



Supplementary Information

Presentation from the Canadian Nuclear Laboratories

In the Matter of the

Canadian Nuclear Laboratories

Application to renew its waste nuclear
substance licence for the Port Hope Project

Commission Public Hearing

November 22, 2022

Renseignements supplémentaires

Présentation des Laboratoires Nucléaires Canadiens

À l'égard de

Laboratoires Nucléaires Canadiens

Demande concernant le renouvellement du
permis de déchets de substances nucléaires
pour le projet de Port Hope

Audience publique de la Commission

22 novembre 2022

Port Hope Area Initiative

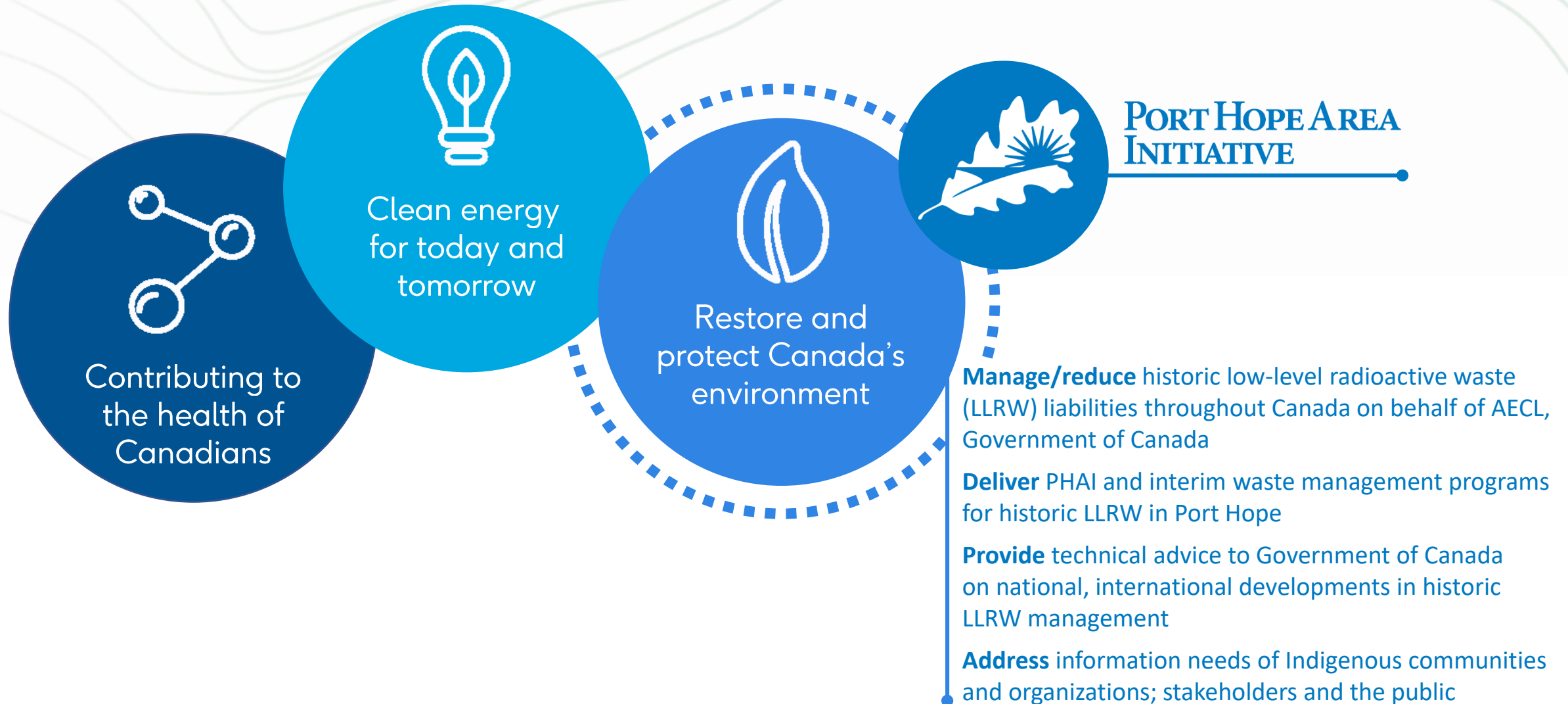
CNL Licence Renewal Hearing
November 22, 2022



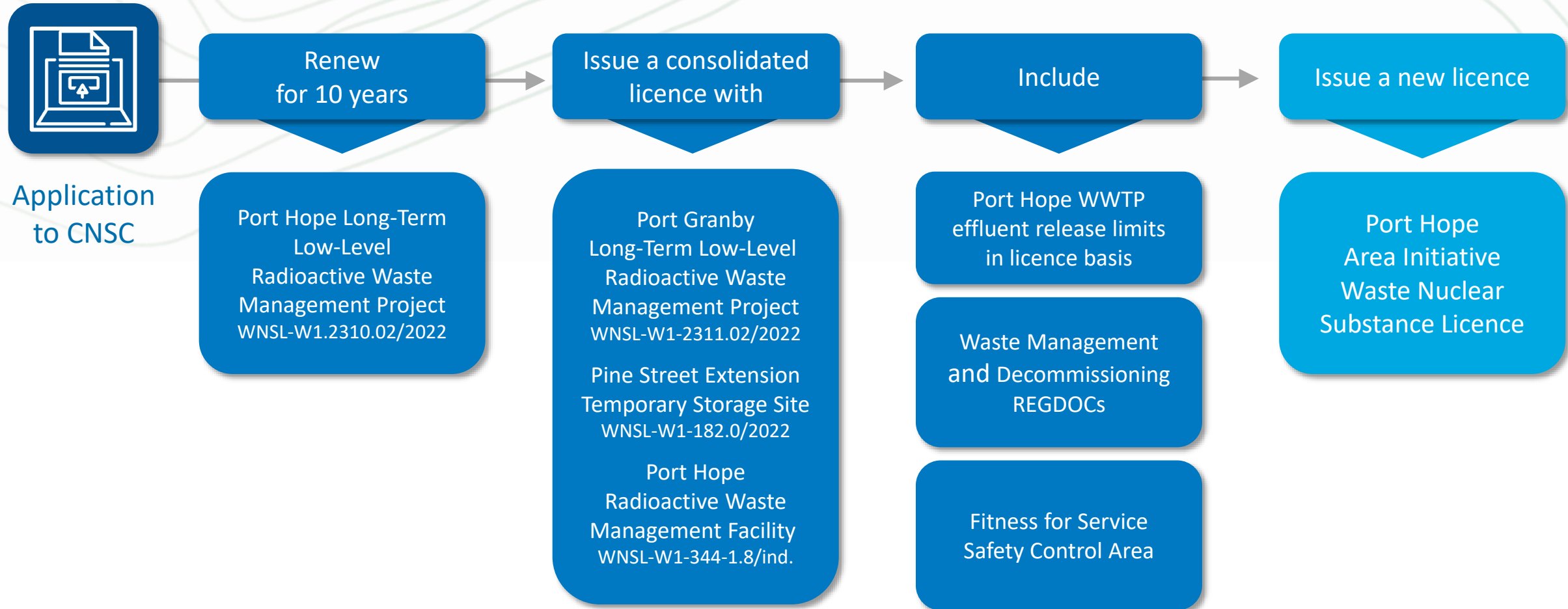


Land Acknowledgement

Canadian Nuclear Laboratories – Strategic Priorities



CNL Application – Licence Renewal and Consolidation



Overview

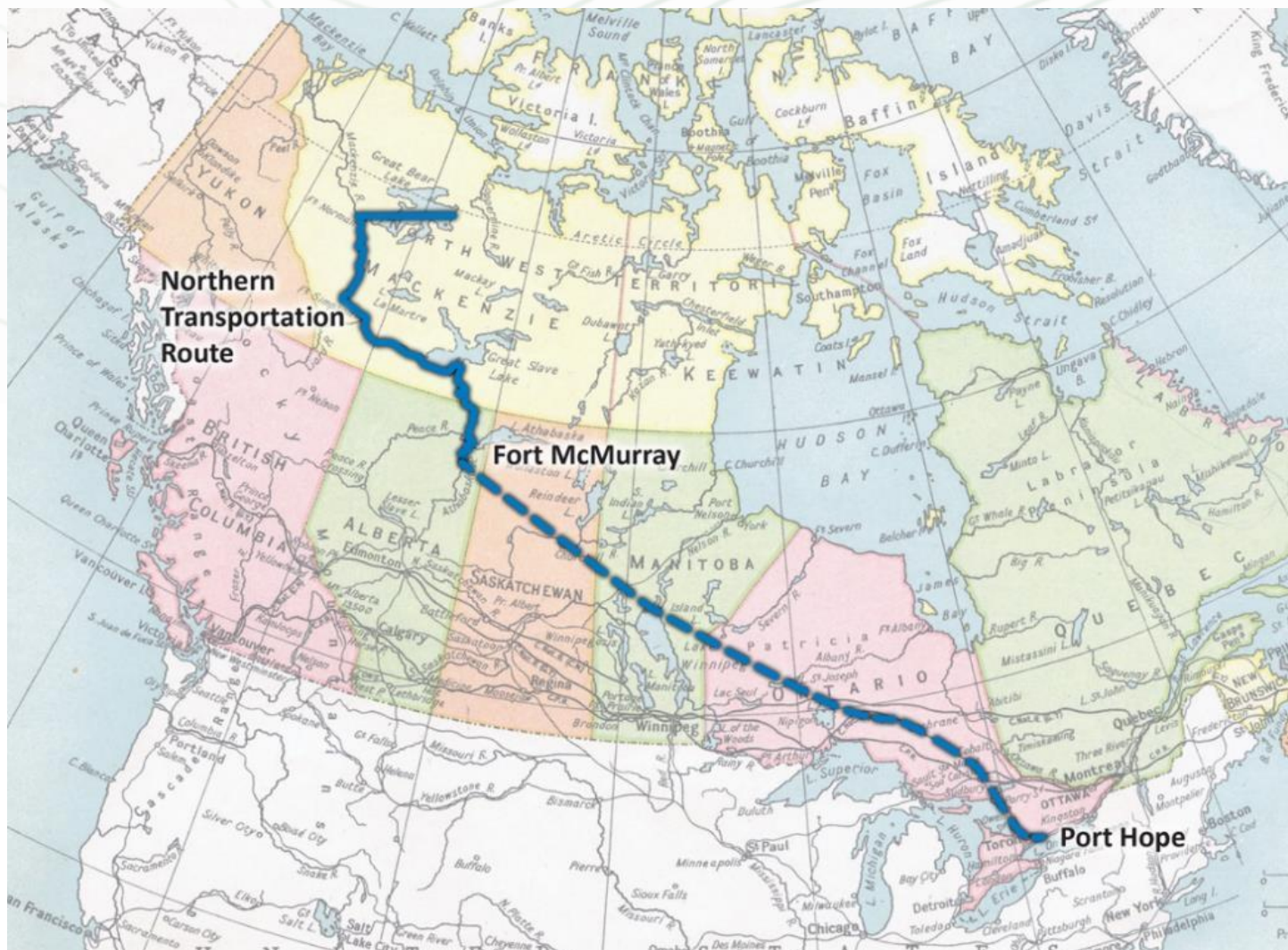
- Evolution of the PHAI
- Engagement with Indigenous Communities and Organizations
- Engagement with the Public
- Project Performance – 10 years of the PHAI
- Project Success
- Environmental Protection
- The Next 10 Years – PHAI to 2033

Presenters

- Kristan Schruder, Acting VP, Stewardship & Renewal Group
- Mark Hughey, General Manager, Historic Waste Program



Community-Requested Project



Mid-1970s LLRW
problem identified



1976-82 Initial Cleanup
100,000 m³ to Chalk River



1986-96 Independent Siting Task Force
province-wide search unsuccessful



1997-99 Community Solutions
brought to federal government



2001 Legal Agreement
Canada, Clarington,
Town of Port Hope, Hope Township

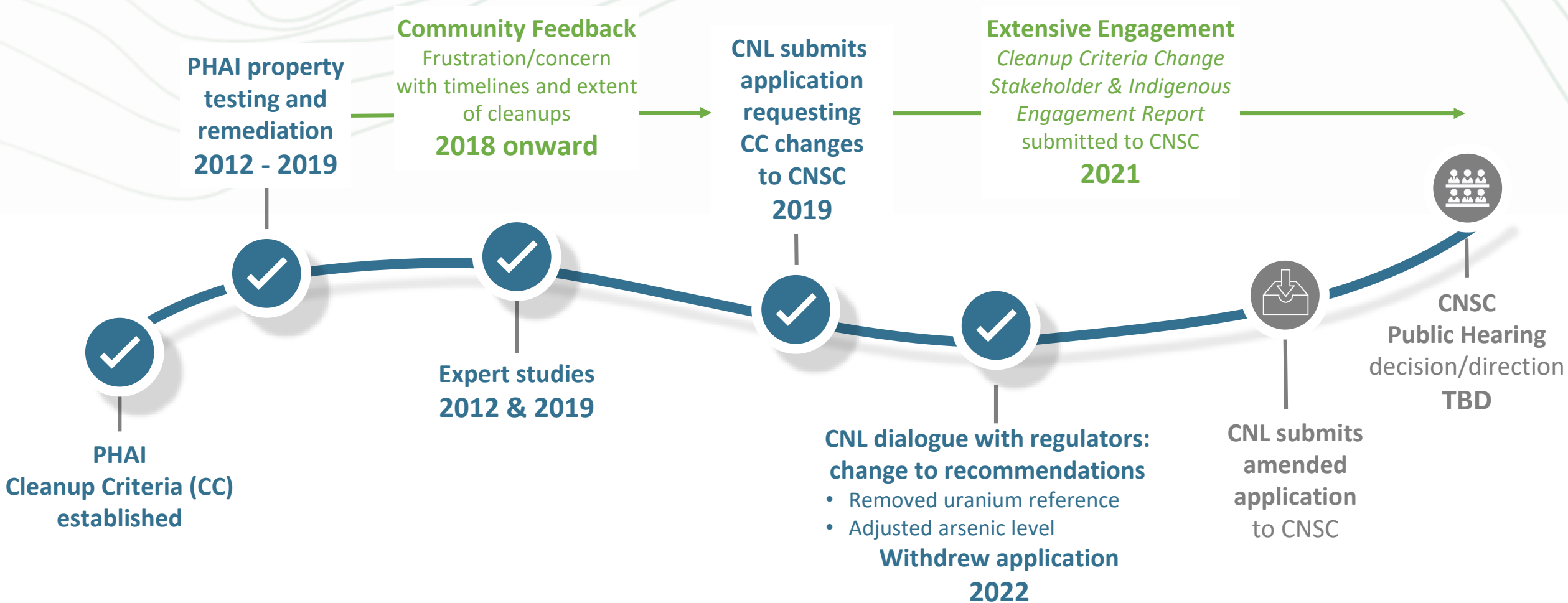


CNL Management System

- Integrated set of policies, expectations, standards, procedures and responsibilities
- Aligns with required Safety and Control Areas in *Licence Condition Handbook*
- Demonstrates commitment to high level of quality and excellence in managing all CNL activities
- Prioritizes safety and fosters continual improvement
- Evolves to meet changes to regulatory requirements



PHAI Cleanup Criteria Change Application Update



Port Hope Area Initiative

One Initiative, Two Projects



Port Hope Area Initiative- Video



[Watch on YouTube](#)



Engagement with Indigenous Communities & Organizations

Engagement with Indigenous Communities & Organizations

Commitment

- **Recognize** Constitutional rights, Indigenous perspectives and interests
- **Advance** reconciliation through meaningful actions
- **Continue** to build relationships with Indigenous communities with ongoing learning about values/interests
- **Evolve** inclusion and participation
- **Focus** project planning on environmental protection, sustainability, in consideration of Indigenous knowledge systems
- **Enhance** communications, plans, reporting with balanced language, acknowledging Indigenous rights/perspectives

Engagement

- Engagement meetings, site tours
- Information sharing/updates
- Newsletters, event invitations, disclosures
- Observation/demonstrations
- Archaeological protocol



Indigenous Communities and Organizations

Indigenous Communities with Treaty rights

- Alderville First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Mississaugas of Scugog Island First Nation
- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation

Indigenous Communities with Interests

- Métis Nation of Ontario, Regions 6, 8
- Mohawks of the Bay of Quinte

Indigenous Organizations

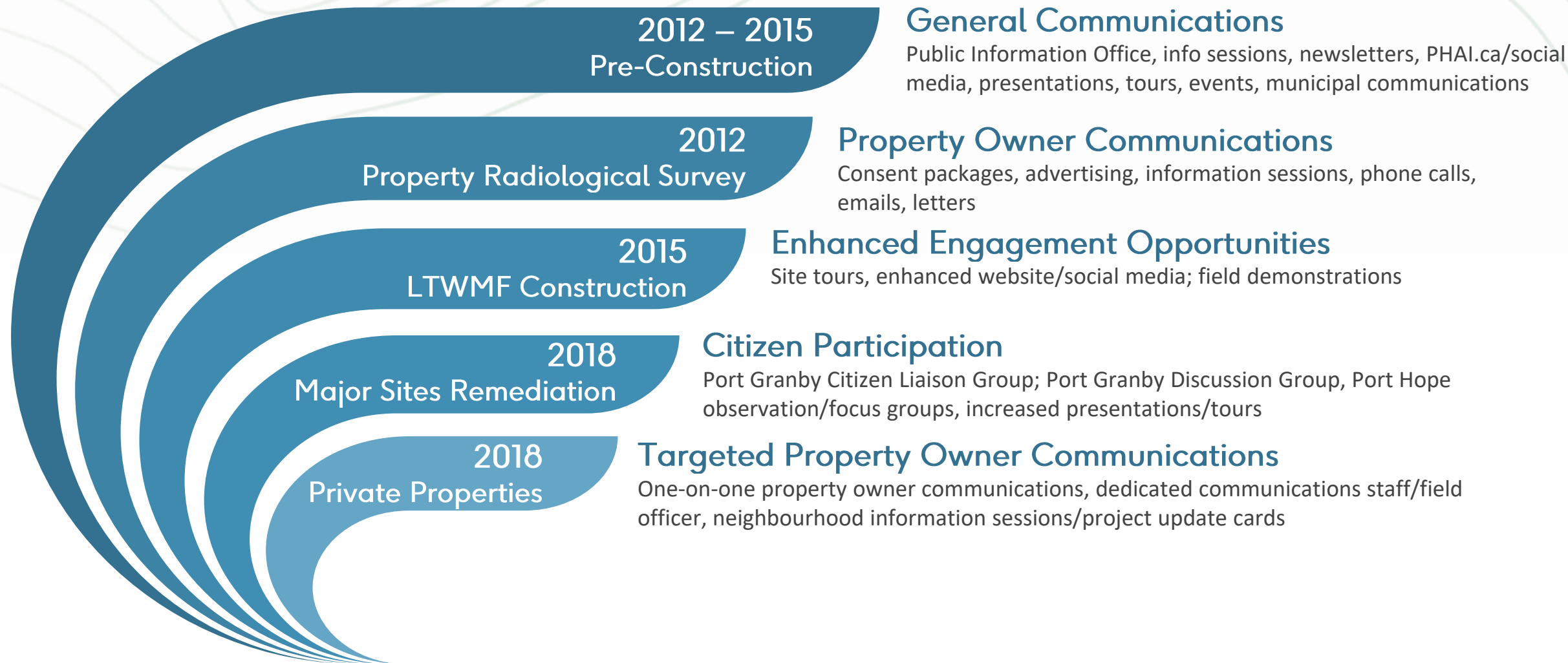
- Anishinabek Nation
- Métis Nation of Ontario





Engagement with the Public

PHAI Public Information Program Evolution



10 Years of PHAI Public Engagement – 2012 to 2022



- Presentations
- Site tours
- Special events



- Key stakeholder relations
- Communications products
- Community notifications



- Property owner meetings
- Field visits



2,016

**Public Information
Office visits**

22,836

**Phone calls,
emails, letters**



257,827

**Website
visits**

813,764

**Page
views**

1,739

**Social
media posts**

Implementing the PHAI



PHASE 1

PLANNING & PREPARATION

- Environmental Assessments
- CNSC licensing process to meet requirements of Nuclear Safety and Control Act

PHASE 2

CONSTRUCTION REMEDiation, CLOSURE

- CNSC licences issued
- Facility construction begins
- Property Radiological Survey
- Start of private property, road allowance remedial designs
- Start of waste remediation
- Port Granby remediation complete

PHASE 3

LONG-TERM MONITORING

- Monitoring, evaluation of site safety/performance
- Port Granby Project begins transition to Phase 3 in stages
- Port Granby site restoration, demobilization to be completed

Project Milestones

2012



Port Granby waste water treatment plant construction



Port Hope waste water treatment plant construction



Port Hope property survey launched

2016



Port Granby LTWMF construction



Port Granby waste placement begins

2017



Port Hope LTWMF construction



Port Hope waste placement begins



Port Hope private properties remedial designs begin

2018



Centre Pier TSS
REMOVED



Pine St. North TSS
REMOVED



Peter Street Mound
REMEDIATED/RESTORED



Port Hope private properties work begins - work continues

2019



Sewage Treatment Plant TSS
REMOVED, RESTORED



Sewage Treatment Plant Storage Cell
REMOVED



2020



Port Granby waste removal **COMPLETE**

2021



Waterworks East
REMEDIATED, RESTORED



95 Mill Street South
REMEDIATED, RESTORED



Port Granby mound
CAPPED, CLOSED



2022



Pine Street North Consolidation Site
REMEDIATED, RESTORED



Strachan Street Consolidation Site
REMEDIATED, RESTORED

Additional PHAI Licences

- Waste temporarily stored at sites
- Removed, placed into safe storage at Port Hope Long-Term Waste Management Facility
- Additional remediation may be required on sites; once complete, sites will be removed from licence





Port Granby Project

Port Granby Engineered Storage Mound Complete – October 2021



Port Granby Waste Removal Complete – November 2020

Remediation of ~1.3 million tonnes low-level radioactive waste



Port Granby Phase 3 - Long-Term Monitoring



Waste Water
Treatment

- East Gorge groundwater collection
- Storage mound leachate collection
- Treatment plant output to licensed, offsite storage



LTWMF
Monitoring

- Site remains fenced
- Mound surface, internal sensors
- Grounds monitored, maintained



Environmental
Monitoring

- Air, water, groundwater, soil, plant and wildlife monitoring continues



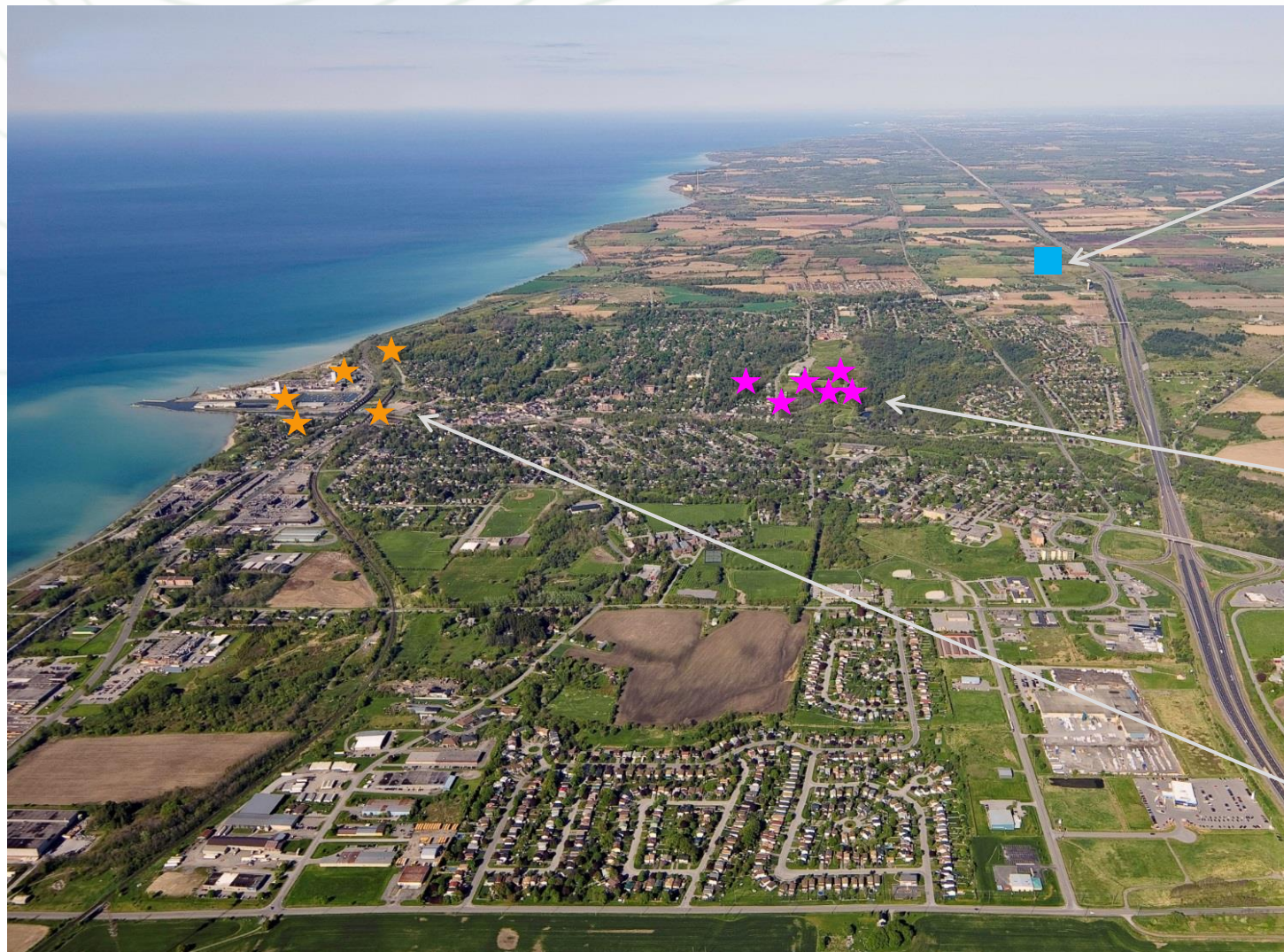
Continued
Safety Oversight

- Plans in place to ensure any event is properly managed
- Minimize risk to people and environment



Port Hope Project

Port Hope Project Major Sites

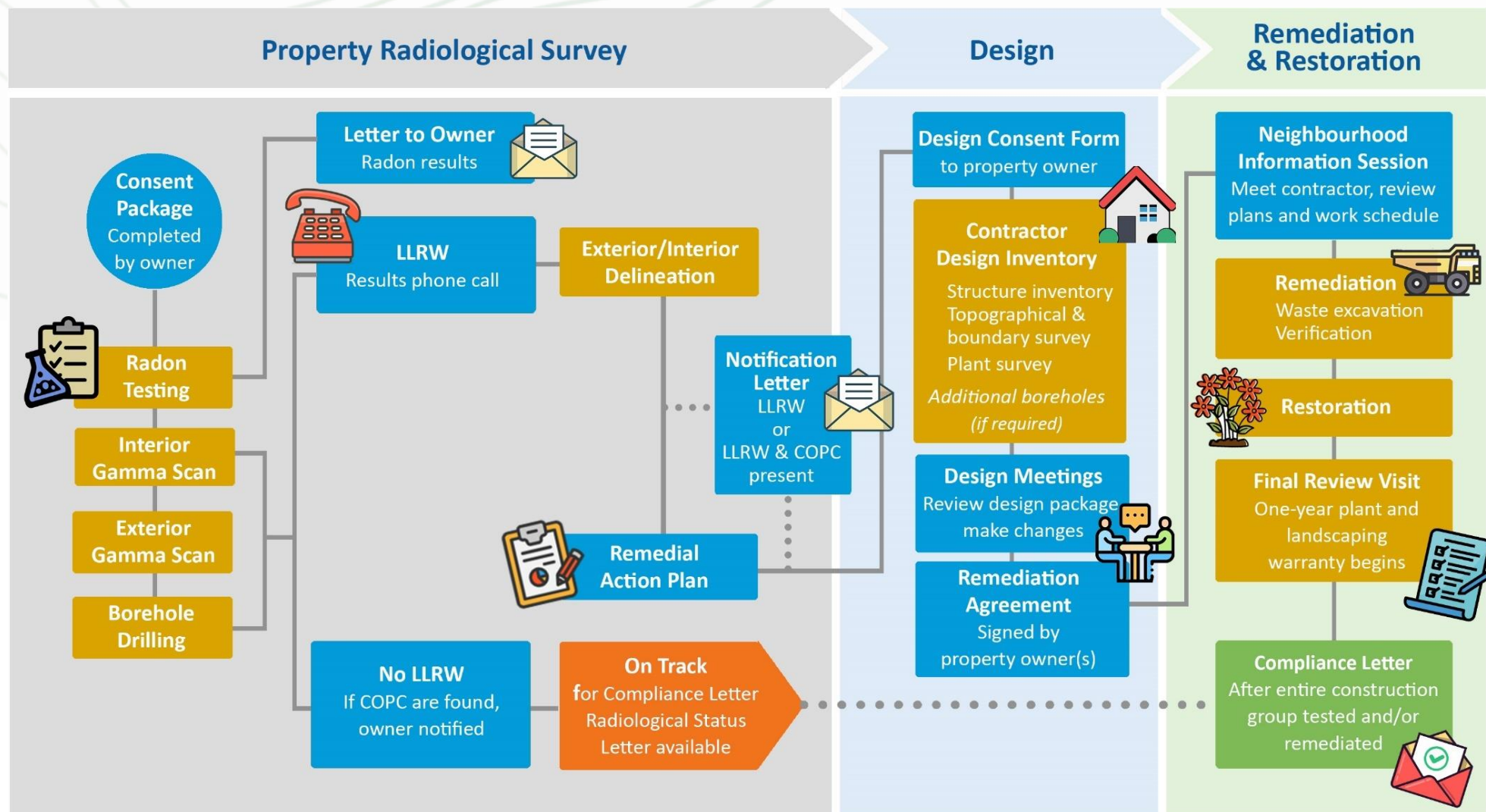


Port Hope Waterfront Sites

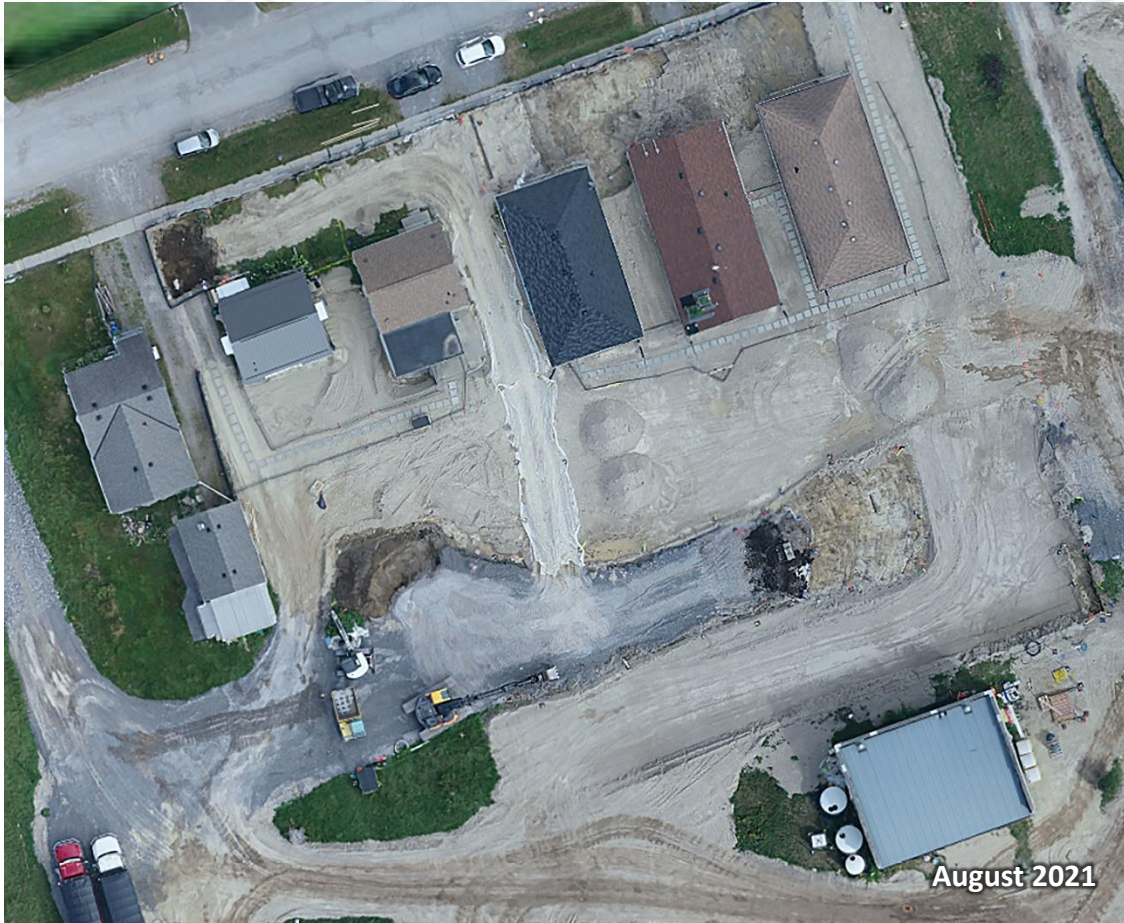


- Remediation complete
- Waste removed
- Remediation underway

Private Properties Testing and Remediation Process



Private Property Remediation



Private Properties– Remediation & Restoration



Private Property Remediation



Unstable building foundation



Basement remediation



Excavation

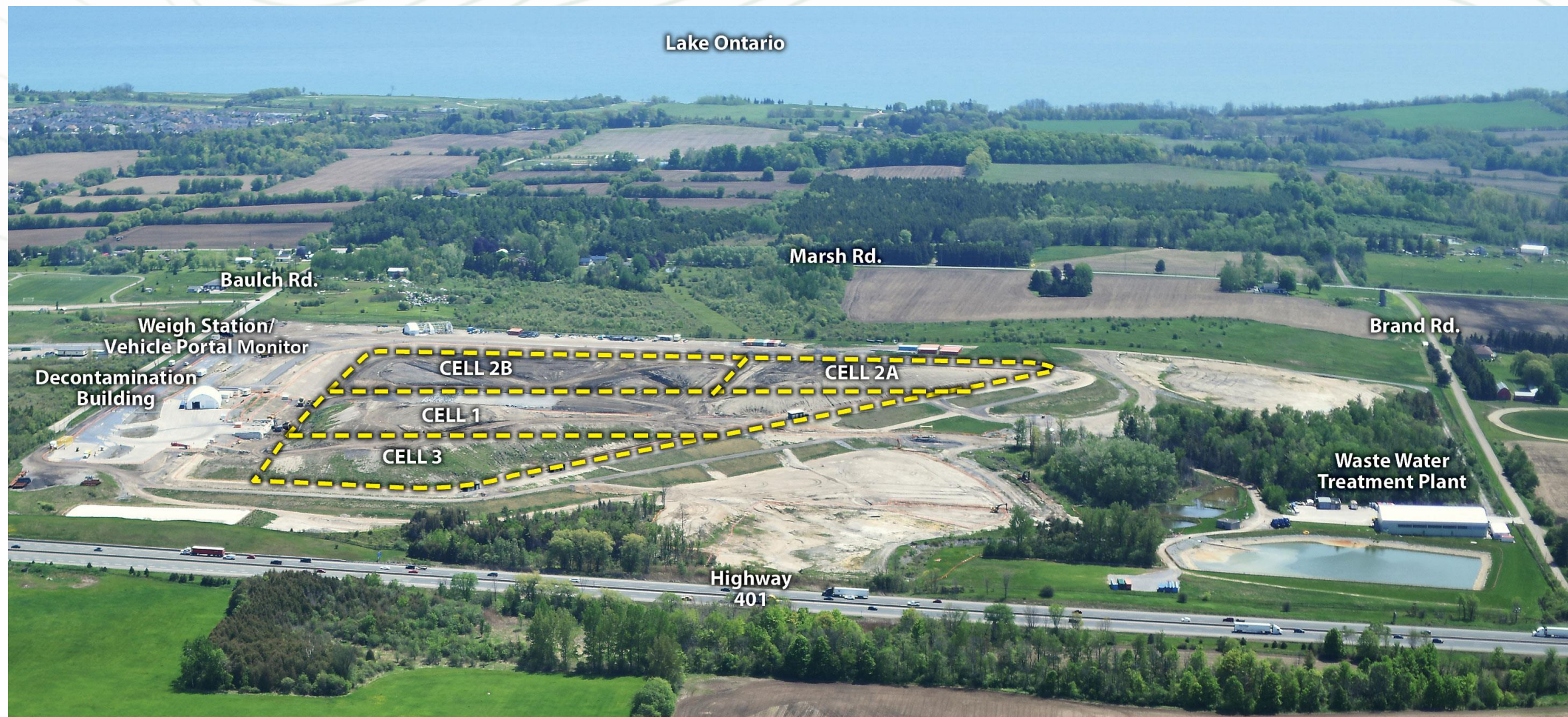


Contiguous Lots



Deep Excavation

Port Hope Long-Term Waste Management Facility



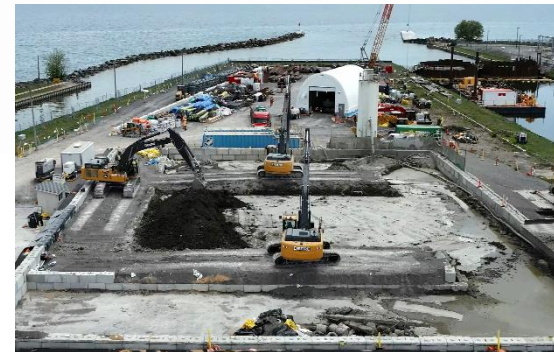
Port Hope Project Long-Term Waste Management Facility

~1.4 million tonnes historic low-level radioactive waste safely placed

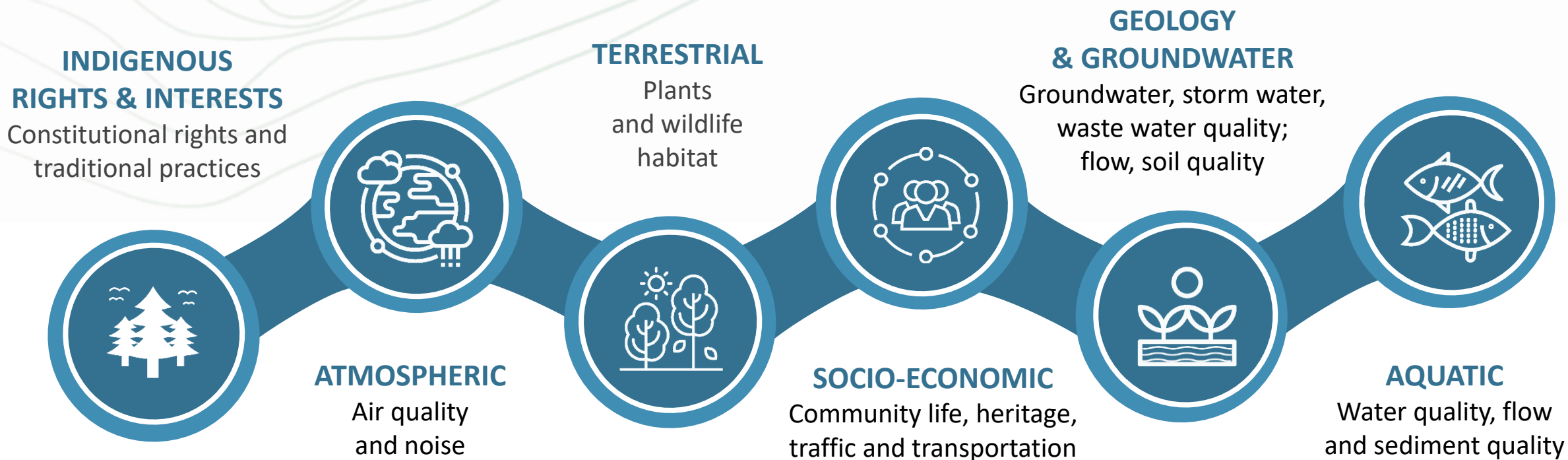


Project Performance

- Safety and protection of people and the environment remain top priority
- Comprehensive monitoring and mitigation measures to minimize adverse environmental impact
- Solid management system supports PHAI implementation in compliance with regulatory and industry best practices
- CNL continues to successfully manage health and safety obligations and build a culture of excellence in safety
- CNL continues to meet all licence and reporting requirements



Environmental Monitoring

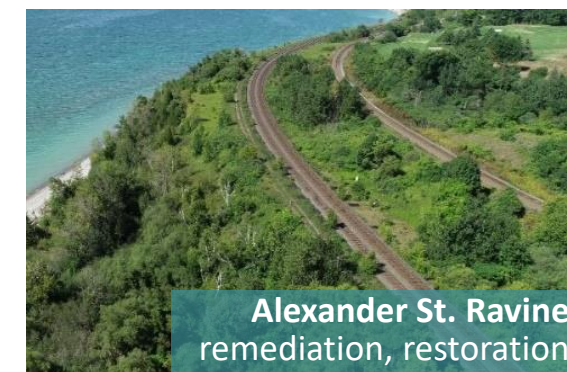


Continuing the Port Hope Project

WORK UNDERWAY



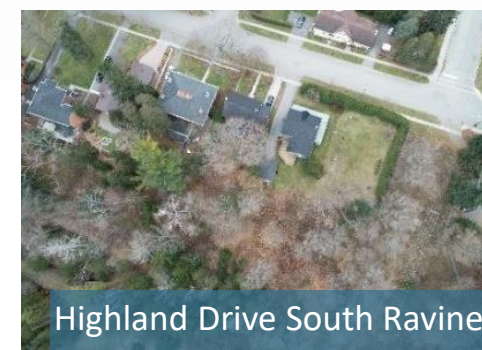
UPCOMING WORK



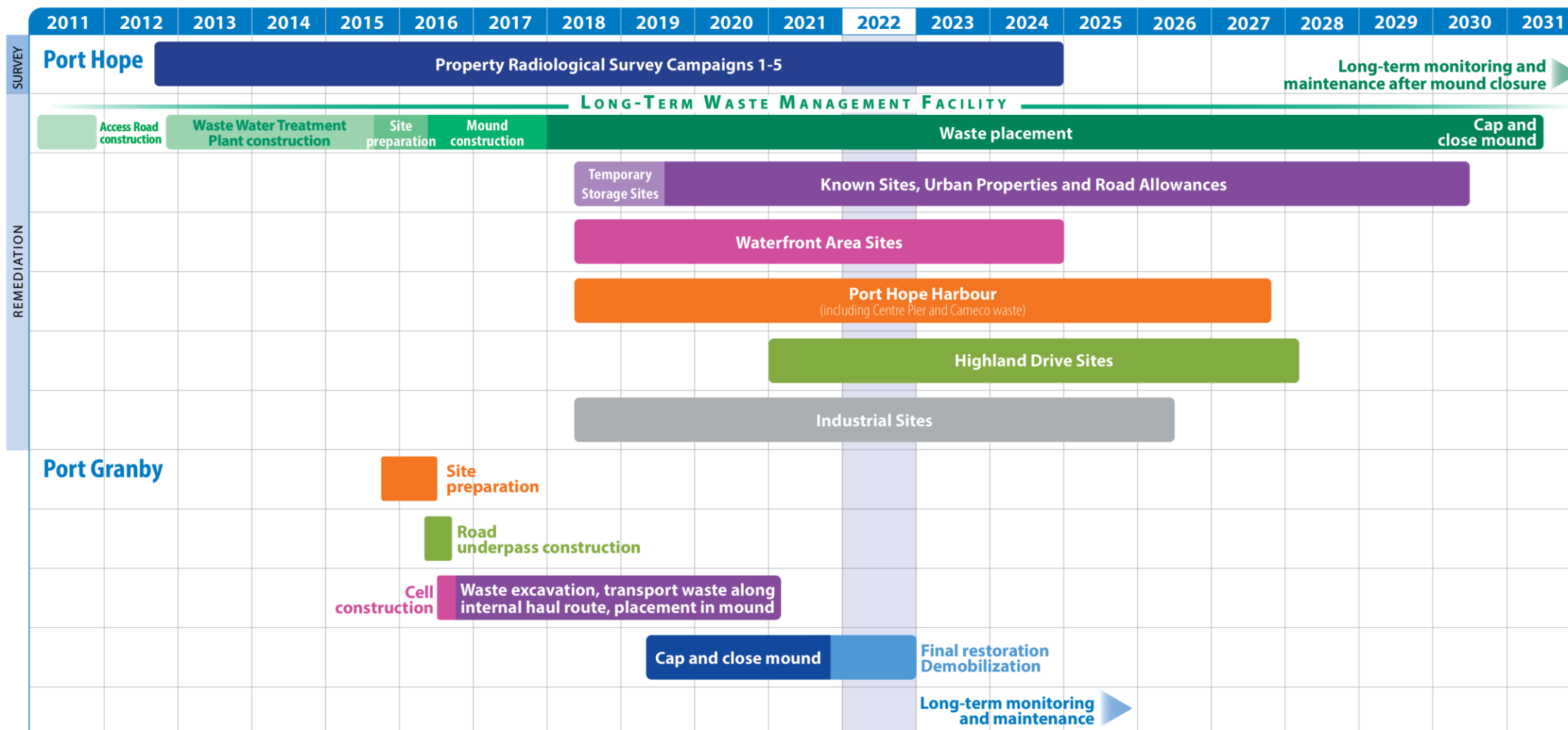
Highland Drive Area Sites



UPCOMING WORK



Continuing the Port Hope Project – The Next 10 Years



CNL Corrective Action Program

Incorporates into work:

- Lessons learned
- Trend analysis on safety incidents/reportable events

Allows for:

- Examination of causes
- Establishment of corrective actions and
- Evaluation for effectiveness



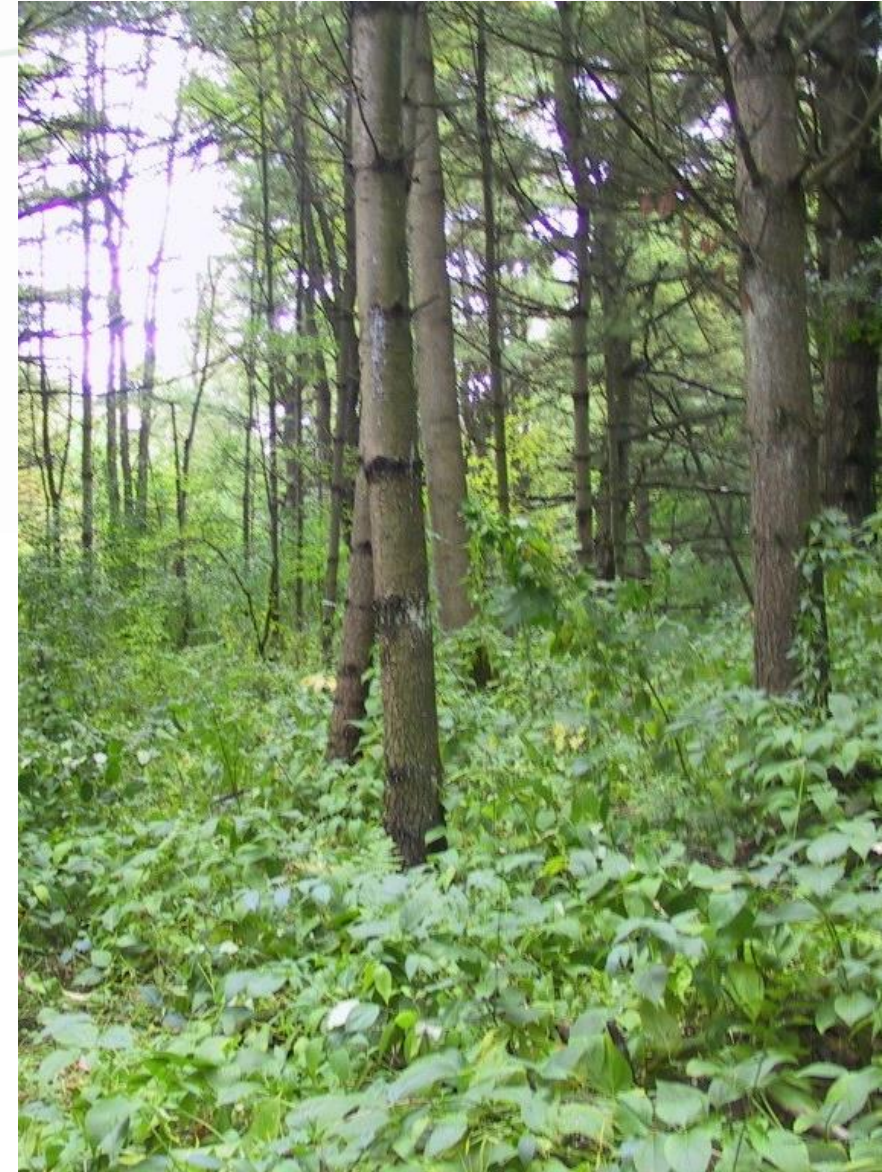
Responsive Management

- Port Granby storage mound dimensions adjusted to increase slope grades, accommodate additional waste volume
- Infrastructure upgrades - 52,000 m³ temporary water storage, enhanced residuals management at Port Granby site
- Contingency pond construction expedited to manage surface-water risk during Port Hope storage mound construction
- Master construction contracts developed for Port Hope Project work to maximize efficiencies



Our Commitments

- **Continue** commitment to truth and reconciliation with Indigenous communities
- **Complete** PHAI projects safely and compliantly:
 - Protection of people and the environment remain top priority
 - Continue to meet all licence and reporting requirements
- **Maintain** solid management system to support PHAI activities in compliance with regulatory and industry best practices
- **Manage** health and safety obligations and work on building a culture of excellence in safety
- **Work** towards a cleaner environment - restoring land for future generations





Miigwetch. Thank you. Merci



info@phai.ca



PH.Area.Initiative



@PHAI_PORT_HOPE



PHAI.ca



Phai_porthope



CNL's Port Hope Area Initiative

