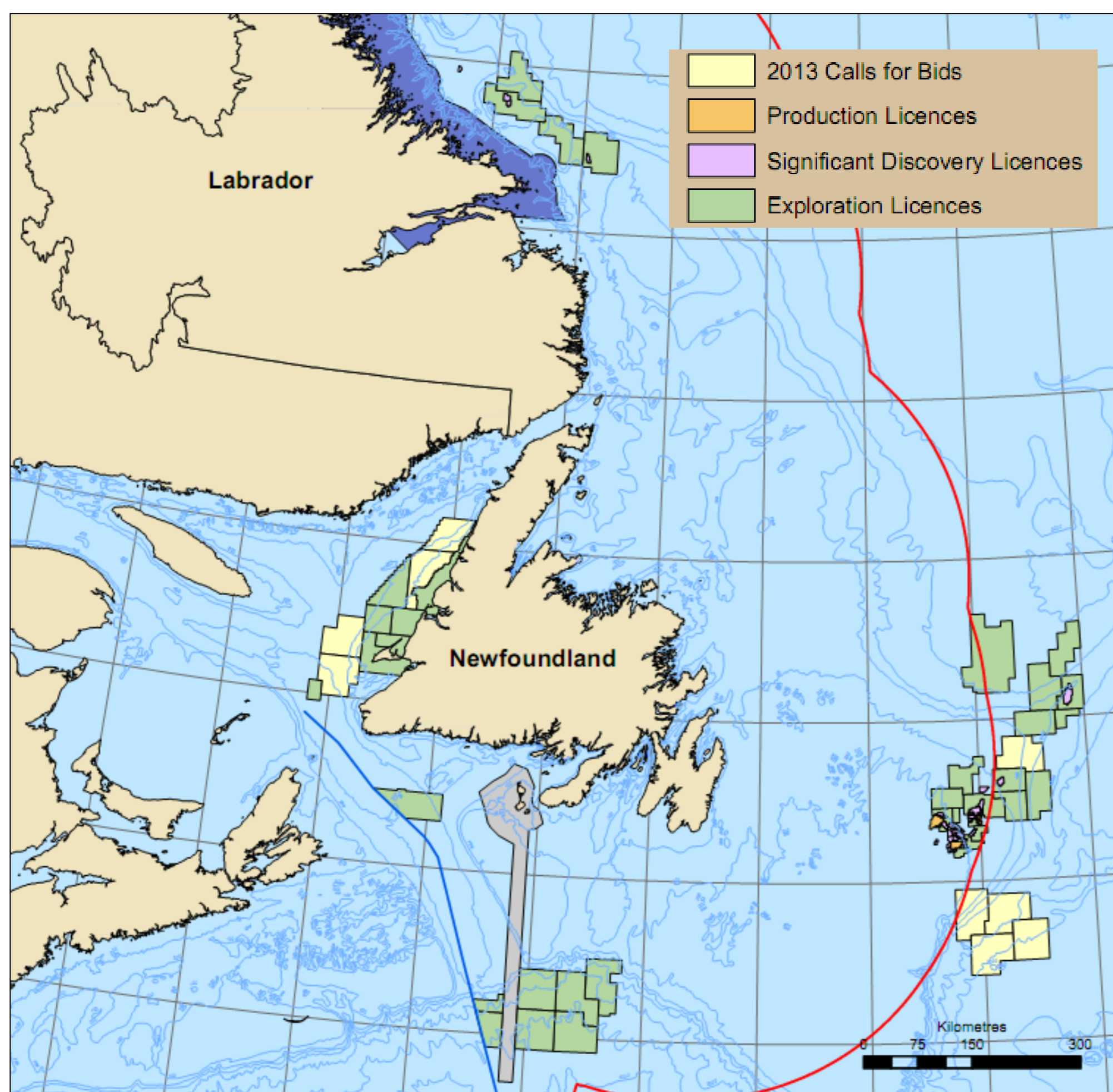
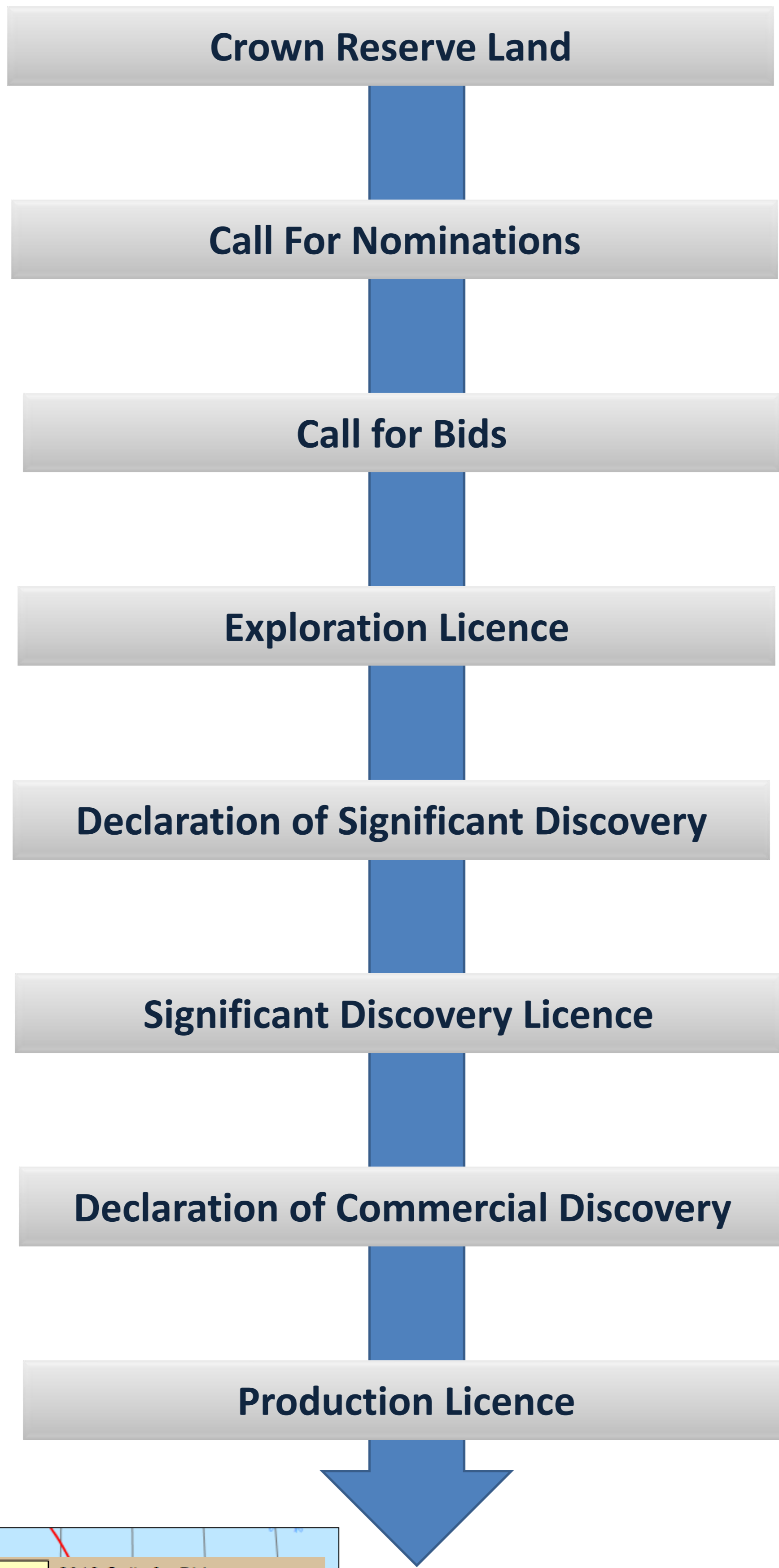


C-NLOPB RIGHTS ISSUANCE PROCESS

- The C-NLOPB is responsible for petroleum resource management in the Newfoundland & Labrador Offshore Area



OFFSHORE OIL AND GAS EXPLORATION ACTIVITIES

Offshore Geophysical Surveys (Natural or Artificial Source Methods)

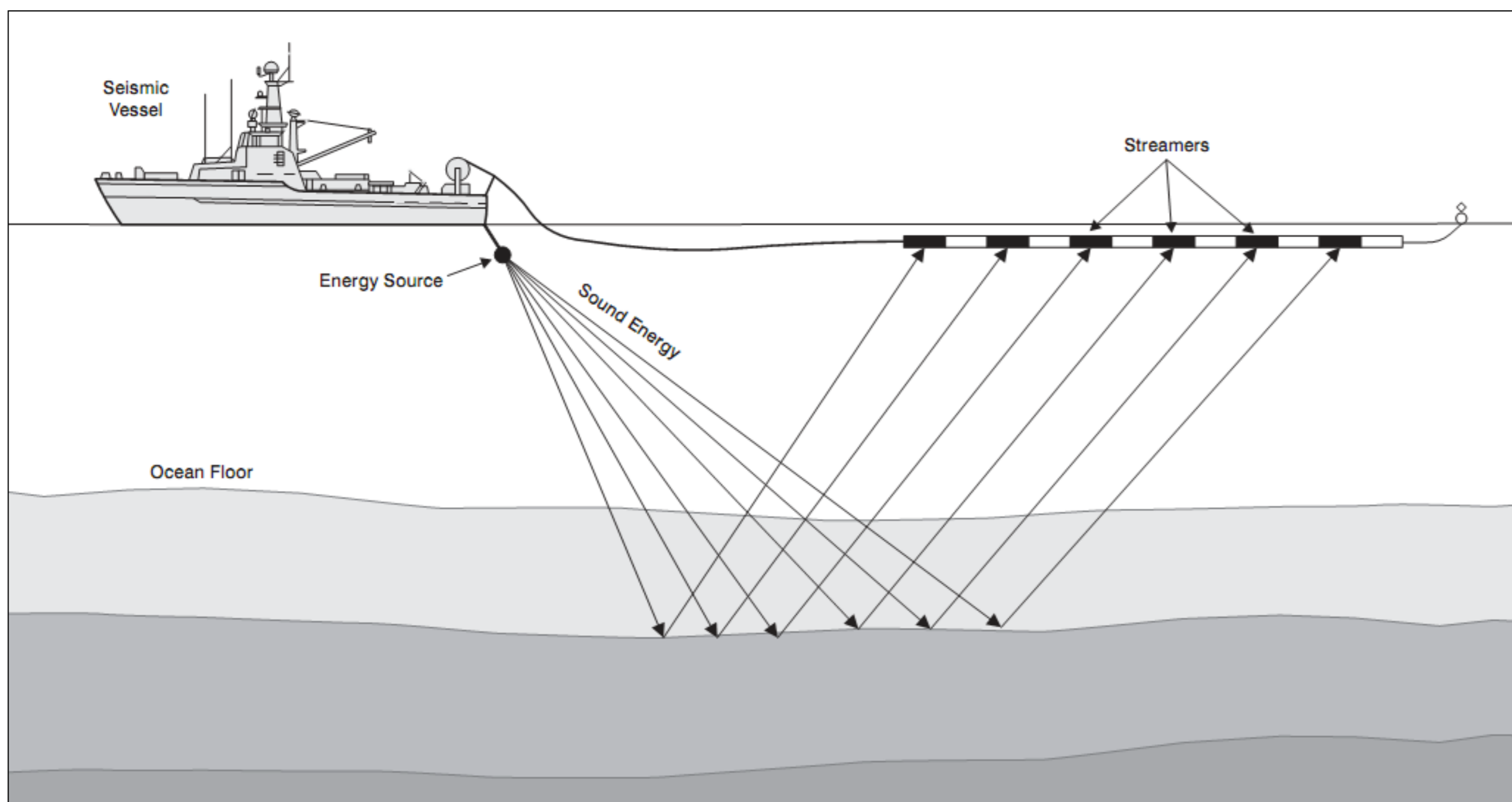
- Used to identify geological formations that may contain petroleum resources
- In seismic surveys, high-energy sound sources (airguns) are towed behind a vessel
- Vessels follow track lines along a prescribed grid crossing potential hydrocarbon prospects
- Reflected sound energy is recorded by sensitive hydrophones (streamers) towed behind the vessel
- Computer systems convert reflected acoustic signals into seismic data for mapping

2D seismic surveys: Cover larger areas with a single streamer

3D seismic surveys: Cover smaller areas with multiple streamers (greater density)

Well Drilling

- Wells may be drilled to confirm the presence, or define the extent, of petroleum resources at a location (often as first identified through seismic surveys)
- Various types of offshore drilling installations can be used once a drill site or target is determined, depending upon water depth and sea and ice conditions



Exploration Projects – Required Authorizations and Approvals

- A proposed oil and gas exploration program requires a range of authorizations and approvals
- These do or may include the following:
 - 1) **Operating Licence**
 - 2) **Authorizations:** Operations (Drilling, Production or Other), Geophysical Program, Diving Program
 - 3) **Approvals** (e.g., Approval to Drill a Well; Development Plan, CA-NL Benefits Plan)
- Operators must demonstrate that they can work in a safe and environmentally responsible manner