

July 19, 2010

Hon. Gail Shea
Minister of Fisheries and Oceans
Parliament Buildings
Ottawa

Re: Request for Meeting to Discuss Canada's Salmon Enhancement Program and the Wild Salmon Policy

Dear Minister,

Watershed Watch and the David Suzuki Foundation met with you recently on sockeye and salmon farming issues, and reiterated our support for Canada's Policy for Conservation of Wild Pacific Salmon (Wild Salmon Policy) and a federal commitment to a salmon rebuilding plan. Watershed Watch, the David Suzuki Foundation, the Raincoast Conservation Foundation and SkeenaWild write to you today regarding the future of Canada's Salmon Enhancement Program (SEP), particularly in relation to Canada's Wild Pacific Salmon Policy. In many ways, the goals and practices of SEP appear to be at odds with the Policy, and we respectfully request a meeting at your earliest convenience to discuss our concerns.

Diverse salmon populations provide for long term resilience to environmental change. On June 3, 2010, a landmark scientific study of the Bristol Bay, Alaska sockeye salmon fishery was published in the pre-eminent journal *Nature*. The authors demonstrated that the maintenance of diverse, naturally spawning populations of sockeye salmon over the past 50 years has resulted in a strong "portfolio effect," whereby overall annual returns of sockeye salmon to the Bristol Bay region have remained relatively stable despite dramatic changes in environmental conditions. Moreover, the authors found that maintaining diversity limited the frequency of fisheries closures, a lesson we should not lose sight of in view of recent problems with Fraser River fisheries.

This study, as well as other peer-reviewed research, also identified problems with the use of hatcheries for salmon. The authors of the Alaska study concluded that "minimizing the homogenizing effects of hatcheries on genetic diversity and protection of weak stocks from overharvesting in mixed stock fisheries will be required to maintain the diversity that stabilizes variance in returns,"¹ a conclusion that aligns closely with the primary objective in Canada's Policy for Conservation of Wild Pacific Salmon (p.9): "Safeguard the genetic diversity of wild Pacific salmon."

Current scientific research suggests that overreliance on salmon enhancement jeopardizes diversity and resilience of wild salmon. In early May, 2010, hundreds of delegates from Japan, Korea, Russia, USA, and Canada gathered in Portland, Oregon for the annual State of the Salmon conference, dedicated this year to the subject of "Ecological interactions between wild and hatchery salmon".

¹ Schindler *et al.* 2010. Population diversity and the portfolio effect in an exploited species. *Nature* 465: 609-613.

At this important meeting, which sadly had little representation from your department, delegates were shown compelling scientific evidence by leading experts that indicates, among other things, hatchery-raised salmon:

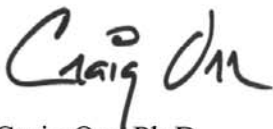
- Have simply replaced wild salmon in many cases, with no net increase in production;
- Have been a disease vector to wild salmon in some places;
- Make less efficient use of available freshwater habitat than wild salmon;
- Prey upon smaller wild salmon;
- Compete with wild salmon for a limited food supply in the marine environment;
- Have higher ocean mortality and lower return rates than wild salmon; and
- Interbreed with wild salmon, interfering with natural selection and lowering genetic integrity, diversity, and fitness of the wild populations.

The future of salmon enhancement in BC must be carefully evaluated. Watershed Watch helped with that task in partnership with Simon Fraser University by hosting a 2-day workshop on "Reconciling the conservation of wild salmon and the production of enhanced salmon under Canada's Wild Salmon Policy." Though the meeting was well attended by key regional DFO staff in Science and SEP, as well as a wide array of stakeholders and experts, it is clear that, while SEP is changing, much of this change is happening in the absence of a clear mandate and vision for the future. It is also disturbing that little progress has been made in developing a "biological risk assessment framework" for salmon enhancement in BC, as promised on p.36 of the Wild Salmon Policy.

At a time when total hatchery output in the Pacific has reached over five billion fish per year and growing, with no linked assessment of the effects of such production on often depressed wild stocks, we must do a better job.

We respectfully request a meeting at your earliest convenience.


Sincerely,



Craig Orr, Ph.D.
Executive Director, Watershed Watch



Jeffery Young, M.Sc.
Aquatic Biologist, David Suzuki Foundation



Misty MacDuffee
Biologist, Raincoast Conservation Foundation



Greg Knox
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Cc: Claire Dansereau, Dan Cody, Carol Cross, DFO