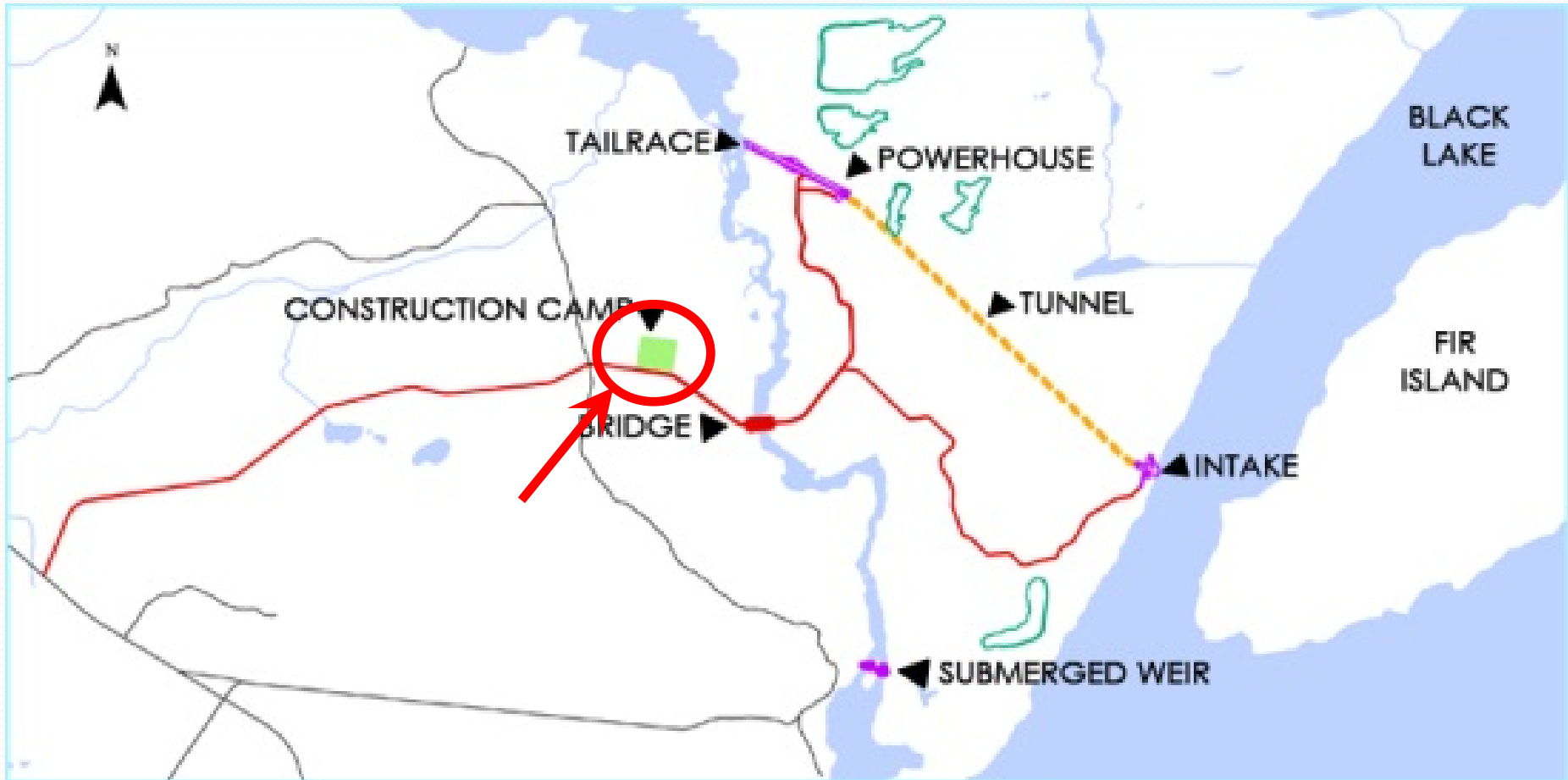
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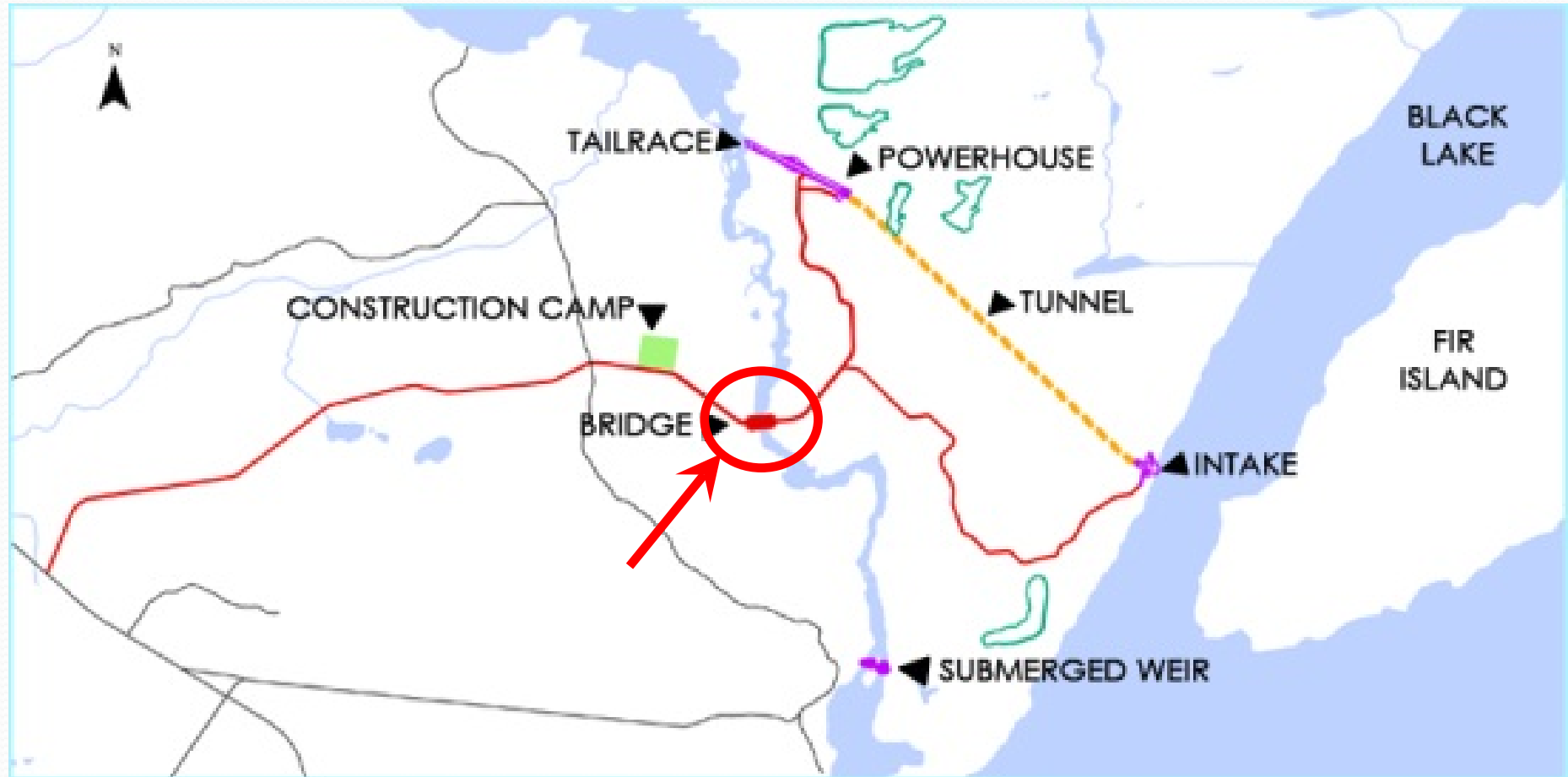
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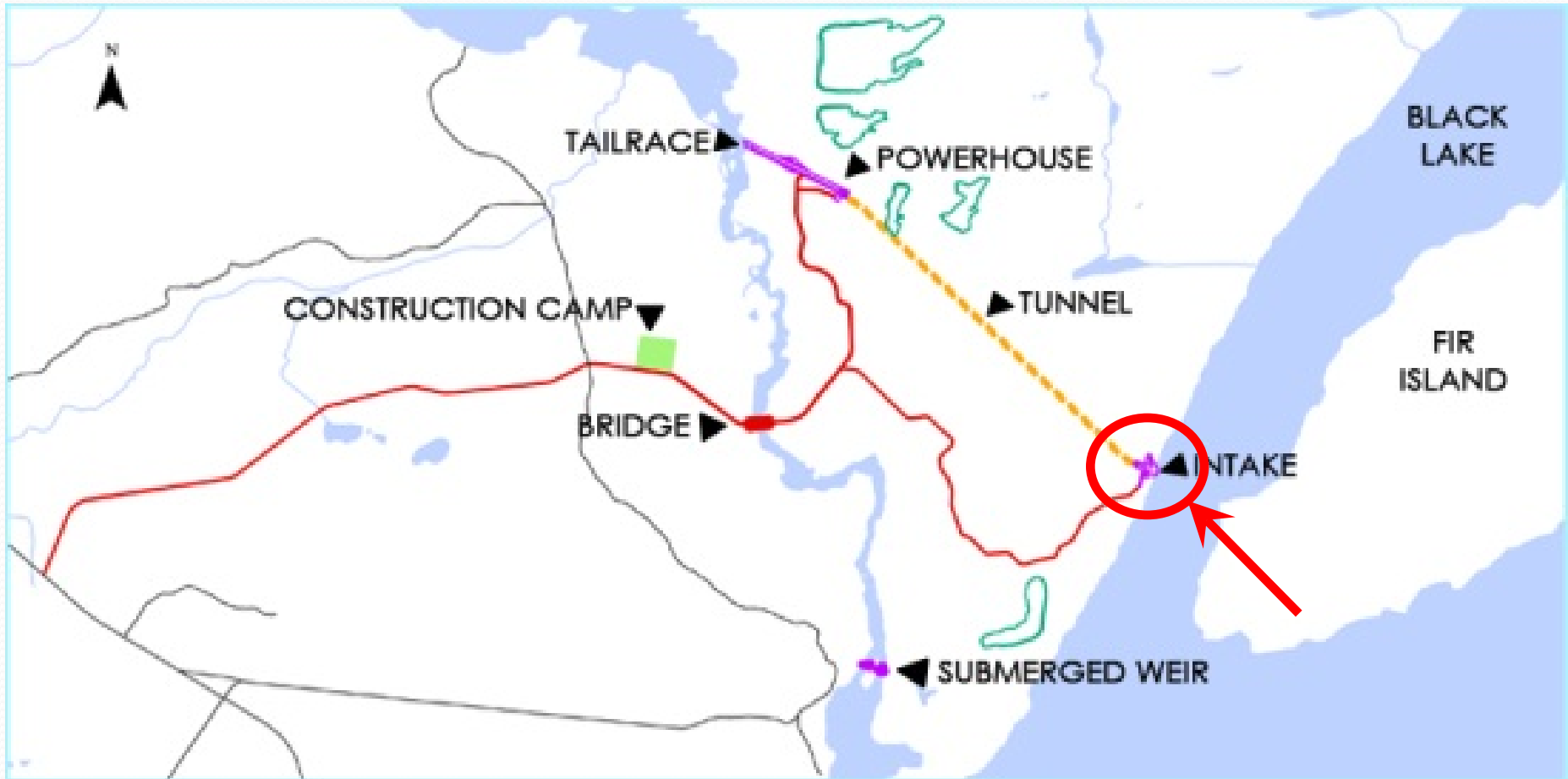
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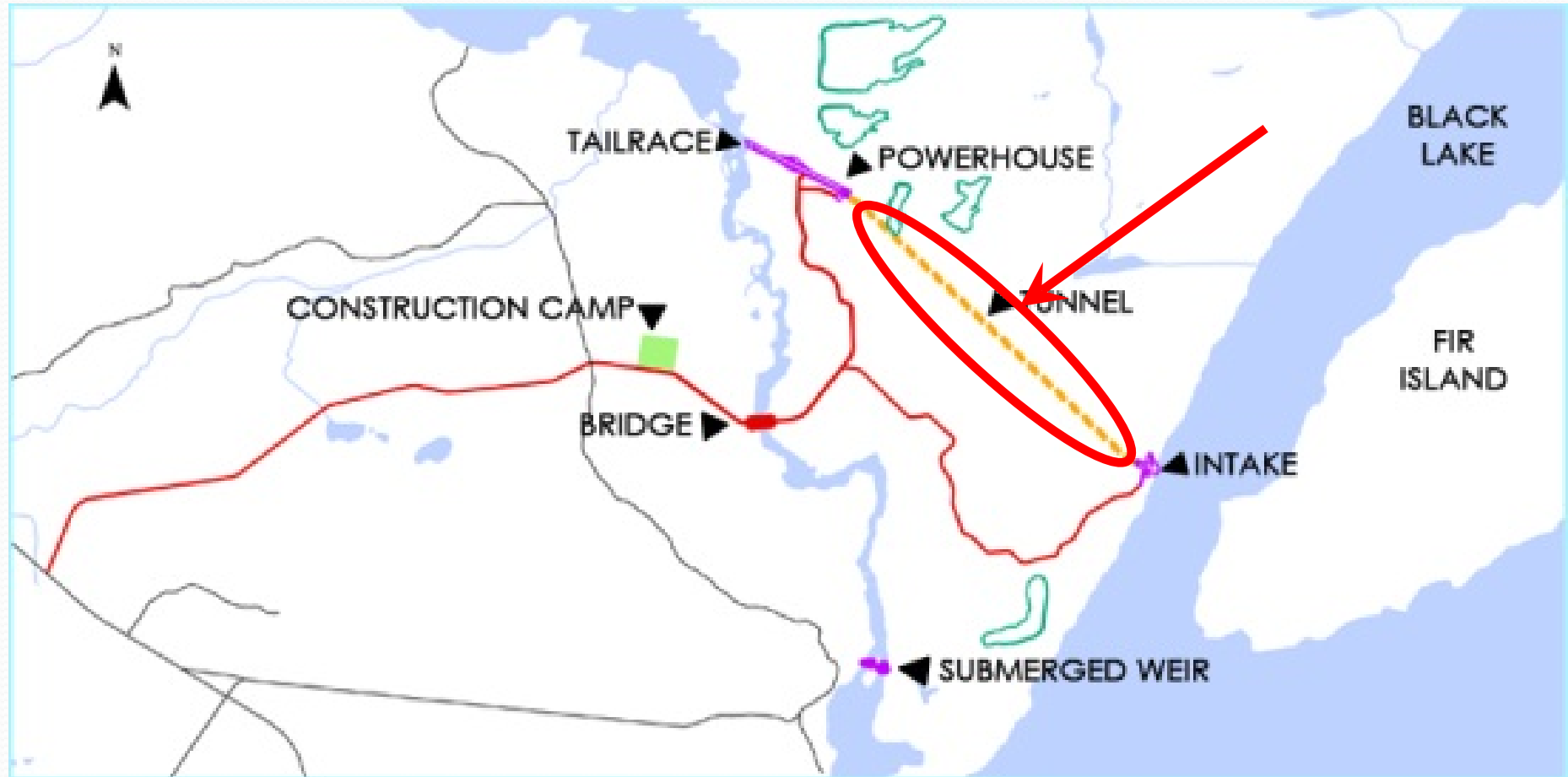
# Bridge



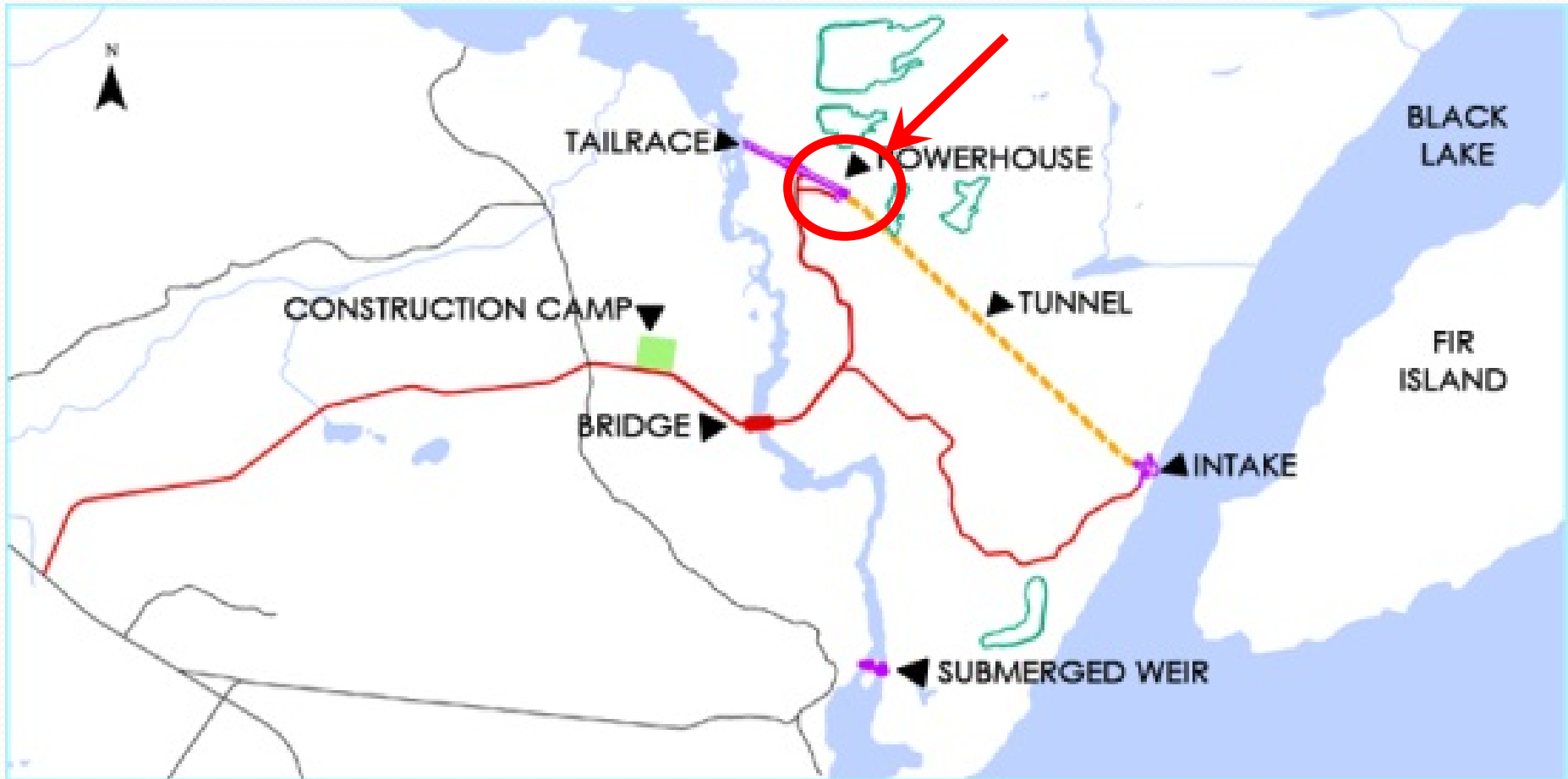
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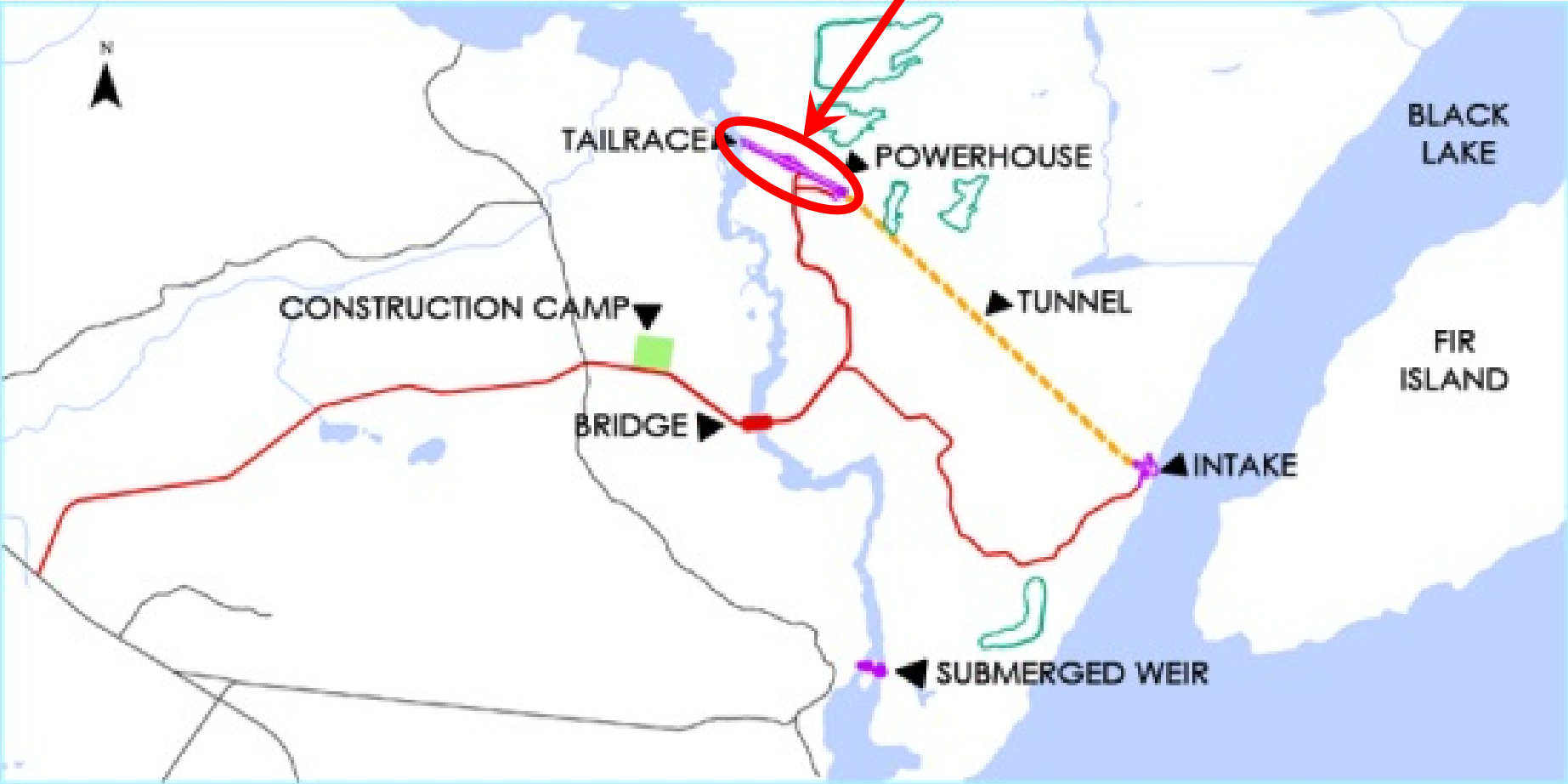
# Tunnel



# Powerhouse



# Tailrace

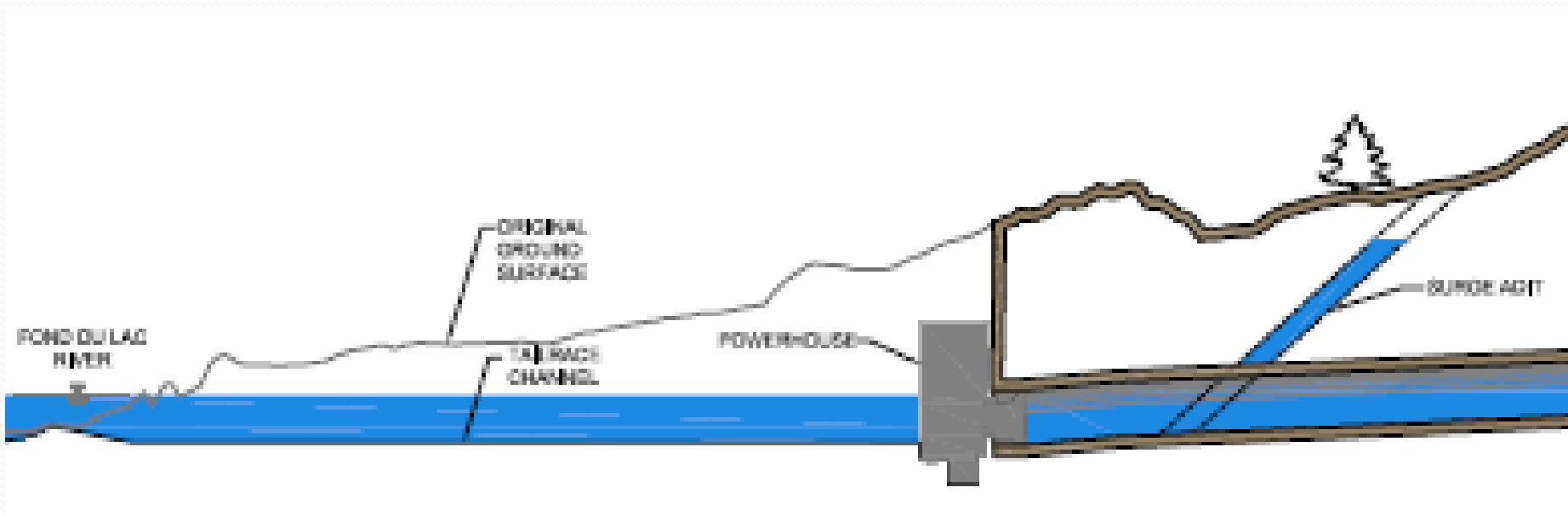


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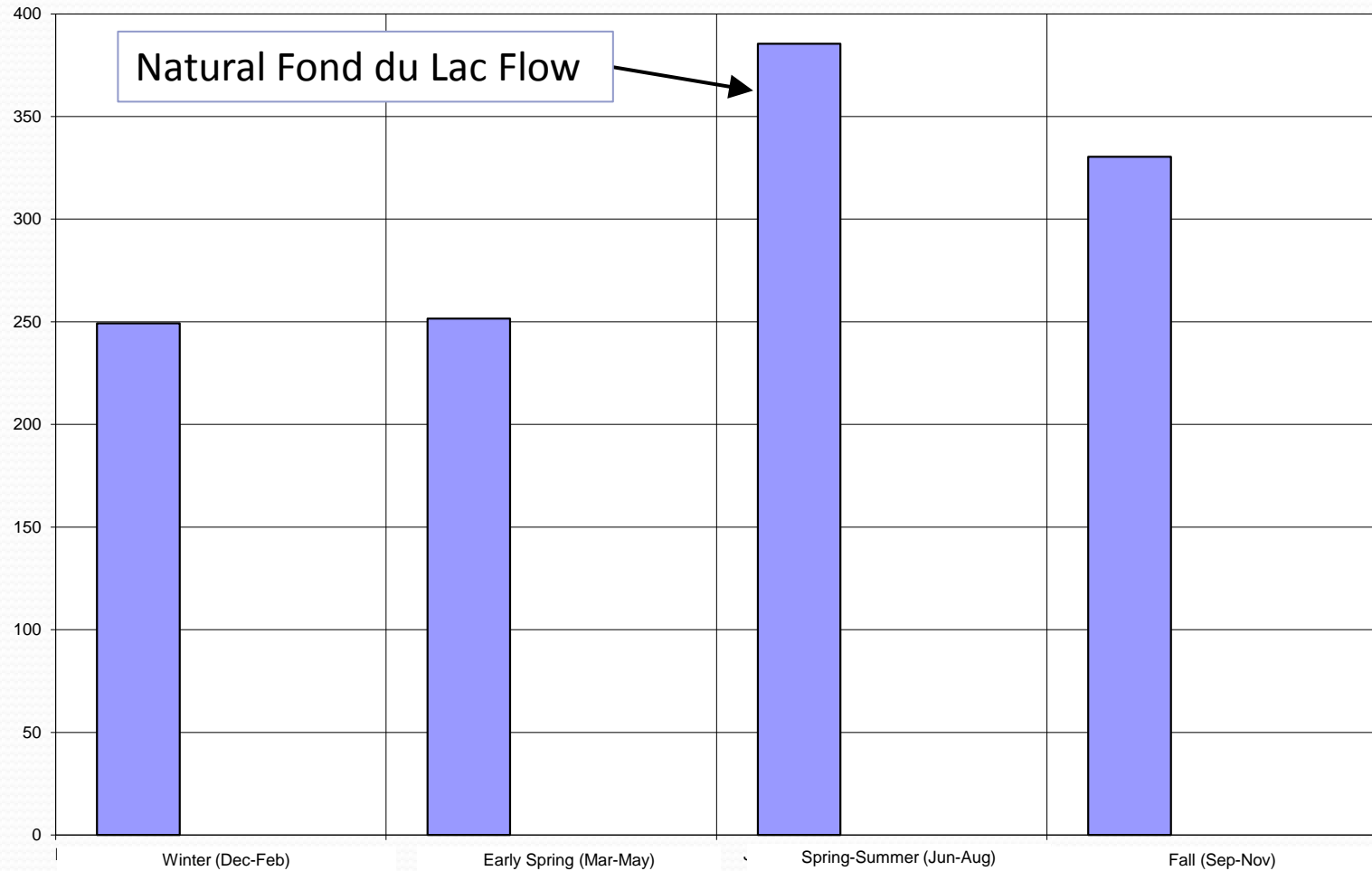


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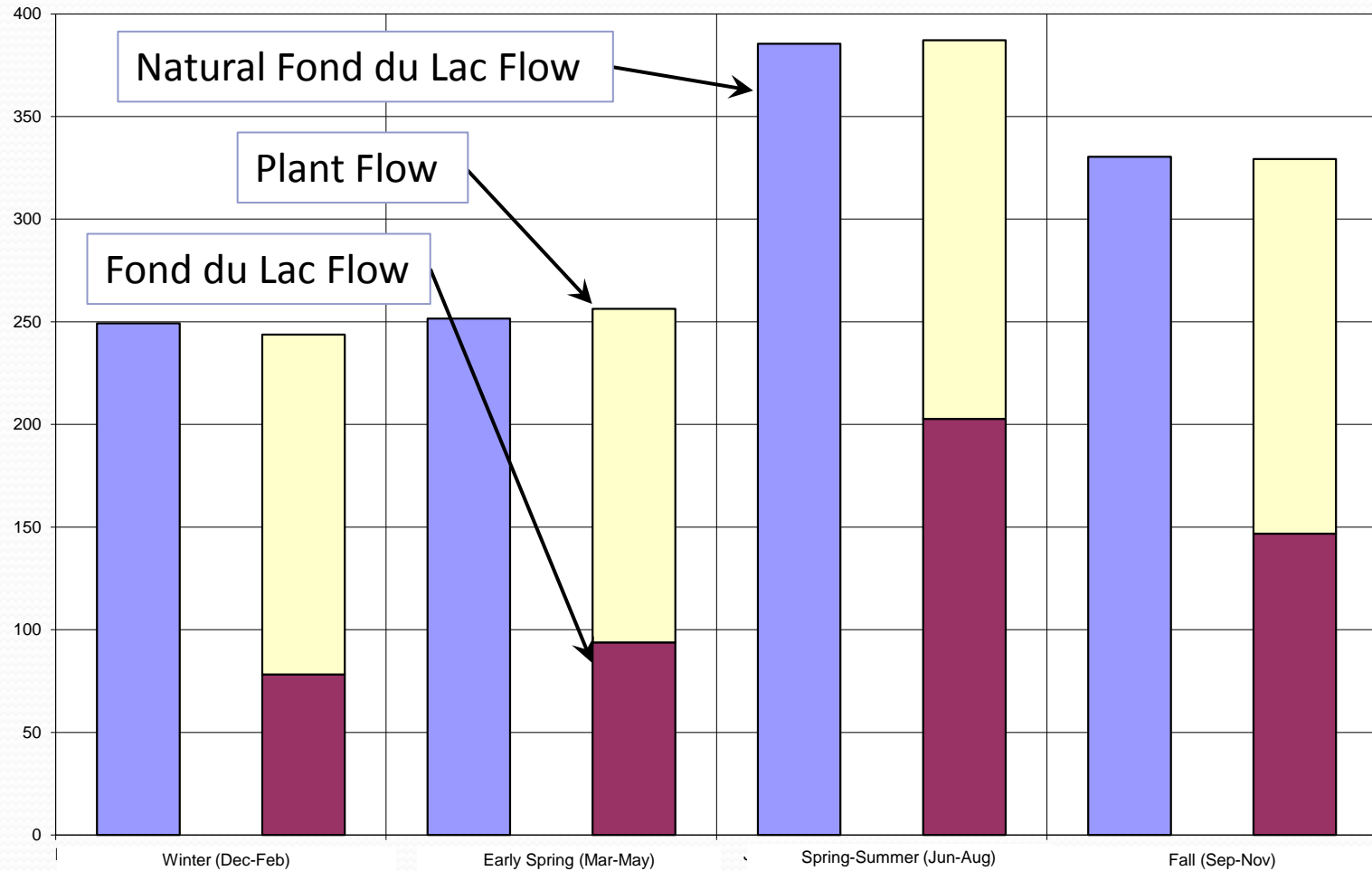
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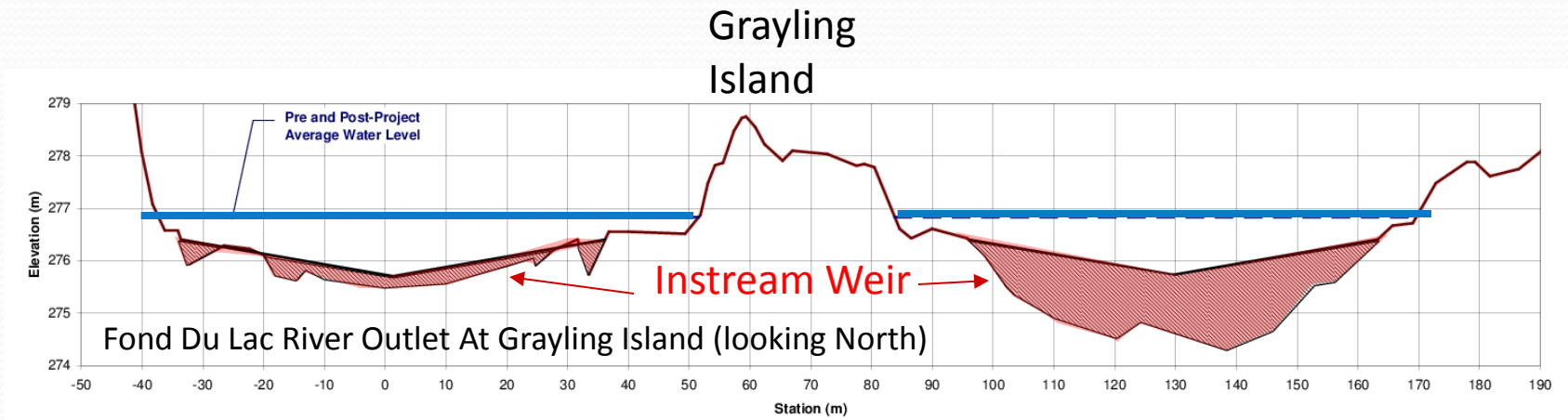


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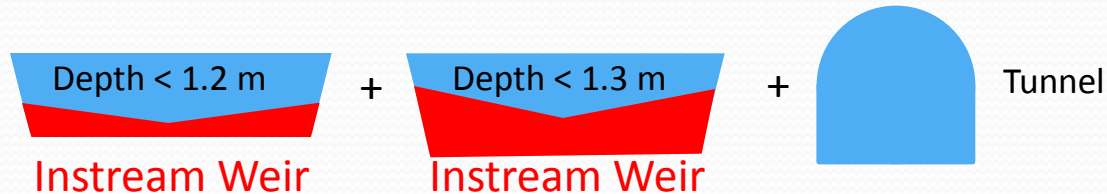


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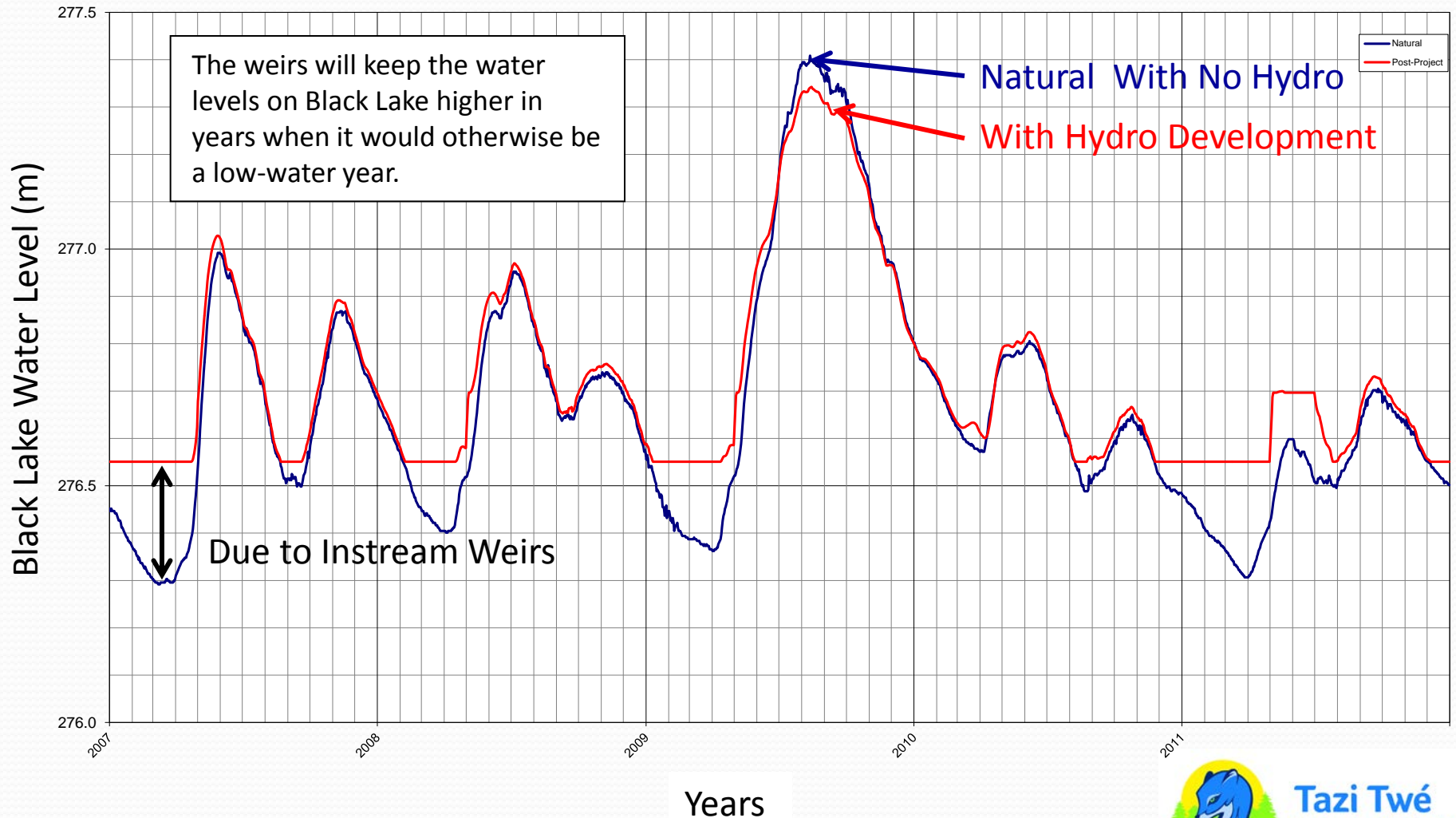
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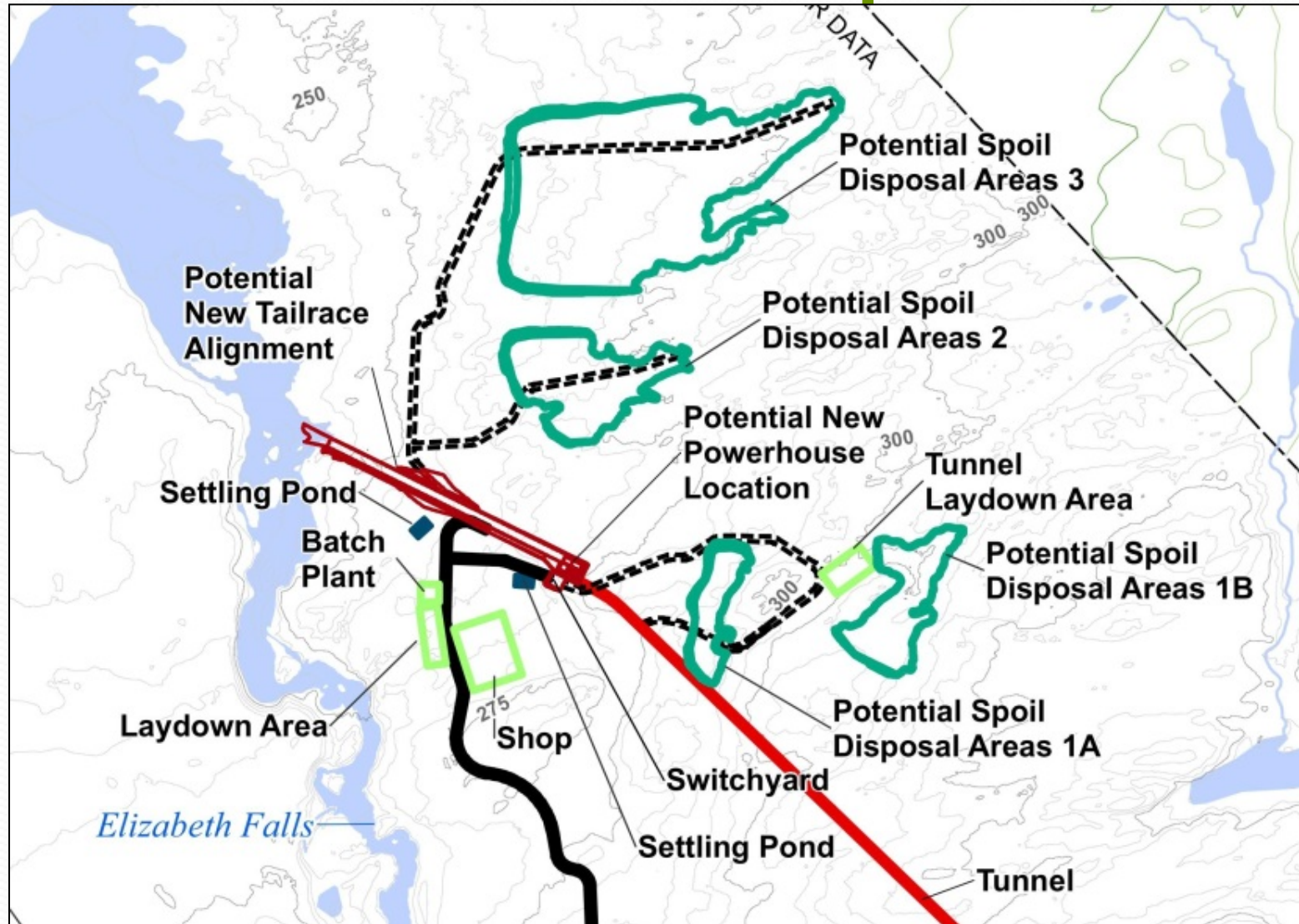
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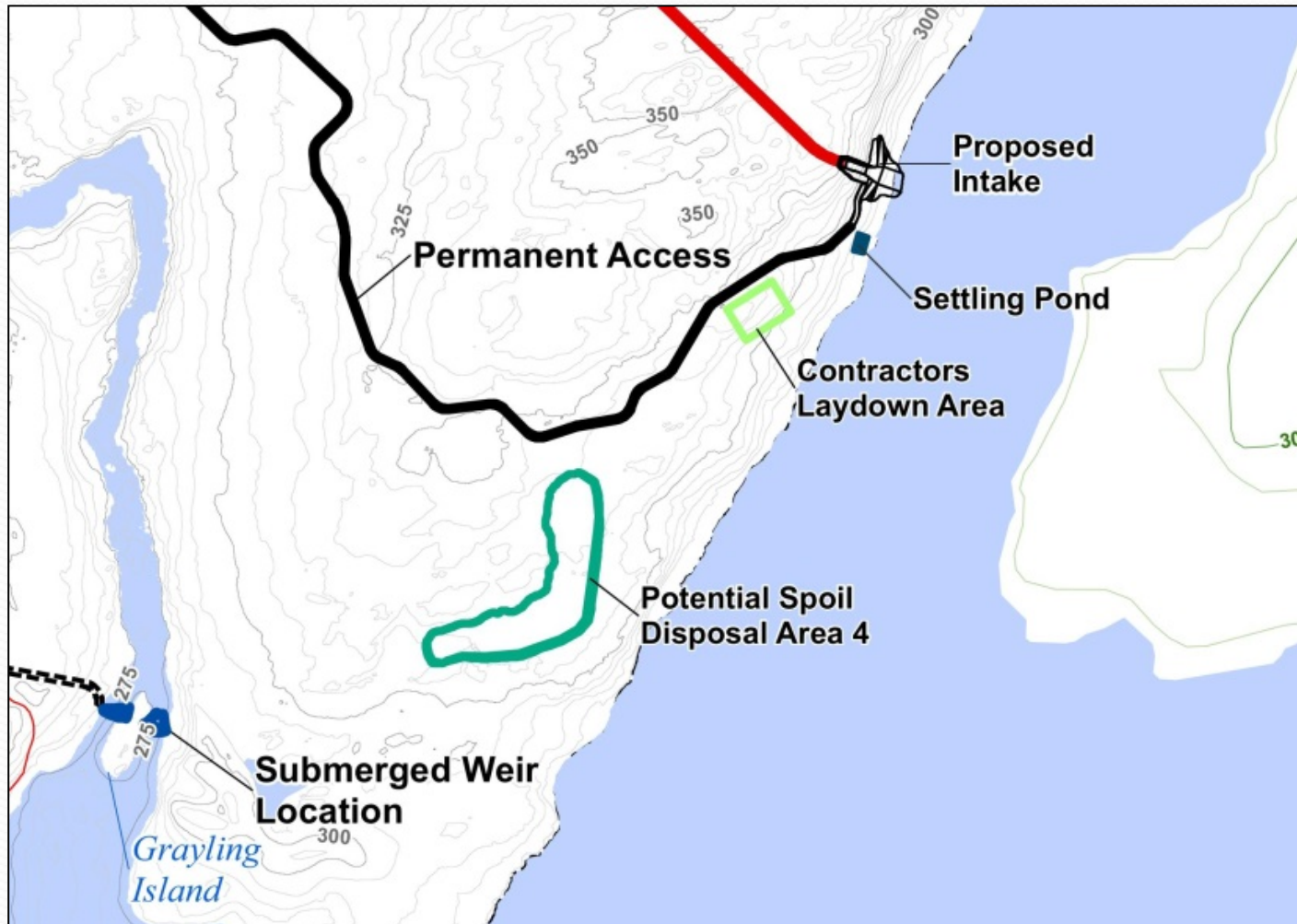
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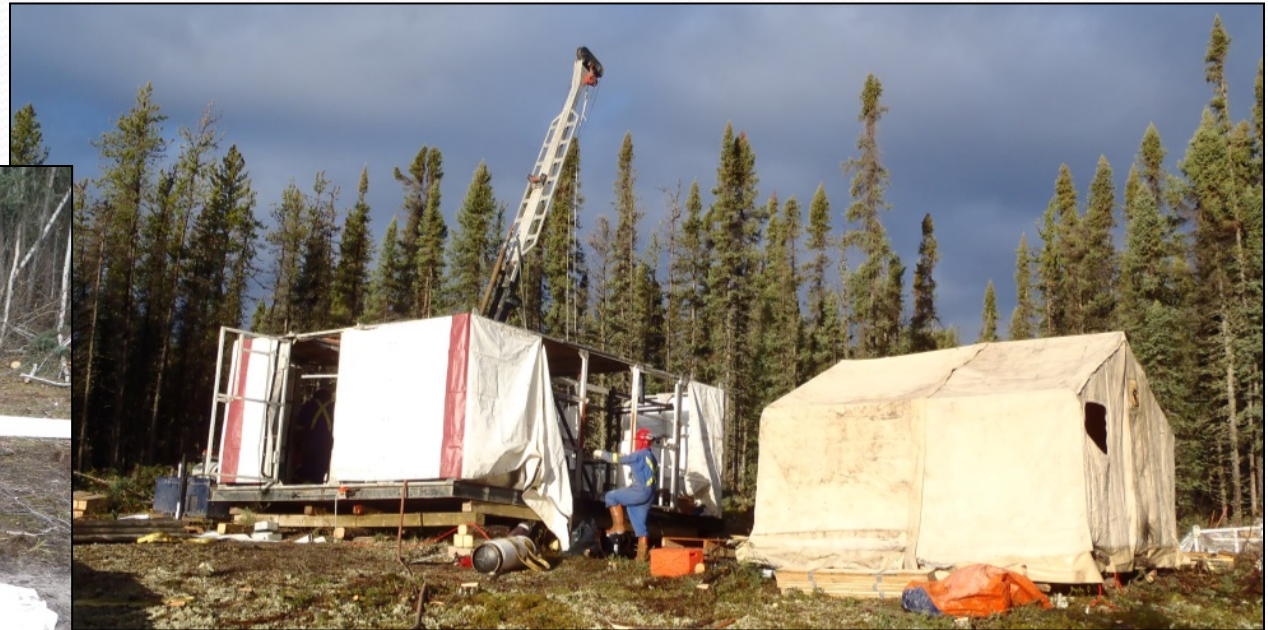
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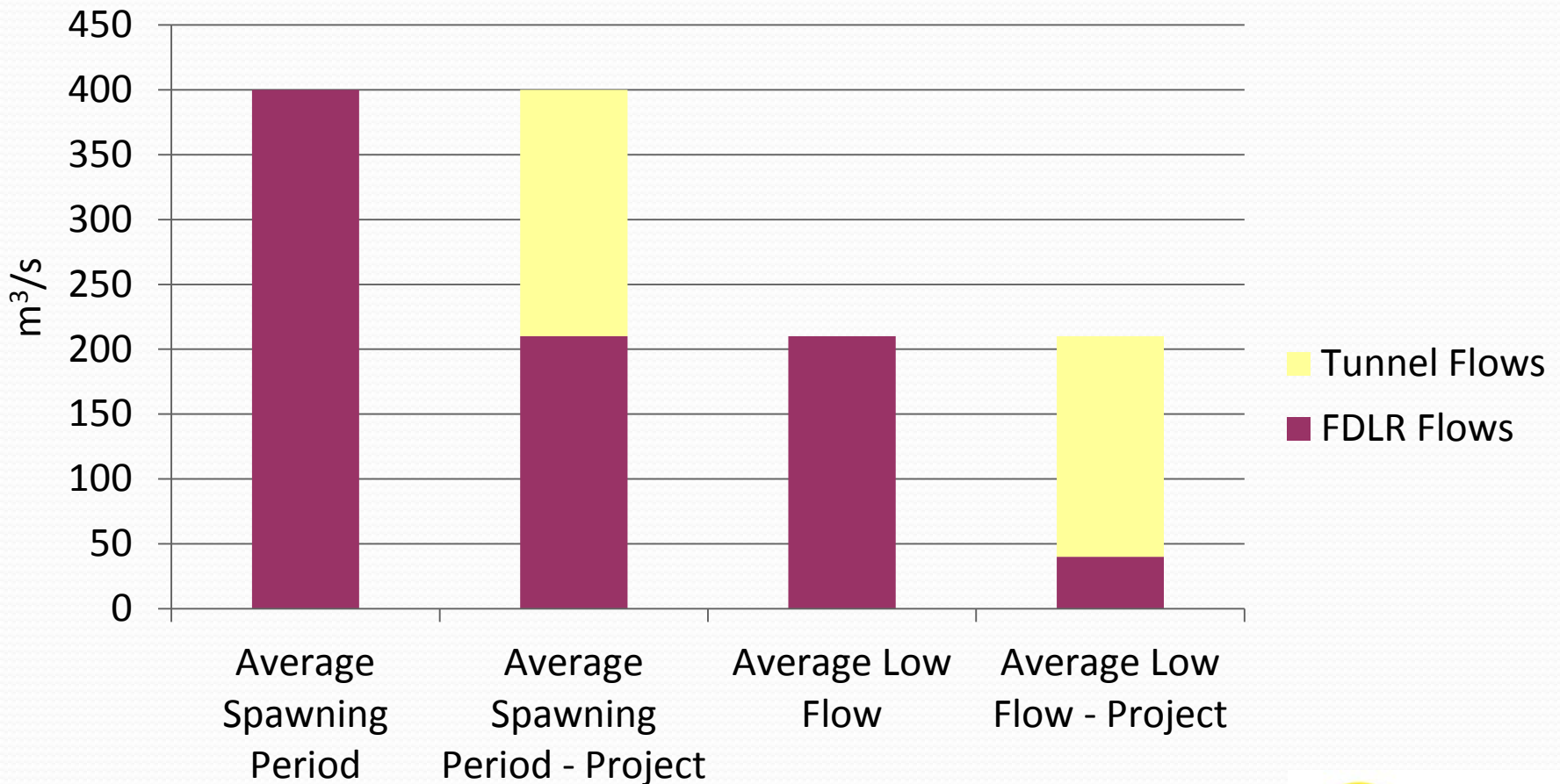
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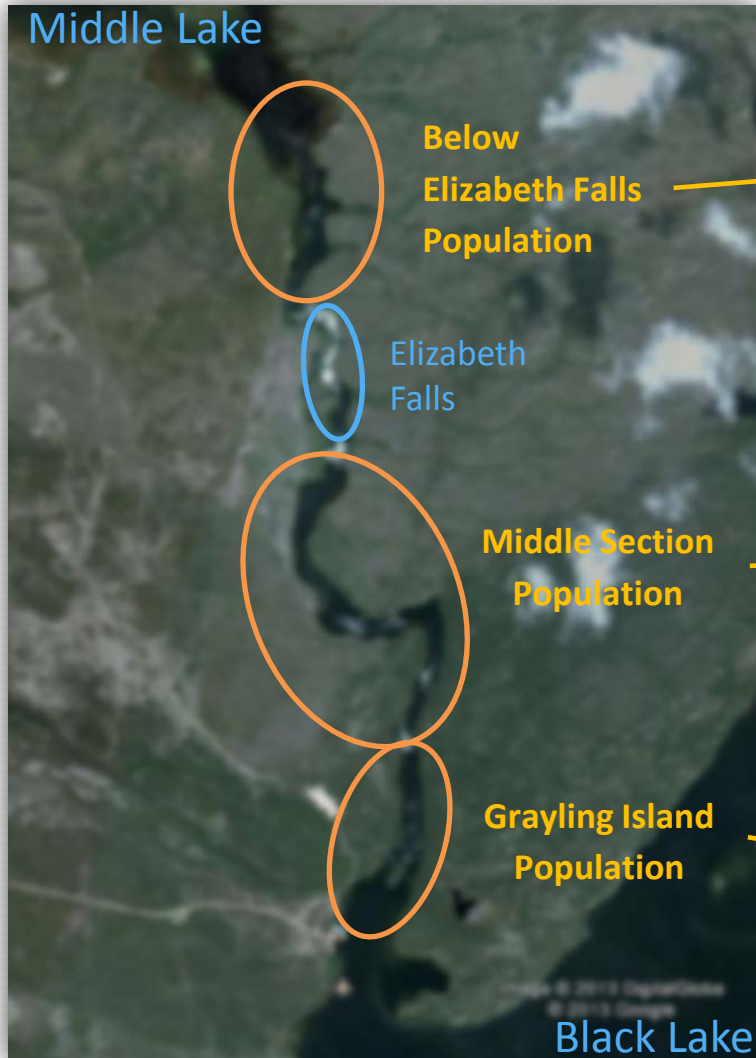
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Spawning habitat is downstream of the tailrace outlet so is maintained by natural flows and water levels in the recombined river.

The by-passed section of the river will have reduced flows due to operation of the project.

Spawning habitat is maintained at a suitable depth by installation of the submerged weir.

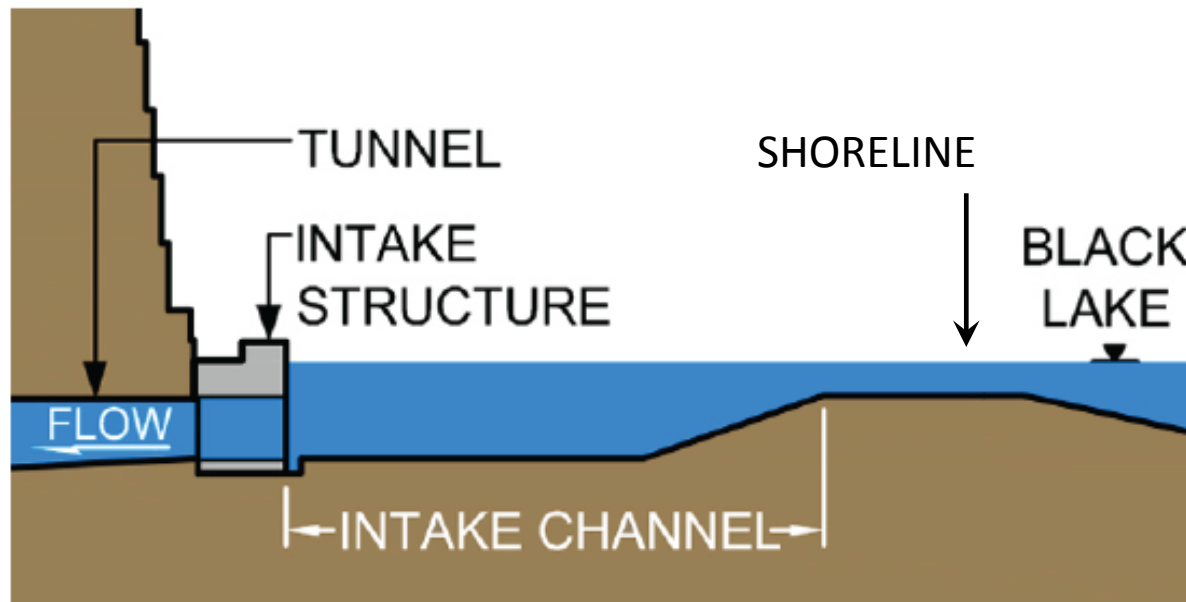
# Fond du Lac River – Grayling Habitat (between submerged weir and tailrace)

- **Spawning Habitat**
  - Reduce by less than 20%
- **Overwintering Habitat**
  - Will increase by 20 - 37%



# Black Lake Tunnel Intake Structure

- Located on Black Lake back from shoreline
- Designed to bring in water from a shallow depth (surface to 5 m)



# Next Steps



# Environment – Regulatory Approval

- Provincial and Federal governments have different processes.
- Environmental Impact Statement (EIS)
  - Expect to submit by mid December 2013
- Environmental Decision ... late 2014

# Project Next Steps

- Aboriginal and Public Involvement ... **Ongoing**
  - Project details
  - Progress updates
- Submit Environmental Impact Statement ... **Dec 2013**
- Finalize Design and Cost Estimate ... **January 2014**
- Project Approvals by the Partners ... **Feb → April 2014**
- Start Construction ... **late 2014**
- Plant In-Service ... **December 2017**

# Closing

- Thank you for coming and listening
- We want your comments and feedback
- Visit with our project team at the displays ...  
Ask questions

Reconvene in 30 minutes for group discussion

For More Information

Visit the Tazi Twé Website

<http://tthp.ca>

## Posters



October 29, 2013

Flow = 40 m<sup>3</sup>/s



Flow = 210 m<sup>3</sup>/s

Flow = 210 m<sup>3</sup>/s



**Tazi Twé**  
Hydroelectric Project

October 29, 2013

Flow = 400 m<sup>3</sup>/s



**Tazi Twé**  
Hydroelectric Project

October 29, 2013

Flow = 40 m<sup>3</sup>/s



**Tazi Twé**  
Hydroelectric Project

October 29, 2013

Flow = 210 m<sup>3</sup>/s



October 29, 2013

Flow = 400 m<sup>3</sup>/s



October 29, 2013

Flow = 40 m<sup>3</sup>/s



October 29, 2013

Flow = 210 m<sup>3</sup>/s



October 29, 2013

Flow = 400 m<sup>3</sup>/s



October 29, 2013

Flow = 40 m<sup>3</sup>/s



October 29, 2013

Flow = 210 m<sup>3</sup>/s



October 29, 2013

Flow = 400 m<sup>3</sup>/s



October 29, 2013

Flow = 40 m<sup>3</sup>/s



October 29, 2013

Flow = 210 m<sup>3</sup>/s



October 29, 2013

Flow = 400 m<sup>3</sup>/s

# Existing Arctic Grayling Spawning Locations and Viewpoints

Lower  
Fond du Lac  
River  
Population

Middle  
Section  
Population

Grayling  
Island  
Population

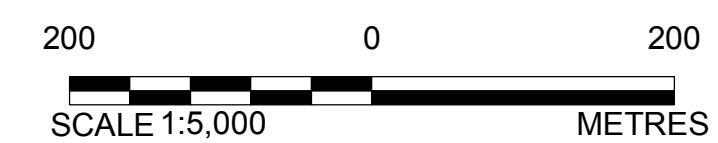
Tunnel and Tailrace Alignment

VP5  
VP4

VP3

VP2

VP1



**LEGEND**

- LOW TO MODERATE EGG NUMBERS
- HIGH EGG NUMBERS
- TUNNEL AND TAILRACE ALIGNMENT

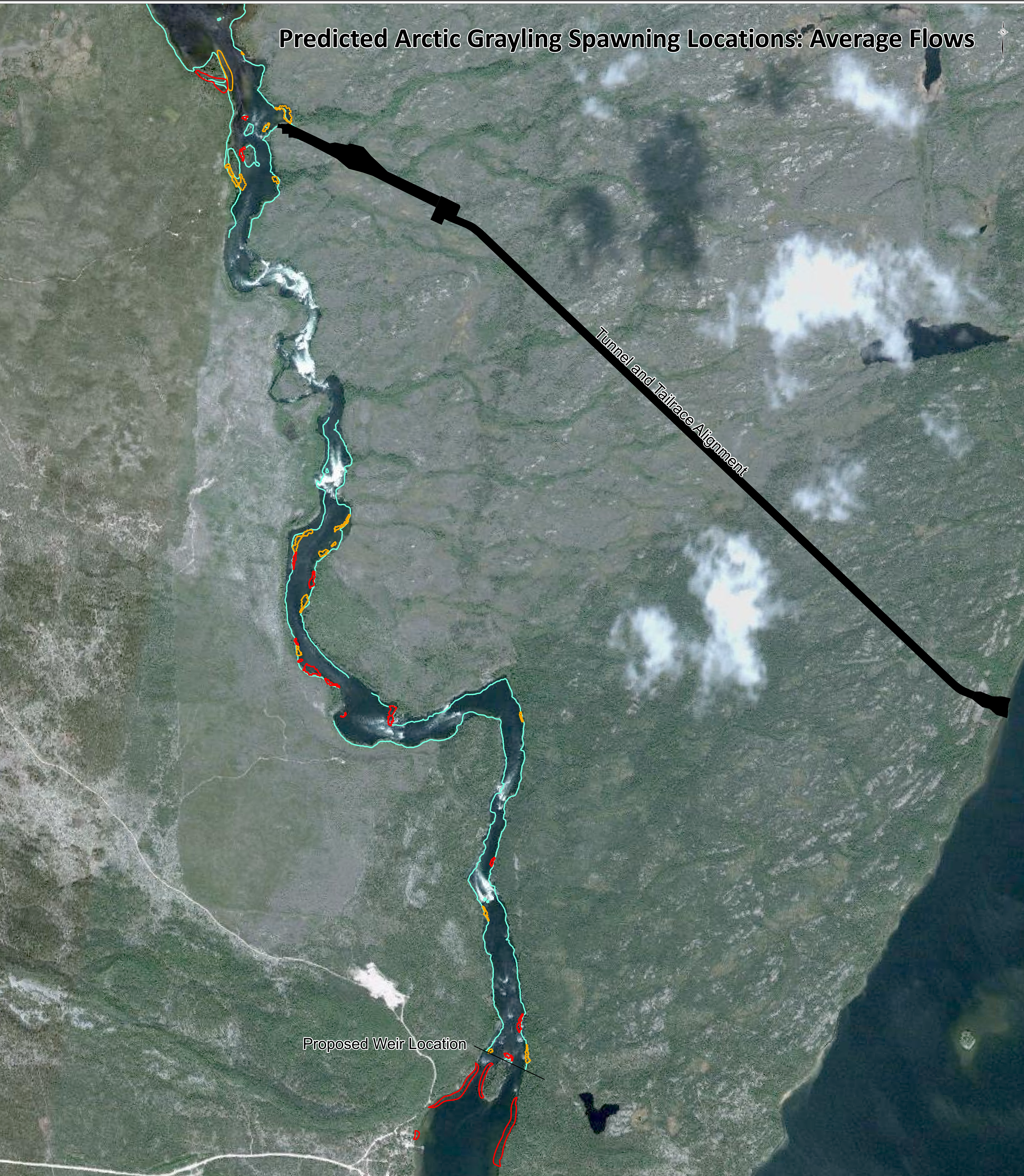
**REFERENCE**  
 GOOGLE IMAGERY © DIGITAL GLOBE 2004  
 CANVECS © NATURAL RESOURCES CANADA, 2012  
 NAD83 UTM ZONE 13

## Community Meeting #2

### October 29, 2013

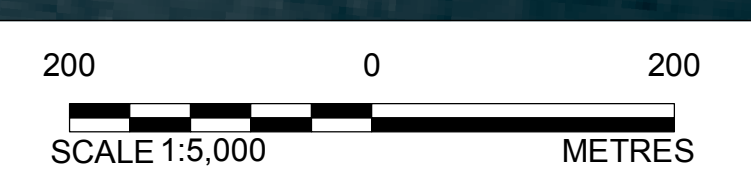
|  |         |              |                       |
|--|---------|--------------|-----------------------|
| PROJECT<br>TAZI TWÉ HYDROELECTRIC PROJECT            |         |              |                       |
| TITLE<br>EXISTING ARCTIC GRAYLING SPAWNING LOCATIONS |         |              |                       |
|  | PROJECT | 10-1365-0004 | FILE No.              |
|  | DESIGN  | SM           | 15/10/13              |
|  | CHECK   | BC           | 24/10/13              |
|  | REVIEW  |              |                       |
|  |         |              | SCALE AS SHOWN REV. 0 |
|  |         |              | FIGURE: 1             |

# Predicted Arctic Grayling Spawning Locations: Average Flows



Tunnel and Tailrace Alignment

Proposed Weir Location



- LEGEND**
- MODELLED FLOW EDGE 210 m<sup>3</sup>/s
  - MODERATELY SUITABLE
  - SUITABLE
  - TUNNEL AND TAILRACE ALIGNMENT

**REFERENCE**  
 INFORMATION SERVICES CORPORATION, 2013  
 CANVEC © NATURAL RESOURCES CANADA, 2012  
 NAD83 UTM ZONE 13

## Community Meeting #2

### October 29, 2013

|   |    |              |                  |
|---|----|--------------|------------------|
| PROJECT   |    |              |                  |
| TAZI TWÉ HYDROELECTRIC PROJECT  |    |              |                  |
| TITLE   |    |              |                  |
| ARCTIC GRAYLING SPAWNING LOCATIONS AT AVERAGE FLOWS (400 m <sup>3</sup> /s) DURING OPERATION: 210 m <sup>3</sup> /s RIPARIAN FLOW |    |              |                  |
| PROJECT   |    | 10-1365-0004 | FILE No.         |
| DESIGN  | SM | 15/10/13     | SCALE AS SHOWN   |
| CHECK   | BC | 25/10/13     | REV. 0           |
| REVIEW  |    |              | <b>FIGURE: 3</b> |

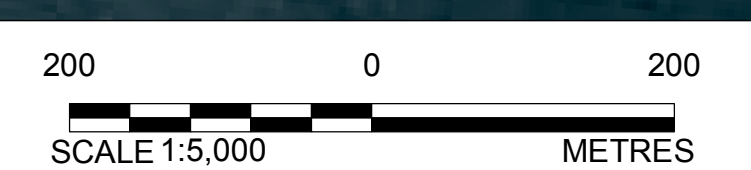


# Low Flow Water's Edge Before and After Project



Tunnel and Tailrace Alignment

Proposed Weir Location



- LEGEND**
- MODELLED FLOW EDGE 210 m<sup>3</sup>/s
  - MODELLED FLOW EDGE 40 m<sup>3</sup>/s
  - TUNNEL AND TAILRACE ALIGNMENT

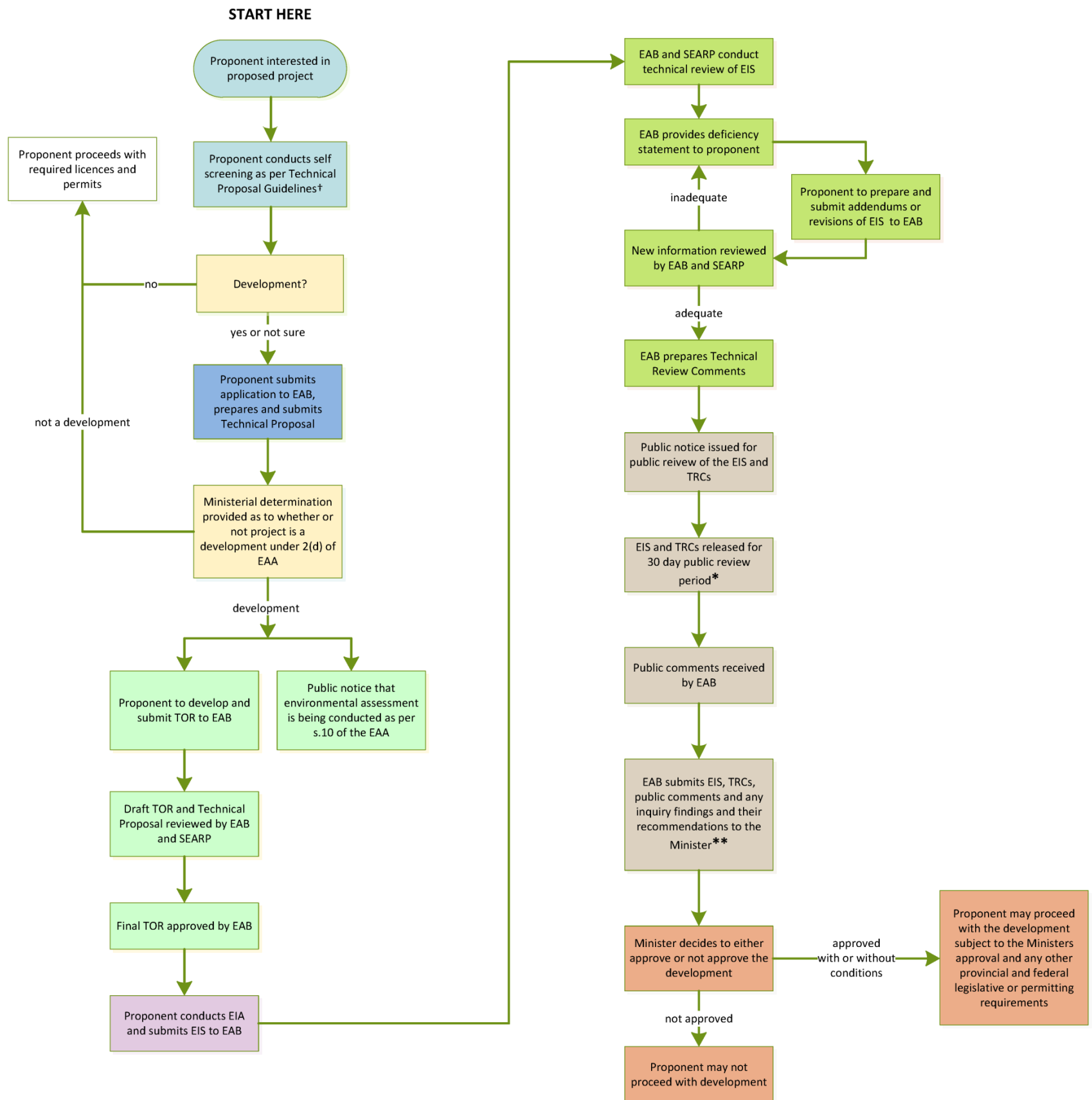
**REFERENCE**  
 INFORMATION SERVICES CORPORATION, 2013  
 CANVECS © NATURAL RESOURCES CANADA, 2012  
 NAD83 UTM ZONE 13

**Community Meeting #2**  
**October 29, 2013**

|         |              |  |                |
|---------|--------------|--|----------------|
| PROJECT |              | TAZI TWÉ HYDROELECTRIC PROJECT   |                |
| TITLE   |              | WATER'S EDGE MODELED AT 210 m <sup>3</sup> /s AND 40 m <sup>3</sup> /s RIPARIAN FLOW |                |
| PROJECT | 10-1365-0004 | FILE No.   |                |
| DESIGN  | SM           | 22/10/13   | SCALE AS SHOWN |
| CHECK   | BC           | 25/10/13   | REV. 0         |
| REVIEW  |              |  |                |

FIGURE: 5

# The Saskatchewan Environmental Assessment Process



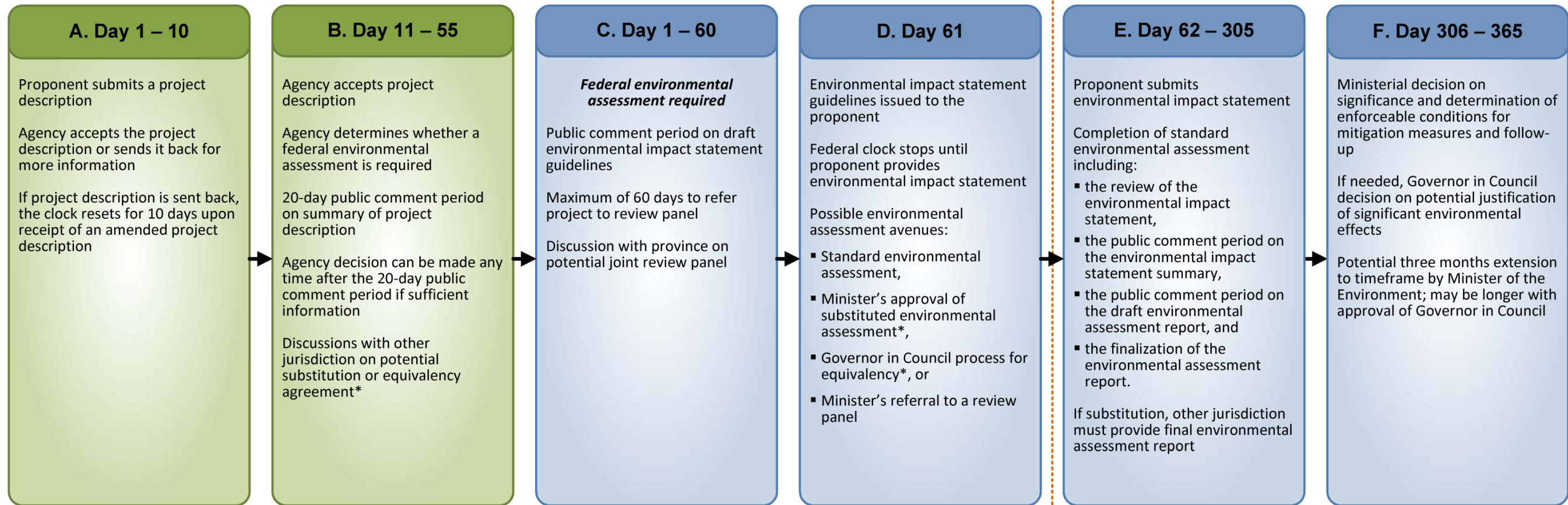
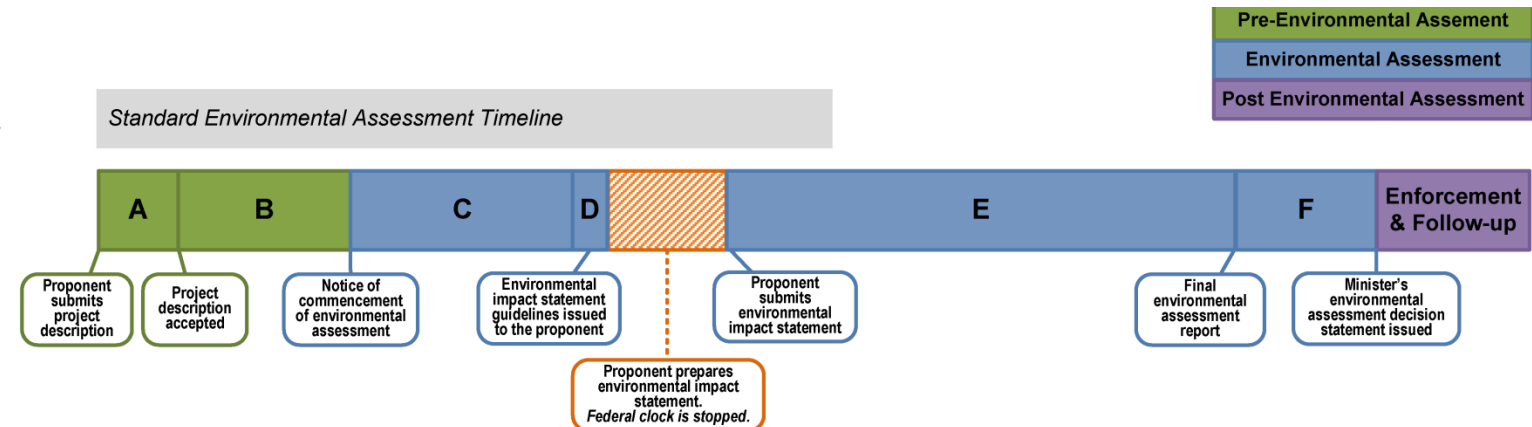
|                      |                      |  |   |
|----------------------|----------------------|--|---|
| Proposal Development | Impact Assessment    | <b>Key</b><br>TPG – Technical Proposal Guidelines<br>EAB – Environmental Assessment Branch<br>EAA – The Environmental Assessment Act<br>TOR – Terms of Reference<br>SEARP – Saskatchewan Environmental Assessment Review Panel<br>EIA – Environmental Impact Assessment<br>EIS – Environmental Impact Statement<br>TRCs- Technical Review Comments | * Any person may: make a written submission to the minister within 30 days from the date when the minister first gives notice or if the minister considers it appropriate, within an additional period of 30 days.<br>**Minister may require public meetings or public inquiry into all or any aspect of the development at any time prior to making a decision about the development |
| Application          | Review               |  |   |
| Screening            | Public Comment       |  |   |
| Scoping              | Decision by Minister |  |   |
|                      |                      |  |   |

†Changes to a development with prior Ministerial Approval require review by EA Branch



# Standard Environmental Assessment Process

For Designated Project Managed by the Agency



No federal environmental assessment required

\* Can occur at any point during the environmental assessment

Legislative Maximum Timeframes

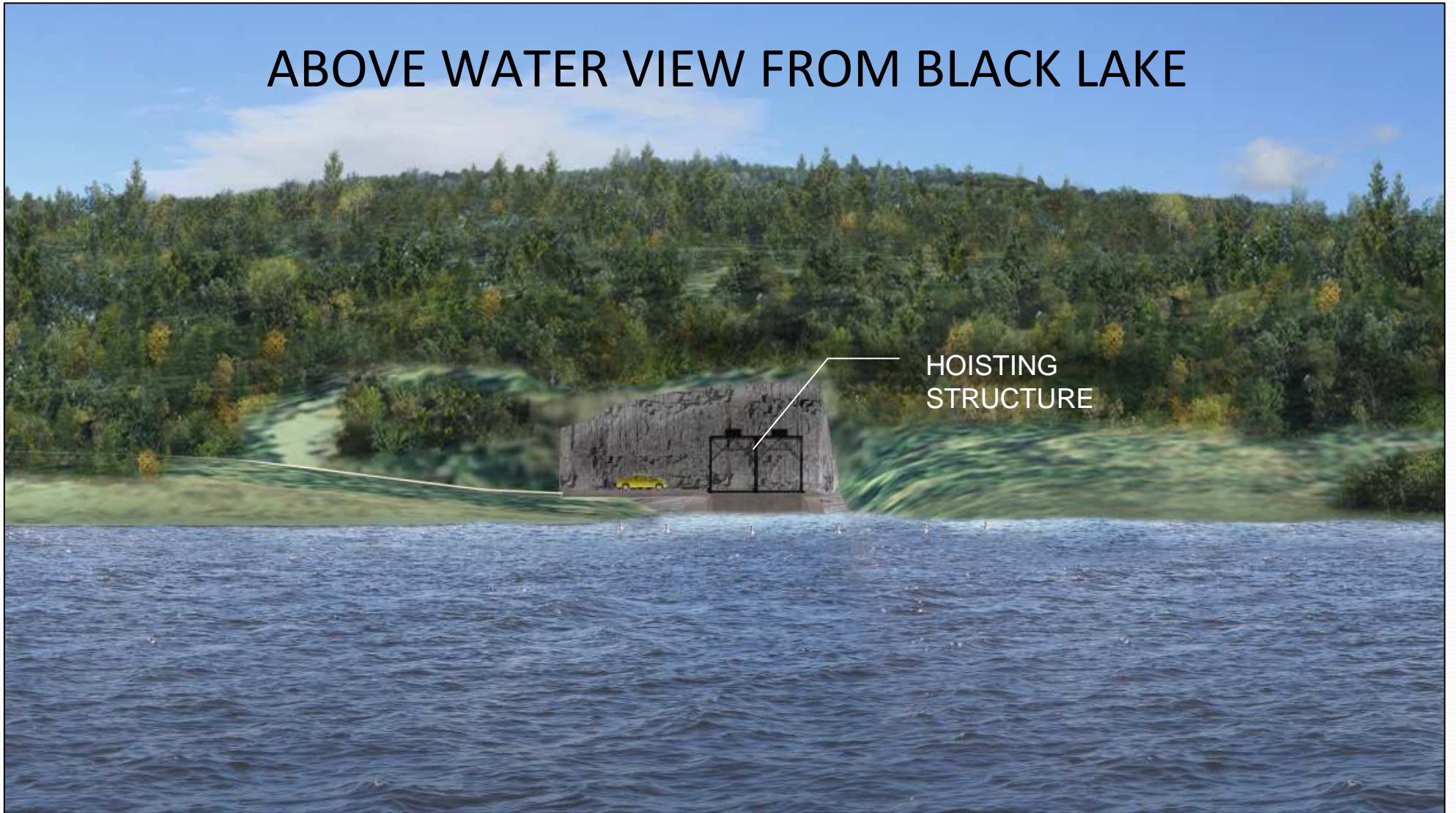
Policy Timeframes Within a Maximum of 365 days



October 29, 2013

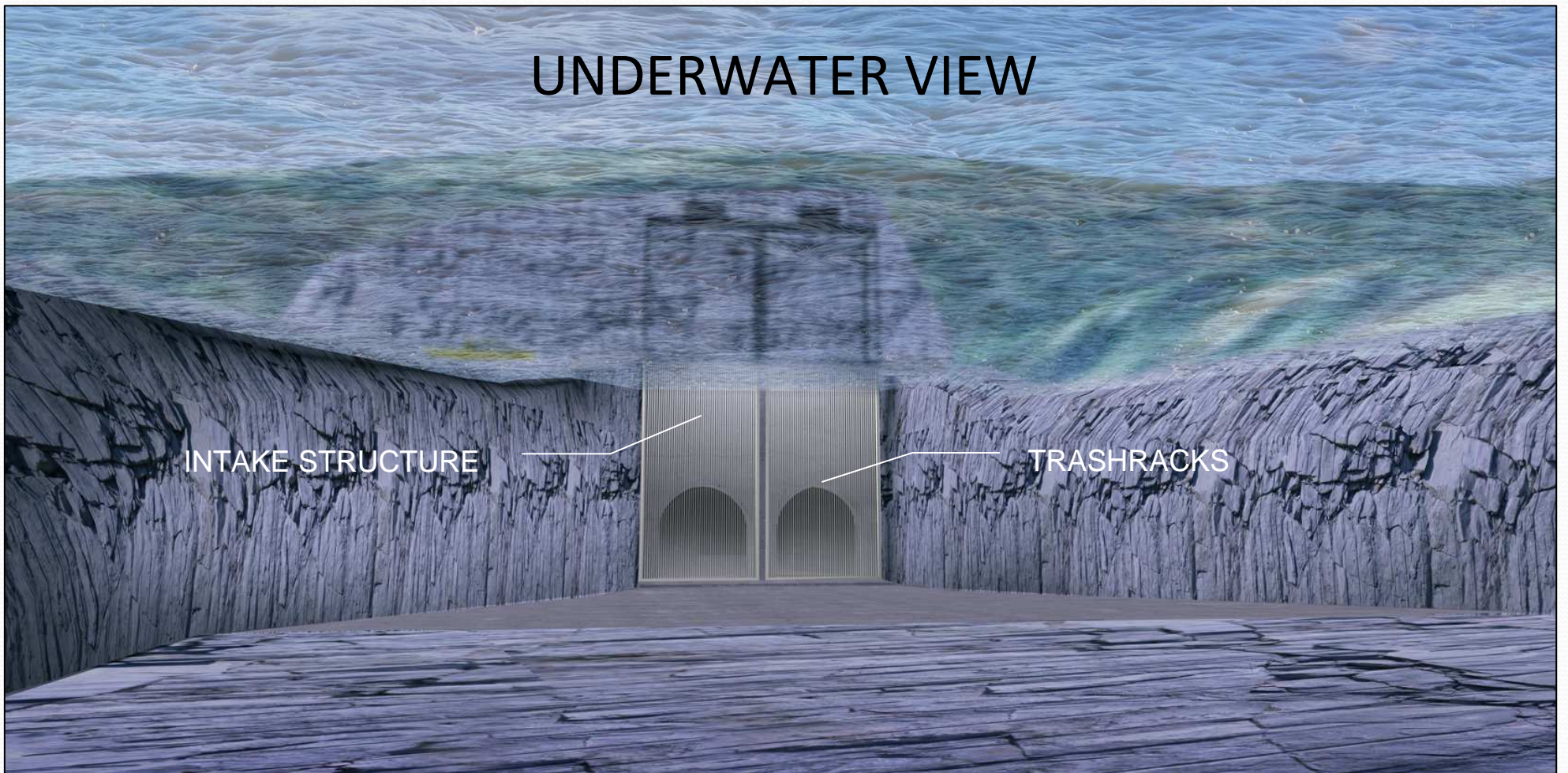
# Intake Structure

ABOVE WATER VIEW FROM BLACK LAKE

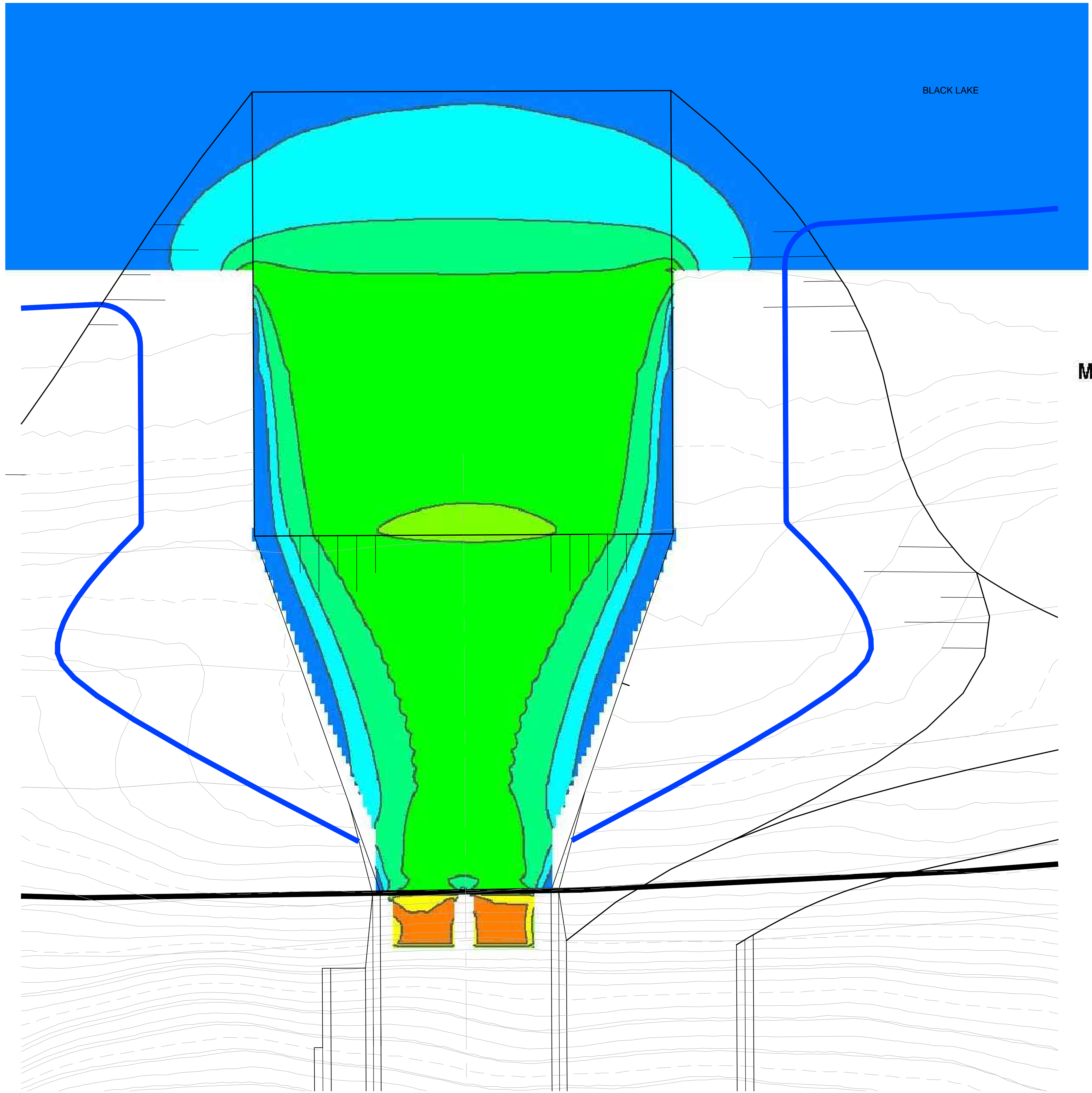


The maximum current in the intake has a velocity of 1 m/s. White water on the river is typically 2 to 3 m/s.

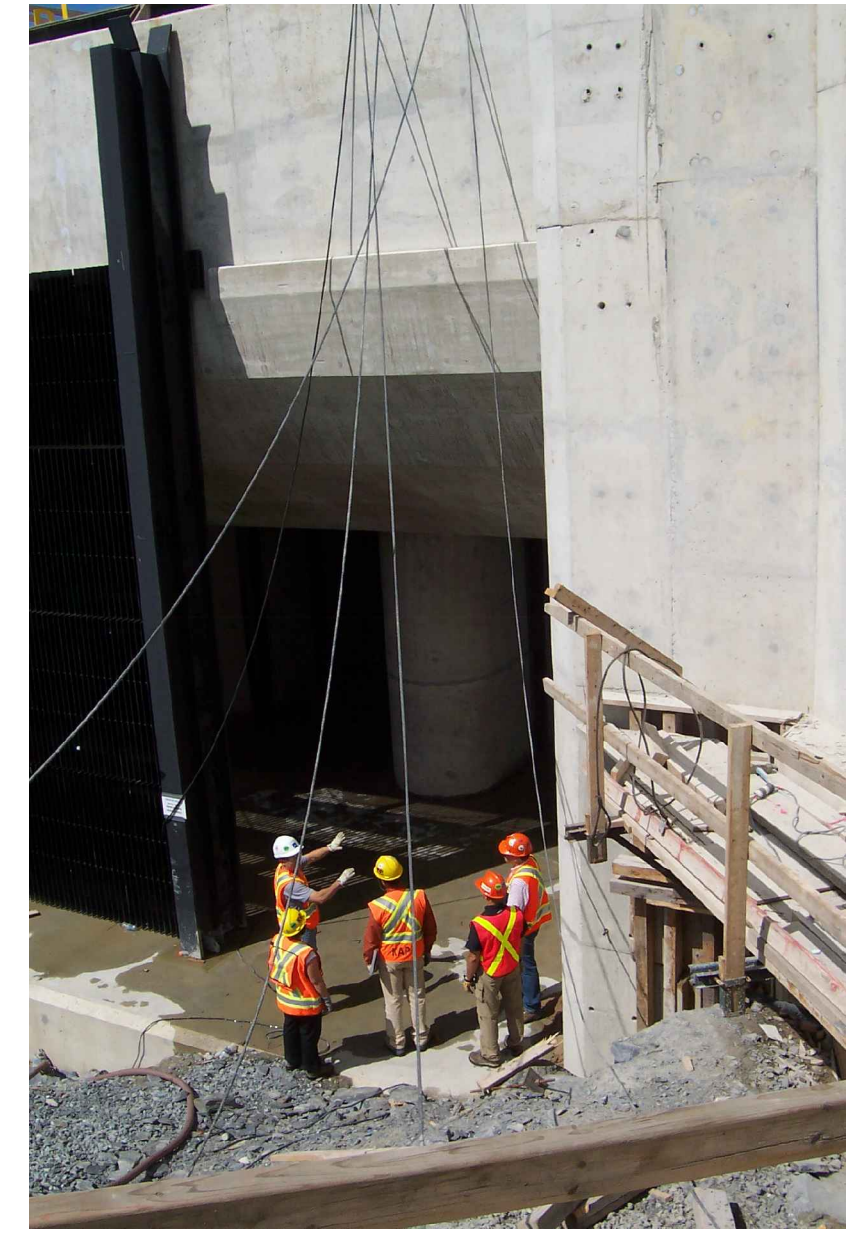
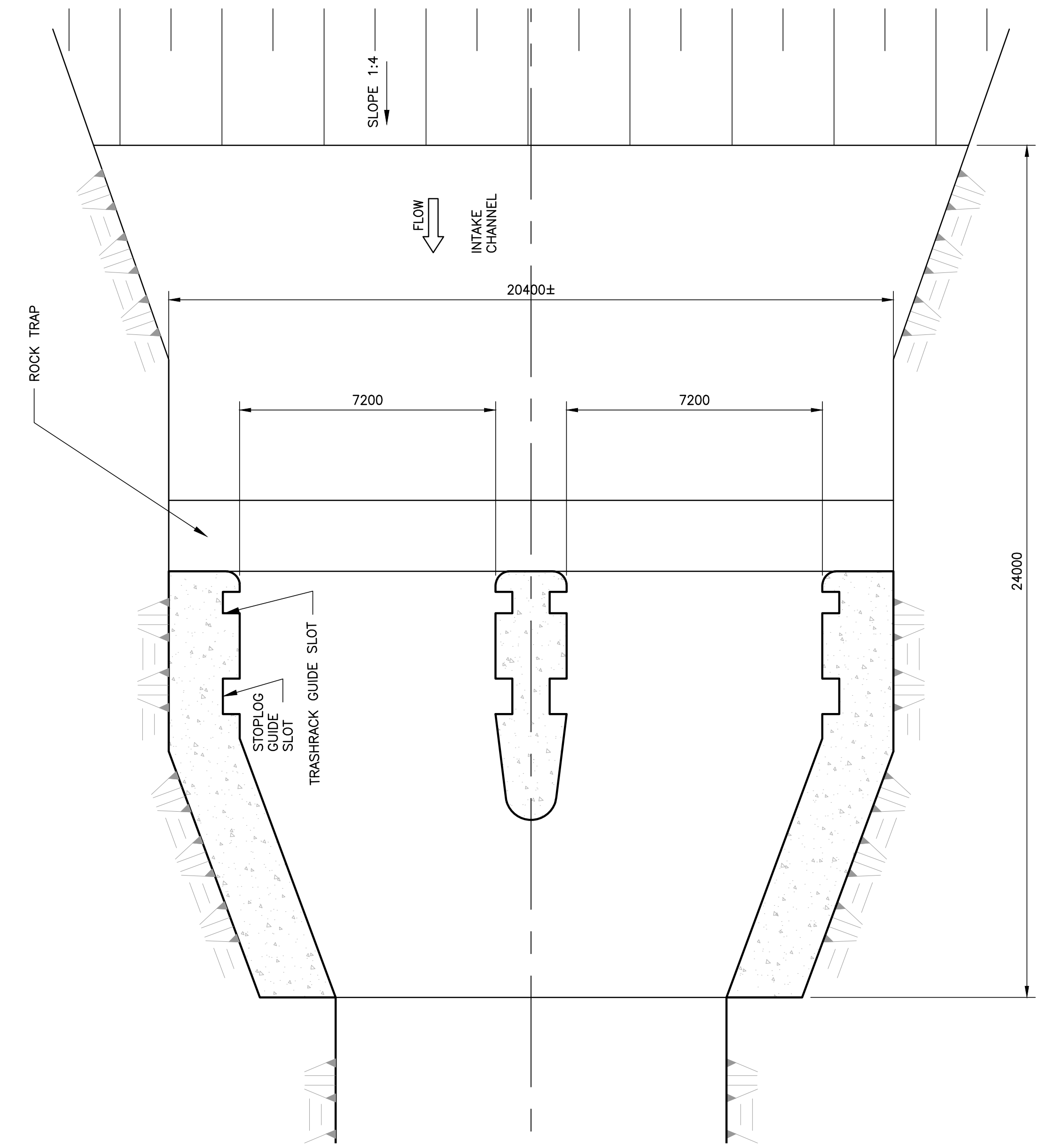
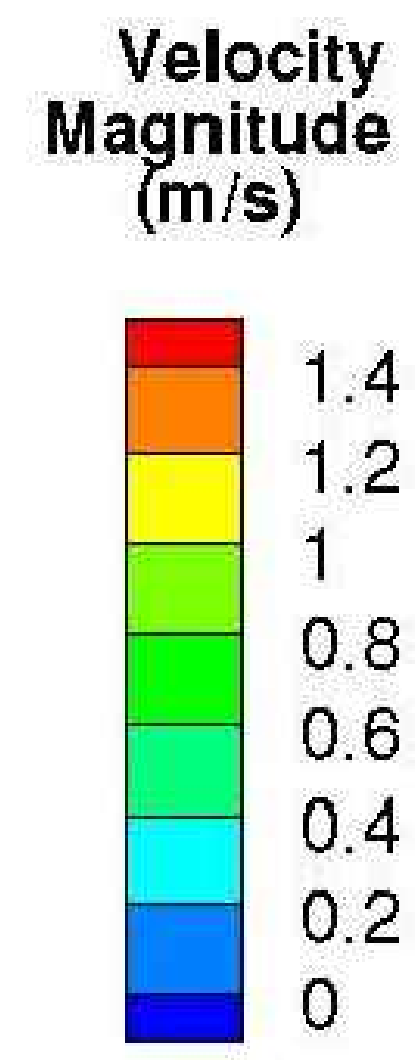
UNDERWATER VIEW



Trash racks collect debris which is regularly removed and visually deters fish.



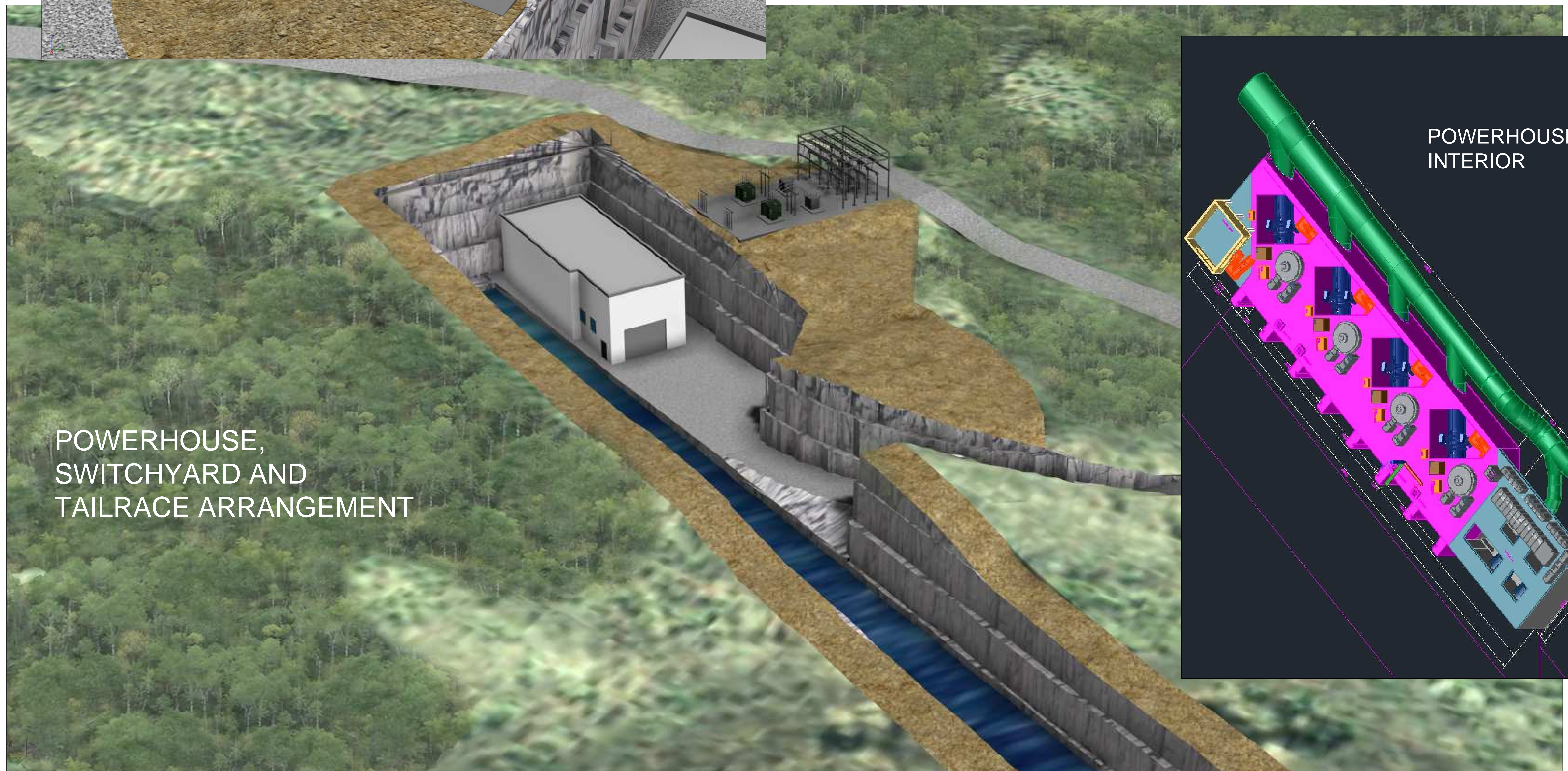
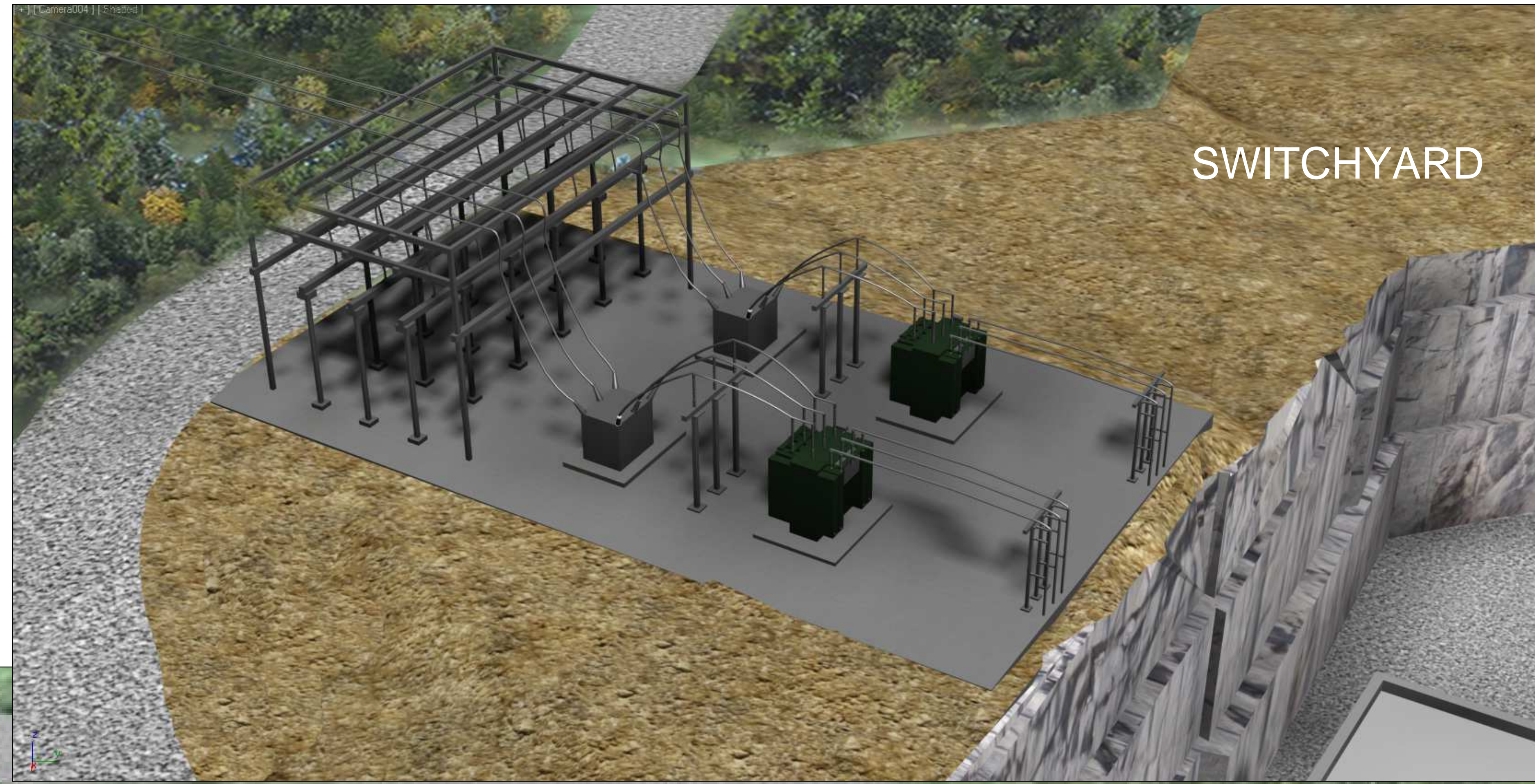
WATER VELOCITY IN APPROACH CHANNEL



INTAKE AT BLACK LAKE

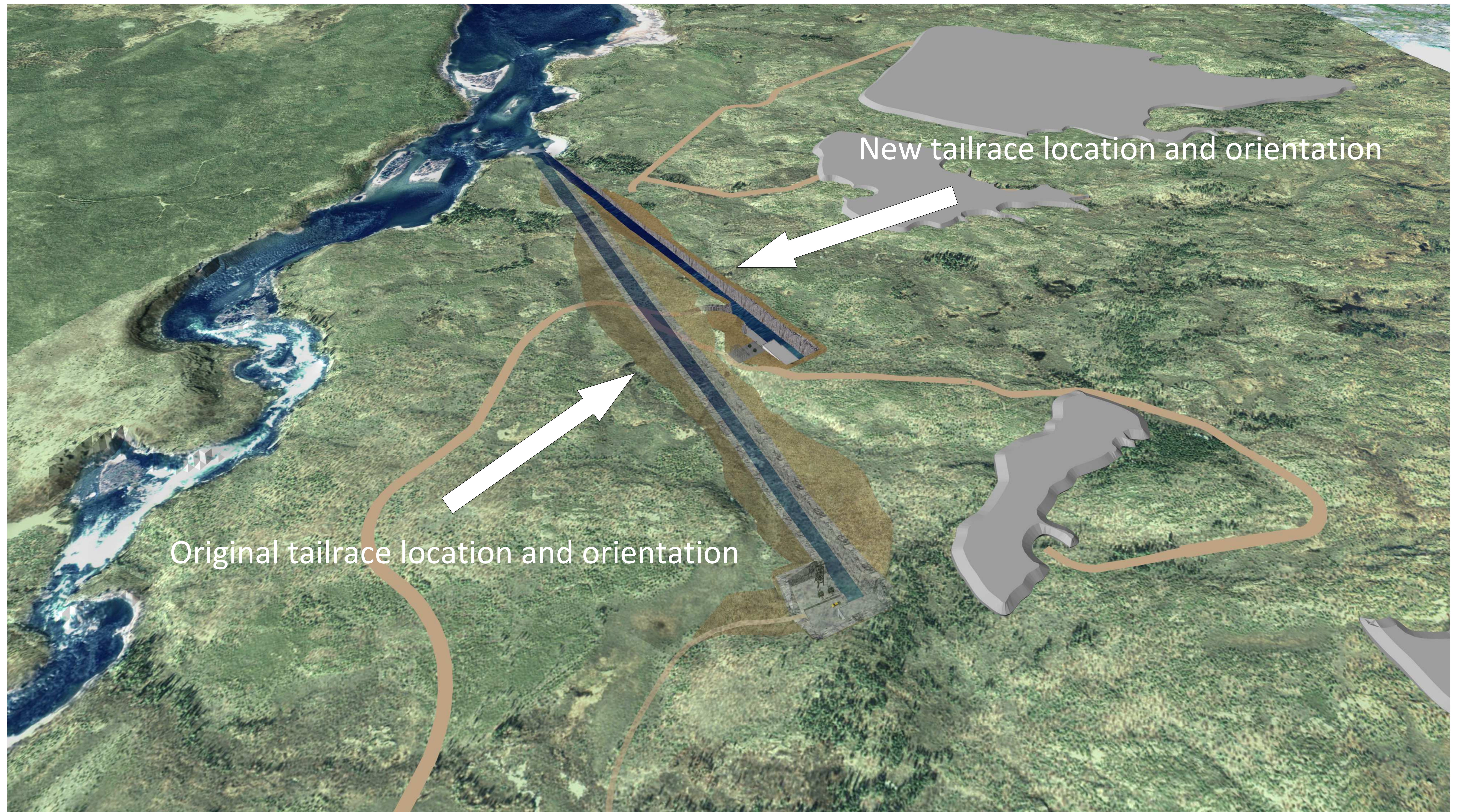
# Powerhouse

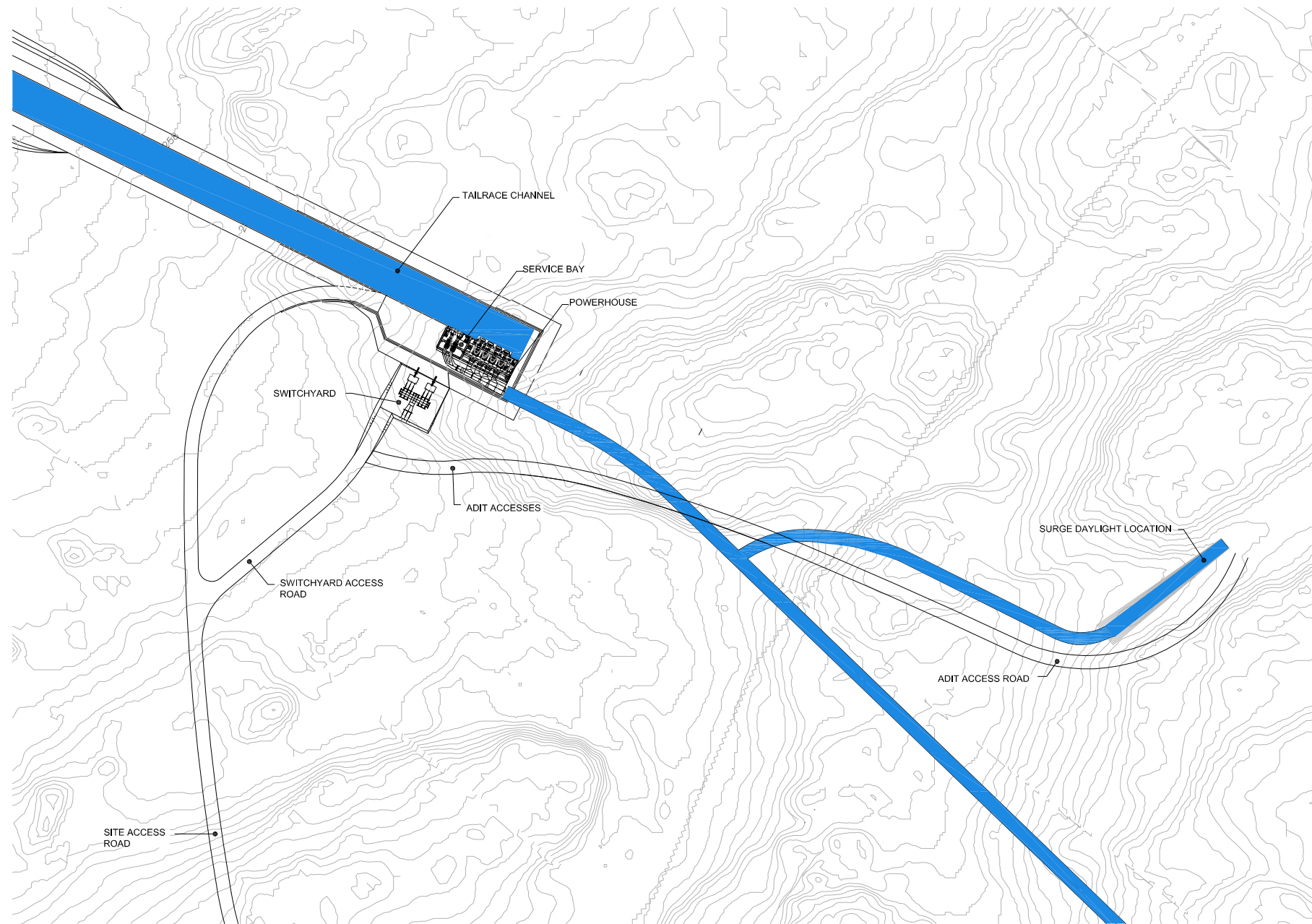
- The water flowing through the tunnel moves to the powerhouse in a large diameter steel pipe encased in concrete.
- The generated electricity is transferred to the switchyard constructed above powerhouse excavation; the switchyard connects to the transmission grid.



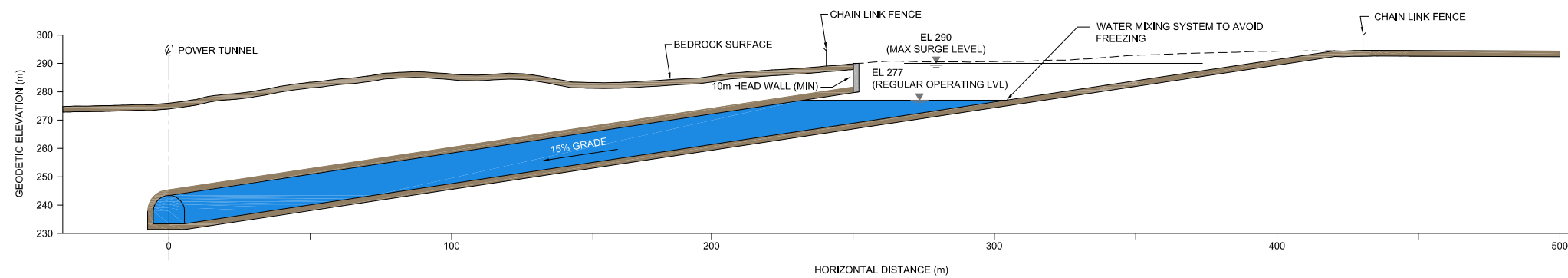
# Tailrace

- Excavation quantity reduced by an estimated 310,000 m<sup>3</sup> by moving the powerhouse closer to the Fond du Lac River

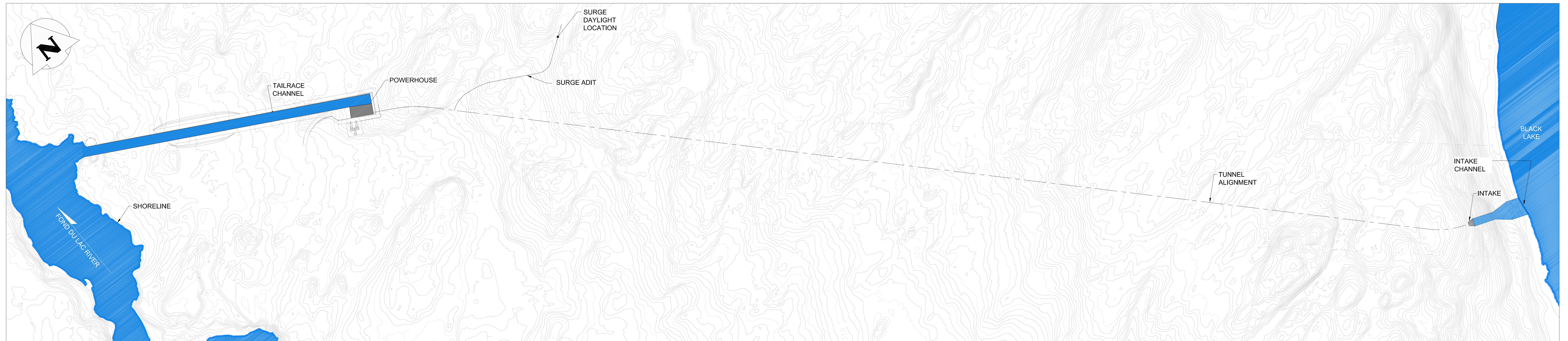




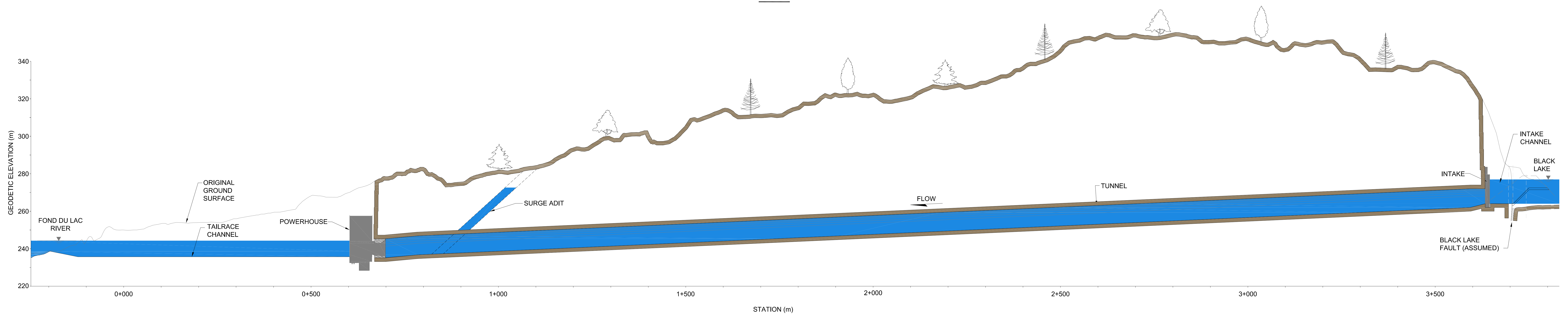
**SURGE/ADIT PLAN**  
SCALE: 1:2000



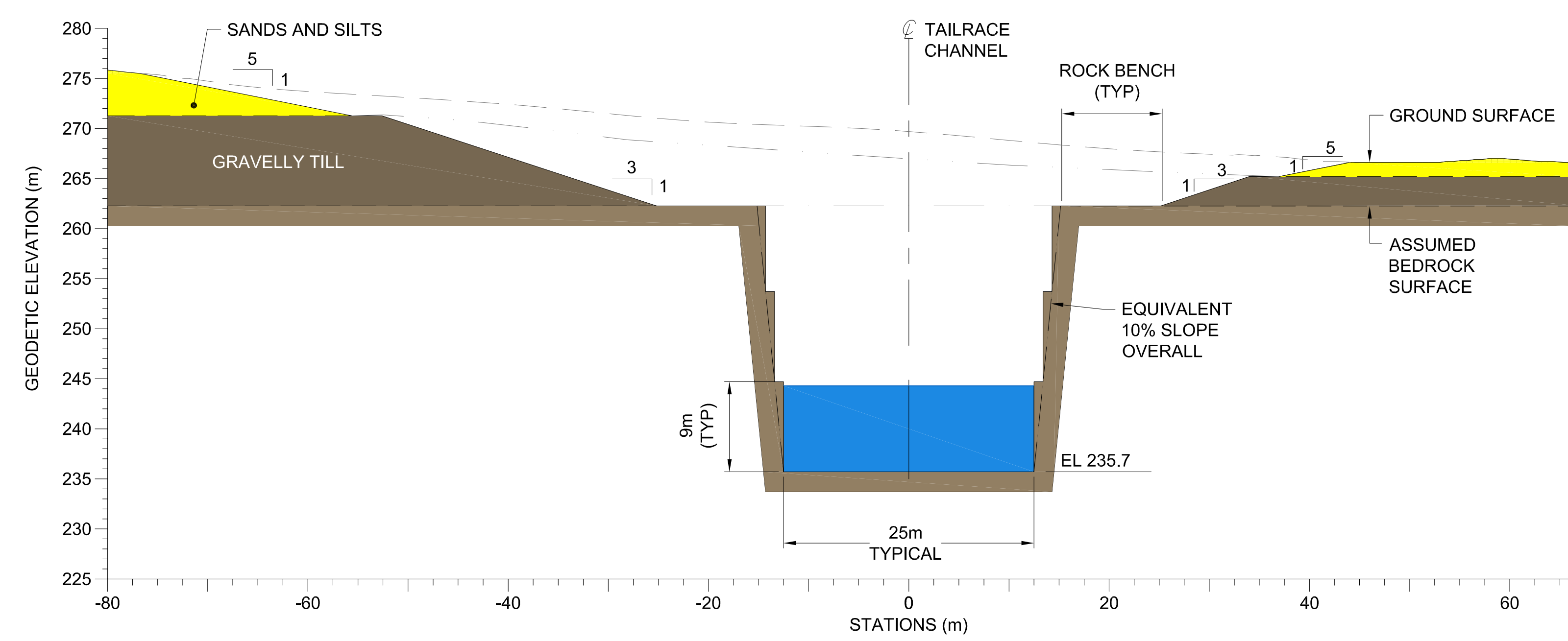
**SURGE/ADIT PROFILE**  
SCALE: 1:1000



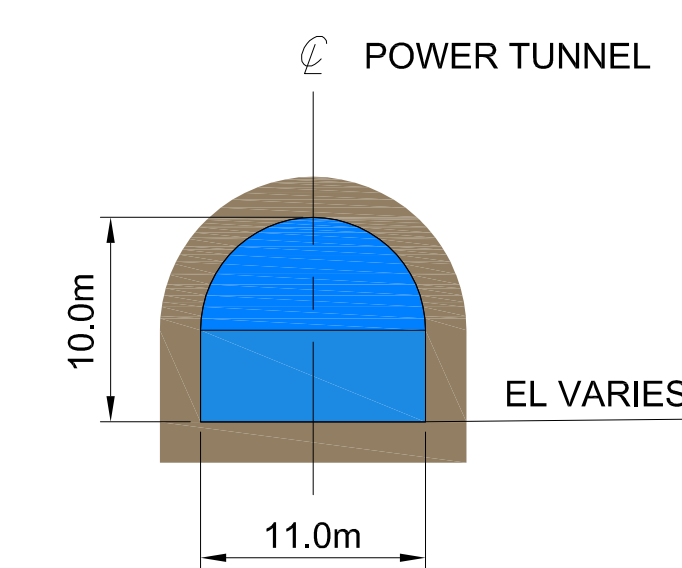
PLAN



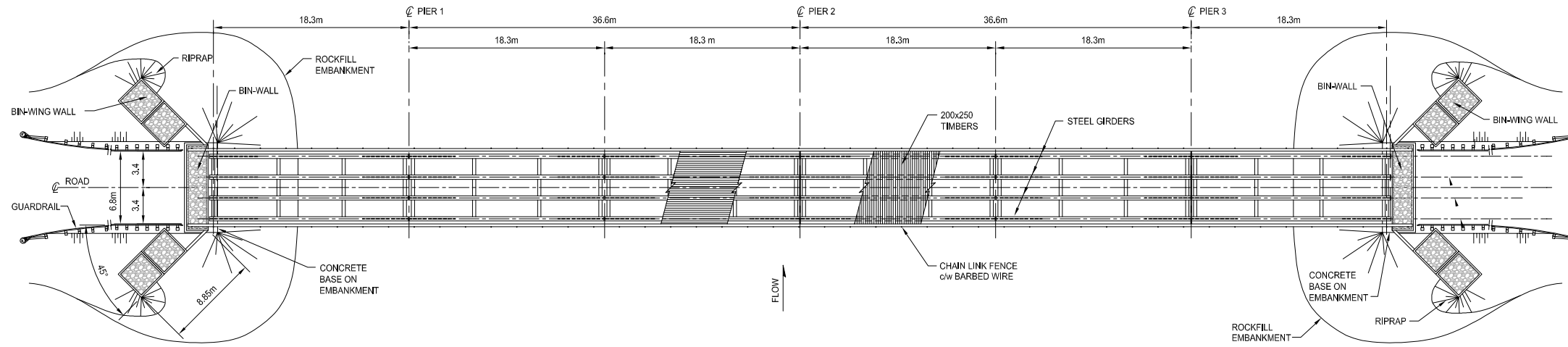
PROFILE



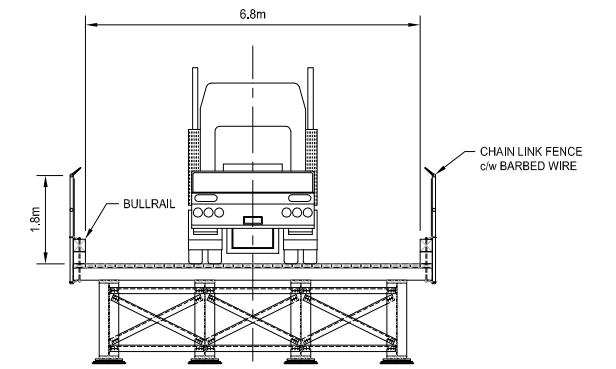
TYPICAL TAILRACE SECTION  
SCALE:1:500



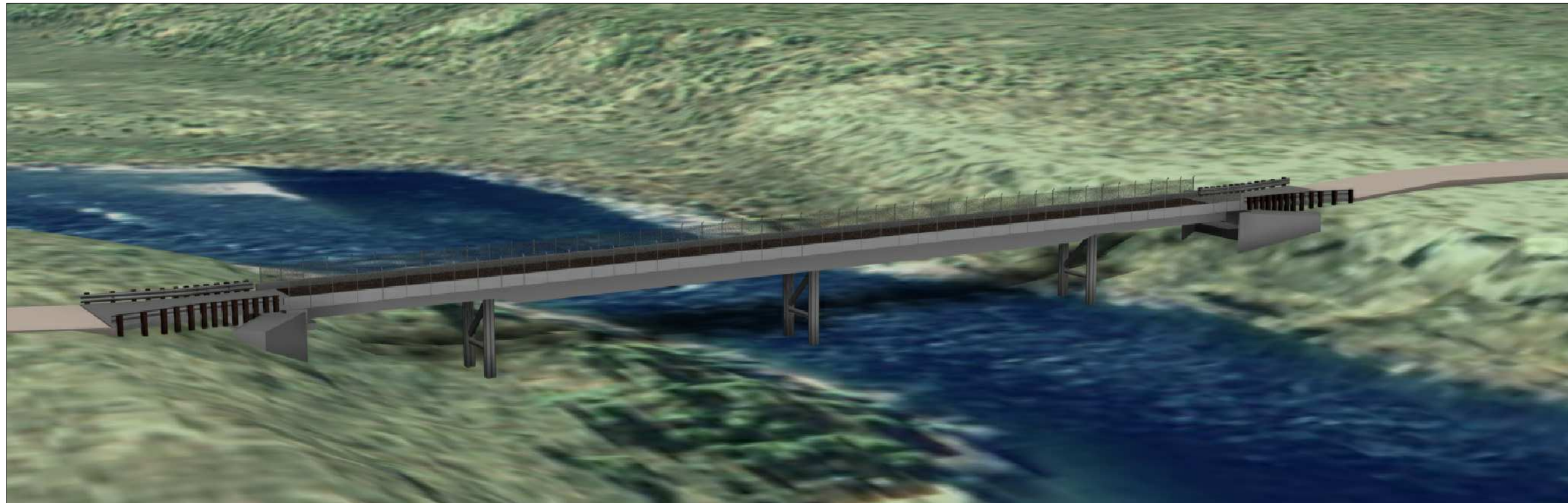
TYPICAL TUNNEL SECTION  
SCALE:1:500



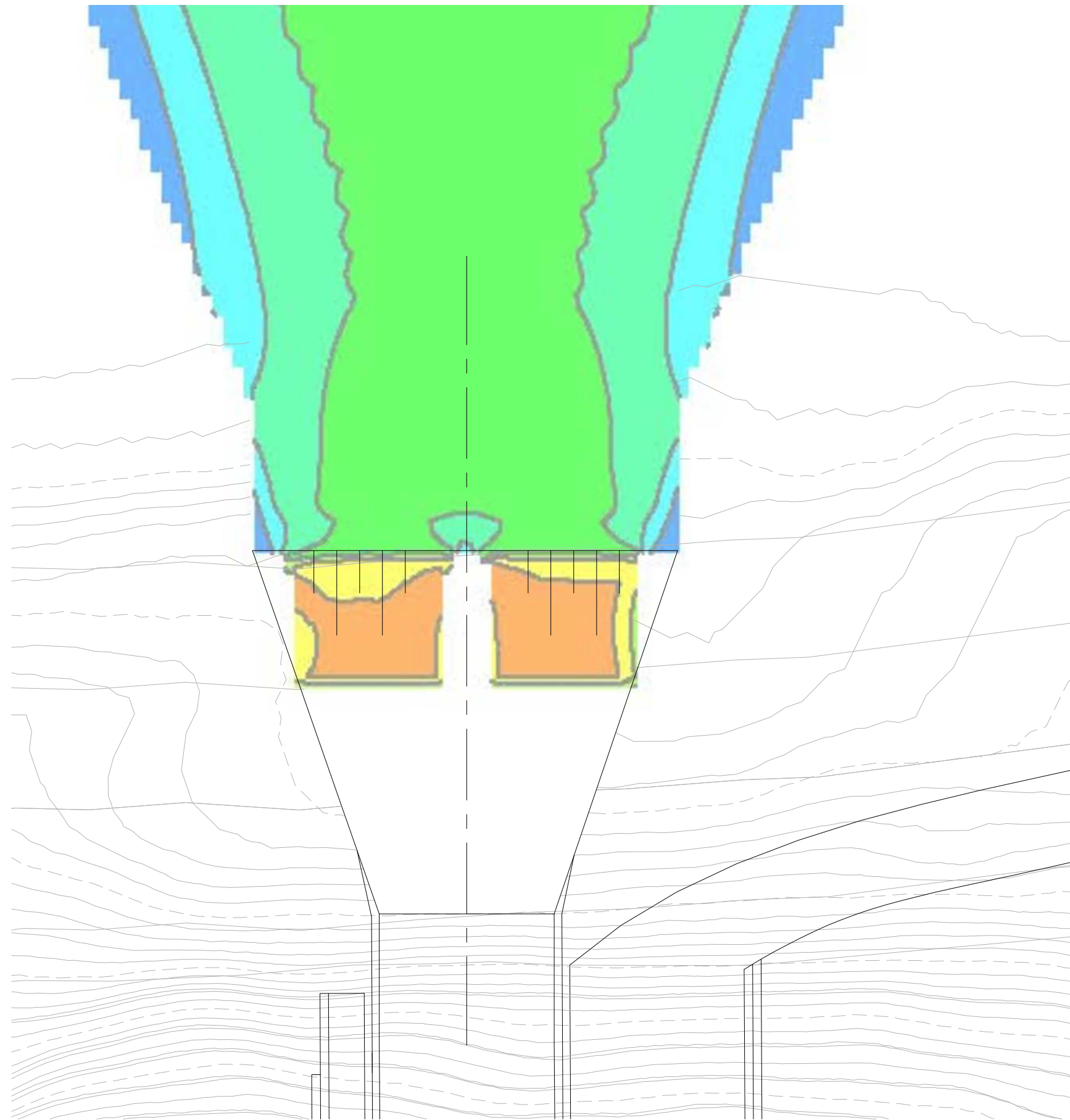
**PLAN**  
SCALE: 1:250



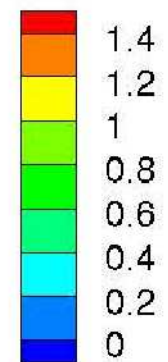
**CROSS SECTION**  
SCALE: 1:75



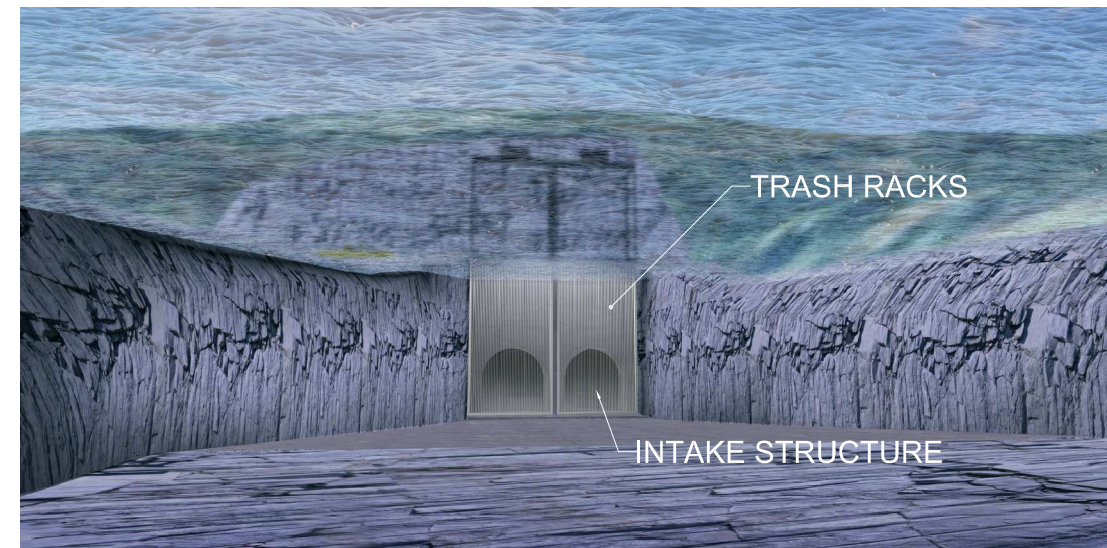
**RENDERING (SINGLE DESIGN VEHICLE)**



Velocity  
Magnitude  
(m/s)



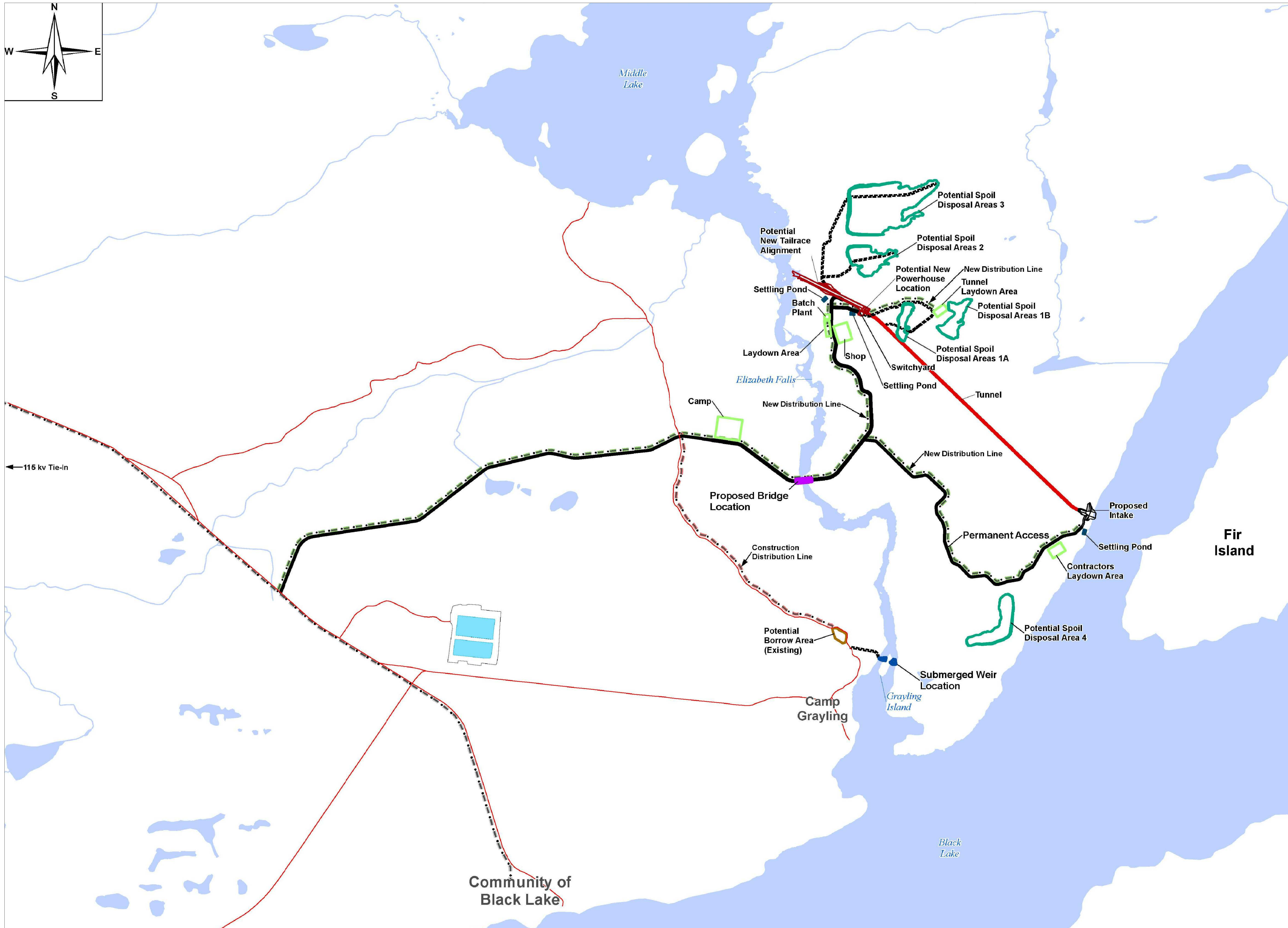
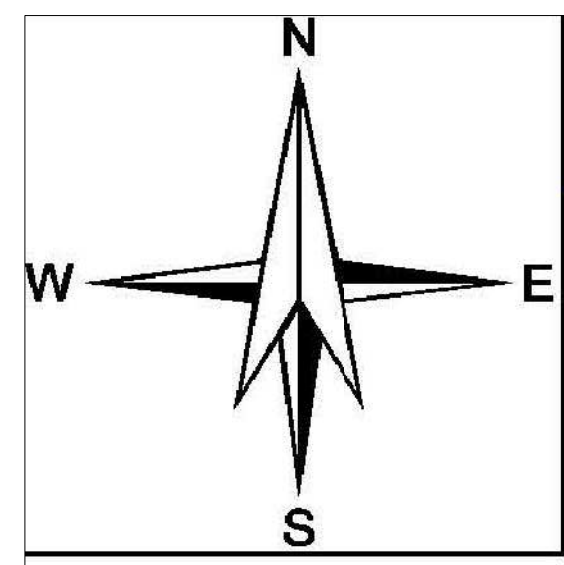
WATER VELOCITY IN APPROACH CHANNEL



UNDERWATER VIEW



ABOVE WATER VIEW FROM BLACK LAKE



- LEGEND**
- INTAKE
  - TAILRACE
  - SPOIL AREA
  - PROPOSED WEIR
  - PROPOSED BRIDGE
  - EXISTING ROAD
  - PERMANENT ROAD
  - - - TEMPORARY ROAD
  - TUNNEL
  - BORROW AREA
  - CONSTRUCTION INFRASTRUCTURE AND LAYDOWN AREA
  - NEW DISTRIBUTION LINE
  - - - CONSTRUCTION DISTRIBUTION LINE
  - - - EXISTING DISTRIBUTION LINE
  - STREAMS
  - WATERBODY
  - LAGOON
  - SETTLING POND DURING CONSTRUCTION

# Excavation Material

- Exploration programs in 2012 and in 2013 did not encounter radioactivity elevated above normal background conditions in drill cores.
- Radiation measurements from the site are comparable to the background measurements taken at Stony Rapids.
- Groundwater quality samples have been recovered from 2013 exploration boreholes for characterization of background groundwater quality from deep bedrock zones.



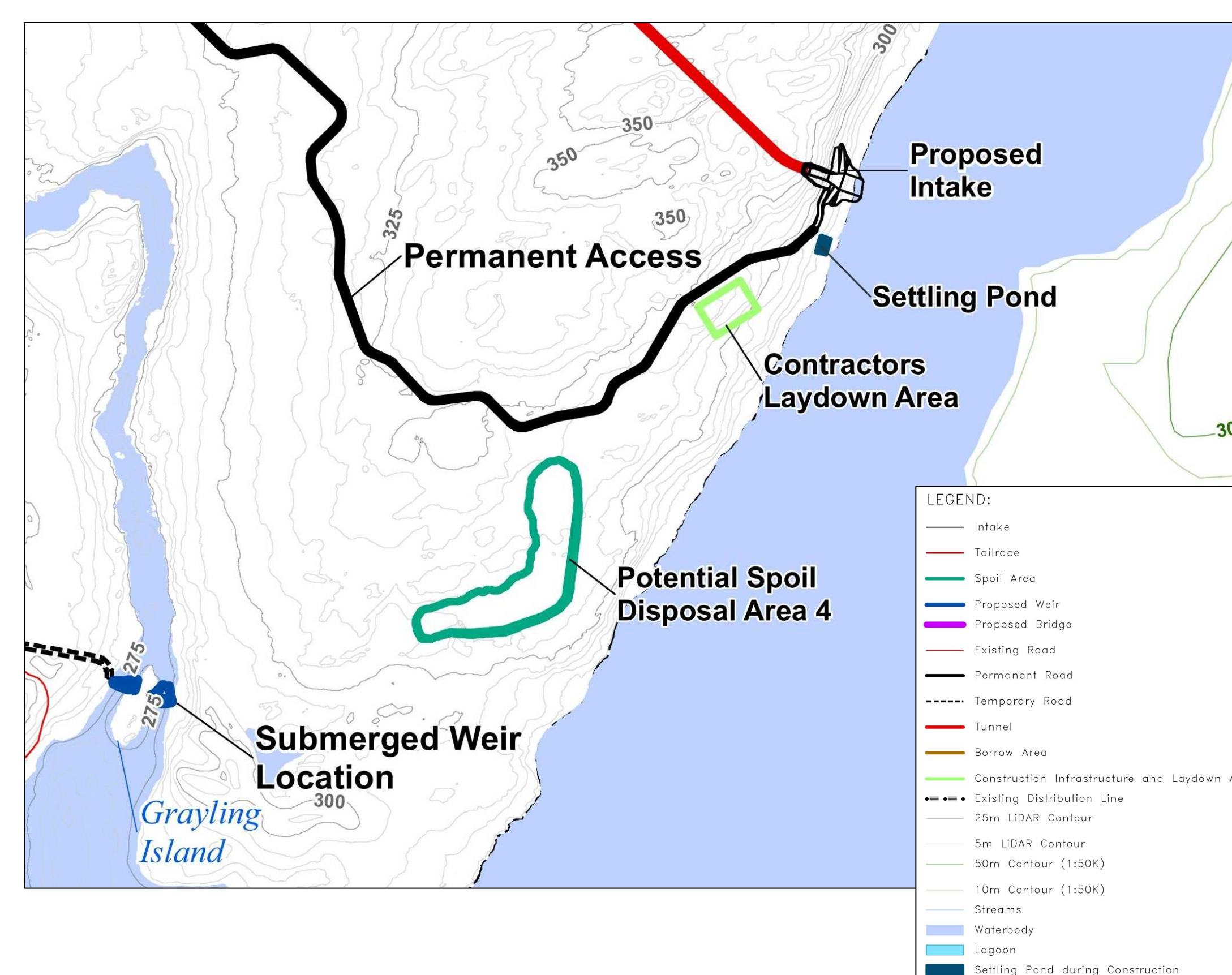
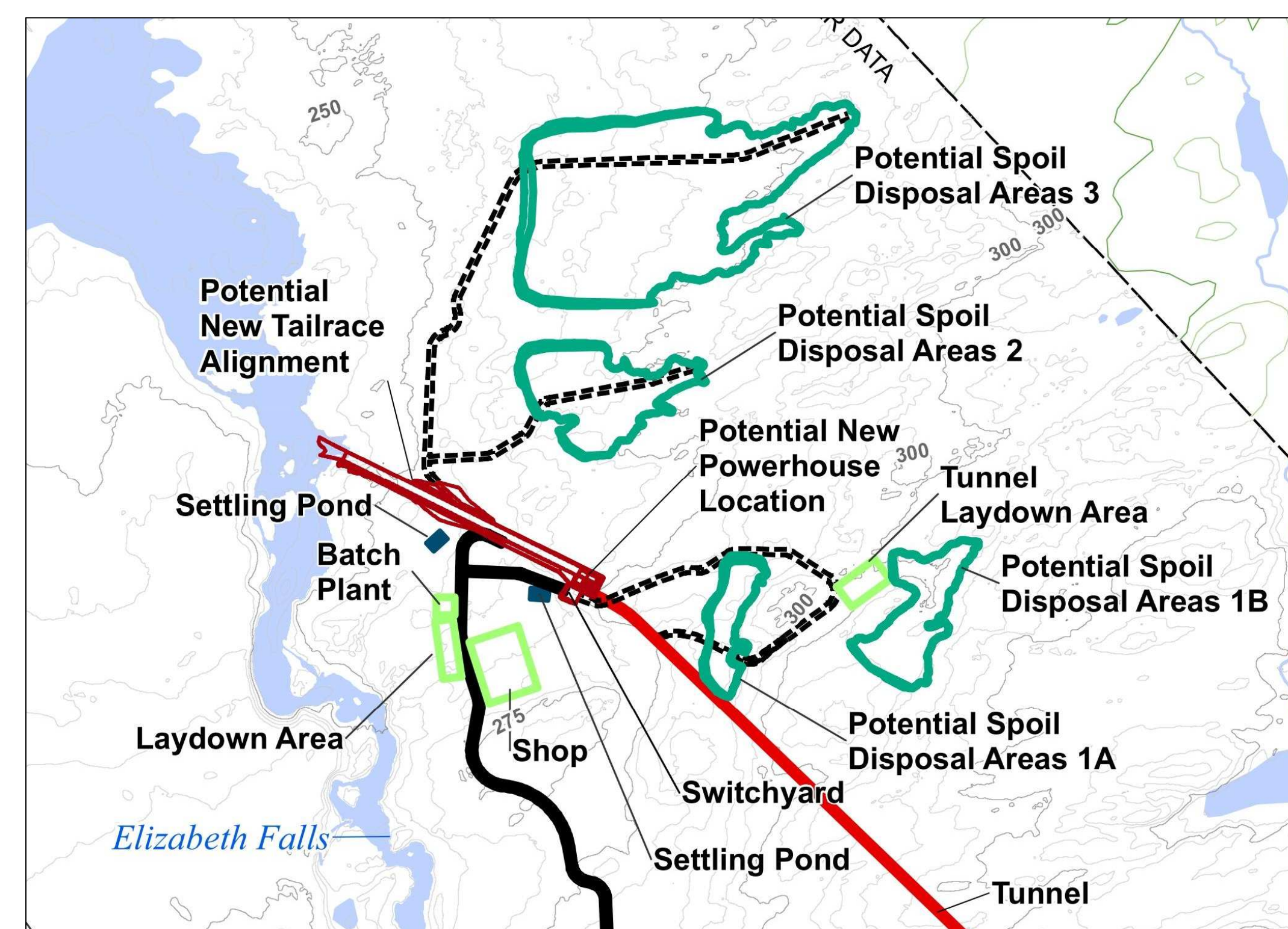
## Estimated Excavation Quantities

| Structure    | Rock Excavation (m <sup>3</sup> )* | Overburden (m <sup>3</sup> ) | Total (m <sup>3</sup> ) | Truck Loads (12 m <sup>3</sup> per load) |
|--------------|------------------------------------|------------------------------|-------------------------|--|
| Intake       | 153,000                            | 60,000                       | 213,000                 | 17,750                                   |
| Powerhouse   | 116,000                            | 0                            | 116,000                 | 9,667                                    |
| Tailrace     | 475,000                            | 58,000                       | 533,000                 | 44,417                                   |
| Tunnel       | 330,000                            | 0                            | 330,000                 | 27,500                                   |
| <b>Total</b> | <b>1,074,000</b>                   | <b>118,000</b>               | <b>1,192,000</b>        | <b>99,334</b>                            |

\* Totals presented above for rock excavation include a bulking factor of 30%

## Acid Rock Drainage and Metals Leaching

- Testing is done through on-site screening and laboratory analysis to identify bedrock materials with potential for Acid Rock Drainage (ARD) and Metals Leaching (ML).
- **Testing of bedrock materials to date for ARD and ML indicate there is no concern in the short or long term.**
- Scanning and testing of bedrock excavation materials for ARD and ML will continue throughout the project.
- Segregation and run-off containment will be constructed if required.



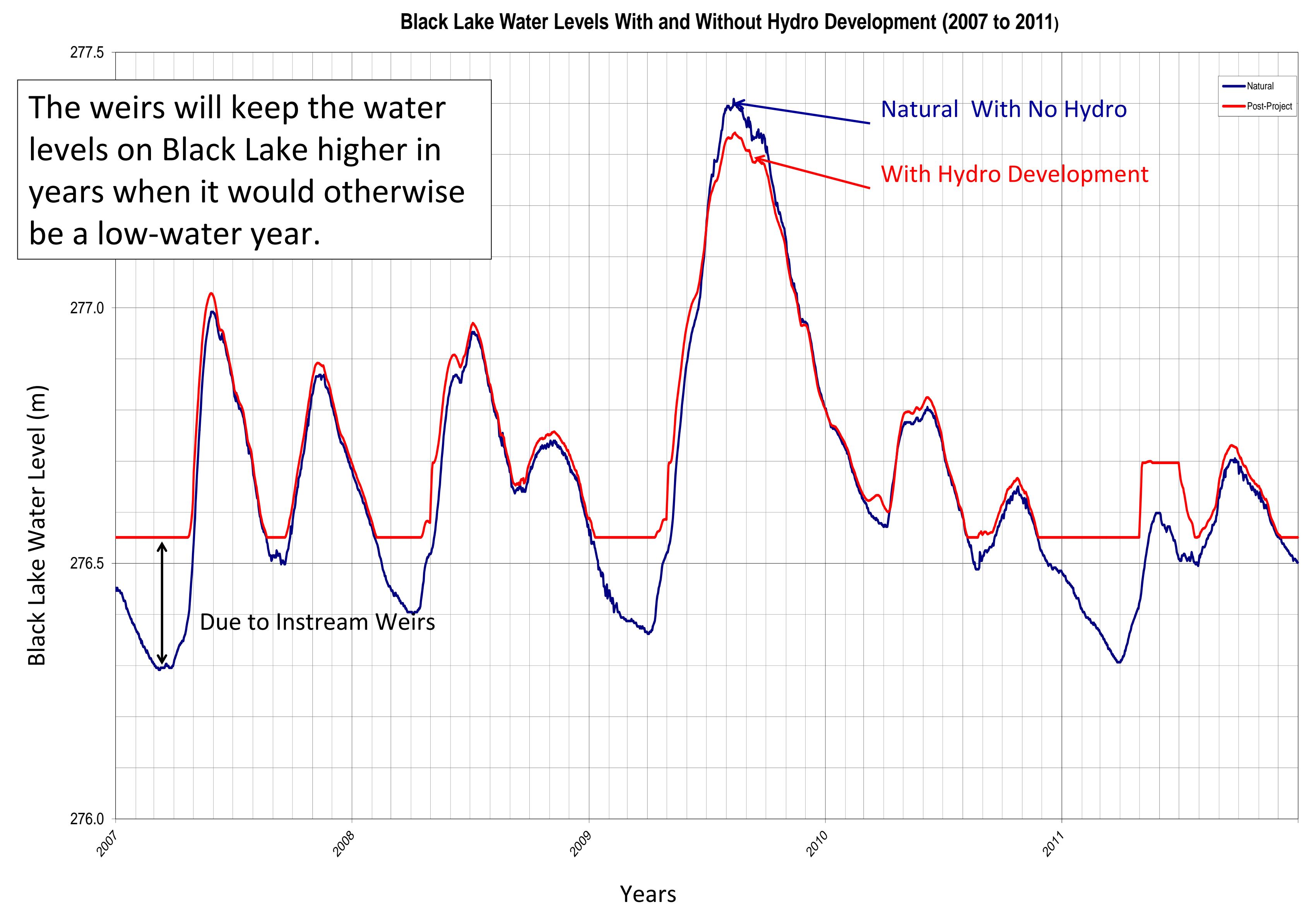
## Waste Rock Disposal Areas

- The proposed waste rock disposal areas allow for nearly twice the volume of the estimated tunnel and tailrace excavation.
- The locations avoid natural surface water run-off areas, are shaped to match existing contours and minimize visual impact.
- Final site contouring and configurations will minimize potential for erosion and sedimentation due to runoff.

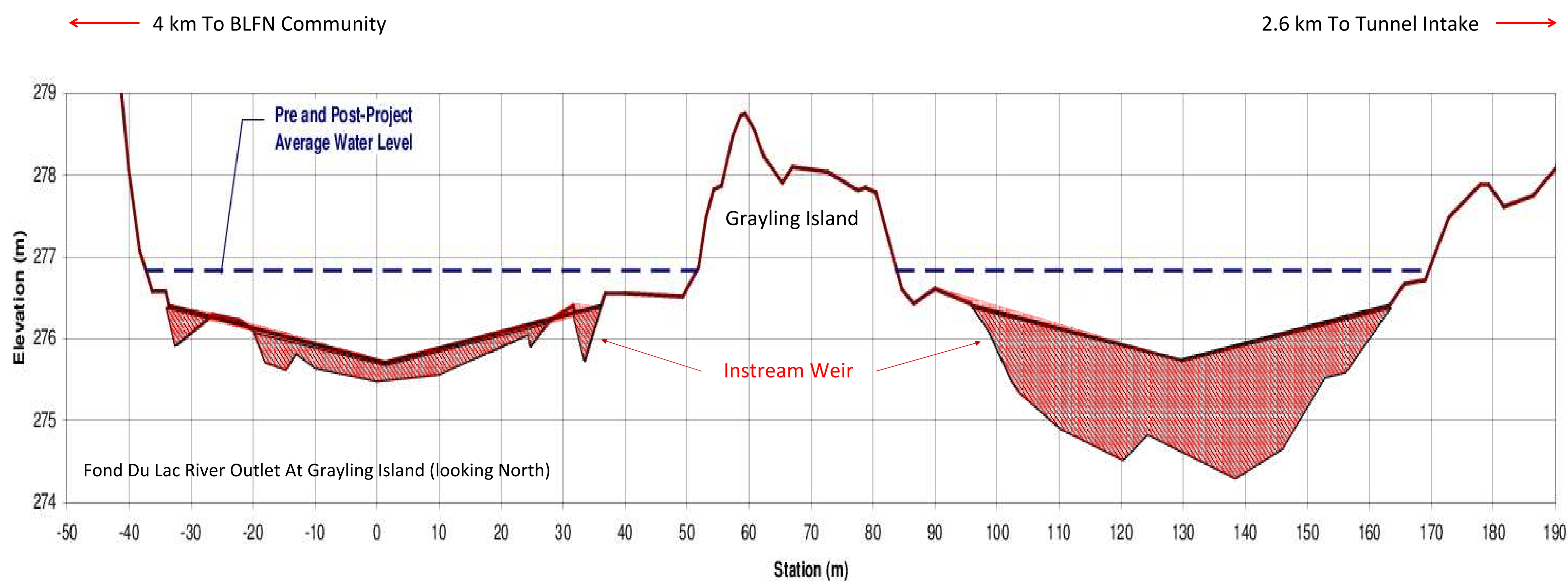
# Water Levels

- Black Lake water levels will not vary from natural range of levels.
- Amount of water flowing from Black Lake to Middle Lake will not change.
- Water level will be controlled by the submerged weirs and controls within the plant.
- When power is not being produced the water will flow through a bypass in the powerhouse.

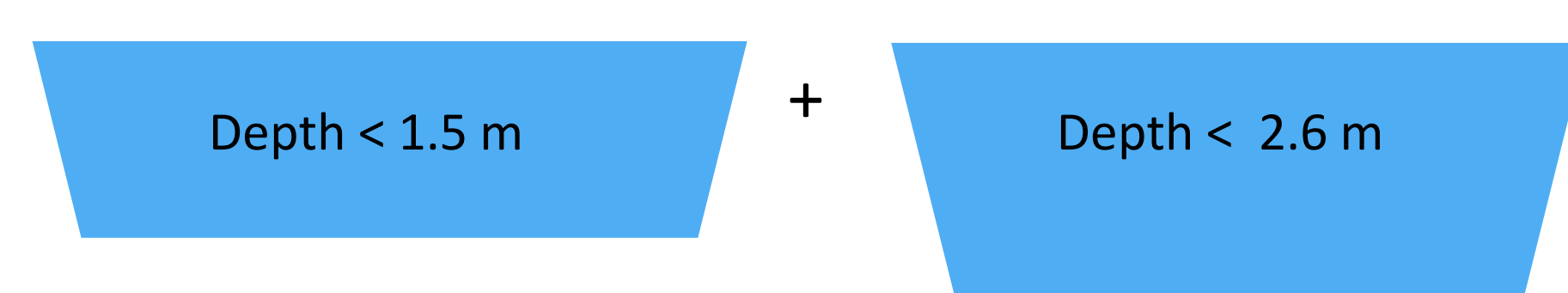
## Black Lake Levels and Flows



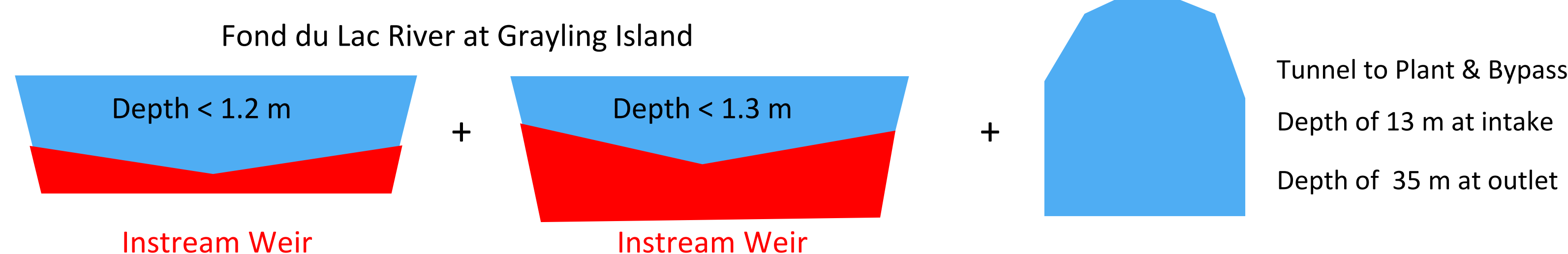
## Why Levels and Flows Are Unchanged



Natural Channel  
(Pre-development) =

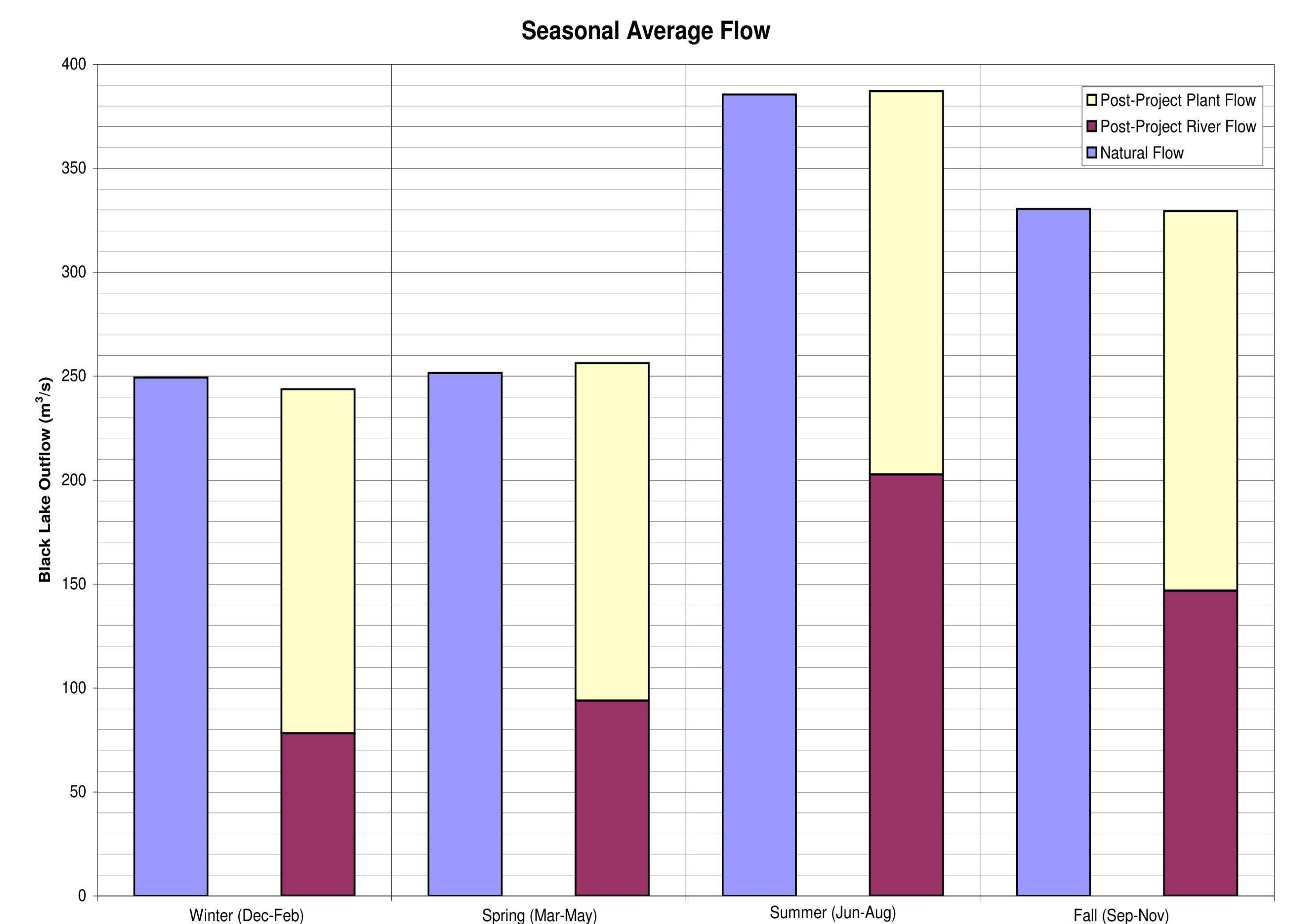


Hydro Project  
(Post-development) =



**WILL HAVE EQUAL FLOW CAPACITY !**

## Black Lake Flows



Black Lake Water Level (m)

|         | Natural Water Level (m) | Post-Project Water Level (m) |
|---------|-------------------------|------------------------------|
| Maximum | 277.81                  | 277.88                       |
| Median  | 276.72                  | 276.74                       |
| Minimum | 276.11                  | 276.55                       |

Black Lake Outflow (m³/s)

|         | Natural River | Post-Project River | Plant | Total |
|---------|---------------|--------------------|-------|-------|
| Maximum | 860           | 647                | 185   | 832   |
| Median  | 287           | 105                | 185   | 290   |
| Minimum | 122           | 50                 | 0     | 50    |

## Photoplates



Presentation Black Lake Community Session



Poster Viewing at Black Lake Community Session



Presentation at Stony Rapids Community Session



Poster Viewing at Stony Rapids Community Session

# **APPENDIX 6.4**

## **Feedback Questions and Responses**

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event  | Feedback (Comment/Question)   | Response  |
|-----------|--|---|---|
| 5-Nov-10  | November 2010 Black Lake First Nation Band Council and Fishers and Trappers. | Will lake levels in Black Lake be maintained, and how?  | The EIS will help to determine any potential impacts of the Project on lake levels, however they should remain the same.  |
| 5-Nov-10  | November 2010 Black Lake First Nation Band Council and Fishers and Trappers. | What is impact on river flow?   | The EIS will help to determine any potential impacts on the river flow.   |
| 5-Nov-10  | November 2010 Black Lake First Nation Band Council and Fishers and Trappers. | Will water temperature change after passing through the turbine?  | The temperature of the water should not change.   |
| 5-Nov-10  | November 2010 Black Lake First Nation Band Council and Fishers and Trappers. | Fish passing through turbine – mortality rate?  | The EIS will help to determine any potential impacts the turbine will have on fish.   |
| 5-Nov-10  | November 2010 Black Lake First Nation Band Council and Fishers and Trappers. | SaskPower promised cheaper power when they serviced Black Lake – why haven't the bills been lowered?                                    | This concern was acknowledged and brought to the attention of SaskPower.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | Am I going to get free power? Why not?  | The cost of developing a new power plant and new transmission lines tend to increase power rates. Rates for power are the same across Saskatchewan, so the benefit of new generation is for the entire province. The cost won't go down.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | Why are we paying more power than anyone else?  | The cost of developing a new power plant and new transmission lines tend to increase power rates. Rates for power are the same across Saskatchewan, so the benefit of new generation is for the entire province. The cost won't go down.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | Is my power price going to go down?   | The cost of developing a new power plant and new transmission lines tend to increase power rates. Rates for power are the same across Saskatchewan, so the benefit of new generation is for the entire province. The cost won't go down.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | Are we going to lose fish?  | The EIS will help to determine any potential impacts to fish.   |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | How are the other communities going to benefit from this development? A few years construction and then how do they benefit after this? | The development will provide Northerners with opportunities for work during construction, with fewer jobs available during operations. The development will provide a more reliable supply of power for all northerners.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | How many years will construction take?  | Construction will take two to three years to complete.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | Is the water level going to change?   | The EIS will help to determine any potential impacts to water levels and flow.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | Is the waterfall/rapids going to change in speed?   | The EIS will help to determine any potential impacts to water levels and flow.  |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | If the power plant is shut off will that affect my power and will they let me know in advance?  | When the power plant is shut down for maintenance power will be delivered from other operating power generating facilities.   |
| 24-Nov-10 | November 2010 Athabasca Leaders-Stony Rapids                                 | How much money will the band get from this development?   | The financial aspects of the Project have not been determined yet.  |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | What about jobs?  | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | How many higher education jobs?   | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | How many jobs during construction?  | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | Will there be on the job training?  | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | Will jobs be from the community?  | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | Who is invested?  | The EFHLP is a partnership between the Elizabeth Falls Hydro Development Corporation and Black Lake Denesuline First Nation. SaskPower has also invested funds to help get the EA underway.   |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | Will the project have an effect on the environment?   | The EA is an important process to determine what types of impacts the project may have on the environment as well as determining ways to mitigate these impacts.  |
| 6-Dec-10  | December 2010 Black Lake Community Sesion                                    | What type of equipment is needed for construction, operations and decommissioning?  | Heavy equipment will be required to construct the proposed Project.   |

## Appendix 6.4 Public Feedback and Responses.

| Date     | Event  | Feedback (Comment/Question)  | Response  |
|----------|--|--|---|
| 6-Dec-10 | December 2010 Black Lake Community Sesion    | How will this equipment impact the environment?  | The EA takes all phases of the Project in to account, which includes construction. The EA will determine what types of impacts this equipment will have on the environment, both on the proposed site as well as transporting it to the site.   |
| 6-Dec-10 | December 2010 Black Lake Community Sesion    | Why develop this Project?  | The Elizabeth Falls Hydroelectric Project has been proposed to help provide more power to the north as well as to provide revenue to the Black Lake First Nation and to provide economic growth and benefits to the people who live in the community.   |
| 6-Dec-10 | December 2010 Black Lake Community Sesion    | Concern about vocabulary used in the presentation and translation.   | An accurate translation of the EA will be very important and will be taken into consideration throughout the EA process.  |
| 6-Dec-10 | December 2010 Black Lake Community Sesion    | Need a translator, and to translate the material into vocabulary that makes sense.   | An accurate translation of the EA will be very important and will be taken into consideration throughout the EA process.  |
| 6-Dec-10 | December 2010 Black Lake Community Sesion    | In terms of local benefits; will the cost of monthly power bills be reduced in the community of Black Lake?                    | With the construction of a new power plant on the Fond du Lac River power rates will not decrease in the nearby communities, however the power will be more reliable and consistent. More power is also required to support the many mines that have been proposed for the north in the coming future.  |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | How many people are required to run the plant?   | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | What types of education are required?  | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Is Black Lake First Nation ready to train?   | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Concern that this region doesn't have capacity right now.  | At this time, the total number of jobs that will be created has not yet been determined. Construction could require up to 300 people. Operations will require much less (6-10 people?). The types of jobs will include electrician, mechanics, machinist, heavy equipment operators, security, and utilities. The goal is to employ local people during the construction and operations of the Project. Training for these positions will occur on the job, or will be scheduled to take place leading up to the operations of the Project. |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Who owns the project?  | The EFHLP is a partnership between the Elizabeth Falls Hydro Development Corporation and Black Lake Denesuline First Nation. SaskPower has also invested funds to help get the EA underway.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Who is on the Board?   | The EFHLP board consists of Ted de Jong, Chief Donald Sayazie, George Davies, Robert Stedwill, Edwin Boneleye, Geoff Gay, Victor Echodh, Rick Robillard, Pauline Toutsaint-Thatcher, Anil Pandila, and Al Schreiner.  |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Will the water levels in Black Lake go down?   | The EFHLP is proposing to construct the Project with minimal impacts to flow or water levels. The EA is an important process to determine what types of impacts the project may have on the environment as well as determining ways to mitigate these impacts.  |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | What about water levels here at Stony Rapids?  | The EFHLP is proposing to construct the Project with minimal impacts to flow or water levels. The EA is an important process to determine what types of impacts the project may have on the environment as well as determining ways to mitigate these impacts.  |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Would the project interfere with spawning?   | The EFHLP is proposing to construct the Project with minimal impacts to flow or water levels. The EA is an important process to determine what types of impacts the project may have on the environment as well as determining ways to mitigate these impacts.  |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Concern for flooding?  | The EFHLP is proposing to construct the Project with minimal impacts to flow or water levels. The EA is an important process to determine what types of impacts the project may have on the environment as well as determining ways to mitigate these impacts.  |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | What happens when flow is lower than this year (2010 low flows)?   | In years when the water levels are too low the power house could be switched off so that no water is taken from the lake.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Will there be a screen so fish don't enter the turbine?  | Hydro facilities incorporate fish diversion devices to prevent or reduce the number of fish from entering the power tunnel/turbine.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Concerns about what the Elizabeth Falls will look like.  | Impacts to aesthetics are an important part of the EA. Visualizations will be created to show the public how the Project will look from different locations along the river and lake.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | How is it going to look 20 to 30 years from now?   | Impacts to aesthetics are an important part of the EA. Visualizations will be created to show the public how the Project will look from different locations along the river and lake.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | Concern for bridge and increased traffic impacting the area, the area has been used to fish, picnic, and camp for a long time. | Impacts to aesthetics are an important part of the EA. Visualizations will be created to show the public how the Project will look from different locations along the river and lake.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | What will the water intake look like?  | Impacts to aesthetics are an important part of the EA. Visualizations will be created to show the public how the Project will look from different locations along the river and lake.   |
| 7-Dec-10 | December 2010 Stony Rapids Community Session | What are tags on the fish for?   | During the 2010 field season over 1,000 fish were tagged. The purpose of this process is to gain information on the fish and their habitat; this includes determining where they have travelled since being tagged, how they have grown and their age.  |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event   | Feedback (Comment/Question)  | Response  |
|-----------|---|--|---|
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Will the ice be affected by the water intake?  | Ice around the water intake will likely be thin, or not form at all. This area will have to be avoided as it could be a hazard especially for snowmobilers crossing the lake.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | How big is the powerhouse?   | The proposed powerhouse will be approximately a 50 MW facility.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Are there any dams proposed for the project?   | No.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Are there facilities like this in Canada?  | A similar hydro project can be found in British Columbia, however the proposed Project is more of a hybrid project as it will be designed to have minimal impacts to downstream flows and lake levels.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Can you re-circulate water back to Black Lake?   | No. Water will continue to flow into Middle Lake and down river into Lake Athabasca.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Where would the construction camp be located?  | The final location for the construction camp has not been determined at this stage.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Why do you need to construct a bridge?   | A bridge is required so that the facilities on the east side of the river can be accessed all year round.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | When are they going to start drilling?   | A contract for drilling has not yet been given out.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Is the drilling from a few years ago not useful?   | Yes, but more drilling is required to determine how acidic the rock is, as well as determining the geological structure of the rock.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Will the bridge and road be accessible to public?  | Likely the bridge and road on the east side of the river will be fenced off to keep the public away from the facilities.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | What is the submerged weir for?  | The submerged weir will be used to help maintain the water levels in Black Lake.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Would acidic rock be a show stopper?   | This will be determined through geo-technical studies.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | What will happen with the facilities used for the construction camp?   | It has not yet been determined what will be done with the facilities for the construction camp, however some options include turning them into a fishing camp, or moving the structures to one of the local communities to use as housing.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Concern for translation.   | An accurate translation of the EA will be very important and will be taken into consideration throughout the EA process.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Will CEAA complete their own consultations?  | Yes, CEAA is required to carry out their own consultation. This will likely occur after the Environmental Impact Statement has been submitted.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Is there enough information for the project to go ahead?   | Not at this stage. It takes approximately three years to gather all the necessary data required for the Environmental Impact Statement.   |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Is the EA similar to the original EA?  | Many improvements to technology and computer modelling have occurred since the original EA was carried out. We are better able to predict the impacts that the Project may have today than we did in the past.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | Are local people working on the EA?  | Yes, local involvement is a very important part of the EA. This includes hiring local assistants as well as getting feedback from the local people on their thoughts and concerns about the Project.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | If flows are high can you guarantee more power?  | With the construction of a new power plant on the Fond du Lac River the power in the north will be more reliable and consistent. More power is also required to support the many mines that have been proposed for the north in the coming future.  |
| 7-Dec-10  | December 2010 Stony Rapids Community Session    | How much power is produced in the north?   | Approximately 124 MW of power are currently being produced in the north at the Island Falls and Athabasca System Hydroelectric Stations.  |
| 20-Feb-13 | February 2013 Black Lake Community Session      | Questions about the waste rock created.  | SaskPower is still determining the approach to managing waste rock. They are currently testing samples they have collected from drilling to understand what is in the rock. They will examine what will happen when rain or snow come in contact with the waste rock and becomes runoff. They will be able to provide better answers to the question in the future.   |
| 20-Feb-13 | February 2013 Black Lake Community Session      | Concern for how scenery will change.   | There will be less water in the river as some of it will be going through the tunnel and the powerhouse. On average about 50% of the water that already flows through the river will continue to flow down the river – but there will be more than 50% in the spring, and less than 50% in the winter. The study team does not think the change will be dramatically different from today. There are a number of really deep pools in the river – and those will be maintained. How the appearance of the river will change will be included in the environmental assessment. The water intake tunnel at the lake will be designed to address concerns about fish and debris coming in from the lake. |
| 20-Feb-13 | February 2013 Black Lake Community Session      | Concerns about high power bills.   | The price of power in the north is high because the community uses electric heat. This concern was being passed on to a SaskPower customer service representative.  |
| 20-Feb-13 | February 2013 Black Lake Community Session      | Explain what a turbine is? Is it going to be safe?   | The turbine is like a propeller, but the force of the water is what causes the propeller to spin. A propeller on an airplane is on the outside and is a dangerous thing. A turbine is inside the power house – it can't be accessed by people on the outside. The building is encased in concrete and the water is the only thing that can touch the turbine. It is safe.   |
| 20-Feb-13 | February 2013 Black Lake Community Session      | Concern that once the tunnel is in operation that their trail along Black Lake might become dangerous in wintertime.   | It was noted that the community will likely have to take some precautions using the area near the water intake during winter. It would be similar to how the community avoids the area where Black Lake flows into the Fond du Lac River in winter where there is open water or thin ice. SaskPower believes that safety is important, not only for its workers, but for the communities it serves.   |
| 20-Feb-13 | February 2013 Black Lake Community Session      | The community doesn't need a Project that will have harmful effects to the land or the environment. They need to think about the fish, the birds, the water, the furbearers. | The Project team is trying to identify the birds, fish, and wildlife that are important to the community. Golder Associates is working from a list that has been compiled from previous meetings but if the community has any information they want added, this can be considered. If there are species of special interest to the community, that aren't already on the list, Golder would be willing to include those in the assessment.  |
| 21-Feb-13 | February 2013 Meeting with Stony Rapids council | How will it be ensured that water will continue to flow down the Fond du Lac River once the project is built?  | The purpose of the submerged weir and options for the control of water flowing through the tunnel was explained. One of the regulatory controls placed by the Department of Fisheries and Oceans was to ensure the survival of the arctic grayling population in the Fond du Lac River between Black Lake and Middle Lake.  |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event   | Feedback (Comment/Question)   | Response  |
|-----------|---|---|---|
| 21-Feb-13 | February 2013 Meeting with Stony Rapids council | How has the tunnel rock been checked for uranium? Is there more drilling planned in the area?   | There have been two drilling programs along the tunnel alignment. Geochemical testing on the core samples has not been completed at this time. We are unsure if further drilling will be required in the area.  |
| 21-Feb-13 | February 2013 Meeting with Stony Rapids council | Will there be access to training for local people?  | A training plan is being developed that will ensure the training is provided locally.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Questions were also asked about the partnership arrangement.  | The Project is a partnership between the Elizabeth Fall Hydro Development Corporation (owned by Black Lake First Nation) and SaskPower.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | What benefits is there to Stony Rapids?   | The development will provide opportunities for work during construction. Between 6 and 10 people will be required when the plant is in operation. Also, the Project will help provide a more reliable supply of power for northern Saskatchewan.  |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | What kind of work force? What kinds of labour would be required for construction?   | It would be similar to what is required for construction of a mine. A lot of the skills already exist in the community. We are also looking to provide some training programs to prepare people for the opportunities.  |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Will there be a target for local employment, similar to the mines' target of 67%?   | There is no target number for the Project, however we are hoping that the majority of the employment, aside from highly skilled labour, will be sourced locally.  |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | What kind of contracting?   | In the coming months, SaskPower will bring on a general contractor. This contractor will begin by considering the capacity of the contractors in the region to complete the work. Certain special   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | What contracting opportunities will be available?   | Hopefully the skills that are developed in the Project can be applied to other industries like mining.  |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | What happens if fish start spawning up the tailrace channel?  | This possibility has been considered. The speed of the water coming down the tailrace is expected to be about 1.1 metres per second. With that sort of current, fish could probably swim upstream for a short distance, but it would be too fast for fish to be able to spawn in the tailrace. This is based on studies of grayling ability and where they prefer to spawn. For spawning they need slower currents.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Will there be radiation in the rock? Found in the drill cores?  | No unusually high radiation was recorded when they took core samples. There were about 12 holes drilled since 2002. The holes weren't randomly drilled – they were done along the proposed tunnel and tailrace location; and where there was a greater likelihood of uranium being found. Based on the samples they collected, they aren't  |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | What about radiation levels from the rock that is excavated?  | expecting any issues with radiation. The rock will be monitored throughout the excavation process. There will be a plan in place if they encounter any rock with high radiation levels along the way.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Will there be different types of waste rock?  | plants in the project area were documented on three occasions for the environmental assessment.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Will diverting water through the tunnel have any effects downstream?  | Where the tunnel rejoins the Fond du Lac River, just above Middle Lake, water levels will return to the same level of water as before. There shouldn't be any effects downstream.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Will power rates decrease because of the proximity to the hydroelectric project?  | Rates for power are the same across Saskatchewan, so the benefit of new generation is for the entire province. The cost won't go down.  |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Will costs go down if the project goes ahead?   | The cost of developing a new plant and new transmission line tend to increase rates. Rates for power are the same across Saskatchewan, so the benefit of new generation is for the entire province. The cost won't go down.   |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Explain how half the water is being used for the power plant.   | In areas of the river where it isn't shallow, you won't likely see that big of a change; where it is narrower or shallow you may see a difference. On average, the powerhouse will take about as much water as will flow in the river, but it won't be distributed evenly during all seasons. In the spring, more water will go down the river (about 60% in the river and 40% in the tunnel). In the fall and winter more water will go down the tunnel and through the powerhouse. However, the river should still have about 90% of the surface area it has today. Some of the rapids may be less deep, or there may be less white water and more rocks visible. The overall flow may be a bit slower. Spring flows might look more like what you are used to seeing in the fall. The deep pools of water won't see the same level of change, they will still be deep pools. |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | Pushing two flows of water; will levels be the same?  | In areas of the river where it isn't shallow, you won't likely see that big of a change; where it is narrower or shallow you may see a difference. On average, the powerhouse will take about as much water as will flow in the river, but it won't be distributed evenly during all seasons. In the spring, more water will go down the river (about 60% in the river and 40% in the tunnel). In the fall and winter more water will go down the tunnel and through the powerhouse. However, the river should still have about 90% of the surface area it has today. Some of the rapids may be less deep, or there may be less white water and more rocks visible. The overall flow may be a bit slower. Spring flows might look more like what you are used to seeing in the fall. The deep pools of water won't see the same level of change, they will still be deep pools. |
| 21-Feb-13 | February 2013 Stony Rapids Community Session    | A question was asked about the volume of water going through the tunnel vs. the water going through the river – will it be about half and half? | In areas of the river where it isn't shallow, you won't likely see that big of a change; where it is narrower or shallow you may see a difference. On average, the powerhouse will take about as much water as will flow in the river, but it won't be distributed evenly during all seasons. In the spring, more water will go down the river (about 60% in the river and 40% in the tunnel). In the fall and winter more water will go down the tunnel and through the powerhouse. However, the river should still have about 90% of the surface area it has today. Some of the rapids may be less deep, or there may be less white water and more rocks visible. The overall flow may be a bit slower. Spring flows might look more like what you are used to seeing in the fall. The deep pools of water won't see the same level of change, they will still be deep pools. |
| 27-Feb-13 | February 2013 Fond du Lac Community Session     | Why didn't the water quality sampling extend beyond Middle Lake and into Lake Athabasca?  | The water quality sampling wasn't done beyond Middle Lake because no measurable water quality effects are anticipated to extend downstream of Middle Lake (especially not as far as Lake Athabasca). Nothing added to the water that goes through the power house during operations, so there wouldn't be anything that could affect water quality. If during the analysis of potential effects it is determined that for some reason this was not the case – then further sampling would be done downstream.   |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event                                       | Feedback (Comment/Question)   | Response   |
|-----------|---|---|--|
| 27-Feb-13 | February 2013 Fond du Lac Community Session | A comment was made that lake trout have been known to spawn in the river. The question was asked as to why lake trout sampling wasn't completed in the river.   | The Environmental Baseline Studies did include fish community sampling in the river but the sampling didn't capture any lake trout in the river itself. It isn't too surprising to learn that locals have caught lake trout in the river, but simply a case that none were captured in the river during the baseline studies. It was noted that this information can be added to the EA baseline as local knowledge.   |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | A question was raised about the cost of power. When the power-line between Uranium City and Fond du Lac was installed it was explained that power costs wouldn't go up. It seems that First Nation communities pay higher rates than non-First Nation communities (e.g., Uranium City, Camsell Portage and Stony Rapids), and the question was asked as to why this was the case. | What typically happens when new infrastructure is built is that this tends to increase rates to help cover project costs. It was noted that just because the Project would be built in the area doesn't mean that rates would be reduced.  |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | Why have power rates continued to increase when the last hydroelectric facility in the area was built in the 1960's?  | It was noted that the question about rates would be brought back to someone in customer services at SaskPower to provide better clarity. It is our understanding that rates in northern Saskatchewan are the same as those rates paid in rural southern Saskatchewan.  |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | What is the benefit to Fond du Lac beyond construction employment?  | In terms of benefits there will be opportunities for employment in addition to benefits through the community's ownership of contractors who could be working on the Project. It was noted that the Project is a partnership with Black Lake First Nation which will bring other benefits specific to that community. Chief Robillard added that the community is negotiating an agreement with SaskPower right now, which will include benefits to companies owned by both Black Lake and Fond du Lac. Northern contractors, such as those contractors that form the Athabasca Basin Development Limited Partnership, will have priority. So this will be of benefit to other communities in the region. He noted that the Project can also act as a model for future similar projects in the region – such as the one that the Fond du Lac community leadership has identified. It's an opportunity to develop a partnership between a First Nation and SaskPower – so it can be a model for future development.   |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | Why hasn't consultation with the Fond du Lac community occurred earlier?  | It was explained that five years ago, the Project really wasn't as real as it is now. There wasn't the same need for power in the north; there was sufficient power available from other sources. Black Lake was still interested in the Project and working on its development, but it has only been in the last year or two that the demand for power has increased. In the past, being partners in the Project really wasn't a serious consideration for SaskPower – who only decided to come on as a partner in the last year. Chief Robillard added that two years ago the former leadership from Black Lake identified Stony Rapids and Fond du Lac as areas that could be impacted. In earlier discussions with Fond du Lac leadership the community expressed that they were opposed to the Project and refused the opportunity to have discussions with Black Lake.   |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | Would compensation be provided to the Fond du Lac community if in 20 years the fish in Lake Athabasca started to be impacted?   | It was responded that the board will consider the question, and bring back an answer at a later time.  |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | Would the submerged weir prevent fish passage downstream?   | It was explained that the fish sampling was done as part of the baseline studies. The Project should not impact the fish populations within Lake Athabasca because Lake Athabasca has a self-sustaining fish population and doesn't depend on fish from the Fond du Lac River to maintain stocks. It was further explained that some of the baseline studies showed that fish reside in the Fond du Lac River – with grayling being most common, although other species are often found in some of the deeper pools on the river. Tagging studies have shown that the fish in the river, for the most part, stay where they are. They move upstream a bit and move downstream a little bit but they don't continually move through the River. Of all the fish they tagged, most stayed within about half a kilometre of where they were tagged, although one fish did swim all the way to the Chipman River. The fish that were tagged didn't swim downstream towards Stony Rapids – the farthest downstream movement was Middle Lake. Lake Athabasca has lots of streams feeding it that support local spawning. In terms of the submerged weir it was explained that the weir will be located near the outlet of Black Lake. It would look very similar to a current set of rapids on the west side of Grayling Island. The weir would create a small set of rapids and would allow fish passage similar to how they move right now. It will be designed so it does not prevent fish from moving down or upstream. |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | Chief Lidguerre wanted to understand why Fond du Lac hasn't been at the table to discuss the potential for benefits of the Project which seem to only consist of opportunities during a three year construction period. He wanted to understand whether there would be any benefits beyond that?  | It was explained that they hope the Project can be a model for other First Nations interested in developing hydro projects. They think the Project will benefit other communities in the region. It was noted that SaskPower has options – they could buy power from Manitoba to meet the need. But the most affordable way to meet that need is to build a facility in the region as there is no gas and no coal in the north. The resource that is available is water. He explained that having a secure power supply in the north would mean that there would be a reliable source of power for northerners. The Project will generate 42 MW of power, which is only half of what the future projections for power are. If mining continues to expand – they may need more power than what is on the graph in the presentation.   |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | A comment was made about the cost of power in the north. Would it be possible to charge SaskPower for the water required for the Project?   | It was responded that SaskPower pays a fee for the use of water – but didn't quite understand the question, so was unsure how to answer more clearly. It was added that other parts of the province have other options for power like gas and coal. One of the things about hydropower is that it has a very high capital cost at the outset – but has a lower ongoing operation and maintenance cost. Gas plants and thermal plants have higher longer-term costs. When they evaluate projects, SaskPower looks at the entire life cycle of the Project. SaskPower will end up spending a lot of money at the beginning (\$300 million) but it all gets averaged out over time.   |
| 27-Feb-13 | February 2013 Fond du Lac Community Session | A question was raised about what would happen if the land was flooded.  | No flooding is expected with the Project because Black Lake will not be dammed. The same amount of water that already goes down the Fond du Lac River will continue. The only difference is that about half the water will go through the tunnel, the power house and the tailrace before going back into the river. By the time the river reaches Middle Lake, the flows will be the same as they already are. There won't be any change in the amount of water Lake Athabasca sees at all.   |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event   | Feedback (Comment/Question)  | Response  |
|-----------|---|--|---|
| 27-Feb-13 | February 2013 Fond du Lac Community Session         | A comment was made that when the power line was built from uranium city, an agreement was signed with respect to the 80 towers that are on Fond du Lac Reserve land. He thought that this agreement should be revisited for all projects that get connected to this power line, and that Fond du Lac should be a partner in the Project as well.                 | The SaskPower Representative responded that he wasn't sure about the agreement that was mentioned, but that he would go back to the SaskPower transmission group to see if they could provide more clarity. He noted that the SaskPower transmission group will have to get approval for the 20 km of transmission line required for this project.  |
| 27-Feb-13 | February 2013 Fond du Lac Community Session         | Would compensation be provided to the Fond du Lac community if in 20 years the fish in Lake Athabasca started to be impacted?  | It was also stated that no effect on Lake Athabasca fish populations is anticipated.  |
| 6-Mar-13  | March 2013 NLMC Meeting                             | Will there be a component to hire northerners within the agreement.  | EFHLP and SaskPower are in the draft stage which will include the sub-project employment and training components. Because of the confidential nature of the agreement with Black Lake First Nation, specific details could not be given at this time. However, SaskPower did indicate that the Corporation is taking a fresh approach to the aboriginal training and procurement policies and are discussing funding options with Northlands College and Northern Career Quest. |
| 9-Apr-13  | April 2013 Workshop                                 | What will happen at Cree River with this project? Will there be any effects at Cree River?   | This Project doesn't affect the Cree River at all.  |
| 9-Apr-13  | April 2013 Workshop                                 | Will the submerged weir flood the river like beaver dams flood rivers?   | The submerged weir will act like the natural river outflow, fish will move upstream and downstream and it will not dam the river at all. The weir is there to keep the river flowing.   |
| 9-Apr-13  | April 2013 Workshop                                 | In the winter time there is ice slush that flows down the river, if that freezes will that flood the river at the submerged weir? This usually happens in November.  | We wouldn't expect the river to freeze anymore in the future then it has in the past. It will maintain the natural flow and will not flood even in winter.  |
| 9-Apr-13  | April 2013 Workshop                                 | Another concern I have is the Camp site during construction should be on the reserve and we should be given all the contract and job opportunity for the Black Lake Denesuline First Nation band members. The location of the camp should be in Black Lake and not in Stony Rapids.  | While a final decision has not yet been made regarding the construction camp location, it will most likely be on Black Lake Reserved Lands. The goal is to employ local people during Project construction and operations.  |
| 9-Apr-13  | April 2013 Workshop                                 | Debris from dead trees that fall into the lake, will that go into the water intake and into the tunnel?  | Dead timber will always fall into the lake from somewhere. Debris will be screened at the water intake and prevented from entering the power tunnel.  |
| 9-Apr-13  | April 2013 Workshop                                 | Will there be local employment opportunities, not just a contractor?   | The Project intends to maximize employment opportunities and use of local resources.  |
| 9-Apr-13  | April 2013 Workshop                                 | The Fond du Lac River is sacred. Do we have to change flow?  | While Black and Middle Lakes will stay nearly the same, lower flows down the river are needed to provide water to operate the generating station.   |
| 9-Apr-13  | April 2013 Workshop                                 | Will the flow in the river get completely cut off?   | Based on historical flow levels the river will always have flow.  |
| 9-Apr-13  | April 2013 Workshop                                 | Will rock placement for the submerged weir harm fish?  | Rock will be placed in a manner acceptable to DFO.  |
| 9-Apr-13  | April 2013 Workshop                                 | Will submerged weir operations harm fish?  | No. Black and Middle Lake water levels will remain within their historic range.   |
| 9-Apr-13  | April 2013 Workshop                                 | Can the submerged weir freeze and back up Black Lake?  | No. The weir will behave like other riffles and rapids along the Fond du Lac River.   |
| 9-Apr-13  | April 2013 Workshop                                 | What about fish entrainment through the water intake? What if fish attracted to flow?  | Limited entrainment of fish is anticipated, but it is being reviewed.   |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | Would really like power for her cabin on Middle Lake (ideally free power)  | No response recorded  |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | Recognizes that there will be noise associated with construction and would like someone to explain about blasting as that information becomes available (number of times per day, power of the blasts). If it gets too noisy would just come and stay in Black Lake.   | No response recorded  |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | Would send a letter with her concerns to the Chief   | No response recorded  |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | Generally speaking, does not want to be disturbed at Middle Lake and would like the road and transmission line to be routed as far away from her as possible   | No response recorded  |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | If, during operations, observes unusual water levels, who should this be reported to.  | No response recorded  |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | Noted can hear the noise of Elizabeth Falls at her cabin.  | No response recorded  |
| 10-Apr-13 | April 2013 Discussions with Middle Lake Cabin Owner | Would like to be buried at Middle Lake.  | No response recorded  |
| 24-Apr-13 | April 2013 Camp Grayling Meeting                    | The grayling population will be wiped out.   | Information gathered during baseline environmental studies indicates that there is not likely to be an adverse impact to the Arctic grayling population. This will be assessed during the EIA.  |
| 24-Apr-13 | April 2013 Camp Grayling Meeting                    | River flows would go to zero at certain times of the year.   | It is acknowledged that the project would require a reduction in flows in the river between Black Lake and Middle Lake but that there would always be a minimum amount of water allowed to flow in the river. If necessary plant flows would be reduced to ensure the minimum flow requirement is met. The Project Description summarizes seven riparian flow scenarios that the project is considering. No decision has yet been made regarding minimum riparian flow levels.  |
| 24-Apr-13 | April 2013 Camp Grayling Meeting                    | The pristine environment that Camp Grayling relies on and that clients expect, would be destroyed by the noise of drilling and blasting, the roar of trucks and equipment, the extraction of aggregate from the existing gravel pit north of his camp, the dust from construction traffic and the ruined aesthetics of the water intake structure on Black Lake. | There is a possibility that the project might be good for the Camp Grayling business by providing opportunity for accommodations.   |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | How does the intake work?  | Explained the fundamentals of the operation of the intake structure.  |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | How will the intake affect the fish?   | Explained the features of the intake structure that would deter fish from being drawn to the area.  |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | How high are the falls?  | The facility will take advantage of the 35 to 36 m drop between Black Lake and Middle Lake which includes a series of rapids as well as Elizabeth Falls.  |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | Will SaskPower be tendering the job directly or how will the project be tendered?  | Discussion of the early Stage Contractor involvement and identified the various methods of ensuring the involvement of locally owned contractors.   |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | Will a transmission line upgrade be required? Will new line need to be strung?   | Could not answer at the meeting, followed up via telecom.   |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | Noted the picture from the Tribune publication that was good to explain how the project would work.  | No response recorded  |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | Will the project impact Wollaston Lake?  | There will not be an impact on Wollaston Lake from the project.   |
| 2-Jul-13  | July 2013 ABDLP Meeting                             | Sounds like it will be a good project.   | No response   |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event  | Feedback (Comment/Question)  | Response  |
|-----------|--|--|---|
| 31-Jul-13 | July 2013 Hatchet Lake First Nation Presentation | Under the business arrangement, can other First Nations invest with the Black Lake First Nation up to the 30%?   | Ted de Jong identified there was nothing in the arrangement, as it is currently written, that would prevent that. However, as one might expect, arrangement of that nature would be at the discretion of the Black Lake First Nation.   |
| 31-Jul-13 | July 2013 Hatchet Lake First Nation Presentation | Why is 30% an acceptable level of ownership?   | As the arrangement has been negotiated, SaskPower accepts all the risk while Black Lake receives a guaranteed rate of return for the entire 90 years of the project. More ownership would mean more risk for BLFN which BLFN was not willing to take on as it could impact revenue Black Lake could receive from the project. |
| 31-Jul-13 | July 2013 Hatchet Lake First Nation Presentation | Is hydroelectricity really the only option for the north? In the days of the diesel generator, power bills were lower. When the power grid was installed we thought we were gaining more but it seems we are giving up more. Understand it is a good choice from an environment perspective but is there not a more affordable option?   | One of the benefits of hydropower is that while the construction costs are high, the operating costs are low and more or less fixed for the life of the project. With other options, fluctuations in the market cost of alternate fuels drives the price. The costs of other fuels are not going to reduce in the long term.  |
| 31-Jul-13 | July 2013 Hatchet Lake First Nation Presentation | What is the drop in elevation between Black Lake and Middle Lake? How will the tunnel be built? Will it be similar to Charlot River?   | There is about 120 ft difference between Black Lake and Middle Lake.  |
| 31-Jul-13 | July 2013 Hatchet Lake First Nation Presentation | Will the employment and training target only Black Lake members? Who will the actual recruiter be?   | It is anticipated that Athabasca Labour Services will be involved in the recruiting. However, on site, recruiting will be done by the general contractor  |
| 31-Jul-13 | July 2013 Hatchet Lake First Nation Presentation | Can SaskPower go ahead with the project without Black Lake First Nation participation?   | No, one partner cannot proceed without the other.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | What are the predicted river water levels with the project?  | A summary of predicted effects to river levels provided.  |
| 29-Oct-13 | October 2013 Black Lake Community Session        | What are the predicted effect on Camp Grayling.  | A summary of anticipated effects of project on sport fishing activities on the river was provided.  |
| 29-Oct-13 | October 2013 Black Lake Community Session        | No concerned with the environmental effects, but questioned the business arrangement for the project.  | Suggested that concerns be raised with EFHLP Board and at other community meetings.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | General impacts to fish questions  | A summary of anticipated effects to fish in Black Lake and Middle Lake and river was provided   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | General impacts to fish questions  | A summary of anticipated effects to fish in Black Lake and Middle Lake and river was provided   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | General impacts to fish questions  | A summary of anticipated effects to fish in Black Lake and Middle Lake and river was provided   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | General impacts to fish questions  | A summary of anticipated effects to fish in Black Lake and Middle Lake and river was provided   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Interest in training for water sampling and other environmental work.  | Name and contact information in order to provide follow-up on possible training programs.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | How the project will deal with water entering the tunnel during construction.  | Tunnel will probe ahead and water will be contained during construction.  |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Will the tunnel drain small lakes in the area.   | The rock in area is very hard and tight; the area will be sealed during tunneling work.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Will there will be a dam across the intake during construction.  | The existing rock plug will stay in place during construction and be removed once the intake is complete. There will be no dam.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | What will the size and shape of waste rock piles.  | More space than required has been identified for placement of waste rock piles; the project does not currently know how much waste rock will be placed at each of the identified sites.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Assume the project was only for the benefit of the mines and that there would be no benefit to BLFN members. Also suggested that Fond du Lac and Hatchet Lake First Nations were partners in the project.  | BLFN and SaskPower are only partners in project; connected participant with Ted de Jong for additional information.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Expression of disagreement with the project; however, understands that the project represents an opportunity and BLFN must think about the future. The project must offer employment opportunities for local members. Noted that band leadership should be present at the meeting and there should be more band member representation on the EFHLP board. The process must be transparent so that members know where the money is being spent. Noted social issues in the community and that there has been discussion in the community regarding possible uses of project earnings. If the issues that BLFN faces cannot be resolved, the next generations will suffer. Would like to hear from communities that have experience with hydro projects similar to Tazi Twé to get their opinions, perspectives, and advice. | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | The project is important and a major accomplishment for the community. Commented that the project will not adversely affect the environment, including the local fisheries, and agrees that employment related to the project will be beneficial for community members. Concerned about the consultation process regarding the Partnership and the long-term implications for the community. Believes that the Partnership deal should be transparent, with the agreement signed in public in Black Lake. Wants the deal to be good for BLFN so that members don't look back in 20 or 30 years and wish to renegotiate. The agreement must be a fair, long-term agreement and should not be undertaken too quickly.  | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Expressed disagreement with the project.   | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Commented on water rights under the treaties, noting that water is very important. Believes that project-related changes to land and water will affect the Dene culture and feels that there needs to be more discussion of how treaty rights are affected by development projects, including effects of this project. Voiced disagreement with the process and noted that the agreement with the community is difficult to understand and would like to see more consultation.  | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session        | Expressed disagreement with the project, noted that power bills are already too high and does not believe that the cost of power will be reduced through the project. Remarkd that households in Black Lake had power shut off that week. Voiced concern that there could be misuse of partnership money and this would hurt the community's younger members. Sees more potential in keeping the community healthy without the project and commented that Chief and Council must listen to the concerns of community members. Questioned the accuracy of the project predictions and believes that it is difficult to know what things will be like in 99 years.   | No response provided.   |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event                                       | Feedback (Comment/Question)   | Response  |
|-----------|---|---|---|
| 29-Oct-13 | October 2013 Black Lake Community Session   | Member of Band Council and the EFHLP Board addressed transparency of the project process and attendance of leadership at the meeting. Commented that had attended the meeting to listen to members' concerns and noted that discussions and opportunities for voicing concerns will continue. Acknowledged community members' concerns and noted that no one knows exactly what will happen in the future. Understands that people are reluctant to accept promises as their trust has been broken in the past.   | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | Noted important information was presented, including information on environmental impacts and waste rock. Acknowledged that there are many aspects of the agreement still to be made and discussion will continue. Believes that the community must take their lives and livelihoods – including the animals – into account.  | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | Member of Band Council attended the meeting to listen and ask questions of members. Believes that there are a number of issues that still need resolution, including ownership, the land lease agreement and the length of the project (99 years).  | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | The community must think about future generations, including keeping youth in the communities. Provided some history into BLFN and the development of reserve lands. Comments focused on past developments in the region and concern that effects of the project could be similar to past effects, including concern over contamination of water. Reiterated that the presentation and meeting are for learning and discussion; noted that many questions have been tabled, including questions to SaskPower. Black Lake and Stony Rapids must decide together whether the project will go ahead.   | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | The project will provide employment for young people in the community and stressed the importance of education for the future of the community. Agreed that the financial arrangements of the project remain a challenge; however, overall sees the project as beneficial to the community. Commented that meetings and discussions are important and members should listen to all sides.   | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | Speaking as an Elder, the community must think about future generations. Remembered that Elders used to say that in order to come to agreement on issues, people need to look at the big picture. As such, it is important to learn about the project and have all the information at hand before a decision is taken.  | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | Translator commented in Dene; no translation provided.  | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | Wants to see the project built and views it as an opportunity for the community; it will provide benefits for future generations, including income and other benefits to be decided following analysis of the community consultation. Noted that community members need to support local leadership and that the meetings provide community members with opportunities to learn more about the project, to see the presentations, and to understand what the project will mean for the community. It is a struggle to have all the opinions heard and to discuss the project openly, but it is necessary. These discussions will be on the public record. | No response provided.   |
| 29-Oct-13 | October 2013 Black Lake Community Session   | The community must think about the future for their children and must focus on the positives.   | No response provided.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Concerns raised about project effects to Camp Grayling.   | Explained the current nature of the Fond du Lac River and how the project will result in less stressful grayling habitat on the middle section of the river, as well as anticipated changes to river spawning and overwintering habitat. Discussed how the grayling populations near Grayling Island and Middle Lake will be largely unaffected by the project. In the middle section of the river, grayling is expected to stabilize with a slightly reduced population. |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Concern raised about rare plants in the project area, particularly what would happen to the plants during construction. Suggested that rare and medicinal plants should be recovered and transplanted prior to project construction and replanted during reclamation activities.  | Plants in the project area were documented on three occasions for the environmental assessment.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Also suggested that topsoil could be transported by trucks to be brought north for the project, which could then be sold or distributed to gardeners in Stony Lake and Black Lake.  | Take idea under consideration.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Will noise, overpressure or vibrations would affect fish habitat in Fond du Lac River.  | Construction activities will take place at a sufficient distance as to reduce the effects of noise, overpressure and vibration on the river. In addition, the project will comply with DFO guidelines on these issues.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Questioned the use of boring equipment for tunnelling.  | The width and shape of the planned tunnel mean that conventional boring equipment could not be used.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Students have raised concerns regarding environmental contamination, lake levels, and effects to fish. Asked for further details on waste rock containment and the footprint of the project. Will take back information for class.  | Details on concerns raised regarding water levels and effects to fish provided, as well as planned waste rock piles and the reduction of the project footprint through recent changes to the tunnel design.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Questioned the Effects Assessment process, including differences between provincial and federal processes and the lack of harmonization between the province and the federal governments.   | The regulatory process explained and noted that a single Environmental Impact Statement will be submitted to provincial and federal regulators. Although the review process will be separate, each regulator will see the same EIS.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What is planned for the bridge after project construction.  | The bridge will remain across the Fond du Lac River in order to access the power station and for potential use by the community.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Questioned the impact of the project on water levels downstream of Middle Lake.   | Middle Lake water levels will remain the same with the project. Water levels will also remain the same downstream of Middle Lake.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Previous presentations had given the impression that the water levels on Black Lake would drop with the project.  | Black Lake may have dropped. However, with the construction of the weir, water levels are anticipated to remain within regular seasonal variation of Black Lake.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Is there a possibility of moving and replanting rare plants?  | Rare plants will be addressed in the environmental assessment.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | How much of the overburden is soil and would any soils be available for community use.  | The quantity of soil in the overburden is not currently known; it is likely to be reused on-site but excess may be available for other purposes.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Will the roads will be upgraded for the project.  | Discussions on road condition and maintenance will take place with Saskatchewan Highways and Infrastructure.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | How long the project would take to build.   | The project is expected to take 3½ years to construct, beginning in autumn 2014.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Are plans to hire local residents,  | The workforce would include as many qualified local residents as possible.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Will helicopter support would be needed during the construction phase of the project.   | Currently the Project does not anticipate requiring additional support during construction.   |

## Appendix 6.4 Public Feedback and Responses.

| Date      | Event                                       | Feedback (Comment/Question)   | Response   |
|-----------|---|---|--|
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Suggested that the placement of the new road and bridge looked like good locations considering the other possible locations.  | Noted that the road and bridge locations had been made in consultation with the communities, further the chosen route avoided most existing trails and that the community of Black Lake has a sentimental attachment to the area between Highway 905, the Fond du Lac River and Middle Lake. This area is used for community cultural camps and other traditional activities.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Will the tunnel will be lined or will remain natural rock.  | The tunnel will remain natural, with some screening.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What will the composition of the overburden be and total estimated amounts for excavation.  | The totals presented in the PowerPoint are estimates and these amounts have decreased as the project planning has developed. The precise composition of the overburden and waste rock is still being determined and will develop during the construction phase.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Questioned the possible contaminated rock being removed during tunnel construction.   | Rock testing has begun and no contaminated rock has been uncovered so far. Rock sampling will continue throughout the construction of the tunnel and tailrace.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What is the porosity of the rock.   | The rock to be removed is not very porous.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What else might be done with overburden and rock, other than placing in waste rock piles.   | Overburden and rock is being looked at in terms of crushing and use for roads and blending material for concrete.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What size of trucks will be used to remove waste rock and overburden during construction of the tunnel and tailrace.  | The trucks to be used for removal of waste rock and overburden have 12 m <sup>3</sup> buckets. This size of truck was chosen because two can pass within the tailrace and tunnel during construction.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Construction employment estimates   | The construction workforce for the project is estimated to peak at 250 workers.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Is the current transmission line tied into the Tazi Twé project.  | The transmission line is a separate project with its own regulatory process, but construction of the transmission right of way is anticipated to coincide with construction of this project. The new transmission line will tie into the current line at the existing substation and will be owned by SaskPower.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Will the current transmission line will be able to handle the additional power generated by the Tazi Twé project.   | Upgrades will be part of a multi-year process to improve the current transmission line and equipment to 138 V capacity.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Operational employment estimate.  | 8 rotational positions are anticipated for the project under operation, although the project would not be manned 24 hours per day. The project intends to hire local residents in the long term; however, there may be some non-local employees until local residents are trained and qualified.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Where would non-local operational live?   | It is anticipated that these employees would live in Stony Rapids.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What kind of training will be required to operate the facility.   | SaskPower's Northern Power Group has a training program; in Sandy Bay a high proportion of operational employees are residents.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Will the community and social services, such as the RCMP and the AHA hospital, have enough time to prepare for an influx of workers if the project is licensed in late 2014 and construction begins soon after. | There has been some discussion with service providers in the communities and these will be on-going as the project moves ahead. Furthermore, although 250 workers are anticipated at peak construction, the workforce requirements will be gradual and these workers will not flood into the area as soon as the project is licensed.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What will happen to the construction camp after the construction is complete.   | Following construction, the construction camp area will be decommissioned and remediated. It is not yet known whether some materials will be reused by the communities or during operations. InterGroup also spoke to the participant following the meeting to discuss worker interaction issues.  |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | How will power for construction and the construction camp be provided.  | There is sufficient capacity but until the new transmission line is in place, diesel generators will supplement the existing transmission line to satisfy construction power needs and the construction camp. There will be a temporary power line to some borrow areas.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | Noted that at previous meetings there had been discussion of residents of Stony Rapids participating in Tazi Twé training programs and asked if this was still planned.   | There are currently two training courses underway in Black Lake, with another course scheduled for January. Committed to providing information on training programs to the Stony Rapids administrator.   |
| 30-Oct-13 | October 2013 Stony Rapids Community Session | What are the plans for procuring materials and services for the project.  | the project is currently estimating its needs. Some road materials, for instance, will likely be sourced from waste rock and materials excavated when clearing the transmission right-of-way.  |
| 2-Dec-13  | December 2013 Fond du Lac Community Session | Concern was expressed by two speakers regarding the heritage sites, particularly burial sites, located or that could be present in the area.  | Identified that both local knowledge and the heritage site registry had been used to identify sites to date. Additionally, if heritage sites were found during construction, activity would cease in the area until appropriate measures could be put in place to assess and preserve the site as required.  |
| 2-Dec-13  | December 2013 Fond du Lac Community Session | What is going to happen to the fish?  | The environmental assessment identified three distinct populations of Arctic grayling in the affected river reach between Black Lake and Middle Lake. Of these three populations only the middle group is expected to be impacted resulting a small decline in population that would stabilize at a lower number. There is not expected to any impacts to any other fish species in the study area.  |
| 2-Dec-13  | December 2013 Fond du Lac Community Session | During the presentation on Arctic Grayling, a member of the audience questioned if the potential effects on plants and wildlife had been considered.  | Assessment has been conducted on the potential effects on plants and wildlife in the area. To date the assessment has identified there is no significant risk to plants and animals in the area.   |
| 2-Dec-13  | December 2013 Fond du Lac Community Session | What about fish being pulled into the tunnel and through the powerhouse? What will happen to the fish?  | Discussed the various design features of the intake that would prevent fish from getting to the tunnel in the first place. Design features included:<br><input type="checkbox"/> Shallow approach (less than 5 m deep), drawing water from top of lake while fish tend to congregate at lower depths;<br><input type="checkbox"/> Location that does not support spawning or large populations of any species;<br><input type="checkbox"/> Trashrack as visual and physical deterrent.<br><br>Advised that those fish that did get into the tunnel and passed through the powerhouse, some would survive and some would perish. The EIS will have the details of this assessment |
| 2-Dec-13  | December 2013 Fond du Lac Community Session | What about noise  | Noise has been considered in the assessment as well. Results will be available in the EIS once it is made available to the public.   |
| 2-Dec-13  | December 2013 Fond du Lac Community Session | What about the government? Why don't they come out and talk to us   | Comment is noted and will be passed along  |

## Appendix 6.4 Public Feedback and Responses.

| Date     | Event  | Feedback (Comment/Question)   | Response   |
|----------|--|---|--|
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | The need for consultation was identified ... "it is not like the old days people need to come and talk to us".  | Consultation efforts that have been taken to date (i.e. community meeting #1 and meeting with Chief & Council held in Fond du Lac February 27, 2013, website) were identified including the current 'meeting'. As well, it was noted by the project team that the Black Lake FN has been looking at this project for over 10 years but it has only been in the past 3 years that it has started to look at this project seriously (i.e. EA work started in 2010). Only since February 2013 when the Black Lake FN and SaskPower signed an agreement in principle on a partnership to continue with the assessment of the project has detailed design and feasibility work been undertaken. As a result, it has only been in the past 6 to 8 months that details with respect to the environment and technical aspects of the project have become available. Prior to this there really weren't any good details available to answer questions in a meaningful way. |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | Why should the Fond du Lac FN support this project? What is in it for them?   | There will be jobs available for residents from across the Athabasca region including those from Fond du Lac. There will also be contracting opportunities for companies from across the Athabasca Region and northern Saskatchewan that Fond du Lac FN has partial ownership in. These are all benefits that the Fond du Lac FN can get from the project.   |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | Wanted to know if a decision had already been made to proceed with the project?   | No. The Black Lake FN and SaskPower both on their own still need to decide if they wish to proceed with the project. Those decisions are expected to occur in early 2014. Also, the federal and provincial governments, the regulators of the project need to approve the project before it will be allowed to proceed.  |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | What about water contamination from tunnel and tail race blasting. It will contaminate the water. (previously mentioned by the Chief during the meeting with Chief and Council.   | The water recovered from the tunnel during tunnel and tail race excavation will be collected in settling ponds and tested prior to release to the environment. If required, the water will be treated prior to releasing it to the environment.  |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | How many full time employees will be required to operate the plant and what qualifications will they need?  | There will be between 6 to 8 employees required to operate the plant. Ultimately the plant will be operated by people from Black Lake once they have been trained properly to do so. [I don't recall what they were. What you have written captures the key message and answers the question.  |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | The amount of CEAA funding for reviewing the project was questioned. It was identified that the typical funding in the neighbourhood of \$10,000.00 was not enough for stakeholders to do a proper review of the documents. Would SaskPower be interested in topping up the dollar value? | The funding for project review is identified by CEAA. We can forward your comment to the Agency.   |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | Who was used for the collection of Traditional Knowledge used in the project assessment? Was it a firm from down south? People in the region can be used for this function similar to the Gunnar Project. After all, it is their knowledge.   | InterGroup from Winnipeg was used for the Traditional Knowledge piece of this project. They conducted interviews with the local people to collect the necessary information.   |
| 2-Dec-13 | December 2013 Fond du Lac Community Session              | There were also some questions raised about the cost of power and past promises made by SaskPower when the transmission line was built across their land that their power bills would be lower.   | Although these questions were not related to the project SaskPower did attempt to answer them by noting that residents in northern Saskatchewan paid the same rate as those in the south but that their bills were higher as a result of no natural gas for heating and higher consumptive use as a result of electric furnaces, stoves, water heaters, etc and that Fond du Lac's climate was a factor as well.   |
| 2-Dec-13 | December 2013 Meeting with Fond du Lac Chief and Council | What types of benefits would the Project provide for Fond du Lac, suggested that construction of the road between Pine Channel and Fond du Lac might be appropriate.  | No commitment from the Project team.   |
| 2-Dec-13 | December 2013 Meeting with Fond du Lac Chief and Council | How would residual contamination from the blasting operation be managed with respect to downstream water quality?   | This has been examined as part of the environmental assessment and the results will be included in the report.   |
| 2-Dec-13 | December 2013 Meeting with Fond du Lac Chief and Council | How will water be managed from the tunnelling operation?  | Water from the tunnelling operation would be contained in settling ponds until it could be confirmed that the water met guidelines for release to the environment prior to discharge.  |
| 2-Dec-13 | December 2013 Meeting with Fond du Lac Chief and Council | How does the diversion of water from the Fond du Lac River work to produce power and will this result in less water flowing downstream into lake Athabasca?   | The diversion concept was explained. Once the flow from the tailrace and river rejoined upstream of Middle Lake, the downstream flows would not be effected.   |

# **APPENDIX 6.5**

## **Duty to Consult: Saskatchewan Ministry of Environment**

## Introduction

It is the responsibility of the Ministry of Environment (MOE) Environmental Assessment Branch to determine if the Tazi Twé Hydroelectric Project (Project) will trigger a Duty to Consult, based on the Project information provided in the Project Description (Golder 2012) and the Terms of Reference (Golder 2013). In determining if the Duty to Consult will be triggered, the Environmental Assessment Branch will consider if:

- the proposed Project is a “development” under the *Environmental Assessment Act* (2010) and the Minister must decide whether the project will be approved;
- the proposed Project has the potential for adverse environmental effects on the resources that First Nations and Métis people use to exercise their Treaty and Aboriginal rights and traditional uses; and/or
- the proposed Project has the potential to limit First Nations and Métis right of access to those resources (MOE 2012).

On April 19, 2013 the MOE Environmental Assessment Branch determined that the Project has the potential to adversely affect the exercise and Treaty and Aboriginal rights or traditional uses as described in the provinces First Nation and Métis Consultation Policy Framework (Appendix A). Although the legal Duty to Consult ultimately resides with the Crown, and not with the Proponent, MOE has delegated certain procedural aspects to the Proponent of this Project as they are in the best position to describe accurately the Project and any potential effects on the environment. The Environmental Assessment Branch identified the communities to which the Proponent were to provide Project-specific information and solicit feedback with respect to potential impact on Treaty and Aboriginal rights. The communities identified by the Environmental Assessment Branch include the following:

- Fond du Lac Denésuline First Nation; and
- Métis Nation Saskatchewan Northern Region I, Local # 80.

The primary objective of the Proponent is to assist MOE in meeting its Duty to Consult. The Proponent will work with the identified First Nation and Métis communities to fulfill MOE's Duty to Consult requirements in accordance with MOE's letter dated April 19, 2013.

The Proponent will provide the identified First Nations and Métis communities with specific information about predicted effects from the Project (i.e., because of the water diversion) in the Fond du Lac River between Black Lake and Middle Lake and how that might affect fish species. Information will be gathered from the First Nations and Métis communities regarding how these potential effects might affect their ability to pursue their traditional activities along the Fond du Lac River (e.g., hunting, fishing, trapping, or other traditional activities).

## Method of Contact

The Proponent sent letters (Appendix B) to both the Fond du Lac Denésuline First Nation and Métis Nation Saskatchewan Northern Region I, Local # 80 to request a meeting to specifically address the topics required by MOE. The letter was followed up with a fax and inquiries were made to both groups to schedule a meeting.

A meeting with Fond du Lac First Nation was scheduled and took place on December 2, 2013. A meeting with Metis Nations Local #80 has not yet been able to be scheduled.

While not specifically related to the procedural aspects of the Duty to Consult, the Proponent has been conducting an engagement program to inform and receive feedback from stakeholders. As described in Section 6 of the Environmental Impact Statement, a variety of methods have been used to inform stakeholders about the Project including: website, news articles and press releases and community information meetings. Over the past few years, nine community sessions have been held in the area; four at Black Lake, three at Stony Rapids and two at Fond du Lac.

### **Results**

A meeting between Fond du Lac First Nation and the Proponent took place on December 2, 2013 with the specific purpose of providing Project-specific information and solicit feedback with respect to potential impacts on Treaty and Aboriginal rights. Fond du Lac First Nation was represented by the Chief and Council. The Proponent was represented by a Black Lake First Nation Councillor, an Elizabeth Falls Hydroelectric Limited Partnership Board member and consultant, and SaskPower.

An update of the Project was provided using presentation material and site map (Appendix C). The meeting was interactive with council members requesting clarification on particular design features on the Project. Concerns or questions about the Project focused on water quality issues and economic benefits.

When asked if Chief and Council had been provided with sufficient information about the Project to determine if it impacted their Aboriginal rights, Chief and Council were non-committal. However, the Chief and Council did advise that adequate information had been provided on the Project and they would be interested in having more information. It was identified that the [Executive Summary](#) of the Environmental Impact Statement would be provided to the Fond du Lac First Nation once available.

### **References**

- Golder (Golder Associates Limited). 2012. Project Description – Elizabeth Falls Hydroelectric Project. Prepared for Elizabeth Falls Hydro Limited Partnership.
- Golder. 2013. Tazi Twé Hydroelectric Project Terms of Reference. Prepared for Elizabeth Falls Hydro Limited Partnership.
- MOE (Saskatchewan Ministry of Environment). 2012. Proponents Guide: Consultation with First Nations and Métis in Saskatchewan Environmental Impact Assessment. November 2012. 13 pp.

# **APPENDIX A**

## **Duty to Consult: Saskatchewan Ministry of Environment**



19 April 2013

EAB File: 2013-001

Stan Saylor,  
Environmental Supervisor,  
Business Development  
SaskPower  
2025 Victoria Avenue  
REGINA SK S4P 0S1

Dear Mr. Saylor:

**RE: Consultation Notification of Proposed Tazi Twe Hydroelectric Project**

As you have been previously informed by the Ministry of Environment the proposed Tazi Twe (Elizabeth Falls) Hydroelectric Project is, in the opinion of the Minister, a “development” as defined in section 2(d) of *The Environmental Assessment Act*. This notice is to advise you that information reviewed by the Environmental Assessment Branch (EA Branch) in relation to the proposed project indicates that the duty to consult has been triggered.

The province recognizes its constitutional obligation to consult with affected First Nations and Métis communities when considering decisions that might adversely impact the exercise of Treaty and Aboriginal rights or traditional uses as described in the province’s *First Nation and Métis Consultation Policy Framework* dated June 2010.

To assist the province in fulfilling its duty to consult, the province is assigning Elizabeth Falls Hydro Limited Partnership (EFHLP) and SaskPower various procedural aspects of the consultation process. The EA Branch will rely on EFHLP and SaskPower to work with potentially affected First Nation and Métis community in the development of the environmental impact statement (EIS). EFHLP and SaskPower may find it helpful in drafting the EIS to have worked with potentially affected First Nation and Métis community on the development of the Terms of Reference document.

As part of the environmental assessment process, EFHLP and SaskPower are required to consult with Fond du Lac Denesuline First Nation and Métis Nation Saskatchewan – Northern Region I, Local # 80 and provide them with project-specific information to help in understanding how the project may potentially affect their Treaty and Aboriginal rights and

...2

traditional uses. Specifically, the Ministry is interested in obtaining information about the potential impacts on Treaty and Aboriginal rights and traditional uses associated with the the changes in hydrology between the Fond du Lac River and Middle Lake as the result of the water diversion, which may result in significant adverse impacts to fish species (Arctic Grayling) and/or habitat.

The EA Branch has advised the potentially affected First Nation and Métis community to discuss the nature of the project with proponents, provide information on the potential adverse impact to their Treaty and Aboriginal rights and traditional uses and work with the proponent during the environmental assessment process to identify ways to avoid or minimize any potential adverse impacts to rights and traditional uses.

As stated in the Provincial *First Nation and Métis Consultation Policy Framework* (2010), the duty to consult lies with the Government of Saskatchewan. In determining whether the Crown's duty has been met in relation to the Minister's decision on an environmental assessment, the EA Branch will consider whether the proponent has engaged in meaningful consultation and accommodation that is appropriate to the significance of the potential adverse impacts to Treaty and Aboriginal rights and traditional uses.

Information provided regarding this proposed project's effects on the respective communities' ability to exercise Treaty and Aboriginal rights to hunt, fish, trap for food and carry out traditional uses will assist the Ministry in making one of the following decisions:

1. Approve the project proceeding, including any terms and conditions that EFHLP and SaskPower would have to fulfill in order to proceed;
2. Require the project to undergo further review and assessment; or
3. Refuse approval for the project to proceed.

The procedural aspects of consultation that the EA Branch is assigning to EFHLP and SaskPower are listed below and include, but are not limited to, the following:

- Provide information to the First Nation and Métis community(s) to ensure they are reasonably informed as to the nature of the proposed activities and are aware of any potential environmental impacts.
  - Include short, medium and long-term plans in the area.
- Arrange meetings by mutual agreement with First Nation and Métis community elected officials or their formally authorized designate to discuss appropriate means of engagement recognizing community specific requirements.
- Engage with the First Nation and Métis community to identify and discuss specific potential adverse impacts of the project on First Nations and Métis ability to exercise their right to hunt, fish and trap for food and carry out traditional uses.

- Consider the views of First Nation and Métis community and, where necessary, work with the community(s) to avoid or minimize adverse impacts on First Nations and Métis ability to hunt, fish and trap for food and carry out traditional uses.
- Document the consultation efforts and include a consultation report in the EIS outlining:
  - Attempts to contact and steps taken to engage the First Nation and Métis community;
  - Specific community concerns related to potential adverse impact on their ability to exercise Treaty and Aboriginal rights and carry out traditional uses;
  - How concerns identified were considered and addressed by the proponent;
  - Any outstanding issues the proponent was unable to address and reasons why;
  - Any agreements developed with the community(s); and
  - Other relevant information related to community discussions.
- Where required by the EA Branch, participate in follow-up consultations between the EA Branch and First Nation and Métis community.

Based on consultation efforts reported in the draft EIS, the EA Branch may deem that the consultation efforts undertaken by EFHLP and SaskPower are satisfactory or may require EFHLP and SaskPower to undertake additional measures of consultation where appropriate and as required.

If you have any questions or require additional clarification regarding this notice, please refer to *Proponents Guide: Consultation with First Nations and Métis in Saskatchewan Environmental Impact Assessment* found at the following link  
<http://www.environment.gov.sk.ca/EnvironmentalAssessment>

Alternatively, you may contact me at your convenience at 306-787-5971 or email [Alvin.Yuen@gov.sk.ca](mailto:Alvin.Yuen@gov.sk.ca).

Sincerely,

**ORIGINAL SIGNED BY**

Alvin Yuen, P.Eng.  
Senior EA Administrator

cc:

Sharla Hordenchuk, Acting Director, EA Branch  
Brady Pollock, Acting Applications Manager, EA Branch  
Jeff MacDonald, Acting Manager, Program Development Landscape Stewardship Branch  
Mai-Linh Huynh, Canadian Environmental Assessment Agency

# **APPENDIX B**

## **Letters from Proponent**



2013, September 18

Chief Earl John Lidguere  
Fond du Lac Denesuline First Nation  
Box 211  
Fond du Lac, Saskatchewan  
S0J 0W0

RE: Proposed Tazi Twé Hydroelectric Project – Duty to Consult

Dear Chief Lidguere:

The Saskatchewan Ministry of the Environment (MOE) in recognition of its constitutional obligation to consult with the Fond du Lac Denesuline First Nation on the proposed Tazi Twé Hydroelectric Project (the "Project") has delegated certain procedural aspects of the consultation to the Project Proponent. A letter dated April 19, 2013 advising of the delegation of certain procedural aspects was sent to the Project Proponent and to Fond du Lac Denesuline First Nation.

MOE's letter of April 19, 2013 identifies that it is interested in obtaining information about the potential impacts on Treaty and Aboriginal Rights and traditional uses associated with changes in hydrology between the Fond du Lac River and Middle Lake (located on Chicken Indian Reserve No. 224) as a result of the Project.

The proposed Project is to be located on the east side of the Fond du Lac River, between Black Lake and Middle Lake. The hydroelectric power facility is a "water diversion" design, as it moves a portion of the normal flow of the Fond du Lac River through a tunnel to the power station, then the water returns to the river and natural flow conditions near Middle Lake.

General information about the Tazi Twé Hydroelectric Project is available on the website: <http://tthp.ca/>.

The Project Proponents (Black Lake First Nation and SaskPower) are requesting to meet with the Fond du Lac Denesuline First Nation to discuss the Project and gather information related to concerns for fish habitat in the Fond du Lac river between Black Lake and Middle Lake.

Please call, e-mail or write to the undersigned regarding a convenient time and location to establish a communication process for meeting with the Fond du Lac Denesuline First Nation. We look forward to meeting with you.

Regards,

Stan Saylor – Tazi Twé Environmental Assessment  
Business Development, 4W  
SaskPower  
2025 Victoria Ave.  
Regina, Saskatchewan S4P 0S1

phone: 306-566-2879  
e-mail: [ssaylor@saskpower.com](mailto:ssaylor@saskpower.com)

Cc Ted de Jong – CEO (Elizabeth Falls Hydroelectric Limited Partnership)  
Betty Hutchinson – Tazi Twé Public Information Program Manager  
Mark Peters – Tazi Twé Project Manager (SaskPower)



2013, September 18

Mr. Curtis Fiss, President  
Métis Local 80  
Box 46  
Stony Rapids, Saskatchewan  
S0J 2R0

RE: Proposed Tazi Twé Hydroelectric Project – Duty to Consult

Dear President Fiss:

The Saskatchewan Ministry of the Environment (MOE) in recognition of its constitutional obligation to consult with the Métis Local 80 of Stony Rapids on the proposed Tazi Twé Hydroelectric Project (the "Project") has delegated certain procedural aspects of the consultation to the Project Proponent. A letter dated April 19, 2013 advising of the delegation of certain procedural aspects was sent to the Project Proponent and to Métis Local 80.

MOE's letter of April 19, 2013 identifies that it is interested in obtaining information about the potential impacts on Treaty and Aboriginal Rights and traditional uses associated with changes in hydrology between the Fond du Lac River and Middle Lake (located on Chicken Indian Reserve No. 224) as a result of the Project.

The proposed Project is to be located on the east side of the Fond du Lac River, between Black Lake and Middle Lake. The hydroelectric power facility is a "water diversion" design, as it moves a portion of the normal flow of the Fond du Lac River through a tunnel to the power station, then the water returns to the river and natural flow conditions near Middle Lake.

General information about the Tazi Twé Hydroelectric Project is available on the website: <http://tthp.ca/>.

The Project Proponents (Black Lake First Nation and SaskPower) are requesting to meet with the Métis Local 80 to discuss the Project and gather information related to concerns for fish habitat in the Fond du Lac river between Black Lake and Middle Lake.

Please call, e-mail or write to the undersigned regarding a convenient time and location to establish a communication process for meeting with the Métis Local 80. We look forward to meeting with you.

Regards,

Stan Saylor – Tazi Twé Environmental Assessment  
Business Development, 4W  
SaskPower  
2025 Victoria Ave.  
Regina, Saskatchewan S4P 0S1

phone: 306-566-2879  
e-mail: [ssaylor@saskpower.com](mailto:ssaylor@saskpower.com)

Cc Ted de Jong – CEO (Elizabeth Falls Hydroelectric Limited Partnership)  
Betty Hutchinson – Tazi Twé Public Information Program Manager  
Mark Peters – Tazi Twé Project Manager (SaskPower)

# **APPENDIX C**

## **Presentation Material**

# Tazi Twé Hydroelectric Project

**Community Meeting #2**

**Black Lake First Nation**

**October 29<sup>th</sup>, 2013**

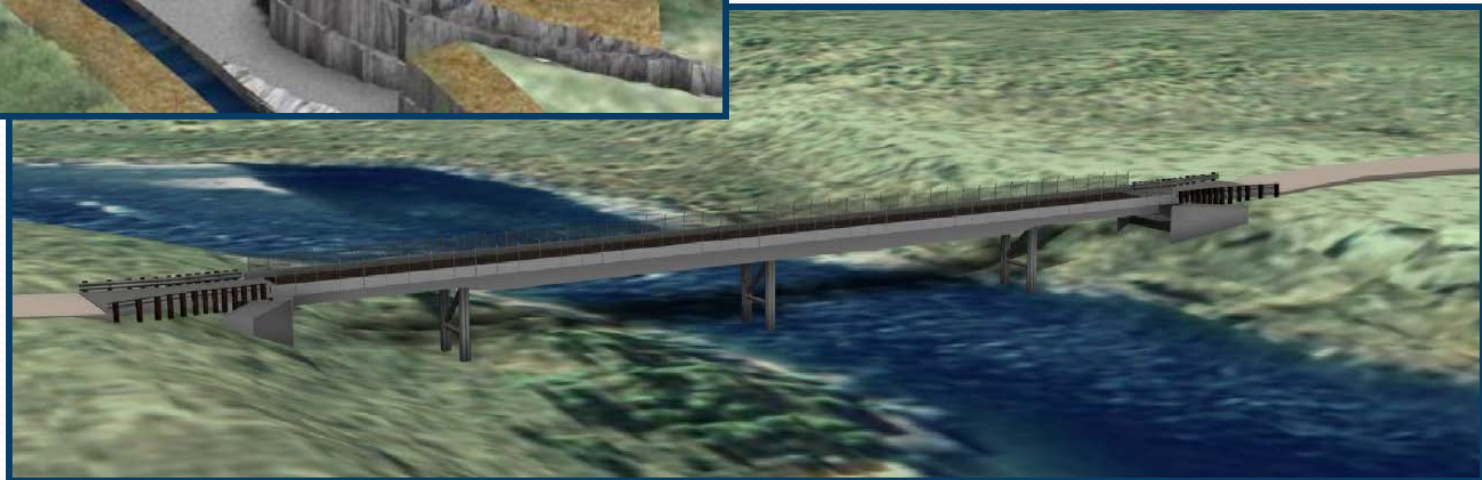
# Meeting Objectives

- Update on technical aspects of the project
  - Design accomplishments to date
- Affect of the project on the environment
  - Black Lake / Middle Lake water levels
  - Waste rock management
  - Impact to Fond du Lac River
  - Impact on fish
  - Listen to your concerns ... Answer questions

# Project Overview

- 50 MW Hydroelectric Power Facility
- Located entirely on Black Lake First Nation land
- Water diversion power plant
- No dam
- Zero flooding
- Black Lake water levels will remain within historical range

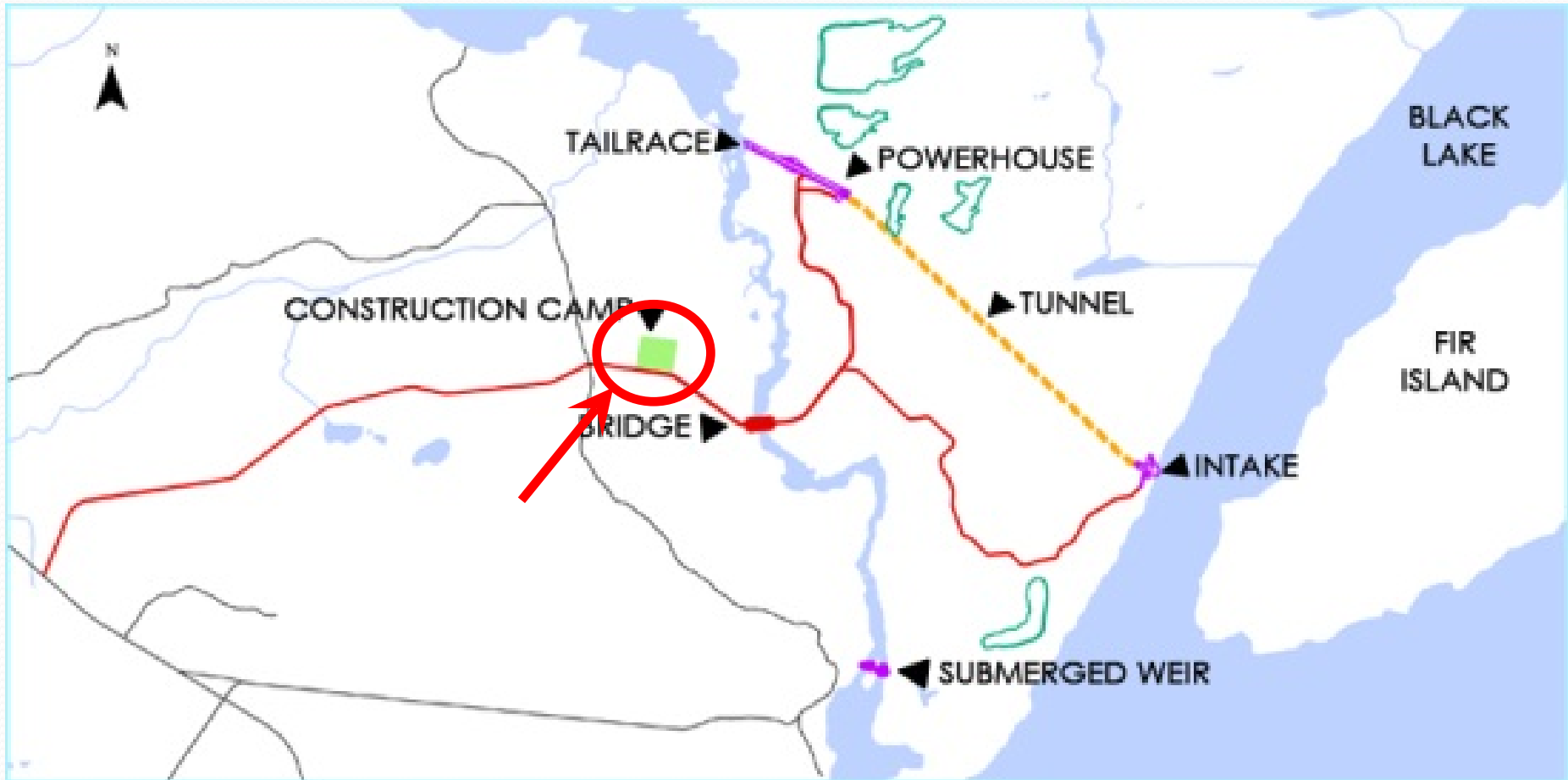
# Project Design



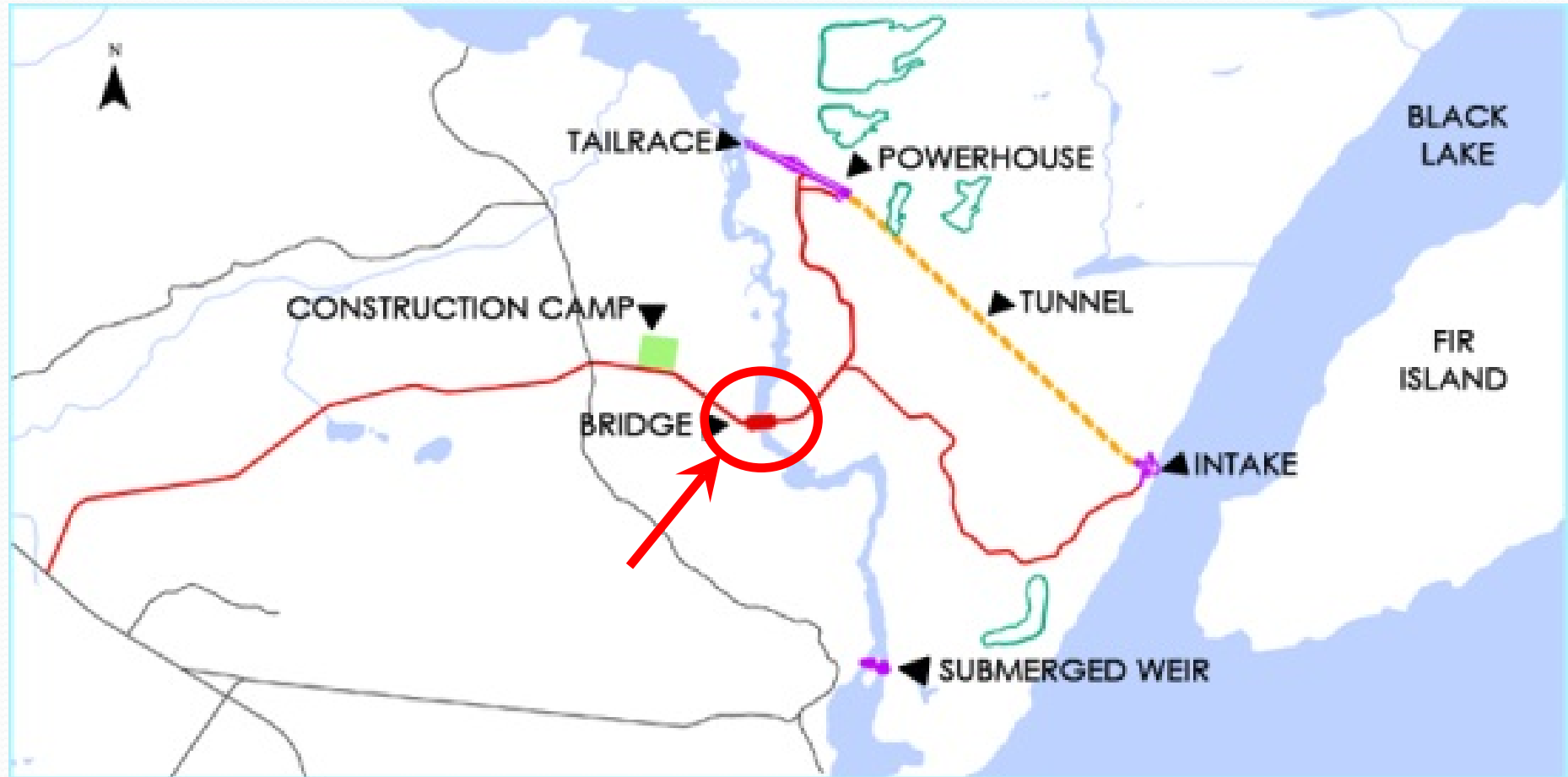
# Site Access Roads



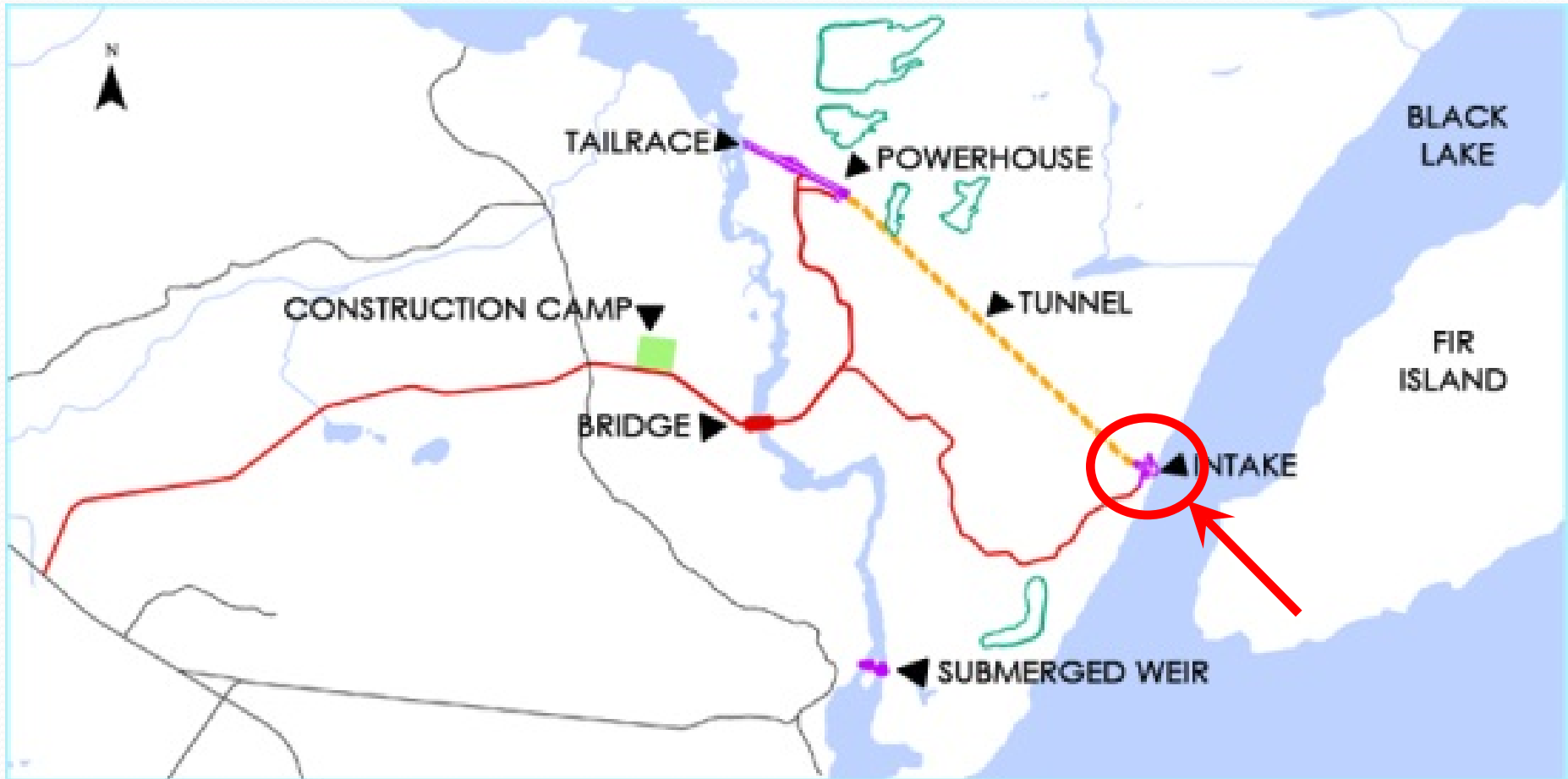
# Construction Camp



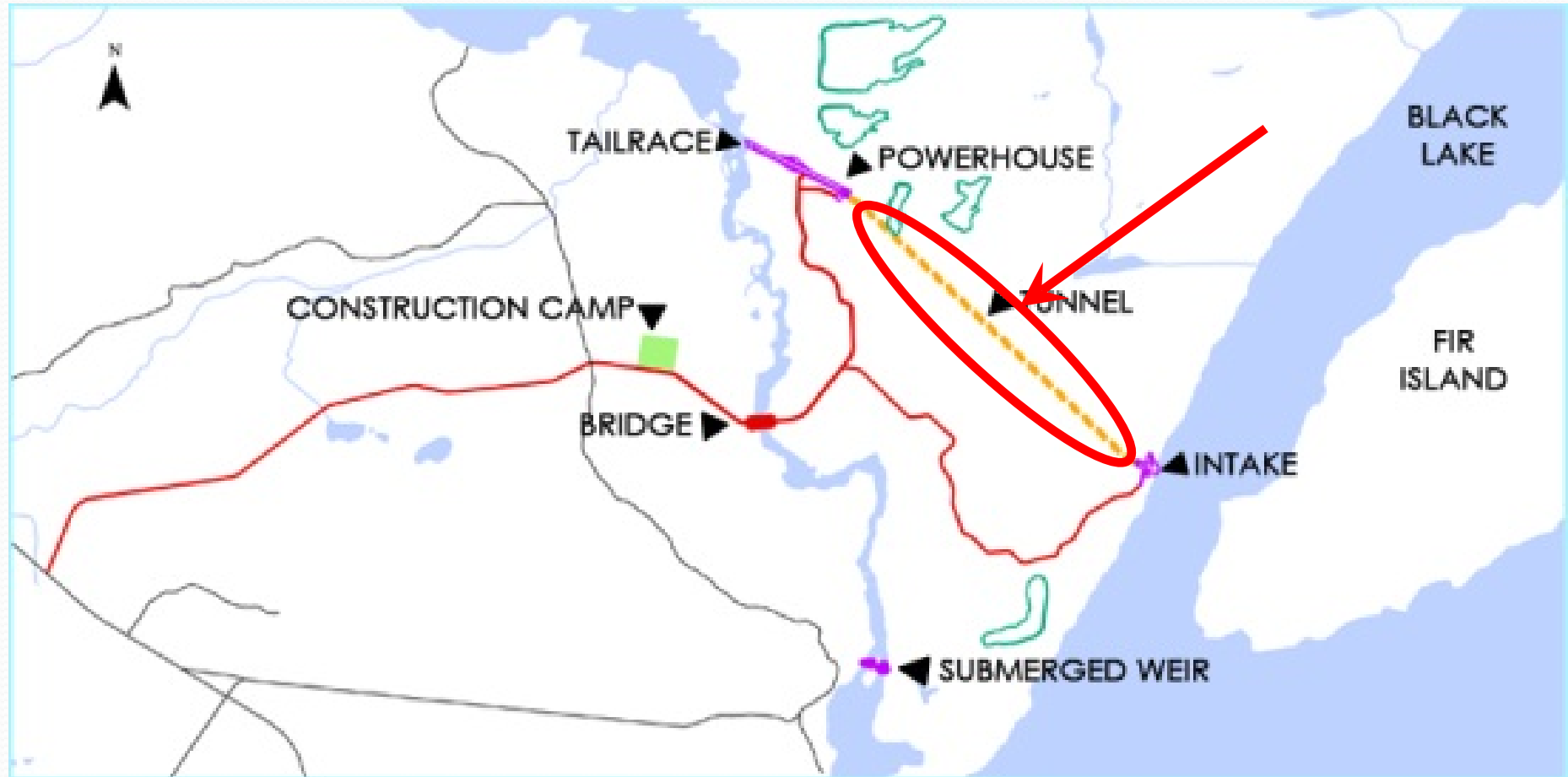
# Bridge



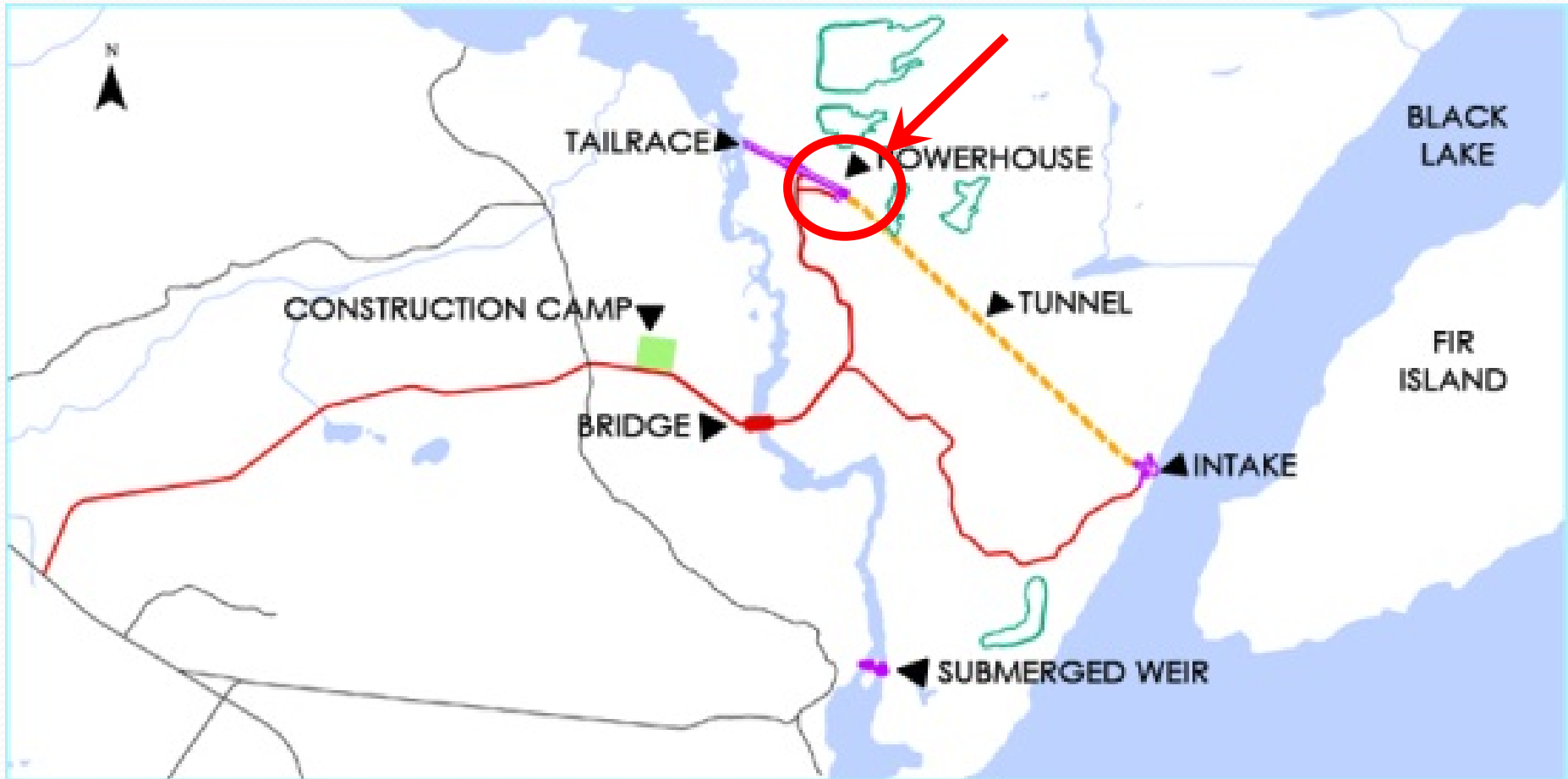
# Intake



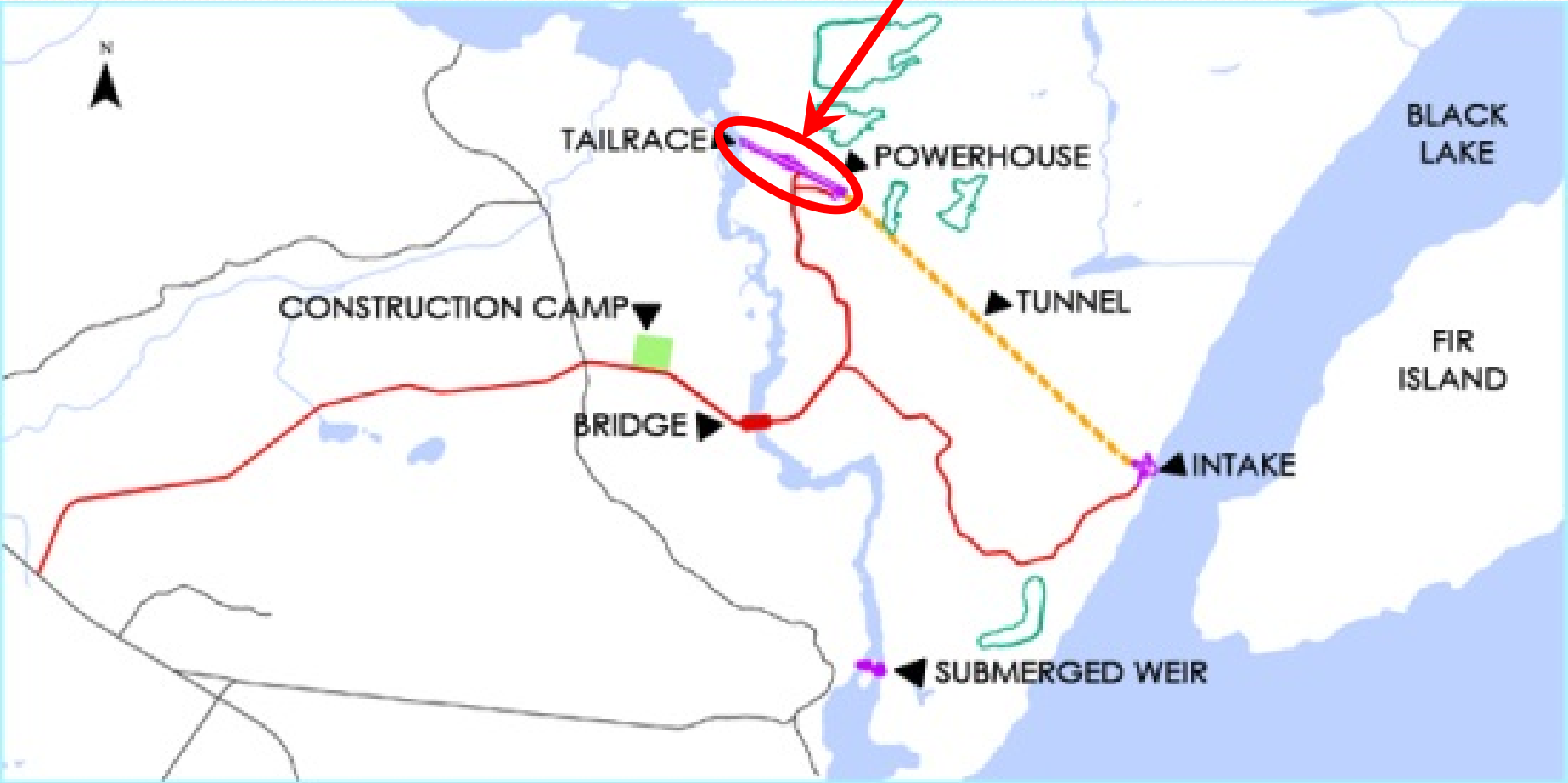
# Tunnel



# Powerhouse



# Tailrace

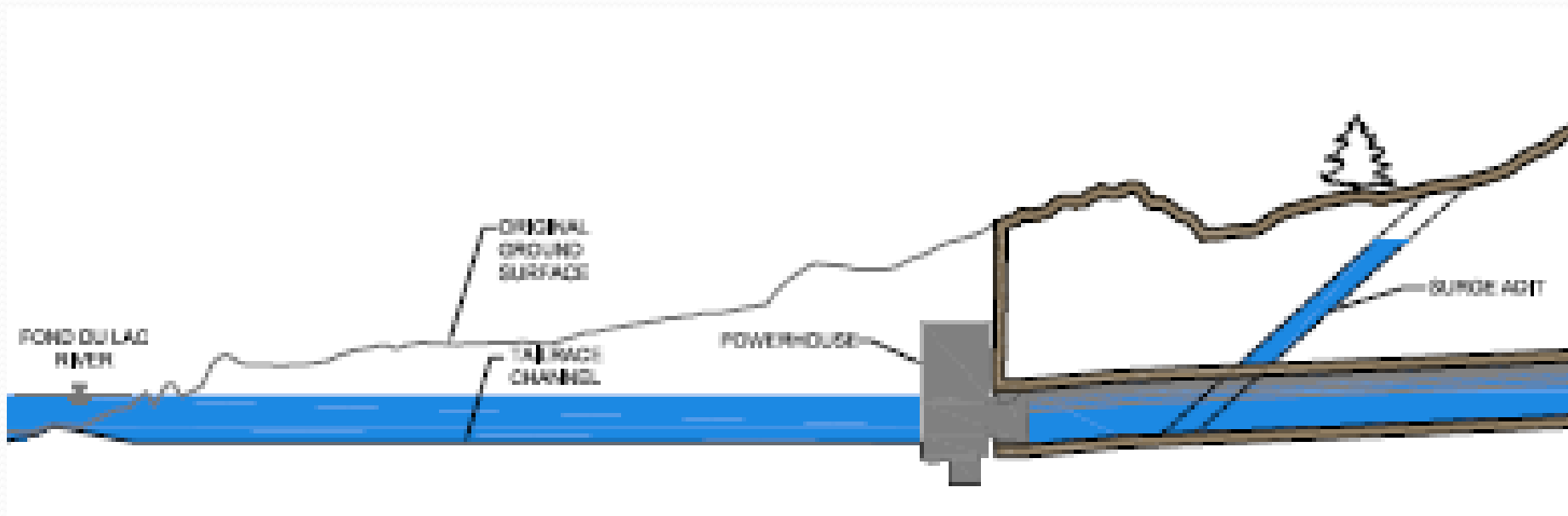


# Submerged Weir



# Surge Facility

- The surge facility consists of a tunnel adit providing water storage and pressure relief for the water conveyance system.



# Black Lake / Middle Lake Impacts

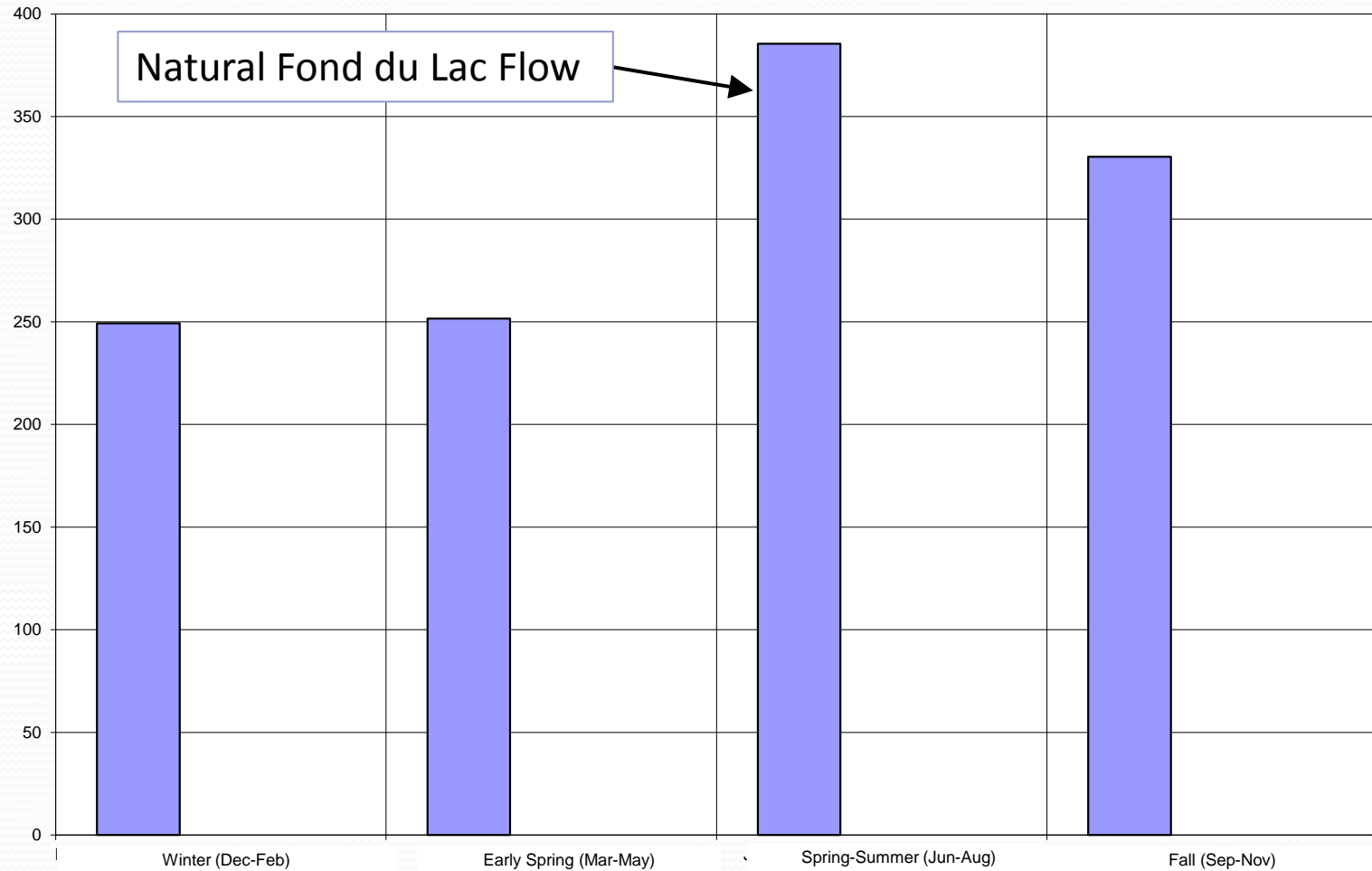


# Water Levels

- Black Lake water levels will stay within the natural range.
- Amount of water flowing from Black Lake to Middle Lake will not change.
- Water level will be controlled by the submerged weirs and controls within the plant.
- When power is not being produced the water will flow through a bypass in the powerhouse.

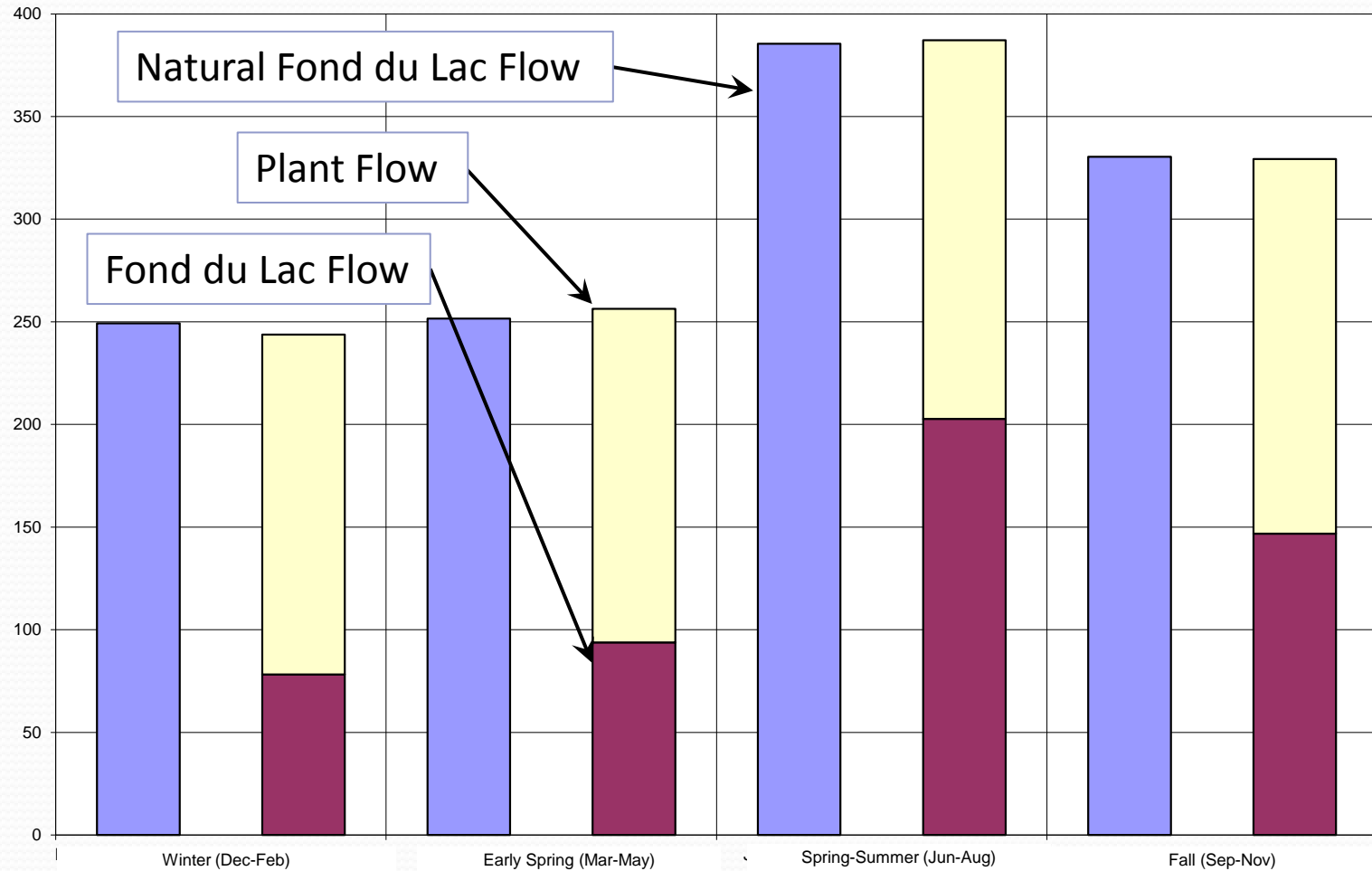
# Water Flow

Seasonal Average Flow

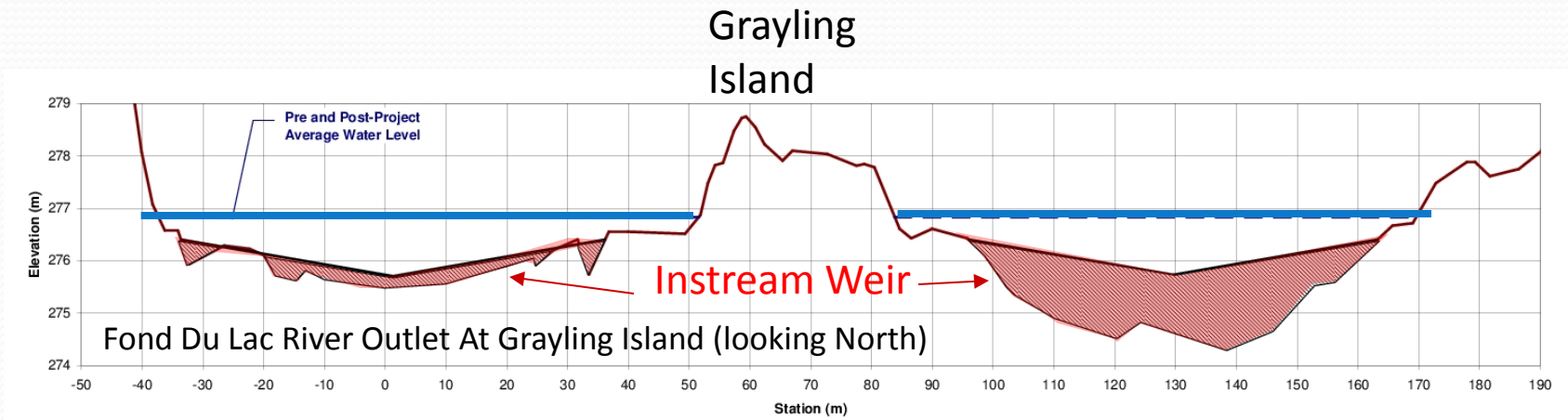


# Water Flow

Seasonal Average Flow



# Why Levels and Flows Are Unchanged

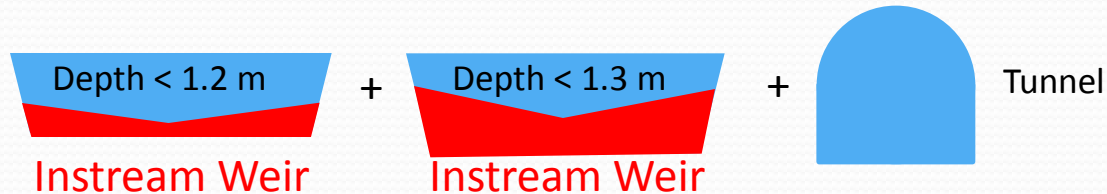


## Fond du Lac Channel at Grayling Island

Natural Channel  
(Pre-development)



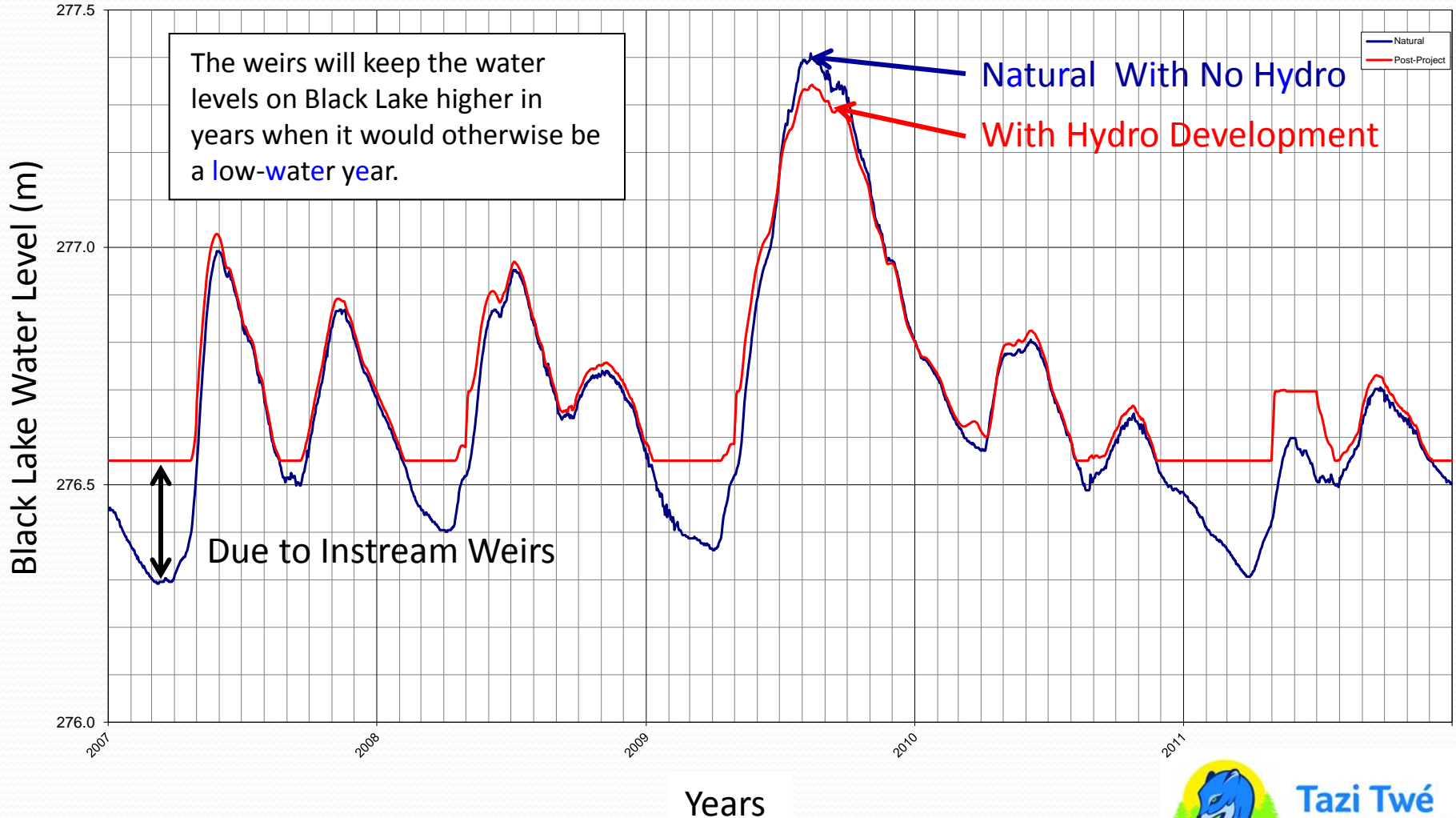
Hydro Project  
(Post-development)



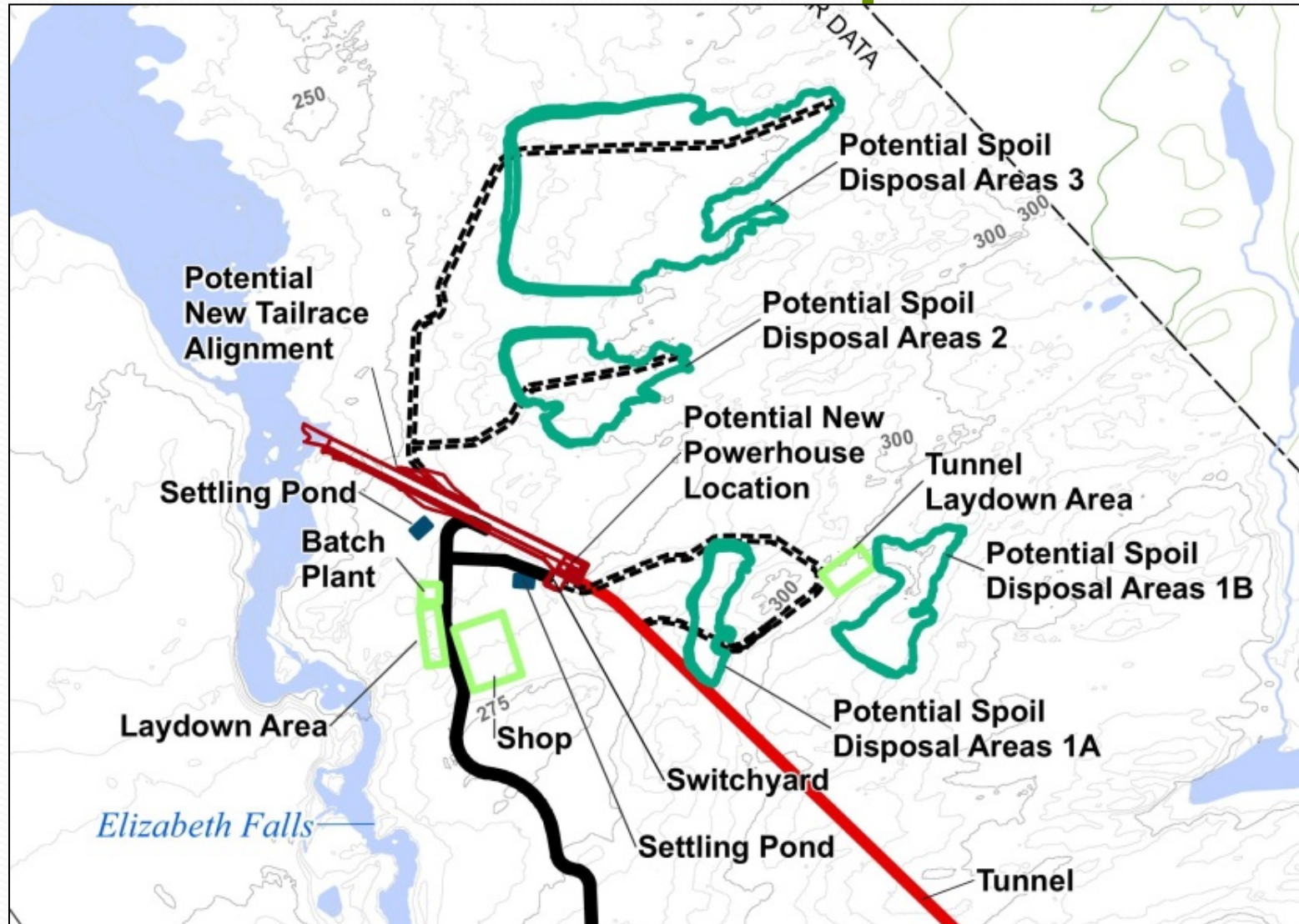
**WILL HAVE EQUAL FLOW CAPACITY !**

# Black Lake Levels

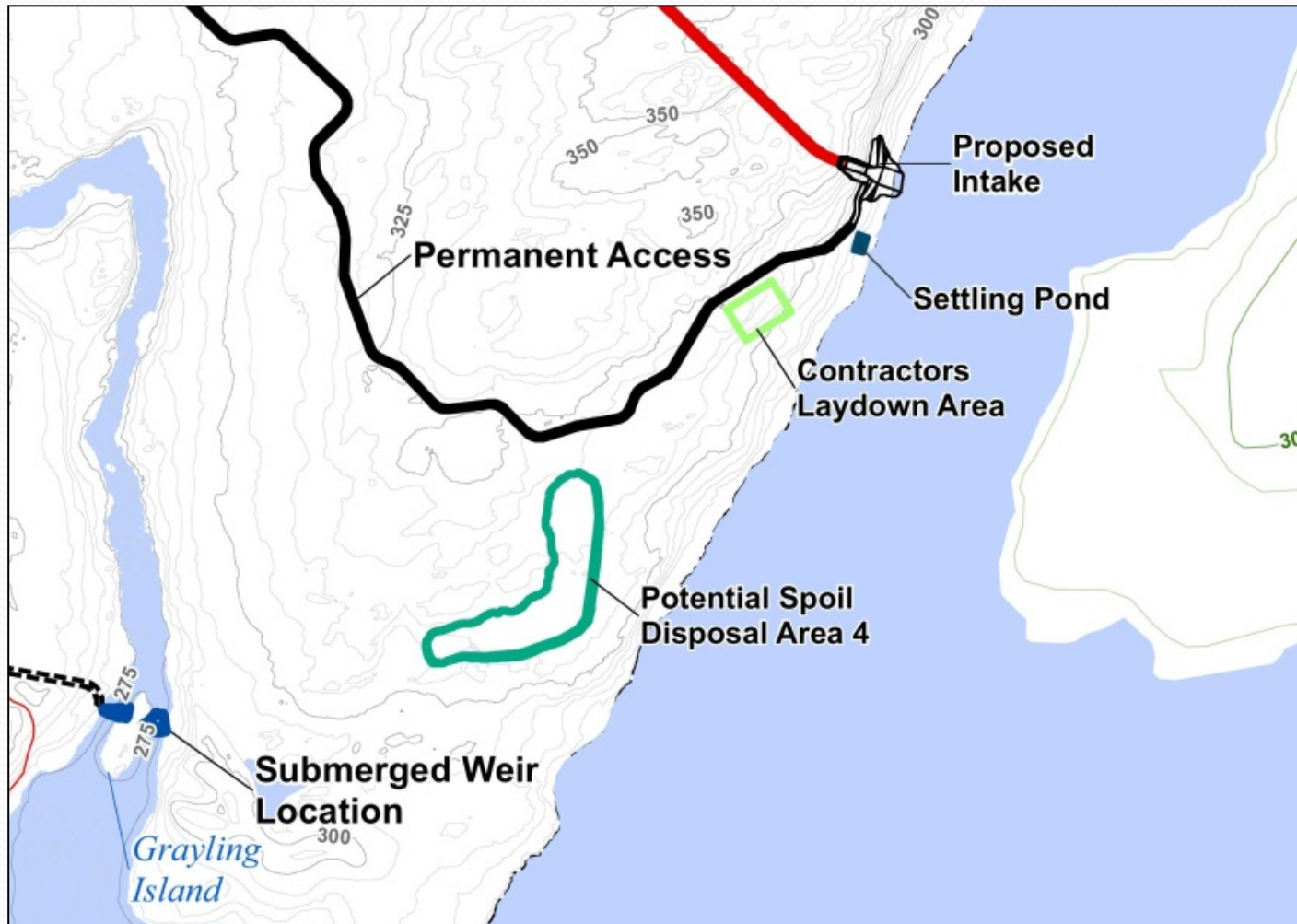
Black Lake Water Levels With and Without Hydro Development (2007 to 2011)



# Excavation Material Disposal Areas



# Excavation Material Disposal Areas



# Estimated Excavation Quantities

| Structure    | Rock Excavation (m <sup>3</sup> )* | Overburden (m <sup>3</sup> ) | Total (m <sup>3</sup> ) | Truck Loads (12 m <sup>3</sup> per load) |
|--------------|------------------------------------|------------------------------|-------------------------|--|
| Intake       | 153,000                            | 60,000                       | 213,000                 | 17,750                                   |
| Powerhouse   | 116,000                            | 0                            | 116,000                 | 9,667                                    |
| Tailrace     | 475,000                            | 58,000                       | 533,000                 | 44,417                                   |
| Tunnel       | 330,000                            | 0                            | 330,000                 | 27,500                                   |
| <b>Total</b> | <b>1,074,000</b>                   | <b>118,000</b>               | <b>1,192,000</b>        | <b>99,334</b>                            |

\* Totals presented above for rock excavation include a bulking factor of 30%

# Excavation Materials – ARD and ML

- Testing has been done for Acid Rock Drainage (ARD) and Metals Leaching (ML).
- **Testing to date indicates there is no concern in the short or long term.**
- Testing for contaminants will continue throughout the project.



FIELD SAMPLING, SUMMER 2013



DRILL CORE SAMPLES FROM FALL 2013 DRILLING PROGRAM



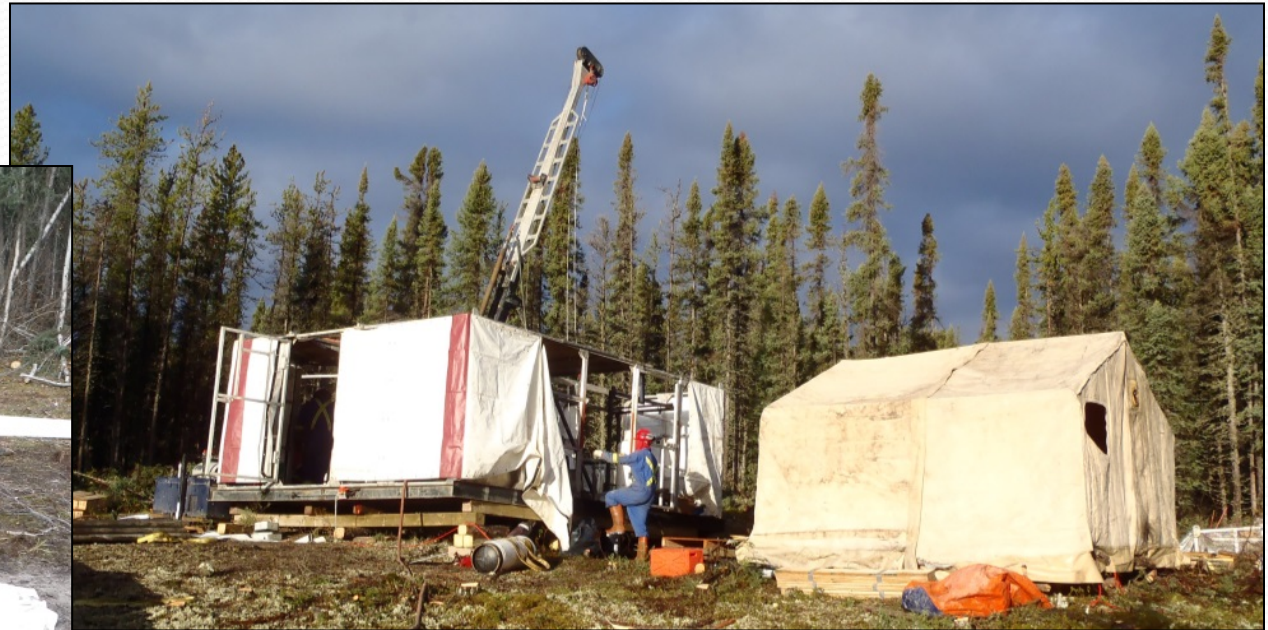
# Excavation Materials

- No radioactivity found from drilling investigations in 2012 and 2013
- Radiation measurements from the site are comparable to the background measurements taken at Stony Rapids.



# Water Analysis

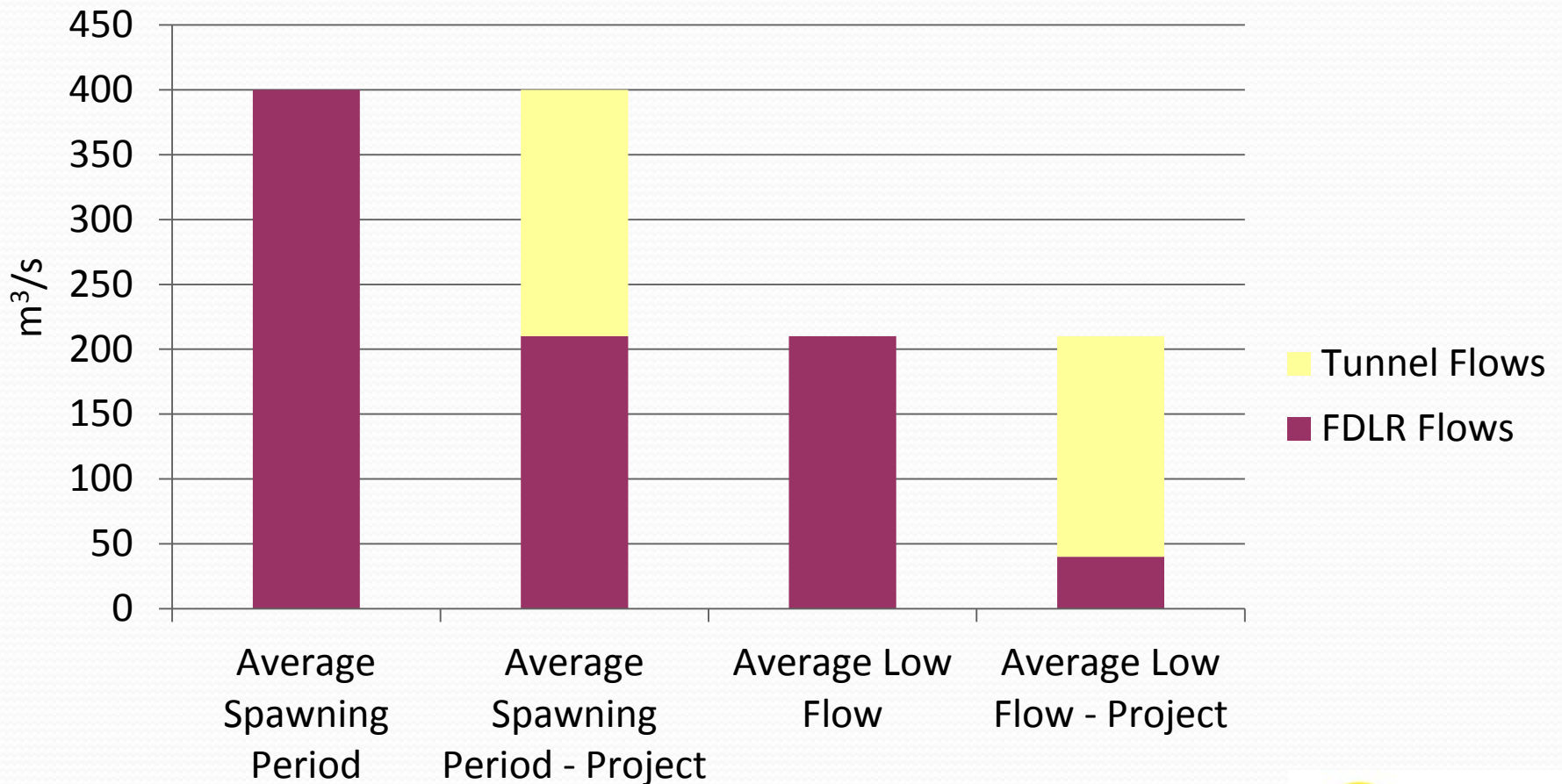
- Groundwater samples were taken from 2013 exploration boreholes to test for groundwater quality.



# Impact on the River



# Fond du Lac River Flows



# Fond du Lac River

Average Spawning Season Flow – 400 m<sup>3</sup>/s



# Fond du Lac River – With Project

Average Spawning Season Flow – 210 m<sup>3</sup>/s



# Fond du Lac River – With Project

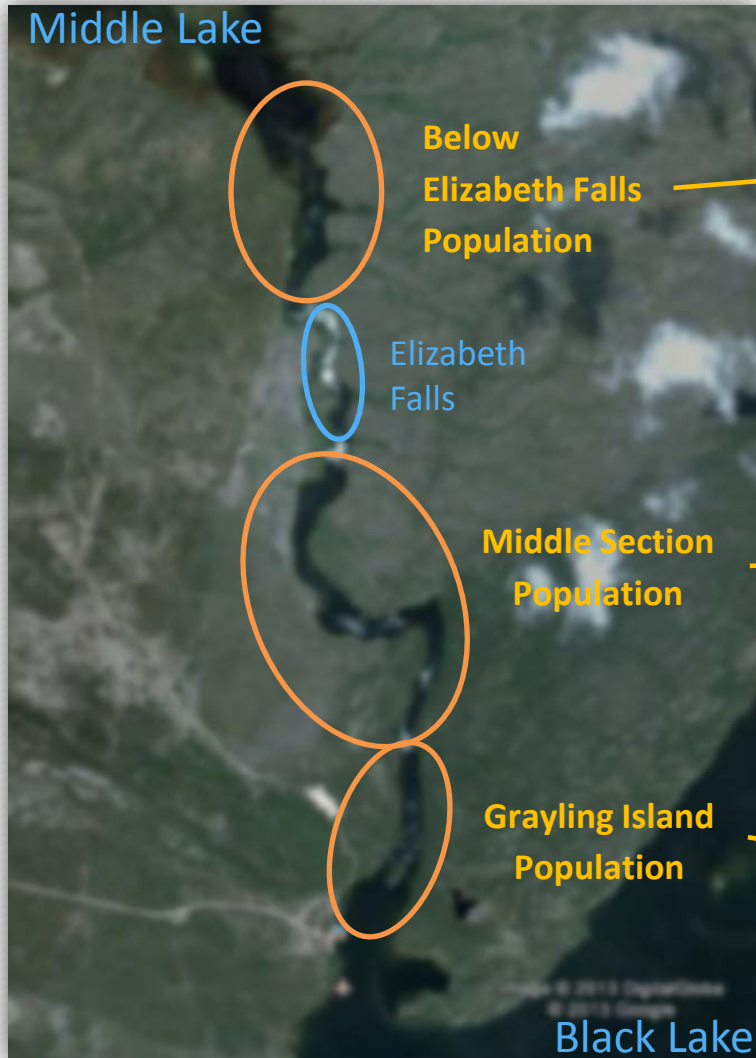
## Lowest Flow – 40 m<sup>3</sup>/s



# Impact on the Fish



# Fond du Lac River – Arctic Grayling Populations



Spawning habitat is downstream of the tailrace outlet so is maintained by natural flows and water levels in the recombined river.

The by-passed section of the river will have reduced flows due to operation of the project.

Spawning habitat is maintained at a suitable depth by installation of the submerged weir.

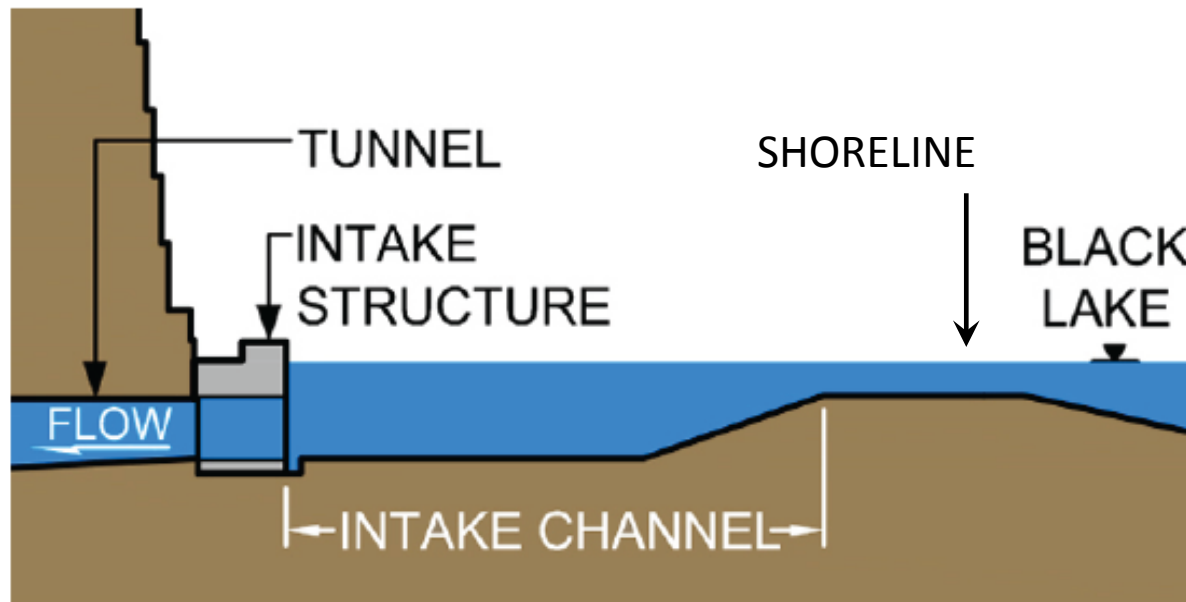
# Fond du Lac River – Grayling Habitat (between submerged weir and tailrace)

- **Spawning Habitat**
  - Reduce by less than 20%
- **Overwintering Habitat**
  - Will increase by 20 - 37%



# Black Lake Tunnel Intake Structure

- Located on Black Lake back from shoreline
- Designed to bring in water from a shallow depth (surface to 5 m)



# Next Steps



# Environment – Regulatory Approval

- Provincial and Federal governments have different processes.
- Environmental Impact Statement (EIS)
  - Expect to submit by mid December 2013
- Environmental Decision ... late 2014

# Project Next Steps

- Aboriginal and Public Involvement ... **Ongoing**
  - Project details
  - Progress updates
- Community Engagement Process ... **Ongoing**
  - Project Benefits (trust, employment, contracting)
- Submit Environmental Impact Statement ... **December 2013**
- Finalize Design and Cost Estimate ... **January 2014**
- Project Approvals by the Partners ... **February → April 2014**
- Start Construction ... **late 2014**
- Plant In-Service ... **December 2017**

# Closing

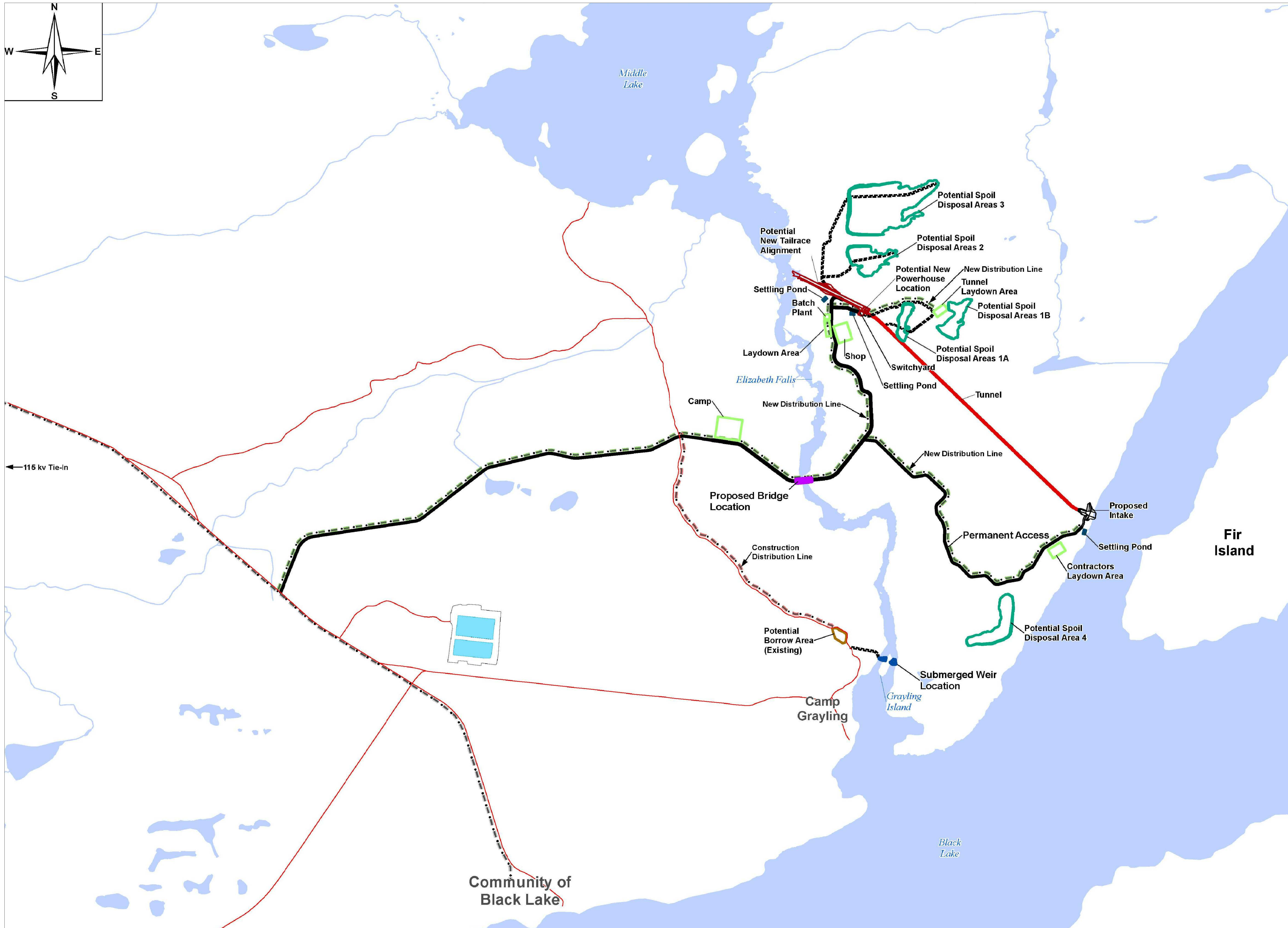
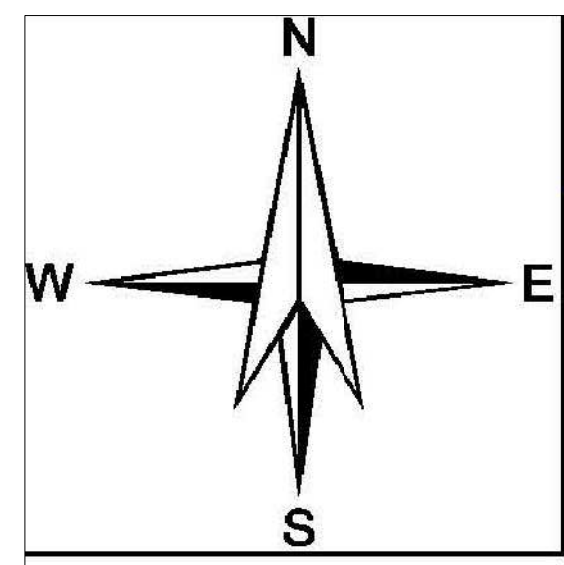
- Thank you for coming and listening
- We want your comments and feedback
- Visit with our project team at the displays ...  
Ask questions

Reconvene in 30 minutes for group discussion

For More Information

Visit the Tazi Twé Website

<http://tthp.ca>



- LEGEND**
- INTAKE
  - TAILRACE
  - SPOIL AREA
  - PROPOSED WEIR
  - PROPOSED BRIDGE
  - EXISTING ROAD
  - PERMANENT ROAD
  - - - TEMPORARY ROAD
  - TUNNEL
  - BORROW AREA
  - CONSTRUCTION INFRASTRUCTURE AND LAYDOWN AREA
  - NEW DISTRIBUTION LINE
  - - - CONSTRUCTION DISTRIBUTION LINE
  - - - EXISTING DISTRIBUTION LINE
  - STREAMS
  - WATERBODY
  - LAGOON
  - SETTLING POND DURING CONSTRUCTION