

Contaminated Sites on Reserve (CSOR) Program Winnipeg In-Person Engagement Session

April 12, 2023



About the Contaminated Sites On Reserve (CSOR) Program

- The priorities of the Contaminated Sites On-Reserve Program are:
 - To reduce and eliminate, where possible, environmental, health and safety risks posed by contaminated sites;
 - To ensure that First Nation lands are available for economic *and* community development and traditional use/cultural continuity.
- ***The CSOR Program receives most of its funding from the Federal Contaminated Sites Action Plan (FCSAP) Program.***
- As a custodian under the FCSAP Program, ISC is required to contribute through a cost share component (20% assessment, 15% remediation).



CSOR Program Continued

- While CSOR is administered out of ISC HQ, ***the Program is implemented by First Nations and Regional ISC staff.***
- Projects are delivered jointly with First Nations and Tribal Councils, providing economic opportunities and opportunities for increased capacity for environmental management on-reserve.
- Project implementation can be funded in one of two ways:
 - ***Grants and Contributions funding (First Nation led), or;***
 - Operations and Maintenance funding (First Nation supported)



What is a Contaminated Site?

- **A site at which substances occur at concentrations:**
 - above background levels and pose, or are likely to pose, an immediate or long-term hazard to human health or the environment, or;
 - exceeding levels specified in policies and regulations;



Sources of Contamination on Reserve

51% Fuel Storage Tanks

40% Landfills/Solid Waste

9% Other Sources/Commercial

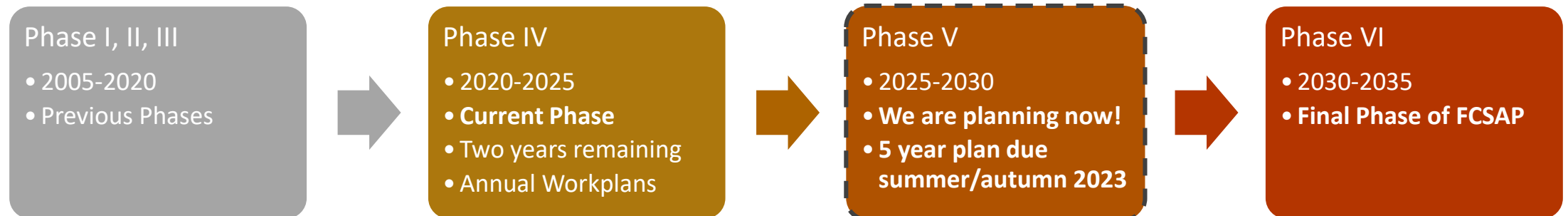
I think we might have a contaminated site!

- Many sites were identified through Environmental Issues Inventory (mid-1990's), though sites have been added over time based on:
 - Additional sites identified by First Nations; through First Nations Land Management Environmental Site Assessments; environmental spills/incidents.
- ***ISC relies on First Nations to identify potential suspected contaminated sites.***
- Once identified, ISC staff will work directly with the First Nation to determine if a site has the potential to be a contaminated site.
- If the site is suspected to be contaminated, the site will be listed in the [Federal Contaminated Sites Inventory](#) as ***Suspected***.
- ISC follows a long standing, pre-determined *10 step process* to assess and if needed, remediate (clean up) a site.



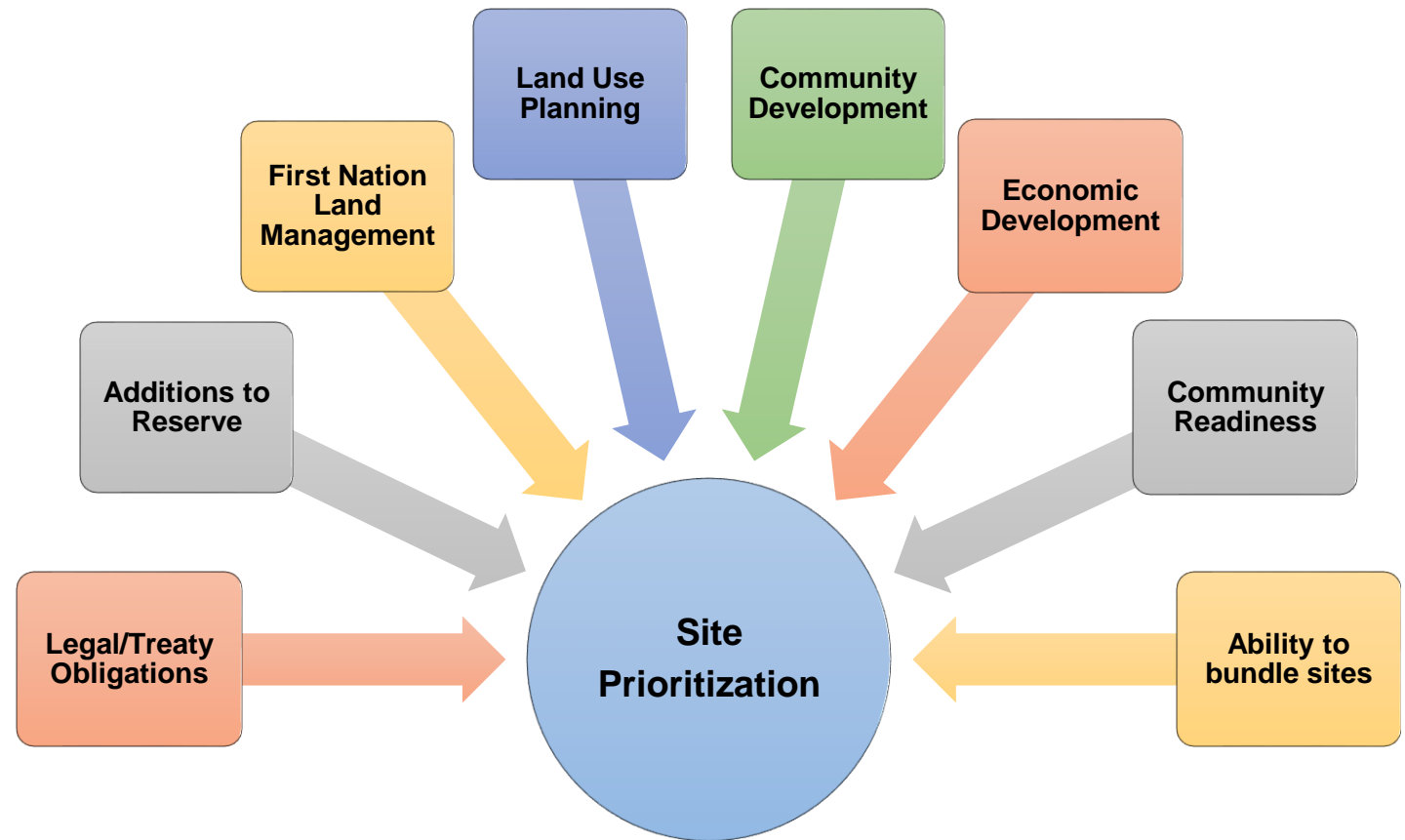
What is the planning process like?

- **Projects on the workplan are driven by First Nations.** ISC relies on First Nations to indicate what projects on-reserve are priorities.
- Projects are prioritized for assessment/remediation based on available funding, risks to human health and the environment, economic and community development plans, capacity, and other factors the First Nation determines.
- ISC follows an annual workplan/funding cycle that's directed by an overarching 5-year plan. FCSAP oversees this.
 - Workplans are updated annually, allowing for priority projects to be included.



How are sites prioritized for remediation?

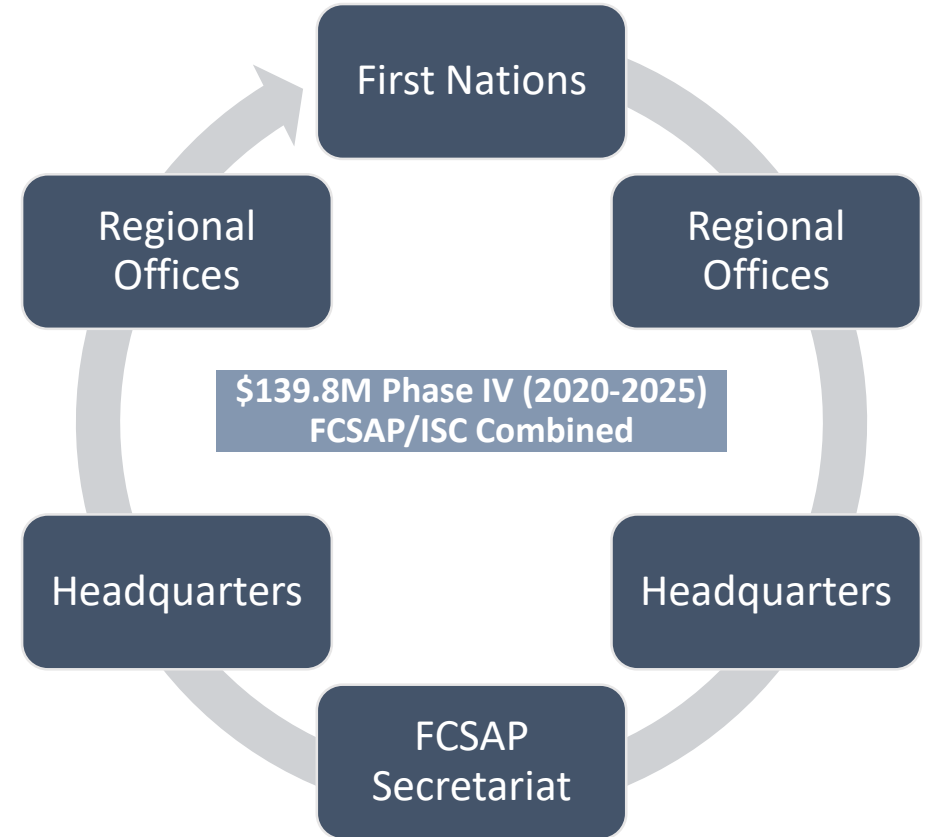
- Prioritizing sites for remediation is primarily influenced by:
 - Risks to human health and the environment;
 - Availability of funding;
 - Other factors First Nations determine.
- **Sites must be assessed and classified in order to be eligible for remediation funding.**



Limited funding for assessment has had a major impact on which projects are identified for remediation.

Funding approval/distribution

- After receiving input from First Nations, ISC Regional staff submit annual/5-year workplans to ISC HQ for review/ approval.
- Workplans are then submitted to the FCSAP Secretariat for review and approval.
- Once approved, funds are then distributed to the regions to establish ***Contribution Agreements (G&C's) with First Nations*** or contracts (O&M).



BC Region - Contaminated Sites Overview

- 1040 open sites in the Integrated Environmental Management System.
- Limited assessment funding available under FCSAP and CSOR.
- Assessments primarily funded through the First Nations Land Management Initiative.
 - 52 Operational, 15 Developmental
- Coordination with the First Nations Solid Waste Management Initiative to provide access for assessment and clean-up.
- Major Sites:
 - Sumas Brick Plant (far right)
 - Kitasoo Reserve-wide Remediation (top right)
 - Snuneymuxw Coal Mine (bottom right)



AB Region - Landfill Remediation and Reclamation

A combination of both FCSAP funding and Solid Waste funding was used to assess, remediate, and reclaim an unauthorized landfill on reserve over the span of 2 years.

JANUARY, 2019 SITE VISIT



AUGUST 18, 2020 FINAL INSPECTION



I Think My Community Has A Contaminated Site On Reserve - What Do I Do ?

Contact ISC's Regional Environment Team:

- We work closely with First Nation partners to determine an action plan to address the site
- We provide funding and project management support
- We provide scientific expertise and navigation assistance through the 10-Step FCSAP process

AB Region - ISC Environment Contacts


Manager	Stacey LeBlanc	Stacey.leblanc@sac-isc.gc.ca (780)-782-8350
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Environmental Review Process	Contaminated Sites	Solid Waste	Forestry and Permits
Lead: Joel Gervais A/Senior Environment Officer Joel.Gervais@sac-isc.gc.ca (780) 782-8350	Lead: Tyler Cox Senior Environment Officer tyler.cox@sac-isc.gc.ca (780) 238-7295	Lead: Fons Schellekens Senior Environment Officer fons.schellekens@sac-isc.gc.ca (780) 495-2802	Lead: Peter Todd Forestry Officer peter.todd@sac-isc.gc.ca (780) 975-3770

SK Region - Illegal Dumpsite App



ISC - SK Region - Illegal Dumpsite

 Indigenous Services Canada Services aux Autochtones Canada

Report Illegal Dumpsites


[Saskatchewan Waste Reduction Council](#)
[Environment and Climate Change Canada - Polluter Pays Principle](#)

Illegal Dumpsite Info ▼

Band Name (Number)*
Enter the band name or number where the dumpsite is located.

Location of Site*
Use the map below to identify the location (point) of the illegal dumpsite.

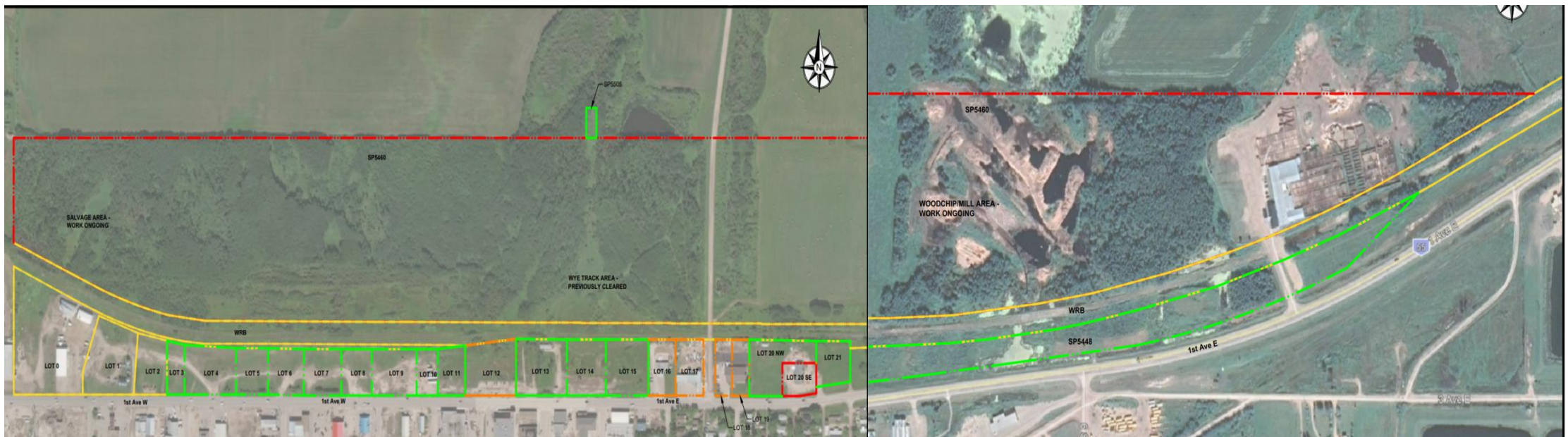
Find address or place



Earthstar Geographics | Esri, HERE, Garmin
No geometry captured yet.

SK Region - Flying Dust Railway Lands

- Flying Dust First Nation
- Meadow Lake, SK
- Lands Reversion
- Environmental Remediation involving “Polluter Pays Principle” (CN)

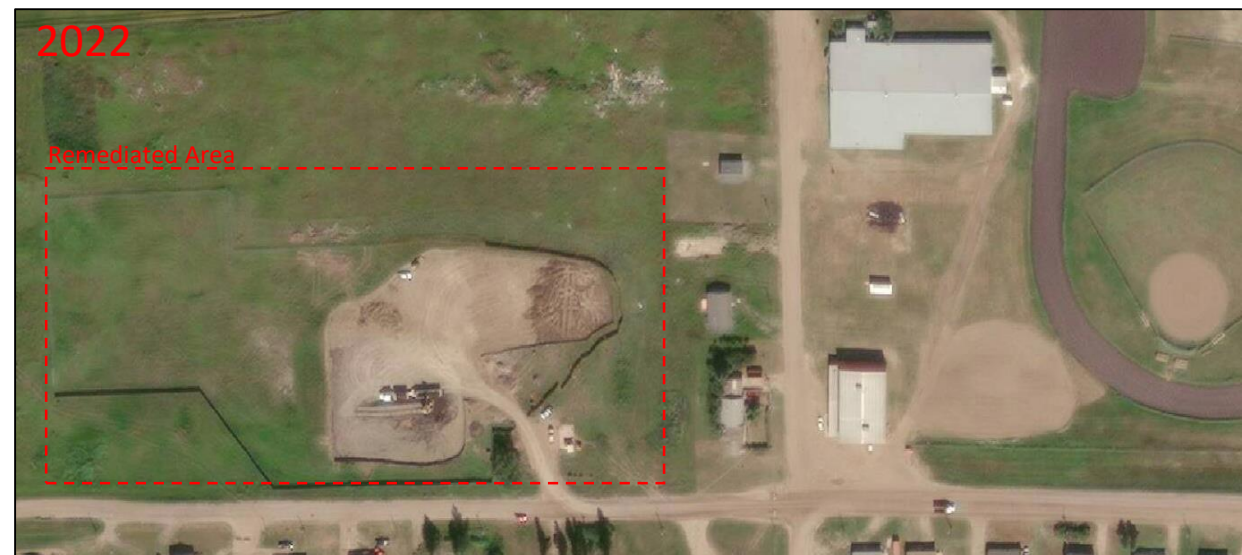


SK Region - Flying Dust Railway Lands



SK Region – Cote Wood Treatment Plant

- COTE Wood Treatment Plant had steps 1 to 10 completed in 1996 with ongoing groundwater monitoring.
- In 2017, the asphalt cover was observed as degrading. Since step 1-4 was known with high levels of arsenic, it didn't need to be repeated.
- In 2018-19 testing and reclassifying the site (Phase 2 & 3 Environmental Site Assessment) transpired as per step 5 and 6.
- In 2020, a Remedial Action Plan with recommendation for a Risk Management Plan was documented as per step 7 in the event that site could not be fully remediated due to naturally occurring high arsenic levels in the area.
- In 2022 the site was able to be fully remediated and will be restored as a recreational site as per steps 8-10.



SK Region – CSOR Contact Information

Contaminated Sites on Reserve in Saskatchewan

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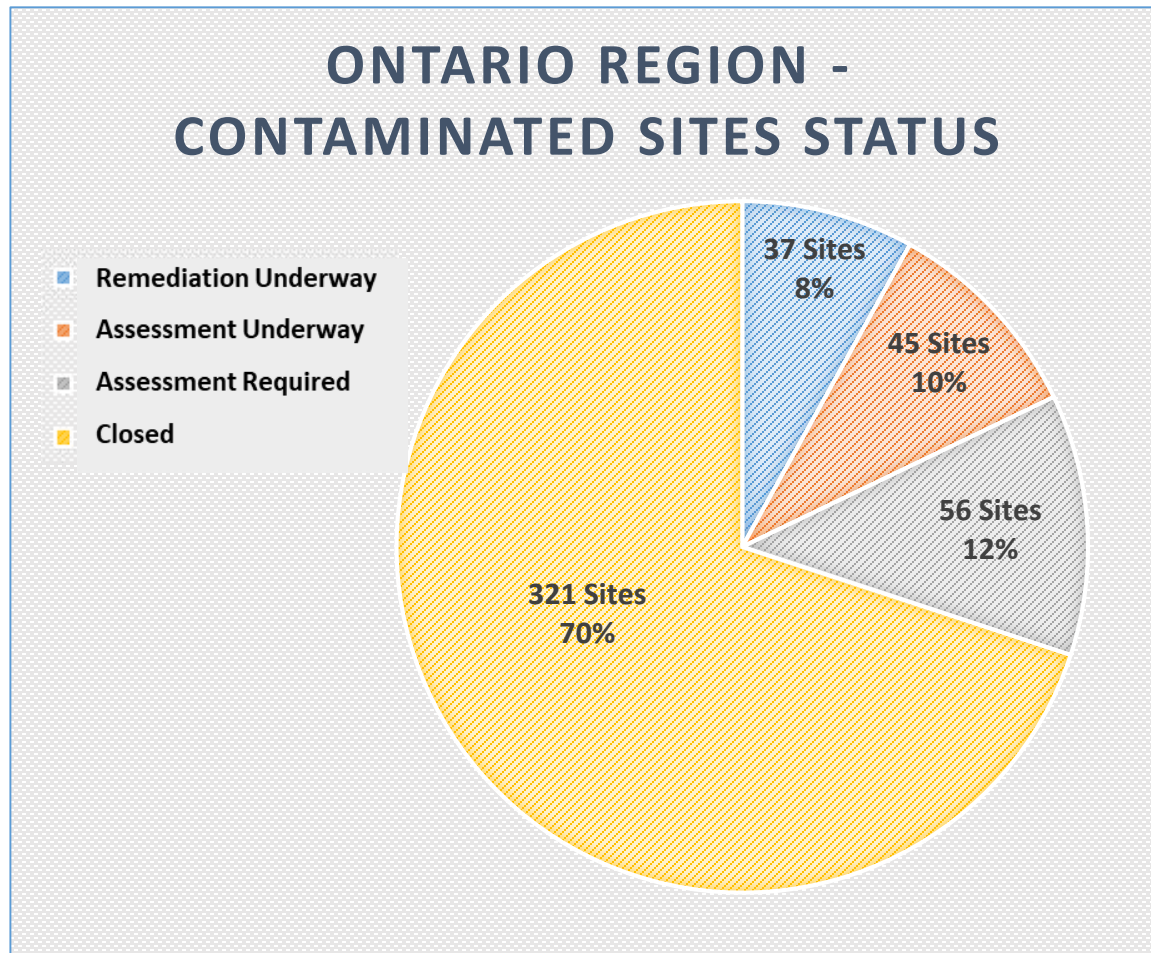
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Dylan Deck
Environmental Officer
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Ontario Region - FCSAP Project Delivery

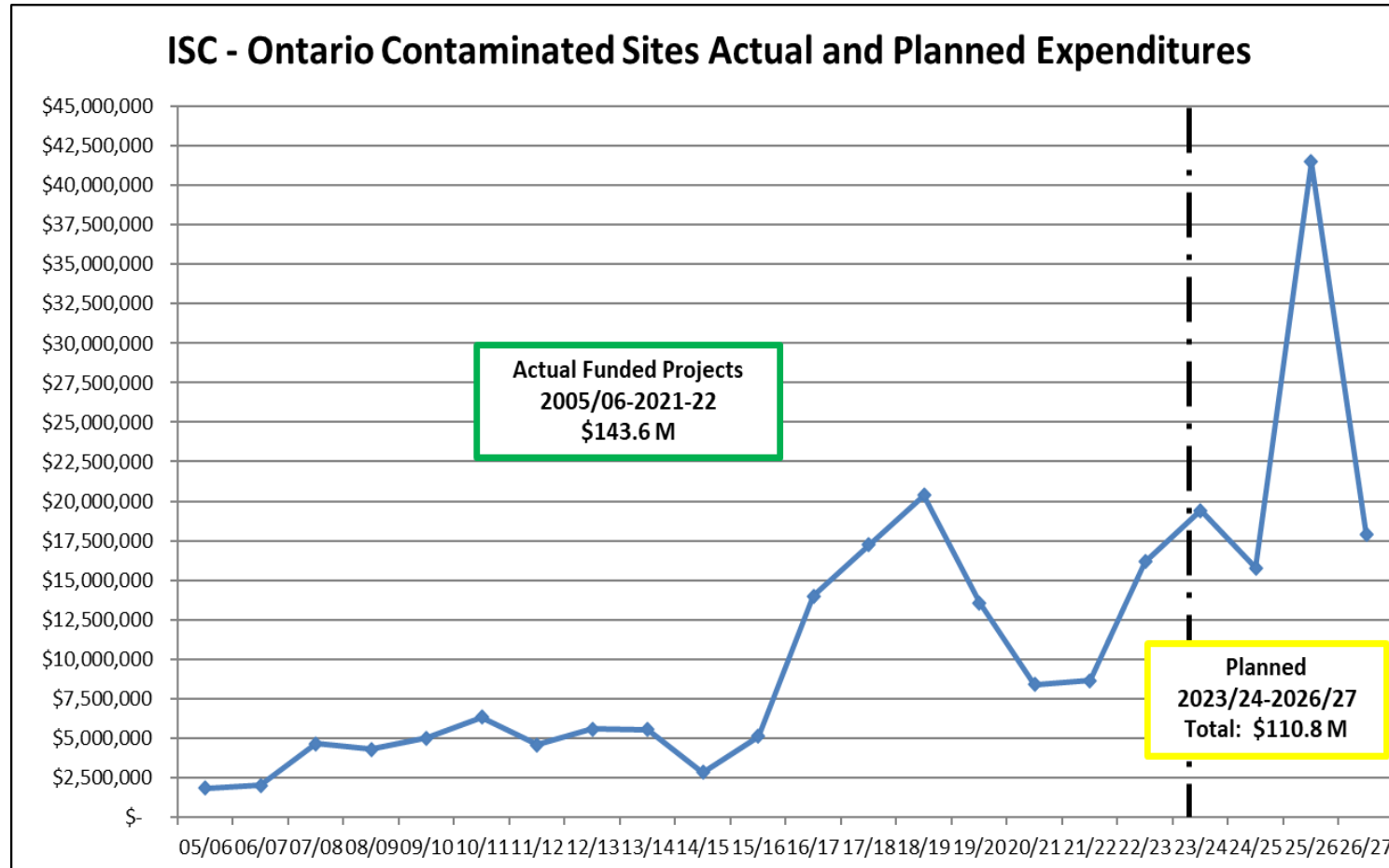


Ontario Region – Background and Status



- Current inventory is almost certainly incomplete – baseline from mid-90s Environmental Issues Inventory
- Please reach out - we don't know, what we don't know (kerri.hurley@sac-isc.gc.ca)
- Goal is to address remaining sites by 2035
- An additional ~150 sites on-reserve that are identified as third party (e.g., service stations, private fuel storage), work needed to determine site status, some may be orphaned

Ontario Region – Progress to Date



- Since the start of FCSAP, **213** sites have been assessed and remediated in **34** First Nations.
- **68** of these sites are fully remediated and have been closed, meaning the land has been restored and is safe to be redeveloped to meet community needs.
- These 68 sites had a total of 120,816 M³ (180,000 T) of contaminated soil

MB Region – CSOR Contact Information

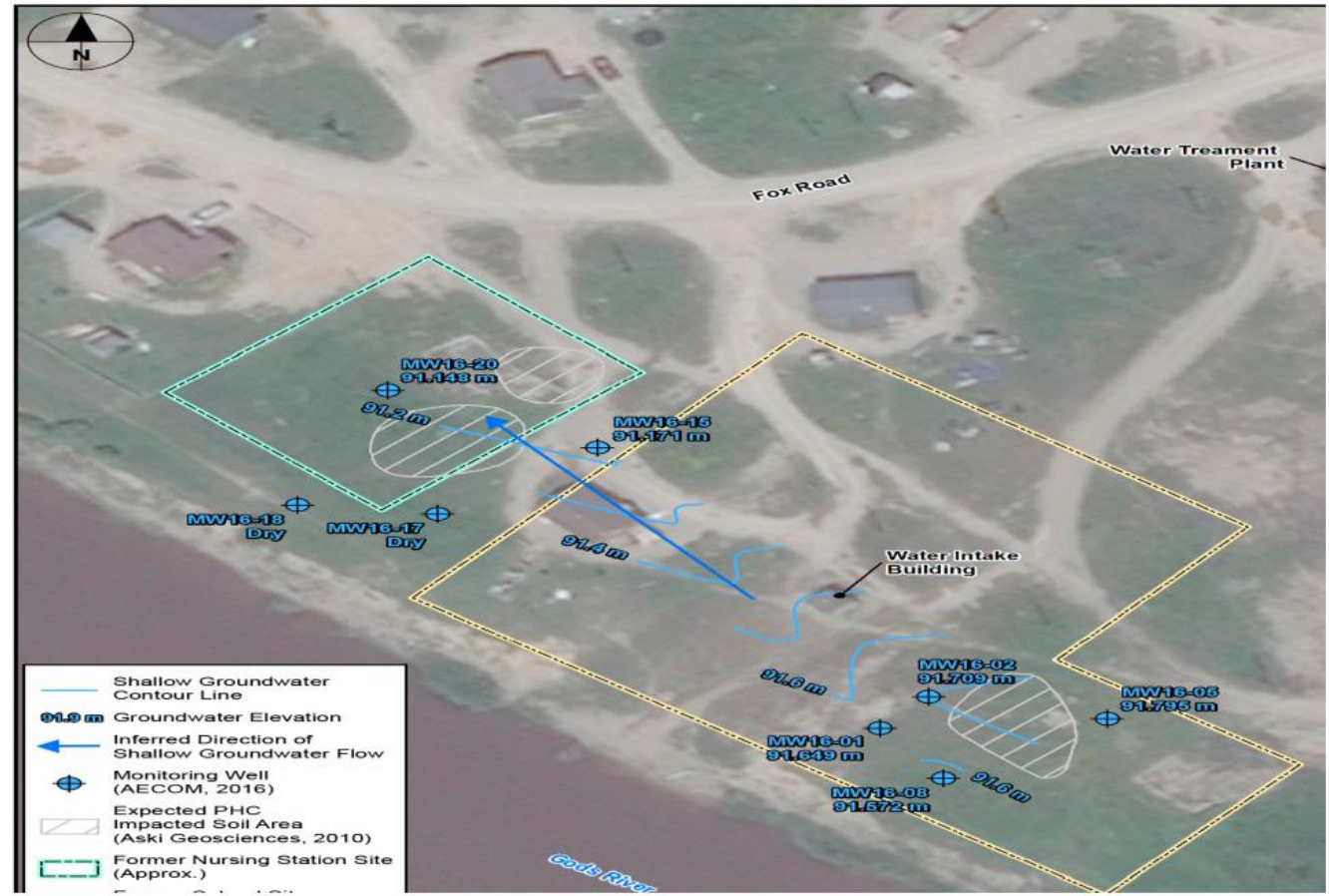
- **Contaminated Sites on Reserve in Manitoba**
- Programs that support the identification and assessment of contaminated sites
 - **FCSAP** (Federal Contaminated Sites Action Plan)

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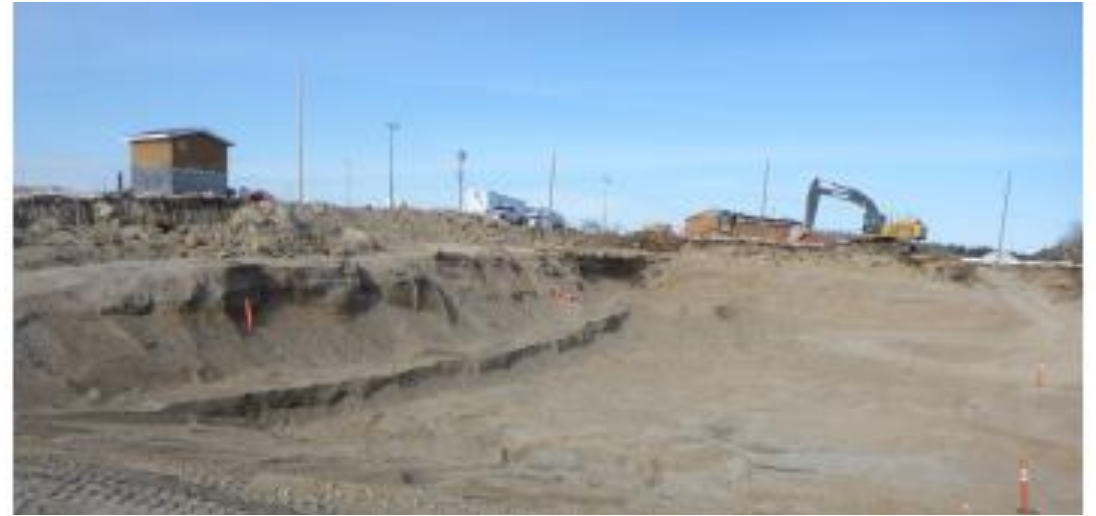
Angela Bidinosti
Sr Environmental Specialist
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E: Angela.Bidinosti@sac-isc.gc.ca

MB Region - Shamattawa First Nation Soil Remediation Project



MB Region - Site Preparation and Soil Testing

- ESAs were completed
- Testing for Petroleum hydrocarbons (PHCs) BTEX + CCME Fractions F1 – F4
- Class 1 NCSCS Score (high Priority under FCSAP)



MB Region - Design and Construction

Remedial Action Plan (RAP) to aid the choice of remediation technology evaluation

Construction considerations:

- Historical Gravesites
- Riverbank Ecosystem
- Community Water Intake and other community infrastructure



MB Region - Backfilling and Restoration



Clean fill (peat moss, top-soil and vegetation)



Redevelopment for commercial or recreational use



MB Region – Landfarming & Closure

Landfarming

- Existing land-farm treatment with fertilizers and tilling
- Confirmatory sampling

Closure

- Inclement weather
- Shoring
- Remote location
- Protection of burial sites
- Protection of Riverbank Ecosystems and Community Infrastructure



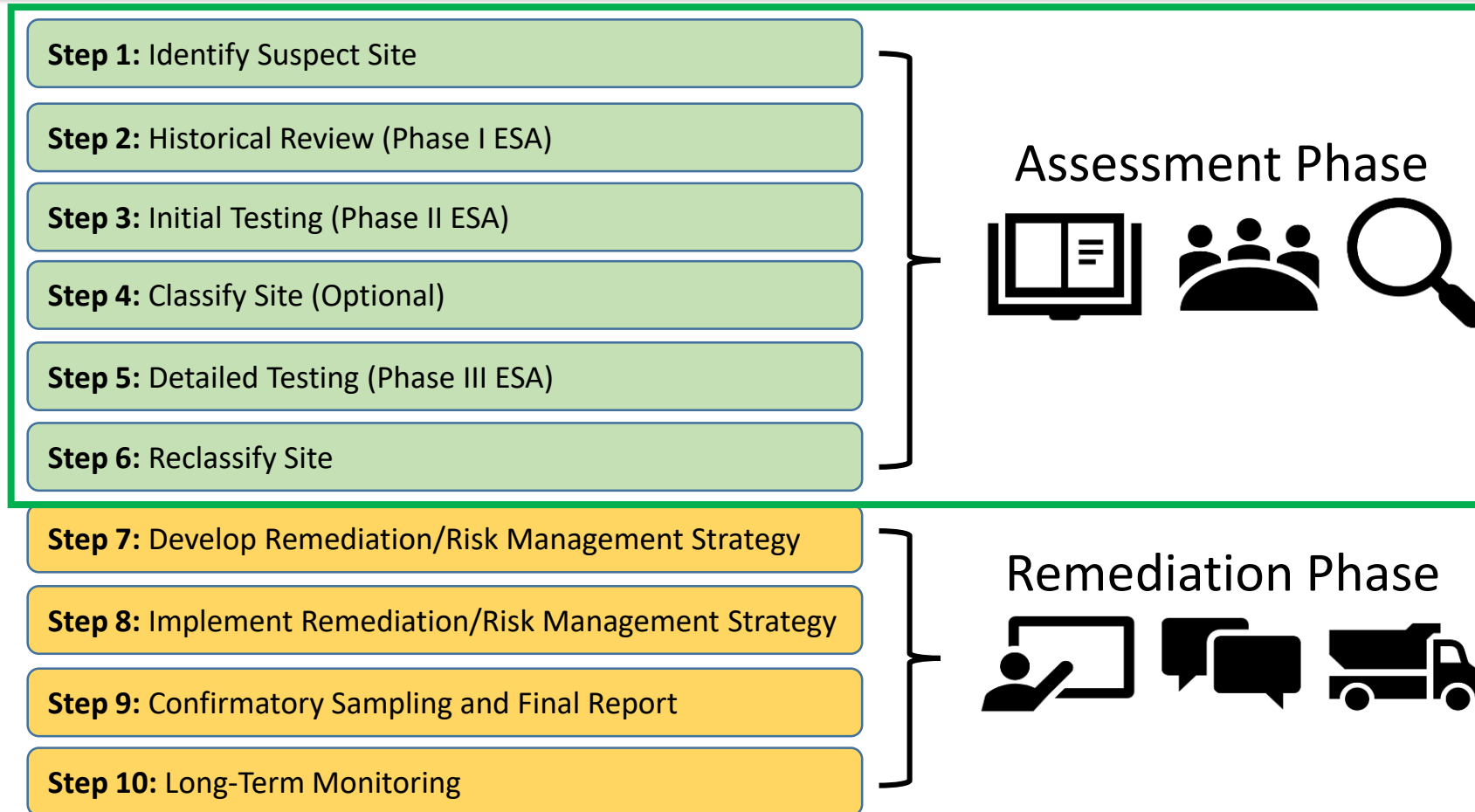
Thank you!

We thank you for the opportunity to share with you today and look forward to hearing your feedback today.

For more information about the Contaminated Sites on Reserve Program, please reach out to your regional ISC representatives!

Annex A - Supplementary Materials

Back to the 10 Step Process



There are economic opportunities for First Nations to *support and/or lead assessment and remediation projects!*
ISC can support you through the process!

Environmental Site Assessment Types

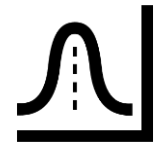
■ Phase I ESA:

- Research the current and historical use of the area to determine if there's a possibility for contamination on site.
- This can be done by conducting site visits and interviewing First Nation members and/or Elders, reviewing documents and looking at aerial photography.



■ Phase II ESA:

- If your Phase I ESA indicates the potential for contamination, there will be a need to collect samples from soil, surface water, groundwater to analyze for the presence of contaminants.



■ Phase III ESA:

- If your Phase II ESA determines that contamination is present, you will likely need to conduct additional sampling to determine the **extent** and **volume** of contamination on site.



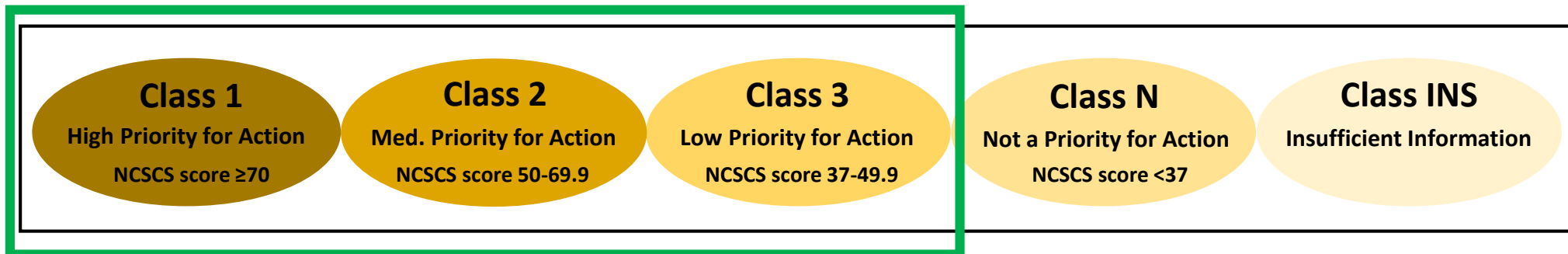
■ Human Health Risk Assessment*

■ Ecological Risk Assessment*

Lack of funding is often a limiting factor in the number of assessment projects implemented each year.

What's Next? Site Classification

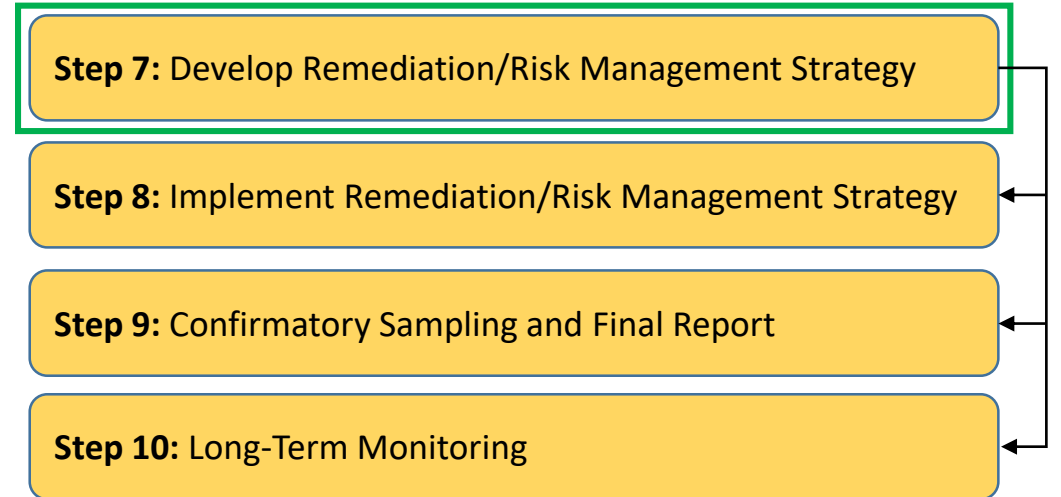
- You've completed your Phase II/III Environmental Site Assessment
 - In most cases, you will be able to **“classify”** your site with the information using the National Classification System for Contaminated Sites (NCSCS).
 - Site classification can occur after the Phase II ESA and/or Phase III ESA



- Classifications are determined based on the level of risk the site presents to human health and the environment.

What does the remediation process look like?

- That depends – but it will start with the development of a Remediation (R) or Risk Management (RM) Strategy (Step 7)!
- Your R/RM strategy will be based on many important considerations, though ***future intended land use*** will be an important one.
- Your independent consultant will help you design your preferred R/RM strategy.



You can build funds into the project for community engagement activities and outreach!

What about the remediation/risk management?

- Next is Step 8 - Implement Remediation Risk Management Strategy:



- This is where the physical work happens, creating additional employment opportunities, especially with local/Indigenous businesses and suppliers.
- The length of the R/RM work will depend on the nature, source and severity of contamination, remoteness, availability of contractors/equipment, length of field season etc.



- Depending on the project, when remediation is complete, you may move to close the site (Step 9), or into Long-Term Monitoring (Step 10).
 - This will be determined in your R/RM Strategy.



Step 8: Implement Remediation/Risk Management Strategy

Step 9: Confirmatory Sampling and Final Report

Step 10: Long-Term Monitoring



Is my site eligible for funding?

YES	NO
<ul style="list-style-type: none">▪ Sites connected to community facilities (schools, band council offices, municipal garage, etc.)▪ Former ISC Diesel Plants▪ Former dump sites (authorized or illegal) on Reserve▪ Abandoned/Orphan sites* 	<ul style="list-style-type: none">▪ Sites in operation (waste/dump sites)▪ Sites on Certificate of Possession lands▪ Operating businesses, private fuel facilities▪ Sites established after becoming operational under First Nation Land Management 

Reach out to your Regional ISC representative for questions relating to site eligibility and eligible costs!

Eligible Costs – Assessment *and* Remediation

Eligible

- Consulting, engineering, and contractor services and disbursements
- Mobilization/demobilization of equipment and personnel
- Development of Indigenous and/or stakeholder engagement plans or strategies
- Indigenous engagement (e.g., community meetings, workshops, distribution of brochures, newspaper advertisements, social media posts)

Eligible (Indirect – max 10% cost)

- Archaeological studies and activities that are concurrent to assessment activities and that are required for the physical work to be carried out.
- The development and implementation of skills development and training programs for workers, Indigenous communities, or stakeholders.

Eligible Costs – Remediation/Risk Management

▪ Eligible

- Re-creation of a lost species' habitat due to R/RM activities (e.g., loss of fish habitat, wetlands).

▪ Eligible (Indirect – max 10% remediation/risk management cost)

- *In the case of a built asset (buildings, facilities, or public works such as roads and sewers), equipment, or a storage tank system present at the site;*
 - *costs associated with relocation (temporary or permanent), demolition, dismantling, or removal and disposal or recycling of these items, provided that these activities are essential to access and remediate/risk manage contamination beneath or adjacent to the items.*
- Storage tank system removal or relocation if necessary to remediate/risk manage contamination beneath or adjacent to the storage tank system;
- Removal of debris not contributing to the contamination at the site only when required to access contamination as part of the R/RM strategy, but excluding the cost of disposal;

Ineligible Costs

- Storage tank removal if not necessary for assessment or to access contamination;
- Storage tank system upgrades to stop ongoing contamination while a comprehensive R/RM strategy is being developed.
- Storage tank replacement;
- Assessment and/or decontamination of “sick” buildings due to occupational health and safety concerns (e.g., removal of asbestos, mould, flaking lead or PCB based paint from inside of a building).
 - ***In order for “sick” buildings to be eligible for FCSAP assessment and/or remediation funding, the building must be suspected/confirmed as a source of contamination and contaminants must have entered into the environment.***
- Ongoing administrative (O&M) site costs - e.g., hazardous, solid, or sewage waste management costs, costs associated with licensed or operating landfill sites.
- Costs associated with relocation or temporary accommodation of people who are at risk from contamination at a site or who must be displaced to allow assessment/remediation activities to be conducted.

