# Scientific Concerns Regarding the Selection of Rockfish Conservation Areas in British Columbia

To: Lynne Yamanaka and The Rockfish Conservation Area Committee

From: Jeff Ardron on behalf of the Pacific Marine Conservation Caucus

August 16, 2004

Dear Ms. Yamanaka and the RCA Committee,

On behalf of the Pacific Marine Conservation Caucus (MCC), I am writing to express our deep concerns regarding the past and present process of selecting Rockfish Conservation Areas (RCAs). These we have expressed previously in other submissions, and will be summarized below. In short, the MCC no longer feels it can support the RCAs or the selection process as it presently stands. This is troubling because we do firmly believe in the need for RCAs, and would very much like to support you in this effort.

One of our key concerns is that there be a scientifically defensible and transparent process. We would like to learn what sort of peer-review has been planned for the methodology and the data behind RCA selection to date.

In addition, the MCC questions why it has been excluded from participation on the RCA Committee, despite our stated desire to do so, and earlier assurances that it would play an active role. (Again, this is expanded upon below.) It remains our preference to be involved in a transparent multi-stakeholder process. However, if indeed DFO has decided that the RCA Committee is only open to government agencies, perhaps you would consider the creation of a technical advisory committee that could provide meaningful scientific and technical input?

We look forward to your responses at your earliest possible convenience.

Sincerely,

Jeff Ardron

BC Marine Conservation Caucus, Rockfish Subcommittee

Marine Analyst, Living Oceans Society

#### **Background: A Chronological Summary of our Scientific Concerns**

#### October 2003: Submission to the RCA Committee

Sierra Club (BC Chapter), Living Oceans Society, and Canadian Parks and Wilderness Society submitted to the RCA Committee a report regarding the proposed rockfish conservation area strategy (Wallace and Ardron 2003). In that report, amongst other issues, we expressed the concern that the methodology for selecting the RCAs appeared to not be in accordance with generally accepted principles of marine protected area design. However, since the RCA Committee had not published the rationale behind the selection of these RCAs, it was difficult to determine exactly how these decisions were made. Using what data we had on hand, there appeared to be a number of proposed RCAs in areas where commercial rockfish fishing was not known to occur and therefore these sites were potentially poorly suited for rockfish. Furthermore, judging by the attributes of the GIS dataset given to us, these sites appeared to be the result of suggestions by industry, rather than any sort of habitat analysis. We went on to say:

...The problem with this procedure is that social, political and economic factors automatically override biological criteria. This is not an appropriate starting point for a large-scale system of marine reserves as some of the best potential RCA sites are not considered before the process has even begun.

(ibid, Executive Summary, extract from point 13)

We suggested that a workshop could be organized with the objective of developing a habitat-based system for RCA identification (ibid, Exec. Sum., pt. 14).

We received no response to our submission. Our request to better understand the rationale behind the RCA selection went unheeded. And, there was no workshop.

#### December 2003: A visit to PBS

While visiting Pacific Biological Station on other business, I was kindly introduced by Jeff Fargo to Lisa Lacko. She had been doing a topographical complexity analysis based on my published methodology (Ardron 2002). She briefly showed me how she was melding this with logbook data to rate prospective RCAs. At this impromptu meeting, and again in a follow-up email to Jeff and Lisa (Dec. 21 2003) I suggested that considering I had developed the complexity analysis, and our mutual interest in modelling rockfish habitat, we should work together on this. I offered the services of myself and of our DFO intern, Andrew Marchand.

I received no reply.

<sup>&</sup>lt;sup>1</sup> This was later confirmed at the public consultations in early 2004.

#### Jan. / Feb. 2004: Public Consultations

At the public RCA consultations, several members from the Pacific Marine Conservation Caucus raised concerns regarding the lack of transparency, accountability, and involvement from all parties in the selection of the RCAs. In Nanaimo, I personally expressed my concern that a poorly designed set of RCAs might give managers and the public a false sense of security. I urged that a more scientifically defensible approach be adopted. In response, I was told by Gary Logan that the scientific rationale would be explained at the up-coming Western Groundfish Conference.

## Feb. 9-13 2004: 13th Western Groundfish Conference

I, and several members of the MCC, attended the Western Groundfish Conference. There was no presentation to explain the scientific rationale behind the RCA selection. We could only find one poster (by Lisa Lacko) that simply showed their proposed locations. At the same conference, Scott Wallace and I presented a poster depicting initial promising results from our rockfish habitat model.

No one from the RCA Committee contacted us, however, despite that poster and our oral presentations on related topics, though we received interest from several other parties.

## March 2004: MCC Response to the Public RCA Consultations

In a new submission, the Pacific Marine Conservation Caucus once again expressed its concern regarding the lack of peer review behind the selection of RCAs. We urged that scientific criteria be incorporated from the outset (not just in site review), and that the proposed sites be evaluated with regard to regional habitat. We pointed out the various sources of information that could be used, and implored the Committee to make these data available for public review. We suggested the Rockfish Protection Areas (RPAs) be expanded to include recreational fisheries. We recommended a RCA monitoring plan be created. We requested that DFO publicly re-affirm its previous commitments, including "50% of known rockfish habitat" in inside waters, and 20% for outside waters. Finally, we urged DFO to adopt a multi-stakeholder approach that would include the marine conservation sector.

To date, no data have been made publicly available. No habitat analysis has been made publicly available. The RPAs were scrapped; the overall effect of which was to *reduce* commercial rockfish protection by 43%, by area.<sup>2</sup> No monitoring plan has been released. And, to our knowledge, DFO has not reaffirmed its commitment to its earlier targets.

With regard to our involvement in the RCA process, Gary Logan responded, saying, "The approach that you have identified is exactly what I wish to do, similar approach to the Lingcod Management Framework that we are working on but probably a larger group." (excerpt from email sent to Keith Symington, March 23, 2004) With all the bad news, at least this sounded hopeful...

<sup>&</sup>lt;sup>2</sup> The discontinuation of the RPAs had not been made explicit at the public RCA meetings. Thus, the public and the MCC were generally under the impression that the RCAs were *in addition* to the RPAs. Thus, feedback on the RCAs was based on the false assumption that there would be greater rockfish protection than there actually is.

### June 2004: RCA Committee is sent our paper on rockfish habitat modelling

In June of 2004, Scott Wallace and I were informed that our paper on modelling inshore rockfish habitat had been accepted for publication (Ardron & Wallace In Press (2005)). I sent out draft copies of that paper to various members that I knew on the RCA Committee. I had hoped to arouse some interest in using this approach, which was showing itself to be quite powerful. The methodology was rather more complicated than simply using complexity, and I realized that a full appreciation of the approach could not be gained from the paper alone. Our results showed that in our pilot test area (Statistical Area 12), 3 of the 7 RCAs were likely poor choices, and that several of the rescinded RCAs would have represented better selections. We again argued for a habitat-based methodology from the outset.

Jeff Fargo responded by saying, "Lynne and company are currently conducting rockfish surveys in Areas 12. Your analytical expertise is something that we can use. We are now in the planning for a multi-stakeholder group to evaluate potential RCAs and you will definitely be part of that (time frame is late June or early July). We look forward to working with you in the near future." (excerpt from email sent June 7, 2004) This definitely sounded hopeful...

#### August 2004: MCC excluded from the RCA Committee

On August 4, in response to an email querying the status of the multi-stakeholder evaluation (that was supposed to happen in June or July), I was informed by Gary Logan that,

"The RCA committee, which is part of the larger Rockfish Sustainability Team discussed the merits of a broad multi-stakeholder group vs keeping the committee as primarily governmental. As a result of the discussion, the committee is being kept as an agency driven committee."

Thus, despite hopeful assurances by both Gary Logan and Jeff Fargo, the MCC was excluded from the RCA Committee, and by inference, also the RCA habitat analysis.

Apparently, I would receive some materials to review. However, it was not made clear if this would constitute MCC participation, and if this would have any bearing on the deliberations of the RCA Committee.

#### **Conclusion: Withdrawal of MCC Support**

In our MCC submission of March 12, 2004 we wrote:

While the Pacific Marine Conservation Caucus remains concerned about the RCA process to date and the set of RCAs now slated for formal designation, we are prepared to conditionally accept them pending the realization of the following criteria:

- That an open and scientifically defensible evaluation process be developed to assess current and future proposed RCAs.
- That the current set of RCAs be scientifically and openly evaluated with respect to their contribution to rockfish conservation and the overall Rockfish Sustainability Strategy, and that gaps are identified.
- That it is clearly understood that the present RCAs do not represent the end of the process, and that more designations are expected.
- That the conservation sector be actively consulted and engaged in RCA selection and the Rockfish Sustainability Strategy through a multi-sectoral Advisory Committee.

(letter from MCC, March 12 2004, p7)

Considering that only one (bullet #3) of these four criteria has been met, the Marine Conservation Caucus finds itself with little choice but to withdraw its support of the present RCAs. If the future RCAs also fail to meet these other three criteria, we expect that we would be unable to support them as well. This is unfortunate, because these criteria are really asking nothing more than would be commonly expected from any science-based selection process.

Understandably, we are disappointed with the lack of transparency –in the RCA methodology, process, and supporting data. We are concerned that the RPAs were discontinued without public discussion or explanation. To date, the actions of the RCA Committee have indicated a disregard of the marine conservation community's various submissions, and our genuine desire to collaborate has been rebuffed.

It seems such a shame not to collaborate. A variety of researchers are working on various pieces of the reserve design puzzle. For example, there are your own rockfish surveys. There is the DFO collaboration with Natural Resources Canada re seafloor mapping. South of the border, there is research such as by Philip Bloch of Washington Dept. of Natural Resources, using graph theory to better understand connectivity between reserves. And, back in BC, in the non-governmental sector, I am expanding our inshore rockfish habitat model to include a methodology to identify "regions" of habitat based on larval dispersal.

In any case, the MCC would like to learn what sort of peer-review has been planned for the methodology and the data behind RCA selection to date.

In addition, the MCC questions why it has been excluded from participation on the RCA Committee, despite our stated desire to do so, and earlier assurances that it would play an active role. It remains our preference to be involved in a transparent multi-stakeholder process. However, if indeed DFO has decided that the RCA Committee is only open to government agencies, perhaps you would consider the creation of a technical advisory committee that could provide meaningful scientific and technical input?

#### **References** (papers, as well as emails and letters, are available upon request)

Ardron, J.A., 2002. A Recipe for Determining Benthic Complexity: An Indicator of Species Richness. Chapter 23, Marine Geography: GIS for the Oceans and Seas. Edited by Joe Breman, ESRI Press, Redlands, CA, USA. Pp 169-175.

Ardron, J.A. and Wallace, S. In Press (2005). Modelling Inshore Rockfish Habitat in British Columbia: A Pilot Study. Chapter 5 in Place Matters: Geospatial Tools for Marine Science, Conservation, and Management in the Pacific Northwest. University of Oregon Press. Dawn Wright and Astrid Scholtz, editors.

Wallace, S. and Ardron, J. 2003. Submission on the proposed rockfish conservation strategy. Sierra Club of Canada, BC Chapter; Living Oceans Society; Canadian Parks and Wilderness Society.