

The Honourable Gail Shea, P.C., M.P.
Minister of Fisheries and Oceans
Government of Canada

Sent By Email

Dear Minister Shea,

Please accept this as the formal feedback from the undersigned conservation groups and charities for the public consultation on the Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs Marine Protected Areas regulations, as published in Gazette 1 on June 27th, 2015.

We are extremely pleased to see this marine protected area (MPA) reach this stage in the designation process and would like to extend our congratulations to Fisheries and Oceans Canada on your efforts to protect this globally significant site. It has been a long process to reach this point and we recognize DFO's continued efforts to achieve adequate protection of the reefs, as voluntary fishing closures were replaced with regulated fishing closures, which in turn are to be replaced with protection through marine protected area designation.

We also recognize the investments that have been made to ensure that the process has been informed by the best available science and the response to developing issues, like the impact of sedimentation on the reefs, when they were brought to the attention of DFO. After five years of consultation and development, we are keen to see this MPA quickly established. The reefs continue to incur damage from fishing activities throughout the area, so time is of the essence.

The core protection zone (CPZ) will significantly improve the protection of the reefs by prohibiting potentially harmful activities such as prawn and crab trap fisheries which are currently permitted on the reefs and which pose a significant threat. However, we are concerned that the proposed regulations fail to provide protection from a number of potentially harmful activities in the adaptive management zone (AMZ) and vertical adaptive management zone (VAMZ).

The proposed regulations permit the laying of cables, bottom trawling and other bottom contact fisheries to continue in the AMZ. These activities pose an unacceptable risk to the glass sponge reefs. The effects of sediment plumes created by bottom contact activities has been well documented and brought to the attention of DFO during the MPA establishment process. Research by Dr. Leys (2013) showed that re-suspended sediments at levels below those caused by bottom trawling can choke glass sponges, causing them to cease feeding and reducing feeding efficiency, which if prolonged can compromise their growth and reproduction and cause death.¹

¹ Leys, S.P. 2013. Effects of Sediment on Glass Sponges (Porifera, Hexactinellida) and projected effects on Glass Sponge Reefs. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/074.vi + 23 p.

Furthermore allowing bottom contact activities in the adaptive management zone will increase the likelihood of accidental damage to the glass sponge reefs from the direct impact of fishing gear or cables, which can crush the fragile sponges. In June 2015, DFO put in place fishing closures for **ALL** bottom contact fisheries in a 150m buffer zone around nine smaller glass sponge reefs in the Strait of Georgia to protect them from accidental damage with the recognition that gear placement may not always be accurate. This buffer zone was originally modeled on the AMZ, however disappointingly it now seems to be the case that the Strait of Georgia glass sponge reefs are much better protected than those in Hecate Strait and Queen Charlotte Sound. We would like to see the MPA follow the precedent set by the Strait of Georgia glass sponge reef fishing closures, with all bottom contact fishing activities prohibited throughout the AMZ.

Of similar concern is the fact that midwater trawling and hook and line fisheries will be permitted inside the 40m VAMZ above the reefs. According to DFO scientists “it is known that contact with the bottom during [midwater trawl] fishing operations can and does occur depending on the spatial distribution of the target species and the bottom type.”² Even if all fishing activities were prohibited within the VAMZ, the small size (40m) does not provide much of a buffer to protect the reefs from accidental contact with fishing gear. The massive damage that is caused by trawling gear has been demonstrated with the destruction of large areas of the glass sponge reefs by the bottom trawling. To allow midwater trawling to continue above the reefs, when it is known that it poses a real and serious threat to the reefs completely undermines the goals and objectives of the MPA.

We understand that DFO is planning to conduct further research into the effects of sediment on the glass sponge reefs, the variable effects of different fishing gears on sediment re-suspension and the specific risks of various fishing methods to the reefs. However, given the known vulnerability of the glass sponge reefs, their ecological importance and their global uniqueness, we strongly recommend that DFO apply the precautionary approach³ to management decisions within this MPA.

Some areas of the Hecate Strait and Queen Charlotte Sound glass sponge reefs are over 9000 years old, dating back to the last ice age. The reefs are slow growing and so it may take hundreds of years for damaged areas to recover, if they recover at all. Re-suspended sediments that interrupt feeding and reduce the energetic budget of the reefs will further reduce the chance of recovery. Prior to the discovery of the Hecate Strait reefs in 1987, glass sponge reefs were thought to have gone extinct 40 million years ago, and in the 28 years since their discovery they

² Boutillier, J., Masson, D., Fain, I., Conway, K., Lintern, G, O, M., Davies, S., Mahaux, P., Olsen, N., Nguyen, H. and Rutherford, K. 2013. The extent and nature of exposure to fishery induced remobilized sediment on the Hecate Strait and Queen Charlotte Sound glass sponge reef. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/075. viii + 76 p.

³ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-back-fiche-eng.htm>

have been found nowhere else on Earth. All this is to say that the reefs are simply irreplaceable and absolutely invaluable. Canada has a responsibility to protect this globally significant treasure.

Aside from their uniqueness and scientific interest, BC's glass sponge reefs have great ecological value. The reefs are important habitat for rockfish, both commercially important and endangered species, as well as other commercially important fish and invertebrates. The reefs are a particularly important nursery habitat for many species, especially juvenile rockfish. This means that properly protecting the reefs is also of the utmost importance to the long-term sustainability of BC's fisheries.

It is clear from the Regulatory Impact Analysis Statement that the commercial fishing activity around the reefs is extremely limited. Therefore the socio-economic impact of closing the entire MPA to all fishing activity will be negligible. The MPA represents a total area of just 2,410km², a tiny portion of fishable waters along the BC coast. Closing the area to all fishing activities would have a limited impact on fisheries and actually provide many benefits.

Given the low economic importance of the area compared to the high ecological importance of the area, and the high level of risk posed by the activities described above, it is our strong recommendation that the management standards for the core protection zone should be extended to the AMZ and VAMZ. We urge the Federal government to prohibit all bottom contact fishing and cable laying, maintenance, or repair in the AMZ, and to prohibit midwater trawling and fixed gear fishing in the VAMZ.

Finally, we hope that future efforts to establish MPAs will focus on the development of a coherent and strategic network of marine protected areas, rather than continue with the current site by site approach. The glass sponge reefs have strong biological, ecological, physical and chemical connections to species and ecosystems across the BC coast. Our ocean ecosystems, marine species and coastal communities are facing unprecedented pressure from growing industrial development, increasing fishing pressure, and climate change. The threats are many, varied and widespread and the decline of our marine ecosystems and species populations is happening at an ever-faster pace.

The Hecate Strait and Queen Charlotte Sound Glass Sponge Reef MPA has been one of the quicker establishment processes - other MPAs have taken decades, rather than years to complete. The site-by-site approach is slow, inefficient and ineffective. In order to fully protect, enhance and support the remarkable biodiversity of our coast, we need to develop a coast-wide, strategic and well-protected network of MPAs as part of an integrated ocean management approach.

We thank you for taking these critical steps to protect the glass sponge reefs of Hecate Strait and Queen Charlotte Sound and urge you to take further and stronger precautions to protect these ancient, unique, and incredibly valuable ecosystems. BC's glass sponge reefs are a global treasure and need to be fully protected, before they disappear forever.

Sincerely,



Sabine Jessen
National Director, Oceans Program
Canadian Parks and Wilderness Society



Karin Bodtker
Director, Mapping and Analysis
Living Oceans Society



Panos Grames
Communications Specialist
David Suzuki Foundation



Dr. Bettina Saier
Vice President, Oceans
World Wildlife Fund Canada



Kees Visser
President
BC Nature