Dr. Jason Clay's Welcome speech at the Salmon Aquaculture Dialogue

Good morning. My name is Jason Clay. Welcome to WWF and to Washington DC for this Salmon Dialogue meeting. Most of you have had to make difficult choices to be here. I don't know which was more difficult—the fact that today is Friday the 13th or that tomorrow is both a Saturday and Valentine's day. Thank you for making this meeting a priority.

As promised, the group is divided equally between researchers and everyone else including representatives from industry, NGOs, governments and donors, investors, and buyers. In point of fact, it was very difficult to keep Canadians from being the only group represented here. There must be something in the water up there—and I don't just mean salmon!

We are a diverse group, but we are all here because we are interested in reducing the impacts of salmon aquaculture to more acceptable levels. Even so, the next two days may not be easy, but they're sure to be enlightening. With open minds and hard work we should be able to see a way forward—not just about salmon aquaculture and how to reduce its impacts but about aquaculture more generally.

Many of you may be wondering why we are at WWF. The short answer is because some of you asked us to convene this dialogue. The outcome, however, will depend on each of you. Another reason we are here is because of WWF's interest in aquaculture. WWF identifies and analyzes global trends, threats and opportunities for conservation. Increasingly this means looking at where and how people make a living and use resources to produce food. More and more we're working with food producers and players in market chains to help them identify what they *can* do rather than what they *can't* or *shouldn't* do.

Globally, WWF is concerned about the impacts of fishing—the only hunting and gathering activity around the world that has survived on such a scale. That is why we helped establish the MSC.And, that that is why we have become interested in aquaculture as well. For ten years we have been involved in identifying BMPs for shrimp aquaculture because we see it as preferable to the damaging impacts of shrimp trawling.

Aquaculture holds great promise. It is not only the fastest growing food production system globally; it has the potential to take pressure off fisheries even though that is not always the case at this time. Most of the internationally traded tilapia, catfish, trout, salmon, mussels, oysters, clams, scallops, abalone and many types of seaweed are produced by aquaculture. Certainly there are problems, intensive aquaculture is a new industry. But in just 30 years great strides have been made to reduce impacts.

WWF's goal is to help reduce the impacts of aquaculture even more by making producers more sustainable—not putting them out of business. We would like to see them still in business in 30 to 50 years.

All human activities have impacts. Aquaculture is no different. Today we will discuss the environmental impacts of salmon aquaculture. With your help, we have identified the 6 key impacts:

- Siting and carrying capacity
- Nutrient loading and benthic impacts
- Escapes
- Disease
- Increased pressure on wild fishers (feed, harvest, markets)
- Chemical Inputs

These are all environmental issues. Human health issues are also important, but they are not the focus of this meeting. This is about salmon aquaculture's impact on the environment not the other way around—the impact of pollution on aquaculture. Social and policy issues, too, are important. But, for the next two days we are focussing on the environment. These issues alone will give us plenty to work on.

We have the skills in this room to identify:

- Areas of general agreement
- Areas of disagreement
- Areas about which there is insufficient information, and
- Next steps

Through this initial discussion, it is our hope that this group will commit not only to identify research priorities but to commit to supporting and carrying the research out as well. We would like to see:

- Key future research topics identified and prioritized
- TORs drafted for key studies that could help reduce the disagreements or areas about which there is too little information
- Structures or organizations proposed that might allow us to continue to work together as a group
- Strategies developed that would allow us to agree about what sustainable salmon aquaculture might entail
- Commitments of individuals and organizations to pursue common objectives

Based on WWF's work with a similar consortium for shrimp aquaculture research, we have some ideas about how this work might proceed. I'm sure each of you does as well. The ultimate goal, however, is to be inclusive. No one group or interest can carry this forward alone. I think we all realize that. We will never all agree on all these issues, either. However, the areas of disagreement may be smaller than we think and the commitment to finding solutions may be more than ever before.

The Oromo of Ethiopia have a proverb that goes something like this—You can't wake a person who is pretending to sleep. Everyone in this room is awake (or nearly everyone, I hope).

The salmon aquaculture industry is not going away. Over the past thirty years, tremendous gains have been made to reduce its impacts. The questions before this group are:

- Are the impacts from salmon aquaculture uniform around the world or do they vary considerably between producers and/or countries?
- Which impacts are at more acceptable levels?
- Which are the trends that should concern us and which should give us hope? How can we encourage the latter?

Now, some points about this meeting. The presentations and discussions are off the record unless otherwise agreed to by the speakers. None of the points made in discussions should be attributed to specific individuals. The presentations today will tee up discussion on the 6 key impacts that have already been identified. A few more issues might be added as well. After the presentations, there will be time for brief clarifications and comments. At the end of the day, representatives from three producer companies will discuss what they see to be the key trends in environmental impacts. Tomorrow there will be follow-up discussions to go into more depth on each of the issues and prioritize areas where further work is required.

Since many of you don't know each other, before we begin today's presentation, lets have each of you briefly introduce yourself.