

## Northwest Science Forum

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**Dr. Jack Ward Thomas**, Boone and Crockett Professor of Wildlife Conservation, The University of Montana

### **Watching the Columbia River Salmon Dwindle Toward Extinction— Elephants in the Room**

**(Speech given 17 March 2000 at Skamania Lodge, Stevenson, Washington)**

Let me begin with the customary disclaimers. I am not an expert on salmon, nor am I as well informed on all the details surrounding the intricacies of the salmon's continuing decline in the Columbia River System as I would like.

Now, I follow with my "claimers." I spent some ten years of my professional career involved in high-profile roles dealing with spotted owl/old-growth issues in the Pacific Northwest. I was involved as a member—usually as team leader—of a series of task forces that started with the consideration of the welfare of a single sub-species (the Northern Spotted Owl) in a relatively specific habitat type (old growth forests) and ended up with a plan for ecosystem integrity. That plan included consideration of streams that harbored dwindling runs of salmon.

These efforts included the Interagency Scientific Committee (ISC), the so-called "Gang of Four," the Scientific Team (SAT), and the Forest Ecosystem Management Assessment Team (FEMAT). I then served three years as Chief of the Forest Service dealing with implementation of the Northwest Forest Plan. In that role, along with Dr. Michael Dombeck, who was Acting Director of the Bureau of Land Management, I or-

dered the Interior Columbia River Assessment. I had no idea that the effort would outlive my tenure as Chief.

I now spend my time as a professor, and have made one certain discovery in the process. I find that pontification is much easier and more fun than responsibility.

Those are my credentials for my pontification for today.

I also have some reputation as one who "tells it like it is," or, more likely, how I think it is at the moment. My impression is that I was invited to address you for that reason.

In preparing for this presentation, I made only a cursory review of the extant literature. But I did discuss my ideas with ten colleagues who are or were intimately involved, past and present, with the issue of salmon in the Columbia River System. None of them disagreed with the premise that I put before them, and encouraged me to "tell it like I think it is"—and added, "it is about time somebody did."

I think that many of the shortcomings in the current situation surrounding the welfare of salmon in the Columbia System are related to a failure to

recognize that there are "elephants in the room." If that analogy does not ring a bell, I got it from a cartoon showing a group of people at a cocktail party blithely carrying on party conversation, ignoring the fact that the columns they were leaning against were the legs of elephants. If they recognized the elephants, they would have to react.

Look around you. Squint your eyes just a bit. The elephants are here.

I remember once being in a tour group that was on the Starkey Experimental Forest and Range on the Wallowa-Whitman National Forest in the Blue Mountains of northeastern Oregon. We stood on the banks of Meadow Creek, a tributary to the Grande Ronde River, which, in turn flowed into the Snake River. There were colleagues on the tour who remembered when there were salmon in Meadow Creek. No salmon now came back to Meadow Creek, though we were looking at a dramatically improved section of the stream. A short time earlier our research unit had been threatened with a "jeopardy call" because we were using a two-inch stubble height in the meadow to signal the time to move the cows. The National Marine Fisheries Service (NMFS) had dictated a three-inch stubble height. Someone asked me what I thought of the situation.

My reply went something like this: "As we stand here talking, the trawlers are working right off the mouth of the Columbia, and the sports fishing boats and their occupants are catching salmon. But we would not want to handle the economic, social, and political consequences of addressing that situation.

"Whatever salmon escape the nets and the hooks at sea start up the Columbia River and swim through the effluent from Portland and the settlements of the Willamette River. From this point forward they begin to encounter nets set by Native Americans fishing in concurrence with their treaty rights. A glance to either side of the river reveals an Interstate Highway and a parallel set of railroad tracks on one side and a double-lane road and a railroad on the other bank. There are dredges opening a channel for barge traffic. But, understandably enough, it would be tough to handle the economic, social, and political consequences of dealing with those limiting factors.

"And, whatever fish are left come to the first dam. Some get over the dam, and some don't. Then, the survivors swim through the tens of miles

of slack water to the next dam, and the process is repeated. Some get over the dam, and some don't. This is repeated eleven times before the survivors can turn up the Grande Ronde River headed for the spawning gravels from which they emerged. But, clearly, we are not willing to face the social, political, and economic consequences of facing up to the problem associated with dams—particularly the dams in the lower river.

"As the fish proceed upstream they encounter agricultural areas where plowed fields stop only where they encounter the stream banks, and the runoff from the fields is laced with herbicides, insecticides, and fertilizer. Pumps pull irrigation water from the river and there are diversion ditches. Roads and railroads parallel the stream course for many of the miles from the mouth of the Grand Ronde River to Meadow Creek. Cows pound the stream banks on the private lands to the boundary of the Experimental Forest. But, clearly, we are not willing to face the social, political, and economic consequences of dealing with those problems.

"It is probably not necessary to go through this litany again to describe what the smolts will go through as they make their journey to the sea. And these would be the very few as might result from a chance encounter between what few salmon might make it back to the spawning gravels.

"So now we stand here and argue. We argue about whether the stubble height of three inches is so significantly different from that of two inches that a grazing experiment should be shut down in a riparian zone on a stream which has not had a single salmon return in 20-plus years. What is wrong this picture? Something had to be done somewhere to make it seem as if meaningful actions were underway somewhere. And so we were chosen. Why here? Why us? The answer seems simple enough to me. There were no social, economic, or political impacts of enough consequence to attract attention. We were relatively weak.

"We are not focusing on the real problems. We are taking on targets of opportunity, as regulators are demanded to do *something*, and it is directed toward those with relative lack of political clout."

Viewing the long term and continuing gyrations with the issue of saving salmon in the Columbia River System is, at the very least, not encouraging as far as long-term success is con-

cerned. Actions thus far are similar to the story described earlier, as new targets for action are chosen on the criteria of limited social, political, and economic impact. The rule seems to be: start with the weakest first, and move up the ladder as action is required.

Unfortunately, most of these efforts produce little or no result. For there is an elephant standing unseen in the room. That elephant is that the big problems, the *real* problems, are ignored as a matter of political expediency—or, perhaps, reality.

Simply put, as costs skyrocket, the Columbia River salmon continue to slide toward extinction. Simply put, as the struggle labors on to develop coherent policy and approaches between all the players—federal, state, tribal, quasi-public (not counting the myriad agencies at all levels)—the salmon continue to slide toward extinction. Simply put, as regulatory agencies, feeling forced to act under limiting factors, focus on players that are easy targets (and, regrettably, that are relatively insignificant to salmon recovery) and avoid dealing with the truly significant factors, the salmon continue to slide toward extinction.

One run of salmon after another “winks out” as the fish returning dwindle to zero in spite of the existence of spawning habitat. How, in the biological sense, is it possible that there can be any “take” by harvesting (i.e., killing) of salmon that might be upstream migrants in the Columbia System, headed for stream stretches where “wink out” is increasingly likely?

Clearly, managers are driven by the Endangered Species Act to carry out their roles in the prescribed drama, even if one failure after another is the consequence. I cannot think of another instance in the application of the Endangered Species Act where such ongoing failure would be tolerated. But, even that is not too hard to understand. The erstwhile “environmentalists” who took on the issues related to the northern spotted owls and other such tough fights simply do not have the heart for this one. They are willing to settle for incremental changes that address environmental issues piece by piece, whether or not truly related to salmon recovery. They cannot help but know that many of these actions are not likely to reverse the decline of the salmon, but will result in improvements in dealing with mine wastes, abusive grazing, roading, etc.

When they view the potential consequences of the suite of actions that would give salmon a real chance in the Columbia River System, they too ask that the cup be passed.

Let us examine just a few of the other elephants in the room as we ponder the fate of the salmon.

Examination of the purposes of the Endangered Species Act is in order: “The purposes of this Act are to provide a means whereby the ecosystems upon which endangered and threatened species may be conserved, to provide a program for the conservation of such endangered and threatened species . . .”

The Columbia River System has been so dramatically changed over the last century and a half—probably irreversibly—that “conservation” of the ecosystem in any semblance of its original state is simply not possible. Even draconian actions, such as removal of the lower Columbia dams, are almost certainly impossible due to astronomical direct costs and social, economic, and political consequences. Even cursory examination of dams, hatcheries, barging fish, dredging, roads, railroads, diversions, effluents from many varied sources, agriculture with associated pesticides, herbicides, and fertilizers, altered water flows, influences of urban development, and varied other impacts, quickly erase any vision of the protection of a long-gone ecosystem upon which threatened and endangered species depend. Many of the runs of salmon that still exist can be compared to a dying man essentially on full life-support—and still their numbers and range of occupancy dwindle. These pitiful remnants of what once was, not so long ago, but are no more except in dreams, are what Aldo Leopold called *numena*, or the spirits of a place.

For these wonderful creatures were the numena of the wild Columbia. The Columbia River of today is a working river. The economic, social, and political realities, I believe, assure that it will remain as such. Undoing of what has been done, except for a little cosmetic dab here and there, does not seem within the realm of the possible. The only parts of the ecosystem that are reasonably intact are the public land areas—and, oddly enough, (or perhaps understandably enough), they seem to receive most of the attention of regulators and planners.

Clearly, chances for survival of various runs of salmon are not equal. Many of the runs have

winked out, and the genetic make-up of the fishes in those runs is forever lost. Other runs continue in what appears to be an inexorable death spiral in spite of "best" (i.e., politically acceptable) efforts. Some runs are in reasonably good shape, and may well survive with appropriate management actions.

The perceived inflexibility in the ESA precludes the use of techniques to assign limited resources to those runs that have the best chance of maintenance and recovery, while ignoring those that are likely doomed. It is time to apply "triage" techniques, i.e., face up to what are likely irreversible declines in some runs in order to direct resources to those runs where the odds for long-term survival are better with adequate help.

Such an approach would also entail identifying land whose management can no longer be conceived as having an impact on salmon. Regulatory agencies should reduce their arena of activity to habitats that can realistically be identified as important to salmon welfare—and, simply put, leave other folks alone.

Costs of actions should be reported and recognized in a more realistic and comprehensive fashion. Costs are not limited to payrolls and expenditures. Both direct and opportunity costs are imposed on others—government and private—by regulatory actions. Frequently such costs are not accounted for and weighed in the balance. They should be.

The political process dealing with the salmon issue is hopelessly confused in spite of the best efforts of all involved parties. How could anything else be expected? Every entity involved has a different mandate, power base, constituency, objective, personality, source of funding, capability, vision of scale, and "boss."

I have absolutely no doubt that every "boss" is a person of good will, impeccable honesty, and dedication to do the "right thing." I have no doubt that every scientist involved from every agency and from every discipline is appropriately skilled and motivated to do the best possible job.

I am saying that the circumstances that exist could have been derived as a platform on which scripts for an old-time Keystone Cops comedy could be structured. In spite of all the good people involved, the circumstances do not bode well for either developing rational outcomes that will stand

the test of ESA compliance, or that can be effectively executed.

If past is prologue, there may be lessons that can be derived from the experiences of dealing with the spotted owl/old growth/salmon "situation" (some might say "fiasco"). First off, it should be clear that the Columbia River salmon issue is far more complex—ecologically, politically, socially, legally, and administratively—than its predecessor crisis in the Pacific Northwest. Second, there are dramatic parallels in the amount of delay in developing a coordinated response and subsequent loss of options as various runs of salmon wink out. Third, the situation was allowed to fester until a series of teams were appointed that were given cover to work through appointment of a leader, who in turn was given the authority to work without political oversight to derive and evaluate options for a decision.

Scientists and technical support personnel must be chartered under a single leader with the authority and guts to face the situation—and defend the results. In my opinion, any such process that is guided by a "board of directors" from the various involved agencies will be so organized and conducted that it will produce a series of compromises before the time that such compromises should be made. Time frames will stretch as the team is sent back to the drawing board time after time for more analysis in hope of more politically viable answers.

Experience with the Interior Columbia Basin assessment effort indicates that to be the case—and reveals that more and more and more assessment does not produce significantly different results. In fact, more and more assessment and the time required produces rapid erosion of options for decision-makers. Threatened or endangered species are likely to suffer from delay, and chances for successful management dim accordingly.

However, continuing assessment and planning does make it appear that additional important and essential work is in progress—and, perhaps, even more research and assessment *is* essential prior to a decision. Maybe of greater importance for consideration is that drawn-out assessment and planning produce delays in making decisions that are to the detriment of threatened or endangered species, persons who will suffer as a result of the decisions, and politicians in whose back yards the decisions will have effect.

So there may be advantages to those who will be hurt or made miserable by change—and that makes up a considerable array. Delays can carry one beyond the next election, or, simply, put off the day of reckoning.

It may be time to ask: “What do we not understand about the salmon issues in the Columbia System that precludes coming to a reasoned conclusion?” The likely answer seems to be “not much.”

In looking at the options that are currently under consideration, I find none that I believe would satisfy the intent of the ESA. Be that as it may, it seems likely that declines in some runs would continue, and some would wink out.

On top of that, I believe there is yet another very large elephant in the room. That is the question of who, finally, is to make the momentous decisions as to how much protection is afforded, and who takes the economic and social consequences. I do not believe that the continuing group grope of regional directors of various political entities and agencies “with a dog in the fight” will produce appropriate decisions. The mix of missions, mandates, pressure groups, constituencies, personalities, and political loyalties does not yield a suitable cultural medium for the growth of a solution.

Further, given the complexities surrounding the issues and the almost certain dramatic magnitude of the economic, social, ecological, and political impacts of any decision, I do not believe that this is a decision that should be made by a bureaucrat or a collection of bureaucrats. Given that the issue has international, interstate, and nation-to-nation connotations, and in view of the sheer magnitude of the impacts of that decision, there is one obvious choice for the decision-maker: the President of the United States.

There is a precedent for the President to make such a decision in a case of such dramatic import, and under strikingly similar circumstances. One of the ramifications of a decision by the President is that there are no appeals possible internal to the administrative branch of government, and the first step in opposition are the courts. Certainly, speed is of the essence in the case of the Columbia River salmon given the rate at which salmon runs are declining and the reduction of options implied in those losses.

Given the likely magnitude of economic and social consequences of any plan with any real

chance of saving the salmon, the President would probably cut the finest possible line in choosing an option that would minimize impacts on human welfare while affording salmon a chance for survival. If the precedent of the Northwest Forest Plan held, legal actions from environmentalists and the tribes could be expected. These challenges would relate to charges of inadequate attention to salmon welfare. Those suffering economic damage would charge lack of adherence to process, inadequacy of data, inappropriate interpretation of data, or any other circumstances that would preclude institution of action under the chosen alternative.

A loss to the environmentalists or the tribes would require either more attention to salmon welfare, with associated increases in social/economic impacts, or an immediate appeal to the Endangered Species Committee (the “God Squad”). Either event would escalate the speed of resolution with associated savings in time, money, and options (“decision space” in the parlance of the planner.)

Congress, then, would be able to bless the decision by appropriating the funds necessary to execute the plan. Or, by refusing funding, veto the plan and open the door for a certain legal action for failure to adhere to the requirements of the ESA. Such a “veto” would run the risk of a judge-ordered action that could have dramatic impacts in the economy of the Northwest United States.

It seems implausible that the Congress would exercise such a “veto” without instituting legislation, predicated on the phrase “all other laws notwithstanding,” that would legislate a solution to the impasse.

It does not seem possible that the Endangered Species Act was written, debated, and passed with any inkling that an issue of the magnitude of the Columbia salmon issue would arise. Magnified by the collateral issue of tribal fishing rights, this set of circumstances makes the spotted owl/old growth issue pale into relative simplicity and insignificance.

So I doubt that there will be any immediate overt recognition of the elephants in the room. But, if the elephants are not recognized and dealt with, there seems no room for bold strokes to come to grips with the issue to even be suggested. For, after all, it is said “the devil you know is better

than the devil you don't know." And, what official in his or her right mind, agency or political, would take a "lose-lose" situation of this magnitude?

The likely alternative of plodding on down the path that is being followed will likely produce continued diminution and wink outs of the salmon runs, a continued buildup in expenditures, accumulating restrictions on landowners (whether effective or not), and drawn-out assessments and evaluations. Declines in the fish runs may well continue as the inverse of expenditures, with no indication of cause-and-effect relationship.

Maybe it is time for someone to stand up and say loudly "Hold! Enough!"

This ongoing set of circumstances has taken on a life of its own, with its own cast of characters—and that cast routinely increases in size and costs. How many people's professional lives, how much occupational energy, how much political and social capital, and how much treasure (direct and opportunity costs) is it rational to spend in a losing game? The salmon continue their slide toward extinction, and options disappear as the runs wink out one by one—but the debate and disconnects with realities and costs continue to mount.

We have become too complacent, too accustomed to extant processes, too mired in those rituals, and too addicted to piecemeal "show piece" actions as the Columbia River salmon runs drift, seemingly inexorably, into the shadows known as history. There to become, for future generations, one of the myths of what once was in this land near the sea.

One of the first orders I gave when I became Chief of the Forest Service was to "tell the truth" and "obey the law." That made a lot of my fel-

lows angry. I do not think, as a result, many paid much attention, and nothing changed much. But there is always hope. I thought it was good advice then and good advice now. So I repeat what I said then to you: tell the truth and obey the law.

The truth is that the situation for salmon is getting worse. The truth is that the situation is not likely to improve much unless we start breaching dams—and not just the four in the lower Snake River. The truth is that will occur when there is a really cold day in hell. The truth is that there is no acceptable way that we can come into compliance with the Endangered Species Act as it relates to salmon in the entire Columbia River System. The truth is that we are simply unwilling to come to grips with the issue that we have, probably irrevocably, decided that the Columbia River is a working river harnessed to provide the cheapest electrical energy in the world—and, simply, we ain't about to give that up. The truth is that playing games with various combinations of attempts to assuage limiting factors for the salmon will not do the job—and we know it.

If we frankly admit that we cannot obey the law, we are free to do the best we can to save the remnant populations. That can be done through a combination of directing money and resources to the places they will do the most good, and letting people off the hook who have nothing to do with those efforts. There should be no shame and much honor in facing the facts and telling it like it is.

We should do better. The law says so. Our professional ethics say so. Our consciences say so as we ponder what the Columbia River would be like without its numen. But in my opinion, we will do better only if we, very soon, recognize and deal with the elephants in the room.