

Federal Contaminated Sites Action Plan (FCSAP) Updates

Science Advisory Board for Contaminated Sites in BC Fall 2020 Virtual Workshop Thursday, October 8 2020

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Overview

- Federal Contaminated Sites Action Plan (FCSAP) 101
- Northern Abandoned Mines Reclamation Program (NAMRP) 101
- FCSAP Guidance Publications and Tools
- Forecasts National & Pacific
- Interactive Map Tool
- Contact Information
- Access to GCcollab





Federal Contaminated Sites Action Plan (FCSAP) 101

What are federal contaminated sites?



On lands owned or leased by the federal government



On non-federal lands for which the gov't has accepted responsibility

FCSAP was established in 2005 with the following objectives



Reducing risks to human health and the environment



Reducing associated environmental liabilities from sites

Achievements

After 15 years of FCSAP (2005-2020)

\$4.5 billion investment

• World-class contaminated sites management industry in Canada

2,200 sites with remediation

• 1,700 fully remediated

Skills development and job training

• 22,800 direct jobs; \$2.4 billion spent in Canada's North

Science development

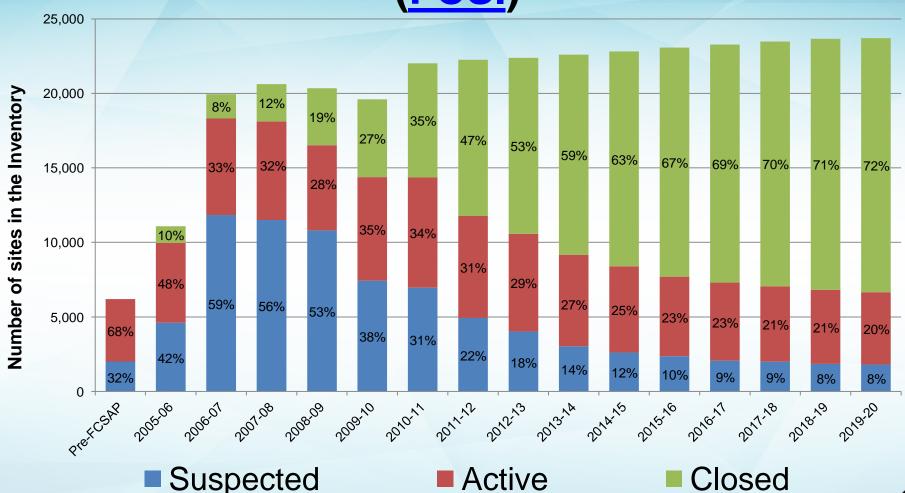
• 88 environmental quality guidelines, technical guidance, tools

Source: FCSAP Secretariat (September 2020)





Status of Sites in the Federal Contaminated Sites Inventory (FCSI)



















Minor Navigational Aid Site (NFLD)

DEW Line Site (NU)

Columbia National Wildlife Area (BC)

Mathis Colomb Cree Nation Community (MB)

Government of Canada

Gouvernement du Canada

Sources: FCSAP Annual Reports

FCSAP Beyond 2020

- Program renewed until FY2034-35, with funding renewed in 5 year increments
- Phase IV (2020-2025):
 - \$35.1M for assessment
 - \$1.2B for remediation, risk management and long term monitoring
- 17 custodians
- Secretariat: ECCC and TBS





Northern Abandoned Mines Reclamation Program (NAMRP) 101

 \$2.2 billion over 15 years starting in 2020-2021 to address Crown-Indigenous Relations and Northern Affairs' (CIRNA) 8 largest abandoned mine remediation projects:

Yukon:

- o Faro Mine
- United Keno Hill Mine Project
- Ketza River Mine Project
- o Clinton Creek Mine Project
- o Mount Nansen Mine Project

NWT:

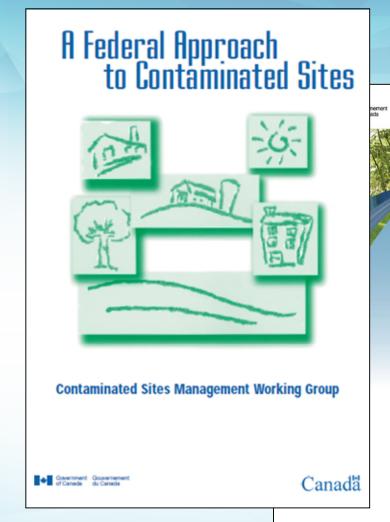
- Giant Mine
- Cantung Mine Project
- o Great Bear Lake Project



FCSAP Guidance Publications: Updates

FCSAP Decision Making Framework

- Road-map on how federal contaminated sites are managed within the Federal Contaminated Sites Action Plan
- References and links to guidance for all stages of contaminated sites management





Canada

Federal Contaminated Sites

Action Plan (FCSAP)

Decision-Making Framework

May 22, 2013



Upcoming FCSAP Guidance - ERA

- Ecological risk assessment on federal contaminated sites Comprehensive Guidance (update from 2012)
- ERA Module 5: Defining Background Conditions and Using Background Concentrations (Published in 2020)
- ERA Module 6: Ecological Risk Assessment for Amphibians on Federal Contaminated Sites (Published in 2020)
- ERA Module 7: Default Wildlife Toxicity Reference Values (TRVs) Recommended for use at FCSAP Sites
- TRVs and toxicity data for Fish (tbd lead by DFO)
- Compilation of reptile toxicity data





Upcoming FCSAP Guidance

- Management of LNAPL on Federal Contaminated Sites Guidance Document
- Monitored Natural Attenuation in Soil and Groundwater Guidance Document
- Supplemental Guidance on Implementation of Canada-Wide Standard for Petroleum Hydrocarbons in Soil on Federal Contaminated Sites
- Guidance on the management and treatment of non detect data on the Federal Contaminated Sites
- Management and Treatment of Values Below the Detection or Quantification Limit
- Management of Ecological Risk at Federal Contaminated Sites
- Use of Real Time Technologies at Federal Contaminated Sites





Upcoming FCSAP Advisory Bulletins (FABs)

- Use of Atlantic PIRI's petroleum hydrocarbon sediment criteria at federal sites (Published in 2019)
- What guidelines can be used if a CCME soil quality guideline is based only on human health protection or only on environmental protection?
- What guidelines apply to a federal site with multiple land uses?
- Applying the statistical approach in CCME (2016) to identify COCs at federal contaminated sites
- How are field duplicates assessed?
- How, when and why do I decommission a groundwater monitoring well? (update)
- Can Provincial/Territorial Guidelines be applied in lieu of existing Federal Guidelines? (update)

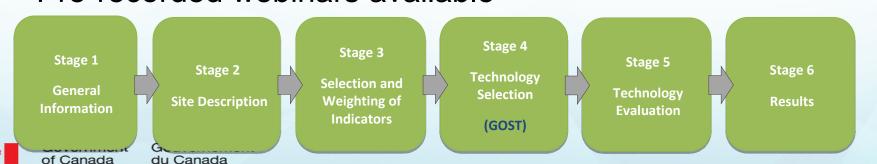


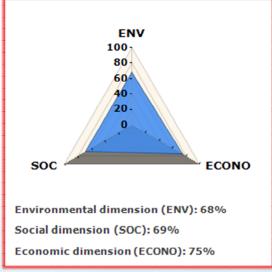


Sustainable Development Analysis Tool (SDAT)

- Web-based and open access: https://oadd-sdat.tpsgc-pwgsc.gc.ca
- To be used to compare Remediation/Risk Management (R/RM) Options after identifying potential R/RM options with the Guidance and Orientation for the Selection of Technologies (GOST) Tool (i.e. Step 7 of the Federal CS 10-Step
- Supports a better understanding and communication of SD related issues
- Pre-recorded webinars available

Process)







Federal CS Demand Forecast 2020-2025 - Caveats

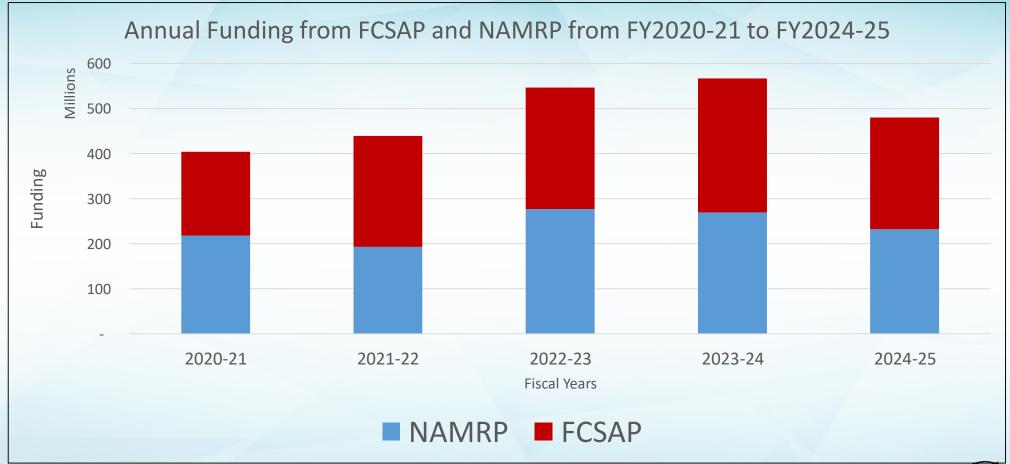
- 1. The analysis contained herewith is the best information currently available and provides a "big picture" perspective on FCSAP and NAMRP investments
- 2. The data is extracted from the latest National Workplan and Federal Contaminated Site Inventory (FCSI) and is a **snapshot** of funding submissions and contaminated sites data and is subject to possible revisions.
- 3. Custodians sometimes experience project delays due to weather conditions or other unforeseen circumstances (e.g. pandemic), which can affect their work plans. Although projects may be approved, they may not proceed for logistical reasons.
- 4. Annual updates will improve future year estimates in terms of quality from a cost objective to a budget estimate, and quantity both number of sites and value.

Complete list of caveats are available on Federal CS Demand Forecasts GcCollab group: https://gccollab.ca/file/view/3716266/fcsap-phase-iv-cs-demand-forecast-analysis-january-2020-final-enpdf





Federal Contaminated Sites Demand Forecast -FY2020-21 to 2024-25







National Overview of FCSAP Phase IV

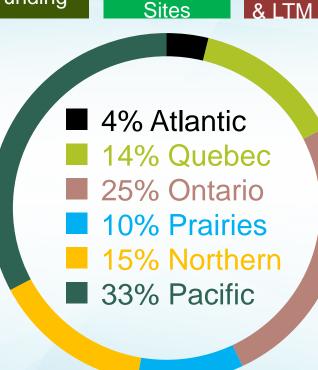
\$1.2B

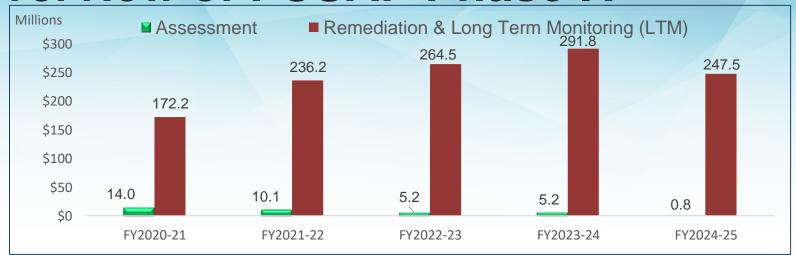
Funding

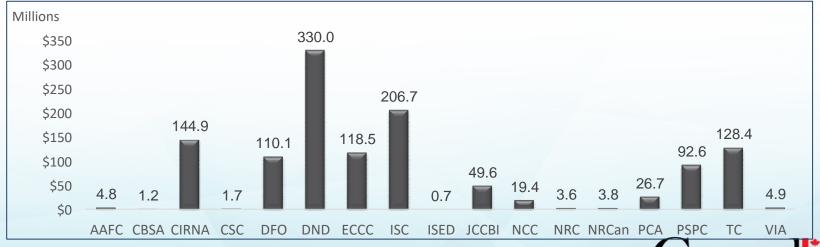
306
Assessment

1275

Remediation & LTM Sites







Pacific – FCSAP Phase IV Overview

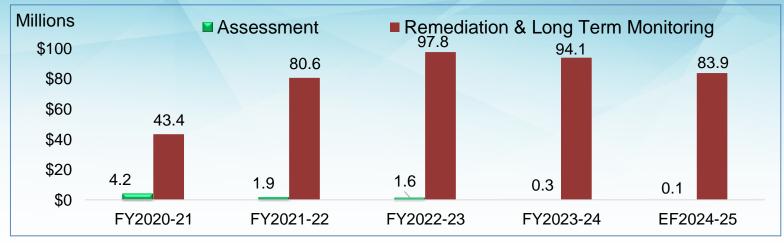
\$407.9M **Funding**

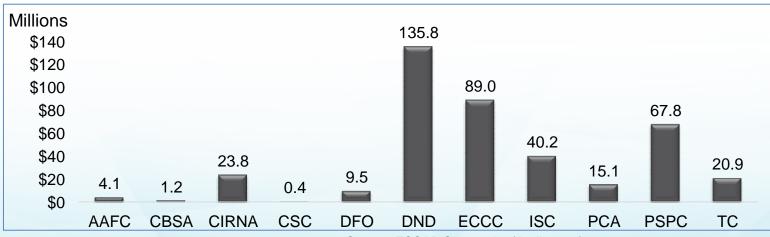
130 sites

428 sites

Assessment Remediation & LTM







Source: FCSAP Secretariat (April 2020)

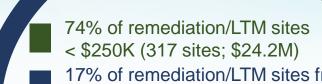




Pacific – Distribution of the Value of Sites (FCSAP Phase IV)

Assessment

- 98% of assessment sites < \$250K (128 sites; \$7.3M)
- 2% of assessment sites from \$250K to \$1M (2 sites; \$0.8M)
- 0% of assessment sites > \$1M



- 17% of remediation/LTM sites from \$250K to \$1M (73 sites; \$42.9M)
- 8% of remediation/LTM sites > \$1M to \$10M (32 sites; \$85.7M)
- 1% of remediation/LTM sites > \$10M (6 sites; \$13.3M)

Remediation and Long Term

Monitoring

\$8.1M

\$399.8M



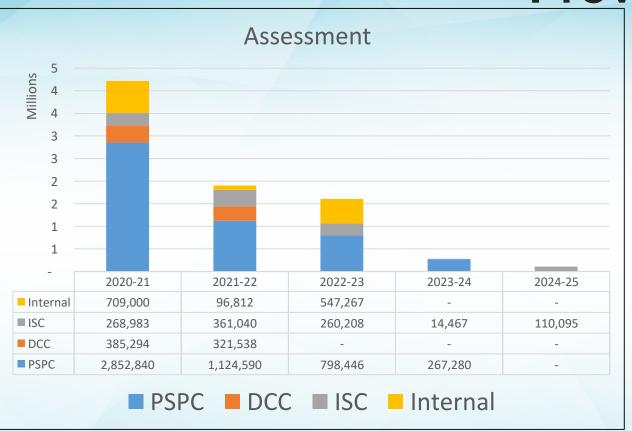
Government of Canada





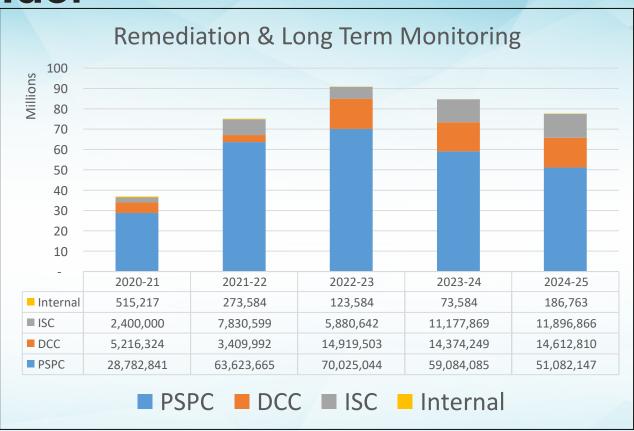


Pacific - FCSAP Phase IV Funding by Procurement **Provider**



Gouvernement

du Canada



PSPC: Public Services and Procurement Canada; DCC: Defence Construction Canada; ISC: Indigenous Services Canada



Source: FCSAP Secretariat (April 2020)

Interactive Map Tool

- Live interactive tool: https://arcg.is/18aG19
- Available on Federal Contaminated Sites Demand Forecasts GcCollab group:
 - o **User Manual**
 - o Complete Federal CS Demand Forecast Analysis Report





Disclaimer: Federal Contaminated Sites Action Plan / Northern Abandoned Mine 1 - High Priority for Action **FCSAP Phase IV** January 2020: The data contained herewith is the best **Reclamation Program** 2 - Medium Priority for Action information currently available and provides a "big Geomatic Application Dashboard to represent FCSAP Sites and 3 - Low Priority for Action Custodians **Contaminant Type** 1 of 9 \triangleleft \triangleright \times \otimes Federal Contaminated Sites Action Plan 500 56525067 Other 3% BTEXs 10% K83 Campbell's cabin PHCs 27% 400 Custodian: PCA Metal 30% Highest Step Completed: 08 - Implement Remediation/Risk PCBs and 300 PCDD/Fs 3% Other inorganics Management Strategy PAHs 21% 200 Class: 2 - Medium Priority for Action Other organics 2% 100 **BTEXs** benzene, toluene, ethylbenzene, ar ^ metal, metalloid, and organometall Metals PAHs polycyclic aromatic hydrocarbon polychlorinated biphenyl **PCBs** AAFC CSC **ECCC** PCA PCDD/Fs polychlorinated dibenzo-p-dioxin/c ∨ CANADA **AAFC** Agriculture and Agri-Food Canada **Medium Type** Canada Border Services Agency CBSA CIRNAC Crown-Indigenous Relations and Northe Other 4% Correctional Service Canada **CSC** DFO Department of Fisheries and Oceans Surface water 5% Groundwater 21% DND Department of National Defence Surface soil 11% ECCC Environment and Climate Change Cana Other medium 3 **ISC** Indigenous Services Canada Sediment 7% ISED Innovation, Science and Economic Deve **JCCBI** Jacques Cartier and Champlain Bridges NCC National Capital Commission National Research Council **NRC** Soil 50% 600km NRCan Natural Resources Canada Sources: NRCan, Esri Canada, and Canadian Co. **PCA** Parks Canada Agency

Government

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Contact Information

ECCC – FCSAP Expert Support

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Federal Contaminated Sites Website:

https://www.canada.ca/en/environment-climatechange/services/federal-contaminated-sites.html

CIRNA

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Innovation, Science and Economic Development (ISED)

Clean Growth Hub

Access to GCcollab

- Step 1: Create an GCcollab account (https://gccollab.ca/splash).
 If you have a non-federal government email address, there are 2 options:
 - 1) Submit a ticket to the GCcollab Help Desk (https://support.gccollab.ca/en/support/tickets/new) requesting an account
 - 2) Contact a Gccollab user for this person to invite you. e.g. Martine Lalande (martine.lalande@pwgsc.gc.ca)
- Step 2: Request Membership to join this group: Federal Contaminated Sites Demand Forecasts / Prévisions de la demande reliée aux sites contaminés fédéraux using this link: https://gccollab.ca/groups/profile/3625736/enfederal-contaminated-sites-demand-forecasts-pru00e9visions-de-la-demande-reliu00e9e-aux-sites-contaminu00e9s-fu00e9du00e9rauxfr
- Step 3: When your membership request has been processed, you will be to access the files using this link: https://gccollab.ca/file/group/3625736/all#

If you have any questions/problems, please consult the FAQ GCcollab page: https://gccollab.ca/help/knowledgebase or contact Martine Lalande (martine.lalande@pwgsc.gc.ca).



