

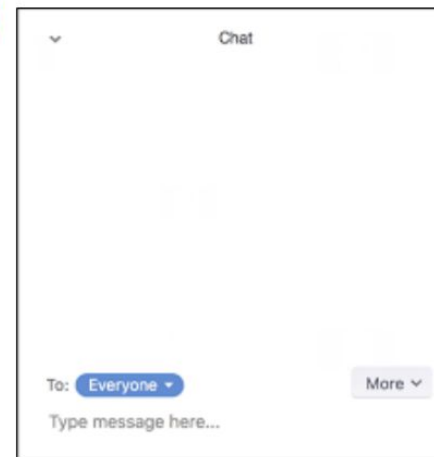
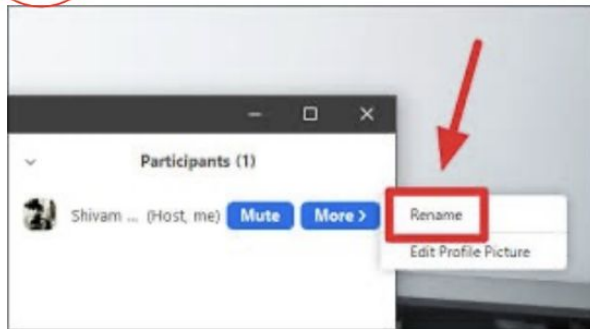
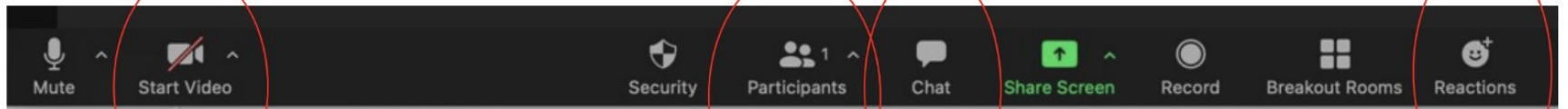
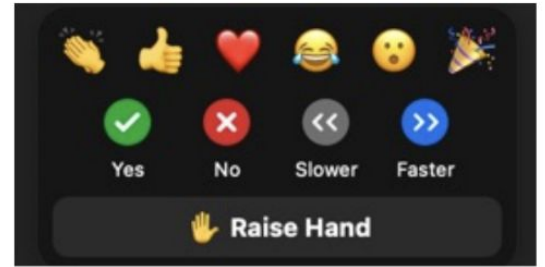
MAR.7.23

# Welcome

**Atlin Hydro Opportunity**  
*Virtual Open House*

# Zoom Housekeeping

- Please keep yourself on mute until the Q & A period
- Please raise your hand to ask questions
- You can turn your camera off if your internet is slow
- Please re-name yourself, and use at least your first name
- Use zoom chat for comments, links etc - it will be moderated throughout the presentation
- We will be recording the presentation



# The Spirit of Engagement

- Honour the time we have together
- We share the responsibility for an effective meeting
- Respect the diversity of experience and wisdom of all here
- Everyone has a voice
- Challenge ideas, not people
- Speak to be understood, listen to understand

***Intent:*** This session is an update, sharing of ideas, and gathering of comments but not the making of a decision.

# Agenda

1. Introductions
2. What's Happening? Atlin's Hydro Opportunity
3. Who is Involved?
4. What's Happening? The Legacy & Benefits
5. What We Have Heard: Stakeholders & The Process
6. What We Have Heard: Project Response
7. Protecting What Matters Most
8. What's Next?
9. Q + A

# What's Happening: Atlin Hydro Opportunity

# What is the Atlin Hydro Opportunity?

Simply put, The Atlin Hydro Expansion Project (AHEP) is a proposed 9MW hydroelectric project located on Pine Creek and Surprise Lake near the community of Atlin, BC.

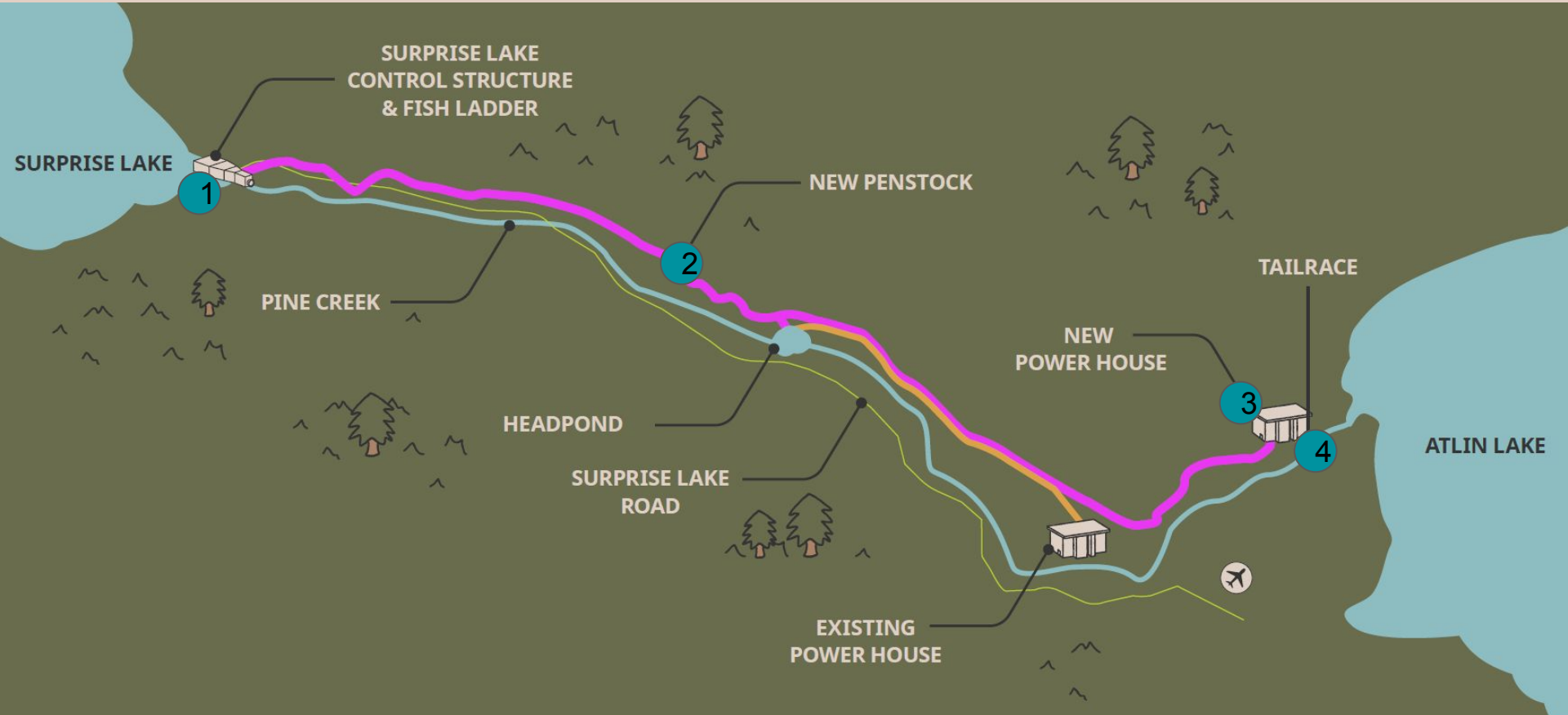
## What is a hydroelectric project?

Generating hydroelectricity will follow these steps:

1. Water is stored in Surprise Lake.
2. Water either travels down Pine Creek or down the proposed pipe (called a penstock) to the new power plant near Warm Bay Road.
3. Turbines in the powerhouse will generate electricity. Water will go back to Pine Creek from the powerhouse via a constructed channel called a tailrace.
4. The power generated will travel via a transmission line to Jake's Corner where it will connect to the existing hydro grid in the Yukon.
5. Water will still flow down Pine Creek to support ecosystems, current users, and Atlin power production.

# PENSTOCK ROUTE

NOT FINAL OR TO SCALE





# What is *Atlin's Hydro Opportunity*?

- A leap forward in addressing climate change
- 240 metre change in elevation
- 64+ million cubic metres of water
- Renewable, every single year
- Million tons of GHG offset
- \$ Millions annually to Atlin's economy
- \$0 to polluting oil + gas companies

# Who is involved?

# The Proponent

## THEL

A member of the Taku Group of Companies, THEL is the official proponent of Atlin's Hydro Opportunity.

THEL has submitted a Clean Energy Development Plan to the BC Government for review while collaborating with all other stakeholders to move the *Opportunity* forward.

# Partners

## Taku Group of Companies

### VISION

To achieve a future that is strong in culture, opportunity, wealth and prosperity, for today and future generations, through active involvement in economic development, business ownership and employment creation for the Taku River Tlingit First Nation.

### MISSION STATEMENT

To operate within a long-term, wealth creation perspective rather than short-term profit perspective.

# Regulators & Opportunity Oversight



# Regulators & *Opportunity* Oversight



**The Project Review Group** - The PRG plays a critical oversight role in assessing the environmental, social, strategic and economic impacts of Atlin's Hydro Opportunity.

**The PRG will help interpret and consolidate information for TRTFN leadership and Elders for decision-making at a Joint Clan Meeting.**

# Regulators & *Opportunity* Oversight



The Province of British Columbia requires a Clean Energy Development Plan (CEDP) be submitted for any proposed green energy project.

A Regional Clean Energy Project Team is formed to review CEDP submissions. It consists of technical expert representatives from:

- BC Ministry of Transportation and Infrastructure
- BC Energy Mines and Low Carbon Innovation
- BC Forest, Lands, Natural Resource Operations and Rural Development (FLNRORD)
- BC Environment
- Taku River Tlingit First Nation Lands Department

THEL has recently re-submitted a CEDP for Atlin's Hydro Opportunity. It is available to view on the Atlin Hydro Opportunity website.

# Regulators & *Opportunity* Oversight



From a regulatory standpoint, The Government of Canada's role is the assessment and approval of specific *Opportunity* elements.

Canada will review stand-alone applications but also plays a collaborative role with the Regional Clean Energy Project Team.

- Transport Canada, Navigable Waters Act
- Department of Fisheries and Oceans



# Regulators & *Opportunity* Oversight



As the new Transmission line from Atlin reaches the BC border the *Opportunity* crosses into Yukon where the electricity will ultimately be consumed.

Yukon Socio-economic Assessment Board (YSEAB) completes a review of *Opportunity* elements that fall in their jurisdiction. Namely - transmission line, construction from the BC border on the Atlin Road to new substation infrastructure in Jake's Corner.

# Partners



Yukon Energy has agreed to purchase clean, renewable electricity from THEL and Atlin's Hydro Opportunity for the next 40 years.



Canada  
Infrastructure  
Bank

The Canada Infrastructure Bank has committed to an \$80 million dollar investment in the *Opportunity* as part of its goal to invest over \$1 billion dollars in partnership with and for the benefit of Indigenous Peoples across Canada.

## Taku Group of Companies

The *Opportunity* has taken many years to move through the appropriate stages of discovery and approvals. Each stage requires important investments that have been led by the Taku Group of Companies and make the *Opportunity* itself possible. Dividends from the *Opportunity* will go back to the TRTFN via the Taku Group of companies.

# The Legacy & Benefits

**Indigenous participation in medium to large renewable energy projects grew by 29.6% between 2017 and 2019 alone.**

**- The Conference Board of Canada**



2009 HYDRO LEGACY

# We are national experts in indigenous clean energy

There's a reason the 2009 Hydro Project was called historic - it was.

Countless indigenous energy infrastructure projects of the last decade can point to Atlin as their inspiration and teacher.

**Project leaders from Atlin have spoken across Canada and mentored other first nations in how best to take control of their financial futures through energy infrastructure.**



2009 HYDRO LEGACY

## Improving over 50 lives

The Skills Training and Employment Program (STEP), open to Tlingit and non-Tlingit, helped brighten the future of over 50 participants through its patient hands-on teaching.

***That's over 10% of Atlin's entire population!***

Imagine the impact of paycheques and pride-inducing employment opportunities linked to this \$800 000 investment over 7 years. Made possible because of the 2009 hydro commissioning.

Neighbours, friends and family from all backgrounds have found a future through the STEP program, improving individual employability and strengthening the independence of our entire community.



2009 HYDRO LEGACY

## Equipment that moves mountains

With a trained workforce, and after purchasing strategic equipment to facilitate the original Hydro Project, we built the capacity to tackle local infrastructure projects **without calling Whitehorse** - or sending all our dollars there.

By doing more of the non-hydro work ourselves, like road paving and countless other projects, we retained quality job opportunities and further strengthened our capacity to keep people here, young and old.



2009 HYDRO LEGACY

## Capacity that's trusted

When a mine needs talent or services or support - they have a large trusted partner in ATELP thanks to the capacity building impact of the original Hydro project.

In fact - for the first time our teams are the contractor of choice for remediation projects and other camp needs in the area.

This sort of capacity protects existing local jobs and creates more each year because decision makers know they can trust our experienced workforce.





2009 HYDRO LEGACY

## No more noise or pollution

24 hours a day, 7 days a week the diesel generators would run - powering Atlin for decades.

Expensive, dirty and loud, Atlin retired its exclusive dependency on GHG emitting generators when its Hydro project was commissioned.

An environmental decision we can be proud of.

Instead of paying oil companies for all that diesel, millions of dollars have stayed in Atlin since 2009 and the air is cleaner too! - that's the sweet silent sound of success.

2009 HYDRO LEGACY

# Strengthening the TRTFN

Ultimately, the Atlin Hydro Project forever strengthened the Taku River Tlingit First Nation.

By dramatically growing the Nation's ability to create jobs and employ Tlingit and non-Tlingit people the TRTFN has succeeded in diversifying the local economy.

This more entrepreneurial economy is supported by smart and targeted investments that strengthen TRTFN's financial position and will continue to do so for decades to come.



TAKU RIVER TLINGIT  
First Nation



# Environmental benefits

## **We're taking 360 million litres of diesel off the road**

That's over 9 million litres of diesel off the highway to Whitehorse every single year for the next 40+ years - how's that for a legacy we can all be proud of?

Instead of sending empty oil trucks and millions annually down the Alaskan Highway, Yukoners will take their hard earned dollars and send them to Atlin.

# Environmental benefits

## **Say goodbye to over a million tonnes of greenhouse gas**

Over its lifespan, *Atlin's Hydro Opportunity* will prevent more than 1 million tonnes of greenhouse gases from being created to power Southern Yukon - that's 27 000 tonnes each year!

**This project will serve to substantially reduce Southern Yukon's reliance on non-renewable energy each winter.**

# Environmental benefits

## **First of its kind environmental monitoring and stewardship**

The Surprise Lake ecosystem is a renewable bounty for the area that is rich in resource extraction history and present day exploration.

The *Opportunity* will introduce extensive monitoring of the ecosystem to ensure no unintended impacts from the new hydro infrastructure.

This investment in stewardship represents an opportunity to learn more about the land and educate a new generation of environmental voices about the unique gifts the land provides.

An aerial photograph showing a paved road on the left and a dirt road leading into a dense forest of tall evergreen trees on the right. The sky is not visible, and the overall scene is bright and clear.

# Economic benefits

## New, Permanent, Quality Jobs

In a community the size of Atlin, quality jobs can have a transformational impact on entire families - strengthening the community overall for generations.

Atlin's Hydro Opportunity will create 4 to 6 quality, permanent full-time jobs in the operation and maintenance of the new hydro infrastructure. That's stable, reliable employment making stable, reliable and renewable hydro energy for the next 4+ decades.

An aerial photograph showing a paved road on the left and a dirt road leading into a dense forest of tall evergreen trees on the right. The scene is brightly lit, suggesting a sunny day.

# Economic benefits

## Life-Changing Construction Experience

We know from experience that working on the *Hydro Opportunity* construction will have a hugely positive impact on people from Atlin. Skills training and hands-on direct work experience are a catalyst for future employment options and we've seen with pride how options can empower entire families.

Experienced builders, contractors and construction professionals are coming to Atlin for the Hydro Opportunity - transforming our community into a natural learning and growing environment where anyone locally who is interested in making a living and a difference has an option.

This will improve lives, which will improve families and, together, Atlin's entire future.

# Economic benefits

## *Opportunity in Supporting Construction Efforts*

With 170+ full-time jobs during construction over 3 years, Atlin will need outside help to meet the workforce demands.

That means talent from away will need to be fed and housed - not to mention what they'll need to get the actual work done, like materials, equipment, repairs and a hundred more needs.

Construction will create new opportunities for businesses in our community and spur investments to meet the demand that will remain long after construction is complete.



# Economic benefits

## Growing Atlin's Tax Base

Like life, there's no *Hydro Opportunity* without paying taxes.

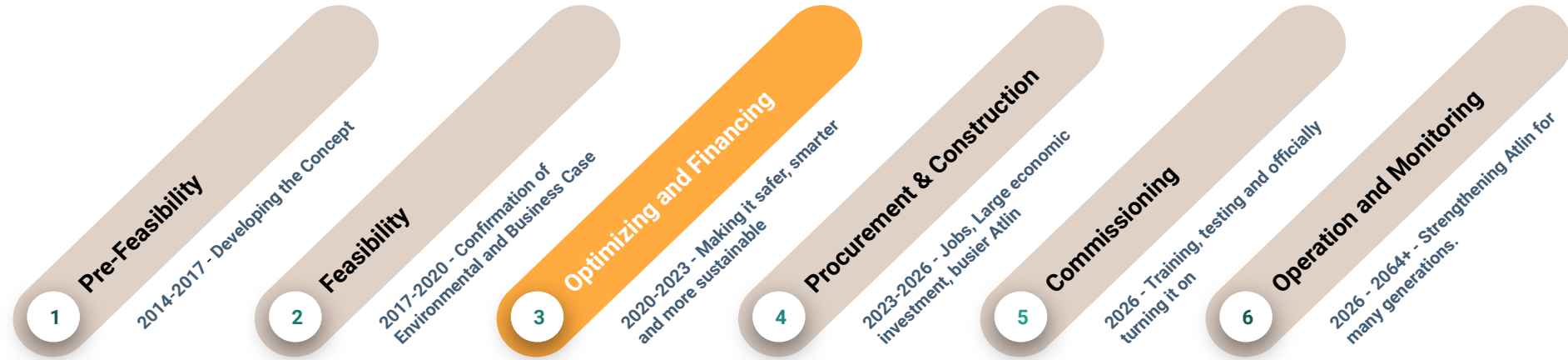
It's expected *Atlin's Hydro Opportunity* will contribute over \$150 000 annually to the region's school and community improvement-based property taxes.

Over the *Opportunity* lifespan that's more than \$6 million in property taxes alone that will be paid to strengthen and improve Atlin for everyone.

# The Process

## The Process

# The Process



\*We are here

Ongoing Public & Stakeholder Engagement

# The Process

## Where we are at today:

- Currently at about **60% Design Completion**
- Safer, smarter and more sustainable design updates
- Continuing **public communication and engagement** on design
- Key funding milestones and achievements to confirm opportunity viability
- Collaboration with all stakeholders to solidify details and agreements
- **Re-submission of the Clean Energy Development Plan (CEDP)**

More information available at [AtlinHydro.ca](https://AtlinHydro.ca)

# Engagement Summary

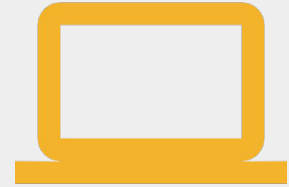
We've come a long way. Over the last seven years, we've been busy gathering public, stakeholder and government feedback as well as conducting technical and feasibility studies to refine the Project design. The graphic below shows a snapshot of what we've done to date.



Countless 1:1 Meetings



In-Person Open Houses



Virtual Open Houses

# Key Themes

Throughout our engagement we have heard the following key themes:

- Support for the economic & capacity building opportunity
- Support for a renewable energy source with minimal impacts
- Concern about noise and visual impact
- Questions about the loss of biodiversity and habitat
- Questions about changes to the water table
- Questions about recreational impacts
- Desire to see improved communication and engagement

# What We Have Heard: Project Response

# Project Response

The project design responds to what we heard as key concerns through public and stakeholder engagement as well as technical review feedback. The table below summarizes these key changes.

## We Heard Concerns about:

- Noise and visual impact
- Loss of biodiversity and habitat
- Changes to the water table
- Recreational impacts



## In response, the updated design:

- Limits new disturbances
- Reduces impacts to beach areas
- Conducts less in-water works



# Key Changes

## More specifically, the new design makes these key changes:

1. Changing the water intake/diversion from Upper Pine Creek to Surprise Lake, and removing the Spruce Creek diversion
2. By changing intake/diversion we have eliminated the need for any new water structures in Pine Creek
3. Changes in flows to Pine Creek
4. Changing the powerhouse location and tailrace to eliminate impacts at Pine Creek beach
5. Using a penstock (pipe) to transport water instead of an open canal
6. Utilizing one powerhouse (instead of two) and a shortened tailrace
7. Burying the transmission line near Warm Bay Road

# Protecting What Matters Most

An aerial photograph of a winter landscape. In the foreground, a river flows through a valley covered in snow and evergreen trees. A bridge crosses the river. In the background, snow-capped mountains rise under a cloudy sky. The text is overlaid on the upper half of the image.

We heard from TRTFN and the community about the importance of responsibly managing the impacts to wildlife and the environment. **Here are some of the ways we are doing that...**

# Ungulates



## What We Heard

Ungulates are of high importance to TRTFN, whether that be for food, ceremonial, or cultural value.

## How the Project Responds

1. **Limiting clearing and ground disturbance** by using existing footprints, field confirmation of habitat, conduct pre-clearing surveys, etc.
2. **Minimizing construction impacts** by developing and following a Construction Environmental Management Plan, conducting worker orientation, pre-clearing surveys, etc.
3. **Minimizing new predator lines of site** by blocking temporary access post-construction, adding physical features to block site-lines, etc.
4. **Reducing potential flooding of travel routes** by reducing lake storage from 2.5 m to 2m.
5. **Long term monitoring** through remote camera monitoring and monitoring of vegetation to assess changing shoreline environment.

# Birds



## What We Heard

Shorebird nesting habitat is important to the region, and there is concern with the potential impacts associated with an increased lake level.

## How the Project Responds

1. **Minimizing construction impacts** by developing and following a Construction Environmental Management Plan, conducting worker orientation, pre-clearing surveys, etc.
2. **Reducing flooding of habitat** by reducing lake storage from 2.5 m to 2m.
3. **Minimizing transmission line collisions** by placing transmission lines at relatively low elevations and spacing the lines to allow for travel, monitoring possible bird collisions.
4. **Monitoring** through continuing existing shoreline and nesting bird surveys and conducting bird collision monitoring, along with related vegetation monitoring programs

# Fish



## What We Heard

Access to fish is important for food, recreation and culture. It is important to maintain healthy fish and fish habitat.

## How the Project Responds

1. **Ensuring minimal impacts throughout operations** by maintaining environmental flow, developing ramping rates, and following maintenance best practices.
2. **Restoration programs** including a new culvert at Snake Creek and creation of grayling habitat at Otter Creek.
3. **Adaptive monitoring programs** that respond to issues of concern, including fishway passage, spawning success, water quality, hydrology, etc

# Water



## What We Heard

Water supports all life - we heard concerns for the impact to the safety and abundance of water for wildlife, fish, and the community.

## How the Project Responds

1. **Reducing erosion and sediment** by following construction best practices, restoring and revegetating temporary areas, and an optimized design.
2. **Minimizing in-water work** to reduce stirring up bottom sediment and potential construction leaks.
3. **Reducing disturbance** during start-up by changing the control of the penstock and control rates of water flow.

# Recreation



## What We Heard

We heard public outdoor recreation opportunities and the area's amazing views are important to community members.

## How the Project Responds

1. **Minimizing construction impacts** through public notice of work, following best practices, and remediating disturbed areas post-construction.
2. **Minimizing changes to views** by removing the previously proposed vertical vent pipe, using existing disturbances, using natural colours for infrastructure, and revegetating temporary areas.
3. **Reducing the storage range at Surprise Lake** from previously proposed 2.5m to 2.0m to protect beach access and use.
4. **Limiting changes to recreational access** and use by reducing lines of sight post construction and deactivating temporary access routes.



# Traditional Uses



## What We Heard

It is important to protect cultural sites and continue to have access and use for hunting, trapping, fishing and harvesting.

## How the Project Responds

1. **Reducing water levels** from a proposed 2.5m to 2.0m to protect shoreline access to protect cultural sites along shoreline.
2. **Conducting archeological investigations** prior to operations, working with TRTFN. More knowledge and information being learned about the traditional use.
3. **Mitigating and avoiding disturbances** to the natural environment.
4. **Monitoring** wildlife, shoreline vegetation and habitat, and birds on an ongoing basis.
5. **Aligns with the Atlin Taku Land Use Plan** primarily using areas of generally lower environmental sensitivity.

# What's next?

# Next Steps for Atlin's Hydro Opportunity

**Thank you for joining us today. Our next steps include:**

- We will be hosting in-person public open houses this week, and using the feedback from this round of engagement to refine the construction and long-term monitoring programs.
- Comments for the provincial system close on April 14 (after 45 days)
- The Project Review Group will make a recommendation to inform the TRTFN final decision at the Joint Clan Meeting in May.
- In Spring/Summer, you may see some movement on site as we continue our geotechnical studies to look at the soils and subsurface conditions.

**If you would like to stay in touch and receive project updates, please check out our website at: <https://www.atlinhydro.ca/stay-engaged>.**

# Next Steps for Atlin's Hydro Opportunity

## **Interested in working on the project?**

We will begin hiring for the construction phase soon and will be hosting a job fair. Please watch out website for more details.

## **Do you or someone you know own a company that could work on the project?**

We are looking to develop a list of Indigenous owned businesses to partner with during the next phases of the project. If this is you or someone you know, please reach out to [stuart.simpson@takucorp.ca](mailto:stuart.simpson@takucorp.ca)

# Q & A

# A few guidelines:

- Share airtime with others and keep your comments to the point
- Use respectful language and respect the views of others so that we have a productive conversation
- Please speak for yourself and not for others
- Speak to be heard, and listen to understand

MAR.7.2023

Thank you