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Canada

# *National Environmental Emergencies Centre role in NL Offshore spill response*

Graham Thomas

Senior Officer

National Environmental Emergencies Centre

NL Satellite Office, Mount Pearl, NL

Environment and Climate Change Canada

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# ECCC's Roles and Authorities

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- Protects Canadians and their environment from the effects of environmental emergencies through provision of science-based expert advice and legislation
- Key Legislation:
  - *Canadian Environmental Protection Act, 1999 (CEPA)*
  - *Fisheries Act*
  - *Migratory Bird Convention Act, 1994*
- Other:
  - *Emergency Management Act, 2007*
  - *Atlantic Accords Act*
  - Regulations, Agreements and Plans
    - MOU between C-NLOPB and ECCC



# MOU between C-NLOPB and ECCCC

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- Notification of spills by the NL Operators are directly to the C-NLOPB and the NL Spill Line
- C-NLOPB is the Lead Agency responsible for the oversight of, and potential intervention for environmental emergency response from offshore drilling and production installations in the NL Offshore area.
- National Environmental Emergencies Centre (NEEC) is the focal point for ECCCC's scientific and technical advice during a response.
- C-NLOPB and NEEC will establish lines of communication



# MOU between C-NLOPB and ECCC

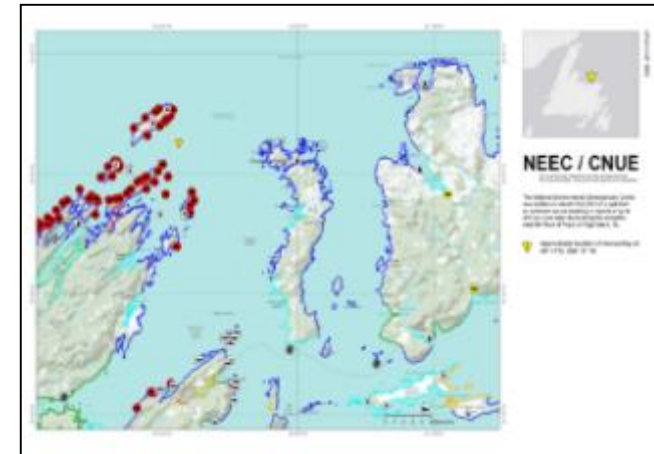
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- NEEC will chair an Environmental Emergencies Science Table as needed in support of the C-NLOPB
- Agreements are in place concerning environmental compliance and enforcement, in order to work collaboratively to avoid duplication and maximize resources.



# NEEC's 24/7 Services

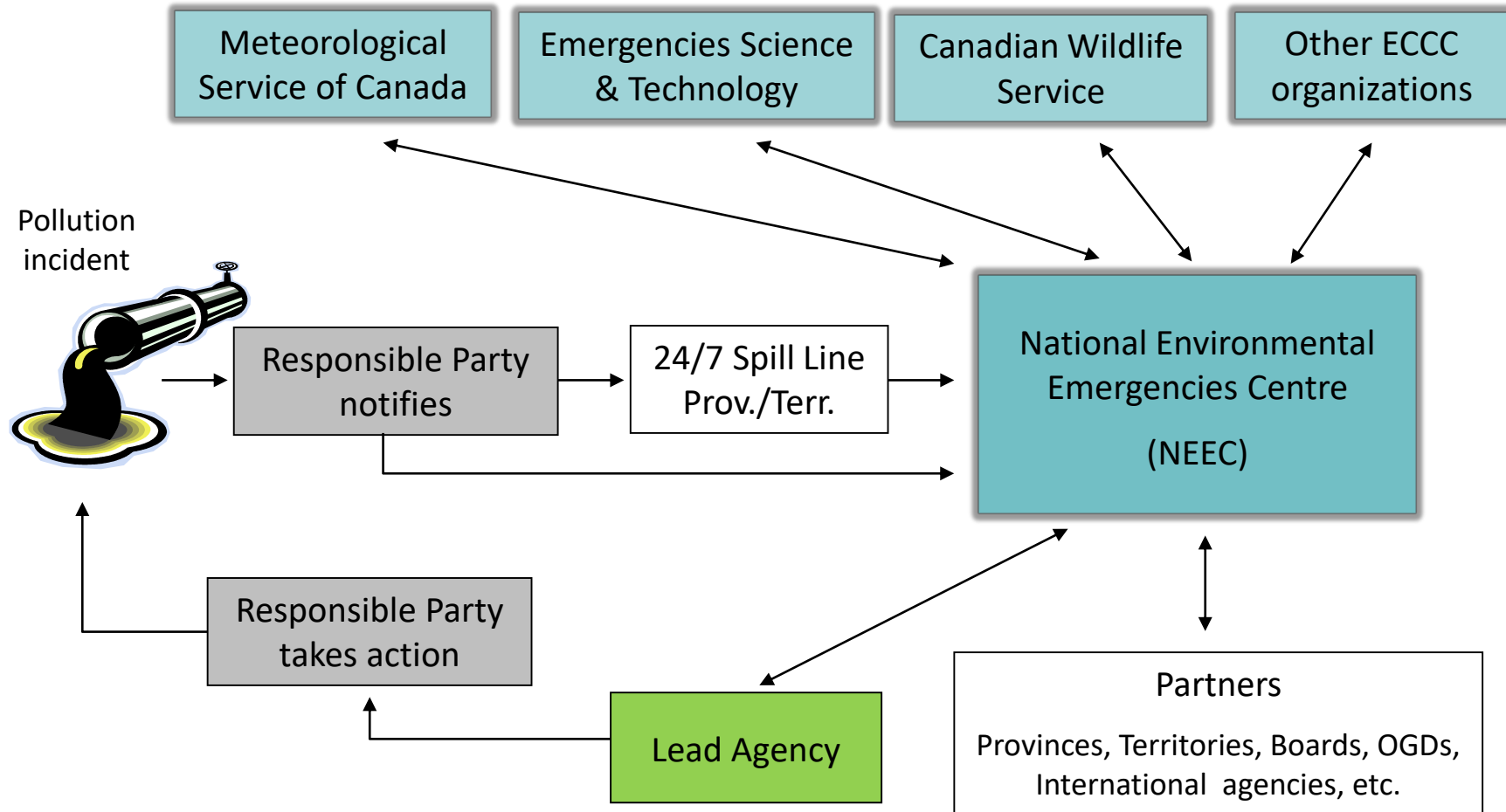
- Coordinate ECCC's environmental emergency preparedness & response services
- Assess that all appropriate and reasonable mitigation actions to protect the environment are taken
- Notify ECCC's Senior Management and key external partners on environmental emergencies
- Available 24/7 to provide technical/scientific advice and assistance to the Lead Agency
  - Identification of environmental sensitivities areas and priorities (sensitivity mapping)
  - Advice on mitigation and cleanup measures
  - Assessment of oiled shorelines to prioritize their protection and cleanup using the Shoreline Cleanup Assessment Technique (SCAT)
  - Convene a Science Table of experts to develop consensus-based advice to the Lead Agency
  - On-site scientific support coordinator during incidents



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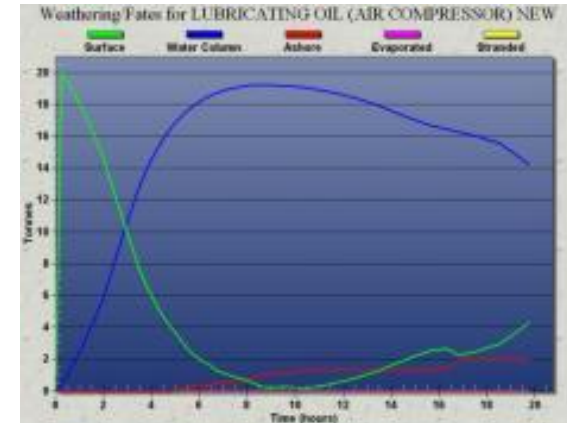


# NEEC is supported by multiple services within ECCC



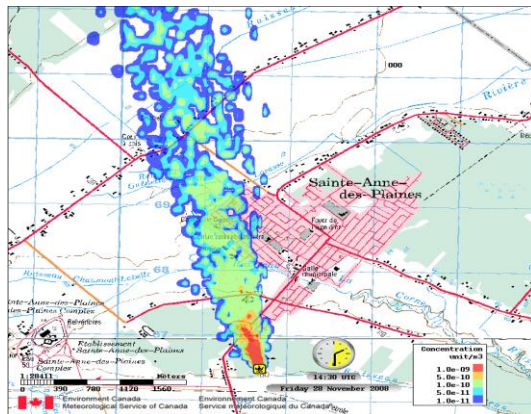
# Emergencies Science & Technology Section

- Oil forensic identification
- Pollutant fate, behaviour and effects
- Spill treating agent evaluation and guidelines
- Modelling - vessel, trajectory, dispersion
- Evaluation of spill countermeasures, containment, recovery, treatment and disposal techniques

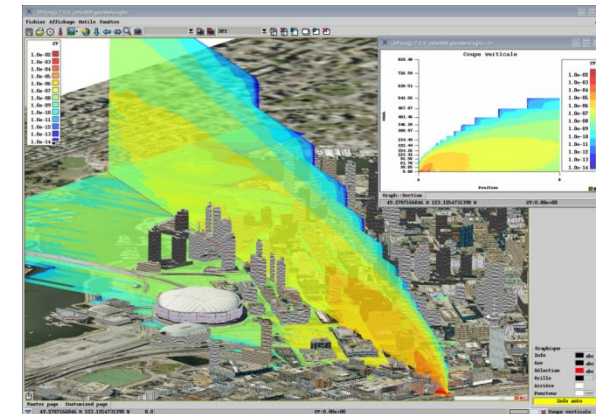


# Meteorological Service of Canada

- Site specific weather information:
  - Weather observations, warnings, ice reports, sea state, wind, etc.
- Atmospheric dispersion modelling for all types of contaminants
- Canadian Ice Service provides ice charts and forecasts
- Operational monitoring of satellite imagery for early detection and monitoring of oil spills (Integrated Satellite Tracking of Pollution – ISTOP)
- Ocean numerical modelling (currents, ice, wave, temperature, trajectories)
- Surface winds and tidal currents over the area of interest to run oil spill models

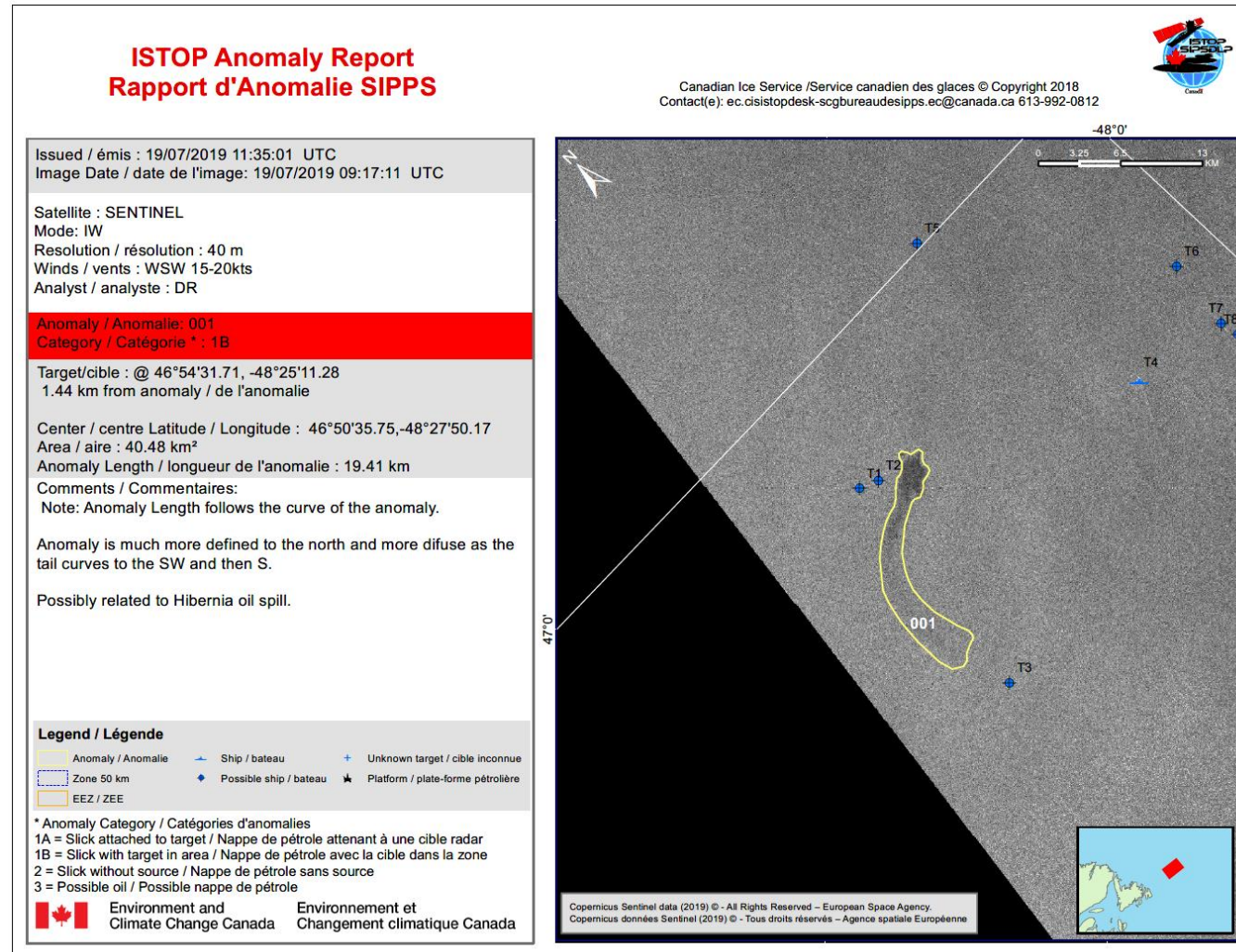


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# ISTOP Report July 19, 2019



# Canadian Wildlife Service

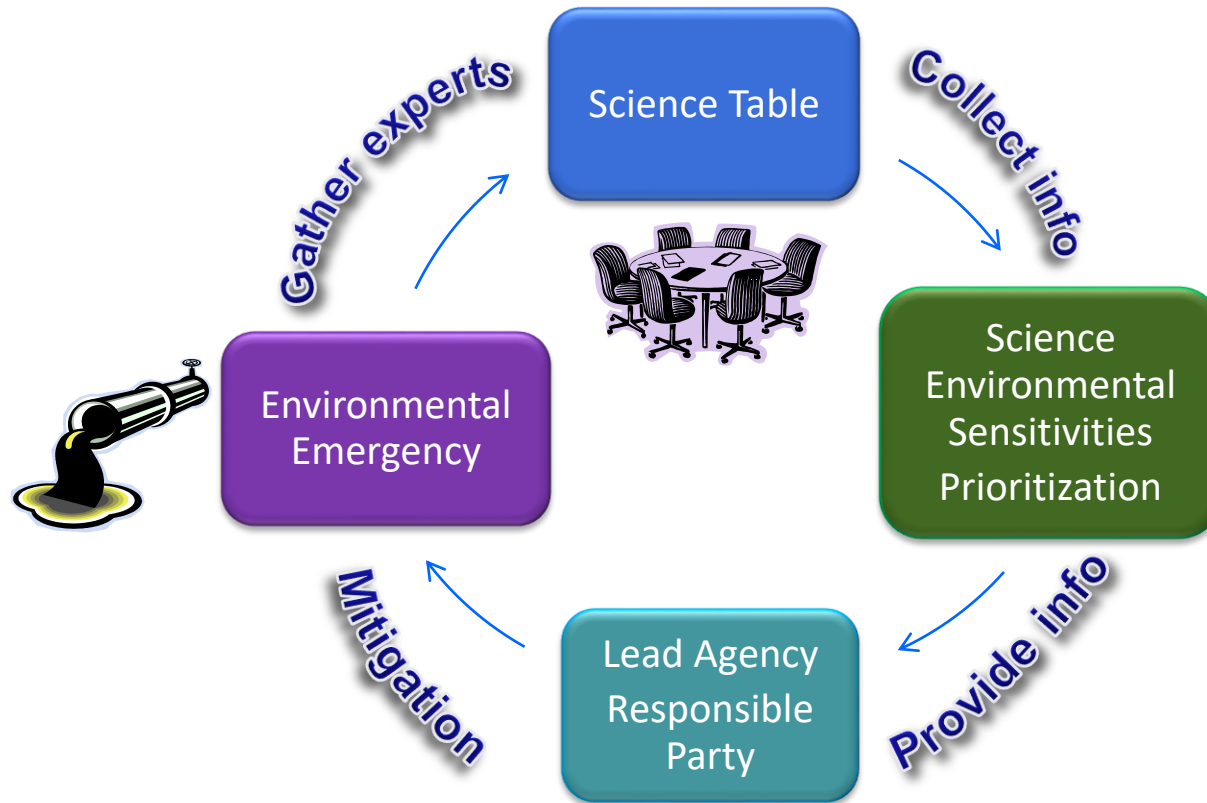
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- Expertise on the migratory bird resources and species at risk
- On-site assessment and determination of wildlife impact
- Advice and permitting of hazing
- Permitting of capture and rehabilitation operations
- Establishment of a National Wildlife Emergency Response Framework (NWERF)
- Review and input into the Responsible Party's Wildlife Response Plan.



# Environmental Emergencies Science Table

- Multidisciplinary table of experts providing consolidated advice, information and assistance to the Lead Agency



ECCC can convene and chair a Science Table when one or more triggers are met, or requested by the Lead Agency:

- Environmental emergency is significant and/or complex/severe;
- Incident has international or cross-jurisdictional component; or
- Need to coordinate information impedes the Lead Agency at fulfilling its response monitoring role.



# Environmental Emergencies Science Table (EEST) Principles

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- Lead Agency Concept – members are there to provide support to the C-NLOPB and ensure their departmental/agency mandate and legislation is complied with.
- One Window Approach: each participating member is expected to appoint one representative to gather pertinent data from within their organization or interest group and present the consolidated concerns/comments to the entire Table;



# Environmental Emergencies Science Table (EEST) Principles

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- Team Concept: partnerships and cooperation are critical to the success of the Table; each member has an equal voice and an equal opportunity for input in the decision-making process;
- Flexibility/Expandability: all members that have jurisdiction or vested interest in environmental emergencies are encouraged to be part of the Science Table;
- Open Communication: a free exchange of information between all members is encouraged; all interests, concerns and areas of dispute should be openly discussed, thereby providing opportunities for resolution;



# Environmental Emergencies Science Table (EEST) Principles

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- Provision of Consolidated Advice: upon discussion, a consolidated set of priorities and advice are presented to the Lead Agency for consideration and implementation by the Responsible Party.



# EEST: Examples of Members for recent NL Offshore oil and gas incidents

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- C-NLOPB
- ECCC: NEEC, ESTS, CWS, ISTOP, MSC, Communications Branch, Environmental Enforcement Directorate (EED), Wildlife Enforcement Directorate (WED)
- Canadian Coast Guard Environmental Response
- Department of Fisheries and Oceans
- Transport Canada
- National Resources Canada
- Department of National Defense
- Public Safety Canada
- Province of NL: Municipal Affairs and Environment, Service NL, Wildlife, Natural Resources



## EEST: Potential additional Members for recent NL Offshore oil and gas incidents

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- During incidents NEEC works closely with DFO to monitor local fisheries and fishing activities at the time as well as looking into the future and compares this activity to monitoring of the incident.
- If there are potential impacts partners such as Fish Food & Allied Workers Union (FFAW) and One Ocean would be contacts for possible addition to the EEST.
- FFAW and One Ocean would have high value input into any discussions related to possible voluntary or mandatory fishery closures as well as compensation processes.





# Lessons Learned

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- MOU works well, communication between C-NLOPB and ECCC-NEEC begins early, is open and continues throughout the incident
- ISTOP surveillance can be critical for monitoring when weather prevents aircraft from flying
- Data sharing is critical and we need a better method to share aerial surveillance data packages, tracker buoy data and field observations between the operator and government. Delays in data sharing can result in delays in modeling and possibly impacts fate and behavior assessment.
- Based on the last 3 incidents over the past 12 months a full review of capacity, tactics and expectations is needed



# Questions?

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Graham Thomas  
Senior Officer  
National Environmental Emergencies Centre  
NL Satellite Office, Mount Pearl, NL  
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