



# TWO EYED SEEING NETWORK

## APPLYING OUR KNOWLEDGE

Network Discussion **Two**  
Jan 19th, 2024





# WELCOME & LAND ACKNOWLEDGMENT

We thank, honour and acknowledge the Nations whose territories allow us to carry out our work and lead our lives on these lands.

We look forward to continuing this journey with you!



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# AGENDA

DRONE USE  
WITHIN  
COMMUNITIES



GUEST  
SPEAKER



HARMONIZING  
TRADITION WITH  
TECHNOLOGY



SHARING  
EXPERIENCES

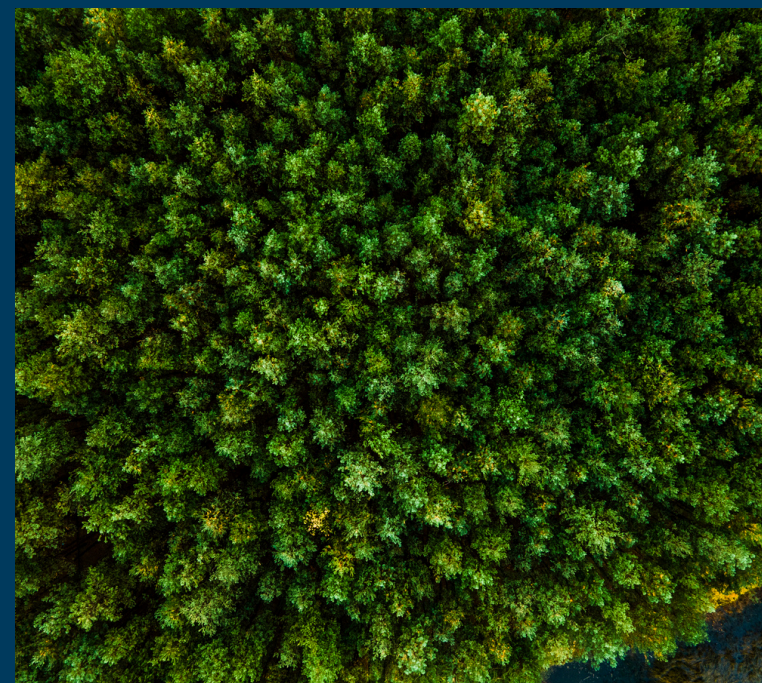




# DRONE TECHNOLOGY

## WITHIN INDIGENOUS COMMUNITIES

- Land and Water Territory Mapping
- Wildlife Monitoring and Protection
- Vegetation and Land Use Analysis
- Cultural Heritage Site Protection
- Community Engagement and Education



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# LAND AND WATER TERRITORY MAPPING

**Advanced Surveying:** Drones offer an efficient way to map vast and often inaccessible land and water territories.

**Accurate Data Collection:** Capture high-resolution images for precise mapping, aiding in land management and resource allocation.

**Boundary Identification:** Drones simplify the process of identifying territorial boundaries - essential for legal and environmental purposes.

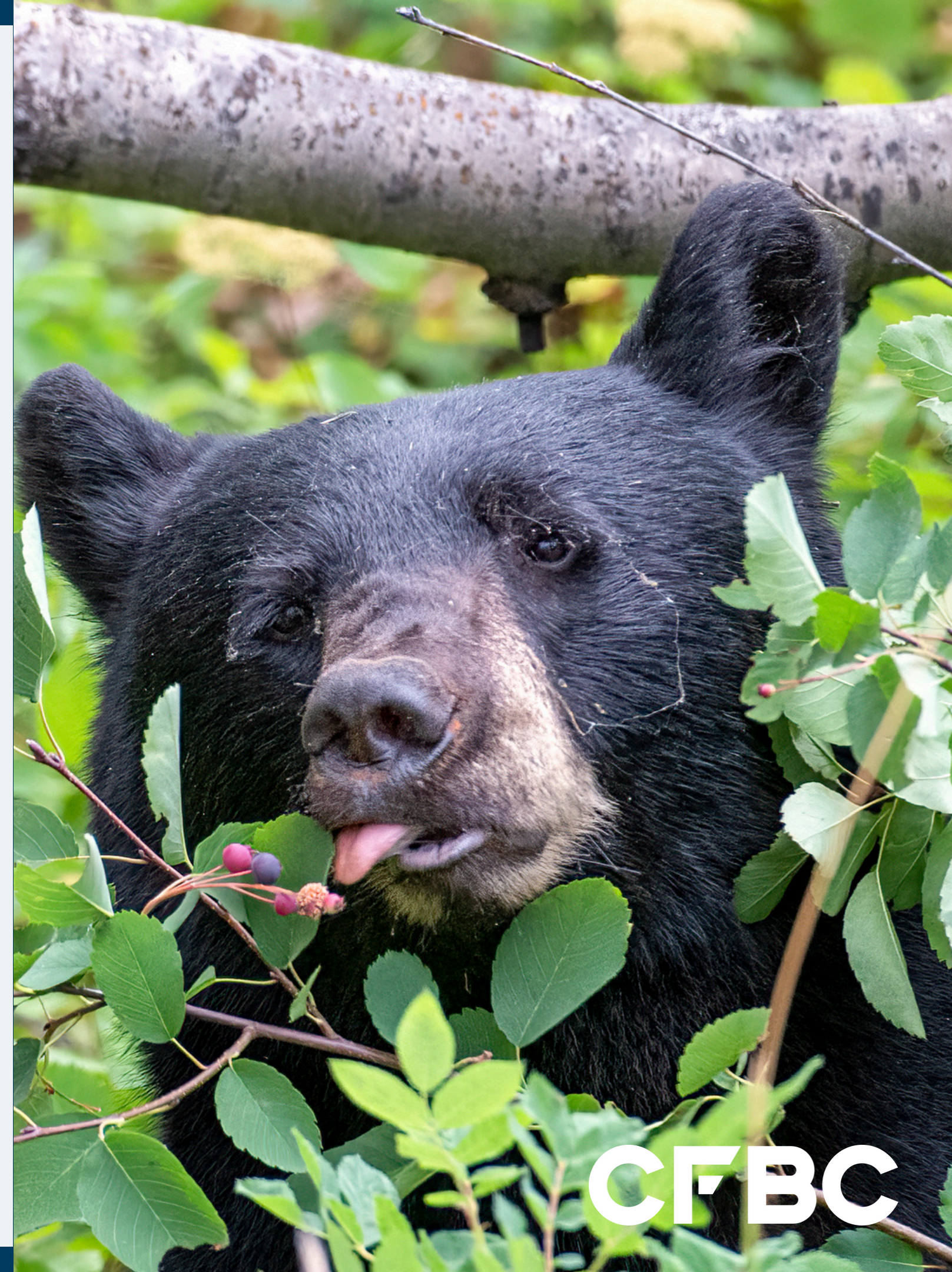


# WILDLIFE MONITORING AND PROTECTION

**Non-Invasive Observation:** Drones allow for the monitoring of wildlife without disturbing their natural habitat.

**Tracking Migration Patterns:** Useful in studying and protecting migratory routes and animal behavior.

**Poaching Prevention:** Drones equipped with cameras can be a powerful tool in deterring and detecting illegal hunting activities



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JUMBO PASS, INVERMERE

# VEGETATION AND LAND USE ANALYSIS

**Ecosystem Health Monitoring:** Assess the health and diversity of vegetation, crucial for maintaining ecological balance.

**Resource Management:** Understanding what resource values are in the territory to plan for sustainable practices.

**Land Use Planning:** Assist in making informed decisions regarding land development and conservation efforts.



# CULTURAL HERITAGE SITE PROTECTION

**Site Surveillance:** Drones can monitor and document the status of cultural heritage sites, aiding in preservation.

**Archaeological Exploration:** Useful in identifying potential archaeological sites without disturbing the land.

**Awareness and Documentation:** Create detailed visual records of sites for educational and historical preservation purposes.







# COMMUNITY ENGAGEMENT & EDUCATION

**Skill Development:** Drone operation and analysis offer valuable skill-building opportunities for community members.

**Youth Involvement:** Engaging the youth in drone technology fosters interest in science, technology, engineering, and mathematics (STEM).

**Public Awareness:** Using drone footage to educate the community about local environmental issues and cultural heritage.



# SHARE YOUR DRONE EXPERIENCE

WHAT ARE YOUR OWN SUCCESSES AND CHALLENGES?

## Overcoming Barriers

What are key barriers for Indigenous learners in tech and how can we address them?

## Supportive Framework

What support systems are most effective for Indigenous tech learners? How can we ensure accessibility?

## Training Methods

What essential elements should be implemented for practical, hands-on learning?

## Access to Technology

How do we ensure equal access, particularly in remote communities?





# GUEST SPEAKER

DARCY HUNT

Founder & CEO of the first 100% Indigenous Remotely Piloted Aircraft Systems (RPAS) Operations/Training/Sales Organization.

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# EMPOWERING INDIGENOUS COMMUNITIES

- Dedicated to nurturing leadership and innovation in RPAS among Indigenous youth.
- Has successfully trained hundreds of Indigenous pilots in Basic and Advances RPAS Operations.
- Key advocate for the integration of Indigenous communities in leading the drone industry.



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# SHAPING THE FUTURE

## INDIGENOUS LEADERSHIP IN RPAS

- ▶ Provides comprehensive training in critical RPAS applications like LIDAR Mapping, Inspections, and Search & Rescue.
- ▶ Committed to setting high standards in RPAS training and services as a model for Indigenous students and communities.
- ▶ Continuously inspires and unites Indigenous communities to be at the forefront of the drone industry

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# ACCREDITATION AND CERTIFICATION TO FLY DRONES

- ▶▶ Standard Certification
- ▶▶ Advanced Certification
- ▶▶ One Complex Pilot Certification



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# APPLYING WHAT WE KNOW

## HARMONIZING TRADITION WITH TECHNOLOGY

### Respect for Tradition

Integration of traditional Indigenous knowledge with contemporary technological advancements.

Recognizing that both traditional wisdom and modern technology offer unique and valuable insights, and understanding how to create a complimentary relationship between the two.



# HARMONIZING TRADITION WITH TECHNOLOGY

Treaty 7 Project:  
Siksika Nation  
Students Merge  
Tradition with Tech in  
Drone-Based River  
Mapping, Narrated by  
Elders in Blackfoot.





# THE POWER OF MODERN TECHNOLOGY

Modern technology, particularly advancements like drone technology, artificial intelligence, and digital tools, offers endless possibilities.

These technologies can aid in areas such as:

- Environmental Monitoring
- Cultural Site Mapping
- Resource Management
- Educational Outreach







# SUPPORTING TRADITIONAL PRACTICES THROUGH INNOVATION

- ▶ Language
- ▶ Underwater drones to monitor wildlife
- ▶ Sacred places such as wildlife migration and medicinal plant collection



# STRENGTHENING COMMUNITIES AND PRESERVING CULTURE

By harmonizing tradition with technology, Indigenous communities can strengthen their cultural practices, protect their lands and resources, and ensure the passing of their knowledge to future generations.

Technology becomes a tool that empowers communities, preserving their heritage while also embracing the benefits of modern innovation.



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# SHARE YOUR DRONE EXPERIENCE

## FUTURE THOUGHTS FOR COMMUNITY GROWTH

### Career Pathways

What tech career pathways align with the learners' interests and how do we connect training to these opportunities?

### Incorporating Insights

How do we effectively incorporate feedback from learners to continuously improve tech training programs?

### Community Engagement

What role can Indigenous communities and leaders play in program development and implementation?





# ENHANCING CAREER OPPORTUNITIES

## DRONE USE ACROSS VARIOUS SECTORS

- Pilot License
- Thermal Camera Technology
- Mapping
- Green Technology
- Knowledge of government regulations for environment and air space



# ONGOING EVOLUTION OF THE DRONE SECTOR

- ▶▶ Complex One Pilot Certification
- ▶▶ Autonomism New Docks
- ▶▶ Drone Shows (SWARMS)



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# FUTURE MEETINGS

Fridays 10am-11:30m

~~DEC 8, 2023~~

~~Welcome back  
and drone  
overview.~~

**JAN 19, 2024**

**Applying our  
knowledge.**

FEB 9, 2024

Industry  
opportunities.

MARCH 8, 2024

Learning Matrix

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*Thank!  
You!*

[www.2esn.ca](http://www.2esn.ca)

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