

GETTING THE MESSAGE OUT AFTER IT IS TOO LATE – ENSURING THAT SALMON FARMING AND WILD PACIFIC SALMON COEXIST SUCCESSFULLY IN BRITISH COLUMBIA, CANADA.

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The management of Pacific salmon is always a controversial issue in British Columbia and it should be. The 11 species of Pacific salmon are the principal indicators of environmental health. Millions of brightly coloured Pacific salmon return from the open ocean to spawn in thousands of rivers and streams every year. The general public monitor this annual replenishment of stocks and if there is anything unusual it is reported to authorities. It is to be expected that any potential threat to wild salmon will attract the immediate attention of a long list of concerned British Columbians. If the possible threat is also an exotic salmon from another ocean, then management agencies need to have a solid management plan in place. The problem is that this plan was not in place when salmon farming started. The plan did not exist probably because the changes in the population dynamics of wild salmon and the success of farmed salmon surprised everyone.

Wild Pacific salmon abundances increased unexpectedly in the mid 1980s and decreased just as unexpectedly in the 1990s (Figure 1). At the same time there was a steady increase in the production of farmed salmon to a level that now is more than double the commercial catches of wild Pacific salmon and a managed reduction in wild salmon catches (Figure 1). A regime shift occurred in 1998 that reduced river flows in the southern areas of the Province (Figure 2). The resulting increases in surface salinities probably caused the well publicised outbreak of sea lice.

Management agencies now find themselves with a list of difficult problems. The commercial industry is concerned about its future and feels threatened by salmon farming. The successful but struggling salmon farming industry provides important employment in coastal communities but environmental groups are strongly opposed to salmon farming. Advice from a science community is scanty and unable to resolve controversies. A solution is that Government agencies need to adopt a new model to manage this issue. One model would be a modified jury system of experts agreed to by all parties.

Figure 1. Relationship between the catches of wild Pacific salmon and the production of farmed salmon.

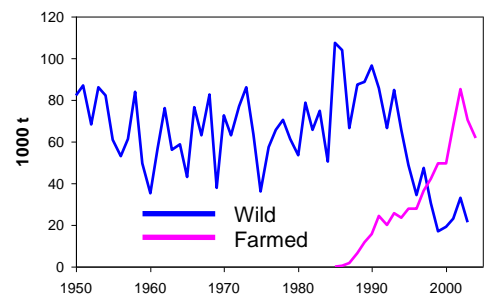


Figure 2. Regime related changes in Kliniklini River flow (flows into the main salmon farming areas).

