EPIC FAIL

CANADA'S FISHERY DILEMMA

ADMINISTRATION of Canada's fisheries currently does not satisfy the intent

of the Canadian Constitution or of federal government legislation. Conservation and protection goals are not being met.

Why is that so?

What are the elements of the problem?

Are there any practical solutions?

This Paper is an attempt to identify elements of problems primarily as they pertain to Canada's Pacific salmon fishery. Although practical solutions to inherent problems are difficult to find, some thoughts about a better road are offered.

Part I: Introduction

Part II: Identification

Part III: A winding trail

Part IV: Previous actions taken

Part V: What is wrong now?

Part VI: Towards a better future

Part VII: Step one

Part VIII: In taking the first step

Part IX: In conclusion

Epic Fail 22-10-12-1.docx 2

PART I: INTRODUCTION

The Fathers of Confederation considered Atlantic fisheries to be a matter that only a federal government could effectively administer. This position was justified by the behaviour of marine species: they do not recognize boundaries created by humans. Accordingly, the thought was that only a centralized system could be capable of providing proper administration. Legislative power remains with the federal government with some management powers subsequently delegated to Provinces, particularly in the field of freshwater fisheries.

The first decade of the 1900's saw the introduction and testing of the role of science and a concept of fisheries conservation and protection. Over the years, these roles were modified in order to adapt fisheries management to the impact of new fishing technologies and unfolding science-based information about salmon behavior. A succession of three strong Pacific Region Chief Supervisors and their Ottawa masters did well for six decades. Since then, the turnover of Regional leadership has been frequent and unproductive. Moreover, from the late 1980's to the present, budget "adjustments" have decimated the capacity and capability of Pacific Region's staff to properly conserve and protect fish, marine mammals and their habitats. Although many budget cuts have been relatively small, the cumulative impact has been high. A major budget cut (40% over five years) launched in 1995 devastated what little capacity and capability remained in Pacific Region. But still, the cutting went on and still continues in the current budget year (2012/13).

The consequence for the Department of Fisheries & Ocean's (DFO) Pacific Region of the endless cutting and of destructive federal government policies? – a shell that may still have a faint heart-beat but no strength. In any case, there is a want of political support that would allow Pacific Region to fully exercise its obligation to *speak for the salmon*.

To repeat, this note about the salmon fishery is written *primarily*, but by no means exclusively, from a Pacific Region perspective.

PART II: IDENTIFICATION

What follows are issues that helped to shape the current federal government's negative attitude about the place of salmon fisheries in the national economy.

1. Fisheries are the only renewable albeit highly variable, natural resource actively managed by the federal government. This uniqueness within the government's administrative system explains much of what follows.

For example, since 1970 the collision of the federal government's human resource development policy with fisheries management has been harmful to DFO. Trainees are transferred from outside the Department into relatively senior DFO positions where, in blissful ignorance, they administer without understanding the external fisheries consequences of their actions. Then, before their fisheries limitations are fully disclosed,

they are replaced by a new crop of trainees.

A second and much more important aspect of this issue is the inability of the Prime Minister's Office (PMO), the Privy Council Office (PCO), Finance and Treasury Board staff to understand DFO's needs (a double-edged doomsday sword when, as is too often the case, DFO senior officials also don't understand). Basically, DFO is viewed as a cost centre by Treasury Board and by Finance. This view is curious, given that 70% or more of Canadian commercial fish products are sold overseas – earning new wealth for Canada.

2. Canadian fisheries administrative sectors are ruled by a central authority as if they were identical components of DFO when, in fact, there are substantial differences in Atlantic, Arctic and Pacific fisheries management needs. An example of the problems this view can create occurred in 1978. The Salmonid Enhancement Program (SEP) was to be a cost-recoverable program. A Royalty proposal was developed and put to the Operations Committee of Cabinet where it received support. However, at the 11th hour, the Atlantic Caucus intervened and had the proposal terminated because they feared that a precedent was being set that might reach into their domain.

If cost recovery had been approved, Pacific Region would not be so strapped today for want of financial and human resources needed for proper fisheries management. The SEP would have been in a position to meet its goal to rebuild depleted salmon populations, rather than merely offsetting some recent and current population losses.

Another example is the obvious bias at the Ottawa level of DFO that favours salmon farming over wild salmon fisheries. Senior officials in key government positions cannot seem to understand that well managed wild salmon fisheries and well managed salmon farming together can best contribute to federal and provincial governments' economic and social goals.

- 3. Over the last 50 years, too many Ministers of Fisheries and Oceans have not stayed long enough to get a good grip on the portfolio. The social aspect of fisheries administration is complicated and vexing and perceived by some Ministers to be a threat to their political careers. As the late Right Honourable Romeo Leblanc, Fisheries Minister for seven years, put the matter, "DFO has an inescapable social component -- but always put the word *economic* ahead of social."
- 4. Over the past five decades, only two Deputy Ministers (DM) had previous experience in the fisheries management sector before their appointment. The learning curve for DM's is steep and many never achieve a passing grade. Don Tansley who came to DFO in the late 1970's from the outside was an exception. He took the time to learn the business. In his first two years he travelled to every nook and cranny of Canada where fish, fishermen (of all stripes), processors, fishery officers, investigative biologists, scientists and Regional administrators served. He asked a lot of questions and payed heed to credible answers. As a consequence, for the balance of his term he was able to separate the important from the fluff, a process beyond many of his senior staff and his successors.

The uniqueness feature of the Fisheries Service mandate often creates a weakness at the most senior bureaucratic level – that of the DM, an important advisor of the Minister of Fisheries & Oceans.

5. Programs unconnected to fisheries administration have been foisted on DFO, causing additional pressure on both budgets and staff. The Fishermen's Indemnity Program (FIP), for example, was an insurance program originally intended to help low-income fishermen on the Atlantic Coast but was extended to the Pacific Coast for 'balance' reasons. Budget and staff were transferred (lost) from Pacific Region's Conservation and Protection Branch to the FIP. Another example was Environment Minister Bouchard's Green Plan which took away some Pacific Region technical staff and a budget in the order of \$12 plus million a year for five years. In the early 1990's another \$12 million was transferred from Pacific Region to a program to test the concept of aboriginal commercial fishing linked to traditional food-social-ceremonial fishing.

Another damaging imposition was the transfer of the Canadian Coast Guard Service (CCGS) from MOT to DFO in1995. DFO's struggle against such a transfer was active in the period 1956/62 and at several times since – DFO's argument being that the fisheries program objectives and priorities were so different as to be incompatible with those of CCGS. Without resolving the obvious incompatibility, an under-staffed and under-budgeted CCGS was transferred to DFO. The impact on a grossly underfunded and under-staffed Pacific Region has been dramatic: Pacific Region no longer has a viable offshore marine fisheries protection service. As feared by those who opposed the CCGS transfer to DFO, CCGS soon swallowed Pacific Region's Marine Service – craft, vessels and budget. Government efficiencies were achieved but at an enormous cost to fisheries administration effectiveness. CCGS staff have little or no training in fisheries protection. A crucial arm of marine fisheries protection is gone.

- 6. Recent Ministers of Fisheries and Oceans have been known to proudly point out that in fact, Pacific Region's budget has increased in recent years. However, this so-called increase is not to the Fishery budget but to ancillary budgets such as the Coast Guard and Small Craft Harbours (a recent press release (2012) crowed about a \$7.3 million budget increase for small craft harbours' repairs but said nothing about the cut in Pacific Region's fishery budget).
- 7. Currently, there is no voice, indeed, no credible centre of fisheries knowledge in Parliament or in the senior bureaucracy. There is no one at the highest level of government to *speak for the salmon*.
- 8. The present federal government appears to deem that fisheries are an expendable resource. All of the above noted elements play second fiddle to this reality.

PART III: A WINDING TRAIL

A government that is prepared to risk fisheries resources when promoting economic development obviously views fisheries conservation and habitat protection as negative factors. The government's response to "Who speaks for the salmon?" is silence.

Since the dismemberment of Pacific Region's Conservation and Protection Branch in 1992/93 and the Investigative Biologists of the Resource Development Branch five years later, there is no one to speak for the salmon. Those who fish, process fish, service fishermen, speak only for more fish for their interest group – this attitude characterizes common property fisheries. It is as if the despoiling of Canada's Atlantic herring reduction fishery in record time in the 1970's did not happen. Or, the wipe-out of the huge Atlantic cod stocks never occurred. Or, the over-cropping of whales on the B.C. Coast after WWII was a mirage. Or, the loss of many B.C. salmon populations is a myth. If the lessons from such disasters will not be learned, what hope for remaining stocks of Pacific salmon?

Indeed, what hope for Arctic marine stocks, hovering on the verge of exploitation as soon as melting of the ice fields permits? Little hope, if any. Although a new Arctic fishery could create an opportunity to introduce and test rational management systems, that is unlikely to happen. Ears that only hear words about stock abundances, words like – fabulous, massive, humungous, too big to fail - have no ear for words like conservation, protection, renewal. The likelihood of a government conversion to conserve and protect, doesn't seem to be on the horizon. If not, it can be anticipated that rape of Canada's Arctic seas will become the next great disaster.

As to the proposed pipeline construction in B.C., conservation and protection of fish and their habitats has come to the forefront of public interest. The federal government's actions to push hard on facilitating pipeline approval and construction with little regard for good husbandry of living natural resources has had at least two significant unintended consequences:

- weakening the Fisheries Act without a full review gave the public a strong clue about the federal government's priorities fisheries and habitat conservation and protection are far enough down on the list as to be inconsequential;
- the public's waning trust has become a major factor in the pipeline equation as the gutting of DFO's capacity and capability to conduct a major or even a minor research program to evaluate risk and to recommend amelioration strategies has become public knowledge.

The conservation ethic is under attack by government policy that pursues industrial development with little concern for other vital national interests. The conservation ethic is in desperate need of a champion in Parliament – but there is only silence.

PART IV: PREVIOUS ACTIONS TAKEN

1. Since the Davis Salmon Licence Plan was introduced in 1969, the number of commercial fishing vessels has been very substantially reduced by licence restrictions implemented in the 1970s and 1990s, a series of licence buybacks, and by licence stacking (see 2 below). These actions not only reduced the size but also altered the mix of the salmon fishing fleet and their overall operating costs. On the other hand, these actions enormously increased the value of vessel salmon licences. Unfortunately,

the rapid escalation in fishing technology has resulted in a much reduced fleet having substantially greater catching power than any previous fleet ever had. Consequently, there are still too many licensed fishing vessels. For example, if the Nass and Skeena areas were closed to salmon fishing for extended periods, potential fisheries in the Central Coast or Haida Gwaii could not support any significant portion of the 638 gillnetters and 108 purse seiners licensed to fish in those management areas. The only credible management option would be to severely restrict fishing time, or, increase the size and number of sanctuaries, or, more likely, totally close all Central Coast and Haida Gwaii salmon fisheries.

2. Recently, ITQs (Individual Transferrable Quotas) for salmon seine fisheries have been tested in the Skeena sockeye salmon fishery. This system controls overall catch, eliminates competitive fishing effort and competitive investment in gear, and, leads to licence stacking (two or more vessel licences combined on one fishing vessel to increase the catch quota allocation) and other arrangements to reduce the number of vessels fishing and thereby reduce fishing costs (the high price of fuel has become a major cost factor).

Mandatory catch reporting systems were implemented as a condition of a vessel salmon ITQ licence. Fishermen must report: start, ending and pause of fishing; cancelled trips; daily catch with details on fishing area, species etc. Seine and troll fishermen must also off-load their catch at designated sites for monitoring. This helps to provide vital catch and effort information for fisheries management. Failure to report can result in fishery closures or reduced fishing times and areas. As these requirements are conditions of holding a vessel licence there is a strong incentive to meet them.

3. Although some recent changes (over the last 10-15 years) have helped to address some of the perverse and negative incentives in the fisheries, there is still a very long way to go.

PART V: WHAT IS WRONG NOW?

Some problems that plague management of salmon resources:

- 1. Salmon fisheries are managed as "common properties" randomly shared by licence holders. This means that:
 - a) the fisherman's major incentive is to compete to harvest as many fish as possible, as fast as possible before others catch them. Other incentives are to lie, cheat and do what can be done to encourage fishery openings, prevent or delay fishery closures or the enlarging of sanctuary areas. In short, incentives are weighted to over-harvesting the resource.
 - b) over-harvest occurs unless DFO is able to push back with management certainty based on reliable in-season catch and escapement data and effective enforcement. Both of these factors are dependent on regional budgets. However, budgets have shrunk so much that they can no longer

support field activities to gather the requisite data or properly enforce regulations, thereby increasing the probability that salmon populations will be over-harvested.

- 2. Many salmon fisheries intercept a number of stocks, each of which may have a different and variable production rate (sustainable harvest rate), timing and migration route. Some stocks can sustain higher harvest rates than others. But, when fished together they must be fished at levels low enough to protect weak stocks. In such a mixed stock fishery, unless the more productive stocks can be harvested selectively, a portion of the potential harvest will be foregone. Consequently, fishing interests have an incentive to write off weak or small stocks.
- 3. Salmon habitat is managed as "common property" by all the diverse groups and individuals who impact it. As the terrain in BC is mountainous, almost all development is in river and stream valleys. Approximately 4,700 populations of salmon use lakes, rivers and streams in BC for spawning and rearing. Almost all development is in or adjacent to salmon habitat. Almost all water use, waste disposal, forest harvesting, agriculture, transportation systems and other urban and industrial development impact salmon habitat. That means that:
 - a) protecting salmon habitat is perceived to be a cost (often very significant) for most industrial and domestic development;
 - b) protecting salmon habitat can be an impediment to local economic development.

The Federal government's response ...? In order to facilitate economic development the federal government has amended the Fishery Act to weaken salmon habitat protection.

- 4. Commercial salmon fisheries are limited entry, which means that only those people with a valid commercial vessel licence can legally go fishing. This has made the licence a valuable asset, which often yields more certain income by renting it out at usurious rates than by fishing it. High rental rates put additional pressure on renters to cheat in order to increase their catch to achieve a profitable outcome.
- 5. Sport/Recreational salmon fisheries are open entry, only requiring a purchased licence. The only limitation is on the daily and weekly catch limits on fish retained. (This can and does lead to catch and release of fish that get damaged and might not survive). In most fishery management areas there is also a seasonal maximum share allocated to the sport fishery. This management approach leads to high-grading of catch for size, which affects the average fecundity (number of eggs per spawner) as well as damaging released fish to the extent that many will not be effective spawners.
- 6. First Nations fisheries are traditional food, social and ceremonial (FSC) with a mix in some areas of quasi-commercial fisheries that are limited by fishing time and/or overall catch. In some areas the FSC fisheries are under-utilized. However, as many First

Nation fisheries are the last harvester before fish spawn, the number of fish to meet their needs and conservation needs often falls short because of previous over-harvesting by downstream or marine fisheries. Also, FSC fisheries on the wild stocks in their territory are being blocked by the Treaty Process, leaving no incentive to protect and rebuild salmon resources. For example, the people in Kitasoo on the Central Coast of B.C. couldn't sustain either commercial or FSC fisheries on the salmon stocks in their territory because commercial fishery openings brought in too much competitive catching power. They had no incentive to protect, restore or enhance local salmon stocks. To address their needs the band invested in salmon farming, which has resulted in significant employment and economic benefits for the community. Also, they operate a small enhancement project on the salmon stock that populates a stream that runs through the community. This activity provides a local source of fish for their FSC.

- 7. Commercial, sport and First Nations fishing interests have no incentive to protect, restore and enhance salmon stocks because any gains made would be shared with all other interests while a few responsible people bear the costs. They adopt the attitude that "government will pay" if such actions are necessary.
- 8. Many communities have little incentive to protect the salmon resources and their habitats. They get few if any benefits from those resources and have no stake in local decision-making or resource management. Additionally, Government actions to protect fish habitat are frequently perceived to make other development (residential, industrial, hydroelectric, forestry, etc.) in the area more expensive and delay or block it altogether.
- 9. Managing and protecting salmon resources are very expensive for government and in some cases costs attributable to conservation and protection of some salmon stocks may exceed the value of annual harvests (but not the cumulated value over endless salmon cycles). Government has little incentive to invest in improving salmon management or habitat protection, and, under severe budget restraint DFO has adopted a "wait for natural rebuilding" approach. While that approach may "save" money in the current budget, it contributes absolutely nothing to stock rebuilding or to the generation of information needed to understand what the limitations or opportunities may be.
- 10. Commercial salmon vessel licence holders don't pay a significant share of the DFO costs like licence holders for other species such as halibut, black cod and hake do. Since benefits from these fisheries accrue directly to the halibut, black cod and hake licence holders, there is an incentive to participate in what might loosely be termed a shared cost partnership with DFO. On the other hand, any action salmon vessel licence holders might take to contribute to the cost of improving salmon management and salmon enhancement would, under present arrangements, cost them money without assuring a defined share of the benefits. They have no incentive to get involved.

Current salmon resource management incentives are negative, perverse and overwhelmingly counter-productive.

PART VI: TOWARDS A BETTER FUTURE

The rest of this Paper is about measures that set protective boundaries for human interaction with salmon.

The primary goal is to save wild salmon by Speaking for the Salmon.

To save the salmon it will be necessary to:

- save healthy fish habitats from harm and restore damaged habitats where possible;
- collect, analyze and apply conservation and protection data;
- protect fish health;
- manage harvest fisheries to ensure that escapement goals are met.¹

Also, it is necessary to:

- identify obstructions that stand in the way;
- expect no willing help from the authorized guardians of renewable fisheries resources;
- look to the public of B.C. for support;
- promote exploration for new concepts of 'fisheries management'.

So ... if the federal government's current policies are skewed by questionable assumptions about the future as well as by perverse new habitat protection policies; and, if DFO continues to be rendered inept by Canadian government shackles ... what then? Let the salmon fisheries die? Or, despite the odds, endeavour to protect, preserve and enhance their role in our society?

Salmon have for long been an icon in British Columbia, and, for at least four generations they have been a generator of wealth that gave birth to Coastal communities and nourished many aboriginal communities. As a noted Naturalist, the late Roderick Haig-Brown put the matter, healthy salmon equates with clean water which equates with a healthy society. In January 1971 he also said that Pacific salmon are among the world's last great natural abundances; therefore, it behooves us to give wise thought to conserving them. He highlighted an important value that has been and continues to be ignored. Without a high standard of husbandry to inspire and guide us, there is little or no chance of succeeding.

-

¹ A most difficult challenge given the natural variability in salmon abundances. If not well done because of a lack of data, the credibility of management quickly dissipates.

There is need to develop and test new administrative methods for managing Pacific salmon fisheries and their habitats. For example, it is time to consider changing salmon and habitat management to make the incentives complement conservation and protection instead of fighting them. Unfortunately, this runs head-long into the federal government's current priority of full speed ahead on economic development and damn the environment.

The challenge is clear:

If the old system doesn't work, then it is time for a new system to be introduced. A new way of doing business. A new way of transforming Nature's bounty into human benefits. A new way of creating wealth without destroying Nature's gifts. Can we do it? Possibly ... if we can set aside our 'dog in the manger' attitudes and learn to work together in harmony for the benefit of all and, most particularly, of the salmon. In the end, what benefits the salmon will benefit humans.

At the very least, a new way of doing business deserves a try ... a new way of doing business that, above all else, is both effective and cost efficient.

In the spirit of hope, develop new concepts of fisheries management based on respect for the salmon, their habitats, and, those who use and depend on them. For fairness alone, local communities should be included in the fisheries resource management equation. Moreover, experience has shown that for practical reasons, local communities must be included if salmon conservation and protection goals are to be fully achieved.

First, change the federal and provincial governments' policies in respect of habitat protection – there can be no healthy wild salmon stocks without productive habitats.

Second, come up with a system of management founded on positive, rather than negative incentives.

PART VII: STEP ONE

The first step, then, is a British Columbia wide SPEAK FOR THE SALMON campaign to get people to bombard governments and politicians (federal, provincial, municipal) with the news that:

- Residents want healthy wild salmon stocks in their future because salmon are important to them;
- Failure to protect salmon habitats creates an undue risk for salmon survival.
- B.C's salmon heritage is too important to put to undue risk;

Sustaining a blitz is essential if a good outcome is to follow. Utilizing social media such as websites, LinkedIn, Twitter, Facebook, Texting in all its manifestations, blogs, email and so forth provides *Speak for the Salmon* participants with relatively easy easy access to a rapid delivery system. Hand written letters still have impact if the volume is high.

Articles/op-eds in newspapers and video stories on TV are time consuming but can be very effective. Community meetings to promote community action can be effective. Calling on elected politicians to speak to community groups is another good avenue even though it may be a difficult one for some politicians to handle but, that is the nature of accountability.

Citizens need to become SALMON SPEAKERS

If a successful blitz causes politicians to come around to accepting and honouring the conservation ethic, then human-made risks to salmon's future can begin to be ameliorated. In any case, a good first step!

A step that can be made even better if followed by actions to reverse the weakening of habitat protection.

The success of this first step will clear the way to developing and implementing new ways of managing salmon harvest fisheries.....new ways founded on positive incentives that reflect a true conservation ethic.

PART VIII: IN TAKING THAT FIRST STEP

Human populations cycle, as do fish populations. One can only hope that the next human cycle is creative and productive, bringing benefits to humanity without bringing enduring harm to other life forms. A questionable outcome, however, given climate change, ocean acidification and the disruptions that likely will be endemic and eventually may set off panicky and irrational responses by governments that finally come to realize that the 'no problem' approach to climate change is taking nations in the wrong direction.

What a proposed Campaign is all about is accountability. Just who is accountable for conserving and protecting salmon and their habitats? We know what the Constitution and the Fisheries Act say. But, given the virtual abandonment of responsibility by federal governments going back to Prime Minister Mulroney's time, the question WHO SPEAKS FOR THE SALMON? remains unanswered. Only the public of British Columbia can force a credible response from federal, provincial and municipal politicians.

A quick review:

The federal government has abandoned its responsibility by cutting budgets and field staff to the point of turning DFO's Pacific Region into a hollow shell, bereft of capacity to properly perform vested conservation and protection duties. The recent watering down of protective provisions that were in the Fishery Act is further evidence of structured neglect.

At the federal level, Cabinet and MP's are caught up in the web of the Prime Minister's indifference to the issue of salmon survival. Scientists have been muzzled. Field capability has been emasculated. Staff dare not speak out. Indeed, no one in the federal government chain may speak out for the salmon without clearance from the PMO.

On the Provincial side, the B.C. government acts as if it has no legal authority to speak for the salmon and it has for long ignored its moral right to speak on behalf of this marvelous renewable resource that is important to the B.C. public. Important not only in economic terms but also, in terms of societal values, uniqueness and, most importantly, for the culture and livelihood of the First Nation component of B.C.'s population. The Province's behaviour is strange given that, in the eyes of the public, salmon are an icon that represents a good quality of life.

Several actions taken recently by the federal government have opened the public's eyes to the pall of indifference at that level to the fate of salmon habitat. Public trust in the federal government's position on environmental protection is eroding and will continue to erode as the impacts of that indifference are revealed.

Unless the Government introduces policies that begin to rebuild depleted salmon populations and to provide effective husbandry of all Pacific salmon resources, the Prime Minister risks losing his critical support base in B.C. Federal MP's have three years before facing an election. Plenty of time for the federal government to ACT, not talk.

The B.C. election in 2013 may be influenced if enough B.C. people let politicians know that they will support candidates who have a strong, positive Pacific salmon platform. Provincial MLA's have one year to ACT, not talk. A relatively short period but still, enough time for the public to drive home the message "We want you to SPEAK FOR THE SALMON."

There is an urgent need for a SPEAK FOR THE SALMON CAMPAIGN across the length and breadth of British Columbia. A campaign in which the public tell politicians that they want Pacific salmon and are willing to do what they can to save them.

A SPEAK FOR THE SALMON Campaign must be apolitical ... in the sense of not favouring one Party over another. In other words, the public is saying they will only support candidates who support the conservation ethic as it applies to wild salmon.

The Campaign must not and will not cater to any special interest group. Some may want to use a Speak for the Salmon Campaign to promote their particular interest ... such a diversion must not be allowed to happen as it would weaken the focus on the very basic, essential, first and foremost challenge of saving wild salmon.

The Aim is clear and singular: SPEAK FOR THE SALMON and restore Pacific salmon populations by applying good husbandry practices now.

Almost half a million B.C. children have participated or are in the school program "Salmonids in the Classroom" (an Optional Course) since it was launched over 32 years ago. Additionally, tens of thousands of adults have volunteered over the years as Streamkeepers: constructing and operating mini-hatcheries; restocking streams; cleaning streams and spawning grounds of harmful debris; protecting habitat from

deleterious practices. Several Streamkeeper groups have been active for well over 30 years. Streamkeepers and school children's participation in a SPEAK FOR THE SALMON Campaign could make an over-powering difference.

Part IX: IN CONCLUSION

The challenge is to launch a SPEAK FOR THE SALMON campaign to have the public speak loud and long for the salmon as a means of convincing politicians that it is in their interest to become salmon conservationists who SPEAK FOR THE SALMON.

A SPEAK FOR THE SALMON Campaign will be based on the dictum: healthy salmon equates with clean water which equates with a healthy society. There is need for:

- 1. A SPEAK FOR THE SALMON package that informs potential supporters about a B.C. wide media campaign to save healthy salmon populations and to restore populations that have been severely depleted.
- 2. Creating and staffing a website to carry the message and to receive feedback.
- 3. A core of young people supported by their elders to blitz federal, provincial and municipal politicians, telling them that they have a choice: properly conserve and protect salmon and their habitats, or, risk losing support.
- 4. A sustained, no-surrender blitz until there is concrete evidence of a federal course reversal and provincial initiatives to protect salmon habitats.

A successful SPEAK FOR THE SALMON Campaign could reach beyond fisheries and lead to constructive change in how we, as a society, accept accountability for how we exploit and how we utilize our most precious gift -- our natural resources.

Al Wood & Ron MacLeod, October 2012

Added Nov 1, 2013

In Part V, item 3. I mention 4,700 populations of spawning salmon. I have added a note in my copy that this estimate came from data collected in the 1960's and '70's.

Given a 22 year lapse since 1989/90 in collecting spawning ground data in all but a few streams, who knows what populations still remain and, in what state the remnants are.

The challenge will be to keep the focus on the salmon and only the salmon at this stage.

Please keep me posted about the response the paper generates. Thank you and regards, Ron

Epic Fail 22-10-12-1.docx