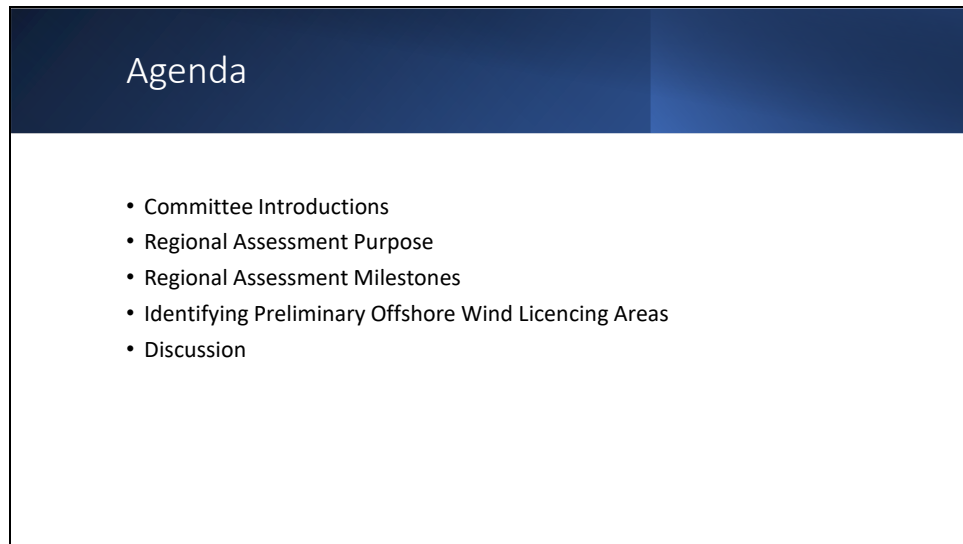


Slide 1

Preliminary Offshore Wind Licencing Area Recommendations

Regional Assessment of Offshore Wind Development in Newfoundland and Labrador
Scientific Information & Community Knowledge Advisory Group Session
February 28th, 2024

Slide 2

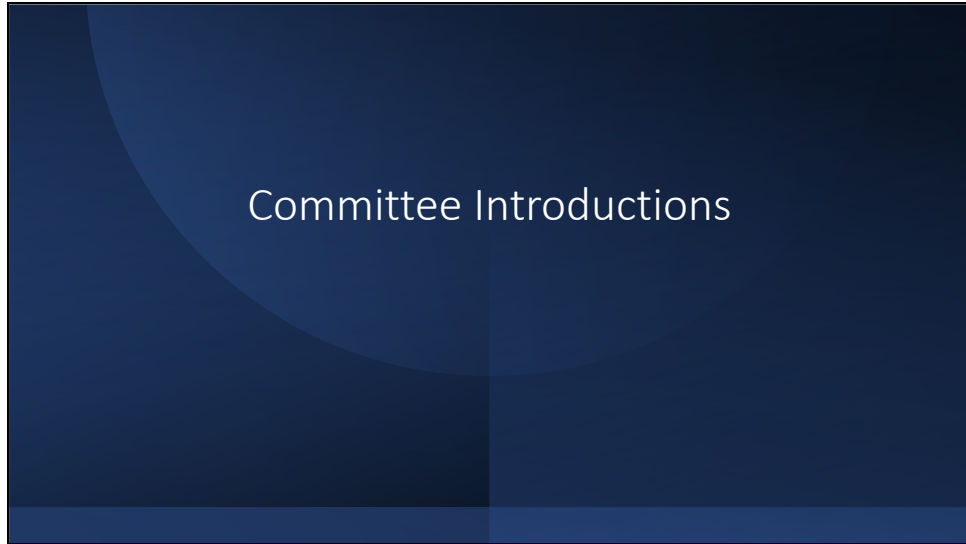


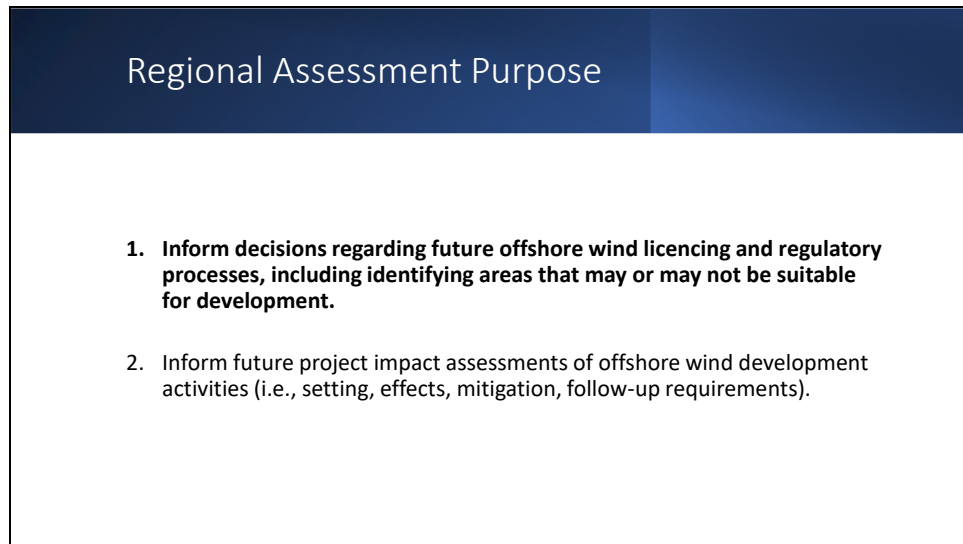
Agenda

- Committee Introductions
- Regional Assessment Purpose
- Regional Assessment Milestones
- Identifying Preliminary Offshore Wind Licencing Areas
- Discussion

- We request that all participants set their audio to mute during the duration of the presentation to avoid any background noise and to turn off their cameras to save our bandwidth (assuming large number of participants)
- We request that you please hold questions and comments to the discussion period at the end of the presentation. We will gladly return to any slides you'd like to revisit and discuss in more detail at that time.
- During discussion period, please use raise hand function and we'll go in order. Questions and comments can also be submitted via the chat function on MS Teams. One of our secretariat members will be moderating the chat and will raise any questions/comments noted in the chat during the discussion period.
- Slides were emailed to participants in advance of the meeting and will be made available on the assessment Registry Page.
- Meeting will not be video-recorded. We will be keeping meeting notes, and a summary of non-attributional feedback will be circulated to all participants.

Slide 3



A presentation slide with a dark blue header and a white body. The header contains the title "Regional Assessment Purpose". The body contains a numbered list of two items.

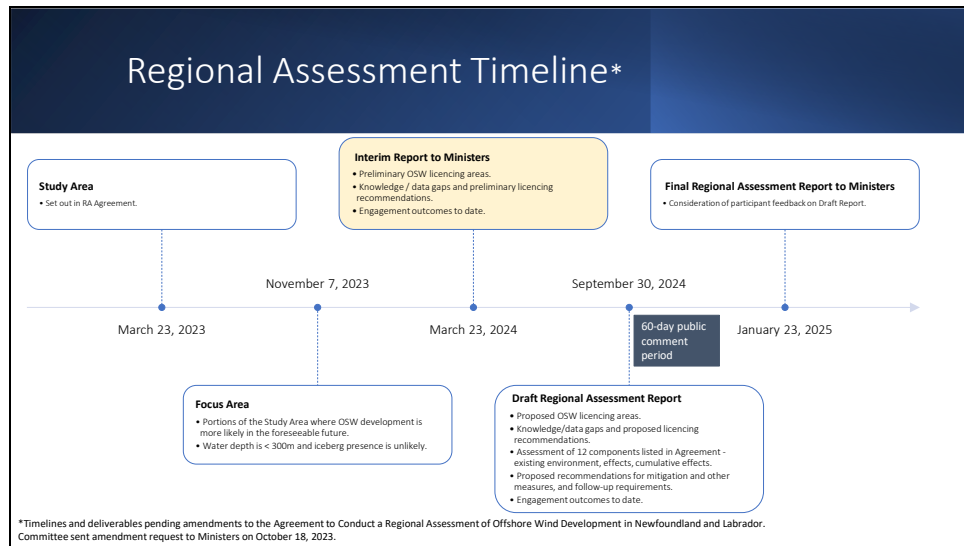
Regional Assessment Purpose

- 1. Inform decisions regarding future offshore wind licencing and regulatory processes, including identifying areas that may or may not be suitable for development.**
2. Inform future project impact assessments of offshore wind development activities (i.e., setting, effects, mitigation, follow-up requirements).

The purpose of the RA is twofold:

- **Inform decisions regarding future offshore wind licencing and regulatory processes, including identifying areas that may or may not be suitable for development.**
- Inform future project impact assessments of offshore wind development activities (i.e., setting, effects, mitigation, follow-up requirements).

Our work to date has focused on item 1, and this is the focus of our engagement today. Important to note that this RA is NOT a project-level IA. Committee recommends that all OSW projects be subject to IA.



Study Area: As per Agreement

Focus Area: The Committee interprets foreseeable to mean there is evidence available now showing OSW is feasible (i.e., technically and economically possible) and likely. The Committee has also determined a precautionary approach should be applied to OSW development where icebergs may be present

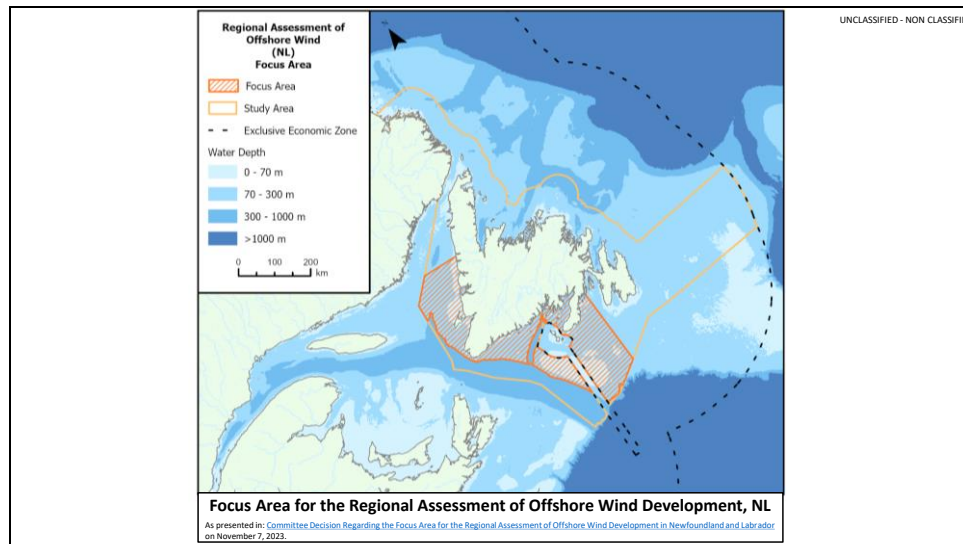
Interim Report to Ministers: Amendment request indicated this is what Committee would provide in Interim Report. Exclusively focused on OSW licencing areas.

Draft Regional Assessment Report: Amendment request indicated this is what Committee would provide in Draft Report/Final Report. It is all information, analyses and engagement as Ministers requested in original Agreement. This draft will be issued on Sept 30, 2024, for a 60-day public comment period.

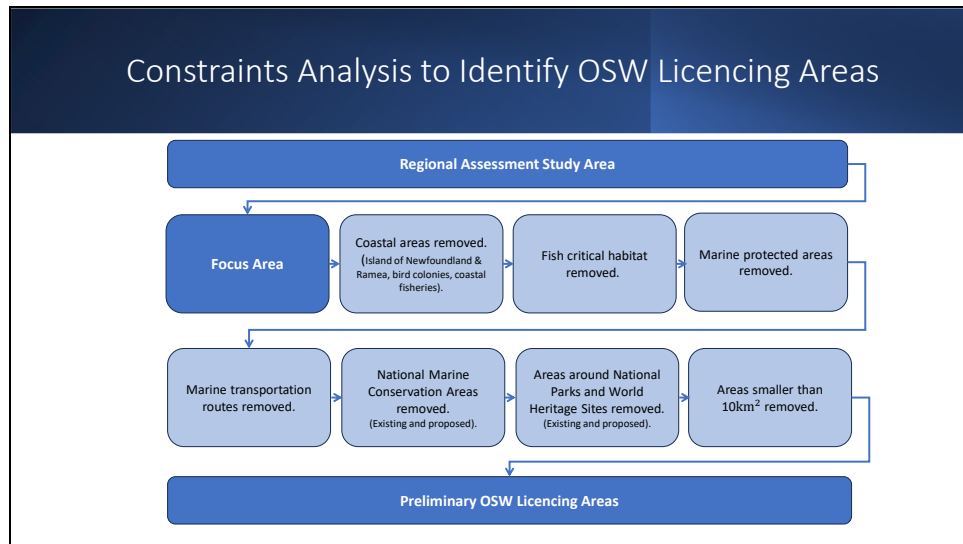
Final Report: Same contents as Draft Report, revised based on feedback received on Draft Report.

This timeline is focused on deliverables. We will also continue to engage throughout 2024 with Indigenous peoples, fisheries, federal and provincial authorities, stakeholders and the public, as well as with the Advisory Groups.

Slide 6



- The Focus Area represents portions of the Study Area where the Committee determined OSW interest would be most likely in the foreseeable future (in consideration of water depth and iceberg presence)
- The Committee interprets foreseeable to mean there is evidence available now showing OSW is feasible (i.e., technically and economically possible) and likely. The Committee has also determined a precautionary approach should be applied to OSW development where icebergs may be present
- The Committee proposed the Focus Area on August 17, 2023; held public engagement and advisory group sessions about the focus area from September 12-19th; accepted written feedback until September 22; and held additional meetings with experts throughout October to validate their work (OSW developers and contacts with experience in ice management, and/or monitoring and data in Atlantic Canada).
- The final Focus Area decision was announced on November 7, 2023. The remainder of the regional assessment will be scoped to the Focus Area.



This slide illustrates steps taken to identify preliminary OSW licencing areas the Committee may recommend to Ministers.

Beginning with the Focus Area, the Committee considered areas that should be avoided (i.e. "constraints") when identifying possible suitable locations for OSW . The Committee decided to avoid:

- "Coastal areas" - Areas within 10 km from the coast of the island of Newfoundland and areas within 3-10km of coastal islands, in consideration of areas important for wildlife and fisheries, and as a means to reduce potential noise* and visual impacts of OSW.
 - *Refers to noise impacts potentially experienced by communities along the coast. Noise impacts to marine mammals will be explored further in the Committee's final report.
- Designated critical habitat for fish species at risk (Northern Wolffish, Spotted Wolffish)
- Marine Protected Areas (Laurentian Channel MPA)
- Marine transportation routes
- Existing and proposed National Marine Conservation Areas (Study Area for South Coast Fjords NMCA)
- 80km off the coast of Gros Morne National Park, in consideration of significant viewsapes and its World Heritage Sites designation (based in part on exceptional vistas and natural beauty).

After applying these constraints, the Committee removed any areas smaller than 10km². The Committee assumes any OSW farm with 10 turbines or more would be at least 10km² in size.

The remaining areas are those the Committee is planning to identify in their Interim Report as preliminary OSW licencing areas.

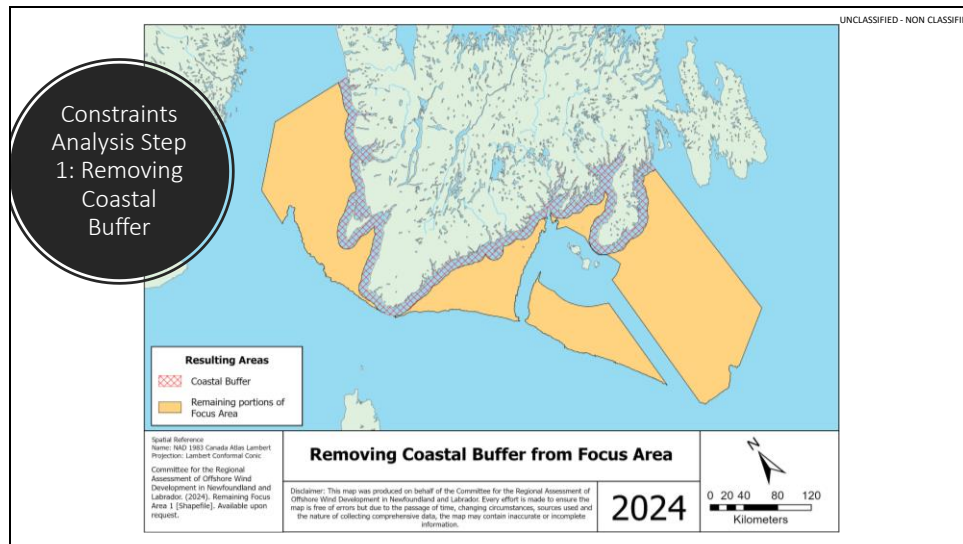
The specific constraints used in the analysis were selected based on:

- Processes used in other jurisdictions for identifying OSW areas;
- Expert authority recommendations on potential areas where OSW may be suitable/unsuitable;
- Publicly-available spatial data, and
- Components the Committee is required to assess as per the RA Agreement.

The Committee acknowledges that our constraints analyses have some gaps. For example, the Committee considers it important to avoid high density fishing areas and avifauna flight paths when siting OSW but did not have sufficient data to support applying these to identify preliminary licencing areas at this time. The areas presented today do, however, reduce or alleviate some marine spatial conflict and delineates more manageable areas for discussion with participants.

Furthermore, the Committee's interim report will describe these gaps and we will make recommendations about how these gaps could be addressed.

Slide 8



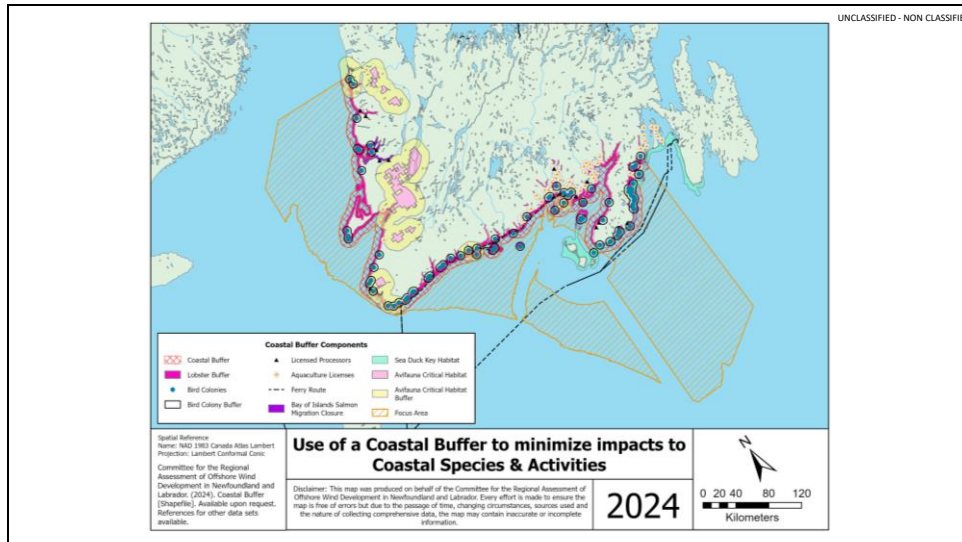
The next several slides will walk the audience through the constraints analysis process in more detail and will show the preliminary licencing areas the Committee identified. Reminder that we will be opening the floor for questions and discussion at the end of the presentation. We will gladly return to any slides you'd like to revisit and discuss in more detail at that time.

This map shows the 10 km buffer around the island of Newfoundland and permanently inhabited islands (Ramea) which was removed from the initial RA Focus Area. This was one of 3 coastal buffers used in the constraints analysis. Additional coastal buffers included:

- A 5 km buffer around coastal islands with breeding bird colonies
- A 3 km buffer around any remaining islands in consideration of coastal fisheries not already avoided because of the two previous (10km and 5km) coastal buffers

The following sources were used to develop the shapefile Remaining Focus Area 1:

- Impact Assessment Agency of Canada. (2023). Focus Area for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador [shapefile]. Open Government. <https://open.canada.ca/data/en/dataset/81560d1e-8394-4b51-8212-2bbe4d8a5ea2>
- Natural Resources Canada. (2023). CanVec 1M Land [dataset]. Topographic Data of Canada - CanVec Series. <https://open.canada.ca/data/en/dataset/8ba2aa2a-7bb9-4448-b4d7-f164409fe056/resource/59968c05-6a94-4120-b525-947ca8298d7b>



This map depicts various components that could be impacted by OSW in relation to the coastal buffer used in the constraints analyses. As illustrated, several key areas are avoided.

Applying a coastal buffer in the constraints analysis could alleviate or reduce impacts to, for example:

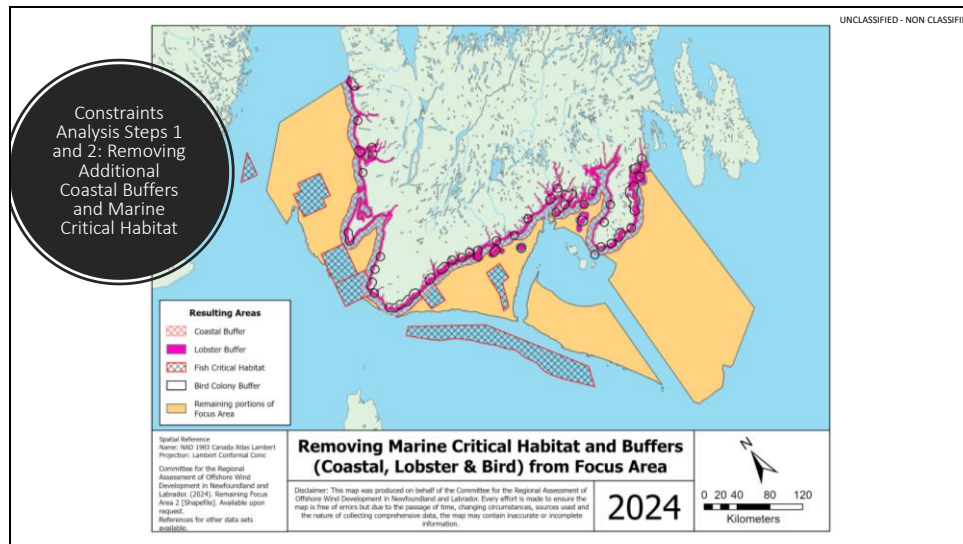
- Avifauna critical habitat that occurs along the coast;
- Aquaculture sites;
- Important Bird Areas;
- Lobster and other coastal fisheries;
- Marine Refuge and Fisheries Closures;
- Sea duck key habitat sites;
- Bird Colonies;
- Airports and Aerodromes;
- Viewscapes from coastal communities and provincially protected areas.

Some of these are depicted on the map shown.

Data sources used to develop this map include:

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Coastal Buffer [Shapefile]. Available upon request.
- Environment and Climate Change Canada. (2016). Atlantic Colonies—Density Analysis [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/87bf8597-4be4-4ec2-9ee3-797f5eafbd97>

- Environment and Climate Change Canada. (2022). Critical Habitat for Species at Risk National Dataset [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/47caa405-be2b-4e9e-8f53-c478ade2ca74>
- Environment and Climate Change Canada - CWS. (2023). *Canadian Protected and Conserved Areas Database (CPCAD)* [Data set]. Open Government. <https://open.canada.ca/data/en/dataset/6c343726-1e92-451a-876a-76e17d398a1c>
- Fisheries and Oceans Canada. (2019). Vessel Traffic Routes [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/6ab2803a-aace-4e60-83ed-44a7e0ccd1d8>
- Government of Newfoundland and Labrador. (2021). Fisheries and Aquaculture Licensed Fish Processors and Aquaculture Sites [dataset]. Fisheries, Forestry, and Agriculture GeoHub. <https://geohub-gnl.hub.arcgis.com/apps/GNL::fisheries-and-aquaculture-licensed-fish-processors-and-aquaculture-sites/about>
- Impact Assessment Agency of Canada. (2023). Focus Area for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador [shapefile]. Open Government. <https://open.canada.ca/data/en/dataset/81560d1e-8394-4b51-8212-2bbe4d8a5ea2>
- Natural Resources Canada. (2023). CanVec 1M Land [dataset]. Topographic Data of Canada - CanVec Series. <https://open.canada.ca/data/en/dataset/8ba2aa2a-7bb9-4448-b4d7-f164409fe056/resource/59968c05-6a94-4120-b525-947ca8298d7b>
- Natural Resources Canada. (2023). CanVec 50K Newfoundland Land [dataset]. Topographic Data of Canada - CanVec Series. <https://open.canada.ca/data/en/dataset/8ba2aa2a-7bb9-4448-b4d7-f164409fe056/resource/59968c05-6a94-4120-b525-947ca8298d7b>
- Sea Duck Joint Venture. (n.d.). Sea Duck Key Habitat Sites Atlas [dataset]. Retrieved February 22, 2024, from <https://seaduckjv.org/science-resources/sea-duck-key-habitat-sites-atlas/>



This map depicts the additional coastal buffers removed from the remaining Focus Area and the next step in the constraints analysis – removing marine species at risk critical habitat.

Bird colonies buffer:

- The Committee considered avoiding OSW within at least 5 km of bird colonies could be a good starting point for identifying OSW licencing areas. Bird colonies would also be important to consider at the project-level and the Committee is aware of ongoing work by ECCC-CWS to develop standard parameters for setback distances from bird colonies that proponents can use when siting projects.

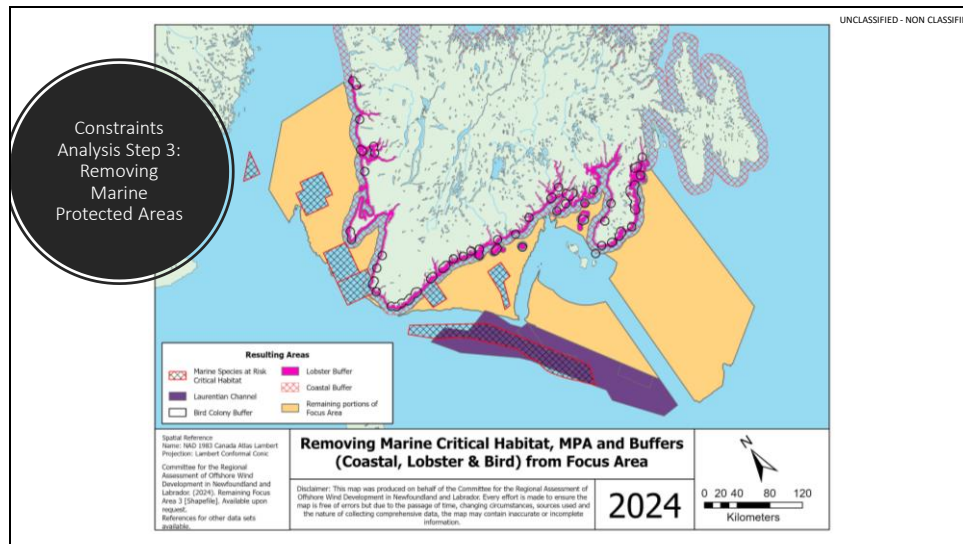
Lobster buffer:

- The Committee assumed any area within 3 km of coastline could include lobster fisheries or other coastal fisheries and removed these areas during the constraints analysis as a starting point for identifying OSW licencing areas.

The following sources were used to develop the shapefile Remaining Focus Area 2:

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Coastal Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Lobster Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Bird Colony Buffer [Shapefile]. Available upon request.

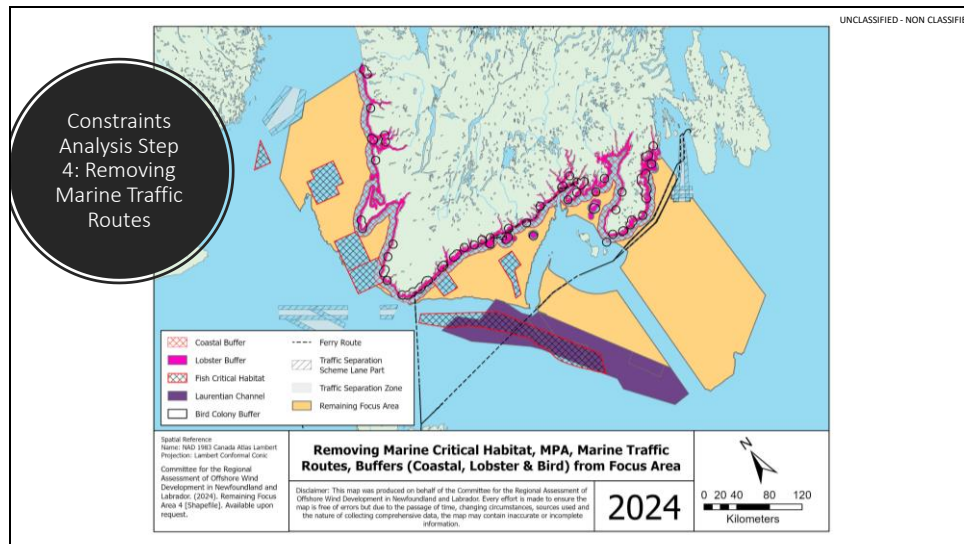
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 1 [Shapefile]. Available upon request.
- Environment and Climate Change Canada. (2016). Atlantic Colonies—Density Analysis [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/87bf8597-4be4-4ec2-9ee3-797f5eafbd97>
- Fisheries and Oceans Canada. (2019). Critical Habitat of Species at Risk [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/db177a8c-5d7d-49eb-8290-31e6a45d786c>
- Natural Resources Canada. (2023). CanVec 50K Newfoundland Land [dataset]. Topographic Data of Canada - CanVec Series. <https://open.canada.ca/data/en/dataset/8ba2aa2a-7bb9-4448-b4d7-f164409fe056/resource/59968c05-6a94-4120-b525-947ca8298d7b>



This map depicts the next step in the constraints analysis and the remaining Focus Area. As in the maps on the previous slides a coastal buffer and marine critical habitats are removed. The Laurentian Channel Marine Protected Area (shown in purple) is additionally removed.

The following sources were used to develop the shapefile Remaining Focus Area 3:

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Coastal Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Lobster Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Bird Colony Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 2 [Shapefile]. Available upon request.
- Fisheries and Oceans Canada. (2019). Critical Habitat of Species at Risk [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/db177a8c-5d7d-49eb-8290-31e6a45d786c>
- Fisheries and Oceans Canada. (2021). Oceans Act Marine Protected Areas [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/a1e18963-25dd-4219-a33f-1a38c497125>



This map illustrates the removal of marine traffic routes from the Focus Area.

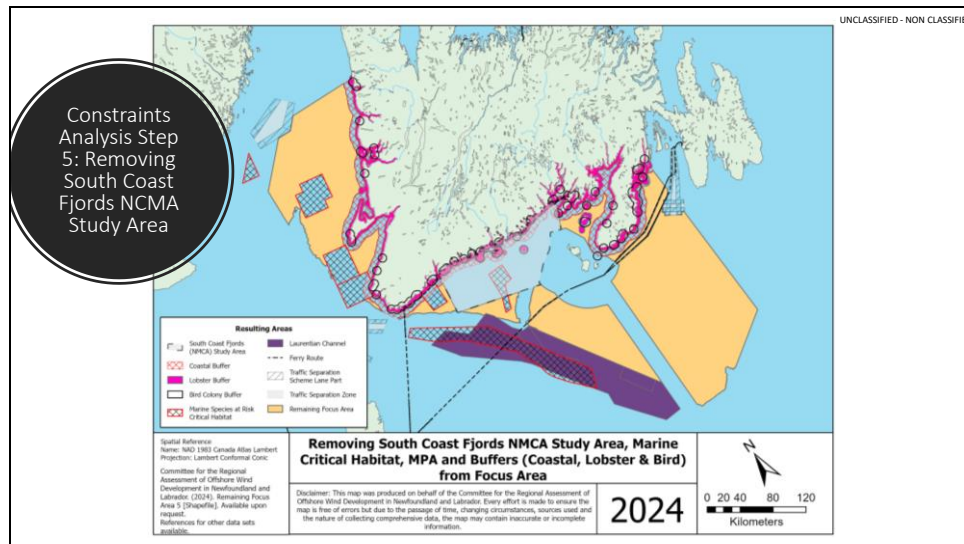
Only vessel traffic routes identified in the Fisheries and Oceans Canada Vessel Traffic Route Dataset were removed.

- The traffic separation zone and traffic separation scheme lane part delineated in the DFO data set were removed from the Focus Area.
- A 500m was applied around ferry routes. Ferry routes were represented linearly in the DFO dataset and otherwise would not have been represented in the preliminary licencing areas. The 500m buffer is not reflective of the distance that should be maintained between ferry routes and wind farms.
- Transportation routes in bays/coastal areas were addressed by a coastal buffer.
- The Committee is aware of data gaps associated with the DFO Vessel Traffic Route Dataset. If more accurate spatial data becomes available the Committee may adjust their licencing areas or recommend this be a consideration in project-specific assessments.

The following sources were used to develop the shapefile Remaining Focus Area 4:

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Coastal Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Lobster Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Bird Colony Buffer [Shapefile]. Available upon request.

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 3 [Shapefile]. Available upon request.
- Fisheries and Oceans Canada. (2019). Critical Habitat of Species at Risk [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/db177a8c-5d7d-49eb-8290-31e6a45d786c>
- Fisheries and Oceans Canada. (2019). Vessel Traffic Routes [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/6ab2803a-aace-4e60-83ed-44a7e0ccd1d8>
- Fisheries and Oceans Canada. (2021). Oceans Act Marine Protected Areas [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/a1e18963-25dd-4219-a33f-1a38c4971250>



This map illustrates the removal of the study area for the proposed South Coast Fjords National Marine Conservation Area (NMCA).

Prohibited activities in NMCAs currently include land use (which include the seabed) and occupation within NMCAs. Parks Canada has recommended that the NMCA study area be excluded from OSW siting at this time to allow the NMCA establishment process to proceed.

The South Coast Fjords NMCA also borders Sandbanks Provincial Park, which has been proposed for redesignation as a national park. Parks Canada advised the Committee that removal of the South Coast Fjords NMCA could reduce potential impacts to views at Sandbanks.

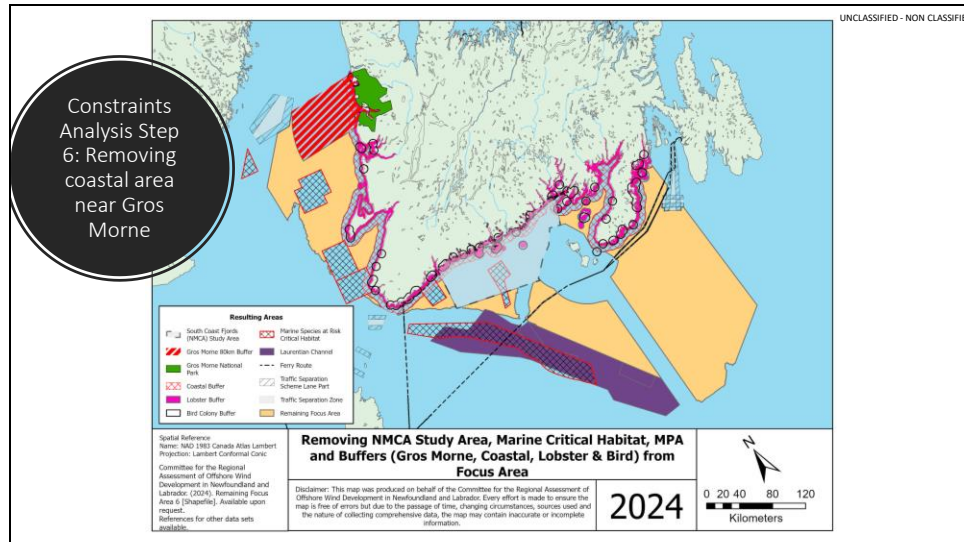
The following sources were used to develop the shapefile Remaining Focus Area 5:

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Coastal Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Lobster Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Bird Colony Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 4 [Shapefile]. Available upon request.
- Fisheries and Oceans Canada. (2019). Critical Habitat of Species at Risk [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/db177a8c-5d7d-49eb-8290-31e6a45d786c>

- Fisheries and Oceans Canada. (2019). Vessel Traffic Routes [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/6ab2803a-aace-4e60-83ed-44a7e0ccd1d8>
- Fisheries and Oceans Canada. (2021). Oceans Act Marine Protected Areas [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/a1e18963-25dd-4219-a33f-1a38c4971250>
- Parks Canada. (2024). South Coast Fjords NMCA Study Area (Unpublished raw data). Parks Canada. Retrieved January 31, 2024 from Parks Canada.

Note a static image of the proposed NMCA study area is publicly available at:

- Parks Canada Agency, G. of C. (2023, June 2). South Coast Fjords Study Area, Newfoundland—South Coast Fjords Study Area. <https://parks.canada.ca/amnc-nmca/cnamnc-cnmca/fjords-cote-sud-south-coast-fjords>



This map shows the removal of coastal areas near Gros Morne National Park and World Heritage Site (WHS). Gros Morne was inscribed on the World Heritage List, in part, based on its exceptional vistas and natural beauty, which are considered a part of its Outstanding Universal Values (OUVs).

In March 2023 UNESCO published *Guidance for Wind Energy Projects in a World Heritage Context*. According to the Guidance any potential impact from projects needs to be measured in relation to OUVs they may impact and any potential, irreversible negative impacts on OUVs should be avoided.

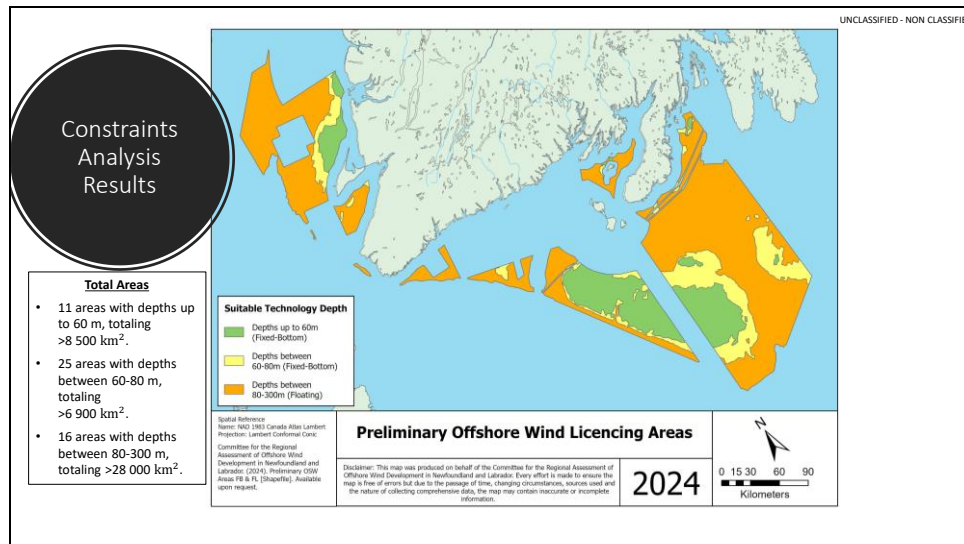
Parks Canada similarly advised the Committee that Gros Morne is a highly sensitive receptor to visual impacts and therefore no impacts on viewsapes should be allowed. They recommended an 80km buffer be used to avoid visual impacts. This is a precautionary estimate of the distance at which OSW turbines up to 300m high could be visible at any given location in the park (based on OSW visibility threshold research in other jurisdictions).

In the constraints analysis, the Committee used a modified 80km buffer that includes an area 80km perpendicular to park boundaries (i.e., does not include peripheral areas).

The following sources were used to develop the shapefile Remaining Focus Area 6:

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Coastal Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Lobster Buffer [Shapefile]. Available upon request.

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Bird Colony Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Gros Morne 80km Buffer [Shapefile]. Available upon request.
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 5 [Shapefile]. Available upon request.
- Fisheries and Oceans Canada. (2023). Critical Habitat of Species at Risk [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/db177a8c-5d7d-49eb-8290-31e6a45d786c>
- Fisheries and Oceans Canada. (2021). Oceans Act Marine Protected Areas [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/a1e18963-25dd-4219-a33f-1a38c4971250>
- Fisheries and Oceans Canada. (2019). Vessel Traffic Routes [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/6ab2803a-aace-4e60-83ed-44a7e0ccd1d8>
- Natural Resources Canada. (2022). National Parks and National Park Reserves of Canada Legislative Boundaries (Record ID: 9e1507cd-f25c-4c64-995b-6563bf9d65bd) [dataset]. Open Government. <https://open.canada.ca/data/en/dataset/9e1507cd-f25c-4c64-995b-6563bf9d65bd>
- Parks Canada. (2024). South Coast Fjords NMCA Study Area (Unpublished raw data). Parks Canada. Retrieved January 31, 2024 from Parks Canada.



- This map shows the results of the constraints analysis and depicts the areas the Committee is planning to identify in their Interim Report as preliminary OSW licencing areas.
- Areas shown are divided into three water depths, reflecting where different types of technologies could be feasible now or in the foreseeable future.
 - Areas in green show preliminary licencing areas where depth does not exceed 60m (fixed bottom turbines)
 - Areas in yellow show preliminary licencing areas where depths are between 60 – 80m (fixed bottom turbines in the foreseeable future)
 - Areas in orange show preliminary licencing areas where depths are between 80 – 300m (floating turbines in the foreseeable future)

Overall, the Committee identified

- 11 areas where depths do not exceed 60m, totaling an area of >8 500km²
- 25 areas where depths are between 60 – 80m, totaling an area of >6 900km²
- 16 areas where depths are between 80-300m, totaling an area of >28 000km²

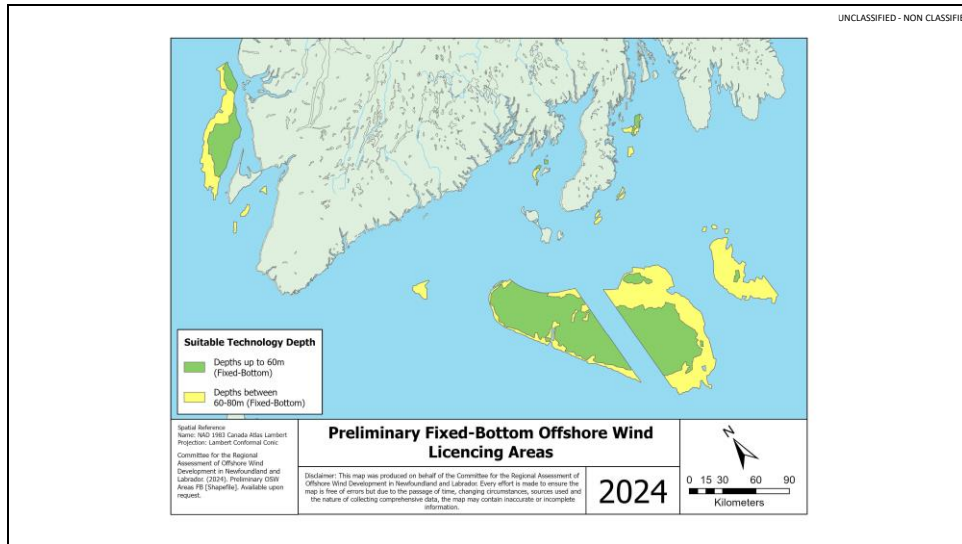
These preliminary licencing areas are a starting point and could be further refined throughout the RA. The Committee will also recommend in the interim report that project-level impact assessments inform more specific siting decisions to further avoid or reduce impacts of OSW.

Furthermore, the licencing areas recommended through this RA are intended to inform first rounds of licencing. Other licencing areas could also be appropriate overtime data gaps are

addressed and provide evidence that certain impacts could be avoided in other areas and/or technologies advance.

The following sources were used to develop the shapefile Preliminary OSW Areas FB & FL:

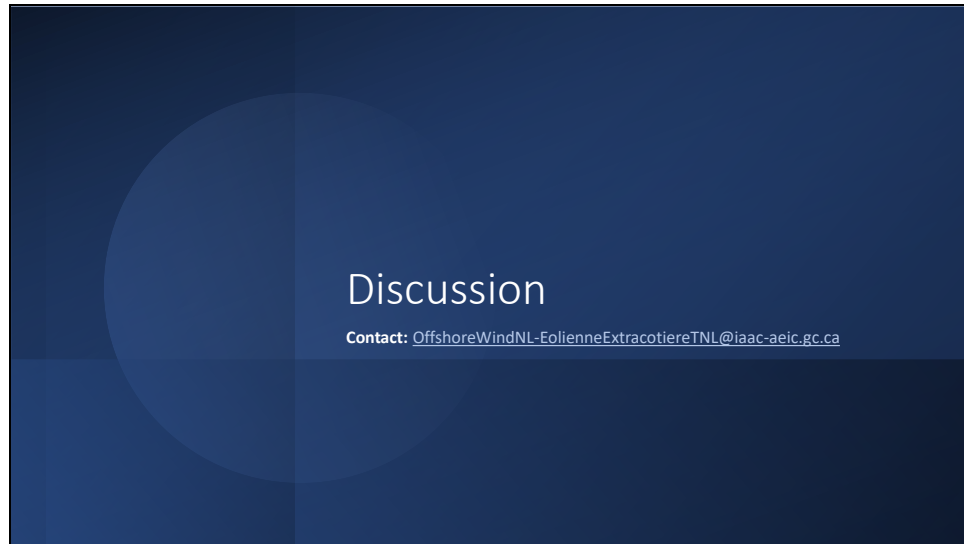
- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 6 [Shapefile]. Available upon request.
- GEBCO Compilation Group (2023) *GEBCO 2023 Grid* (doi:10.5285/f98b053b-0cbc-6c23-e053-6c86abc0af7b)



- Based on engagement with OSW developers potentially interested in NL and examples in other jurisdictions, the Committee expects that of the licencing areas proposed, developers could pursue shallower areas first (relatively lower cost of fixed vs. floating turbines)
- This map shows the preliminary licencing areas the Committee identified where depths do not exceed 80 m

The following sources were used to develop the shapefile Preliminary OSW Areas FB :

- Committee for the Regional Assessment of Offshore Wind Development in Newfoundland and Labrador. (2024). Remaining Focus Area 6 [Shapefile]. Available upon request.
- GEBCO Compilation Group (2023) *GEBCO 2023 Grid* (doi:10.5285/f98b053b-0cbc-6c23-e053-6c86abc0af7b)



Closing statement and thank you for participation.

If you have any additional feedback to provide the Committee or additional data and information the Committee should use to identify licencing areas, please reach out to us at: OffshoreWindNL-EolienneExtracotiereTNL@iaac-aeic.gc.ca

Please note that for the purpose of completing our Interim Report by the required deadline of March 23rd, the Committee will consider any additional data and information provided to us by March 1st COB. This is not to say feedback, data or information received after this date would not be considered, however, information received after March 1st will be reflected in the Committee's Draft Regional Assessment Report on September 30th.