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Canada's Chemical Management Plan: Opportunities for continued collaboration on chemicals management

Great Lakes Binational Toxics Strategy:
Substance / Sector Workgroup Meeting
December 2, 2009

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Overview

- Update on the Chemicals Management Plan
- Update on the formation and progress of the Canadian Great Lakes Chemical Priorities Working Group
- Opportunities for continued collaboration on chemicals management in the Great Lakes

The Chemicals Management Plan is into its 3rd year

- Designed to protect human health and the environment through several major areas of action
  - Setting priorities and taking action on chemicals of concern
  - Integrating chemicals management activities with relevant federal legislation (e.g. CEPA, Food and Drugs Act, Hazardous Products Act)
  - Enhanced research, monitoring and surveillance
  - Communications to Canadians on the potential risks of chemical substances
  - International collaboration to strengthen chemicals management

Chemical Management Plan progress to date…

Setting priorities and taking action – The Challenge

- Challenge batch launch and publication of draft and final assessments as well as proposed risk management approaches are **on schedule**
- All 12 Challenge batches, containing ~ 200 high priority chemicals, will be launched by December 2009
- 27 of 88 substances from the first five challenge batches have been assessed as meeting one or more criteria of s.64 of CEPA 1999
  - Risk management instruments are under development for these substances
- Orders to amend the DSL issued for ~145 high-hazard (PBiT) substances no longer in commerce in Canada; to be addressed through Significant New Activity (SNAc) provisions
- Orders to amend the DSL to apply the SNAc provisions to 8 Challenge substances from the first five batches have been published
- Industry must provide data (under the new substances program) for government review before any of the substances listed can be re-introduced into Canada

Chemical Management Plan progress to date…

Pursuing other substances (Non-Challenge)

- Actions are underway to assess and manage 31 other substances (or groups of substances) from the Priority Substances List 1 (PSL 1) and Priority Substances List 2 (PSL 2), pilot project substances, and substances assessed under various other initiatives, including:
  - Chlorinated Naphthalenes (PCN)
  - DecaBDE,
  - PFOA,
  - HBCD,
  - TBBPA, and
  - long chain PFCAs.

Post-Challenge

- Determining how best to prioritize substances amongst the “medium priorities”

Chemicals Management Plan: Advancing Domestic Action

Updating our national chemicals knowledge base

Policy and program decisions currently rely on DSL data that is ~ 20 years old

- **Quickstart Initiative (2009)**
  - Preliminary information gathering initiative for ~ 550 priorities
    - ~ 50 animate substances of DSL (i.e micro-organisms)
    - ~ 500 inanimate substances of DSL
  - Data collection for these substances is via CEPA s.71 notices, as DSL inventory update data will be unavailable in appropriate timeframe
  - Mandatory s.71 notice was published on Oct. 3rd 2009 for ~ 500 inanimate substances
    - contains ~150 health and ~ 350 ecological priorities

- **DSL Inventory Update (IU) (2010)**
  - New information on industrial and commercial activities will be collected via the DSL IU, in order to update the data collected at the time of DSL nomination and to validate assumptions used in the categorization process
  - Initial data collection will be staged over two years, with cyclical collection to occur every five years thereafter
  - 2010 → DSL IU initial collection cycle

Advancing domestic actions
Transforming risk management

New Generic Instrument Approach – *A single tool that can be used to manage the risks from a number of substances having common or similar requirements*

Sectoral Approach – working with industry sectors to share current information on the next round of substances will improve decision making

Place-based Approach – focus on chemicals management issues specific to a geographic area of interest

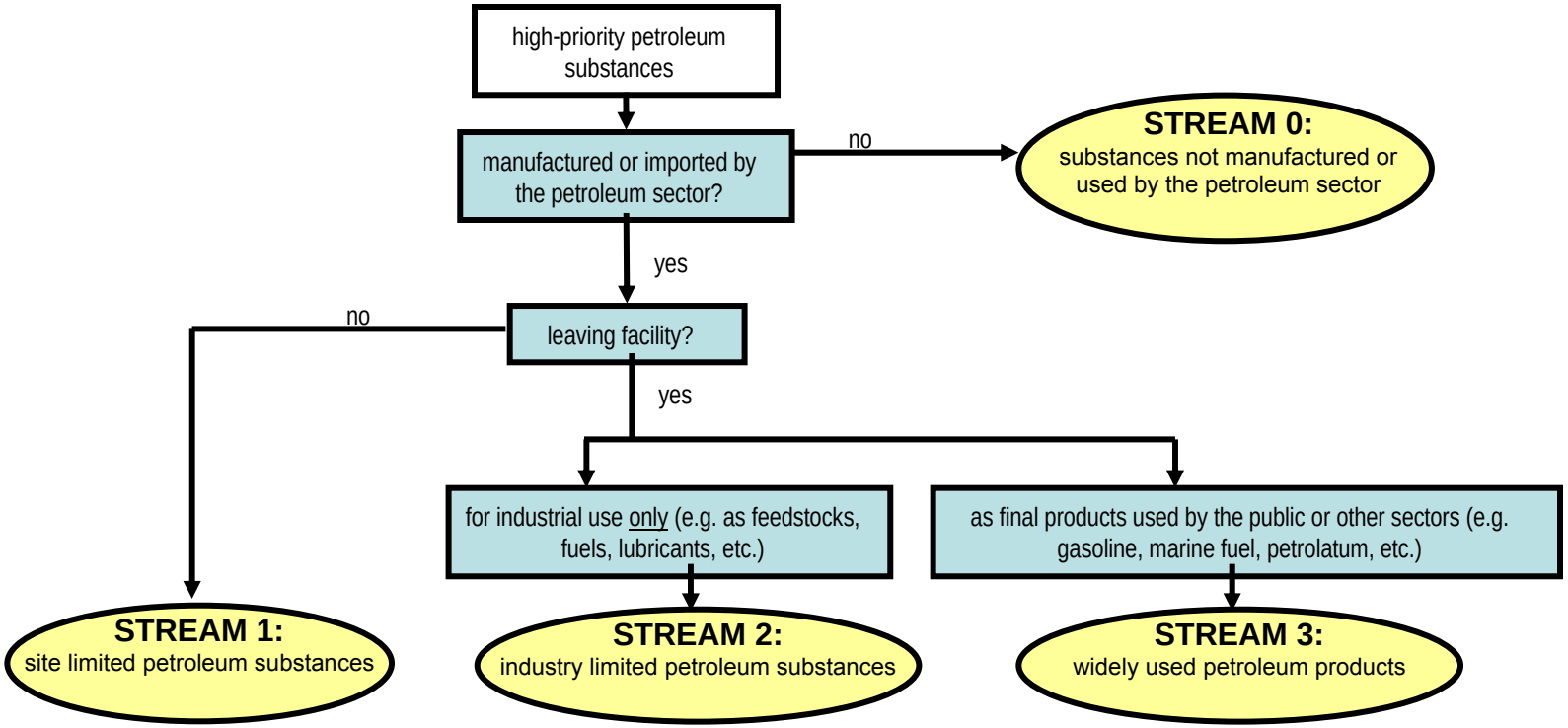
Transforming risk management: Generic Instrument Approach

- Examples already exist under other Acts / jurisdictions that could be used to identify best practices:
  - Environmental Emergency Regulations (under CEPA 1999)
  - Transportations of Dangerous Goods Regulations (under *Transportation of Dangerous Goods Act*)
  - Cosmetic Ingredient Hotlist (under *Food and Drugs Act*)
  - Ontario Drinking Water Quality Standards
  - Ingredient Disclosure List
- Generic risk management tools would specify common requirements applicable to the management of multiple substances, for example:
  - prohibited activities, reporting requirements, record keeping requirements, and testing requirements
- Enables and supports a grouping approach for risk assessment and sector approaches
- A working group is being created to address issues with the development and implementation of compliance promotion and enforcement

Transforming risk management: A Sectoral approach

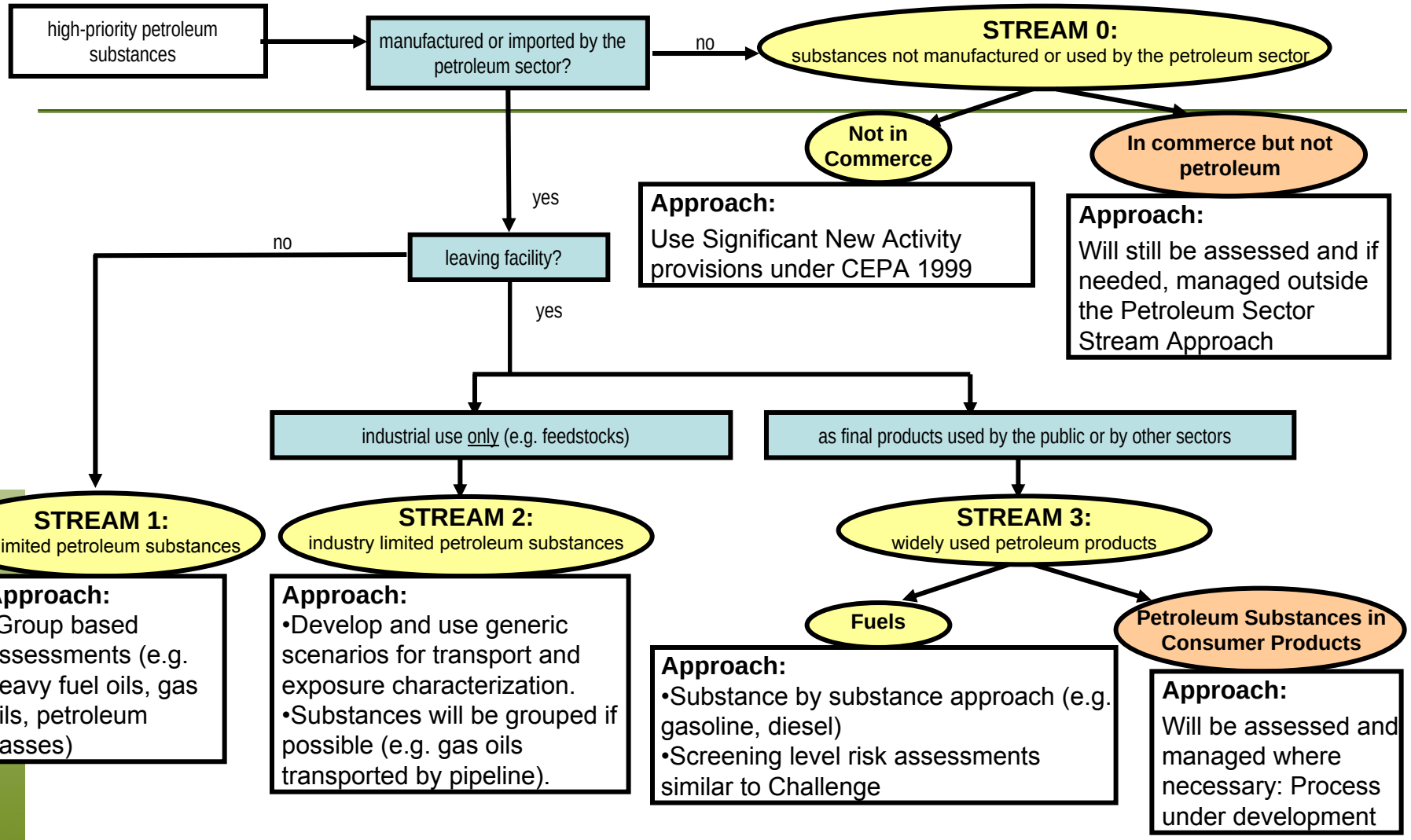
- Working with industry sectors to share *current* information on next round of substances will improve decision making
- For example, the Petroleum Sector Stream Approach substances were chosen to be addressed outside the Challenge under a streamlined approach specific to the petroleum sector because they are:
  - primarily, if not exclusively, related to the petroleum sector
  - complex mixtures that may need to be considered differently from discrete substances
- Because the approach is specific to the petroleum sector, efficiencies can be found
  - Focused data gathering efforts
  - Utilizing existing expertise
  - Grouping similar substances for assessment & management
  - Identifying potential synergies with other initiatives / Existing measures under other programs

The Petroleum Sector Stream Approach



Note: triage results are still being finalized; as information-gathering continues, substances may be moved between Streams

Screening Assessment Approaches for Petroleum Sector Stream Substances



Note: Diagram used for illustrative purposes only at this time

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Transforming risk management: A Place-Based approach

- It can include one or more sectors and/or substance groups, can consist of a combination of several management tools, and can be multi-jurisdictional
- Some ideas that could be explored:
  - "clustering for environmental efficiency" extend the concept of industry clusters that create new business opportunities
  - Promote "supply chain" thinking
  - Foster "cross-industry stewardship"
  - "Test bed" for Product trials
- Opportunities exist to use place-based approaches to complement existing management initiatives, or be a component of new risk management strategies

A Place-Based Approach for the Great Lakes Basin…

- The Great Lakes basin could be considered for a place-based approach
  - The Great Lakes basin is unique in terms of its multi-jurisdictional boundaries (U.S., Ontario, States, Municipalities)
  - A wide range of agreements and programs exist to manage chemicals in the Great Lakes basin
  - A place-based approach could ensure coordination amongst existing Great Lakes basin programs such that they deliver on CMP objectives
- Determining Canada's chemical priorities in the Great Lakes is an integral part of the overall approach to managing and protecting the GLB ecosystem
- Strategic integration of national priorities with Great Lakes priorities will help align efforts to protect the GLB and deliver on national programs, such as the CMP
- To this end, a process for identifying and prioritizing chemicals of concern in the GLB is under discussion by the Canadian Great Lakes Chemical Priorities Working Group (WG)

…through the Canadian Great Lakes Chemical Priorities Working Group

The objectives of the WG are:

- To develop a systematic and transparent process for identifying and prioritizing Canada's chemicals of concern within the GLB;
- To re-visit chemical priorities in the GLB which have been recommended by the aforementioned process, as necessary; and
- To make recommendations concerning opportunities available to supplement and improve the efficiency and effectiveness of risk management of chemicals, as necessary

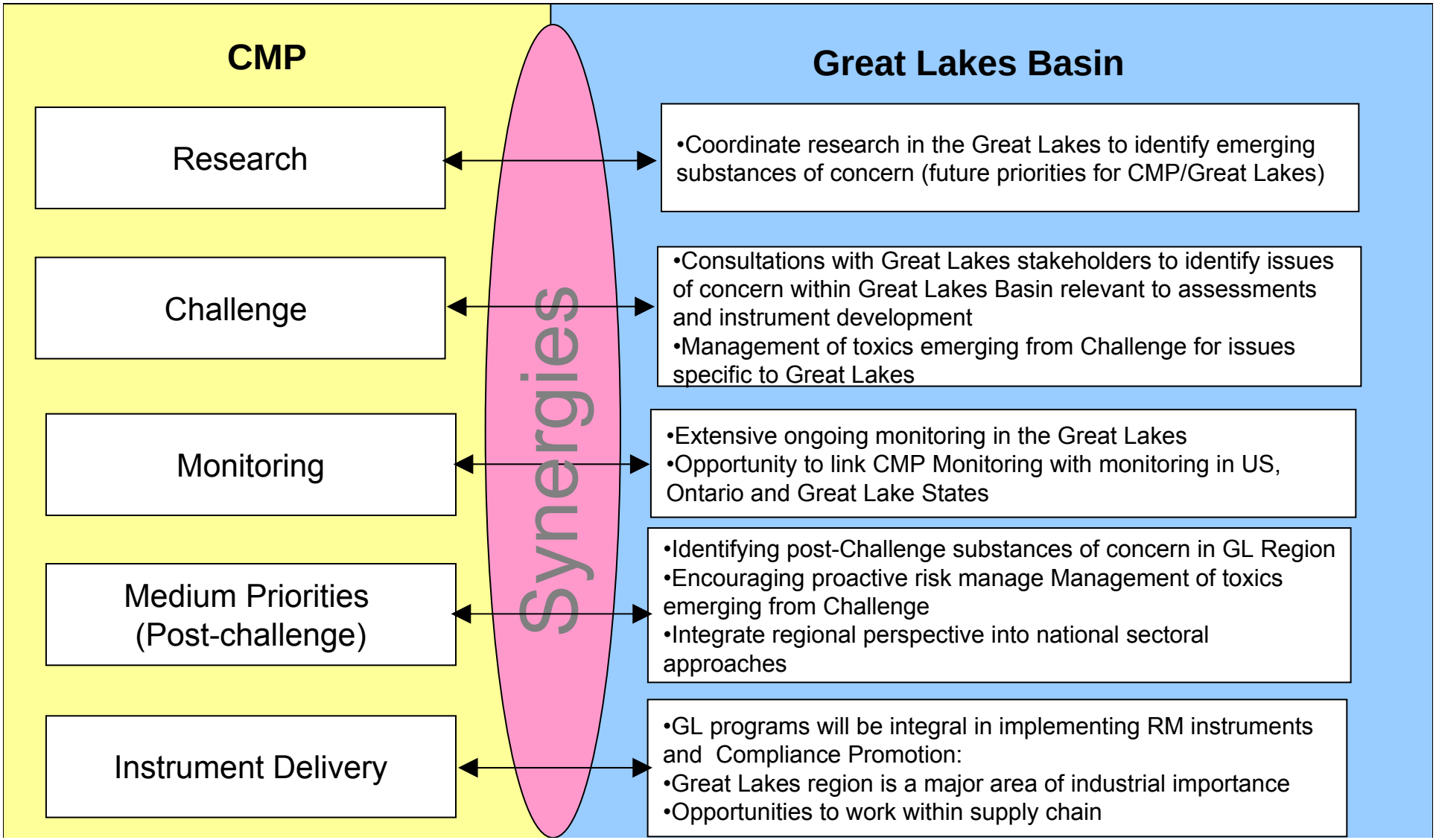
The Canadian selection and prioritization process characteristics

- Flexible
  - Process should be capable of addressing the wide range of chemicals that may be of concern to the GLB
- Dynamic
  - Priorities will change quickly on a national, binational, and international basis, therefore the process should be adaptable and dynamic
- Efficient
  - Process should allow for streamlining and avoiding duplication of effort
  - Should include potential to expand management or evaluation efficiencies through grouping opportunities (Ex. sectors or product use)
- Transparent
  - Allow for stakeholder consultation as appropriate
- Provision of early warning
  - Include capacity for early warning of emerging problems and provide a route for feedback to the CMP and other national programs

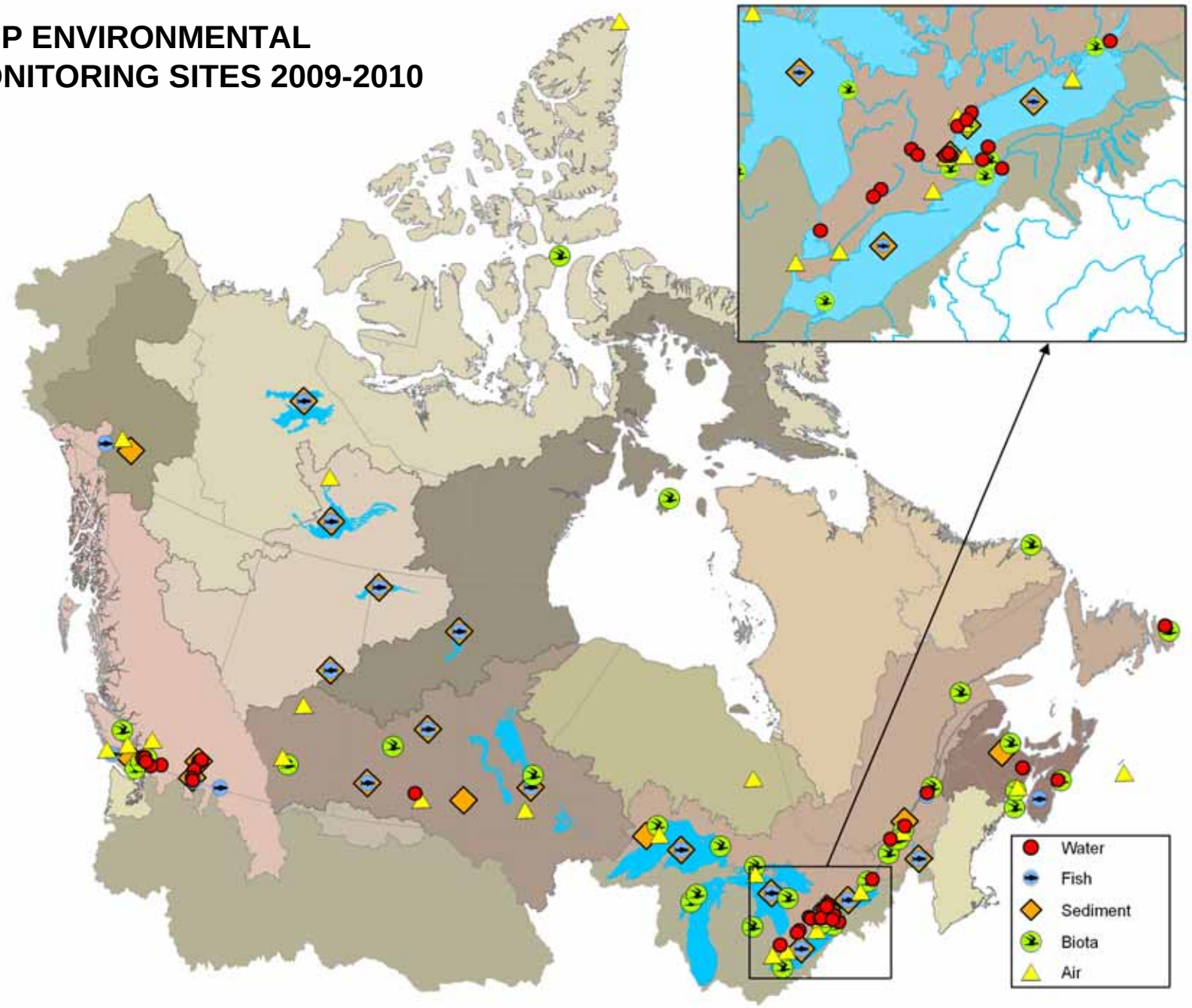
The proposed elements of the selection and prioritization process include…

1. **Triggers for considering chemicals for action through a Great Lakes approach:**
   - Current Canadian national chemical priorities
   - Early warning: emerging/re-emerging chemicals of concern not yet on the national radar
2. **Relevance to the GLB:**
   - Major reason chemical should be addresses with coordinated Great Lakes approach is that it is present in the GLB
   - Presence can be established directly via detection data, or indirectly via probable release into the environment
3. **Present management considerations and recommendations for appropriate action:**
   - The present management status of chemicals in national programs should be considered to determine whether action, or further action, is necessary to complement an existing efforts
   - Chemicals selected by the WG should be recommended for action as management, assessment, review, and/or monitoring
4. **Stakeholder input and expert review:**
   - Provides valuable insight from an “on the ground” capacity
   - Facilitates engagement at subsequent risk management stage

Capitalize on Opportunities for Synergies Between Activities in Great Lakes Basin and Chemicals Management Plan Objectives



CMP ENVIRONMENTAL MONITORING SITES 2009-2010



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Next Steps for the Canadian Great Lakes Chemical Priorities Working Group…

- Pilot candidate chemicals through draft framework to refine the selection and prioritization process and to develop necessary technical instructions. (One could consider the chemicals described in the Annex: SCCP, PFOS, PBDEs, BPA, Benzidine based dyes and phthalates)
- Provide direction and recommendations with regards to Canada's chemical priorities for action in the Great Lakes Basin based on framework output
- Consider adapting this framework to other priority ecosystems and/or geographic areas

Annex: A selection of chemicals and current actions

- **Short-Chain Chlorinated Paraffins (SCCPs)**
  - All CPs are recommended for addition to Schedule 1 of CEPA 1999
  - SCCPs (≤ 20 C atoms) recommended for addition to Virtual Elimination List
  - Proposed risk management instrument is a prohibition regulation with potential specific use exemptions, expected publication 2010
- **Perfluorinated Chemicals (PFCs)**
  - PFOS added to CEPA 1999 Schedule 1 Toxic Substances in 2006
  - Key element of CMP involves taking immediate action on five substance categories, including PFOS:
    - Final prohibition regulations published June 11, 2008
  - PFOS is included in the current monitoring plan for CMP
  - PFOA is currently under assessment

Annex: A selection of chemicals and current actions

- **Poly-Brominated Diphenyl Ethers (PBDEs)**
  - PBDEs added to CEPA 1999 Schedule 1 Toxic Substances in 2006
  - PBDE final regulations published in June 2008
    - Tetra-, penta- and hexa-BDE proposed for addition to Virtual Elimination List
  - Regulatory controls are under development to restrict PBDEs in manufactured products
  - State of Science report on the Bioaccumulation and Transformation of decaBDE published in March 2009
  - PBDEs are included in the current monitoring plan for CMP
- **Bisphenol A (BPA)**
  - BPA proposed for addition to CEPA 1999 Schedule 1 Toxic Substances on May 16th, 2009
  - Risk Management Scope proposed development of regulation to limit the concentration of BPA in industrial effluents
  - BPA is included in the current monitoring plan for CMP

Annex: A selection of chemicals and current actions

- **Benzidine-Based Dyes**
  - Direct Black 38 (CAS:1937-37-7) and Pigment Brown 22 (CAS:29398-96-7) are being addressed in challenge batches 6 & 7 respectively
  - Final assessments have not yet been released, but the draft decision for both substances is that they will be subject to SNAc provisions
  - Further benzidine-based substances from the DSL could be included in future priority work, in cooperation with colleagues at Health Canada
- **Phthalates**
  - Four phthalates have been previously assessed by the Government as Priority Substances (PSL 1 and PSL 2)
  - Several additional phthalates were identified as priorities in categorization of the Domestic Substances List
  - Two Phthalates (DMEP, DHNUP) assessed under batch 6 of the Challenge; expected publication of final Screening Assessment Report November 28, 2009