Ecologically and Biologically Significant Areas (EBSAs)

In response to CBD Notification 2017-107

Ref.: SCBD/SPS/DC/SBG/JL/JG/86798

Canada would like to provide input via the annexed document on Canada's experiences regarding:

- Procedures to modify the geographic scope and/or status (including expansion, downgrading, downsizing or degazettement) of areas previously designated as significant (e.g., ecologically, socio-culturally, historically) and/or sensitive/vulnerable, including information on relevant scientific and technical guidelines for modification;
- Incorporation of new scientific information, including traditional knowledge, into a pre-existing process for the designation of significant and/or sensitive/vulnerable areas;
- Ensuring scientific credibility and transparency in the use of specific criteria for designating significant and/or sensitive/vulnerable areas, including through processes for regular peer-review.

PROCEDURES TO MODIFY AREAS AND INCORPORATION OF NEW SCIENTIFIC INFORMATION

In 2004, Fisheries and Oceans Canada (DFO) developed criteria for identifying Ecologically and Biologically Significant Areas (EBSAs) (http://waves-vagues.dfo-mpo.gc.ca/Library/314806.pdf). Since then, DFO has undertaken the identification of EBSAs within Canadian waters: beginning within five Large Ocean Management Areas (LOMAs) and then expanding to areas outside of the LOMAs (e.g., within the 13 biogeographic units that are the spatial framework for Canada's network of marine protected areas). To date, these exercises have resulted in the identification and description of approximately 236 EBSAs.

In May 2011, DFO convened a peer-review meeting to reflect on the lessons learned and to provide science advice on the application of EBSA criteria in the future (http://www.dfo-mpo.gc.ca/Library/344558.pdf). The resulting Science Advisory Report states that EBSAs need to be re-evaluated over time when something relevant is known to have changed and when new relevant types of information become available. This Science Advisory Report provided additional guidance on some key topics including the application of EBSAs in coastal and freshwaters; requirements for re-evaluation of EBSAs; uses on information in data-poor situations, connectivity; and information on data sources, uncertainties and weightings (if any) for data/information layers.

The refinement of EBSAs includes revisiting specific EBSAs along with its existing or new information in order to enhance the description and resolution of individual EBSA layers. This refinement does not involve a change in identifying features and associated EBSA criteria but may result in a change in the shape or extent of the EBSA boundary. A refinement of EBSAs in an area could take place in an area that is currently represented by a polygon where individual GIS layers for EBSA components do not exist or may be triggered where individual layers do exist but time has passed or changes in the ecosystem of that area are known or expected.

The re-evaluation/re-assessment of EBSAs includes revisiting the area and all the available information. This re-evaluation/re-assessment includes the possible addition of EBSAs, changes in EBSA boundaries (including splitting or lumping of EBSAs) or the removal of specific EBSAs. A re-evaluation/re-assessment of EBSAs could take place when new information or new assessment methods have become available or shifts in the ecosystems of that area might have changed or if a significant amount of time has passed since the area was evaluated last. The resulting map and features may be different from the original EBSA.

ENSURING SCIENTIFIC CREDIBILITY AND TRANSPARENCY

The identification and refinement/re-evaluation of EBSAs occurs through formal peer review through the Canadian Science Advisory Secretariat (CSAS).

These peer review processes are conducted according to the following principles:

- providing timely, responsive and flexible to client needs,
- employing the most appropriate and credible scientific methods,
- involving a range of expertise and perspectives along with scientific experts from within and external to DFO in the review process, and
- providing an accessible public document trail

Peer review meeting products are published on the CSAS website (http://www.dfo-mpo.gc.ca/csas-sccs/index-eng.htm). Meeting products include Science Advisory Reports or Science Responses, Research Documents, and Proceedings. Science Advisory Reports and Science Responses summarize the advice generated at the meetings. Research Documents contain the technical basis for advice, and Proceedings Reports document the meeting discussions.

The Government of Canada, recognizing the importance of effectively addressing science-based issues, developed a set of principles for the use of science advice in making policy and regulatory decisions, *Principles and Guidelines for the Effective Use of Science and Technology Advice in Government Decision Making* or the SAGE principles. These principles provide guidance on how to ensure that government decisions are informed by sound science advice. Furthermore, they are the basis of DFO's science peer review processes.

The SAGE principles are:

I. Early Identification

- The government needs to anticipate, as early as possible, those issues for which science advice will be required, in order to facilitate timely and informed decision making.

II. Inclusiveness

- Advice should be drawn from a variety of scientific sources and from experts in relevant disciplines, in order to capture the full diversity of scientific schools of thought and opinion.

III. Sound Science and Science Advice

- The government should employ measures to ensure the quality, integrity and objectivity of the science and science advice it uses, and ensure that science advice is considered in decision making.

IV. Uncertainty and Risk

- Science in public policy always contains uncertainty that must be assessed, communicated and managed. Government should develop a risk management framework that includes guidance on how and when precautionary approaches should be applied.

V. Transparency and Openness

The government is expected to employ decision-making processes that are open as well as transparent to stakeholders and the public.

VI. Review

Subsequent review of science-based decisions is required to determine whether recent advances in scientific knowledge have an impact on the science advice used to reach the decision.

CSAS EBSA-Related Research Documents

Allard, K. and Gromack, A.G. 2013. Considerations for Marine Protected Area network planning on the Atlantic Coast of Nova Scotia with a focus on the identification of Ecologically and Biologically Significant Areas. DFO. Can. Sci. Advis. Sec. Res. Doc. 2013/066. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2013/2013_066-eng.html)

Buzeta, M.I. 2013. Identification and Review of Ecologically and Biologically Significant Areas in the Bay of Fundy. DFO. Can. Sci. Advis. Sec. Res. Doc. 2013/065. (http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2013/2013_065-eng.html)

Castonguay, M. and Valois, S. 2007. Ecologically and biologically significant areas for demersal fishes in the northern Gulf of St. Lawrence. DFO. Can. Sci. Advis. Sec. Res. Doc. 2007/014. (http://waves-vagues.dfo-mpo.gc.ca/Library/328789.pdf)

Cobb, D.G. 2011. Application of Ecologically and Biologically Signficant Areas (EBSA) criteria in Canadian Waters – Lessons Learned. DFO. Can. Sci. Advis. Sec. Res. Doc. 2011/072. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2011/2011_072-eng.html)

Cobb, D.G. 2011. Identification of Ecologically and Biologically Significant Areas (EBSAs) in the Canadian Arctic). DFO. Can. Sci. Advis. Res. Doc. 2011/070. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2011/2011_070-eng.html)

Curtis, J.M.R., Ban, S., Therriault, T.W., Perry, R.I. and St. Germain, C. 2016. Identification of Ecologically and Biologically Significant Areas (EBSAs) in Canada's Offshore Pacific Region. DFO. Can. Sci. Advis. Sec. Res. Doc. 2016/034. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2016/2016_034-eng.html)

Doka, S.E., Boston, C.M., Randall, R.G., Mossman, J. and Gertzen, E.L. 2014. Assessing marine criteria for Ecologically and Biologically Significant Areas (EBSA): are the criteria interpretable and measurable in Lake Ontario. DFO. Can. Sci. Advis. Sec. Res. Doc. 2014/044. (http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2014/2014_044-eng.html)

Jamieson, G.S. and Levesque. C. 2014. Identification of Ecologically and Biologically Significant Areas in the Strait of Georgi and off the West Coast of Vancouver Island: Phase I – Identification of Important Areas. DFO. Can. Sci. Advis. Sec. Res. Doc. 2014/100. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2014/2014_100-eng.html)

Jamieson, G.S. and Levesque, C. 2014. Identification of Ecologically and Biologically Significant Areas on the West Coast of Vancouver Island and the Strait of Georgia, and in some nearshore areas on the North Coast: Phase II – Designation of EBSAs. DFO. Can. Sci. Advis. Sec. Res. Doc. 2014/101. (http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2014/2014_101-eng.html)

King, M., Shackell, N., Greenlaw, M., Allard, K., Moors, H. and Fenton. D. 2013. Marine Protected Area Network Planning in the Scotian Shelf Bioregion: Offshore Data Considerations. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/064. (http://waves-vagues.dfo-mpo.gc.ca/Library/350259.pdf)

Lavoie, D., Starr, M., Zakardjian, B. and Larouche, P. 2007. Identification of ecologically and biologically significant areas (EBSA) in the Estuary and Gulf of St. Lawrence: Primary production. DFO. Can. Sci. Advis. Sec. Res. Doc. 2007/079. (http://waves-vagues.dfo-mpo.gc.ca/Library/334644.pdf)

Lesage, V., Gosselin, J.-F., Hammill, M.O., Kingsley, M.C.S. and Lawson, J.W.2007. Ecologically and Biologically Significant Areas (EBSAs) in the Estuary and Gulf of St. Lawrence - A marine mammal perspective. DFO. Can. Sci. Advis. Sec. Res. Doc. 2007/046. (http://waves-vagues.dfo-mpo.gc.ca/Library/331137.pdf)

Link, H., Cobb, D.G., Archambault, P. and Roy, V. 2014. Information to support the re-assessment or ecologically and biologically significant areas (EBSAs) in the Beaufort Sea Large Ocean Management Area. DFO. Can. Sci. Advis. Sec. Res. Doc. 2014/097. (http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2014/2014_097-eng.html)

McQuinn, I.H., Bourassa, M.-N., Tournois, C., Grégoire, F. and Baril, D. 2012. Ecologically and biologically significant areas in the Estuary and Gulf of St. Lawrence: small pelagic fishes. DFO. Can. Sci. Advis. Sec. Res. Doc. 2012/087. (http://waves-vagues.dfo-mpo.gc.ca/Library/347263.pdf)

Ouellet, P. 2007. Contribution to the identification of ecologically and biologically significant areas (EBSA) for the Estuary and the Gulf of St. Lawrence: The fish eggs and larvae and crustacean decapods larvae layer. DFO. Can. Sci. Advis. Sec. Res. Doc. 2007/011. (http://waves-vagues.dfo-mpo.gc.ca/Library/345355.pdf)

Paulic, J.E., Cleator, H. and Martin, K.A. Ecologically and biologically significant areas (EBSA) in northern Foxe Basin: identification and delineation. 2014. DFO. Can. Sci. Advis. Sec. Res. Doc. 2014/042. (http://dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2014/2014_042-eng.html)

Plourde, S. and McQuinn, I.H. 2009. Ecologically and biologically significant areas in the Gulf of St. Lawrence: zooplankton and secondary production. DFO. Can. Sci. Advis. Sec. Res. Doc. 2009/104. (http://waves-vagues.dfo-mpo.gc.ca/Library/339787.pdf)

Rondeau, A., Hanson, J.M., Comeau, M., and Surette, T. 2016. Identification and Characterization of Important Areas based on Fish and Invertebrate Species in the Coastal Waters of the Southern Gulf of St. Lawrence. DFO Can. Sci. Advis. Sec. Res. Doc. 2016/044. (http://waves-vagues.dfo-mpo.gc.ca/Library/364028.pdf)

Savenkoff, C., Bourassa, M.N., Baril, D. and Benoit, H.P. 2007. Identification of Ecologically and Biologically Significant Areas for the Estuary and Gulf of St. Lawrence. DFO Can. Sci. Advis. Sec. Res. Doc. 2007/015. (http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2007/2007_015-eng.htm)

Serdynska, A., Fenton, D. Aker, J. and King, M. 2016. Offshore Ecologically and Biologically Significant Areas in the Scotian Shelf Bioregion. DFO. Can. Sci. Advis. Sec. Res. Doc. 2016/007. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2016/2016_007-eng.html)

Swain, D.P. and Benoît, H.P. 2007. Ecologically and biologically significant areas for demersal fishes in the southern Gulf of St. Lawrence. DFO Can. Sci. Advis. Sec. Res. Doc. 2007/012. (http://waves-vagues.dfo-mpo.gc.ca/Library/328380.pdf)

Templeman, N.D. 2007. Placentia Bay-Grand Banks Large Ocean Management Area Ecologically and Biologically Significant Areas. DFO Can. Sci. Advis. Sec. Res. Doc. 2007/052. (http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2007/2007_052-eng.htm)

Treble, M., Siferd, T., Warehman, V., Roy, V., Link, H., Archambault, P. and Kenchington, E. Identification of Mega- and Macrobenthic Ecologically and Biologically Significant Areas (EBSAs) in the Hudson Bay Complex, the Western and Eastern Canadian Arctic. DFO. Can. Sci. Advis. Sec.Res. Doc. 2011/071. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2011/2011_071-eng.html)

Ward-Paige, C.A., and Bundy, A. 2016. Mapping Biodiversity on the Scotian Shelf and in the Bay of Fundy. DFO Can. Sci. Advis. Sec. Res. Doc. 2016/006. (http://waves-vagues.dfo-mpo.gc.ca/Library/363944.pdf)

Wells, NJ, Stenson, G.B., Pepin, P., and Koen-Alonso, M. Identification and Descriptions of Ecologically and Biologically Significant Areas in the Newfoundland and Labrador Shelves Bioregion. DFO. Can. Sci. Advis. Sec. Res. Doc. 2017/013. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2017/2017_013-eng.html)

Wells, N., Ollerhead, L.M.N., Gullage, M. and Trip, N. 2017. Development of Spatially Referenced Data Layers for Use in the Identification and Delineation of Candidate Ecologically and Biologically Significant Areas in the Newfoundland and Labrador Shelves Bioregion. DFO. Can. Sci. Advis. Sec. Res. Doc. 2017/036. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2017/2017_036-eng.html)

CSAS EBSA-Related Science Advisory Reports

DFO. 2004. Identification of Ecologically and Biologically Significant Areas. DFO Can. Sci. Advis. Sec. Ecosystem Status Rep. 2004/006. (http://waves-vagues.dfo-mpo.gc.ca/Library/314806.pdf)

DFO. 2007. Ecologically and Biologically Significant Areas (EBSA) in the Estuary and Gulf of St. Lawrence: Identification and Characterization. DFO Can. Sci. Advis. Sec. Sci. Adv. Rep. 2007/016. (http://waves-vagues.dfo-mpo.gc.ca/Library/328383.pdf)

DFO. 2009. Conservation objectives for the Ecologically and Biologically Significant Areas (EBSA) of the Estuary and Gulf of St. Lawrence. DFO Can. Sci. Advis. Sec. Sci. Adv. Rep. 2009/049. (http://waves-vagues.dfo-mpo.gc.ca/Library/338284.pdf)

DFO. 2011. Ecologically and Biologically Significant Areas – Lessons Learned. DFO Can. Sci. Advis. Sec. Sci. Adv. Rep. 2011/049. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2011/2011_049-eng.html)

DFO.2011. Identification of Ecologically and Biologically Significant Areas (EBSA) in the Canadian Arctic. DFO. Can. Sci. Advis. Sec. Sci. Adv. Rep. 2011/055. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2011/2011_055-eng.html)

DFO. 2012. Evaluation of proposed ecologically and biologically significant areas in marine waters of British Columbia. DFO. Can. Sci. Advis. Sec. Sci. Adv. Rep. 2012/075. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2012/2012_075-eng.html)

DFO. 2013. Identification of Additional Ecologically and Biologically Significant Areas (EBSAs) within the Newfoundland and Labrador Shelves Bioregion. DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2013/048. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2013/2013_048-eng.html)

DFO. 2014. Assessment of freshwater Ecologically and Biologically Significant Areas (EBSA) and Ecologically Significant Species (ESS) criteria. DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2014/025. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2014/2014_025-eng.html)

DFO. 2014. Ecologically and Biologically Significant Areas (EBSA) in northern Foxe Basin, Nunavut. DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2014/024. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2014/2014_024-eng.html)

DFO. 2014. Offshore Ecologically and Biologically Significant Areas in the Scotian Shelf Bioregion. DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2014/041. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2014/2014_041-eng.html)

DFO. 2014. Re-evaluation of Ecologically and Biologically Significant Areas (EBSAs) in the Beaufort Sea. DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2014/052. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2014/2014_052-eng.html)

DFO. 2015. Ecologically and Biologically Significant Areas in Canada's Eastern Arctic Biogeographic Region, 2015. DFO. Can. Sci. Adv. Sec. Sci. Adv. Rep. 2015/049. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2015/2015_049-eng.html)

DFO. 2016. Identification of Ecologically and Biologically Significant Areas (EBSAs) in the Offshore Pacific Bioregion. DFO. Can. Sci. Adv. Sec. Sci. Adv. Rep. 2016/011. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2016/2016_011-eng.html)

CSAS EBSA-Related Science Responses

DFO. 2015. Information on Potential Sensitive Benthic Areas in the Bay of Fundy: Head Harbour/West Isles/Passages and the *Modiolus* Reefs, Nova Scotia Shore. DFO Can. Sci. Advis. Sec. Sci. Resp. 2014/044. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2014/2014_044-eng.html)

DFO. 2016. Refinement of Information Relating to Ecologically and Biologically Significant Areas (EBSAs) Identified in the Newfoundland and Labrador (NL) Bioregion. DFO. Can. Sci. Advis. Sec. Sci. Resp. 2016/032. (http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2016/2016_032-eng.html)

CSAS EBSA-Related Proceedings

DFO. 2009. Proceedings of a National Science Advisory Process to Review Canadian Experiences with Ecologically and Biologically Significant Areas (EBSA) in the Northeast Pacific; 29-30 June 2009. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2009/035. (http://waves-vagues.dfo-mpo.gc.ca/Library/339321.pdf)

DFO. 2006. Proceedings of the Zonal Workshop on the Identification of Ecologically and Biologically Significant Areas (EBSA) within the Gulf of St. Lawrence and Estuary; February 21-23, 2006. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2006/011. (http://waves-vagues.dfo-mpo.gc.ca/Library/323230.pdf)

DFO. 2010. Proceedings of the workshop to select Ecologically and Biologically Significant Areas (EBSA) in northern Foxe Basin, Nunavut. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2010/037. (http://waves-vagues.dfo-mpo.gc.ca/Library/341688.pdf)

DFO. 2011. Application of Ecologically and Biologically Significant Areas (EBSA) Criteria - Lessons Learned; May 19-20, 2011. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2011/046. (http://waves-vagues.dfo-mpo.gc.ca/Library/344746.pdf)

DFO. 2011. Identification of Ecologically and Biologically Significant Areas (EBSAs) in the Canadian Arctic; June 14-17, 2011. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2011/047. (http://waves-vagues.dfo-mpo.gc.ca/Library/344816.pdf)

DFO. 2012. Proceedings of the Regional Peer Review on the Evaluation of Proposed Ecologically and Biologically Significant Areas in Marine Waters of British Columbia; February 7-8, 2012. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2012/053. (http://waves-vagues.dfo-mpo.gc.ca/Library/347995.pdf)

DFO. 2014. Proceedings of the regional science peer review of the freshwater Ecologically and Biologically Significant Areas and Ecologically Significant Species criteria assessment; November 19-20, 2013. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2014/018. (http://waves-vagues.dfo-mpo.gc.ca/Library/359678.pdf)

DFO. 2014. Proceedings of the regional re-evaluation of Ecologically and Biologically Significant Areas (EBSA) in the Beaufort Sea; November 20-22, 2012. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2014/037. (http://waves-vagues.dfo-mpo.gc.ca/Library/359914.pdf)

DFO. 2015. Proceedings of the regional peer review of the re-evaluation of Ecologically and Biologically Significant Areas (EBSAs) in the Eastern Arctic Biogeographic Region of the Canadian Arctic; January 27-29, 2015. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2015/042. (http://waves-vagues.dfo-mpo.gc.ca/Library/362258.pdf)

DFO. 2015. Proceedings of the zonal peer review meeting on the identification of Ecologically and Biologically Significant Areas (EBSAs) in the coastal zone of the Estuary and Gulf of St. Lawrence, December 16-17, 2014. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2015/053. (http://waves-vagues.dfo-mpo.gc.ca/Library/362237.pdf)

DFO. 2016. Proceedings of the Regional Peer Review of Updating Offshore Ecologically and Biologically Significant Areas in the Scotian Shelf Bioregion; February 18-20, 2014, and March 24, 2014. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2016/006. (http://waves-vagues.dfo-mpo.gc.ca/Library/364142.pdf)

DFO. 2016. Proceedings of the Pacific regional peer review of the Identification of Ecologically and Biologically Significant Areas (EBSAs) in the Offshore Pacific Bioregion; February 11-12, 2015. DFO

Can. Sci. Advis. Sec. Proceed. Ser. 2016/020. (http://waves-vagues.dfo-mpo.gc.ca/Library/40575676.pdf)

CSAS EBSA-Related Peer Review Documents Yet to Be Released

Re-evaluation of the Placentia Bay-Grand Banks Area to identify Ecologically and Biologically Significant Areas (Terms of Reference: http://www.dfo-mpo.gc.ca/csas-sccs/Schedule-Horraire/2017/01_17-18-eng.html)

Assessment of Canadian Pacific Cold Seeps Against Criteria for Determining Ecologically and Biologically Significant Areas (Terms of Reference: http://www.dfo-mpo.gc.ca/csas-sccs/Schedule-Horraire/2017/05_15-eng.html)

Assessment of nearshore features against criteria for determining Ecologically and Biologically Significant Areas (EBSAs) in the Northern Shelf Bioregion (Terms of Reference: http://www.dfo-mpo.gc.ca/csas-sccs/Schedule-Horraire/2017/06_14-eng.html)

Reassessment of the Ecologically and Biologically Significant Areas (EBSAs) in the Pacific Northern Shelf Bioregion (Terms of Reference: http://www.dfo-mpo.gc.ca/csas-sccs/Schedule-Horraire/2017/11_01-02-eng.html)

EBSA-Related Research projects

Through the Strategic Program for Ecosystem-Based Research and Advice (SPERA), DFO Science conducts research on key issues, such as scientific guidance on the refinement/re-evaluation of EBSAs and support for tools to help manage biological diversity in Canadian waters. SPERA funds projects by DFO researchers which assess the ecosystem impacts of human activities, assess and report on ecosystems, and develop tools to implement the ecosystem approach to management.

(2016-2017) Update of Placentia Bay-Grand Banks Large Ocean Management Area Ecologically and Biologically Significant Areas

- ⇨ Aims to refine existing EBSAs, and if possible, identify new EBSAs in the Placentia Bay-Grand Banks (PB-GB) Large Ocean Management Area (LOMA) using robust, modern spatial techniques based on new DFO Science guidance (DFO 2011) and consistent with recent analyses for the Newfoundland and Labrador Bioregion (DFO 2013).

(2015-2016) Ecologically and Biologically Significant Areas (EBSAs) in the Northern Shelf Bioregion

- ⇨ *Aims to deliver spatially-referenced data layers (in the form of maps) to support MPA Network planning, fisheries management decisions, and inform initiatives related to oil spill response under the WCTSS.*

(2014-2015) Identification of offshore EBSAs in Pacific Region

- ⇨ *Aims to complete the EBSA identification beyond the shelf break in the Pacific Region. Extending west of the shelf break to the boundary of Canada's Exclusive Economic Zone (EEZ), from North of Haida Gwaii to South of Vancouver Island, the offshore zone include several productive and ecologically unique features such as seamount complexes, hydrothermal vents, the continental slope and influential currents.*

(2013-14) Mapping species distributions and identifying important habitats in the coastal and near-shore zones of the St. Lawrence Estuary and Gulf

- ⇨ *Aims to continue work on expanding the modelling to predict species occurrences to include the Gulf region, and identifying EBSAs based on observed and predicted species-habitat biological occurrences as to pursue the development of an integrated management plan for marine ecosystems.*

(2013-14) An integrated approach for identification of biologically important areas and ecosystem indicators in the Gulf of Saint Lawrence

- ⇨ *Aims to complete a database displaying the spatial repartition of invertebrates, zooplankton and fish for the Gulf of St. Lawrence. Biodiversity indicators will also be elaborated to identify areas of biological importance.*

(2012-13) Identification of benthic EBSAs on the Scotian Shelf

- ⇨ *Aims to identify EBSAs in the Scotian Shelf using data on benthic species and habitats.*