

Conservation Measure 24-04 (2017)
Establishing time-limited Special Areas for Scientific Study
in newly exposed marine areas following ice-shelf retreat or
collapse in Statistical Subareas 48.1, 48.5 and 88.3

Species	all
Area	48.1 48.5 88.3
Season	all
Gear	all

The Commission,

Recalling Resolution 30/XXVIII concerning climate change impacts on the marine ecosystem within the Convention Area,

Noting that one of the most evident signs of regional climate change in Antarctica has been glacial retreat and ice-shelf collapse in the Antarctic Peninsula,

Concerned that there is a probability that climate change will lead to the retreat or collapse of other ice shelves in the Antarctic Peninsula region in the future,

Noting that ice-shelf collapse will lead to the exposure of new marine habitats and to subsequent biological colonisation and altered ecosystem dynamics,

Conscious of the scientific value of habitats exposed by glacial retreat or ice-shelf collapse and the need to facilitate research in such areas,

Recalling Article IX.2(g) which provides for the designation of the opening and closing of areas, regions or sub-regions for purposes of scientific study or conservation, including special areas for protection and scientific study,

Noting Recommendation 26 from the Antarctic Treaty Meeting of Experts on Climate Change in April 2010 to consider the means by which automatic interim protection might be afforded to newly exposed marine areas following ice-shelf collapse,

Recognising that an automatic review period prior to interim protection would allow for detailed inspection of the available data, whilst maintaining a precautionary approach,

Noting that 10 years is considered to be the minimum time period needed for scientific activities in Antarctica to be designed, organised and funded, and initial results to become available,

hereby adopts the following conservation measure in accordance with Article II and Article IX of the CAMLR Convention:

Designating Special Areas for Scientific Study following ice shelf retreat or collapse

1. Special Areas for Scientific Study may be designated in any newly exposed marine area following the retreat or collapse of an ice shelf, glacier or ice tongue in the Antarctic Peninsula region (Statistical Subareas 48.1, 48.5 and 88.3) shown in Annex 24-04/A.
2. The retreat of ice shelves, glaciers or ice tongues is defined as the landward movement of the ice front such that there is a loss of more than 10% of the areal extent of an individual

ice shelf, glacier or ice tongue within any 10-year period from 2016 onwards. Collapse is defined as the break up or disintegration of an ice shelf, glacier or ice tongue over a period that may be shorter than 10 years.

3. Special Areas for Scientific Study shall be designated in two stages, as follows:
 - (i) Stage 1 Special Areas for Scientific Study shall be designated for a maximum period of two years, during which time the provisions in paragraphs 13 to 18 of this conservation measure shall apply. Stage 1 is a provisional designation to allow time for detailed review of the available data, including any relevant fishery research proposals in accordance with paragraphs 6 and 7 of this conservation measure.
 - (ii) Stage 2 Special Areas for Scientific Study shall be designated for a period of 10 years, during which time the provisions in paragraphs 13 to 18 of this conservation measure shall apply.
4. Members recording the retreat or collapse of any ice shelf, glacier or ice tongue, as defined in paragraph 2, shall inform the Secretariat, as soon as practicable, of the proposed Stage 1 Special Area for Scientific Study (corresponding to the area of ice loss). Details on the extent of retreat or collapse, and the corresponding boundaries, shall be provided to the Secretariat. The Secretariat shall subsequently, and within one week, notify all Members, and also include the coordinates and map(s) of the Stage 1 Special Area for Scientific Study in a publicly available list on the CCAMLR website.
5. Stage 1 Special Areas for Scientific Study shall be deemed designated 48 hours after all Members have been notified in accordance with paragraph 4.
6. Following the designation of a Stage 1 Special Area for Scientific Study, Members shall submit detailed information on the extent and characteristics of the Special Area for review by the Scientific Committee and its working groups. Information should also be provided on the baseline extent of the ice shelf, glacier or ice tongue under consideration, i.e. its extent before collapse or retreat occurred.
7. The review should include consideration of potential interactions of the notified Stage 1 Special Area for Scientific Study with fishery research proposals for the relevant subarea.
8. Stage 1 or Stage 2 areas can be opened for research fishing in accordance with paragraph 12, and subject to a research plan agreed by Commission upon advice from the Scientific Committee and its working groups.
9. Calculations of incremental retreat of ice shelves, glaciers or ice tongues, or the total area of collapse, shall be based upon ice coastline boundaries contained in the periodic updates of the SCAR Antarctic Digital Database, or upon other relevant scientific information if available, including high-resolution satellite imagery.
10. Stage 2 Special Areas for Scientific Study shall be designated upon agreement by the Commission, based on advice from the Scientific Committee. The 10-year period of designation for Stage 2 Special Areas for Scientific Study shall start immediately following agreement by the Commission.

11. Details of the designated Stage 2 Special Areas, including coordinates and map(s), shall be appended to this conservation measure as annexes. Coordinates and map(s) of the designated Stage 2 Special Areas for Scientific Study shall also be included in a publicly available list on the CCAMLR website.

Conditions for fishing activities within Special Areas for Scientific Study

12. Fishing activities may take place within any Stage 1 or Stage 2 Special Area for Scientific Study subject to the conditions in paragraphs 7, 8 and 14.

Scientific research within Special Areas for Scientific Study

13. Members are encouraged to undertake scientific research in Special Areas for Scientific Study following ice-shelf collapse or retreat, particularly in order to understand the ecosystem processes in relation to climate change. Scientific research may be undertaken in Stage 1 Special Areas as well as Stage 2 Special Areas, if practicable.
14. Scientific research activities related to fisheries and the harvesting of marine living resources shall be carried out in accordance with the provisions of Conservation Measure 24-01, subject to the following conditions:
 - (i) unless otherwise agreed by the Commission, following advice from the Scientific Committee, the annual catch for all taxa (finfish and non-fish) combined shall be limited to 1 tonne per Member in each designated Stage 1 or Stage 2 Special Area for Scientific Study;
 - (ii) any Member planning to use a vessel or vessels for fisheries research purposes in a Stage 1 or Stage 2 Special Area for Scientific Study shall notify the Secretariat, which in turn shall notify all Members immediately, according to format 1 given in Annex 24-01/A;
 - (iii) each vessel conducting research activities related to fisheries and the harvesting of marine living resources shall have on board at least one scientific observer who shall be appointed in accordance with the CCAMLR Scheme of International Scientific Observation, space on board should also be made available to at least one scientist to ensure related scientific data are collected during the fishing effort. Vessels are encouraged to operate oceanographic sensors and bottom cameras.
 - (iv) vessels to which the provisions of this paragraph apply, shall be exempt from conservation measures relating to mesh size regulations, prohibition of types of gear, closed areas, fishing seasons and size limits, and reporting system requirements other than those specified in Conservation Measure 24-01, paragraph 4.
15. Members planning to initiate, or undertake any non-fisheries-related scientific research or monitoring on marine living resources within any Stage 1 or Stage 2 Special Area for Scientific Study are encouraged to inform the Scientific Committee of their intended research plans, and also to subsequently report any results relevant to the work of the Commission and the Scientific Committee.

Other management provisions within Special Areas for Scientific Study

16. In addition to the provisions of Conservation Measure 26-01 and MARPOL Annex V relating to the discharge of garbage within 12 n miles of the Antarctic coastline, no discharges and no dumping of any type of waste¹ by any fishing vessel² shall take place within Special Areas for Scientific Study.
17. No transshipment³ activities that involve any fishing vessel shall take place within Special Areas for Scientific Study except in cases where vessels are involved in an emergency relating to safety of human life at sea or engaged in a search and rescue operation, or to prevent an environmental emergency.
18. For the purposes of monitoring vessel traffic within Special Areas for Scientific Study, transiting fishing vessels are encouraged to inform the Secretariat of their intended transit prior to entering any Special Area for Scientific Study, and provide details of their Flag State, size, IMO number and intended course.

Expiration of Stage 1 and Stage 2 Special Area for Scientific Study designations

19. All Stage 1 Special Area for Scientific Study designations made under paragraphs 4 and 5 of this conservation measure shall expire after the two-year review period. Stage 1 designation may also expire before the end of the two-year review period, if the area is designated as a Stage 2 Special Area for Scientific Study. On the date marking the end of the Stage 1 period, the Secretariat shall notify all Members and archive the details of the expired Special Area for Scientific Study on the CCAMLR website.
20. All Stage 2 Special Area for Scientific Study designations made under paragraphs 10 and 11 of this conservation measure shall expire after a 10-year study period. On the date marking the end of the Stage 2 period, the Secretariat will notify all Members and archive the details of the expired Special Area for Scientific Study on the CCAMLR website. Details of the expired Special Area shall be removed from the relevant annex of this conservation measure.
21. Any proposal to extend the period of designation for a Stage 2 Special Area for Scientific Study must be made as a new Commission proposal, either through the process for designating Stage 2 Special Areas as defined in paragraphs 10 and 11 of this conservation measure, or as a specific, separate conservation measure for special area management.

Review of Annex A

22. The Commission shall update Annex A to this conservation measure every 10 years, or sooner if new information about the extent of any ice shelf becomes available.

Interactions with other States and with the Antarctic Treaty System

23. In accordance with Article X of the Convention, the Commission shall draw this conservation measure to the attention of any State that is not a Party to the Convention, whose nationals or vessels are present in the Convention Area.

24. Details of all Stage 1 and Stage 2 Special Areas for Scientific Study designated under this conservation measure shall be communicated to the Antarctic Treaty Consultative Meeting, which shall be encouraged to consider whether to take any appropriate steps, within its competence, to complement and facilitate scientific study within such areas.

- ¹ Waste includes oil or fuel products or oily residues into the sea, garbage, food wastes, poultry or parts (including egg shells), sewage, incineration ash, fishing gear, offal and discards.
- ² For the purposes of this conservation measure, the definition of 'fishing vessel' is that given in Conservation Measure 10-02.
- ³ Transshipment means the transfer of harvested marine living resources and any other goods or materials to or from fishing vessels.

Locations and extent of ice shelves within Statistical Subareas 48.1, 48.5 and 88.3

Special Areas for Scientific Study may be designated in any newly-exposed marine area following the retreat or collapse of an ice shelf, glacier or ice tongue in the Antarctic Peninsula region (Statistical Subareas 48.1, 48.5 and 88.3) shown in Figure 1.

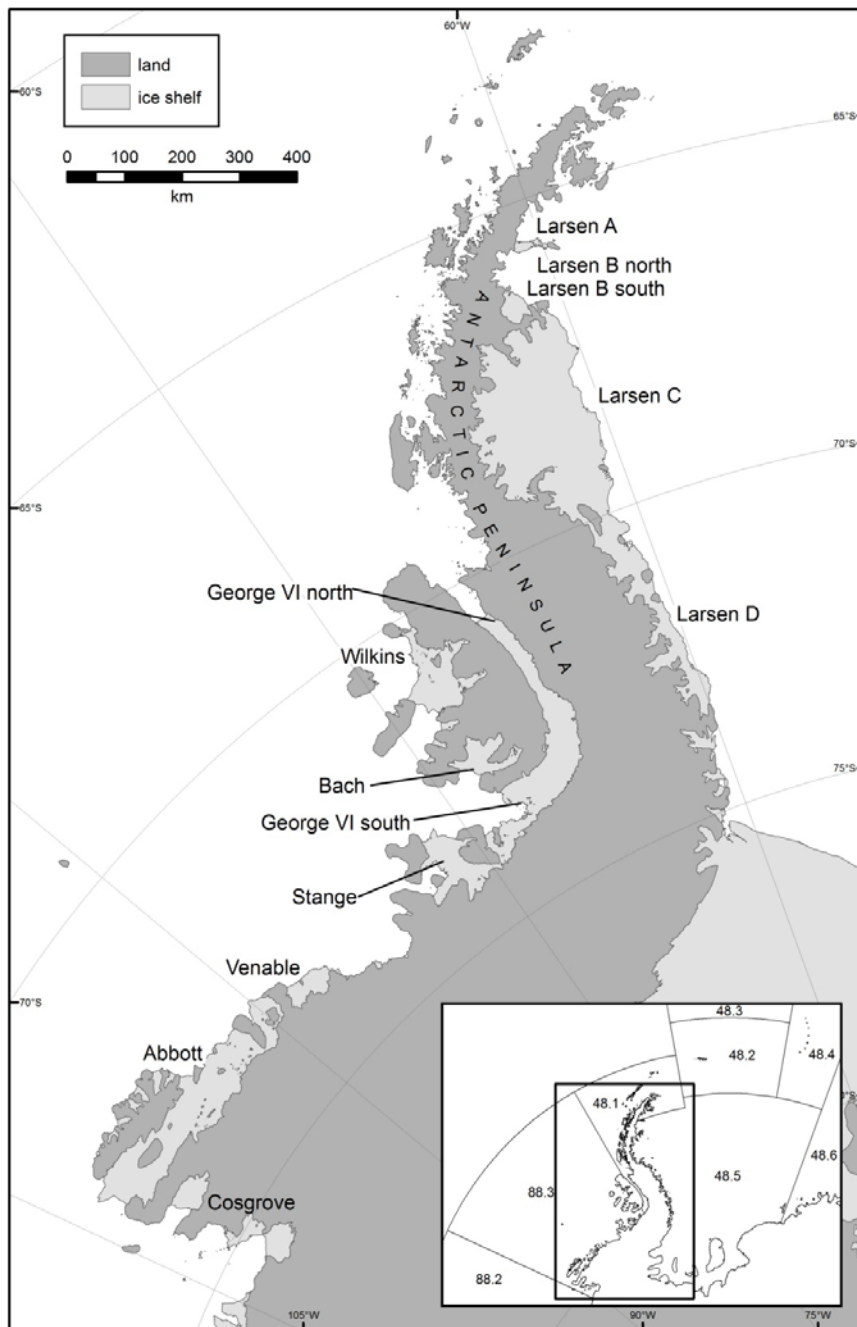


Figure 1: Locations and extent of ice shelves, glaciers and ice tongues in Statistical Subareas 48.1, 48.5 and 88.3. Coastline data from the SCAR Antarctic Digital Database version 7 (2016) (www.add.scar.org).

Larsen C Special Area for Scientific Study

1. On 12 July 2017, a 5 818 km² section of floating ice was lost from the Larsen C Ice Shelf in Statistical Subarea 48.5. The area of ice loss is equivalent to 12.1% of the baseline extent of the Larsen C Ice Shelf (48 001 km²).
2. The Larsen C Special Area for Scientific Study is located at 67.83°S 60.96°W, and is shown in Figure 2 (hatched area). The extent of the Larsen C Ice Shelf is obtained from the SCAR Antarctic Digital Database (2017), and the boundary of the Larsen C Special Area for Scientific Study is generated from a Sentinel-1 satellite image acquired on 12 July 2017.
3. Full coordinates for the boundary of the Larsen C Special Area for Scientific Study and the baseline extent of the Larsen C Ice Shelf have been deposited with the Secretariat and are available in the CCAMLR GIS.
4. This annex will expire on 27 October 2028.

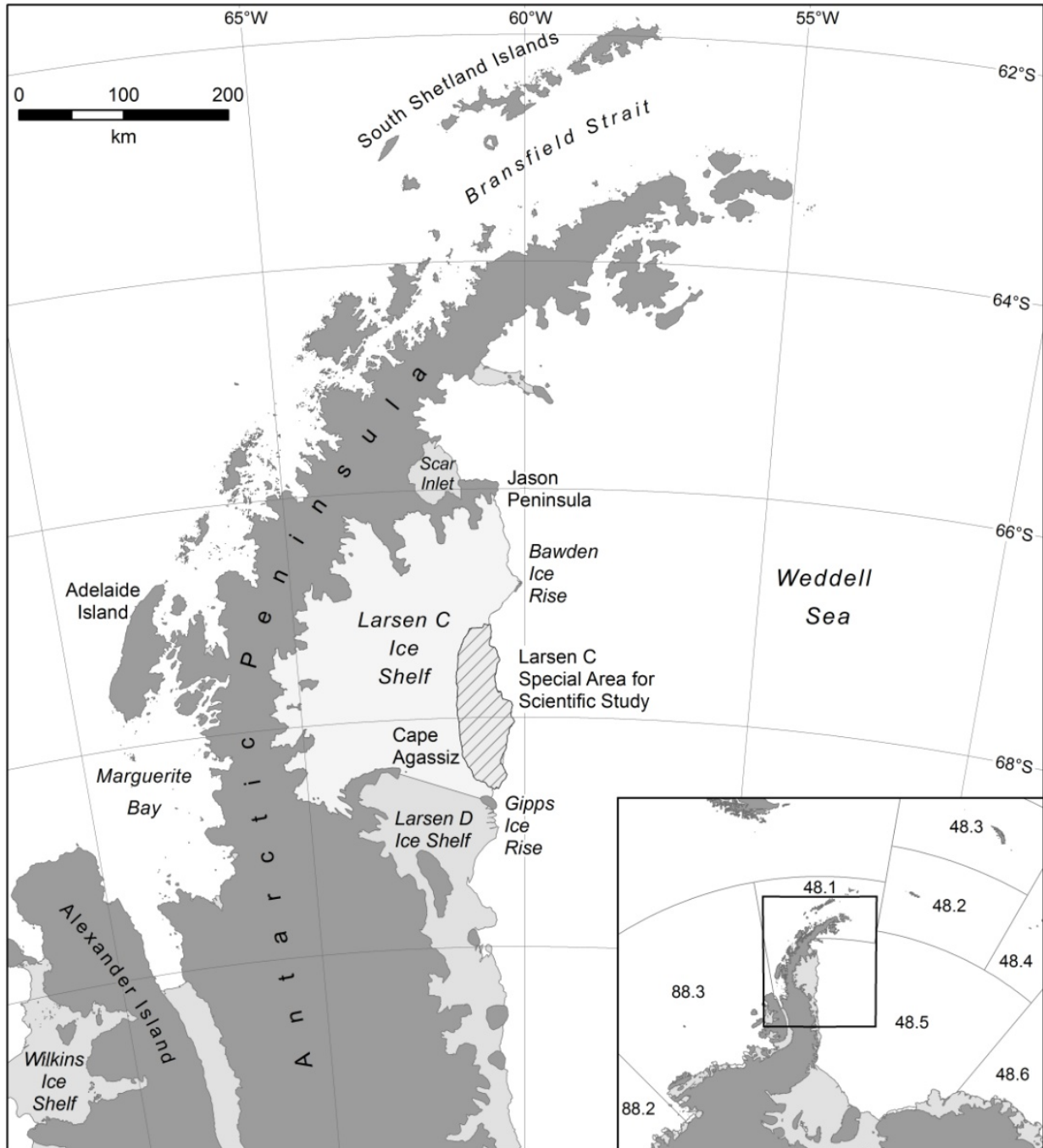


Figure 2: Location of the Larsen C Special Area for Scientific Study (hatched area).