BIPARTISAN CONGRESSIONAL PANEL

PUGET SOUND MEETING

Congressional Meeting on the Survival of Returning Adult Salmon and Steelhead

Carwein Auditorium
Tacoma Campus
University of Washington

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SPEAKER: Next on TVW, a public meeting on the Pacific Northwest Salmon Preservation with congressional state and policy group representatives takes place in Tacoma on October 12th.

MR. DICKS: -- and someone who is very interested in this issue and my colleague from the Third Congressional District, Brian Baird. I'm Congressman Norm Dicks. This is actually my district, the Sixth District, in which we're having this meeting. And I think we're going to open here with our opening statements.

I want to thank all of you for coming and participating in this meeting to discuss the survival of returning adult salmon and steelhead. We are here today to discuss what many people refer to as the four H's, Habitat, Hatcheries, Hydropower, and Harvest. And for my friends in the environmental movement, I want you to know we haven't forgotten that hydropower is an issue, as we heard about yesterday.

I am particularly interested in gaining a better understanding of the role salmon harvest plays in the region's effort to recover salmon. However, before we

begin our discussion about this important issue, I want to make something very clear. Our desire to better understand salmon harvest must not be interpreted as putting less importance on the role of the other H's, Habitat, Hatcheries, and Hydropower in the recovery of our salmon and steelhead.

All of the H's must be addressed if we are going to recover salmon and steelhead. Our effort to improve salmon habitat must and will continue. And I'd been working on this going back to 1999, during the Clinton administration, when we got -- Vice President Gore helped us put in a $100 million in the budget, which we've been able to sustain at, you know, 100 to 90 and up and down over the last six years. And I have been very appreciative that the Bush administration kept that funding in the bill, which helps habitat recovery throughout the Pacific Northwest.

Our hatcheries must be managed in a manner consistent with the needs of wild salmon. We have begun that effort with the Puget Sound in west -- on Washington coastal hatcheries. But I am sorry to say we have done very little on the Columbia River to address this matter

and that is simply unacceptable. And Senator Gordon (phonetic), Senator Murray (phonetic), and I have put money in the budget for five years to do the Hatchery Scientific Review Group. They have -- and the tribes participated, the states participated. They have done some magnificent work in coming up with recommendations how to better operate our hatcheries so as to protect wild fish.

We must continue our efforts to find ways to minimize and eliminate the negative impact that our hydropower system has on wild salmon and steelhead. And the Oregon director yesterday talked about that impact. And as we will discuss today, we must make sure that the harvest of salmon and steelhead is consistent with the region's recovery efforts.

I believe that the citizens of our state are committed and willing to make the necessary sacrifices to recover salmon. We have spent, literally, billions of dollars to improve habitat, marked nearly all our hatchery salmon, and modified both the operations and infrastructure of our dams. The vast majority of these efforts have been necessary and important for salmon

recovery.

What we are increasingly hearing from those who are paying the bills for these efforts and experience the impacts of additional regulations on their lives that they don't understand how we can ask them to support such cost, both monetary and personal, and at the same time continue to harvest the very wild fish we're trying to protect.

Thus, today we want to begin a regional discussion about the role of harvest in salmon and steelhead recovery. It is our belief that the public must have the confidence that harvest is being managed in a manner consistent with salmon recovery. We also believe that the public must understand the effects of harvest on salmon recovery, if we're going to continue to work on the other H's.

Let me make it clear, that I will remain committed to addressing all of the four H's. Discussing harvest should not serve as an excuse to any county or municipality for not passing critical area ordinances that protect salmon habitat. It should also not prevent any other private or public entity from taking the steps necessary to protect salmon habitat.

We all must do our part. I come to this meeting this morning eager to hear from the fish managers, including my long time tribal friends led by the highly respected Billy Frank, more about how harvest numbers are determined and contribute to salmon recovery. Thank you and I look forward to these discussions. And I'll now call on Congressman Walden to give his opening remarks.

MR. WALDEN: Thank you very much, Congressman Dicks. I appreciate your hospitality in hosting this meeting that we're having here and I want to congratulate Congressman Baird for his efforts on this as well. And I want to concur in your statements.

We're all very acutely aware of the four H's, Habitat, Hatchery, Hydro, and Harvest. And as Congressman Dicks said, we're not ignoring any of those in our work. And Lord knows we're not ignoring any of those in this region, when you look at the incredible investments, both human and financial, that are being made in this region to deal with all of those issues. But we have a special interest in trying to better understand the role that harvest plays in rivers, in the ocean and that's really the subject we're focused on today.

And we had a very productive, I thought, meeting yesterday, in Vancouver. We spent many hours listening to very certified smart people who talked to us about their views on this issue. But I think there is one haunting piece of this puzzle that continues to troubles me. And that is where in the Endangered Species Act the authorization exists to harvest a listed species.

We understand incidental take as part of a project. But the outright harvest of a species that we're investing hundreds of millions of dollars in this region to restore is a bit perplexing. And so, you know, we're trying to figure out how does that fit in with the various strategies and regimes in place to manage the entire river system as well as international agreements with Canada and what happens out in the oceans.

We're also very cognizant of the tribal trust obligation the United States has and the need to meet that tribal trust obligation. So that should not be in doubt. But I think as Oregonians, and Washingtonians, and Northwesterners, we're all committed to see sustainable salmon runs for now and into the future. And I think we all know we can do better than we've been doing and

hopefully, out of these hearings, we'll find ways to achieve that goal.

So I appreciate the leadership of my colleagues from Washington State. We'll have a third one of these meetings at a yet to be determined date in Eastern Oregon as kind of a follow up to these two. But I want to thank all of you for being here today and especially our participants. And I yield back the balance of my time, as we say in Washington.

MR. DICKS: Thank you. And now I'm going to call on Congressman Brian Baird from the Third District. He, yesterday, hosted our event in Vancouver. We want to thank you, Brian, for that. That was a tremendous start to our inquiry, and I thought the meeting was extraordinarily productive and civil, which is -- we'd like to make sure it's civil here in Tacoma too, by the way.

And so I want to call on Brian for his opening remarks. And Brian's been very interested is this subject and gives a perspective from the Columbia River and today we're up here in the Puget Sound area.

MR. BAIRD: Great, thank you, Norm, I appreciate

the invitation to join you here and Greg, thanks for your presence. We, Norm and I and Greg, all agreed that this really needs to be a bi-state regional and bipartisan effort. Fish could care less whether their representatives are Democrats or Republicans. They, to their credit, don't get involved with party politics.

But we all need to pull together because whether it's our farmers who are making sacrifices, our foresters who can't harvest their land, our ratepayers who are paying increased rates, or our communities who deal with all the permitting challenges that we face because of salmon recovery. Everybody is affected and that's why we all need to work together to try to solve this.

And I want to underscore what Greg and Norm said already. We are all absolutely committed to continuing the important efforts to restore habitat because we're making strides in habitat. We have really opened up streams that have been closed before. We're finding -- learning, I think, a great deal about ways that we can produce fish in the wild and wild fish in natural habitat and not just hatcheries. We're also absolutely committed to an effective and efficient hatchery system. And we are

committed to further modifications to improve the efficiency and safe passage beyond the hydro systems.

But there is this fourth H, and it includes not just human harvest. Every -- and we heard yesterday and I think anybody who is involved in this will hear great stories about pinnipeds, seals, and sea lions, which have increased in large numbers. And I think almost every fisherman here can share a story of bringing up a head of a fish instead of a full fish. And we need to look at that issue.

We've had that problem down on the Bonneville Dam. As you know, the Bonneville locks faced this challenge a while back. We -- there are still blockages to fish passage in a number of drainages, where we could have productive habitat. So we want to look at all the things that are impeding the return of adult salmon who are ready to spawn, ready to reproduce, and right at the point when we could realize that goal, they get intercepted by manmade or natural factors. And we ought to look at those because we believe that we can do a better job of helping those wild salmon get upstream to spawn and reproduce, which ultimately is our goal.

Our ultimate goal here is to ensure a viable run of wild and hatchery fish for foreseeable future of many, many generations yet to come at levels that can be enjoyed for sport fishing and for commercial harvest, that's our goal. And we want to underscore that because sometimes you come out of a meeting like this, you could say that a hundred times and some sound bite gets put in a newspaper or TV that gets everybody upset. And we want to be absolutely clear that that is our goal and that's why we wanted to hold these hearings.

So I thank everyone who will be speaking before us and all of you who are present. And we certainly offered down in Vancouver, I know it's the case here, if you haven't been invited to speak, please don't take it personally, we just have finite amount of time. We would love to hear from you. Now, all of us have websites or addresses, where you can mail us or give us your written commentary. We will take those carefully into account and our goal, as Greg mentioned, is to have future hearings, one up in Eastern Oregon and a series down the road.

We are committed to doing everything we can to try to solve this for the sake of all the region, and we

think we can do it. So thank you to our panelists again. Thank you, Norm for your leadership not only today but in so many ways in this region and particularly on salmon issues and steelhead issues.

MR. DICKS: Thank you, Brian. We're on time; we're ahead of schedule in fact. And so I'm going to call on our first three witnesses. Bob Lohn is the regional director of NOAA Fisheries. He's been at the forefront of, during the Bush administration, of all the major issues relating to salmon in the Pacific Northwest, on the Columbia River, and on Puget Sound.

And Bob testified yesterday and was kind enough to ask me, you know, do I need him here again today. And I said I really did want him, and I appreciate his changing his schedule to be here. And we're going to do like we did yesterday, five minutes per witness. At about four minutes, you -- Sara (phonetic), here in the front, will give you a -- will have some signs and we'll try to notify you when we get close to five minutes so you can wind up your testimony. Bob.

MR. LOHN: Thank you, Mr. Chairman and distinguished members of the panel. Thank you also for

what I thought was just an exceptional meeting. I attend many salmon meetings and I just found that the honest level of inquiry, the deep questions, and the thoughtful presence of the panel members really spoke a lot to all of us.

I'm so grateful that -- and on something that's so both economically and culturally important to this region that you folks have chosen to invest the time. I know how much time it can take, and I just want to speak as someone who knows a bit about these matters. These are --

MR. DICKS: Can you hear Bob in the back? Are you having trouble -- okay, they can hear you. I just think you might pull up a little closer.

MR. LOHN: Okay, yeah, these are complex matters and I, personally, was very impressed with, obviously, the preparation and the level of knowledge you all had gathered. So thanks again just -- on behalf of all us.

Yesterday, I talked about Columbia River issues, today, I'm happy to respond to further questions. But today, I'd like to focus on Puget Sound, make a couple of points briefly on why Puget Sound is different, and then

mention some common problems, themes you'd heard.

I really am much more optimistic currently about fish protection in Puget Sound than I am in other parts of the region. Why is Puget Sound different? Well, first of all, there is a history of cooperation, which may be a short history, that is, this came out of some real struggles and particularly over treaty rights over salmon.

But in recent years, I've seen a sort of unparalleled effort from the fishery managers, both the tribes in the Northwest Indian Fisheries Commission and the State of Washington to work together to solve the problems. And that's just extraordinarily healthy and gives us a leg up on these problems.

Secondly, there are fewer listed stocks in Puget Sound. There are actually three, Hood Canal chum and Lake Ozette sockeye, which are relatively minor in the picture, plus a single listing that embraces all chinook in Puget Sound.

And Congressman Walden, you'd asked a good question, "How are these different from the ESUs in the Columbia River?" My estimate is that if we were to follow the same -- precisely the same principles, we would've

divided them into five groups. And for recovery and planning purposes, we do in fact recognize those five groups. So it's not okay to trade off the survival in one of the groups for more fish in another.

Third point, why Puget Sound is different and ahead, Congressman Dicks referred to and I want to highlight it, the Hatchery Scientific Review Group. Prior to that time, there really was no good scientific metaphor for how you integrate and think about hatchery production parallel to wild stocks. That group developed the science; it audited the hatcheries and their practices, and laid out a plan for change.

We're now in the midst of transition for that, that is, not all the changes recommended can take place immediately. But the need for them is recognized, the plans are being, and long term, I think we're going to get where we need to be. That overall coordinated vision for -- in this case, for Puget Sound chinook, the major listed stock here is what puts -- again, a factor that really puts Puget Sound far ahead.

The fourth is that -- the fact that there has been a consistent approach now to harvest. We were

challenged legally on these issues in cooperation with the managers and an environmental impact statement costing about three quarters of a million dollars was prepared. It was completed this spring, and it lays out in great detail the impacts on each of the listed groups, where they're occurring, how they need to change, and so forth.

Along with that, we adopted a principle called the recovery exploitation rate, a sort of standard metric for harvest in Puget Sound, the RER. The RER has two elements. First of all, there is sort of a base line level of abundance that says unless -- the stocks must stay above it, harvest cannot take them below it. And secondly, there must be an 80 percent probability of recovery, long term.

Now, not all of the harvests exactly meet the 80 percent probability of recovery but they're moving in that direction. Finally, I just want to commend Puget Sound for having a comprehensive recovery plan in the shared strategy. A hundred and fifty units of state, local, and tribal governments, and interested individuals have worked for several years to prepare this plan. We will soon be publishing it as a comprehensive recovery plan.

There are familiar problems, Canadian harvest, mixed stock fisheries, degraded habitat. But I'd characterize Puget Sound as we're not where we need to be for the long term, but we know where we need to go and we're moving in that direction. Thanks.

MR. DICKS: Thank you very much. We're going to go -- I think we'll do the Feds first, Phil, and then we'll do you -- you can wrap up. Dave Allen is our regional director of the U.S. Fish and Wildlife Service. He -- we've been working together on implementing mass marking and dealing with these issues. He's also taken the initiative on -- with the Warm Springs Tribe on doing some work on Hatchery Scientific Review on the Columbia River, which I am very appreciative of. You know, we'd still -- that's a -- that's one area where -- on the Columbia River where we need to do the same kind of a review as we've done on the -- on Puget Sound and the coast of Washington.

Dave, glad to have you here and go ahead and make your presentation.

MR. ALLEN: Thank you, Mr. Chairman and other members of the panel. And again, it's a pleasure to be

here to talk about salmon and steelhead recovery, obviously a-- an extremely important issue to this part of the country.

MR. DICKS: You might pull it up just a little closer.

MR. ALLEN: How's that in the back, okay? Good. To begin, I'd like to provide a brief overview of the Fish and Wildlife Service activities and programs along with just a few highlights that benefit steelhead and salmon conservation in the Pacific Northwest.

Well, the Service is engaged to varying degrees in all facets of salmon and steelhead recovery, in other words, the four H's. My comments today will address Service activities and at reversing trends of habitat loss and at improving management of our fish hatcheries for conservation of these species.

Finding ways to stop or reverse the trend of habitat loss or degradation continues to be a major focus for salmon and steelhead recovery. The task of finding the solutions to these trends is confounded by the complex life history strategies that these species require, needing very specialized habitat and varied habitat at a

number of different life stages.

Addressing the habitat needs of these species in a manner sufficient to achieve recovery will be a difficult task, requiring the combined efforts of federal, state, tribal, and private interest to be successful. Fish and Wildlife Service is working very hard to do its part to address the various habitat needs of salmon and steelhead.

On our national wildlife refuges, where habitat is present, a restoration is possible. We stress their importance in our refuge management strategies for these species. For example, at Nisqually National Wildlife Refuge at the southern end of Puget Sound, we're cooperating with the Nisqually Tribe, the Nisqually River Council, and many other partners to restore estuarine wetlands in areas adjacent to the refuge. On the refuge, we plan to restore 700 acres of historic estuary through dyke removal. And once completed, this will be the largest estuarine restoration project in the Pacific Northwest.

At our Julia Butler Hanson Refuge along the lower Columbia, we're working in partnership with the U.S.

Army Corps of Engineers, Bonneville Power, American Rivers, and the Columbia Land Trust on a $3.7 million project that includes restoring 297 acres of tidal marsh at Crimms Island. In addition to managing our own lands to benefit salmon recovery, the Service provides incentives to partners for habitat conservation through several grant programs.

In the Pacific Northwest, most of our programs focused on riparian and wetland habitat improvement or restoration. Grants are awarded each year to the states, tribes, local governments, and private individuals or organizations. All grants are leveraged with matching funds or in kind services from one or more partners in support -- to support dozens of projects benefiting salmon conservation and recovery.

The second major area of activity by the Service in support of salmon and steelhead recovery is the management of fish hatchery programs that we either operate directly or support. This year, through 25 fish hatcheries and associated production facilities in Idaho, Oregon, and Washington, the Service released 76 million young salmon and steelhead. More than five million of

these fish were released specifically for salmon restoration and recovery purposes.

The Service continues to work closely with states, tribes, and fishing groups to improve hatchery -- to improve its hatchery management. For example, we are coordinating with habitat restoration efforts to ensure that hatchery fish do not conflict with the rebuilding naturally spawning populations of salmon and steelhead.

We are implementing the science-based hatchery reform initiatives that were identified in the Puget Sound and Coastal Washington Hatchery Reform Project to improve the contribution of hatcheries in salmon and steelhead conservation and recovery.

We are initiating a similar hatchery review process this year for the 21 Columbia Basin hatcheries that the Service operates or supports with the same goal of improving the quality of fish produced for salmon and steelhead conservation and recovery. Also we are participating in a region-wide effort to mass mark hatchery produced salmon and steelhead to assist in recovery and to aid in selective harvest management of these species.

Our hatchery management programs include fish culture practices and policies designed to prevent the introduction and spread of diseased fish and pathogens and to promote the production of healthy fish. Our Abernathy fish culture -- excuse me, our Abernathy Fish Technology Center, here in Washington, provides leadership in science-based management of hatcheries to research programs and fish nutrition, oncology, physiology, pathology, and genetics.

Our four fish health centers provide a long term -- provide long-term pathogen surveys and monitoring of fish at national fish hatcheries and selected wild populations as well as diverse diagnostics and investigation studies. Our fish health centers are national leaders in fish pathogen containment, emergency disease control, epidemiology assistance, and assistance to managers.

In conclusion, I'd like to mention also that the Service responsibilities under the ESA to recover listed bull trout and Kootenay sturgeon are, for the most part, consistent with and complimentary to the conservation and recovery goals of both salmon and steelhead. They occupy

many of the same rivers and tributaries and have many overlapping habitat requirement. There are, however, important differences we must also take into account due to the unique life history strategies exhibited by these species. That concludes my remarks, thank you.

MR. DICKS: Thank you for your statement. Phil, we're glad to have you here today representing the director, Jeff Koenig, who wanted to be here but had to be in Spokane today with -- on a meeting. And Phil, of course, is a long-time official of the department and is someone I've enjoyed working with over the years on the -- on all the issues facing our state. And Phil, we're glad to have you here today.

PHIL: Thank you very much, Congressman Dicks and other distinguished members of the Congress. Certainly appreciate the opportunity to come before you today and offer some of our thoughts on the harvest management of salmon and ways -- the measures that we've taken to try to improve the survival of returning adults and looking toward the future for additional opportunities.

I really appreciate this opportunity because I

think harvest is often misunderstood and the role that it plays in recovery and protection of wild salmon is often misunderstood. So if this gives us an opportunity to explain how harvest management works and how it contributes to the return of adult salmon, that's a good thing.

We start off with a couple of values. And that is that, first, salmon, that is, the fish are an important part of our history, our culture, our economic vitality, and our future. Salmon are a trademark of the Pacific Northwest, and these fish deserve our best efforts to maintain them at viable levels. The second value that we have is that salmon fisheries are equally important and reflected in our history, our culture. It too is a trademark of the Northwest, and it too is worth preserving.

My presentation is going to focus on the management of Puget Sound chinook. I'm going to provide you with an overview of where these fish are caught, the results of our efforts to improve spawning and escapement, and mother nature's efforts too because she has certainly helped us in recent years, and put into perspective the

incidental harvest of these fish by state and tribal fisheries.

I've -- I'm going -- I'm kind of a visual type of a person, so I've provided you some copies of slides that I have developed that are going to try to help me explain what we're doing, progress that we've made, challenges that remain.

And you'll note that the title on the front page refer to the tribes, and I'm certainly not speaking for the tribes, but all of our harvest management is a product of work that we do through our co-management of these resources. So I have two examples that I used, and I did not cherry-pick these to show you the best ones. There are better ones; there are worst ones.

But -- at first, in looking at Skagit spring chinook, the historical harvest, that first page, take a look at the --

MR. DICKS: This is a listed species, right?

PHIL: This is a listed species, yes, Congressman. You'll see that the amount -- the percentage of the run size that spawned was 40 percent in this timeframe, 1983 through 1992, we had a harvest rate on

these fish of 60 percent. You'll compare that to the next --

SPEAKER: What would be a -- how many fish are we talking about here, numbers? Do you have the numbers, roughly?

PHIL: Let me just ask Pat Pattillo, if I could, Congressman, to respond to that --

SPEAKER: Yeah, Pat knows everything. Come on, Pat.

PHIL: It's about 14 --

MR. PATTILLO: (inaudible 29:41).

SPEAKER: Ten thousand spring chinook.

MR. PATTILLO: (inaudible).

SPEAKER: Okay.

PHIL: So compare that to the next slide, which is our 2005 harvest plan, state tribal harvest plan, and you'll see that the number of fish out of the run size that we expect to spawn went from 40 up to 71 percent. You'll see our harvest rate reduced from 60 down to 29 percent. And you -- it also displays on both these pie charts where the harvest is taking place, where that incidental catch is taking place, by area, Canada,

Washington's ocean, pre-terminal sport, and terminal net.

SPEAKER: Is this the harvest of the listed species?

PHIL: This is the harvest rate on the listed species.

SPEAKER: On the list --

PHIL: Yes, sir.

SPEAKER: And how many fish in this one?

PHIL: This is the same stock, Congressman. This just compares spring chinook to spring chinook from an '83 to '92 base to 2005.

SPEAKER: Okay, I see it's --

PHIL: Okay?

SPEAKER: -- actually it's the same one.

PHIL: Now, we're going to move to the next example, deals with Skagit summer/falls. The '83 through '92 average harvest rate was 63 percent. You can see that we've returned -- 37 percent of their run size returned for spawning purposes. That compares to your next page where spawning went from 37 up to 61 percent of the run size and the harvest rate went from 63 down to 40 percent. The next slide --

SPEAKER: This is listed too, right?

PHIL: Yes, sir. All of these are listed stocks that I'm --

SPEAKER: All chinook --

PHIL: That's correct. The next table speaks to this issue of -- in part at least, that we've managed -- we don't just manage the ESU and left, you know, some stocks dry, the strong stocks are okay and pull up the weak ones. We do look at the individual stocks. But really the point of this is just take a look at Nooksack, for example. Only 6 percent harvest rate on Nooksack chinook by U.S. Fisheries. That's split roughly 50-50 between the tribes and the state fisheries. So we're trying to manage our state fisheries on a 3 percent harvest rate on Nooksack. And that similar example could be said for the rest of those stocks that are represented on this table.

SPEAKER: And Canada is taking most and -- most of these fish, right?

PHIL: You'll see in that previous pie chart, Congressman, that Canada takes a -- the major portion of the harvest that does occur. For example, summer/fall

chinook is taken in Canadian fisheries.

SPEAKER: Let me ask you another question. Are these hatchery fish or are these wild fish?

PHIL: These are wild fish.

SPEAKER: These are all wild fish?

PHIL: Yes, the next -- I appreciate your questions and interruptions but I hope it buys me a little bit more time.

SPEAKER: It does, we're going to --

PHIL: Okay.

(Laughter)

SPEAKER: We're still ahead of schedule.

PHIL: The next chart is simply looking at the total number of Skagit wild summer/fall Chinook escapement over that timeframe from 1978 through 2004. And you can see, at least my perspective in looking, that we are making progress. We are increasing the number of spawners on the grounds as a result of our harvest management actions as well as -- and I can't take all the credit for the change in the ocean productivity that's helped this.

The next two slides -- and I'll just quickly go through these. This hasn't happened without a lot of

pain. You can see that the reductions in our chinook catch in the Wanda Fuka (phonetic) sport fisheries, places like Port Angeles, CQ (phonetic) look as what happened to those harvest. And looking at a Puget Sound overall, you can see on the next slide that it's dropped 91 percent since 1975. So these games come at a high cost.

The next two slides look at the efforts that we have made in terms of constructing selective fisheries so that we can harvest healthy stocks and have truly incidental impacts on wild or listed stocks. And we have been the leader with your help, Congressman, in selective fisheries utilizing mass marking techniques in a number of different of our sport fisheries that are depicted on that slide.

In addition, the following slide looks at selective fishery strategies that we have for commercial fisheries because marked selective fisheries are not the only way to selectively harvest healthy fish, and we do that with a variety of strategies, both the tribes in the state in terms of restricting time-area, using different gear requirements, release requirements, and we also have on the water monitoring, quick reporting, and a real

commitment to enforcement, on the water enforcement to ensure that our regulatory regimes are complied with.

So I'll just close by saying that we've got some future opportunities, I think, that we need to seize on and take advantage of. One is that Mr. Cassidy mentioned yesterday is getting a better understanding of predicting ocean productivity. And that is the key to us being able to accurately forecast the number of fish that we expect back. The HSRG product is a great tool and can really help us, I think, in guiding our hatchery management. I think hatcheries can be used to be an effective tool to help wild populations rebuild. We need to seize on that work now.

Selective fishery strategies, we need to be aggressive in exploring new ways to use mass marking as a harvest management tool and also be aggressive about looking at other tools for selectively harvesting, particularly, in commercial fisheries. And lastly, no one H can solve this problem. As Larry Cassidy said yesterday, there is no silver bullet. It's going to take a comprehensive approach. We all need to be part of this solution because we're all part of the problem. Thank you

very much for giving me a little bit extra time.

MR. DICKS: Thank you very much and we're going to start now. We're still ahead of schedule. We're going to have questioning here for 35 minutes. Let me ask you a couple of questions. Now, Phil, your agency has done a lot of investigation into the question of whether or not mass marking and selective fisheries would undermine the coded wire tag system. What have you concluded? What has the department concluded on this subject?

PHIL: I think we -- Congressman Dicks, first of all, as you know, and I'm not going to dodge the question because you won't let me. But --

MR. DICKS: More like Cassidy did yesterday.

PHIL: Yeah.

MR. DICKS: Okay, yeah, all right.

PHIL: I took some notes on that. We do -- there is an expert panel that we are expecting a report from and I believe we're expecting that report even next week that was looking at the coded wire tag system, how mass marking and selective fisheries impact the integrity of that coded wire tag system. But they were also looking at what the general problems with the coded wire tag

system are, even in the absence of mass marking or selective fisheries.

We believe that has -- that we can maintain the integrity of the coded wire tag system with mass marking, with selective fisheries, we believe that -- and we've made substantial investments in tools, in terms of modeling fisheries to assess the impacts of mark-selective fisheries, that is an issue that the co-managers have been addressing. Our work is not done, we have more work to do and we have -- are investing resources to do that.

But where we have stocks of fish, particularly those that don't have migrations to the far north, we believe that electronic detection systems that we have in place for detecting coded wire tags in fish are in place and can be used effectively to maintain the integrity of the coded wire tag system and at the same time provide --

MR. DICKS: This is the so called one, you're talking about.

PHIL: The so called $8,000 one --

MR. DICKS: And the tooks, right?

PHIL: And the tooks, that's correct.

MR. DICKS: And this is just a question of

investing the money to do it and then doing a little extra to put the fish through that exercise. Isn't that correct?

PHIL: That's correct, Congressman. Now, there are places, certainly, in -- I'm sure -- I don't want -- can't speak for the State of Alaska, certainly. I know they're here. But there are places where that -- those investments have not been made. They do not have an intent to use mark-selective fisheries as a management tool. And they're, I think, reluctant in making that investment and they are concerned about the effects on the coded wire tag system as a result of mass marking fish.

MR. DICKS: It seems to me if they're really concerned, they'd buy the equipment and then they could solve the problem.

PHIL: But Congressman --

MR. DICKS: You're talking about the Canadians now or --

PHIL: Well, the Canadians are using electronic detection systems. They do mass mark coho. They don't intend to use mark-selective fisheries for chinook so they've not been willing --

MR. DICKS: Not yet.

PHIL: Not yet. They've not been willing to make that investment in the double indexed tag piece of that. Now --

MR. DICKS: Now, let me also just mention one other thing. I want to get your comment on this. One of the key recommendations of the Hatchery Scientific Review Group was and I quote, "Mark or tag all hatchery released fish so that the proportions of natural and hatchery origin fish among natural spawners and in the brood stock can be monitored and controlled." That's in Appendix B7.

They stated the same recommendation in more detail in their September 22nd letter to David Bedford. Dave, are you here today? Yeah, just -- always glad to see you. And I want to quote from this letter. Their answer was an unequivocal yes about whether mass marking of hatchery fish was the right thing to do. Then -- and they said you should -- yeah, and so to me this -- you know, it is one thing to talk about a selective harvest but the most important thing here is what the Hatchery Scientific Review Group said is you got to be able to monitor and assess in the river the hatchery fish from the

wild fish. And can we do that? I mean as we move forward in this mass marking, can we do that monitoring and will this help us, you know, improve our hatchery operations?

PHIL: Congressman Dicks, I believe this is going to help us in a couple of ways. One is when we do stream surveys in the fall and we're looking at returning adults, it's going to allow us to identify those that came from -- that were raised in hatcheries. But I think as important, if not more than important in that, is the ability to seize on the opportunity coming out of that HSRG process, in that this will enable us to use our hatcheries more effectively in terms of rebuilding natural spawning population.

And that is to say to get that brood stock from the natural environment, put those fish into the hatcheries and rear them in that manner, where it makes sense. It doesn't make sense in all areas but look at the integration, where appropriate, between hatchery and wild fish. And that ability to identify those fish on the spawning grounds is the key tool in order for us to utilize that tool that the HSRG identified.

MR. DICKS: Is it the Washington State

Department's intention to implement hatchery reform in its hatcheries, assuming you can get the money from the legislature?

PHIL: It is our intent, yes, sir.

MR. DICKS: And that you're going to do it?

PHIL: If we get the money, yes, sir.

MR. DICKS: All right, it's always the money. I want to call now on Congressman Walden for 10 minutes.

MR. WALDEN: Thank you. I want to thank our panelists again for your comments this morning. They're most helpful. Phil, maybe I need to start with you. I just have a question or two. I want to make sure I understand your charts correctly. The Skagit spring chinook, all of these are indicating listed species?

PHIL: Yes, Congressman, that's true.

MR. WALDEN: Is that right? Of all the Chinook?

PHIL: There is a number in the bottom right hand corner and that would help me know which one you're looking at.

MR. WALDEN: Number 2.

PHIL: Thank you.

MR. WALDEN: Please go to door number 2.

PHIL: I numbered them for that reason, sir, thank you. Yes, sir, those are natural spawning wild --

MR. WALDEN: So we're not talking about any hatchery stocks on this chart?

PHIL: No, sir.

MR. WALDEN: And so from '83 to '92, the state allowed the harvest of 60 percent of the listed species, of the Skagit spring chinook?

PHIL: Well, if I may clarify, the harvest rate was 60 percent. You can see in that pie chart where that harvest occurred. So certainly not all of that 60 percent --

MR. WALDEN: I see --

PHIL: -- occurred or was authorized by the state.

MR. WALDEN: I see, yeah, okay. But 60 percent of that run was harvested either here or in Canada or tribal harvest.

PHIL: That's correct.

MR. WALDEN: And now it's down to 29 percent.

PHIL: That's correct.

MR. WALDEN: All right. Okay, Bob, let me go

back to you because we had a bit of this discussion yesterday. Can you tell me about endangered species recovery programs that are successful, where we harvest endangered species?

MR. LOHN: Congressman, I --

MR. WALDEN: At levels of 29 percent or 60 percent regardless who is doing it, if we're -- if our goal is recovery.

MR. LOHN: Congressman, I -- managing harvest while recovering species is a very tricky thing to do. I'm not aware of any listed fishery stocks that have been recovered in the presence of significant harvest. So I want to be very frank, we're trying a new thing here, yes.

MR. WALDEN: And then let me ask you -- we had a bit of this discussion yesterday as well when I walked with many of the panelists. Where in the Endangered Species Act does it even allow for targeted harvest? I understand the notion of incidental take but that's usually in context of some other activity and very minimal. This is actually people sitting down and deciding how many fish to take, right?

MR. LOHN: Yes, sir. Now, this is -- it's

usually incidental to -- actually, Phil may be able to tell me more of this than this because he is deeper into Puget Sound harvest but it's usually incidental to other lawful harvest, as we talked about yesterday, that may or may not be an acceptable answer but that's how we would phrase it. And so for example, these wild fish -- I don't know specifically about the Skagit spring/summers but the wild fish might well be found with a body of harvestable hatchery fish. And so there would -- until the time of selective harvest, there might be some take going on.

MR. WALDEN: But we're seeing is a take including Canada because --

MR. LOHN: Yes.

MR. WALDEN: -- it's not broken out by percentage beyond spawning. But a fairly significant amount of the fish are being taken, even if they're taken along with a whole bunch more of other fish that aren't listed, right?

MR. LOHN: That's correct.

MR. WALDEN: Phil?

PHIL: Congressman --

MR. WALDEN: How does that work?

PHIL: -- if I could ask -- add just a couple of -- well, an -- maybe an opinion and a response to the question. I guess from my view -- in my view, an incidental take, a killing of a listed species, while I'm producing a kilowatt of electricity, or I'm irrigating an acre of cornfield, or I'm providing access to thousands of healthy fish that are reared in hatcheries, they're all dead. They're all incidental takes in my mind, while pursuing an activity that produces a public value.

And so whether they're killed while they're doing any one of those things, they're still dead. And it -- to me it's an incident -- it is truly an incidental harvest in this case, where we're talking about harvest of a listed species. These percentages on page 6 of my --

MR. WALDEN: But I -- I mean here is what I'm having trouble with. If there isn't any hatchery fish -- I mean these -- is this a mixed stock or is this an intentional taking of 29 percent of these fish?

PHIL: This -- well, let's -- I mean --

MR. WALDEN: This -- that can't be incidental unless it's a mixed stock.

PHIL: It is a mixed stock.

MR. WALDEN: So you're saying it is a mixed stock?

PHIL: Absolutely.

MR. WALDEN: All right.

PHIL: We have hatchery productions of chinook in Puget Sound and the -- as well as hatchery production of chinook stocks that are coming from Canada. Fraser is an example.

SPEAKER: So they're swimming in the water at the same time?

PHIL: These are swimming in the water at the same --

SPEAKER: What's the balance? What's the percentage of hatchery versus the wild then?

PHIL: May I -- Congressman, may I ask Pat Pattillo --

SPEAKER: Let's go to Pat.

MR. PATTILLO: There are no direct (inaudible 48:50) directed at hatchery returns of that same species of chinook or in a mixed stock area such as sport fishery in Puget Sound and there are non-direct fisheries there. And if you can either sell the contribution of this stock

either Skagit summer/fall chinook or Skagit spring chinook, it is probably less than 1 percent of the total take of chinook. And while those chinook are being taken, many of these fish that are -- these are total mortalities. They're not just fish that are caught and kept, we're accounting for even the fish that die in the process of releasing fish --

SPEAKER: Very small.

MR. PATTILLO: -- very small percentages in any catches and times and areas, and with years that allow release, at times and areas where there are small percentage of these fish --

SPEAKER: When these fish are caught recreationally, they're not released, right?

SPEAKER: Whether in the summer, whether in the fall of the --

SPEAKER: Is that the law? I mean, is that the rules under the Department of Fisheries; that they have to release these fish if they're wild.

SPEAKER: In most fisheries in Puget Sound they're allowed, where there are some chinook kept -- they are -- there are -- hatchery fisheries that are being

implemented, there are also fisheries where the only species you can keep are coho salmon or pink salmon other species that are -- commingles in the water at the same time.

SPEAKER: Well, I --

SPEAKER: Congressman.

SPEAKER: Let me just --

SPEAKER: Phil had another comment here.

SPEAKER: Go ahead, we'll give you more time.

SPEAKER: And the other thing, the mortalities that you see here, for chinook are mortalities that occur while we fish for all other of the --

SPEAKER: Right.

SPEAKER: Other four species in Puget Sound, chum, sockeye, pink, and coho.

SPEAKER: Let me just change gears a second.

SPEAKER: Okay.

SPEAKER: I mean, this region has also had dramatic change as a result of the listing that's spotted out. And if I'm out pheasant hunting, I don't get to take spotted owls, because my aim was off, do I, no. And we don't go out and say, "We can just, you know, kill every --

one out of every 100 pheasant I shoot or doves or whatever. I mean, I don't get to do that, do I? Bob, I mean, -- Dan -- Dave. Has this happened elsewhere in other species management of the ESA?

SPEAKER: There is one example with this, you know, it's a small example.

SPEAKER: Okay. What is it?

SPEAKER: Recently, with -- in fact within the last two years, we did issue a section incidental take permit for a regulation in the State of Montana to allow some harvest, not take, catch and release of bull trout. And this was done again, but, you know, the basic test is these harvests, you know, these particular populations in a couple of reservoirs are doing very well, but we can't de-list by reservoir--

SPEAKER: Reservoir.

SPEAKER: -- by reservoir.

SPEAKER: All Right.

SPEAKER: But we can allow some limited harvest on a threatened species.

SPEAKER: Was that because there were too many in that reservoir or that river system?

SPEAKER: No -- it's been managed very well, and if you've ever been fishing where bull trout are around, they've a strong affinity for the hook. So people do tend to catch a lot of bull trout if they --

SPEAKER: That's not all they have a strong affinity for, is it?

SPEAKER: Are available, yeah. If they are available, right.

SPEAKER: Isn't that why they poisoned them in a lot of the streams in Northeast Oregon and around -- early in the last century. We used to get rid of them because they were a predator fish on some of the salmonid?

SPEAKER: Yes, they were.

SPEAKER: So now we're -- but that aside and -- I'm telling you we are not against fishing, all right. I think it's a wonderful thing, and a very important part of our economy, both sport and commercial and tribal obligations.

I understand all that but we have this law that seems to come in on top of everything we do, called the Endangered Species Act, and I don't find in there, where harvest is allowed, and if you're talking -- it may be 1

percent of a bigger run of other fish, but if it accounts for 60 percent of this run, how is that incidental, or 29 percent, your own five harvest levels of -- let me go to page three, it shows 29 percent; that's 29 percent of the wild fish, right?

And it's not -- I'm just not -- I'm not picking on Washington or Canada, but combined, the total mortality as a result of this activity is 29 percent, right? Is -- do you consider 29 percent incidental? Or is -- or am I reading the law wrong, 'cause I'm not a lawyer, but --

SPEAKER: Congressman, I'm not going to suggest you're reading the law wrong, although I have a different interpretation of it.

SPEAKER: Now, that's why we're at -- you're like into this stuff.

SPEAKER: So I -- the -- one of the points that I don't believe that we emphasized that there is that -- in our Puget Sound Chinook Harvest Management Plan that has been approved by NOAA that allows for our fisheries to take place, both state and tribal and Puget Sound. I believe the reason that they approved it is because the RERs or these Recovery Exploitation Rigs that are ceilings on any

incidental take on any of these listed stocks will result in recovery of these fish.

SPEAKER: Okay. Let me switch then to Bob for a second and let's go back to the Columbia system, because we have Judge Redden, (phonetic) riding the river -- running the river. And it's all about the chinook; fall chinook salmon. We had this discussion yesterday. And I mean, we're not talking that many fish, and the recovery rate, he wants a little higher than it is now, correct?

And couldn't you achieve a higher recovery rate if you had -- few are those being harvested after they've survived. Everything coming out of the river system. And again, we understand habitat and hatchery and hydro are all potential issues here. But if you finally grow to adulthood and are making your way up and you get past the sea lions and a few things -- to go up and spawn and then you're hooked or netted, you're not going to spawn, your recovery rate is going to be less, isn't it.

SPEAKER: Congressman, I agree. One of the points of dispute we have is federal agency with Judge Redden and I say this with all due respect, he's a judge and he has ruled against us on this one.

SPEAKER: And he may invite you in to see him if you say the wrong thing here.

SPEAKER: But our assessment of the situation is that the measures we had in place were adequate to recover Snake River fall chinook. We had -- well, this wasn't a formal recovery plan several years ago. I really want to be able to give the region some guidance, so we -- I had my folks develop interim recovery standards for each of the stocks.

The Snake River fall chinook since, I believe, 2000, maybe 2001, have been well above the interim recovery goals. That is we felt enough fish were getting back there at least for the short term to utilize that spawning habitat and be a stable population. Obviously, that was unimpressive to the court.

SPEAKER: Could he not come into a region like this or a judge and say, "Whatever your recovery goals are, aren't what I think they should be," and slap the same sort of restrictions on you?

SPEAKER: Congressman, as someone trained in the law, I would like to believe that the law provides a guide and a -- even an anchor to our actions when we're required

to operate under it. I would like to read the law as requiring the judge to act in a certain way that includes deference to the technical judgments of the agencies you put in charge. If you were to follow that, I'm -- I don't think that's the outcome, because it would not be our recommendation.

SPEAKER: All right.

SPEAKER: I think the judge has expressed dismay and frustration with the actions we've taken.

SPEAKER: Right.

SPEAKER: And has decided very explicitly not to defer to our judgment.

SPEAKER: Let me ask you one more question and then I'll yield back. Yesterday, in our discussion about the summer spill strategy in the Columbia River, Steve Wright, the head of the Bonneville Power Administration; the administrator, had some new data that showed that the run had passed the dams before the spill had really begun.

And so the fish were already through -- working their way through the system before the summer spill strategy started; new data that's just come out. Have you had a chance in the intervening period of time, to learn any

more about those data and what we can learn from that?

SPEAKER: Congressman, a fair assessment, I've simply seen the same information Steve developed the charts from. The fair assessment was that the spill requested by the court provided very little benefit simply because the fish weren't present. We would've -- there is another assessment, which I think is also important, which is to see to the extent that we can tease it out for those fish that were kept in the river during this summertime season; did they in fact benefit from it.

The -- ironically, the numbers may be so small, we won't be able to get the science back that would say whether or not it made a benefit. Our assessment going in and our advice to the court was in this particular year, it was twofold. One, by -- we don't think the transportation is an unqualified great way to move fish. But in this particular circumstance, and in this particular year, summertime low flows, high temperatures -- we thought it made a lot of sense to continue doing what we'd been doing in the past, because we had received this rising number of fish.

We were well above the interim target. The judge chose to take a different approach. I think it is safe to

say that the data indicates a relatively small number of fish moved in river during this time of spill, whether it provided a benefit, none of us will know until the fish returned from the ocean migration. Even then the numbers may be too small to tell. Our estimate going in is that it was likely to do more harm than good.

SPEAKER: More harm than good?

SPEAKER: Yes, sir.

SPEAKER: Why?

SPEAKER: Our best estimate was that looking at the limited information we had on survival of these fish in the river, that many of them during a warm -- migrating during this time of the year, especially, in warm water out of the Snake, simply wouldn't successfully make it down the river. That we indicated was, you know, that was based on very limited information.

We don't claim to have perfect science so we were confronted, simply put, with a situation where we were doing one thing -- we knew what the results were, and they were pretty acceptable. And there was another thing in which we had limited information, but reason for concern.

SPEAKER: Okay. Sounds almost like trying to get

your car washed, but driving through the carwash before the water light comes on -- come out the other end.

SPEAKER: Congressman Baird.

MR. BAIRD: Thank you, and I thank the gentleman for the good testimony. It seems like you've got a -- somewhat of a, Phil, of a natural experiment here, and I'm very intrigued by that. The -- page two suggests that the harvest rate was up to the 1999, 60 percent. Harvest rate's now dropped to 29 percent, that's a 31 percent difference. What is the impact then in terms of the number of fish -- wild fish getting up the river as you cut the harvest rate by 30 percent?

SPEAKER: That was the purpose of one slide, Congressman Baird, that I provided, it gave you a look at how the spawning escapement in terms of pure numbers of fish has increased over this timeframe, and if I could find it, it --

SPEAKER: I've got it, it's number 7.

SPEAKER: Okay.

MR. BAIRD: The -- I think the points -- here's the question I'm asking. We heard a testimony yesterday from some folks who were trying to say, "Gee, you know,

harvest isn't a big deal." But what I think we're seeing here is that when you cut the harvest by half, you dramatically increase the escapement rate, and is that a fair portrayal of what you're saying?

SPEAKER: I believe, there's two things that has happened over this timeframe. One is that we've reduced harvest rates, the second is, we've had a tremendous improvement in ocean productivity over this timeframe. I'd like to say that we could take credit for the -- all the increase in the spawning escapement, but we can't, we've seen --

MR. BAIRD: Yeah.

SPEAKER: Similar dramatic gains in other places too, and I'm certainly not here before you saying that harvest isn't a big deal, or can't -- isn't an important part of the solution. At the same time, I'm saying that our value statement and our assumption of the public value that we're trying to represent is that when I go to the wall and I flip the switch, I want the light to come on, and I also want to be able to go out and get on my boat, and go catch a fish in a manner that doesn't impede, and if anything, accelerates recovery of fish that are in trouble.

MR. BAIRD: And it's a point well taken. I think the question I would ask is, it's easy to say, as I thought I heard earlier, that the total catch of the Skagit chinook is 1 percent of the total harvest on the Puget Sound area, and so you might say, well, it's 1 percent; that's not going to make a difference, but if apparently, if you can cut the harvest of that 1 percent, by half, you can -- and you get the right ocean conditions acknowledging that we've got a lot of uncertainties.

But there's at least a co-relational relationship between a change in our harvest numbers, and a significant change in escapement. And that would suggest to me that the more we can do to try to move towards a selective harvest at some level the more potential -- that plus common sense, frankly. The more likelihood, where I'd have escapement and reproduction in the wild.

SPEAKER: No argument that there is a correlation, and that's why we go to great pains in our co-management regime, every spring and set in our harvest management plan to ensure that we get as many adults back to those areas, meet our obligations in terms of recovering those fish, keeping our recovery rate half or below; in most cases well

below the ceilings that were allowed --

SPEAKER: Let me move to that if I may --

SPEAKER: -- well, can I just ask one, just a little quick follow-up?

SPEAKER: Okay.

SPEAKER: But you are saying that a selective fishery would help you get more wild fish escapement wouldn't it?

SPEAKER: I'm saying the better we can utilize selective fishing techniques, the better we'll be able to utilize the healthy stocks and provide increased protection for the stocks we're trying to protect.

SPEAKER: Thank you.

MR. BAIRD: Bob, I appreciate the optimism, and one thing I want to underscore and I mentioned it earlier. There has been tremendous effort, the other variable -- we've had -- ocean conditions have improved, we have seen some changes in harvest, we've also seen a great deal of effort on habitat improvement. One of the questions -- and someone may testify to this later on or may raise this issue. Some have asserted to me that the harvest rates allowed in the Puget Sound area broadly, because we don't

distinguish between ESUs and the various drainages. There are some harvest rates, which actually could lead to extinction of fish in certain rivers.

And I'm interested in that and the second thing is, I've read somewhere that some biologists had suggested we actually don't want to let too many fish get upriver, because you could actually have too many fish in a river, which is one of the most absurd statements I've ever heard. And so if any of you could comment on that, I'd be interested.

SPEAKER: That's certainly contrary to the Alaska model, right, Dave? You get a -- you do your abundance space, you get the fish in the river and make sure there's plenty of fish in the river and plenty of nutrients, right?

SPEAKER: That's true. We also try to get (inaudible 17:13). We have good information to show that putting more fish in a certain level will lead to depressed productivity, lowering net productivity.

MR. BAIRD: But that's probably a few more than 200 or 300?

SPEAKER: Yeah, it's -- you have to get pretty substantially involved with your optimum escapement before

you hit that slight -- there is a peak, which you get into after which, you wouldn't want to escape if you had decline in productivity.

SPEAKER: Understood, but --

SPEAKER: Certain instances.

SPEAKER: But we certainly got some --

SPEAKER: We're talking of wild runs. I mean, you're talking about -- you're talking about hatchery fish.

SPEAKER: I'm talking about (inaudible T1S2 17.40) data, which is a fine example of that.

SPEAKER: In terms of your catching --

SPEAKER: How do you get $2 every sockeye into a river and then we wind up overgrazing plankton population in a lake of decreasing productivity in future.

MR. BAIRD: But that's sockeye in a lake. We've certainly got abundant evidence, at least a growing evidence I think that nutrients are a critical factor in addition to habitat, and if you have habitat without nutrients, we've got this experiential data in some of the drainages down south, that you've got to have the nutrients there and to my way of thinking, first of all, 200 is a mighty damn close margin when you think of all the things that could happen to

200 or 300 fish, but second of all, you don't have the nutrients that they provide by their death, and by the eggs that aren't hatched. Anyway --

MR. LOHN: Congressman, I might add to that. In some parts of the world, not principally in the United States, fisheries are managed for nutrient volume, which is a higher number of fish escapement than for simply escapement for reproduction. Are there runs of fish in Puget Sound that are being exploited at a rate that's consistent with extinction, no, sir, I'm not aware of any of them. I'd come back to the two principles that are in our harvest management here.

One, is the RER, which is the target rate -- it's something we strive for, it's not met all the time, but the fisheries are designed to achieve that, certainly the vast number of instances, but the other part is a minimum escapement rate. They're sort of a floor for each of the management units that says, "At a minimum, we need at least this many fish to get back." And that's something that we haven't had tests since we -- at least I'm not aware Phil, that we've tested it --

MR. BAIRD: My understanding is that in some of

the areas, Bob, the minimum escapement rate is at such a level that even if some of the communities do all the critical habitat ordinances et cetera, the escapement rate actually could be so low -- the escapement rate doesn't necessarily correspond to some of the recovery goals and you could actually have --

MR. LOHN: Yes, yes, yes --

SPEAKER: At this junction there that leads to the extinction of the fish in that river.

MR. LOHN: Good. Excellent point, sir. You're right that the -- in fact, that's true in many places, let me explain why that's there, and why I hope it will disappear.

MR. BAIRD: Okay.

MR. LOHN: The -- under the recovery planning for example, done by Shared Strategy, there were ambitious goals developed as to what the fishery should be, both to meet a healthy population, and in some instances to meet underlying tribal trust and treaty responsibilities. Those goals are out there, and people are aiming for them.

That doesn't mean that today, the habitat is present there to sustain that number of fish. In fact, in

many instances it's -- there's some distance to come; there's quite a bit of distance. So those numbers are aware where the fish should be in the long term. Whether the -- the real issue is, is the habitat presently in place to sustain that number of fish -- most cases, the answer is, no, and so the releases are more timed toward two things; toward making --

SPEAKER: Could -- I'm extremely sorry.

SPEAKER: Excuse me. I'm sorry, the escapement are more aimed at two things. One, making sure that there is at least a sustainable population in the short term get back and reproduce. Two, that they would grow as the habitat supports them. So that's the intention.

MR. BAIRD: Can you -- and I'm not asking you to -- I'm not trying to put you on the spot --

MR. LOHN: No.

MR. BAIRD: But can you name some of the rivers where we believe that the habitat, overall, in the drainage of the river is not adequate, and what the escapement -- adequate for larger numbers of escapement, and what the current numbers allowed for those particular rivers are -- 'cause if the -- some of the rivers I've seen are rivers I

know a little bit about.

MR. LOHN: Yeah.

MR. BAIRD: I think there's -- there being a habitat up there and, you know, you look at a small section at Hanford Reach, you put a lot of fish out of that --

MR. LOHN: Yes, yes.

MR. BAIRD: Fairly small section, and I'm talking big rivers here, where we're talking a couple of 100 fish, at least if I understand it right. Are there some -- can you offhand or maybe, staff, name a couple of rivers that we're saying that are not allowed -- their escapement rate is not -- we can't have more fish in those rivers, 'cause we don't have the habitat?

MR. LOHN: That's -- it's a good question, I can speculate 'cause I couldn't --

MR. BAIRD: I'm not trying to put you on the spot, Bob --

MR. LOHN: Steven Richards (phonetic) is here. And there may be others who could answer you --

SPEAKER: Pat, can you answer this?

MR. PATTILLO: -- for example, the Nooksack River, which is one of the stocks that was listed there, the number

of wild spawn is very, very low, and below a recovery rate as was mentioned; the recovery exploitation rate is only -- is -- the actual rate is the one that Phil mentioned, that was about 3 percent for the southern U.S.; 6 percent total is extremely low, restricted harvest on the ceremonial subsistence for the tribe for example.

And the habitat is -- the ability for that stock to recover the amount of siltation in that river and the habitat is just extremely poor. So we're not getting recovery of wild fish in spite of a very low harvest rate. That's an example on the low end.

SPEAKER: But that --

(Tape Interruption)

SPEAKER: -- the end of the Nooksack river and I mean, you know --

SPEAKER: (inaudible)?

SPEAKER: Yeah.

SPEAKER: You know, the information that we've got based upon --

SPEAKER: Identify yourself, just so we know who's speaking.

MR. KENLEY: I'm Randy Kenley (phonetic) from the

Lummi tribe.

SPEAKER: Great.

MR. KENLEY: Based upon our scientists and our biologists that (inaudibleT1S2 23.19) we put the fish up there, but the habitat attached right now is not there to sustain any type of increase in spawning --

SPEAKER: When you put the fish up, did you put them up with dead carcasses, et cetera to give the --

MR. KENLEY: No, no, we put them up -- live fish.

SPEAKER: No, no, what I mean -- did you add the dead carcasses to the system to provide the nutrients?

MR. KENLEY: -- and right now, it's -- based upon our scientists with GSW, the habitat is part of the key issue to resolve up there, because all the --

SPEAKER: What is the habitat issue? Can you tell us a little more specifically?

MR. KENLEY: -- capacity to hold the amount of fish that we want to put up there right now.

SPEAKER: Is it gravel, is it --

MR. KENLEY: It's all the stuff that Pat was talking about. All the limiting factors up there. Right now, you got warm water, you got the siltation, and then

getting back to what the other farmers are going to talking about over -- what you call overpopulation; we've seen in the Nooksack is that, you put too much over there, and you're going to have spawning -- what this gentleman was talking about -- you have suffocation, and so we had the capacity of fish here.

But then the capacity the habitat can carry, that we're putting up there, right now based upon our spawning surveys and our -- new chart information. So we have the information on the Nooksack, and you know, not to say that fishing is part of the problem, but now, we've put the fish up there, and we have the documentation for the --

SPEAKER: And you put them up with carcasses and all that to give them the nutrients?

MR. KENLEY: Yeah.

SPEAKER: Phil, on -- one thing on your chart, and I'm going to -- I mean, I know we got the pacific salmon -- Larry Rutter is going to testify next, but it does show that on these species that Canada is taking a substantial number of these wild fish. Now, is that allowed under the agreement or -- what do we do with Canada to try to get them not to target these wild fish?

PHIL: Well, Congressman, we're going to be entering into a new round of negotiations with Canada within the Pacific Salmon Treaty forum in the next couple of years, and I'm sure that's a strategy that the U.S. delegation is going to be talking a lot about. Obviously, the impacts on these stocks in Canada represent the large majority of the impacts that are occurring. And we need to figure out a negotiating strategy that will lead to success in that area.

SPEAKER: All right. Thank you very much, it was a great panel, thank you, Bob, again, for --

SPEAKER: One follow-up and we don't have time to cover here today. If someone could provide us some addition -- two questions I would like written information about. One, how you monitor the harvest that is happening, in terms of what number of folks are on the boats, how you track the harvest of various species, and two, if you can give us some data on pinniped impacts within the Puget Sound, we asked this about Columbia yesterday. That would be helpful, thank you.

SPEAKER: Thank you.

SPEAKER: All right.

SPEAKER: All right. We'll have our next panel?

(Recess)

SPEAKER: Serving more than two million people daily, this is TVW -- on the Pacific Northwest Salmon preservation with congressional, state and policy group representatives, takes place in Tacoma on October 12.

MR. DICKS: Well, I want to thank our next panel of witnesses here, and I'm going to call on Billy Frank first. Billy's been the leader of the Northwest Indian Fisheries Commission and has been a real leader on salmon issues in the Pacific Northwest, and Billy, I'm going to -- and also the winner of the Albert Schweitzer Award as a humanitarian, and I want you to know he's been a great friend, someone I've enjoyed working with, and Billy, I know it's going to be tough, but you've got five minutes and we're going to -- okay.

MR. FRANK: Five minutes --

MR. DICKS: This would be -- well, do your best.

MR. FRANK: I've got your five minutes too?

MR. DICKS: No, no, well, I'll give you some more questions afterwards, but Billy Frank.

MR. FRANK: Thank you Congressman, and thank all three Congressmen for being here and welcome to the great

northwest. And I -- I'm Billy Frank. I'm Chairman, Northwest Indian Fish Commission. I -- I'm the spokesman for our tribes here, our 20 tribes in Western Washington -

MR. DICKS: Can you hear him? You've got to pull it up Billy, a little closer.

MR. FRANK: But probably the congressmen are going to know more than then ever wanted to know about the Pacific salmon fish we've out here in the Northwest. And -- but this is a great day for us managers. You heard Phil earlier talking about the understanding of how we open a fishery and how we close the fishery, how we regulate a fishery, and with the mass marking and all of our data that we collect, and all the -- working with the Alaskans and with the Canadians and U.S.-Canada International Treaty, and how we're proud of what we do here, as managers of -- of this great salmon that we have to protect, and hopefully we'll recover.

You are clear regarding the role of returning adult salmon including steelhead -- salmon and steelhead recovery. Salmon recovery directly effects the health and economics of both Indian and non-Indian communities. It

also defines our tribal culture and identity. We must have salmon to have salmon.

We must protect and sustain them at all ages from eggs to adults; we must concentrate on all four H's: Harvest, Hatcheries, Hydro, Habitat. How do we get more salmon to the spawning grounds, the answer is simple and clear. More fish in, does not necessarily mean more fish out. We must do more for habitat and water quality and quantity.

A dead fish is a dead fish, you heard that earlier. Whether it is killed to provide nourishment or killed in a turbine, by pollution, by a lack of clear plain water, or a lack of (inaudibleT1S1 3:55) critical habitat, you heard that earlier. We are submitting printing testimony and reports to substantiate all of this, and to remind you of the extensive work being done by co-managers to recover the salmon reserves.

We all face many challenges. Human population is expanding, expecting to double in western Washington over the next 50 years. The temperature is increasing; water is over allocated now. On top of all of this, the oceans are sick and parts of Puget Sound are dying. The

time for finger pointing is gone.

It is short sighted for one fishery to oppose another and for salmon recovery to be misconstrued as salmon versus people. Just as time is gone for fighting over the ever-shrinking slices of the salmon pie, it is time for us to work together to help the pie grow bigger. We need your help to generate the cooperation and coordination. We need to plan for the future -- of our future generations.

Now, collaboration, we heard this from the President of the United States and throughout the country in -- when we attended in Missouri. Collaboration, in 1980 started in this state with a timber industry. In 1980, that's not very long ago, this -- the timber industry decided to be regulated, and they are today. And we work with agreements side by side with the tribes in the state of Washington and with the timber industry.

Collaboration is not free. Collaboration takes money to do what we do here in the great Northwest and throughout Pacific, in Oregon, throughout California, the range of our fishery deemed to Alaska. You know, collaboration is a good word to use, but it don't go

without funding and putting money into this great resource.

Now, right here in the Puyallup tribe, just a couple of minutes from where we are right here, the Puyallup River is right here. It comes out of our great mountains right here, Mt. Rainier, it's about 70-80 miles long. Then the -- the Puyallup tribe has been closed from chinook salmon for the last, over 20 years now. And now they have a 12-hour fishery, 12-hour fishery.

So we're making little headway, you know, we're committed. We're committed to bring the salmon back. And they are the very positive things that we're committed to do. You know, Norm, I talked to my Congressman about it, and he's been helpful on everything that we've been doing on the Nisqually River watershed, I've got a hatchery named after him. It -- there is no name there in Fish and Wildlife, and that's throughout working on that. But anyhow the --

MR. DICKS: It's going to be surprise, but --

MR. FRANK: Yeah.

MR. DICKS: I think the only bad part is you've got to die for us, that's all.

MR. FRANK: No, no, you can't die. You've got 50 more years, at least I have, and you've got to be here. But anyhow the -- the Nisqually watershed's example, you heard our Fish and Wildlife director talking about the estuaries. We're taking part in -- on Nisqually watershed, and throughout all of our range of our fishery, here in Puget Sound and along the Pacific Coast.

You know, it takes time to do this, and nobody, nobody, people in this room look around. In that other room down there in Portland, where I was there yesterday, and thanks to Brian for inviting and having a nice room to have this great conference. You know, none of those people, I don't think, know how we open a fishery.

This hearing, these two hearings, and hearings afterward will make more understanding of what it takes to open a fishery along this Pacific coast. What it takes to talk with Canada, talk to Alaska and all our fishery throughout the range of our salmon. It's very important that you ask these questions and very important that I have the A team here today.

You've heard part of my A team, Randy Kenley (phonetic) from Lummi talking about the Nooksack river up

by the border of Canada, and I have Lorraine Loomis from the -- our representative on Fraser River Panel. And I have the A team right here. I have Mike Grayum, Craig and Jim Anderson and David Trout (phonetic). So you -- you can ask these guys any questions, we're -- we're ready to answer anything and give you any information that you want.

MR. DICKS: Thank you Billy, we appreciate that very, very much. And now we're going to go to Larry Rutter, Pacific Salmon Commission. I'd like to point out the Pacific Salmon Commission was formed by the governments of Canada and United States to implement the Pacific Salmon treaty. And Dave Bedford is here, who is the outgoing U.S. Chair of the Pacific Salmon Commission, Larry.

MR. RUTTER: Thank you Congressman Dicks --

THE CHAIR: We appreciate your in-depth briefing chart. This is almost as good as the Pentagon, I mean, this is pretty -- pretty good.

MR. RUTTER: I'm glad to hear you call it an in-depth briefing, because I thought it was very superficial. I am here on behalf of the U.S. section of the Pacific

Salmon Commission. I want to make it very clear; though I work for NOAA, I'm not here representing NOAA. We have the head of NOAA here. So any questions relating to the ESA can be directed to Bob.

I also want to make it very clear that I'm here on behalf of the United States section. I have not cleared this. I would not purport to represent our Canadian college or the Salmon Commission.

MR. DICKS: Right.

MR. RUTTER: And though the original request was put to the Salmon Commission Executive Secretariat, we normally don't allow the secretariat to get involved in these domestic political forums. I want to give a very, very, brief history of the Salmon Treaty and prior time. In the 60s and 70s, we had a growing competitive fishing regime where the two countries were scrabbling to catch as many fish as they could that originated in the waters of the other country and it was just a terrible mess.

And there were many, many years attempting to develop a treaty that failed, and then finally in 1985, the Pacific Salmon Treaty was signed at the Shamrock Summit by President Reagan and Brian Mulroney from Canada.

And a very key component, one of the probably two biggest components of the Salmon Treaty was the chinook rebuilding program. It spoke to the need for a coast-wide regime, just because of the far migratory range of these animals, many of them originating in Oregon, and some of them even in California, going as far north as Alaska. So it required a level of cooperation as rarely seen in Fisheries management.

As Congressman Dicks pointed out, the Treaty created the Pacific Salmon Commission to oversee the implementation of the treaty, and the commission is comprised of four Canadian and four U.S. Commissioners. And then there are alternates for each one. The Salmon Commission usually meets about three times an year with the final negotiating session occurring in each February.

And I'm spending a little bit of time on the process, because the process is sort of connected to the results we can expect from it and how fast we can expect results. We are appointed for four-year terms by the President. We can make a decision only when there is no dissenting vote among the three commissioners that represent the State of Alaska, Washington and Oregon has

one commissioner and the tribes have a commissioner.

And in this very odd treaty, the federal government does not have a vote, so I just sit there and complain. Bilateral decisions always require a consensus between Canada and the United States. No decision could be made unless two countries agree. They have one vote and for your ratification, I've put in a chart, just so you can get a -- get a sense of the bureaucracy that is created by the Pacific Salmon Treaty and Pacific Salmon Commission.

And there are a number of panels and have regional representatives that deal with discreet issues, we have a host of technical committees. The premium technical committee, if you will, is the Chinook Technical Committee that deals with the most complicated species that we manage. And I've focused on those largely because those are the most of the listed fish that we deal with in the ocean.

Our chinook salmon, we have very, very, little impact on steelhead, and actually very, very little impact on many kinds of chinook salmon as well. But anyhow, the original regime relied on a fixed catch ceilings. The

idea was just to cap the ceilings of major fisheries in the ocean, and then let the escapement increase, and as a result of that the harvest rate would continue to go down as you -- as you kept those ceilings in place.

But there were a number of problems that led to a lack of success with that program. The most notable was the abundance varied greatly, and the production varied greatly and differently than was predicted when the ceilings were put in place. We had -- in some cases when the abundance was low, people would fish harder to get to that ceiling, which was too high in that case increasing exploitation rate. And in other cases when the abundance was very high, in the late 80s, right after the treaty, the fishery was greatly shortened because of the impact of the ceiling and that made people very unhappy.

We had fixed ceilings in a number of other fisheries that are not pertinent to today's discussion. I've got a slide in here just to show you that -- to jog the memory of some of you that this is an issue that has been very contentious in the past that sort of -- I kind of chuckled when I read the press release that we're going to begin the debate on harvest, when I recalled some of

the -- some of the history that we had in the salmon treaty.

Going back to the chinook, we have a new regime as a result of 1999 and it resulted in a vastly improved fishery management system in Canada as well as the United States. But one of the things Canada has done, and it has got a lot of press, is that they've learned to apply genetic technologies to identify which of the fish they're worried about, are theirs, when they are present and when they are not? And they've used that information to target on fish that they're not as concerned about, and guess what, some of those are ours.

But the information that is being widely cited in the press and everywhere, and I think that lead somewhat to this discussion, is the (inaudibleT1S1 15:06) resource is newsworthy. And to us, that have been involved in this for a long time, it isn't that newsworthy at all. We've always known the WCVI chinook fishery was comprised mostly of United States fish. And I think I'll rely on the question and answer period to elaborate on some of the points that I know people will want -- dealt with relating to Pacific Salmon Treaty, but in the slides

that I've provided you, I've got a number of interesting little graphics that I would be glad to go through when the -- when time permits.

I think I want to close, but with one main point. Canada has listed fish too. They have their SARA, the Species At Risk Act in Canada and they have COSEWIC, in their version of a biological review team that reviews the status of species in Canada, and they always find part of the solution is to get us to catch less of their fish. And guess what, we always find a part of the solution for our fish is to get them to catch less fish.

And there is a necessity to engage those discussions in a constructive manner. I'm absolutely concerned; I'm very concerned about the sentiment that is going on the U.S. side, that is starting to point the fingers at Canada. I see us reliving a period of time that I've gone through it. I don't want to repeat, and so I would urge people to put in perspective what is going on with the Salmon Treaty. We are aware of its problems, and we on the United States side will certainly take -- make our best effort to fix that. But the solution isn't going to be the other guy doesn't get the fish.

MR. DICKS: Okay, all right, thank you very much and our next speaker is Randy Fisher, executive director of the Pacific States Marine Fisheries. And this was formed by Congress more than 50 years ago, the Pacific State Marine Fisheries Commission, helps resource agencies and the fishing industry sustainably manage our -- our valuable Pacific Ocean resources in the five-state regime. Randy, you've got five minutes.

MR. FISHER: Thank you, Congressman. As mentioned, I am the executive director of Pacific States Marine Fisheries. Since we basically are responsible for managing information on West Coast Catch, Commercial and Recreational Fisheries, I'll elaborate on what those processes are. As you know, the commission is non-regulatory, but the information we manage is provided to the Pacific Fisheries Management Council and to the state agencies to do the managing.

The recognition of time, I will summarize the ocean catch sampling program for recreational fisheries, and the commercial catch program and I'll highlight some other programs that we manage and have a direct responsibility on recovery of salmon. In this --

MR. DICKS: Can you bring the mike a little closer?

MR. FISHER: Sure, in the State of Washington, the Ocean Sampling Program is responsible for monitoring all ocean sports fishery. In Oregon, it's the Oregon Recreational Board Survey. Both of these sampling programs use the same methodologies. In Oregon, sampling is conducted at nine major ports from March through October 31st. In Washington, two of the four major ports are sampled from March through end of October.

Minor ports in Washington are sampled in the fall only, and minor ports in Oregon are sampled when there is actually effort involved. Both state surveys rely on exit counts of votes at the sample ports each same day to estimate total fishing effort. These counts are done five days a week in all weekend days and are covered in three random weekdays each week.

The sampling design results in somewhere between 45 and 50 percent of all ocean boat trips being sampled. The bottom line here is that these recreational fishing sampling programs collect catch effort and biological data that generate in-season and post-season estimates at a 95

percent confidence interval.

In terms of commercial catch, both tribal and non-tribal data consists of four major areas, fish tickets, logbooks, species composition, and biological data. All landings and values of each market category are recorded on a fish ticket. Information on where and when, and to what depth these fish are caught are provided through logbooks.

Species composition sampling is done by port samplers. They collect biological information, edit fish tickets and input the information -- edit fish tickets and input the information to the system. The bottom line here is that all commercial catch is accounted for, and provided to the management agencies.

As you know, the commission is also responsible for the regional mark-processing center and the Coded-Wire Tag Program, or the Coded-Wire Tag Program and the PIT Tag Program. Both of these tagging programs are key elements to our salmon recovery. The regional mark-processing center has been in operation since 1977, and the center provides regional coordination for tagging, fin marking information, maintenance of the coded-wire databases.

Currently over 50 million tag smolts are released annually. Fifty-four state tribal and private entities tag fish. Tag recoveries from adult fish average around 275,000 per year. The PIT tag program's fundamental purpose is to monitor migratory habits of fish in regard to their effects on the Columbia River Power System.

Over 12 million fish have been tagged and monitored since 1987. Interrogation of fish is done at eight dams, in streams, at hatcheries, acclamation ponds totaling over three dozen separate sites. Information on date, time, location, water temperature, and who released these fish are in the tag files.

The commission is also involved in other programs that deal directly with recovery. The Northern Pikeminnow Predator Program and Aquatic Nuisance Species Prevention. The Northern Pikeminnow Predator Program was started in an effort to reduce predation by northern Pikeminnow on salmon juveniles or juvenile salmons.

One important component of this program was to award anglers for harvesting pikeminnows over 9-inches in length. Since 1990, over 2.4 million northern pikeminnow

have been removed from the Snake and the Columbia systems. As a result of this component of the program, predation on juvenile salmon has been cut by an estimated 25 percent.

In 2004, more than 267,000 northern pikeminnow were caught. The northern pikeminnow that are caught are produced into fishmeal or for animal feed. And just in case you're curious, we are now paying $4 per fish from one to a 100, $5 a fish for a 101 to 400, and if you're lucky enough to catch over 400, we pay you $8 a fish.

In terms of aquatic nuisance species, we are concentrating on the potential introduction of zebra mussels and mitten crabs. We're also contracting Washington and Alaska to monitor Atlantic salmon.

Zebra mussel pose an enormous threat to salmon recovery in the Columbia system. They are currently as far west as the lower Missouri River in South Dakota. Live zebra mussels have been found in Washington State attached to recreational water crab. We are monitoring zebra mussels in the basin and doing education work throughout the west.

In terms of mitten crab, we are monitoring and undertaking research and education on the crabs. To date,

only one mitten crab has been found in the Columbia basin. However, we continue to be concerned because of the dramatic effects witnessed in the San Francisco Bay-Delta area.

We have been monitoring Atlantic salmon in Washington states in over a 125 streams and rivers since 2003. The good news is, because of the monitoring escapes of Atlantic Salmon from fresh water hatcheries has decreased from a few thousand to basically zero. We are continuing to work with the State of Alaska and the British Columbia to redress other potential concerns.

I like to close by highlighting some serious concerns that we have in order to provide data. Commercial packed fin in recreational programs funded by NOAA fisheries had been level funded for 10 years. We, in the state, are having serious problem maintaining port samplers and the interim structure to continue these programs. With quota management and concerns over threatened and endangered species, these programs are critical.

We have a need for additional million dollars in these programs just to maintain our current levels. And

finally, the Coded-Wire Tag program was dropped from base funding from the U.S. Fish and Wildlife Service two years ago. Their $250,000 contribution supports the mark- center. Without this funding, the center cannot function. We need to have some sort of permanent funding solution.

Once again, thank you for the opportunity to testify --

MR. DICKS: I just want to point out, I've taken -- twice taken care of putting that $250,000.

MR. FISHER: Thank you very much, Congressman.

MR. DICKS: Out of my mass marking program, which was extremely painful, right Dave?

MR. FISHER: Yeah, we've all had experience with that funding. Only $250,000, it's a shame, but thank you very much.

MR. DICKS: Okay, I want to go to Larry first. Now, you -- and you said you had some other things you might want to say. Now, what do you -- you said you were worried about the climate, what worries you about the climate with Canada?

MR. RUTTER: Well, a couple of things Congressman. One is --

MR. DICKS: Use the mic please.

MR. RUTTER: There is -- there seems to be a growing sentiment that the Canadians are not conservation minded, and they're out there hammering away on the fish that we're working hard to protect. They -- they are not --

MR. DICKS: There isn't -- is this the perception that they're protecting their wild fish and targeting ours?

MR. RUTTER: That -- I believe, that's the perception, yeah.

MR. DICKS: That's the one you're talking about?

MR. RUTTER: Yes, yes, and I --

MR. DICKS: These numbers that we just saw make someone think that that isn't so, such a false --

MR. RUTTER: No, I understand the origin of the thought. I just want to do a couple of things to put that in to perspective.

MR. DICKS: All right, go ahead.

MR. RUTTER: One is that we have always known the WCVI trawl fishery catches is mostly American fish, whether you're talking chinook, whether you're talking

about coha or you're talking about chum salmon. Secondly, we did the analysis of biological -- biological analysis of the 1999 agreement with those stats in front of us.

The only thing that really has changed is the percentage of that catch that is now listed, and that has changed because we have now listed hatchery fish. So the Canadians really haven't done anything dramatic, to change that fishery. They have been more successful at targeting or avoiding the WCVI chinook stock that worries them the most.

Now, the implication is when you shape a fishery off a one group of fish, that you shape it on to another, and you know, that's just logical. And it seems also logical that the percentage of the catch now will be even a little higher of U.S. origin fish, but that's not an absolute give in. I've seen a lot of press things of late citing this now famous, 80 percent of those fish are American and 70 percent of those are listed, and all those numbers.

One of the things that we have learned on many occasions in the salmon treaty environment, is data is suspect until it is bilaterally scrutinized. That data

has not been scrutinized by the United States. That was presented by a Canadian fellow at the ISAB presentation at the Northwest Power and Conservation Council.

I am aware today that some of the analysis was simply wrong leading to incorrect numbers. I will not go so far and say what the right numbers are, because I would be committing the same fault that I think it has been committed here. Those numbers are incorrect. But I think the main point I want -- but I will not deny that the majority of those fish are American, and many of them are listed, but I want to point out that the great majority of them that are listed are hatchery listed fish, which is a consequence of our Alsea decision.

So that kind of puts it in perspective. It doesn't sound quite so scary. The other thing I want to point out is that the numbers that are frequently cited, like 70 or 80 percent of the fish are listed. That does not translate into 70 or 80 percent of our listed fish are caught by them.

The impact on any given American ESU is going to be much, much smaller. They're obviously not catching 70 to 80 percent of our Snake River fall chinook for example.

The total of the catch in Canadian WCVI fisheries could well total 70 percent, but the impact on any given ESU is not anywhere close to that. So I want to -- those kind of little factoids are -- it's a loss to the people.

MR. DICKS: Are they sympathetic at all to the idea on the wild fish, of working with us to try to protect those fish, just as I would assume they would like us to work with them on protecting their wild fish, that -- and asking Alaska, I mean, who gets the first shot at this, to lay off some of their either threatened or endangered -- I don't know their law, but I know it's a new law and you've been -- you've been briefing them on the Endangered Species Act.

MR. RUTTER: Right.

MR. DICKS: How does that work? I mean, is there any willingness to cooperate?

MR. RUTTER: I think that there is. I will also say that it doesn't happen as fast as we would like. That right now, as of last February's meeting, we have launched a bilateral effort to investigate this very matter. You know, before we can ask the Canadians to modify how they're catching their fish, we have to establish that

they are in fact having the impact that we worry we might be having on our fish.

So we have to go through this bilateral exercise, we're going to get the first report which you know, the next week, the preliminary report of what we call our Chinook Interface Group. They are sympathetic. On the other hand, I also know that it's going to be very difficult for Canada to sustain any fishery if they can't harvest -- if they're asked to reduce the impacts on our fish as well as the ones they're trying to avoid themselves.

I will as a, you know, an American participator in the treaty negotiations, that we have done, I think, a better job of responding since 1999, when the whole atmosphere was changed to -- to Canadian conservation concerns. Their number one conservation concern has been Thompson and Upper Fraser Coho, and we've got a new Coho regime that we put in place, that is very responsive to that fish, that concern that's analogous to one of our ESUs.

We have been very responsive in the management of the Fraser Sockeye fishery, which is, you know,

targeting Canadian origin sockeye to their listed Cultus Lake, they're not formally listed, but they're Cultus Lake and Sakinaw Lake sockeye. So we've -- I think we've got a record that we can defend, and we can hold up as an example to the Canadians of what we want them to do.

MR. DICKS: Now, let me ask just one other point, the time's running here quickly. They have followed a selective fishery on Coho, isn't that correct?

MR. RUTTER: They have used mark selective fishing on Coho, now, yes.

MR. DICKS: But they have not been willing to do that on Chinook, isn't that correct?

MR. RUTTER: That's absolutely right.

MR. DICKS: Why is that, would you explain why that is?

MR. RUTTER: There are at least two reasons. One of them is that they do not believe that the problems that have been -- been imparted on the Coded-Wire Tagging program are solvable. And that the cost --

MR. DICKS: And your panel's looking at -- is there a special committee looking at it?

MR. RUTTER: Yes, we have a panel. I was

instrumental in putting that together. We have the report, the preliminary report, not the final report, but the preliminary report next week. And there's been a lot of misunderstanding about a very complicated subject. I know, Congressman Dicks, you tend to believe that the thing can be fixed with just some money and some wands and electronic stuff, but that -- that misperceives one of the major problems that has proved unsolvable, and this expert panel has not solved it.

And that is the ability to use hatchery fish, which we tag, to represent wild fish. We relied on that system for nearly 30 years and we can no longer do that as reliably as we used to. And we're working on solutions to patch that but we cannot fix that by deploying more wands and tubes and that sort of thing.

MR. DICKS: But let me ask you this, just from a political perspective. There's been a lawsuit filed, as you know, with the customs about importation of wild fish into the United States. Now, it would seem to me that if that is -- if the lawsuit's successful and customs has to block, you know, recreational fishermen from bringing wild -- I mean, any fish back, that is a wild fish, then aren't

they going to have to move to some kind of a fishery recreationally, so that they can -- so that the sports fishermen can be assured that when they catch a fish with a fin clip, that it's a fish that they can bring back into the United States?

MR. RUTTER: I would really hate to speculate at how Canada would react to that, if it was made illegal for Americans to bring back unclipped fish, as what you're talking about.

MR. DICKS: Yes.

MR. RUTTER: I don't know what the reaction might be. The reaction might be to say that you can come up here and catch fish but you can't bring them home. Lot of times, sport fishermen, as you well know, fish because it's fun.

MR. DICKS: Yes, that they release.

MR. RUTTER: Yeah, and they don't necessarily need to bring the fish home. They might substitute the fish that they otherwise would bring home for something else that can be imported. I don't know; I'm reluctant to speculate.

MR. DICKS: Would you get into that at all --

MR. RUTTER: They would -- yes, they would certainly raise that. We had some experience with a similar issue, GATT issue in the late 1980s when Canada imposed landing restrictions on American Fishermen that wanted to land in their ports, and it went all the way to the GATT council. So but -- I don't -- I don't know where this one will go. I -- I'm reluctant to speculate.

I know that the Canadians will raise it, they will not be real happy, as that technique is a technique for us to get them to go mark selective fishing. We have also -- I wanted to elaborate on the second part of, I think, your question. We asked that, well, can we at least get you to do the sampling that we need to maintain some of the integrity of the Coded-Wire Tagging Program? They said, well, we don't believe in mark selective fishing for Chinook, and we don't want to be prioritizing it because we're kind of broke, but if you want us to do it, here's what it will cost; they gave us a bill, in February.

MR. DICKS: All right, Congressman Walden.

MR. WALDEN: Well, I guess on this issue with customs, because it's one we -- I've thought about it in

the broader context of the Endangered Species Act. Do you know, any of you on the panel, what happens if you kill an endangered species other than fish and try and bring it across the border, back into the United States? Randy is that?

MR. FISHER: Well, you can't do it basically.

MR. WALDEN: And why can't you?

MR. FISHER: I mean, it's the same as you were asking in the earlier panel, my guess is the law would say this illegal.

MR. WALDEN: So that raises the obvious question is, why when the endangered the species happens to swim in the ocean, can you do that? Can you bring it across the border without penalty or notice?

MR. FISHER: Well, you know, I'm aware -- I'm not going to get into a legal analysis, I'm not qualified to do that, but I'm aware of the -- you know, the Convention on the International Trade of Endangered Species, the CITES treaty --

MR. WALDEN: Does it list the fish?

MR. FISHER: Speaks to this issue about creatures found to be endangered by one state, one country

and imported to another and even fish that resemble them and can't be -- the difference can't be told. I think it's a very serious issue. The question has many legal facets as to whether the harvest of that in Canada was legal or not, and several other related issues, I wouldn't want to really speculate on where that lawsuit's is going to go, but I think it's a -- you know, it's a very serious issue they're raising.

MR. WALDEN: I do too, and especially in light of the seriousness of this whole issue for our region, terms of recovery of endangered stocks, and the price we're paying and every -- every body is. I mean, again, we know about hydro, and hatchery, and habitat, and you know, now harvest. I'm also curious, I'd like to know more about, and I think Randy you brought this up, the zebra mussel issue.

MR. FISHER: Yes.

MR. WALDEN: Can you tell us what happens if those zebra mussels begin to show up here? What happens to our habitat, what happens to these other species?

MR. FISHER: The zebra mussels that were actually came in on ballast water in to the Great Lakes a

number of years ago, and as a result of that, the effect on the Columbia would be extremely severe because within a --

MR. DICKS: Pull the mic up a little, just a little closer.

MR. FISHER: Within a period of two years, the zebra mussel which is about the size of your little finger nail, will actually end up blocking a pipe that's about 2 inches around. So if you think about the Columbia River system and you think about the number of irrigation pipes and all the by-pass systems that we have, the cost would be astronomical.

The second part that would be a very serious effect on salmon would be the fish ladders themselves, because zebra mussels go attached to the fish ladders. We have -- we've been working with Bonneville Power Administration to try to encourage them to start writing environmental impact statement now, because when and if they do show up, and if you look in a map, it's just probably not a matter of if, it's a matter of when. They need to -- we need to move fast in order to eliminate any possibility of those things becoming permanent.

MR. WALDEN: And how do you do that? What's the technique for eliminating of them?

MR. FISHER: Basically, they either scrub them or they use chlorine. So you have to physically remove them. They can live without -- outside of water for a number of days, up to a week. The boat that was caught, that was found in Seattle was a -- was actually a sale boat, and it was encroached with zebra mussels, they put it into salt water to kill it, but --

We have a big education program going all throughout the Missouri, Montana, we go to all sports shows and try and educate people that if you're going to come out west, as part of Lewis and Clark deal, you better make sure you have a clean boat.

MR. WALDEN: Leave the zebra mussels at home?

MR. FISHER: Pardon me?

MR. WALDEN: Leave the zebra mussels at home --

MR. FISHER: Exactly.

MR. DICKS: May be we ask Dave Allen, do you guys do anything on this?

MR. ALLEN: (inaudible 38:16) Pacific Northwest?

MR. DICKS: Yes.

MR. ALLEN: Not here, but obviously the service is heavily engaged in Great Lakes, there's a multi-partner cooperative group that's focused very much on this, and there's some funding to address this issue, on a national scale.

MR. DICKS: Thank you.

MR. WALDEN: And I know Brian Baird's then, one of the real leaders in the Congress on this issue. The Northern Pikeminnow in the harvest there, I've seen a lot on that. Is the Northern Pikeminnow a species that in other regions is listed? I mean, I've heard, I've had people tell me that, but --

SPEAKER: Listed?

MR. WALDEN: Yeah, is a threatened or listed species, anywhere else?

SPEAKER: No.

SPEAKER: No.

MR. WALDEN: Okay, you know, in this job you hear a lot from a lot of people, and so it's nice to have a panel of experts, where you can get an answer to it, because I've -- I've heard that. You know, I don't think I have any other questions.

MR. DICKS: Okay, Congressman Baird.

MR. BAIRD: Thank you. I blanked on your name, I'm sorry.

MR. RUTTER: Larry Rutter.

MR. BAIRD: So you're Larry. Okay, got you, all right, good, thanks Larry.

MR. RUTTER: I think this will help, yeah, --

MR. BAIRD: Larry, I appreciate the tough situation you must be in. I mean, we all remember the decade or so ago that Canadian blockades of U.S. boats and all that. But the reason that some of us are very concerned about this is because we have a judge in the Columbia River System saying he may run the whole river. Call for tearing out dams, we've -- is mandated summer spills that are costing a $100 million.

And when you look at these pie charts in the Puget Sound area, but certainly my understanding of the data, and admittedly maybe they need further review, 40 percent of the harvest up there is listed Columbia River Chinook, or the Chinook harvest that I should say. Well, if you kind of judge, say an American ratepayers have to pay an additional $100 million, when they tear out dams

which will then jack up rates even more with significant, I believe, environmental consequences, and you look at how our fishermen and our ratepayers and our foresters and our farmers and our communities have taken the hits.

You start saying, "Yes, you know, we need a little help from the Canadians." And my hope would be that the American delegation to that commission is an advocate on our behalf, and a little steel in the spine, I understand these can be delicate issues, but I -- I've got to tie, I'm a little concerned from what I've heard so far, from -- and this may be unfair characterization, but is, please understand the perspective of the Canadians in this.

And I don't think there's a silver bullet that we just blame the Canadians and it solves. We've discussed that many times here today. We've got to deal with habitat; we've got to deal with hatcheries et cetera. But neither do I believe that when I look at graphs like this, and when I hear the 40 percent figure of their harvests is listed chinook, then we can just say, "Well, the Canadians don't have a responsibility here."

And I would encourage you and the American

delegation to say, "We've got some members of Congress and some judges and some folks who're very, very concerned about this." And so for the record, that's why you're hearing our concern about Canadians. Hundred million dollars gets your attention, we've got senior citizens going to try to pay their bills this winter that's going to be higher than it has to be. And so for the record, I would like you to carry to the next discussions that we want to see some changes there.

MR. RUTTER: Well, I appreciate that. You could rest assured that the American delegation is going to come out swinging to reduce the impact on Chinook. My -- the point of my earlier comments was to make you understand the context within which we work. The process things that I was describing was to let you know that nothing happens unless you agree.

So the conviction behind our position doesn't necessarily translate into an agreement. That said, we certainly will make the best case. We will make it with bilateral data. The Canadians are quite astute at our political -- understanding our political system. The know that we have invested billions of dollars, I mean, they've

just -- their eyes glaze over when we throw around the amount of money that we are spending on this kind of thing, and they're sympathetic to that.

I just wanted our side to understand what they are doing, what they've already done. They came in as part of the '99 -- the era of the '99 agreement and bought out half of their fishery. And what's left of it, they're not letting fish in many cases. So they, you know, they've got very dire circumstances in their fishery and so this is the -- this is the other party, our partners in this treaty that we're going to try to ask to do more.

I just want to put that in perspective. The other thing I want to reiterate is that 40 percent of their catch is -- are listed fish, but again I want to reiterate that that's a consequence that we have listed now a lot --

MR. BAIRD: What if we had not listed the hatchery fish in a sense --

MR. RUTTER: Yeah, if we had not listed the hatchery fish, you know, the -- the biggest contributor to the WCVI trawl fishery in terms of a single ESU, I'm quite confident, is the lower Columbia River chinook, which we

have listed, dominated, heavily dominated by hatchery production out of the Mitchell Act hatcheries. And so they're not going to be greatly swayed by our argument based on that percentage.

MR. BAIRD: Okay.

MR. RUTTER: Because they know they're hatchery fishing and they have a limited value in recovery.

MR. BAIRD: That's a helpful insight. Randy, first of all I want to applaud you for the work on the zebra mussel. Actually, I have been one of the leaders on that along with Vernon Ehlers in the Science Committee. The 100th Meridian Initiative, which is this, you know well, and I'm sure Dave does is, the initiative to try to keep the zebra mussels from getting west of the 100th Meridian.

And the problem we face is if they get into any of our freshwater drainage, from the water in Mexico on up to Alaska we're going to have zebra mussels. And you look at not just the pipes along the Columbia River, be it irrigation or the hydro pipes you look at all the fish screens.

The screens that divert the salmon around the

turbines, those things will incrust, it won't take a year for those things to incrust. They will incrust and then you won't -- they won't be able to filter water, and it will make -- I believe, it will make all of this discussion and all the billions of dollars we spent moot. I think it is one of the single greatest threats we face to the region. So Norm has been willing to work with this.

It's one of those things that if we could spend a few million now we could save billions and billions. It's multi-billions as you know in the Great Lakes system. So we need to deal with that. The challenge we face right now is all the attention, much of the attention, Congressionally, is on the Great Lakes. And one factor you didn't mention is, but I'm sure you're aware of, the gravel beaches on the Great Lakes becoming incrusted with zebra mussels with two great consequences.

One, you can't walk on them, certainly, barefoot. And two, they reek as the zebra mussels dry when the water recedes. But it occurs to me that we could also see a pretty significant loss of salmon habitat as in the low water, if the zebra mussels get in the gravel

that's not going to be a conducive place for salmon to spawn. So this zebra mussel thing, we really need to pay attention to. It's not glamorous, politically, I can tell you, but -- I applaud your efforts on them, and we should commit to.

One question I had is, yesterday, you're familiar probably with the Harvest Report put out by the Northwest Power Conservation Council.

MR. KENLEY: Right.

MR. BAIRD: When we heard yesterday from those folks, and I've actually read that report, they asserted a great deal of ambiguity and uncertainty in harvest data. And yet from your description it sounds like you're fairly confident that we've got accurate harvest data at least in the open ocean. Any -- if you're aware of that report, if not I'll understand you might not want to answer. But if you are, any reconciliation of those two perceptions one suggesting ambiguity, and your observation suggesting pretty great precision?

MR. KENLEY: My guess is the ambiguity is in the type or the kind of fish that are being harvested; where they're probably from. That's where the ambiguity comes.

We can't tell whether or not it's hatchery fish unless you go through the coded-wire tags or PIT tag, you don't know which hatchery that fish is from. So if there's an ambiguity in the system that's probably where the biggest ambiguity would lie.

MR. BAIRD: And that would then translate to ambiguity in terms of which ESUs --

MR. KENLEY: That's correct.

MR. BAIRD: -- that's especially in the case of wild fish which don't have tags of any sort. So --

MR. KENLEY: That's correct.

MR. BAIRD: Well, I appreciate the work, but I would just want to add an addendum to my comment earlier when I said the goal was "A sustainable sport and commercial." I should have added to that, "and tribal fishery". And I think I just want to reiterate that. That is our goal here; that's what we're about when -- we want the whole system to be able to work, and it is a difficult process.

SPEAKER: Go ahead.

MR. KENLEY: Brian, I -- and our Congressmen, I hope the United States addresses this U.S.-Canada treaty.

I can remember when we brought in Dewinsky (phonetic) an ambassador to -- an ambassador, the --

MR. BAIRD: Former Congressman, by the way.

MR. KENLEY: Yeah, yeah, exactly.

MR. BAIRD: Dewinsky, from Illinois.

MR. KENLEY: Yeah. And a good friend of all of ours from the U.S.A. And we settled this dispute up there. This is going to be a dispute, exactly what we're talking about. And it can go on and on and on. And this is one piece of our puzzle of our fisheries management in the Lower 48. And we better be damn serious about it. And --

MR. BAIRD: Dave, you want to make any comment on this subject?

MR. ALLEN: Which subject in particular?

MR. BAIRD: Well, just this U.S. -- I mean, this upcoming negotiations with Canada from kind of an Alaska perspective.

MR. ALLEN: Well, from our perspective, we have a coast-wide conservation program. We think that it's worked fairly well. At the back of the presentation that Larry gave you, there's some graphs in there that show the

reduction in harvest rates in the ocean fisheries. That's a direct consequence of the work that we did in the Salmon commission. None of it came easily. It was all long, hard-fought battles.

I'm hoping that with Canada this time around, that having had about 10 years under our belts by the time the next negotiation comes up that we'll be in a position to come to some accord a little bit more amicability than we were able to in the 1990s.

I think there is a real understanding on their part of the border of the kinds of problems that we have, and similarly on our side of the border, the sorts of problems that they have. But we're ultimately going to have to come to some kind of a resolution that speaks to the interests on both sides.

I think that another thing to look at when you're talking about the impacts of the West Coast Vancouver Island Fishery, is it's one thing to talk about percentage, it's also good to talk about numbers.

And when you look at the numbers of fish that are being harvested on the west coast of Vancouver Island there may be a pretty high percentage of one thing or

another. The absolute number is down very, very substantially. So there's an effort in Canada, an effort under the Salmon Commission Treaty.

MR. BAIRD: -- now, or not very substantial.

MR. ALLEN: It is much, much less than what it was in the past. So the result, the net result of the agreements that we've reached have been fairly positive. Now, not positive enough, but nonetheless they've gone in the right direction. So we recognize that we do have a uphill battle coming up in 2008, but we're ready for it, we'll do it.

MR. BAIRD: Thank you very much. Thank you all and we're going to take a -- let's take just a 10-minute break and then we'll come back with our third panel, and we'll start at 11:40 a.m. Ten-minute break.

(Recess)

SPEAKER: This is TVW, Washington's public affairs television network. Next on TVW, a public meeting on the Pacific Northwest salmon preservation with Congressional, state, and policy group representatives, takes place in Tacoma on October 12th.

MR. DICKS: And representing Ron Sims today is

Pam Bissonnette. And Pam has worked on a number of these issues with Ron, and I've been very appreciative of the outstanding leadership that Ron Sims has provided in King County on a multitude of salmon issues, and you know, courageous work on the Critical Areas Ordinance, for example. And Pam, go ahead, you've got five minutes to start.

MS. BISSONNETTE: Congressmen Dicks, Baird, and Walden, thank you very much for the opportunity and to represent Executive Sims here today for King County. I understand you would like to know what we have done --

MR. DICKS: Hold the mic just a little closer.

MS. BISSONNETTE: Sorry -- in support of salmon recovery. So very quickly, once the listing was made back in the late 90s. Executive Sims convened the Tri-County process, which was the Snohomish, King, and Pierce County, which represents the largest urbanized area draining to the Sound. And that later was enlarged, and he was a founding member along of course with Bill Ruckelshaus and others of the Shared Strategy, which we have supported ever since. King County is the lead for RIAs 8 and 9 and a major player in 7. Those plans were six years in the

making and they are either unanimously adopted by their cities and counties, or nearly so, and they are currently pending approval by NOAA Fisheries, which we hope to see in the early part of next year.

The costs in those plans are over about $200 million for the first ten years, and we're committed to finding, creating, and using those funds to speed salmon recovery in those areas. But we didn't wait for the planning. While the planning was going on, the area covered by our RIAs has collectively spent over $50 million, a lot of that leveraged, I would say, by the SRF Board funding, which I want to express our appreciation and gratitude for to our Congressmen for the support that. We could not have done what we have done without that.

But in addition to that, there has been a lot more local money that this has leveraged, and I'll just give you the highlights. Last year, the County purchased the 100,000 acres -- or protected 100,000 acres of the headwaters of the Snohomish system by purchasing the development rights to the Snohomish tree farm, as an example. Congressman Dicks, you already referenced that the Critical Areas Ordinance, which may not have been a

big dollar cost, but a very high political one.

We are initiating our reclaimed water project in our current budget for $26 million and if that is -- goes to fruition, it will increase the flows in the Sammamish River by about 16 percentage, which is huge, and decrease the temperature-beleaguered river. We're also trying to initiate with the other partners in the region a regional water supply plan to connect the dots between in-stream flows for fish and diversions for a municipal supply.

We're spending, or will have spent by the end of the cleanup, King County alone, $57 million on the cleanup the Lower Duwamish. So those are just a flavor of the kinds of things that just King County is doing. If you replicate that across the ESU, I know other counties and cities are making serious investments.

We do have a concern, however, that we'd like to take this opportunity to voice. We've been working very diligently with Shared Strategy on what recovery will look like and how to get there, but our scientists are reviewing right now the 2005 harvest plan. And it appears as though there is a discontinuity between the definition of recovery that we've been using in Shared Strategy and

the definition of recovery in that harvest plan. And there are specific -- again we haven't concluded our review, but it appears as though that there is a very serious impact, particularly on our RIAs in Sammamish River and on the Cedar, where the harvest plan may not yield the escapement that we need to people, if you will, our environment. If we're going to build the housing for the fish, we need the fish to come.

So we are still concerned over -- we're considering reviewing that situation, but it is a concern for us. You can imagine how difficult it is to raise that kind of money locally and if it doesn't yield results, then we're going to lose credibility with the region and with our constituents.

So I'll close with that. We hope that that will be resolved and that we will be able to move together with an integration of the three H's in a confident way, that we're going to be working together to achieve recovery.

MR. DICKS: Very good, thank you very much. Now, we have Pete Knutsen from the Puget Sound Gillnetters.

MR. KNUTSEN: Thank you, Congressmen, for

sponsoring the salmon event today. The state of salmon should certainly concern all of us because it's an indicator of the ecological health of our region, which is certainly the most important legacy that we can hand down to our children.

I represent the small boat non-treaty salmon fishermen of Puget Sound as President of the Puget Sound Harvesters. Also I'm an elected commissioner on the Puget Sound Salmon Commission, which under the auspices of the Washington State Department of Agriculture, seeks to return the highest value for our salmon resource to fishing communities in the state. The Commodities Commission is funded by a two percent tax on catch receipts, which has been self imposed by the 210 harvesters that we represent.

Personally, I've been a salmon harvester in Puget Sound and southeast Alaska for 33 years and my family direct sells our catch through neighborhood farmers' markets, food co-ops, restaurants, and off our vessel at Fisherman's Terminal in Seattle.

In this short time, I will briefly sketch the most pressing economic and ecological issues confronting

our local fishing communities and then mention some of the strategies which we are pursuing to take our fisheries forward in a sustainable direction.

Between 1989 and 2000, the value of our salmon plummeted on a per-pound basis in real dollars by approximately 85 percent at the ex-vessel level. In Alaska, the harvest, much of it done by Washington-based vessels, remained high at sustainable levels while prices plummeted. In Puget Sound the harvest of chinook, sockeye and coho dropped radically for our fleet as did the per-pound price paid to the fisher. The one bright spot for our local fleets has been the very good returns of wild spawning chum salmon.

Prices have dropped for a number of reasons, worldwide explosion of farm salmon production, increasing monopolization of the processing sector, possible abuse of transport pricing and much higher margins being taken at the distribution and retail levels of the salmon industry. As a result of these factors, commercial fishermen have been faced with the impossible imperative to catch more and more salmon at lower and lower prices to stay financially afloat.

In response to this downward spiral, the harvesters and the Salmon Commission developed a new strategy four years ago to move our fishermen away from a low-value, export-oriented, low-quality harvest to a catching strategy which emphasizes selective harvest of high quality salmon and direct sales by the fishermen to the consumer. Our strategy is analogous to that of many organic farmers who have moved away from high-volume, low-value production for an anonymous market, in favor of niche marketing to the consumer farmers' markets and to smaller retail outlets.

Fishermen who participate in our Sound Catch Quality Harvesting Program are required to ice and process fish onboard, minimize fishing time of their nets in the water, and to generally treat fish with the utmost care. I gave you, Congressmen, some literature over there.

We also provide advertising materials in a central website to connect fisherman and buyers at soundcatch.org. WDE and W has been very helpful in helping us achieve our value-added goals and has redesigned its harvesting schedule to facilitate our direct marketing efforts. These efforts are now beginning

to pay off. In the last three years, we have seen substantial increases, more than double, in the ex-vessel price.

Throughout the world, there is renewed interest in the health benefits of wild salmon. In the wake of scientific studies regarding the high pollutant levels in farm-bred salmon and the documented benefits of the Omega-3 oils found in wild salmon, we are finding tremendous new opportunities to increase the value of our local fish harvest.

The primary salmon fishery for the 210 salmon gillnet permit-holders which I represent, is the fall chum or keta salmon fishery. This fishery began last week and continues for the next six weeks. This fishery has recently benefited from excellent ocean conditions; the runs have returned in spectacular fashion, producing some of the largest chum salmon returns since the early 1900s, approaching one million fish in southern Puget Sound alone.

Although chum salmon has historically not been considered a premier salmon choice, it is in fact an excellent fish, high in Omega-3s and very low in pollutant

levels. We are working hard to add value to this abundant local resource. Other species such as chinook and coho have not been so fortunate as the chum salmon, which we primarily target. Due to a deadly combination of factors, including habitat destruction, some non-selective harvest, especially in the past and hydropower, these species are in peril.

We support federal intervention under the ESA to protect chinook and other stocks of concern, and we have worked with WDF and W observers to change our fishing gear techniques and harvest timing to minimize our impact on these and other species. In our last two legislative sessions, we've been primary advocates for the state bill to allow WDFW to protect salmon reds from careless destruction. On the federal level, we oppose the current proposal by NOAA to permit net cage aquaculture in federal waters; we feel this will open a Pandora's box.

In the decades ahead, as fossil fuels reserves are depleted and transportation costs skyrocket, the importance of Puget Sound as a food resource for our population will become more and more apparent. What could be more efficient than protecting and enhancing our wild

salmon runs, which harvest the photosynthetic work of the Pacific Ocean and bring it back to our doorstep? Thank you.

MR. DICKS: Thank you very much. And now we want to call on Todd Woolsey, who will be testifying on behalf of the Puget Sound ESA Business Coalition. Todd, welcome.

MR. WOOLSEY: Thank you Congressman, and I appreciate the opportunity to be here with the other people who are working so hard to recover the Puget Sound chinook salmon in the area. My testimony today is going to include comments on harvest as well as a little bit on hatcheries, since both are related -- on habitat, pardon me, one of the other H's.

As a way of background, the Business Coalition is composed of businesses involved in manufacturing, transportation, development, real estate, energy, construction, and forest products. The Coalition has actively participated in Watershed, Tri-County, and Shared Strategy planning processes for the last six years. And we remain committed to the goal of salmon recovery.

Our salmon recovery principles, which are

included with my written testimony, continue to serve as a basis for decisions on salmon recovery, and that's the last page of the written testimony, "The Principles of the Business Coalition."

To summarize, the business community is committed to region-wide recovery planning that's science-based, incorporates economic considerations, and recognizes other state and local government priorities. We support a two-step approach to salmon recovery. First, achieve ESA delisting; second, move towards sustainable harvestable levels of salmon, primarily through incentives and voluntary efforts.

To highlight just a few of our principles, the ESA Business Coalition believes that salmon recovery must be based on local and regional plans that are developed and implemented at the local and regional level. On this note, we commend the Shared Strategies for Puget Sound for supporting a grassroots-oriented process in developing the draft Puget Sound Salmon Recovery Plan.

We also believe all salmon recovery plans, including harvest plans, must have clear goals and be based on sound science, law and the principle of adaptive

management. Second, we -- whenever possible, salmon must be protected through better utilization of existing regulations, ordinances, best management practices and permanent requirements rather than creating new regulations and ordinances. And today's focus, we believe that management of all harvesting must be controlled and monitored if salmon are to recover; we concur with the panel.

On the ESA, the Business Coalition has been actively working with the Shared Strategy to provide input on the Draft Puget Sound Salmon Recovery Plan. As part of that effort we are working with the Shared Strategy to address the Business Coalition's questions and concerns relating to harvest.

One of the underlying assumptions in the draft plan appears to be that the condition of the freshwater habitat is the primary factor constraining salmon productivity in Puget Sound rivers, and that further reductions of harvest will not result in improved run sizes. This was discussed a little bit earlier.

The Business Coalition is not convinced the computer modeling used to evaluate habitat is advanced

enough to completely support this approach. Fishery science is not exact; all of the H factors have a role to play with respect to salmon recovery. In our view, it would be more prudent to err on the side of excessive escapement, or number of fish returning to spawn in their river of origin, until we achieve recovery.

Some examples of measures we believe could be taken to reduce the incidental take of ESA-listed fish include the use of fin clipping of all hatchery-produced salmon so that listed fish can be recognized and released if caught, as well as some of the other techniques that were referenced today as well. Also, a greater emphasis on river mouth and estuary fisheries could go a long way toward reducing the incidental take of fish from depressed runs and other rivers.

Ocean fisheries do not discriminate; they catch fish from all rivers that pass through that part of the ocean, depressed or healthy, listed or unlisted. If harvests were limited to river-mouth fisheries, in Alaska and Canada for example, they could not be intercepting the large numbers of Puget Sound chinook that are now harvested in ocean fisheries. We should encourage

limiting harvest to river-mouth or in-river fisheries and at the same time encourage Alaska and Canada to do the same.

As for the draft Puget Sound Salmon Recovery Plan, the Business Coalition completed a preliminary review last summer and identified several issues of concern, which were subsequently communicated with Shared Strategies and NOAA Fisheries.

One, our first comment concerned recovery criteria in adaptive management. The Draft Plan is silent about whether the principles of adaptive management can be applied to all recovery objectives and criteria in the same way they apply to every other aspect of salmon recovery.

Two, we also address the issue of prioritization. The Business Coalition has always maintained that it is important to prioritize actions and programs that will lead the most quickly to delisting ahead of voluntary incremental actions and programs that make up these abundant numbers of harvestable fish.

And three, our comments address the concern about conflicting regulatory strategies. The Coalition

supports the idea contained in the draft recovery plan of evaluating the effects of the existing regulatory programs, many of which are new, to assess their ability to protect and restore a habitat, before implementing additional programs or stricter regulatory measures.

At this point, it's -- my time is up, I thank you for the opportunity and look forward to continuing working with you on recovering salmon at Puget Sound.

MR. DICKS: Pete, you mentioned selective harvest techniques. I noticed there was an article the other day about the Lummi Island reefnet fishery, where -- and then they're all taking these sockeye they catch in the reefnets, they bleed them in the water, so you get the highest quality fish. And then they, like Anthony's (phonetic) or other companies, take those, you know, buy those fish from -- I assume they're your fishermen.

Tell me about that. Are we -- is there a way to catch these fish so we can release the wild fish?

MR. KNUTSEN: Well, first of all, the reefnetters are another gear group, but I'm actually representing the gillnet fishermen. But that is a -- that's a very high quality fish. I've been supplying

restaurants for about 20 years; I do some downtown Seattle restaurants. There's a way that we can use our gear to produce a very high quality product, and I think, recover salmon at the same time. One of things I do is we try to handle the fish, we try to make short drifts; in other words, you don't leave the gear in the water longer than an hour.

We try to pick it up; you want those fish alive when they come aboard. What I try to do is, when they come aboard in the gillnet, I have a knife and I try to snap a mesh with a knife so that I'm not harming that fish. And then if it's -- you know, it's abundant harvestable fish, then I can bleed it and get it down below 30 within half an hour; that's what we do.

The selectivity aspect in terms of, like, our gear type, gillnetting and I've seen it in longlined as well, but the selectivity of our gear type, a lot of it depends on when we deploy it, the run timing, you know, in terms of the area. Also the key thing with gillnets is you can use mesh sizes to achieve a very degree of selectivity.

Let me give you an example. We switched over to

a six-and-a-quarter inch mesh restriction for our chum salmon for our fall fishery about five-six years ago, or maybe ten years ago now. And we saw our incidental take of stocks of concern just plummet. Because those fish, for example, small blackmouth or coho, they shoot right through the six and a quarter.

MR. DICKS: Steelhead too would.

MR. KNUTSEN: And steelhead too. Steelhead would just blast right through. So with a gillnet properly deployed and monitored, you can get a high degree of selectivity. It's not taking the fish out of the water necessarily; it's actually selectivity in water. And so that you can -- all these different techniques, seining, reefnetting, whatever it is, there is ways that we can work to get more selectivity out of it.

MR. DICKS: Pam, one thing, you know, King County of course is, you know, the largest county in the state. Seattle is there, and so you get a lot of people and quite a bit of money to work with. And you know, as we approach these problems it seems to me that there's got to be a coordination between kind of what we're doing in the Shared Strategy.

And by the way, yesterday Bob Lohn in Vancouver said that they're going to have to revisit these numbers that were in this original river-by-river level because the Shared Strategy numbers, which are also partly created by NOAA --

MS. BISSONNETTE: That's correct.

MR. DICKS: -- were much higher. And they're going to review that, because there is obviously an inconsistency. But it seems to me that if we're going to recover these fish and, you know, we've got the Shared Strategy approach, we also have to work on water quality. And you know, in Seattle of course, with Lake Washington we've showed that we could recover a significant body of water in our state that was polluted, we couldn't swim in it and it was a major challenge to the state. We had to fund it and Metro was created and Forward Thrust, other things of that nature.

I mean, don't you see a linkage here in this whole effort to restore salmon that we also have got to look at water quality in a very serious way? And the governor's been talking about a new initiative for Puget Sound. We're trying to get more federal resources in

support of that effort. Tell us about your view of that.

MS. BISSONNETTE: Well, you're absolutely correct. We have the three -- we will have in a few years, the three largest outfalls in Puget Sound. If you combine all of the effluent from the Renton, the West Point and the future Brightwater Treatment Plant, it's about 250 million gallons per day of water. That's more than Seattle supplies on a per daily basis. There are around 140 million gallons a day on the average of water supply.

So we are picking up a lot of ground water, a lot of surface water, storm water into our system. We have combined sewers in 40 percent of Seattle, and of course, there's a lot of storm water that comes from that highly impervious area.

We support the initiative that we hope is going to be coming on the -- you know, to recover Puget Sound because we are, as I mentioned earlier, we're already spending 57 million just on cleaning up that water quality residue in the sediments of this -- of the Duwamish over the past several decades. That's from storm water, waste water and combined sewer overflows discharging for decades

into the Duwamish and contaminating the sediments.

So sediments are now having to be dug up, removed and disposed off at great cost, and there's an environmental side effect. We can't do that entirely, seamlessly without some of those sediments escaping into the rest of the water column. So it isn't without environmental cost, even the cleanup.

So what we're trying to do is a strategy that has multiple benefits. The Brightwater Treatment Plant, we made -- it will be the largest installation of membrane bioreactor treatment in the world. It is Japanese technology. I think the largest plant in the world right now is about five million gallons per day. We're going to build the 36 million gallons per day treatment plant, where the entire base flow is treated to class A reclaimed standard; that is far above secondary.

What that means then is rather than just waste that into the Sound, as we have done in the past, we're going to build pipelines to take it back into the watershed and use it for irrigation of parks, of golf courses, of cemeteries, industrial processed water, and everything except drinking.

We've done this already with biosolids. We 100 percent reuse our bio-solids environmentally sound. We sell all the methane gas and generated energy from that. The last thing we have to cross here is how to get reclaimed water used in our region. And the multiple benefit of that is if a golf course is using -- and they often do, 600,000 gallons of virgin drinking water on their golf course in a year, by providing them with reclaimed water they -- that water stays in the ground or it stays in the drinking water system, and can either be deployed for other drinking water purposes or left in the rivers for fish.

If we could do this for our other two treatment plants, we have for the next century solved our water supply problem. And at the same time, the other benefit is those -- as clean as that water is it still contains some nutrients. So when we use it for irrigation it's a benefit. When we discharge it into the Sound, there's still a small amount of pollution that goes into the Sound with those discharges. So it removes that from the Sound.

So there is a double water quality-water supply benefit from those kinds of projects. So we're looking

forward as the largest discharger in Puget Sound to working with the state, the federal government, our partners in the region to advance water quality from King County.

MR. DICKS: Todd, I'm -- I was glad to see that your business alliance is supporting the Shared Strategy. How did this get created and how do you think the Shared Strategy effort is going so far?

MR. WOOLSEY: It's -- I think it's going well. It was created because the community, the region came together into a -- for bottoms-up approach to Sound recovery rather than having it imposed upon us. The first couple of efforts were trials runs at it, as it were, but not wanting to fail in recovering the salmon, the Shared Strategies was brought together under the leadership of Bill Ruckelshaus, who deserves tremendous credit.

We all know we're in this together; we all are committed to the goal of recovering salmon. And I think, to everybody's credit, all the stakeholders, that we have learned to respect each other and to try and balance out our different interests, make sure that the impacts that we're all feeling are shared equitably and that we meet

the requirements of the ESA. And I think it's a very mature approach and hopefully one that would be a model for --

MR. DICKS: Do you worry about these water quality issues that Pam was just talking about, in terms of can we as a region put the resources together to deal with these things, to keep Puget Sound from declining further?" We've been solving the dissolved oxygen problem on the Hood Canal. Can we do it?

MR. WOOLSEY: Of course we can do it. The question is can we do it effectively with the limited resources we have and which is why one of our positions is to be very practical, and the way we approach this is to get the most bang for the buck -- get the most bang for the buck in what we do with addressing the different H's, get the most bang for the buck in where we put our limited resources for recovery and restoration. We don't have all the money in the world, so we may need to make sure that it's spent wisely to accomplish these goals.

MR. DICKS: Okay, good. Before I call on Congressman Walden, I just want to ask you, is that a comment on the monorail as well?

MR. WOOLSEY: No, comment.

MR. DICKS: Congressman Walden.

MR. WALDEN: Okay, I'll stay out of the monorail issue. We don't have any of those in my district.

MR. DICKS: You have -- barely have roads out there.

MR. WALDEN: We barely --

(Laughter)

MR. WALDEN: We're pretty happy with our horses as though. Pam, I want to follow up on this effluent discharge issue because I hear about this around -- I would think most major American cities suffer a similar problem. You know, Washington, D.C., where we have the first -- one of the first endangered species in America is the -- I think it's the short-nosed sturgeon or a long-nosed sturgeon in the Potomac and over three or four billion gallons of wastewater flows into Anacostia and Potomac Rivers every year.

And I know the little sewer bill I get there says if it rains hard that -- if it rains they've got these inflatable dams they can erect inside their system, but if it rains too hard then they have to open them up

and let it all flow out. And I've always wanted to ask somebody who knew a lot about this, do endangered fish swimming in that stuff suffer a consequence?

MS. BISSONNETTE: Well, actually we suspect they do, yes.

MR. WALDEN: I mean, it can't be healthy for them, can it?

MS. BISSONNETTE: A lot of the data for this actually comes from Europe, in England and Western Europe, where they started finding out. I mean, even technology right now just takes out the solids, the suspended solids and dissolved oxygen; that's what it's aimed at. It doesn't deal, or hasn't until recently, dealt with the exotic kind of pharmaceuticals that go into the discharge. And one of the things that we find ubiquitously in storm water and in wastewater is caffeine; caffeine is everywhere. We've got, you know, fish on speed out there. So --

MR. WALDEN: Like my coffee now.

SPEAKER: This is decaf by the way.

(Laughter)

MS. BISSONNETTE: Yeah, save a fish, drink

decaf. So what we're -- what they found in Europe and we're beginning to find here in the United States is fundamental genetic changes in fish where they cannot reproduce; they are androgynous. We have the feminization of some species and the masculinization of others. They don't tend to be salmonids because salmonids --

MR. WALDEN: They're out there.

MS. BISSONNETTE: -- circulate so much. But you take, you know, like bottom fish, and they are the ones that we're finding these genetic problems with. So that was another reason for us to go over to this class A reclaim standard, is it removes huge amount of those what we call endocrine disrupters. And that was -- I mean, aside from being able to use it for irrigation, it made good sense just for the quality of the Sound.

MR. WALDEN: Sure. Yeah, and I'm working with some communities in my district on the same sort of issue. One of the -- I guess, one of the questions I would have, is if you had a bottom-feeding fish of some sort that's listed, is this effluent discharge result in a jeopardy take?

MS. BISSONNETTE: I think that's a question for

NOAA Fisheries.

MR. WALDEN: Yeah, I wouldn't answer it either if I were --

MR. DICKS: For Fish and Wildlife.

(Laughter)

MR. DICKS: Fish and Wildlife.

MR. WALDEN: But couldn't it? I mean, in theory you are having an --

MS. BISSONNETTE: Yes, it can.

MR. WALDEN: -- adverse consequence on the fish, right?

MS. BISSONNETTE: Yes.

MR. WALDEN: Yeah.

MS. BISSONNETTE: In fact, when we went through our permitting of Brightwater, we did go through the whole Section 7, part of that, and had to do a lot of research on endocrine disruptors to assure them that we weren't going to be engaged in take.

MR. WALDEN: All right. I want to follow up on a comment you made about the differences between -- and I don't know that that I got this right, but the recovery definition in the harvest plan versus the recovery

definition -- is it in your recovery plan?

MS. BISSONNETTE: In the harvest plan and the recovery plan?

MR. WALDEN: Right.

MS. BISSONNETTE: Yes, Shared Strategy worked with the Technical Review Team, TRT, and came up with the definition of what we needed to do in order to recover salmon. And it was very specific in terms of the number of populations that needed to get to a certain recovery level, but then all the other populations needed to come up to a minimum. My understanding -- I haven't -- again, we're still looking at this, my understanding is that's not the definition that was used for the harvest plan, which had the first part, the number of populations that needed to preserved in any particular -- like south Sound, north Sound, like, two to four populations.

But it didn't have that second part, which is -- and all the rest of the populations need to come up to some minimum recovery standard. And that made the Shared Strategy targets higher than the harvest plan. So if you look at our watersheds, they're based on a certain assumed escapement, and our investments are based on that, you

know, assumed escapement. But if you look at the harvest plan it is -- we're just trying to figure out, are we going to get that escapement.

MR. DICKS: Well -- and part of the reason I asked that -- I'm glad you raised it, because yesterday some of the testimony we got talked about the harvest levels under the Magnuson-Stevens Act. I remember the fellow who testified --

SPEAKER: Right.

MR. WALDEN: -- yesterday talked about there were no fish being -- we were harvesting too many fish under Magnuson-Stevens. The question though is, is Magnuson-Stevens' definition the same as what you're looking at, and is that the same as ESA? It's one thing to prevent specie from going extinct; it's another to achieve levels that can sustain a healthy harvest. And these are the kind of under -- the issues there depends upon what harvest level you're talking about or what -- I think probably more appropriate, recovery level --

MS. BISSONNETTE: Correct.

MR. WALDEN: And how do we get everybody on the same page? Because on the one hand you could have

somebody who says I'm following Magnuson-Stevens in terms of my levels of harvest. I'm not going to decimate the run, but I'm only looking at the ocean. And yet, you may have a completely different standard for what you are asking property owners and all to do on habitat and setbacks and all that.

MS. BISSONNETTE: Well, let me just comment. We at Shared Strategy and the locals that participated in that, we didn't set those targets.

MR. WALDEN: That's fine.

MS. BISSONNETTE: But we abided by them. So we just need to make sure whosever setting them, they are consistent.

MR. DICKS: Wasn't there also a problem in this that certain species were allowed to go extinct?

MS. BISSONNETTE: Correct.

MR. DICKS: In certain rivers if there was an abundance in four or five --

MR. WALDEN: The overall, yeah.

MR. DICKS: And at the same time we're doing habitat work in the rivers in which we're going to let them go extinct. I don't get that.

MS. BISSONNETTE: Well, that's the difference. Again, we're still looking at this, but that I believe to be the difference between the harvest plan definition, where some are allowed to go extinct and the Shared Strategy definition were none are.

MR. DICKS: And I think the escapement numbers in Shared Strategy were much higher --

MS. BISSONNETTE: Yes.

MR. DICKS: -- than the escapement numbers in the NMFS report.

MS. BISSONNETTE: Practice plan.

MR. DICKS: And so is this -- I mean, they are dramatically different. So hopefully -- even Bob Lohn promised us yesterday that they are going to review this.

MS. BISSONNETTE: That's good to hear.

MR. DICKS: Go ahead.

MR. WALDEN: And then --

MR. DICKS: You get more time.

MR. WALDEN: Yeah. I can't wait to get back to Washington where I actually have the gavel.

MR. DICKS: You aren't the chairman.

MR. WALDEN: I am the chairman. This is --

(Laughter)

MR. DICKS: It's been --

MR. WALDEN: They don't even let these guys get near a gavel and now you see why, you know.

(Laughter)

MR. WALDEN: Such abuse I take. I had a couple other questions. Pete, you talked about the recovery of the chum salmon, and I'm going to show my ignorance here, explain to why that one has come back so successfully and so forcefully. What do they -- what do you know? What are they telling you?

MR. KNUTSEN: It's a -- that's a really good question. The primary difference between, say, chum salmon and chinook which are, you know, the ESA-listed -- and a lot of the coho stocks are also stocks of concern. The primary difference is habitat dependency. What you have with chum salmon is essentially they are coming back now. They're going to be laying their eggs in, you know, December-January. And they have a very short time in the gravel before they hatch out, maybe a few months.

And then once they hatch out, they head essentially straight out to the Pacific. And so they're

much less dependent on --

MR. WALDEN: Oh, I see.

MR. KNUTSEN: And this is also happening at a high water tide too.

MR. WALDEN: Yeah.

MR. KNUTSEN: And also, they don't go away up in the rivers into the tributaries like coho do or like chinook. So --

MR. WALDEN: They are pretty close in and out.

MR. KNUTSEN: They're in the lower regions of the estuary and --

MR. WALDEN: Coldest water.

MR. KNUTSEN: And so that the good ocean conditions are directly reflected in the chum salmon survival, but man, if you are talking about chinook and coho, then after over summer, you know -- or in the Kitsap Peninsula, you know, they have to drill down, what, a thousand feet to get water now. I mean it's -- that's really hard to get them water now.

MR. WALDEN: Let me ask you, Todd made a comment about a suggestion to limit fisheries to the river-mouths. I think you said the mouths of the river, not ocean, as a

way to -- is that accurate?

MR. WOOLSEY: Correct.

MR. WALDEN: Yeah. What effect does that have on people like -- who do what you do, Pete?

MR. KNUTSEN: Well, what happens with fish when they come back from the ocean is that at a certain point they stop feeding. And then they stop -- they start living on their on oils.

MR. WALDEN: Yes.

MR. KNUTSEN: And when that starts happening, those fish start turning and they become dark, they become less attractive.

MR. WALDEN: I see.

MR. KNUTSEN: What we are trying to do is take those fish when they are still discrete, using techniques that can identify discrete stocks like scale sample analysis. This is routinely done in Alaska, but still take them when they are bright because --

MR. WALDEN: I see.

MR. KNUTSEN: You know, that's when you get the maximum economic benefit to the community and to the state.

MR. WALDEN: Okay. So yours is an issue about getting them while they are -- still appeal the most to the consumers?

MR. KNUTSEN: That's right.

MR. WALDEN: And yours is more an issue of where you take the fish period in terms of the run?

MR. WOOLSEY: I -- yeah, our point -- it was just an example to --

MR. WALDEN: All right.

MR. WOOLSEY: -- to call for having the fish get a lot closer to their destination rather than this indiscriminate take --

MR. WALDEN: So you could target them better.

MR. WOOLSEY: -- in the ocean fisheries.

MR. WALDEN: Okay. All right. Because -- Pete, isn't it true that while you can -- maybe the mesh size can help regulate the type of fish that get through versus those that get caught. You can't differentiate between the hatchery and the wild stock of the same fish short of pulling them out and checking the adipose --

MR. KNUTSEN: Pretty much. Our selectivity is in-water selectivity. Although we are developing

techniques now to revive fish -- you know, we can run now hoses to boxes. This has been done on the Columbia River --

MR. WALDEN: Recovery boxes? Yeah.

MR. KNUTSEN: -- pretty successfully.

MR. WALDEN: Yeah. We were talking about that yesterday.

MR. KNUTSEN: Yeah.

MR. DICKS: Just on that --

MR. WALDEN: The time just expired -- well, actually I should get more time. But you go ahead.

MR. DICKS: Actually you did. You got two extra minutes.

(Laughter)

MR. DICKS: What about tangle nets? Can you guys use tangle nets?

MR. KNUTSEN: Well, that's an interesting idea. I mean -- and I've gone to smaller mesh nets for a number of reasons, mainly because it doesn't girdle the fish and bruise them when I catch them. But yeah, I think that's an interesting option to begin to look at other options.

MR. DICKS: Because then you could release the

wild fish?

MR. KNUTSEN: Yeah, when there is a problem that's -- that would be a good thing to check out, I think, yeah.

MR. DICKS: And reefnets is another option where you could release the wild fish as well?

MR. KNUTSEN: Yes. And also, you know, changing the gear size, maybe depth, restrictions, there is a lot of different kinds of things we can use to make these fisheries more selective. We're doing lots of stuff now. I mean, we have opaque strips on the top of our sockeye net to minimize seabird take now. I mean we -- we're the only gillnet fishery in the world that does that. And so we've put a lot of new programs precisely to do that.

MR. WALDEN: Can I just ask one more question? I heard yesterday that the gillnetters in the Columbia River system are the only gillnetters that work in a river system in the U.S. and actually are commercial. Yeah, commercial gillnetters. The Columbia is the only one with commercial gillnetting still in the river system?

MR. KNUTSEN: Well, of course you have, you know, a lot of tribes. The tribes maintain --

MR. DICKS: Aside from tribal rights.

MR. WALDEN: Right, in terms of non-tribal --

MR. KNUTSEN: And then you've got Great Lakes fishermen that work in fresh water, you know. I don't know -- you know, the Yukon River, I mean, you've got Alaskan river fisheries as well.

MR. WALDEN: Yeah. That are gillnet?

MR. KNUTSEN: Yeah.

MR. WALDEN: In-river?

MR. KNUTSEN: Yeah.

MR. WALDEN: Okay. All right, that helps. Thank you. Thank you Mr. Chairman, I'll yield back any remaining time I might have otherwise --

MR. DICKS: Yes, quite well.

MR. WALDEN: -- had that you use.

MR. DICKS: Congressman Baird?

MR. BAIRD: Norm, I think we need to have a whole lot more of these field hearings since --

MR. DICKS: Yeah, we're having fun.

MR. BAIRD: Yeah.

MR. WALDEN: He gets to be the chairman next.

MR. BAIRD: Yeah. In all seriousness, these

have been tremendously informative. And we thank everybody who has been here as a participant and in testifying as well. Pam, I want to follow up, were you here when I asked earlier -- I sort of anticipated possibly your testimony. I didn't -- I hadn't seen it before but I knew it's been an issue.

When I asked Bob Lohn, my impression from Mr. Lohn's testimony was that they seem to feel that their escapement targets are acceptable and will not lead to extinction in any of the rivers. And that seems to be in contrast to what your judgment seems to be. Any comments on that apparent discrepancy?

MS. BISSONNETTE: Yes, actually it's not really our judgment. The -- both criteria were set by NOAA Fisheries. One was given by them to Shared Strategy, you know, by the co-managers, I should say. And then the other was set by them in the harvest plan. We, as local governments, don't set any kind of targets. So what --

MR. BAIRD: But your critical habitat ordinances depend upon a certain escapement in order for the whole thing to work.

MS. BISSONNETTE: Yes, we put the entire program

together around those targets.

MR. BAIRD: So there seems to be a pretty significant discrepancy. You folks are saying we're going to require our local communities, our businesses, our homeowners, farmers, foresters to agree to certain kinds of procedures that are costly. And yet, the success of those procedures depends on an escapement number above that which NOAA is apparently setting, at least for some areas. Is that a fair portrayal?

MS. BISSONNETTE: For our watersheds, that appears to be the case. We haven't completed our review but that appears to be the case.

MR. BAIRD: What process exists for you to try to resolve this difference of -- this difference?

MS. BISSONNETTE: Well, I represent Executive Sims on Shared Strategy, and have brought it up there a number of times. And we are hoping that it will get resolved either there or between the members of U.S. Fish and NOAA Fisheries that sit on Shared Strategy and those that are working on the harvest plan.

MR. BAIRD: Okay. And that's something I'd like --

MR. WALDEN: As I understood Bob Lohn yesterday, he said he was going to personally review this based on the questions we asked him yesterday.

MR. BAIRD: I hope we'll encourage that. Because as I heard today, you know, my impression today was that -- my impression was that he was suggesting -- and I'm not trying to put words in his mouth, but I got the impression that he was suggesting that the harvest levels are acceptable, that there will not be extinction and that they're compatible with the CE -- there is a gentleman in the back here who may have some extra --

MR. DICKS: You want to clarify that?

MR. DYGERT: My name is Peter Dygert. I'm with NOAA Fisheries and perhaps I could comment on that.

MR. BAIRD: Please.

SPEAKER: Come on now.

MR. DYGERT: All right, how about ---

SPEAKER: No, you can do it right there.

MR. DYGERT: I appreciate the concern about the escapement goals in the recovery plan --

MR. DICKS: A little closer.

MR. DYGERT: The escapement goals in the

recovery plan versus the escapement objectives that have been defined in the harvest management -- in the current harvest management biological opinion. And we would -- I think there is a time component that hasn't been reflected here. In the harvest plan, the current escapement objectives, the high-abundance thresholds are designed to -- are calculated to be consistent with maximum sustained yield given the existing habitat conditions.

And our -- if you read the biological opinion, you'll see a theme of adapted management on expectations of those objectives would be revisited periodically and regularly. And that as conditions improve, as management -- as habitat improves, that they would be revised, and I would expect the gap between existing, sort of, the harvest criteria and the Shared Strategy criteria would be close to the point that they would -- you know, to diminish the discrepancy.

MR. BAIRD: To what extent is this post-hoc justification versus A-priority planning? In other words, I've heard that this coordination between the harvest side and the recovery side has not actually existed in the past. And to what extent are what we're hearing today

kind of a rationalization for that disjunction?

MR. DYGERT: Well, there is a -- the biological opinion or our approach to harvest has been evolving over the last several years since we had listings in 1999, I believe. We have been consistently trying to keep up with the evolving science, recovery plans are -- and advice about recovery objectives are sort of new information, if you will. Our harvest -- the harvest objectives that -- the escapement criteria for the harvest objectives were designed, were calculated based on existing habitat and the productivity of the systems as they currently exist. And the --

MR. DICKS: A little closer.

MR. DYGERT: The TRT objectives were designed to be consistent with properly functioning condition in the expanse of available habitat. So -- again I -- it wasn't a post-hoc justification. We are supporting the, you know, Shared Strategy, it's -- you know, we're strong proponents of that. We think the perception of a discrepancy between the escapement goals is, you know, valid. But there are -- there is a, you know, an explanation for that.

MR. BAIRD: All right. I appreciate the explanation. I would just encourage -- and I think you heard Ms. Bissonnette suggest that they are in a bit of a quandary because they are asking for a significant sacrifice in adjustment on the part of the people they represent. And they need some assurance that the harvest and escapement numbers will coincide in some fashion that justifies that investment.

Otherwise, they are really left looking pretty stupid. They are saying, "We're asking you to do all this work and not to spend all this money and yet at the end of the day we're not going to see enough fish come back up to make it worth your while."

So I just would strongly encourage you to make sure that you don't leave them in that position; otherwise, we've wasted the money.

SPEAKER: And I appreciate that distinction. Mr. Lohn made a commitment to review that. I think I -- I think we can do a better job of explaining the evolution of the expectation about how harvest will evolve to meet the expectations of the habitat.

SPEAKER: That's great.

SPEAKER: You know, the habitat community.

SPEAKER: Thank you for offering that input. Pete, I want to ask you a question. I thank you, that's very helpful, I appreciate it. We have, as you know, a lot of gillnetters in the Columbia River. They spoke yesterday of several things that I want to ask if they apply and some have been anticipated by my friends here.

They spoke about the use of tangle nets and mandatory tangle nets on certain fisheries for a selective harvest, the mandatory use of recovery boxes, and they've asserted at least they're open to monitors on every -- at any time. You, for market reasons, sounds to me like voluntarily have implemented those kinds of procedures.

To what extent are they mandatory on the Puget Sound? In other words, if we want to move towards a more selective harvest, to what extent are in place now these kind of procedures to protect the listed fish versus the hatchery?

MR. KNUTSEN: Right. Well, first of all, I would say that if you look at our fishery there's a hole compared to the way they were 30 years ago. We've lost about 90 percent of our traditional fisheries. I mean,

harvest has been just throttled down so far that -- essentially all my guys work on, essentially, now is chum salmon, and then we have some isolated fisheries in Bellingham Bay, Dungeness where very discreet stocks are being harvested --

SPEAKER: -- and there's not much by-catch of the Chinook and the listed species.

MR. KNUTSEN: No, in fact that's always a -- where we have like, Thompson River Coho, for example, that's a concern during the sockeye fisheries. And so the state has mandatory brailing. In other words, for Sounds, they've actually -- they can't strap the whole fish and lower it on to the deck, they actually have to take them little by little and sort.

We've got -- we have had recovery box training in that situation, and also, area and time restrictions. I think you have to look at also fishery-by-fishery, because you don't want to come in with one solution like tangle nets where you don't need it. You know?

SPEAKER: Yeah, absolutely.

MR. KNUTSEN: And so I think we have to look at it and be flexible a lot. But those things are always --

I mean, I know the department is working on those things all the time. We've had observer programs to monitory by-catch down here in South Puget Sound. So it's on the radar screen and it's -- yeah, I think it's -- yeah, we're going in that direction.

SPEAKER: Okay. And there's a general sense of cooperation on the part of the gillnetters and commercial fishermen that we want to work together.

MR. KNUTSEN: Yeah, that's -- in fact, one of the things that the department did is they sponsored a fish-friendly workshop that if you want to fish, say, sockeye season, you'll have to go to a seminar and actually see how to revive fish, you know, how to do fishers techniques that will have a high rate of recovery.

So we've got a lot of those things in place. And, of course, my group, we're pushing that. I mean, our whole focus is not to necessarily, increased harvest. Our whole focus is to add value to what's there and to make connections with local consumers so that we get away from that low value mass harvest model.

SPEAKER: And I certainly support and support the efforts to restrict the pen fishing and the farm

fishing. I believe that's destructive to your market and frankly, has an environmental impacts.

The one thing I thought I would just conclude my time by commending your group for its work, but also encouraging, although we're here in the Puget Sound and I had the great privilege of representing both South Puget Sound and the Columbia River with the nature of the 3rd District, our entire region is impacted by what happens on the Columbia as well because of the power costs.

And so, well, the Puget Sound ESA Business Coalition is probably, quite understandably, concerned about what's happening in terms of the habitat harvest et cetera on the Sound, the whole region needs to be attentive to what's happening down on the Columbia River as well, because of its impact on power costs, which is, you know, driving our whole economy. So thank you for the work and I want to thank the witnesses for a great testimony. Thank you.

SPEAKER: All right, thank you very much. We're still basically on schedule. On to our fourth panel. Thank you very much.

(Recess)

SPEAKER: Next on TVW, a public meeting on the Pacific Northwest Salmon Preservation with Congressional, state and policy group representatives takes place in Tacoma on October 12.

MR. BAIRD: All right. Okay, I want to thank our panel here today. I'm going to call first on to Steve Sande from Puget Sound Anglers for five minutes, and I would like to hear -- I hope you saw those charts. The anglers are getting about this much on the end of the deal.

MR. SANDE: Well, don't worry, we haven't lost sight of --

MR. BAIRD: Give you a microphone.

MR. SANDE: I will try to be the only person you can hear today.

MR. BAIRD: Pull it up closer so we can hear you.

MR. SANDE: Do you hear me?

MR. BAIRD: Yeah.

MR. SANDE: All right. First I'd like to thank Congressmen for inviting us here. It's nice to be at the table with all these scientists and politicians. I

represent Puget Sound Anglers, which is a group of 15 independent chapters that is spread throughout Puget Sound from the straits all the way down to Olympia. Chapters are made up of thousands of members who are men, women, and especially we like the kids. So there's lots of people, lots of people on our group.

From the beginning we've been in support of HSRG which has been mentioned here before, it's the Hatchery Scientific Review Group bringing credible science into management of our natural resources instead of allowing politics to dominate. The priority is and should be recovery of the resource for the long-term benefit of all the citizens of Washington.

In the implementation of ESA the Federal Government can and does allow federal -- or does allow exemption, which has been discussed here today. As long as recovery plans are in place, two components that must be considered are certainty of effectiveness and certainty of implementation. We believe that the plan laid out by HSRG has addressed the certainty of effectiveness.

In regards to certainty of implementation, we have significant concerns. We can question political

decisions that would put a half a million dollars, for example, into the Naselle Hatchery, which as HSRG has indicated, has significant and irreparable problems. While closing Garrison Springs, which HSRG has recommended to receive only minor tweaking, in failing to fund the Deschutes Watershed Center which has strong support from HSRG.

We are also frustrated at the inability to implement mass marking, which is a critical tool for implementation of hatchery reform. In conclusion, we ask our political and policy leaders to implement the HSRG recommendations in their entirety rather than pick them apart and deem it a failure. Again, we appreciate being given the opportunity to be a partner, we consider ourselves a partner in the overall efforts to ensure the survival of returning adult salmon and steelhead. Thank you.

MR. BAIRD: Yes, now I'd call on Ramon Vanden Brulle from Washington Trout.

MR. BRULLE: Thank you, Congressmen. Washington Trout appreciates your attention of these important issues and the opportunity to offer our perspective here today.

I might as well get right to the point. Washington Trout --

SPEAKER: Hold the mic just a little bit closer.

SPEAKER: Little bit closer, thank you.

SPEAKER: Closer still, sorry.

MR. BRULLE: Okay. Washington Trout is skeptical about current harvest management in Puget Sound and throughout the region. NOAA Fisheries appears to accept two major justifications for current management approaches to salmon harvest. We've heard some allusions to both today. First, the current habitat capacity is fully seeded by existing spawning escapement levels.

And second, the consideration of extra biological mitigation for the risks imposed by harvest, specifically the notion of what NOAA calls a fair distribution of the burden of conservation. On close examination, neither of these justifications turns out to be entirely convincing. Nobody could reasonably challenge or doubt that current habitat capacity is significantly reduced from historical levels.

Meaningful salmon recovery will require sustained investment in habitat protection and recovery.

But harvest managers are asserting that habitat is so currently limited that increasing spawning escapement would not increase salmon productivity, that those extra spawners would be essentially spinning their wheels, laying eggs that will not hatch, or hatching juveniles that will not reach the ocean.

Some of your questions have recognized that as a significant claim requiring a fair amount of supporting evidence and is noted by a previous panelist, the evidence that has been offered so far, is dominated by a high degree of uncertainty. Most independent researchers agree that the only effective way to determine the productivity of available habitat would be to allow spawning escapements significantly higher than current targets for at least two salmon generations roughly 10 to 12 years.

That of course, has never been done and in fact, most populations suffer from a chronic under escapement, reductions in harvest rates notwithstanding. To hedge this argument NOAA asserts its unwillingness to impose on harvesters a conservation burden higher than they deserve relative to their responsibility for salmon declines. But it is not at all transparent how NOAA has calculated its

equitable distribution of conservation burden.

What exactly is a conservation burden unit? How are they quantified, and how exactly should they be distributed? That calculation --

SPEAKER: Pull that up just a little closer, 'cause I'm worried -- can you hear him back or not? Cannot hear?

MR. BRULLE: That calculation would have to be extremely complex and almost necessarily subjective. First, somehow determining each stakeholder's relative responsibility in salmon decline and then factoring and cross-referencing a vast array of societal cost and benefits. It is not clear to Washington Trout that these calculations would inevitably favor salmon harvest interests. Nor is it clear to us that NOAA has a legal responsibility or right to codify this essentially subjective calculation.

One wonders what timber development or agricultural interests might have to say about it or how much progress would be made once that argument gets started. Washington Trout's skepticism of current harvest management does not exist in a vacuum. In fact, it is

shared by NOAA's own independent science review body. The Salmon Recovery Scientific Review Panel was convened by NOAA to evaluate salmon recovery efforts for scientific credibility.

The rotating panel is made up of six highly qualified nationally recognized experts in genetics, ecology, and conservation biology. In November 2001, the RSRP issued an unusually sharp report harshly critical of the way NOAA manages the harvest of listed salmon and steelhead. Here are just a few quotes from the RSRP Report:

"We remain mystified concerning the scientific justification for the continuation of substantial or high allowable harvest rates on listed salmonic populations. NMFS personnel use subjectivity and legalism to justify biologically unsustainable harvest rates on several listed populations. The models used to set allowable harvest each year need to be much more thoroughly tested and validated. And finally, NMFS should develop a rational harvest policy that does not demean scientific commonsense."

Instead of responding appropriately, NOAA

dismissed the panel's report. In 2002, Washington Trout joined by nine other conservational organizations requested clarification from NOAA about its response to the RSRP's report. We never got a direct response, but NOAA did make its intention public to issue what they call the technical response to the RSRP Report.

Over three years later, we've still not seen that report and yet NOAA continues to use the same policies and rationales that were so harshly criticized by its own scientific review panel. We would urge you Congressmen to use your influence to press NOAA for a response. I want to thank you today. It looks like my time is up.

I want to let you know that Washington Trout appreciates what -- looking into these issues we hope that you'll continue to look into these issues in the future. We have significant experience and expertise in these issues. We hope that you'll consider us a resource in the future. Thank you very much.

MR. DICKS: I want to call next on a good friend, Curt Smitch, who previously served as Assistant to the Governor for Natural Resources in the Executive Policy

Office of the Governor. In this position he was responsible for the development of the Washington State Salmon Recovery Strategy. Mr. Smitch has also served as the Assistant Regional Director, North Pacific Coast Eco-region, U.S. Fish and Wildlife Service, where he was responsible for the President's Forest Plan, Habitat Conservation Plan, Endangered Species Act issues in the State of Washington and Oregon and was also the director of the Washington Department of Fisheries. Mr. Smitch.

MR. SMITCH: Thank you, Congressman Dicks, Congressman Walden, and Baird. Appreciate the opportunity to be here today to participate in a discussion about the role of harvest and salmon recovery. This is the first time I'm aware of, where members of Congress have held public meetings in the region to discuss this important component of salmon recovery.

Let me quickly emphasize, as each of you did, that focusing on salmon harvest in no way diminishes the importance of the critical role that habitat protection enhancement plays in salmon recovery. You've already heard many points of view and received considerable information on the role of harvest and salmon recovery.

Therefore, as a former head of Government Salmon Recovery Office and the former chair of the Pacific Salmon Commission, I'd like to restrict my remarks or what I call lessons learned, and offer a few suggestions for improving the harvest management of salmon.

Lessons learned number one, first and foremost, the recovery of salmon is a public decision. Whether we like it or not, if the public is not willing to make the sacrifices and pay the cost, then salmon recovery will not happen. This means that salmon harvest management must be as open, transparent, and accessible to the public as those processes involved in protecting salmon habitat.

For example, developing and passing critical area ordinances at the local government level or updating the State Shorelines Management Act to make it compatible with the requirements of Endangered Species Act or setting in-stream flows for salmon.

Two, hatchery management cannot be separated from harvest management. We have over 200 hatcheries in the region, over 100 in the State of Washington. The cost for operating these facilities approaches a 100 million a year. These facilities were built solely for the purpose

of harvest. I am, of course, aware that there are a few instances where hatcheries can be used to help conserve wild fish.

However, such efforts are minuscule in the scope of the regional hatchery effort. Thus any attempt to address the impacts of hatchery-raised salmon on the recovery of wild salmon must explicitly address harvest and vice versa.

Three, if we're going to continue the current regional hatchery production levels, then we must change our harvest management practices. As you've already heard, hatchery fish can have serious negative effects on the genetic integrity of wild salmon. The abundant numbers of hatchery fish mixed in with the fewer numbers of wild fish in the ocean and rivers can also cause serious impacts to wild fish.

This is due to the fact that we harvest too many of the wild fish in order to catch the hatchery fish. In either case, harvest management can help to eliminate or at least significantly reduce the negative effects of hatchery fish on wild fish. Some suggestions for making harvest more compatible with salmon recovery: first, continue the public

discussion on the role of harvest in salmon recovery.

We need the decision makers at the highest level involved in leading such an effort. If we're going to have the public support for habitat protection enhancement, they'll have to have a much better understanding of the role of harvest in salmon recovery.

Two, mark all of our hatchery fish so they can be readily distinguished from wild fish. This plan has been made by many scientists, and as you pointed out, by the HSRG, and most recently by the National Marine Fisheries Service and its new June 2005 hatchery listing policy.

Three, aggressively implement selected fishing techniques in order to harvest hatchery fish in all fisheries that have the potential to impact wild fish. And frankly, this is not being done at this time at the level it probably should be.

Four, educate the public and decision makers about the economic value of the harvest of salmon, tribal, commercial, and recreational. The harvest of salmon is one of the few instances where the public can readily see the economic return on the money it spends to protect and manage this wonderful fish.

Five, educate the public about the interaction of harvest escapement goals and habitat with regard to salmon recovery. This interaction is very complex, but it is understandable by the general public. We can no longer leave it only to fisheries managers and special interest to make decisions about the role of harvest and habitat in salmon recovery.

Let me close by saying that you have started a very important and long overdue public discussion about salmon harvest. If history offers us any insight, I believe we'll take your continuing involvement to ensure this discussion continues. For those of us who can't imagine living in this region without wild salmon and salmon fishing, I urge you to keep this effort going.

MR. DICKS: Thank you very much. And our clean up hitter today is going to be Svend Brandt-Erichsen. He is -- he joined the Heller Ehrman, the law firm in 1993, but before that he was the former Legislative Director to the Senator, Ted Stevens. And I must tell you that Senator Stevens has been one of our greatest advocates in the region for salmon, and also has been a great friend of our area.

And it isn't just a coincidence that the most

significant legislation in dealing with these fisheries is the Magnuson Stevens Act. And Senator Stevens now has become chairman of the Congress Committee which has jurisdiction over all these matters. So he'll be playing a very influential role. So Svend, we're glad to have you here representing Salmon Spawning and Recovery Alliance and you got your five minutes.

MR. BRANDT-ERICHSEN: Thank you, Congressmen. And I am here --

MR. DICKS: And pull up the mic, please.

MR. BRANDT-ERICHSEN: Yes. I am here on behalf of the Salmon Spawning and Recovery Alliance. Our organization is focused on what is necessary to recover the salmon and steelhead in our region. Because pacific salmon return -- they reproduce only once and then they die, recovery ultimately will be measured in our region by the number of spawning pairs that return to our rivers successfully.

And so we have to keep our eye, when we're talking about recovery, we have to keep our eye on how many fish are getting back into our rivers. You've heard today from a number of folks who represent different fishing sectors --

MR. DICKS: Pull them a little closer, they're going to have a --

MR. BRANDT-ERICHSEN: Okay.

MR. DICKS: Are you hearing him back there? Okay.

MR. BRANDT-ERICHSEN: -- and from harvest managers. One number you -- you heard a number of numbers thrown around as far as what the harvest rates are. One thing that we have to focus on, when we're evaluating the ESA issues and the recovery of the listed stocks is, what's the total take of the combined harvest of all the fisheries at Alaska, Canada, Washington-Oregon-coastal and in-river Columbia for the Columbia stocks and in Puget Sound, for the Puget Sound stocks, what's the combined effect of those -- those very -- you know, varied and several fisheries on the populations.

Now there have been significant reductions from historic harvest rates. But those historic harvest rates in the late 80s and 90s, early 90s were very high on some stocks ranging from 60 to 90 percent. Today, Snake River fall chinook have been -- in recent years the combined harvest rate is about 45 percent with an authorized rate up to 55 percent.

Lower Columbia chinook, toolys and brights are harvested in the 50 percent range. Puget Sound chinook are harvested in -- it depends on the river, 22 to 76 percent. Now these numbers vary from year to year, but the fact remains that there is substantial harvest occurring on these listed populations. Now to give you an indication, for example, with the Snake River fall chinook of how that divides out.

The Canadian Fisheries take about 11-1/2 percent of the returning Snake River fall chinook, southeast Alaska about 3 percent, Washington-Oregon-coast about 7-1/2 percent, and the in-river Fisheries in the Columbia about 22 percent. I can't give you the breakdown on the individual fishery, the individual rivers in Puget Sound, but that information is readily available. I just don't want to take the time to do it right now.

Now the difficulty is that there are some differences in the way that harvest is being managed compared to the way habitat recovery is being planned in the region. The impact of harvest is not being fully integrated to recovery planning for fish both in the Columbia and in Puget Sound. Now there was some discussion about this. Pam

Bissonnete from King County talked about some conflicts between the recovery targets used in Puget Sound.

This is an area where the differences are easiest to see, because the recovery planning process is furthest along in Puget Sound. I've given you a table which I compiled, showing in the first three columns, the numbers used by NOAA in evaluating the harvest management plan in Puget Sound. The fourth column is the upper management threshold actually appearing in that harvest management plan, and the last three columns the numbers used is planning ranges in the shared strategy process and also the TRT's recommended abundance range.

The point I'd ask you particularly to focus on the NMFS derived viable threshold number which you will see a substantially lower than the abundance targets for the planning process on the -- for the shared strategy process. The implication of that is that NOAA has identified for harvest purposes that populations may be viable they say based on current habitat conditions, there is no basis in ESA to say that a population is viable for one purpose and not viable for all ESA recovery purposes.

This distinction is unsupported. There are

similar problems in the way that the Columbia in-river stocks -- the Columbia stocks have been affected. The result of our analysis of this -- in essence, our objective in the efforts that I'm going to describe is to encourage steps to incorporate harvest issues into the recovery planning process and to actually address the harvest issues along with the other issues in the region as we're planning for salmon recovery.

We have taken a couple of steps, a couple of initial steps, we've evaluated the biological opinions that have been produced for the Pacific Salmon Treaty that affects the Canadian Fisheries in particular for the Puget Sound Fishery and for the Columbia In-river Fishery.

We also have sent out a notice to Customs and to Fish and Wildlife Service, which is responsible for enforcing the ESA restrictions on import of listed animals, indicating our intent to sue -- and there was a comment earlier that a suit had actually been filed. We actually have not filed a suit; we have to wait 60 days from having given notice before we can file a suit.

And we have not made a final decision to actually file the suit, but I expect that there is a good chance we

will. And the purpose of pursuing that suit and other actions is to try to force the agency, force NOAA and through NOAA the other agencies involved with this, to recognize the limitations on the resource the importance that harvest plays in the overall recovery planning process.

Now I'm sure you have a number of questions or you may have some questions about some of the actions that we're pursuing. I'll be glad to respond to those.

MR. DICKS: Good. Have you any indication from the Canadians, what their reaction to this lawsuit is?

MR. BRANDT-ERICHSEN: No, we have not. We did receive a -- an initial response from the U.S. Customs Service, which was, "Thank you for contacting us, we've investigated the question, and we want to tell you that NOAA regulates salmon, and we've forwarded your letter to NOAA to see if they have any comments for you." And of course, Customs is directly charged with enforcing this at the border and actually due to the way the statues are set up. Fish and Wildlife Service is also charged with the border enforcement issues on the ESA.

MR. DICKS: Now you've been around a long time. You know, the question I asked Bob Lohn yesterday was, you

know, where is it in the Endangered Species Act that allows you to take these wild fish?

And I don't think he could answer that very effectively. I mean, what we are basically doing is saying, "Well, there is excess fish, that's incidental take." But I think those -- I think that all those arguments are quite spurious. What is your -- what is your view of the ESA issue here?

SPEAKER: Well, the way that the Act is set up and the way it has been applied to salmon, most of the runs we are dealing with are threatened, not endangered, and the NOAA has adopted regulations extending the protections for endangered species to the threatened species. So the same prohibitions on take, on import, on sale of listed fish apply to the salmon as if they were endangered. There have been incidental take permits issued for essentially all of the fisheries.

I would point out -- I should have mentioned the Magnuson Act. You asked about the Magnuson-Stevens Act and its effect. The Pacific Salmon Commission -- I mean, the Magnuson-Stevens Act body for the Pacific fisheries has responsibility for identifying what an over fished

stock is. And they have done that for salmon and what they've done is, say, they've excluded from the definition of over fished any ESA listed stocks. So in essence, they've excluded the application of the over fished criteria of the Magnuson-Stevens Act to the ESA listed salmon.

Now for the -- under the biological opinions that have been issued for the various fisheries in Puget Sound and in the rivers in the Columbia and for the Pacific Salmon Treaty, in essence, what the Agency has done is they -- the level of take that is occurring is not going to interfere with recovery or is not going to push these species out of existence as a whole.

Now, there are problems with how they've done the analysis. There are inconsistencies with the way that they've applied the analysis to other sectors. And, you know, specific examples we've talked about a little bit, some of the rivers in Puget Sound -- basically what the biological opinions says for Puget Sound fisheries is that some of the harvest rates are going to be too high for the populations to rebuild to even these lower recovery numbers and so those populations are not expected to go

extinct, but they are not expected to improve under current harvest plans over the next 25 to 40 years.

SPEAKER: All right. Thank you very much. Mr. Smitch, you were Chairman of the Pacific Salmon Commission and you heard the discussion earlier this morning about the impact of the trawl fishery on endangered U.S. Chinook salmon, and we were discussing if we are going to have negotiations with the new location (T1S1 28.15) start on this. But based on your experience, isn't it also -- isn't it also going to be necessary for the United States to help Canada on some of the species that it is concerned about in terms of protecting those fish as well if there is any change to get an agreement? Could you give us your view on that?

MR. SMITCH: Well, Congressman, that is right. The United States side has a very difficult task getting ourselves together because we have Alaska, the two lower states in the tribes, and that all has to be unified in order to sit down with the Canadians. The fact of the matter is that the Alaskan fishery, I think Pat's here, he can check me on this, or Larry, but I think the Alaska fishery in Southeast Alaska catches about -- 95 percent of

the Chinook they catch are not Alaskan fish. So they belong either to Canada or us.

And so what the Canadians push for, for example, on Chinook is defer -- to back off on that harvest and then they would back off on our harvest. And so as Larry said, everybody wants the other person to back off on their harvest. So that is a very difficult issue and it will also have to be on the table when we deal with the Canadian issue off the west coast of Vancouver Island. So I think it is important to recognize that -- that the U.S. side of this is a difficult place to arrive at. We will have to work through that, but it is absolutely crucial and the Canadians will insist that we do.

SPEAKER: Based on -- I mean, when will these negotiations start? Do you have any idea?

MR. SMITCH: I think the treaty is up in '08. Yes, and so my guess is Larry and others will be starting the groundwork on that probably soon and certainly in '07 and be ready to engage formally in it sometime after it expires in '08. So it is very soon.

SPEAKER: Congressman Walde?

MR. WALDEN: Curt Isaac (phonetic T1S1 30.32), I

have a question. Who is the market for the fish the Canadians catch? Do they pretty much consume everything they catch or are we part of the market?

MR. ISSAC: Well, it is a regional market. Certainly, they land fish in Washington, as the Alaskans do. Maybe Pete could say this better, but I think of the fish landed in Washington State for consumption, only 5 percent are from Washington, Oregon. So a majority of those come from Canada and Alaska on the commercial side.

MR. WALDEN: So I would think we could exert some market pressures, couldn't we, to help in the negotiations somehow?

MR. ISSAC: Yes, I never got into that area of fish management of how you would --

MR. WALDEN: I'm not sure how you do that either, but, you know, it is clearly they have a problem. Svend, I want to go back to this issue because we heard in testimony yesterday from one of our witnesses that, you know, the fish harvest -- there was no over-harvest of stocks in the ocean under Magnuson-Stevens, which on the face of it, I guess, is true. But what was not said and that's where the name of full disclosure is, ESA listed

stocks are excluded, is that what you just said?

MR. ISSAC: That is my understanding. We looked at the potential. There was a nine circuit case (T1S1 32.09) about two weeks ago on the rockfish, which said that NOAA had to develop a recovery plan for the rockfish under Magnuson-Stevens in an accelerated pace because it was overfished. And so we looked at that to see whether or not it would apply to the salmon, and working our way through it, figured out that the way that the fish are managed under that Act, they point to the ESA and say they'll be conserved under the ESA.

MR. WALDEN: In doing what, I'm sorry?

MR. ISSAC: They point -- the fishery management council points to the ESA and says the salmon will be managed. The listed runs and the hatchery runs are both excluded from their overfished criteria.

MR. WALDEN: So they can set the harvest limits in the ocean irrespective of the ESA and its requirements?

MR. ISSAC: No, the ESA still applies. They are relying on the ESA and someone else maybe can correct me, but they are relying on the ESA to set those limits.

MR. WALDEN: All right.

SPEAKER: Bill (phonetic T1S1 33.09), do you have a comment? Why don't you talk into a microphone so everybody can hear you. You have a mike there.

MR. FRANK: I represent the state of Washington on Pacific Fishery Management Council and I have been on the council for almost 18 years --

SPEAKER: Well, pull it up. You have to be like an initial wave --

MR. FRANK: Okay, sorry. I'll get there. What we've -- when the Magnuson was reauthorized in 1996 by the Congress, there was a prohibition against fishing on overfished stocks and Peter Dygert might want to help me with this, but the national standards were developed by National Marine Fishery Service, which set forth the definition for what an overfished stock is.

SPEAKER: All right.

MR. FRANK: For ground fish, it is a stock that has 25 percent or less of the virgin biomass is determined to be an overfished stock and we, under that -- under the national standards, have to develop a rebuilding plan, which we do. For salmon, the definition of being overfished is a stock that does not meet its escapement

goal for three years in a row and there are actions that are prescribed in the salmon framework management plan that is adopted under the Pacific Council, actions that have to be taken if that occurs -- or if that occurs.

Now, in our -- we have -- in that plan, we have a table that lays all of the various stocks that are taken in some -- to some degree in ocean fisheries and the ones that are listed under the Endangered Species Act, the amount of harvest that can occur has to be coordinated with inside fisheries and cannot exceed whatever the limitation is under that's prescribed by NOAA fisheries for that stock.

SPEAKER: Is that an incidental take permit -- is that an incidental take permit?

MR. FRANK: In the case of Snake River Fall Chinook, we have two different consultations. One is for ocean fisheries and one is for fisheries that occur in the Columbia River. So I don't -- I wouldn't want to leave Congressman with the impression that the Pacific Council simply says, "Well those are ESA listed, they are going to take care of the inside fisheries, we don't have to worry about them." That is not true.

We have a coordinated process that we adopt ocean regulations in concert with the fisheries that are allowed in inside waters and the combination of the impacts of those fisheries do not exceed any ESA limits a listed stock.

SPEAKER: Svend?

MR. BRANDT-ERICHSEN: I didn't want to give the -- I didn't want to give the impression or I did not mean to give the impression that the Pacific salmon -- the Pacific Fishery Management Council doesn't address the ESA listed populations. What I was -- the point I was making was that they were relying on the ESA incidental take permit thresholds that -- basically the thresholds are identified through the consultation process, it comes out of -- it is addressed in the biological opinions to set their upper thresholds and that is coordinated between the in-river fisheries, the Canadian fisheries.

SPEAKER: And the ocean.

MR. BRANDT-ERICHSEN: But in essence, you know, what we'd ask -- what I'd you to focus on is what is the combined effect of all this fish -- all these fisheries, on the fish populations and in fact, could we lower those

combined effects and move the fish towards recovery faster by doing things like relying on marked selective fisheries.

SPEAKER: All right. I've got just one other -- other question here. I wanted to ask you to figure out who it was, I was going to ask you that. And it -- it dealt with the openness of the process and the question was that these decisions should be made more in open and, you know, I think that it is correct. And I fact, here it is. Yes, you talked about the recovery of the salmon. Your lesions learned of the recovery of salmon should be a public decision and you go on talking about that.

Can you explain how the harvest levels are set then as part of a public process given the court case of United States v. Oregon, because that is not much of a public process, is it?

MR. BRANDT-ERICHSEN: No, that is definitely not a public process.

SPEAKER: Can you just -- and get closer to the mike so I can hear you. But how has that come up against what you are suggesting? Tell me how that process works in U.S. v. Oregon.

MR. BRANDT-ERICHSEN: U.S. v. Oregon and U.S. v. Washington are -- govern really the allocation of harvest between the non-Indian fishing -- fisheries and the tribal fisheries, and that will continue and that should continue. But that is really an allocation of the harvestable fish.

SPEAKER: Is that non-ESA related stocks?

MR. BRANDT-ERICHSEN: No, they also take into account ESA stocks. However, those forms are really about setting harvest limits and allocating those 50-50, if you will, between the fisheries. Those -- to some extent, the numbers that they would use for harvest are determined outside that forum.

SPEAKER: Okay. So then --

MR. BRANDT-ERICHSEN: Okay. In other words, you --

SPEAKER: -- they are given a number and then within that --

MR. BRANDT-ERICHSEN: Right.

SPEAKER: -- forum, they decide --

MR. BRANDT-ERICHSEN: -- which would be from the Pacific Fisheries Management Council, Pacific Salmon

Commission, the state and tribal and Federal biologist would bring that information in there and say that, you know, this is what -- this is what you have to work with, now you --

SPEAKER: Why wouldn't that be a more public process? What is the advantage keeping it non-public?

MR. BRANDT-ERICHSEN: Well --

SPEAKER: Other than the judge says that is the way it is going to be.

MR. BRANDT-ERICHSEN: Yes, I don't know, Congressman, how you would open a court order and managed process. This is a concern you have on the river, which Judge Redden runs the process. I mean, that is kind of what people are worried about. That is actually a process that has been established by the courts with the co-managers and the sovereigns.

I don't see them changing that and what I was really trying to get to is I don't think we necessarily want to get into the harvest allocation between tribal and non-tribal, which occurs in that forum, but the notion of where harvest relates to habitat protection and salmon recovery is a forum that can't be managed by the

governments in a way that -- I think it needs to be more transparent.

My experience at the -- when I was with the salmon recovery office is, it is hard to get people to pass critical area ordinances and set in-stream flows if they don't quite understand how the other piece works. Now -- and they've often been told that it is under control, it is too complex, et cetera, and to some extent, it isn't under their control. It is under the control of the governments to set those harvest targets, both by court order and by their direction under statute.

However -- and I think we are sensing this in the region now that when the cost gets to high that you are really starting to have people finally look at salmon management, which is what you folks really to me represent, is a level of concern. Then I am saying we have an opportunity here now to open that process up and more (T1S1 42.17) because at the end of the day, if we do not do that, then I am concerned as someone who doesn't want to see the salmon continue and want to keep salmon fishing, that people will, for example, reject King County's critical area works (t1s1 42.31) as we are not

going to do it until the other guy does it. We don't want to get into that position. I won't move until the other person. So that is what it means.

SPEAKER: And clearly where there is a disagreement among targets and a lack of clarity and some things done in court room sort of enclosed from the public, I think, begins to feel that way, that they are left out of the process, being asked to make a sacrifice either in higher energy costs or must use their land or their way of life and for what good. And that is why I've been asking the questions I have and I appreciate your answers and others. I --

MR. BRANDT-ERICHSEN: And let me say, Congressman, on behalf of the -- of those who have the very difficult job of doing the harvest management, I think what you are hearing from them is if we play through, they are going to show that they are doing a -- for the most part, a responsible job. But right now, that credibility with people who are uninformed about this process, needs to be raised to another level, in my opinion.

SPEAKER: And there is still the underlying

issue that nags at me and a lot of people I represent which is how is it helpful to restore a wild run salmon or any other species when we allow it to be harvested and when we allow 48 to 50 percent of the wild run to be harvested and then call that incidental. It is just a hard thing for us -- some of us to understand, but we are trying.

MR. BRANDT-ERICHSEN: Well, one of the things I learned with the -- when I was with the Fish and Wildlife Service in administering Endangered Species Act is you do have to be careful to apply the biological criteria to each species and fundamental to this debate or this concern that you are articulating is that the salmon managers believe they can treat salmon differently as a species than, say, spot it out. But that is a debate that people like yourselves and others are going to have to get a lot more sophisticated about it, comfortable with, because it initially strikes you as inconsistent with the purposes of the Act.

SPEAKER: Well, how does it strike you? You are the -- you are the guy who was there. I mean, you've looked at the Endangered Species Act for a long period of

time. I mean, give us your best take on this?

MR. BRANDT-ERICHSEN: I -- I believe that salmon can have some level of harvest wild runs and sustain themselves, and I think, however, as somebody said here earlier, I think the way the process is set up now, we often do not -- we are not conservative enough on some of these escapement goals and we need to take a look at that. But I'm not in the camp that says you can never harvest wild fish, Norm. I do believe that they can handle that.

It is just that when we have all these other factors influencing it, we have to understand it, and I think that is what is Svend and others were saying, is how do these different parts interact together so we have a much clearer understanding of when harvest is okay and when it is not. But you can still have harvest. But we are coming out of an era -- you heard the numbers today when we harvested at way too higher rates. We are transitioning into a new era and frankly, we need additional information and a fresh look at that.

I mean, I am troubled, I think as Congressman Baird signaled here this morning, about the notion that extra fish are wasted somehow or they are not being fully

utilized. I think, intuitively, people react to that as a very simple -- simplistic, if you will, model of a very complex ecosystem. You know, we do see strengths (t1s1 46.27) in Alaska, for example, that are shoulder-to-shoulder with fish and they seem to do okay.

If your goal was harvest in there, then maybe that's in a -- you can have a different opinion, but that is a discussion that really needs to be teed up and get the public's confidence upon.

SPEAKER: Congressman Baird, I just want to follow up on that -- on that theme and -- I'm looking at the chart that -- that has been provided to us here and -- so the kind of numbers I alluded to earlier, I just am shocked -- I just -- incredulous, actually, it's beyond shock that -- that there's a belief that the entire Nooksack River can sustain 200 fish.

I don't pretend to be a biologist. I spend a fair bit of time in rivers, but -- there are rivers that you walk across the fish. The healthiest rivers in Alaska, in Canada, you can -- you know, when the runs are thick you can walk across them, and this premise that the entire Nooksack drainage can handle, if I read this right,

200 fish is --

MR. BEARDSLEE: Congressman, can I -- can I comment on that?

SPEAKER: Please.

MR. BEARDSLEE: If you look at the top column, NMFS-derived viable threshold for -- the Nooksack was 500 fish, according to NYMPHS if -- based on current habitat conditions, 500 fish coming back into the two rivers combined would be a viable population, meaning sustainable population. And that's -- that concept, that is not consistent with the way that viable fish population concept has been applied in other contexts.

The harvest managers identified a population of 2000 fish as an upper management threshold. My understanding is that that also is based on an assessment of current habitat conditions. If so -- if that is based on current habitat conditions, you'd think the fish would be moving toward that number.

This is a particularly troubling population because a substantial harvest occurs in Canada. The harvest rate that this particular group of fish can sustain, according to the agencies and, you know, I'm not

a biologist, I can only go on what is in their reports. NMFS said that this population could sustain about a 12 percent harvest rate and continue to move toward a recovery number. The current harvest rate is about double that with about 17 percent occurring in Canada and seven percent or less -- six percent or less occurring in Puget Sound. That is a -- that particular river population is a sore spot or should be a sore spot in the next negotiation, it was in the last in the last negotiation.

That is probably the toughest case, but there are other -- essentially, all of the northern Puget Sound populations are affected by a combination of the Canadian and U.S. harvests, and you'll see that same problem there.

SPEAKER: Ramon and Steve, we heard yesterday from Gary Lomez of Fish First, which you may be aware of -- has been tremendously successful as a volunteer organization of -- largely sport fishermen. In their habitat restoration areas, they've taken creeks or basically hardpan bottom and these sorts of habitat and going from, I think it was -- I heard, yesterday, if I remember correctly, 32 returning pairs to 3000 pairs in a relatively short order on a drainage -- on a creek that is

much smaller than the Nooksack River. And their assertion is that the more fish that come back, the more fish can come back -- because of the aforementioned nutrient issue, but also the -- in the process of creating the reds, they stir up the gravel, keep things moving, and that improves the habitat.

Have you any insights from your experience or knowledge about this issue in the context of these, what I think are fairly low numbers?

MR. SANDE: Well, it is, as you've pointed out, it is true that the input of marine-derived nutrients from returning salmon is and it has been shown to be an important factor in the capacity of available habitats as well as the ecological interactions of spawning and rearing salmon in their habitats. One can -- I've heard it put, that salmon essentially are their habitat. That is one of the issues, I think, is -- as Kurt just alluded to that is not -- does not seem to be captured in this formulation of current habitat capacity and its ability to support increased escapement of salmon.

And again, as I mentioned in my testimony, one of the concerns that Washington Trout has is that this

issue about habitat capacity and its -- the estimates of the productivity of the existing habitat is dominated by a high degree of uncertainty. That the -- the estimates, the proofs that harvest managers use to support this assertion are based on a small amount of data and don't really reflect what might be necessary to prove that assertion.

SPEAKER: My inclination would be to let more fish pass and let the fish sort it out, and evolution would have a way to deal with that. My just -- gut experience is that I think we'd have a pretty -- it'd make more sense to me to try it, plus, I just -- as I mentioned earlier, I think you're in a tight margin when you're talking about just a couple of hundred fish. It just seems like a -- all kinds of things could happen to a couple of hundred fish. Let me raise one other question. Are there dams on the Nooksack River?

SPEAKER: There are several branches to the Nooksack. I don't know the -- I can't remember the specifics. The central Nooksack does have a weir that blocks off passage. It's not a very long --

SPEAKER: How far off is it?

SPEAKER: You know, I don't know the specifics.

SPEAKER: Anyway, what I'm getting to, and I don't have to pursue that. The reason I'm asking maybe some -- how far off is that? What I'm getting at here is, okay, what I'm getting at here blocks all of it?

SPEAKER: For the central port, north and south port do not.

SPEAKER: Okay. But what I'm getting at here is we're -- not all of the rivers that we have been discussing today here in the context of the Puget Sound are obstructed by dams of the scale of Bonneville et cetera et cetera. So yesterday we were down on the Columbia River System where some of us asserted that the predominant, almost sole obstacle to fish recovery are dams. Then we are up in a different ecosystem here that are not blocked by dams.

I don't think anybody pretended the dams don't have an impact, but to try to assert that we needed to get the solution. Yesterday Larry Cassidy said there is no silver bullet. Some of us asserted that the silver bullet is tearing out the dams. If that's a silver bullet, help me understand how rivers that don't have dams are also

having salmon recovery problems.

I don't follow the logic there. And it would seem to me if that's the -- if you got some rivers that are also seeing lower numbers of fish without the same kind of dam structures, it would seem to me, you might want to look for third causes or other causes. And it would seem to me apropos of our discussion today that maybe harvest levels, obviously ocean conditions et cetera have something to do with it. But that harvest might be one of the variables we would look at. That's sort of where I was going with that. Is it --

MR. DYGERT: I'm trying to get a sound check here again. I'm Peter Dygert with NOAA Fisheries. And I thought maybe I can take another round at addressing some of the apparent discrepancies that have been alluded to here.

SPEAKER: Let me be -- precede Peter. At some point, one of the things we will be asking after today is, can you give us some empirical studies of rivers comparable to the rivers listed here wherein we have seen a problem of overabundant fisheries, or overabundant escapement causing an actual decline in numbers versus an

increase in numbers.

In other words, some empirical data where we have got a river of somewhat similar characteristic to the ones here where we have seen too many fish subsequently suppress the numbers relative to too few fish. I would sure like to see a study of that.

MR. DYGERT: All right. I'll make a note of that. And let me comment to some degree in relation to the Nooksack, that's a good -- there is a case in point there. We -- the commentary here notes the distinction between the recovery -- TRT recovery objectives and those at our -- in our current harvest plan.

And that we have noted that in our harvest plan that 500 fish is an appropriate level of escapement given the available habitat. We have not concluded that that is sort of the endpoint and satisfactory for recovery. Again, we would argue that that's a -- consistent with the current productivity of the habitat and that once as habitat improves, it should move in the direction of higher escapement, higher escapement goals.

Now in addition to we would also not discourage additional escapement to the whole systems. In fact the

exploitation rate management is designed to allow additional fish to escape.

In the Nooksack, in addition to the natural origin fish, which have returned on the order of two or three or four hundred fish in recent years, there have been an average of about 400 hundred, about 4000 hatchery-origin fish to the northward Nooksack, which are part of the supplementation program that we also rely on to support the continued viability of that stock in the interim while we achieve further recovery.

But the fact that we see several thousand fish on the spawning grounds and yet the returns from those fish are still on the order of a few hundred is evidence to us that more escapement in itself is not the solution or the remedy to providing --

SPEAKER: Isn't that total logical?

MR. DYGERT: To build the rocks.

SPEAKER: Isn't that total logical? I mean you're saying that we get several thousand fish spawning and yet they don't get back up there. Therefore, more spawning fish doesn't mean more fish get back up. That's the essence of our discussion here today. They surely

can't get up if you are killing them before they get up there.

MR. DYGERT: Well, the fact, and most of those fish that are coming back are fish that are coming from a hatchery program. And so, you know, despite whatever harvest they may be subjected to that number of fish does escape and spawn naturally.

The question here is -- recovery criteria are not just about abundance. They are also about productivity, the sort of criteria from the scientists that direct, that provide advice on what it is, what are necessary, tell us that productivity is equally important to abundance as a criteria for --

SPEAKER: But I'll just dispute, as I heard your definition of productivity, productivity is not being defined as number of fishes spawned and the resulting hatch from that, but number of fish you return on. Again, I find that as sort of total logical, your defining your outcome as if the intervening factors didn't exist. And I don't understand that.

Maybe in addition to maybe getting me some empirical studies of rivers like the Nooksack where you

have seen an excessive return of fish suppress the productivity. If you could also give me and my colleagues here -- I'm assuming that you have done an analysis of the Nooksack drainage and looked and said, "Okay, here is a corner where we have got a nice gravel bar that ought to be suitable for spawning and that will sustain let's say, a 100 reds.

And then here is another corner where we have got that, and here is a little side stream where they can go to mature et cetera. I'm assuming that you have done that kind of inventory, and somewhere on there you have got a little analysis that says, "We think this area could sustain this many reds. This area could sustain this many." Can you get us that just so -- so I can get a better flavor of where these numbers of 500 derive from?

MR. DYGERT: I can provide the estimates of where the number 500 came from and we'll rely on the state and other -- and tribal co-managers to help provide that information.

SPEAKER: That would be helpful. Then I would get some insight into the process that leads to this.

MR. DYGERT: You know, I guess I would just -- I

would emphasize a point of the time line in transition. We are managing to current productivity levels. The recovery goals, which I would remind, you know, it's useful to remind us the recovery plan itself is not complete.

It's been developing over the last few years. And it's just now been presented to us as sort of a new benchmark for management. And we embrace that and are about to publish that as our guidance. And so we look to manage fisheries and other activities consistent with a developing recovery plan.

And I think we need to kind of keep in mind sort of the evolving nature of the scientific information in how management is, you know, trying to keep up with the information as we move forward.

SPEAKER: Congressmen, if I could comment a little bit on that. I think it's our understanding in Washington Trout that those estimates of -- those numbers, 500 fish in the Nooksack are not based on specific inventory of habitats within the Nooksack. But more I think it's -- Peter just explained on the stock recruit data that they are getting is, Peter explained that, you

know, we allow this many fish to spawn, we don't see an improvement in recruits from allowing that increased escapement ergo we must have reached habitat capacity.

One of the objections that Washington Trout has to that reasoning is that it's based on a small amount of data as I expressed in my testimony. To really test that hypothesis you would need, you know, at least two salmon generations to make sure that the signals that you were getting were based on what you thought you were getting from them.

There is all sorts of other issues that could explain why you're not getting returns from increased escapement that you might expect. And that it would need to be -- you need data from, you know, much, essentially much larger data sets than the conclusions that are being drawn so far.

SPEAKER: I appreciate that. Thank you very much.

SPEAKER: Especially, I think because you are allowing the directed harvest on the fish over that number, is that right?

SPEAKER: The -- actually, you know, to be

honest with you, I don't feel particularly qualified to answer that particular question. It's at a technical level beyond my expertise.

SPEAKER: The -- if you review the biological opinion, NMFS' opinion is that a population is above the viable threshold that they have identified could support a directed harvest. The actual plan, harvest management plan, that call them there, numbers above that level, they would contemplate that population being able to support a directed harvest.

SPEAKER: And so that's where we have the problem, the issue about the ESA?

SPEAKER: That's right.

SPEAKER: Yes --

SPEAKER: Well, maybe I can just follow up because you asked -- you were commenting about the data sets and you need a longer data set to really be able to evaluate what's going on. How long was this data set that led to the 500 fish number?

SPEAKER: 1984, 20-year.

SPEAKER: Oh it's a 20-year data set? Okay, on the river.

SPEAKER: Let me ask -- so, you are saying that what's the maximum number of fish that were allowed to escape during that time period?

SPEAKER: 4000 fish spawning in recent years on the spawning ground.

SPEAKER: Well, we'll discuss it further. I'd like to know some of the other variables that relate to the returning numbers, I mean we earlier saw --

SPEAKER: We have a question back here. We have a little time now.

SPEAKER: Part of this, which remain with this discussion. During the Puget Sound Salmon Management Plan, which is in effect from the early '80s about 19-20 years both recently superseded around '99, there were nominal estimated maximum sustainable yield harvest rate escapement goals that were not mapped for 18 out of 19 years. So even though best estimates based on stock-recruit data such as existed with (inaudible T1S2 22.27) as long as South Sound River and the Nooksack go on to escape -- comments about the higher harvest rates and -- are consistent with that. So, the point is that if you are going to pull habitat capacity even from the stock-

recruit perspective, I'll let this many adults spawn this year, future years, how many of their children through adults.

In the context of recovery, we'd like to use several generations while trying to get them on the statements whenever it is possible (inaudible 23.04) most escapement goals to really evaluate whether the stock-recruit relationship is changing as a result of habitat recovery measures, harvesting habits which can change by all of these experiments. So that's the concern. We haven't seen that natural experiment, it has not really been conducted in full backed capacity and even the suspicion that it has been reduced in the last 10 years because habitat --

SPEAKER: Let me put the context to that if I might. I think that's where some of the public's skepticism comes in. Certainly where some of my personal skepticism comes in. If you are saying that we are concluding that allowing more fish to return doesn't -- allowing more fish to spawn doesn't lead to more fish returning, but we are harvesting enough fish that we don't actually allow that -- those fish to return to test the

hypothesis. It creates a sort of a skepticism in the mind of the public and in terms of this policymaker about if we're going to manage the harvest and escapement in that fashion, with that kind of reasoning what's -- how can we feel confident about all the other multi-million dollar mandates that we put on our society from farmers to foresters to developers et cetera? And doesn't that cut the margin pretty precisely?

SPEAKER: National Marine Fisheries and the Department on Puget Sound Chinook Management Plan and others that they seem to be using what (inaudible T1S2 24.50) characterizes a knife edge management plan that's picking up numbers that is maybe more definite but there's not a great deal of margin for error for meeting a minimum statement or if you get some things wrong and the shift that has been made to escape exploitation like management, you've heard that -- the assertion which is a class-wise disagreement that -- you knew that you have got to fix this exploitation rate, you have a whole bunch of fish and in terms of absolute numbers we are going to get in that year, a whole bunch of escapement that we're -- it's a statement in constant proportion.

SPEAKER: But it will be covering most of the years or for one of those variable numbers and escapement goal management which has him required, requires the harvest rates be managed, that is the technique. So I don't think it's fair to juxtapose escapement management against exploitation, exploitation rates will throw all the need -- the escapement goal but the enacted management purpose is, if this is referred threshold that I biologically believe is needed then maybe we can't go fishing this year. Fish will only be enough to barely meet that escapement goal, and I think that's (inaudible TIS2 26.11) where a lot of people don't want to go.

SPEAKER: To put these numbers into little more context too when you look at the Columbia river system, my understanding is that the $100 million, $80 to $100 million summer spill this year was designed to restore -- was in -- theoretically going to increase the return by about 300 or 400 listed fish. So when we're around those kind of margins down in the Columbia, $100 million expenditure for 400 fish and that's the maximum you are talking about in one entire drainage, you just start seeing the scale for what kind of cookie.

SPEAKER: Congressmen, could I draw one thread together? Just -- you had some testimony earlier today about increases in Reds and increases in populations of the Snake River Fall Chinook following their reduction in harvest of the Snake River Fall Chinook. Reduction took effect about '96 and there was an increase in Reds and an increase in population that followed. You asked about what kind of conclusions you could draw from that and the response that you got was you may see some effect from reduction of the harvest but there is also the fact that ocean conditions improve.

So, there the discounting of the effect of reducing harvest, the benefits of reducing harvest is what you heard in the testimony. I think you also have to apply the same thinking where we see populations that may have remained flat despite changes in harvest. You cannot for the same reason say that harvest is not having an effect on those populations.

SPEAKER: Well, sort of by definition, you would think that you would have seen a proportionate increase because the ocean conditions have improved for all the fish presumably.

SPEAKER: Correct.

SPEAKER: And you would have seen -- you would have thought you would have seen that manifest, for example, in returning numbers of the Nooksack had not the harvest numbers constrain that.

SPEAKER: And I don't want to say that habitat is not important because habitat is important but the point is that harvest is important too.

SPEAKER: Congressmen, if I could just make one more -- I just want to know that your skepticism is shared not just by the relatively uninformed public, but also shared by NOAA's own scientific review group. We provided each of you with a package that includes that report, and I would encourage all of you to read it carefully.

SPEAKER: And you are saying that they still have not implemented that?

SPEAKER: As far as we understand NOAA has yet to address the criticisms expressed by the RSRP in that 2001 report.

SPEAKER: Can you explain that?

SPEAKER: I bet he is glad he is staying.

SPEAKER: Yes.

SPEAKER: Congressman Walden said, "I bet you are really glad you are staying."

SPEAKER: Actually I can't explain it. You know, I guess I would point -- the RSRP report provided a review and comment on harvest. The recent ISEB, also an independent science advisory board, also provided a recent review and comment on harvest, and I would just recommend that you look at them both.

SPEAKER: I have read it front to back.

SPEAKER: And we agree -- we think the ISEB report was, you know, a very useful objective review of harvest management and we concur with your conclusions and recommendations.

SPEAKER: But their conclusions were that there is a tremendous amount of ambiguity and uncertainty in terms of what the harvest rates are because of our major, and in terms of the impact of those harvest rates and they called for a much improved scientific study to analyze that.

SPEAKER: The --

SPEAKER: The reason I raised that is because if you have that kind of ambiguity you have got a pretty

significant margin of error in your harvest estimate rates. And when you are looking at 400 to 500 fish, we are within margin of error.

SPEAKER: I'm glad that you brought that up. That has come up a number of times in the last couple of days, and I wouldn't -- the distinction -- the first recommendation of the ISAB was it -- we looked more carefully at the -- basically the level of detail in our management and provide more specific scientific information regarding that. And that was -- the context of that was not, excuse me, was not so much that our existing management is not providing adequate data. It is that we would be better if we could provide more specific data, more stock specific data as we manage our fisheries.

You recall Pete Bisson came up, Dr. Bisson came up during the testimony and recognized that the states and tribes are most -- are doing the doing the management, they are cash strapped and the kinds of monitoring the -- and they are limited in the kinds of monitoring they are able to do. What they would recommend is that we provide better information on more specific -- better stock specific information and that we manage accordingly.

They were not being critical about our -- about the fact that we weren't doing existing data and we are not being critical about at least to the same degree, about the level of precision of existing management. I would --

SPEAKER: I disagree with that. I think they were not saying, you aren't using existing data, but I think they were saying that the existing data are severely limited and therefore --

SPEAKER: True.

SPEAKER: Confidence one can draw about management decisions based on that existing data must be modulated to a significant degree. That's how I read the report, and that's what I heard yesterday in the testimony.

SPEAKER: And I think it's a fair comment. We do take the uncertainty into account. I would -- for example, I would highlight the circumstance in the 2005 spring Chinook fishery. We thought there was a pre-season forecast of 250,000 upriver spring Chinook in the Columbia River. The -- the non-treaty fishery had a target harvest rate of two percent, all in selected fisheries.

It turned out the run was a 100,000, a major disappointment. The fisheries were managed in season, in real time. Before every opening test fisheries were -- test boats were put out to see what the stock composition of the fishery was, so that they knew when they put the fishery on the water, how many fish they were going to catch.

At the end of the day, despite a 60 percent decrease in the overall abundance of fish, on anticipated decline in abundance, the state fisheries and the tribal fisheries too for that matter still met their harvest rate objectives and didn't exceed a two percent harvest rate. To my mind that is a good example of real time in season management responsive to information, and despite very significant changes and expectation system that is flexible and responsive to, you know, to the circumstances.

When I first came up here, the kind of question in mind was how did we respond to the RSRP report. We did complete a part of -- I don't recall the specific -- the specifics of RSRP comments. But I know one of their questions was a request for an explanation for how NOAA

Fisheries conducts harvest consultations and on harvest activities. And we did complete that -- did complete a report about a year ago that described how harvest is reviewed.

And my understanding is that Bob Lohn provided the Congressmen a copy of that report, and yet is designed for, you know, to be publicly accessible. Don't -- try not to lose the people in the sort of legal technicalities of a really complex process. It provides some case studies to help illustrate the difficulties and the range of circumstances that we deal with including a discussion of Puget Sound Chinook, Willamette River Spring Chinook and Sacramento Winter Chinook as examples to --

SPEAKER: Can you -- can you make that available to these folks, because from what I was hearing earlier, they feel they haven't had a chance to access that.

SPEAKER: And I don't think it has been broadly distributed. But we will -- I will try to see that it is posted on our website and then people can access it through that vehicle. So we have been responsive to that request.

SPEAKER: Thank you.

SPEAKER: Okay. I want to thank the panel and I want to thank all of you for coming. Any final comments, Congressmen? I don't have any final comments except to thank you and Congressman Baird for joining with me today.

SPEAKER: I might just like to make, if I might --

SPEAKER: Yeah.

SPEAKER: When Norm and Greg and I began to address this issue, the reactions ranged from "You don't need to even address this because the agencies have it all under control" to "This is the craziest thing you could possibly do politically because it's political suicide to talk about salmon, and you better just stay away from it." We believe that we have a responsibility to all the region, the people who use the salmon, the people who pay the cost of trying to restore the salmon and we believe that by working together we can improve what we are doing.

We believe we have a responsibility to understand it first of all, because as you can tell from the dates it's quite complicated, and there are people with different opinions. The fact that we've had a good meeting yesterday and a good meeting today where people

have been informative, respectful. We've been able to have this kind of give and take, tough questions, responsive answers have helped me understand it personally tremendously.

And I'm immensely grateful that so many people took so much time and have brought so much knowledge to the table that we could benefit from. And we have made a commitment that we don't have a pretense of knowing what the silver bullet is. We know there is no single silver bullet. But we will continue from this to see what role we can play to try to further enhance the comprehensive salmon recovery process including addressing this issue of trying to get more adults upstream to return.

So I just want to thank all the witnesses today and especially the audience. I reiterate what we said yesterday, which is if you weren't able to offer personal commentary because of the limited time we have but you feel you have something we should know about, we want to hear it. Please offer us your written comments and we will take those into consideration.

SPEAKER: Also I want to thank University Of Washington, Tacoma, for making this space available to us

for the hearing. And I want to also thank my staff for the work they did in working with Brian Baird's staff on these two days.

SPEAKER: Absolutely.

(Applause)

SPEAKER: And finally if people have questions about, you know, if people want to say, well, I heard this was said at the meeting, refer them to the transcript that's available on the video from the folks who covered this, because we want this to be disseminated as widely as people can, so they can see how the issue is being approached. Again, I want to complement Norm, thank you.

SPEAKER: Bringing the public's business before the public, this is TBW.