U.S. DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

PUBLIC HEARING
regarding
ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT
FOR THE TRINITY RIVER MAINSTEM FISHERY RESTORATION

EUREKA INN
518 7th Street
Colonnade Room
Eureka, California

TUESDAY, NOVEMBER 23, 1999

1:00 P.M. and 6:00 P.M.

APPEARANCES

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PC-4

INDEX

SPEAKER	PAGE
(AFTERNOON SESSION)	
DENVER NELSON	11
TOM BROADMAN	14
LAWRENCE LAZIO	16
TOM WESELOH	20
CAROL KRUEGER	23
MARIANNE DESOBRINO	27
E.B. DUGGAN	28
TROY FLETCHER	34
DAVE NAKAMURA	40
DUANE SHERMAN	42
JIMMY SMITH	45
JOHN STOKES	46

(EVENING SESSION)	
EMELIA BEROL	56
KRISTI WRIGLEY	60
JESSE NOELL	62
DENVER NELSON	64
JAIME O'DONNELL	66
AIDA PARKINSON	71
DAN DOBLE	72
DAVID MORROW	73
WENDY RING	76
JOHN MCKEON	78

Main TOC Next Page

5

AFTERNOON SESSION 1:00 P.M.

THE HEARING OFFICIAL: We are now on the record.

Good afternoon. On behalf of the United States Fish and Wildlife Service, I welcome you to this public hearing. The U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe and Trinity County are conducting a joint process for taking comments on the draft Environmental Impact Statement/Environmental Impact Report for the Trinity River Mainstem Fishery Restoration.

My name is Robert Ruesink. The last name is R-U-E-S, as in Sierra, I-N-K. I'm the supervisor of the Fish and Wildlife Service Snake River Basin Office in Boise, Idaho, and will be serving as the hearing official for this hearing.

The hearing is scheduled from 1:00 to 3:00 p.m. this afternoon and we will be back here this evening from 6:00 to 8:00 p.m.

With me at the front table are representatives from the Fish and Wildlife Service, Hoopa Valley Tribe, Bureau of Reclamation and Trinity County. You'll hear more from each of them in a minute, and they'll introduce themselves.

Other representatives for the U.S. Fish and

6

Wildlife Service are also at today's hearing at the registration and information table outside the entrance to this room. They have additional information for you at that table and will be able to answer questions that you might have about the Trinity River restoration project.

At this point I'd like to introduce Bruce Halstead, who is the Fish and Wildlife Service representative today, and he will make an opening statement.

MR. HALSTEAD: Thank you, Bob.

Good afternoon. My name is Bruce Halstead of the Fish and Wildlife Service office in Arcata.

Release of the draft Trinity River Mainstem Fishery Restoration Environmental Impact Statement/ Environmental Impact Report is the latest step in a process that Congress initiated several years ago to address longstanding concerns about the effects of water diversion, instream habitat, sedimentation, and watershed management issues on the Trinity River system's health, including its once-abundant salmon runs.

Congress directed the Secretary of the Interior to evaluate the impacts of these issues and to take steps to restore the health of the Trinity River system. In response to this Congressional mandate, the Department of the Interior has been actively participating in a study for more than 15 years. This has been a collaborative

7

effort by the U.S. Fish and Wildlife Service, the U.S. Bureau of Reclamation, the Hoopa Valley Tribe, and Trinity County.

The EIS/EIR summarizes the research that has been undertaken over the past several years and identifies for public comment several potential alternatives for restoring the Trinity River system. Impacts considered under National Environmental Policy Act and California Environmental Quality Act are not limited to the impact to the fishery resources of the Trinity River but include all impacts of the actions affecting the human environment. The Department encourages public comments on all aspects of the draft EIS/EIR.

This public hearing is part of a comment process on the draft EIS/EIR. It will be closed December 20, 1999. A record of decision is expected in the early spring of 2000.

On behalf of the U.S. Fish and Wildlife Service, the Bureau of Reclamation, the Hoopa Valley Tribe and Trinity County, I thank you for the effort you have made to attend this meeting and also thank you in advance for your comments.

Now I'd like you to hear some introductory remarks from Tom Stokely, the representative from Trinity County.

MR. STOKELY: Thank you, Bruce.

8

I'm Tom Stokely. I'm with the Trinity County Planning Department. I've been working with the project team to develop this EIS/EIR for the last five years, and I'd just like to welcome you here and encourage you to submit your oral as well as written comments, either here today or by the deadline on the 20th of December. And also I wanted everyone to know that the Trinity County Board of Supervisors will be holding a public hearing on this same project in Weaverville on December 7th from 7:00 to 9:00 p.m. at the Weaverville library, and I encourage you to come and also attend that hearing and let your feelings about the document and the project be known.

Thank you.

Now I'd like to introduce to you Jasper Hostler of the Hoopa Valley Tribe.

MR. HOSTLER: Yes; I'm here to represent the Hoopa Valley Tribe.

I've been involved since 1990, when, in fact, we were the first ones to start recognizing the reduced flow, and since then we have been -- Hoopa Valley Tribe has been the lead -- one of the lead tribes.

Thank you for being -- attending this meeting.

MR. SMITH: My name is Russell Smith. I am representing the Bureau of Reclamation, Northern California area office, which is located at Shasta Dam.

9

I have been working to improve the Fish and Wildlife in the Trinity Basin for the past 11 years, and I represented the Bureau of Reclamation in this flow EIS/EIR process.

THE HEARING OFFICIAL: Thank you.

Public comments on these draft EIS/EIR documents will be accepted until December 20th, 1999. After review and consideration of your comments, the four co-lead agencies, along with the cooperating agencies, will prepare a final EIS/EIR. The purpose of this hearing is to receive your comments on the draft documents. Comments on all aspects of the alternatives described in those documents are very important and will be carefully considered. Because of the importance of your comments, it is necessary that we follow certain procedures here this afternoon.

If you wish to present comments at this hearing, please register at the table outside this room. When you register, indicate any organization that you are representing. When you are called to present your comments, please come forward to the microphone in front, begin your presentation by stating your full name, spell it for the record, and indicate if you represent an organization.

This is an informal hearing, and therefore you will not be questioned or cross-examined in connection with

10

your comments; neither will representatives of the agencies respond to questions. They will become a part of the administrative record on this action. They are being recorded by the reporter to preserve them for the record. Please keep in mind that the reporter will not record any statement from the audience or made to the audience. Comments must be made into the microphone and addressed to the agency representatives at the front table. Please leave a copy of any written material to which you refer with the reporter or the registration staff. If you are reading your testimony, we ask that you please read slowly for the reporter to be able to record all of your comments verbatim.

Instead of presenting oral comments here this afternoon, or, in addition to oral comments, you may submit comments in writing. Written comments may be submitted today to the staff at the registration table or they may be mailed to Mr. Joe Polos. That's P-O-L-O-S. U.S. Fish and Wildlife Service; 1655 Heindon -- that's H-E-I-N-D-O-N -- Road, Arcata, California, 95521. This address is also available at the registration and information tables outside this room. Again, written comments will be accepted through December 20th, 1999. Written comments will be given the same consideration as oral comments that are presented here this afternoon.

11

At this time we are ready for our first speaker, Mr. Denver Nelson.

Would you come to the microphone, please.

MR. NELSON: My name is Denver Nelson. I'm from Eureka, California.

Do you want me to spell Nelson? N-E-L-S-O-N.

I'm a member of the Humboldt County Fish and Game Commission, but I'm not here officially representing them; I'm just here representing myself.

Thank you for coming to Humboldt County.

As you know, the Trinity River was devastated by the Trinity River diversion project. Many millions of dollars have been spent trying to restore the Trinity River. The Trinity River has not been restored, and, in fact, has continued to decline. Many years of studying the Trinity River has shown that rivers need water to function. No amount of money without water will restore a river. Much emphasis has been given to the decline of salmon and steelhead populations in our area. This decrease is well-documented by many studies and by my personal observations as a sport fisherman.

Fish numbers are certainly one indicator of the health of our river environments. There are many other factors that influence the health and numbers of the salmonid populations. A river is more than a natural fish

12

hatchery. We must not overemphasize increase in fish numbers as the ultimate goal of restoring the Trinity River. If there are no fish returning to the Trinity River 20 years from now, does that mean that the entire flow of the Trinity River can then be diverted to the Central Valley? I certainly hope not.

The concept of making the Trinity River one-half the river it once was by giving it one-half the natural flow and spending millions to move gravel around is a noble experiment. The outcome of this experiment could be measured by the numbers of fish returning. One could simply assume the goal would be to add one-half of the prediversion fish returned. If three-fourths of the prediversion fish return, does that mean that three-fourths of the predivision flow would be returned? In addition, millions of dollars would have to be spent moving gravel. Or, conversely, if only ten percent of the prediversion fish return, does that mean that ten percent of the natural flow comes down the Trinity River and fish restoration money is sharply cut back?

Between 1976 and 1998, $93,952,547 was spent on Trinity River restoration. During the same time, 648,457 naturally spawning chinook returned to the Trinity River. This amounts to $144.89 being spent per fish. There appears to be no correlation between dollars spent on

13

restoration and numbers of fish returning to the Trinity River. A much better correlation is seen between river flows and fish returning to the Trinity River. Fish responded better to water than to dollars. It would be better to spend less money on fish restoration and increase the Trinity River flows.

Humboldt County was given 50,000 acre-feet of water annually in the original legislation establishing the Trinity River diversion. This water allocation has never been accounted for, either by increasing the Trinity River flows or by Humboldt County being compensated for our 50,000 acre-feet of water flowing down the Sacramento River. One of the cornerstones of the Cal Fed process is the sale of water by those with excess water to those who need more water. When the final Trinity flow is selected, that flow number should be increased by 50,000 acre-feet, so that we in Humboldt County can use that water to further enhance our fisheries. Conversely, if our 50,000 acre-feet is going down the diversion, we should be compensated for that water by the users of that water.

The Trinity River Dam eliminated 109 miles of steelhead and salmon habitat above the dam. The ideal restoration of this habitat would be to remove the dam. The next best restoration would be to install a fish ladder to bypass the dam. Serious consideration has not

14

been given to this option. The fish ladder would be a more cost-effective way of restoring fish habitat.

My preferred flow alternative would be the restoration of the natural Trinity River flows and diverting no more water to the Central Valley. My next best flow would be that promised in the original legislation. The promised diversion originally was to be no more than 30 percent of the Trinity River flow. The preferred flow as outlined in this EIS/EIR would be my third choice. The other study flows are inadequate.

No matter which flow is chosen, funding must be available for the bridge and structural removals needed to allow these increased flows. "Adaptive management" is the new buzz word of resource management. In this project, adaptive management should be the prime governing force. If a funded project does not increase the fish returns, the project should not be funded again. If a water flow pattern does not result in increased fish returns, the flow should be changed. At a minimum, the outline of this adaptive management should be in place before any other changes are done.

Thank you for coming and listening to my comments.

THE HEARING OFFICIAL: Thank you, Mr. Nelson, for your comments.

Our next speaker is Mr. Tim Broadman.

15

MR. BROADMAN: Good afternoon. Thank you for letting me come and speak.

I have two very strong --

THE HEARING OFFICIAL: Excuse me. Would you please state your name and spell it for the record.

MR. BROADMAN: All right. Tom Broadman, spelled B-R-O-A-D-M-A-N. And I reside in Fieldbrook, California.

I just want to remind the panel and the government that we have two very strong legal arguments to restore flows to the Trinity River. One is the Endangered Species Act, and also under the Endangered Species Act, treaty rights, treaty rights to our tribes.

Signed in June 5th of '97 by secretarial order, issued by the Secretary of the Interior and the Secretary of Commerce, pursuant to the Endangered Species Act of 1973, it acknowledged the trust, responsibility and treaty obligations of the U.S. Departments will carry out the responsibilities, "departments" meaning commerce and interior. Under the act, in a manner that harmonizes the federal trust responsibility to tribes, strive to ensure that Indian tribes do not bear a disproportionate burden for the conservation of listed species.

In 1991, 75 percent of Trinity water went south. Since the diversion began, 96 percent of coho have been eliminated. In May of 1997 the Southern California --

16

Southern Oregon and Northern California ESU for coho salmon was listed as threatened. Now, recently, affecting this listing under the Endangered Species Act, November 8th of this year, in the Federal Register harm was defined, harm under the Endangered Species act, and harm is defined as any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife. Those essential behavior patterns are defined by National Marine Fisheries as breeding, spawning, rearing, migrating, feeding or sheltering. I think it's pertinent that you restore the runs so these listed fish that are 96 percent gone will have some of a chance to return.

Thank you very much for your time.

THE HEARING OFFICIAL: Thank you.

Our next speaker is Lawrence Lazio.

MR. LAZIO: Thank you. My name is Lawrence Lazio, L-A-Z-I-O. I'm a past president of the Humboldt Bay Fisheries Association and a past president of the California Seafood Institute, a statewide organization representing the seafood-processing industry in the State of California.

Before I get into the area that I have concern

Main TOC Next Page

17

with, specifically, under "alternatives" but eliminated, in talking about increased hatchery production, I want to tell you a story.

In 1975, I heard that the Japanese federal government had a fantastic enhancement program going on in their salmon fishery on island of Hokkaido. If you take the island of Hokkaido and you lay down the State of California, it's approximately from Red Bluff north, making an islet out of that. The Japanese federal government instituted a program of 72 facilities. And I'm specifically using the word "facilities" because they are not what we perceive as hatcheries. These facilities are an enhancement to the natural spawning of the salmon specie, and then the immediate release of the swim-up salmon, just after they've come out of the egg-sac stage and are swimming up, if they were in the river, they are -- their success ratio in relationship to the Eel River spawn fish is approximately ten percent for the natural survival of the eggs against 90 percent for the survival in their facilities. I am calling their facilities "nurseries."

Historically, there was a nursery on the Eel River, to my recollection, in a place called Steelhead Creek, whereby the eggs were taken from the fish, they got to the swim-up stage, they were put in containers, milk -- dairy

18

units, put on horseback and taken to the top of the streams, where they were released into the natural situation for their survival.

I think by not having an idea of a nursery program, not having been looked at when the increased hatchery-production issue is discussed in this document under 2.2.6, is a failure in this document. I think that there are some new attitudes that are coming that are not included in here that could be extremely beneficial to the fast recovery of the system.

We know that we need more water, period. I agree with that. Everyone, I think, in this room, agrees. I would like to see compensation come from the users that got our water. And that's another issue. But going into this area of increased hatchery production and the reasons it has been eliminated from this document does not take into a fact the concept of a nursery program, and I think that all the people involved, all the professionals, need to start taking a look at that issue.

Those of us that are on the river -- and I'm on the river quite often; I was there a week ago Sunday as a fly fisherman -- recognize the predator problem in the Trinity River system, in the Klamath River system. It's a major issue, and I think that the way the predator-control issue has been handled in this program is just we're sticking

19

our head in the mud. There is a major problem out there; we all know it. And I have heard recently that National Marine Fisheries Service is looking at the predator problem.

Historically -- let me give you a historic view. I've been in the fish business all my life, from the time I was a little boy. My grandfather came to the Eel River in the 1880's and fished salmon commercially on the river and made a living off of it. Historically, when we had a salmon fishing fleet in the ocean, there was a substantial elimination of the seals and sea lions by the commercial fleet. Their used to be 5- to 700 boats fishing out of Eureka during April, May, June and July, and any time the sea lion was attached to that fisherman's lines when he was pulling up a salmon, it probably was eliminated. What's happened since we've had the protection of the marine mammals is we've had a fantastic explosion -- that probably you all know, but I'm just saying it here in public -- fantastic explosion of the predator population, yet we've had a fantastic reduction in the salmon species. So how can the government allow, on one hand, the predators to go wild and crazy -- and there's pictures circulated around Humboldt County that were taken from the air at the mouth of the Klamath River, and if you try to estimate, there looks to be maybe 2,000 to 2500 sea lions

20

that are in that grouping of -- in the picture.

So I think that this particular area that I'm talking about, the involvement of a -- I'm going to call it a "nursery program" -- should be looked at for the increased production, because if you take the eggs and you give them a faster start but you put them right back into the river, especially the upper reaches, in my view, you have a natural fish; you don't have what's being perceived as a hatchery fish.

Thank you very much.

THE HEARING OFFICIAL: Thank you for your comments, Mr. Lazio.

Our next speaker is Mr. Tom Weseloh.

MR. WESELOH: Good afternoon. Thanks for coming to Eureka. My name is Tom Weseloh, W-E-S-E-L-O-H. I'm the North Coast manager for California Trout. We represent about 5,000 individual members and another 5,000 affiliate club members. I live in Humboldt County and also work here, as well, and have a rather large interest in the Trinity River.

I already had the opportunity to address you in Redding, so I won't be redundant, as much as possible, but I really wanted to speak to a few issues.

One in particular is the time lines for your process. I know that several speakers and a lot of

Main TOC Next Page

various constituencies have asked for an extension of this process. Right now you are well within your legal guidelines with both the CEQA and NEPA process. We encourage you to stick to those time lines and to not extend any further the deadlines for comments. The studies have gone on long enough. We have the information in front of us. The people that need to review this information and give you comments have known about this information, have been following the studies, have been following the time lines, have been getting the documents. There is no need for further delay. We need to have you stick to the time lines of CEQA and NEPA and move forward with this. Our fisheries have been injured for long enough. No more delays are acceptable to us. Please close the comment period December 20th.

Another reason that I think the time lines need to be met is it appears to me that the Bureau of Reclamation is still in violation by even operating this project. There is not a Section 7 consultation process finalized. There is not a biological opinion that has been granted by NMFS. And until then, under the Endangered Species Act, it is our opinion that any diversion at all is a violation of the Endangered Species Act, and if the Bureau wants to be in compliance, they'd better come up with a new flow regime in a hurry in order to get in compliance. One of

the ways you get there is by finishing up the CEQA and NEPA process in a timely fashion, getting to a record of decision, and implementing the flows as quick as possible.

Another issue that I haven't heard discussed yet that I would like to bring up is the -- some of the costs associated with the programs. I think there are some things that need to be added to the EIS/EIR in order to address this area. I feel that the final EIS/EIR should exempt Trinity PUD from any costs as a result of low power generation as well as implementation costs for the preferred alternative. The final EIS/EIR and record of decision should also include a plan for reauthorization of equitable cost-sharing provisions of the Trinity River Basin Fish and Wildlife Management Act of 1984, which are now expired. We have a lot of good things we would like to do, but right now there is no current way to fund those activities, and we need to have the money in there to carry out any of the alternatives that you have and to carry out restoration of the basin as a whole.

The preferred alternative includes a watershed-protection component. We support inclusion of that component because it addresses upslope erosion. It's a nonflow component necessary for the restoration of this important fishery and for the river. It is also consistent with the requirements of the President's Forest

Plan under Option 9, which has never been adequately funded in a meaningful manner. And in order to ensure that the promise of restoration isn't unfunded like Option 9, identification of a funding mechanism is necessary in the final EIS/EIR and record of decision. Without adequate funding, the preferred alternative or any other actions you may take will not meet the goals and objectives of meaningful restoration.

So not only do I request that you heed the comments I've provided you in Redding, but also the ones today of sticking to the time lines and dealing with these cost issues and the biological opinion.

If I have forgotten anything in Redding or today, you will be hearing from me again, either verbally or in writing.

Thank you very much for allowing us to provide additional testimony. And I encourage you to listen to all the other good speakers as closely as you did me. Thank you.

THE HEARING OFFICIAL: Thank you.

The next speaker is Carol Krueger.

MS. KRUEGER: My name is Carol Krueger, K-R-U-E-G E R. I'm here as a representative of Six Rivers Paddling Club. And thank you very much for the opportunity to comment on the public draft on the Trinity

River.

As whitewater canoeists, we are going to comment on the recreational uses of the Trinity River. We think the whitewater canoeists were left out of your list on recognized recreational users in tables 3-32 and 3-33. In our opinion, there is a big difference between canoeists and whitewater canoeists in their preferred flow ranges. Whitewater canoeists should be included with kayaking and rafting in their preferred flow ranges.

The habitat in the Trinity River needs improvement, and we're going to support the preferred alternate. Along with the fisheries restoration, we think that the preferred alternative would also improve the whitewater recreational opportunities on the Trinity River. My comments deal primarily with the analysis of whitewater recreation opportunities that are affected by the proposals in EIS/EIR.

As whitewater canoeists, we have three favorite runs on the mainstem of the Trinity River that will be affected by the proposals in the EIR/EIS. These runs are: Pigeon Point, which is from Pigeon Point Campground to Big Flat; Hayden to Cedar, which is Hayden Flat campground down to Cedar Flat Ridge; and Hawkins Bar to Salyer, which is the Hawkins Bar USFS river access, to the public access of the Sharper Slough on Fountain Ranch Road.

Main TOC Next Page

25

Under the international scale of difficulty, Pigeon Point is rated as a Class III, or intermediate; Hayden to Cedar is rated Class II, or advanced beginner; and Hawkins Bar is rated as a Class I-plus, or intermediate beginner.

These runs provide easily accessible whitewater for users at a variety of skill levels, and the first two runs are used extensively by whitewater boaters from Northern and Central California and from Southern Oregon. We believe that the preferred recreational flow range thresholds given in Table 3.32 incorrectly assigned either 200 or 300 cubic feet per second as the lower limit of the preferred flow for whitewater canoeists or kayaking on these runs. At 300 CFS, the whitewater runs on the mainstem of the Trinity are marginally acceptable for whitewater canoeists. At this low flow, navigating around rocks and other obstacles to navigate are exposed or very close to the surface. Some routes to rapids are not available, and shallow reaches of the river do not have enough water to float a boat, such as the rapid on the Hayden/Cedar run, commonly commonly referred to as "Picket Fence." Even at releases of 400 CFS, whitewater canoeists get out to portage this long rapid, as we can't negotiate the tight turns at the very bottom of this drop. Shallow water is more dangerous for whitewater canoeists, as a canoe turns over, the paddler is in danger of getting

26

trapped under the canoe and getting, quote/unquote, beat up by the rocks.

We feel that the lowest preferred flow for the mainstem Trinity for rafting, kayaking and whitewater canoeing should be noted as at least 450 CFS, rather than 200 to 300 CFS. Three hundred CFS is a minimal flow for the low threshold but is not preferred. Recreational seasons were defined as from Memorial Day to Labor Day as a primary recreational season in the EIS/EIR, and, in our opinion, is not accurate. We think that the whitewater recreational season for the Trinity River can run year-round. Whenever flows are greater than 3000 CFS at the Lewiston Gorge, the majority of whitewater canoeists would choose to go out on other rivers, but we cannot speak for other types of boats, such as the kayaks and rafts, as they are willing to boat higher flows, and canoeists -- than most canoeists are comfortable with.

The analysis should note that constraints in whitewater boating are dependent on boater skill level and difficulty of the whitewater run, and that low flow constrain whitewater recreation to a far greater extent than high flows.

So, in conclusion, we support the proposal to increase flows into the Trinity River for the purpose of restoration of the fishery habitat in the absence of an

27

alternative that would allow all the inflow into the Trinity River Basin to be trained in the river. The preferred alternative appears to be a minimally acceptable compromise to promote the natural functions and values of the river.

Thank you very much.

THE HEARING OFFICIAL: Thank you.

Marianne DeSobrino.

MS. DeSOBRINO: My name is Marianne DeSobrino. I live in Eureka on the Elk River, and I'm a chair of the Redwood Chapter of the Sierra Club.

And our position on this is that we would like quite a bit more than your preferred alternative. We would like to see no more than 30 percent of the water diverted from the Trinity River, if any water at all needs to be diverted.

I notice in your statement that the preferred alternative, the increase of -- to 11,000 CFS, the latter will be achieved in about 12 percent of the years. I mean, come on. If you're increasing the flow and you're only going to achieve that increased flow in 12 percent of the years, what happens in the other 88 percent of the years? That seems marvelously ineffective to people who care about fish and the ecosystem.

And I'm also sort of dismayed by who would benefit

28

most from the project: communities and fishing-related industries. You don't say anything about the fish, which we have been cumulatively destroying, nor the ecosystem, which we all recognize needs support to retain its contiguousness and make its contributions to our survival as human beings.

In addition, the most beautiful solution, I believe, to the entire problem with the Trinity River would be the removal of the dams.

Thank you very much.

THE HEARING OFFICIAL: Thank you.

John McKeon. John McKeon, are you here? M-C-K-E-O-N.

UNIDENTIFIED SPEAKER: He's here.

THE HEARING OFFICIAL: We'll go to the next speaker, and if John does come in, we'll give him a chance to speak, as well.

E.B. Duggan.

MR. DUGGAN: Hi, Tom.

Good afternoon, gentlemen. My name is E.B. Duggan, D-U-G-G-A-N. I'm representing the Willow Creek Community Chamber of Commerce, Trinity Fishing, Trinity Downriver Resource, and I'm also a fishing guide.

I live on the river. I'm there every day. I'm on the river, physically on the river, on an average of about

29

three days per week, either fishing, looking, checking. I also make a fishing report for our small community that is published in about four different papers.

I have watched over the years our river flows since the dam -- and this is after the dam's been in -- going from 150 CFS to 300 CFS, 400 CFS, and now at 450 CFS. I don't know if you know it or not, but there is a direct correlation in those increases as to the amount of fish that have come in. And I know Jack can attest to it because he hears it and sees it with his people down there, because I have good relations with those people and I know a lot of them and they are my personal friends.

I have not been in here, or been in the valley, for many years, as Jack or many of his friends, but I've been there long enough to know and realize that, in my eight years as a professional guide, the fish need water. About four years ago, if I could have gone to Nike and come up with a -- and devise a method whereby they could have made small tennis shoes that the fish could have -- I could have put on the fish, I could have made a million dollars giving shoes away to the fish so they can go upriver and spawn. This is a fact. In the short distance from Salyer to my house, which is just three miles, when we were flowing 300 cubic feet per second during the summertime, I would have to jump out of my boat on three different

30

riffles and push my customers across it. That's how bad it was. And then the same since -- you have to remember that a drift boat only draws three to four inches with four people in it. Now, what are the fishing going to do?

When you take a ten-pound fish that's eight inches across at the belly, you know, it makes it very difficult for them to get upriver. Even as today, I see many spawning beds called "reds" on the river down in Willow Creek area. And they should be all spawning at least up above Cedar Flat. At least that. It's a shame that the people are just now realizing -- and I say the people in charge of the water flow -- that this water flow is imperative to us. For some ungodly reason, October 15th is the magic date they need to take and reduce the water flow. And they go from whatever is being out down to the 300 cubic feet per second, because we have rain. Believe it or not, we're supposed to have rain up here on the North Coast. That is not happening. If you will take and go to the Department of Fish and Game and check the local Fish and Game in this area here, for the last eight years we have not had rain for opening weekend of deer season, which starts in September. So if we're not getting rain in September and October, why do we cut the water off magically at that October 15th date? The fish need it. And for us to drop that water, it makes it drastically

31

low.

The water at my house this year dropped down over a foot when they went from 450 down to 300 cubic feet per second. Now that we do have rain and the water's coming up, then there's plenty of room for the fish to come in. But when they started dropping that water, we had fish up around Junction City, in that section in there, that were actually spawning from Douglas City to Junction City, through that area. And when they dropped the water from 450 to 300, we left -- I'm saying "we" -- left many reds high and dry. We're talking thousands upon thousands of naturally spawned fish that died because the water was let go and drained their spawning area. We need a better control of when that water is shut down from the releases of 450, or whatever is to be set, down to the minimum, so that it does not affect the spawning. I've been reading and reading and reading your river recommendations. The ones that come out here I feel are adequate but by far what we need. We need a return of the water as what was originally said.

I have some friends that have lived on this river since 1948, and they fished it; they've been collecting paper -- newspaper clippings, and I have two of these folders that they've been collecting about what was going to happen when the dam was going to be in, how they were

32

going to help keep this water flow up, and none of those things that were put in the paper by the state legislators and the federal legislators have come about. In order for us to maintain and keep this fisheries, we do have to have that water. And without it, it's going to be a drastic situation, because we're already starting to lose more and more fishing areas within the State of California. Our logging was taken away from us. We were told look for other means of economic base for our community.

And, Jasper, you know this. You've seen what our town was like. You used to come down and go shopping. Now we have -- we don't even have full stores anymore. We've lost seven major businesses -- seven of them -- that people from Hoopa, Salyer, and Willow Creek all depended upon for necessities within the community. And we don't have them anymore. We have to travel 51 miles one way, 102 miles round trip, to come into Eureka or Arcata to spend our money and get groceries, a major supply of our groceries. That's outrageous. You in the city don't realize that, because you just go down to the local mall and you get all of the needs that you want. We choose to live in this kind of community because it's healthful and it's more relaxing than in the city. But, in the same sense, as the cities grow, the demand for water is going to just go completely out of sight in the next decade.

33

There is going to be such a demand on water within the next decade, where they're building from Sacramento, even Redding, down south, that water is going to be worth gold. It could actually be an economic base where people could trade in buckets of water rather than in money.

So please, take consideration. We have converted from logging as an economic base to fishing and tourism, and as we lose our water and our fish base, and the restrictions we're receiving from the Department of Fish and Game, it's harder and harder to entice people into our valley, just to come in and see and enjoy the refinements of outdoor living. And that's what the people in the cities are looking for, is outdoor living.

Look at what has happened to Yosemite. You can't even hardly get in there. My wife and I spent our fortieth anniversary, which we got married in Yosemite 40 years ago this last year, and we had to get reservations. In 363 days in advance, we got the last room in the hotel. So if that's the demand for that kind of area, and the demand is going to be put onto our valley and our communities, we need the resources to take care of them and provide for them, and without the water we're not going to have them.

Thank you very much.

THE HEARING OFFICIAL: Thank you.

34

John McKeon, are you here now?

MR. McKEON: Yes, I am. I'm going to reserve my comments for this evening's session.

THE HEARING OFFICIAL: Thank you.

Troy Fletcher.

MR. FLETCHER: Good afternoon. My name's Troy Fletcher, F-L-E-T-C-H-E-R. I'm the executive director for the Yurok Tribe, and I'm here today with council member Howard McConnell and our fisheries staff representatives, Dave Hillemeier and Michael Belchik.

The Yurok Indian reservation is located on the lower 44 miles of the Klamath/Trinity River, and the Trinity flows through 44 -- approximately 44 miles of our reservation. The Yurok Tribe is the largest harvester of fall chinook of Klamath River origin, period, of any of the user groups. We have an enormous stake in the outcome of this EIS and what the alternative is that will be selected or the particular management options that will be mandated by the Secretary.

We're looking at the restoration of the Trinity River a little different. We, for decades and decades, have been unable to meet what we consider even minimal subsistence levels, much less have any meaningful economic opportunity to take advantage of the fisher resource on the Klamath/Trinity River Basin. The tribe has a

35

significant cultural, ceremonial, subsistence and economic reliance on Klamath River fish, and that reliance has been relatively unmet because of the poor status of decline in fish populations on these river systems.

In terms of which options or what alternative we support, before I verbalize that I'd like to talk a little bit about what we do, what our position is in terms of the approach to the alternatives.

Number one is there needs to be a long-term approach to the restoration of the Klamath/Trinity River Basin. In the Trinity River EIS, even though it does have a window of decades, and that was one of the confining factors that was looked at in the alternatives, we're not sure that that's totally appropriate and that's going to take us to full restoration like we believe needs to occur. We believe that the "no dam" alternative is a true approach, a true long-term approach, to fully restoring that river, to put it back the way it was and let nature do what it always has done.

In terms of the alternatives, we support as is, we do support the preferred alternative, and we support that because we think that you need to apply the best available science that you have in front of you. That's important. And we think that the various flow-study efforts, the peer review that occurred, and a whole host of agency and

36

tribal and other involvement is a step to get to that best available science. We do need to support it with a few caveats, however.

Because the Trinity River does not empty into the Pacific Ocean and Weichpec, it runs down the entire of the Klamath River, we believe that the condition of the mainstem Klamath River has a direct and important impact, and many times negative impact, on the survival of the Trinity River fish. Trinity River fish must traverse the Klamath River as they go out to the ocean and as they come back. If you do not take care of the Klamath River, you will not take care of Trinity River fish. The EIS, as it is, recognizes that to a small degree. We believe that that needs to be a little more -- there needs to be more analysis, and there needs to be more emphasis placed on the importance of that segment of river that those fish traverse through. There also needs to be more importance and emphasis placed on the estuary at the mouth of the river. Is that a bottleneck. What are some of the considerations that are negative impacts that are affecting the fish at the mouth of the river. We've heard about sea lion predation, seal predation. That's an easy one. What about the quality of habitat that's available to the fish. What about the -- what about the other things associated with the food web. What about other

37

factors. We don't know about those. Those need to be looked at. You cannot restore Trinity River fish unless we look at maybe some of those other bottleneck factors.

So it's important that we take a holistic view in looking at the Klamath Basin. And I'm going to say Klamath basin because the Trinity is only a portion of the Klamath Basin. And I'm going to propose that you cannot restore Trinity fish in a piece of the Klamath Basin ecosystem unless you restore the entire Klamath Basin ecosystem. It's one package, and I don't think you can restore a single part of it, and I surely don't think you can restore a single part of the Klamath River Basin by only addressing those instream needs and not looking out to what those fish -- or what those fish have to go through in the mainstem of the Klamath River or at the estuary.

I'd also like to comment on adaptive management planning and the whole process in terms of where do we go from here. That process, as laid out in the EIR, I think is a good workable start. I'd just like to add a few things: that the tribe needs to be included at all levels in that process; that it needs to be driven by sound science; and I do like the idea of a separate, discrete scientific review panel that looks at the merit of projects and helps identify which projects should be done

38

and which shouldn't be done. I do think that the way the task force and the TCC operate at present lend an atmosphere to -- for fighting and horsetrading, and all that good stuff, over the limited amount of funding we currently have available here.

I'd like to see some type of objective, numerical ranking system when it comes to project proposals and project selection as guided by some type of independent review, scientific review team. I think that would add credibility and credence to the projects that are selected, and it would force the hypothesis-testing type of process as identified in the EIS to be more meaningful and separate the politics from the science. So I do like that portion of it.

The other thing that's going to be necessary is funding. Right now a lot of people will focus on the amount of dollars and the effort that has been placed into the Trinity to date. I do know the task force and the TCC have struggled with priorities in trying to do the right thing, and I think their efforts are commendable, but we have a long ways to go in terms of funding. There's a lot of debate and discussion and haggling and arguing over whether you fund monitoring projects or whether you don't fund monitoring projects. We're a fishing tribe. That information collected by those monitoring projects helps

39

us manage our fisheries responsibly, it helps us predict how many fish are going to be available for harvest, it helps us account for run size, escapement information and our harvest information, and it's important information and it shouldn't be cast aside. And it's necessary to monitor the success of any restoration projects. There also needs to be adequate funding for upslope restoration projects, too. You can't just throw more water and restore river and walk away. You've got to do other things, and you've got to do what's necessary to keep sediment out of the mainstem river and restore those tributaries where those fish do spawn. So there needs to be sufficient amount of funding devoted to the Trinity River. I was going to say to the restoration program, but it might not be; it may have been in some other form. But to the Trinity River. And there needs to be enough of it. And you need only look at the amounts of fish, the amount of money that we and others have foregone because of our water being diverted elsewhere, and it doesn't seem so much an amount of money when you compare it against that of the lost opportunities, the lost economic opportunities, the failure to meet our subsistence needs for decades and decades. We think it's fair that federal agencies and others step up to the plate and identify and ensure that we have enough money in that program to do

40

what's necessary.

That concludes my comments. Thanks.

THE HEARING OFFICIAL: Thank you.

Dave Nakamura.

MR. NAKAMURA: Good afternoon. My name is Dave Nakamura. And just by way of starting this, I have a number of hats in this community. I work at the Humboldt State University and work with a lot of the recreation programs there, including fishing, rafting and river kayaking. I'm also an elected official with the City of Blue Lake. I'm a city council member and also presently a member of the Redwood Region Economic Development Commission. And I mention those, not necessarily that these are official positions in any of those organizations, but that kind of my background on how I'm looking at this situation.

I'm here to lend support to increase flows to the Trinity River. I believe that the Trinity River is the absolute lifeblood of that entire region between the mouth of the Klamath River all the way up to the Trinity Alps area. Part of my perspective looking back on this and listening to other people's comments, where I was kind of remembering back to the opposite situation, which was the drought years in the -- I believe it was the early nineties when the Trinity River was extremely, extremely

45

Jimmy Smith.

MR. SMITH: Thank you.

Jimmy Smith, J-I-M-M-Y S-M-I-T-H. And I want to thank you, too, for being here today.

On behalf of Pacific Coast Federation of Fishermen's Association, I'd just like to state for the record that we have not yet completed what our final request will be concerning the flow regime. I can tell you, however, that the absolute minimum will be the preferred alternative. And I'd also probably like to mention to you that I agree with a lot of the comments that were made here today: Ed Duggan, Troy Fletcher, Denver Nelson. The list goes on. Tom Weseloh. Folks that are very competent and have watched this situation for a number of years.

The one request that I'd like you to hear clearly from me today -- and I want to reiterate that -- clearly -- is that we will not tolerate -- and I'll speak for the fishing industry here -- we will not tolerate the Central Valley Project Water Association's constant delays and implementation of whatever increase in flow that we'll see here in the near future, and we hope that you will join us in that effort.

So thanks very much.

THE HEARING OFFICIAL: Thank you for your comments.

46

John Stokes.

MR. STOKES: Good afternoon. Thank you for giving me the opportunity to speak to you today. I am an attorney in Arcata.

THE HEARING OFFICIAL: Excuse me, please. State your name and spell it for the record.

MR. STOKES: John Stokes. J-O-H-N S-T-O-K-E-S. I'm a lifelong resident of Humboldt County. Though I was born in Alameda County, my family moved here when I was six months old. I've been fishing the Trinity River for at least 25 years, otherwise recreating on the river during nonfishing times.

With all due respect to Mr. Sherman, I feel that I have a cultural attachment to the Trinity River as well as he does, although perhaps not as lengthy as his family's cultural attachment. I agree with Mr. Sherman. I think that the bottom line here is we're not going to get down to restoring fisheries on the Trinity River until we approximate the natural flows of the Trinity River. And this will not occur unless we substantially exceed the preferred alternative of 52-percent diversion, and more likely will not occur unless these dams are removed so that the natural processes can restore the river.

I am very skeptical about any sort of piecemeal restoration efforts. I'm very skeptical that some sort of mechanical manipulation of the streambed will result in removing the clogged, extremely clogged, riparian situation along the upper river, which is, as time goes by, gradually going farther and farther downriver. The river is becoming less and less able to clean itself out after each -- during each year, and I don't think that we're going to approximate that until we get close to natural flows and close to natural levels, and I don't see 50 percent doing it.

47

I think the histories of fisheries restoration has shown that we spend millions, if not billions, of dollars on efforts that have little or no effect on bringing the fisheries back. A good example would be look at the Columbia River Basin. Look at the fact that they have spent billions of dollars trucking fish in barges down through these dams to get them downstream so they can go to the ocean. The net result has been a continued decline of the fisheries.

During my experience in the last 25 years, I have witnessed a continual decline in the fish available or the fisheries on the Trinity River. And I don't say that lightly. During probably between the beginning of September and the middle of November, on the average I am on the river two to three times a week for several hours at a shot, and this has been true over the last 15 or 20 years. In the last few years, the number of fish on the river -- and I'm speaking about steelhead -- is virtually -- there aren't any. They've virtually disappeared. And I don't know whether we can just directly connect this to the dams, but I can't help but feeling that this is a decline that has occurred gradually and persistently ever since those dams were put in. And I don't see how there's any way we're going to reverse that without doing something rather drastic instead of piecemeal.

48

I thank you for giving me the opportunity to speak.

THE HEARING OFFICIAL: Thank you, Mr. Stokes, for your comments.

We have now heard from everyone that registered to speak. If there's anyone in the audience that would like to make a statement, please go to the registration table to fill out a card.

We're scheduled to go until 3:00 p.m. this afternoon, and we'll keep the hearing here in place, but unless someone else fills out a slip right now, we'll take a break and reconvene when someone does that.

We're now off the record.

(Off the record.)

We're back on the record.

We've not had anyone else sign up to speak, and so I'd like to close the afternoon portion of the hearing

41

low. I'm sure many of you remember those years. If you looked at the river at that time, during the summer months, boy, the temperature of that water was amazing. I think if you looked at the gravel bars and the situation where, what was happening with the streambeds, you can see what low flows were doing to the river. You could see what low flows were doing to the willow stands along the side of the river. I think increased flows, if you just propose that, are really going to benefit the river both ecologically and economically.

I would like to tag onto a couple of comments that were made by a couple of people earlier. There was a woman from the Six Rivers Canoeing Club. She made a number of comments regarding the river flows and how it affects her constituency, the whitewater canoeists, and I think everything that she said was very, very true in terms of the recreational use of that river. Ed Duggan also made some comments regarding the flows and how -- the fact that when the river flows are essentially turned down on October 15th, what a significant impact that has on recreation as well. I've been up there quite a bit over the last two months doing whitewater rafting trips, doing kayaking trips, and it's really an interesting thing, once the water goes down that drastically, I think both for the economics of the recreation industry up

42

there, but also just looking at what happens to the river flow and the streambeds.

Lastly, I think that the river flows are absolutely critical for a number of recreation industries up there, including the whitewater rafting industry and the fishing industries.

Thank you.

THE HEARING OFFICIAL: Thank you for your comments.

Duane Sherman? Is Duane Sherman here?

We'll set his card aside.

UNIDENTIFIED SPEAKER: Here he comes.

THE HEARING OFFICIAL: Okay. Duane Sherman, would you come up to the microphone, please. You're our next speaker.

MR. SHERMAN: First of all, let me identify that I'm only here on behalf of myself and not as the chairman of the Hoopa Valley Tribe.

(Speaking in foreign language; not reported.]

And what I said, was since time immemorial the Hoopa Tribe has used the Trinity River. It's important to us because it's life-sustaining. It sustains life not only through acorns, through salmon, through deer, but it means a lot more than that to us. In speaking as an individual and knowing that my roots run deep within the Hoopa Valley. For over 10,000 years the Hoopa tribe has

43

been located there, and my family has originated from there, and when you talk about agreements that were made, treaties that were never ratified, when you talk about the original legislation that was enacted in 1955 that created the dam on the Trinity River, promises have not been kept. Water transportation and water deliveries out of the basin, salmon habitat that has been destroyed or nonexistent anymore, several hundred miles of habitat. I think we need to look at what the real problem is, and the real problem, the bottom line, is the dam, and until the Bureau of Reclamation, until all the associated counties involved, look at the bottom line of actually removing the dam, then the problem will never really be solved.

This document that we're talking about today, that we're discussing today, is the best effort so far. Does it get us there where we need to be? No, it doesn't. But I think if we study it any longer, we'll fail. And by that I mean this is a 12-year process; it's a 14-year process. But when you look at it from the original legislation of 1955, you know it's a 30-or-40-year process. And at some point in time we need to address the real issue and we need to stop studying it and we need to enact on the legislation, the original legislation that said that. Not one delivery out of the basin, not one export would ever occur that would adversely affect those

44

involved who depend upon that for their very life.

Now, we have a lot of user groups who have come in here today and basically said that it doesn't go far enough, and I agree with that, but they can pick up and go use a different river; they can pick up and go flyfish somewhere else, go kayak somewhere else tomorrow. But I have a cultural, historical tie to that valley, and I will never, ever leave that valley. Like the generations who have come before me, I'll be there. And hopefully in 10,000 years my family will still be there, and hopefully this issue will be no longer.

But I will submit written comments as an individual, not as -- not as the tribal representative, and I would just hope that the record would be open long enough. And I would hope the best science is being used, because I don't think that what we've come to agree upon today isn't going to be a political question where counties, where tribal governments, where state and federal agencies get involved, and it becomes a political question where the best science is not being used or will we actually use what we know is right. And the bottom line is the dam has to go.

Thank you.

THE HEARING OFFICIAL: Thank you for your time, Mr. Sherman.

Main TOC Next Page

with a reminder that we will be here again this evening from 6:00 to 8:00 p.m.

I'd like to thank all of you for coming and making statements this afternoon.

The hearing -- or the afternoon portion of the hearing, is hereby closed. We're off the record.

[Afternoon session concluded.]

/ / /

EVENING SESSION 6:00 P.M.

THE HEARING OFFICIAL: We're on the record.

Good evening. On behalf of the United States Fish and Wildlife Service, I welcome you to this public hearing.

The U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Hoopa Valley Tribe and Trinity County are connecting a joint process for taking comments in the draft Environmental Impact Statement/Environmental Impact Report for the Trinity River Mainstem Fishery Restoration.

My name is Robert Ruesink. The last name is spelled R-U-E-S, as in Sierra, I-N-K. I'm the supervisor of the Snake River Basin Office of the Fish and Wildlife Service in Boise, Idaho, and tonight I'll be serving as the presiding official for this hearing.

We had a hearing this afternoon from 1:00 to 3:00 p.m., and this is the last in the series of the hearings; we're scheduled to go until 8:00 p.m. this evening.

At the table with me are representatives from the Fish and Wildlife Service, Bureau of Reclamation, Hoopa Valley Tribe and Trinity County. You'll been hearing more from these folks in just a minute.

Other representatives of the U.S. Fish and Wildlife

Service are also at the hearing this evening. Many of them are present in the back of the room or outside at the information and the registration table. You will find additional information about Trinity River restoration at that information table, and I'm sure that the staff will be happy to try to answer questions that you may have about that restoration.

At this point I'd like to introduce Bruce Halstead, who will make the official-service presentation.

Bruce.

MR. HALSTEAD: Thank you, Bob.

Good evening. My name is Bruce Halstead. I'm with the U.S. Fish and Wildlife Service in Arcata, California.

Release of the draft Trinity River Mainstem Fishery Restoration EIS/EIR is the latest step in a process that Congress initiated several years to address long-standing concerns about the effects of water diversion, instream habitat, sedimentation, and the watershed management issues on the Trinity River system's health, including its once-abundant salmon runs.

Congress directed the Secretary of the Interior to evaluate the impact of these issues and to take steps to restore the health of the Trinity River system. In response to this Congressional mandate, the Department of the Interior has been actively participating in a study

for more than 15 years. This has been a collaborative effort led by the U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, the Hoopa Valley Tribe and Trinity County.

The EIS/EIR summarizes the research that has been undertaken over the past several years and identifies for public comment several potential alternatives for restoring the Trinity River system. Impacts considered under the National Environmental Policy Act and the California Environmental Quality Act are not limited to impacts to the fishery resources of the Trinity River but include all impacts of the action affecting the human environment. The Department encourages public comment on all aspects of the draft EIS/EIR.

The public hearing is part of the comment process on the draft EIS/EIR. It will be closed December 20th, 1999. A record of decision by the Secretary of the Interior is expected in the early spring of 2000.

On behalf of the U.S. Fish and Wildlife Service, the Bureau of Reclamation, the Hoopa Valley Tribe and Trinity County, I thank you for the effort you have made to attend this meeting and also thank you in advance for your comments.

Now I'd like you to listen to some introductory remarks from Supervisor Chris Erickson, who is a

Main TOC Next Page

53

representative from Trinity County.
Chris.
MR. ERICKSON: Thanks. I'm Chris Erickson, Supervisor from Trinity County. And the reason Trinity County is interested in these hearings is that we're the lead agency under the California Environmental Quality Act for this document.
On my right is Mike Orcutt from the Hoopa Valley Tribe.
Mike.
MR. ORCUTT: Good evening. I'm here on behalf of the Hoopa Valley Tribe. I just wanted to make some brief remarks, kind of give you the sense of kind of where we're coming from.
The tribe that owns about 90,000 acres of land on the lower Trinity River and fish and wildlife resources of the basin are important; they have been important to the survival of the Hupa people for a good number of years. The tribe has records of village sites, people, and the Hoopa people being on the lower Trinity River and at least -- being there at least 7500 years. And the status of that resource is one in which some of the background information that is available will state, as well as in the EIS, is that the status of the resources, one of which -- at least one species is listed under the Endangered

54

Species Act, and steelhead, another important species, is probably going to be listed in the near future. So I think the trend in the basin is one in which there's some steady declines. We know some of the reasons behind that. And as is stated in some of the earlier remarks here, Congress has intervened, seeing the importance of the fishery to the basin, the people there, and the 1992 CVPIA legislation, then, is part of the mandate that's being fulfilled here in terms of the flow study and the accompanying EIS.
So we're here tonight to gather comments. And I want to thank you in advance for taking an interest in this important issue.
MR. SMITH: Good evening. My name is Russell Smith. I'm the Environmental and Natural Resources Division Chief of the Northern California area office. It's located at Shasta Dam.
The Trinity River is part of the Trinity division of the Central Valley project, and our office administers that project. I've been working to restore the fish and wildlife for the Trinity Basin for 11 years and represented reclamation in this EIR/EIS process.
THE HEARING OFFICIAL: Thank you.
Public comments on the draft EIS/EIR will be accepted until December 20th, 1999. After review and

55

consideration of your comments, the four co-lead agencies, along with the cooperating agencies, will prepare a final EIS/EIR.
The purpose of this hearing is to receive your comments on the draft documents. Comments on all aspects of the alternatives described in those documents are very important and will be carefully considered. Because of the importance of your comments, it is necessary that we follow certain procedures here this evening.
If you want to present comments at the hearing, please register at the table outside this room. When you register, indicate any organization that you represent. When you are called to present your comments, please come forward to the microphone in front. Begin your presentation by stating your full name, spell it for the record, and indicate if you represent an organization.
This is an informal hearing, and therefore you will not be questioned or cross-examined in connection with your comments, nor will any of the representatives of the agencies at the front table respond to your comments.
Your comments or questions are being recorded by the reporter to preserve them for the record. Please keep in mind that the reporter will not record any statements from the audience or which are made to the audience. Comments must be made into the microphone and addressed to

56

the agency representatives at the front table. Please leave a copy of any written material to which you refer with the reporter or with the registration staff. If you are reading your testimony, we ask that you read slowly for the reporter to be able to record your comments and have a verbatim record of those comments.
Instead of presenting oral comments here this evening or in addition to oral comments, you may submit comments in writing. Written comments may be submitted this evening to the staff at the registration table or they may be mailed to Mr. Joe Polos, P-O-L-O-S, U.S. Fish and Wildlife Service; 1655 Heindon -- H-E-I-N-D-O-N -- Road, Arcata, California, 95521. This address is available at the registration and information tables. Written comments will be accepted through December 20th, 1999. Written comments will be given the same consideration as oral comments that are presented here this evening.
At this time we are ready for our first speaker.
Ms. Emelia Berol, would you please come to the microphone, state your name and spell it for the record, identify who you represent, and begin your comments.
MS. BEROL: Good evening. My name is Emelia Berol, E-M-E-L-I-A B-E-R-O-L. I live in Arcata, California. I've lived in Northern California all of my life, and I

Main TOC Next Page

57
moved to the South Fork Trinity in 1971 and lived there for nine years. I've been interested in Trinity River and South Fork Trinity issues since those days. The last five years I've been working as an environmental journalist and videographer on the Trinity River and produced a documentary last year about the Trinities, so I'm very familiar with the issues.

I was not involved with the scoping for this flow study. I wish I had been, because I feel that the study, the way it was designed, is a bit of a stacked deck. I really don't like the fact that there was not an alternative between 48 percent and 98 percent. I don't think that's really rational. Recent studies have shown that there are other ways of managing the river besides taking half the water or putting all of it back in.

I also object to the fact that the "no dam" option was thrown out of the study. I understand that the -- there are reasons that supposedly justify why that option was eliminated, but, as a journalist, I've talked to a lot of people in Trinity County and Weaverville; I've spent a lot of time wandering around the streets of Weaverville talking to just everybody that lives there, works in the stores. I've interviewed a lot of people for articles I've written and for the video I made. And I don't know anyone in Trinity County -- I honestly don't know anyone

58
that wouldn't like to see the dam come down. I think it's a terrible injustice that that was not even looked at.

I also notice that three of the alternatives, the "no action" and the state, and there's another one, all of them seem to favor the benefiters of the dams, the people who use the resource. It doesn't benefit the people of Trinity County. So I think it would have been fair to them to at least consider the "no dam" option.

With that said, I'll go on.

The EIS -- this is falling over. I want to read from the executive summary, what it says, the purpose and need for the action.

It says: "The purpose of the proposed action is to restore and maintain the natural production of anadromous fish on the Trinity River mainstem downstream of Lewiston Dam. The need for this action results from Congress. One, mandate that diversions of water from the Trinity River to the Central Valley project not be detrimental to Trinity River fish and wildlife resources; two, finding that construction and operation of the Trinity River division as well as other factors have contributed to detrimental effects to habitat and have resulted in drastic reductions in anadromous fish populations; three, finding that restoration of depleted stocks of naturally produced anadromous fish is critical to the dependent

59
tribal, commercial and sports fisheries; and, four, confirmation of the federal trust responsibility to protect tribal fishery resources affected by the TRD.

So what I'm reading here is that this is not about all those other economic factors; it's about restoring the fish. The maximum alternative is probably the one that will most likely restore the fishery. Taking down the Lewiston Dam is my vote, for starters. If you really want to restore the fishery, you can't restore the fishery without the water.

Secondly, the use of the water, I think, is wasteful. You can grow cotton in many other places in the world besides the westlands. I used to grow alfalfa in my orchard in Willow Creek, and I grow lettuce in my garden every year, and any fool can grow lettuce. Only wild rivers produce wild salmon, and the wild salmon are disappearing. We're losing our salmon. We're losing the steelhead. The Trinity River is a sourced river. As the Trinities fisheries collapse, all these other rivers throughout this region are collapsing. The Trinity is the biggest tributary of the Klamath River. The Klamath River ESU is very important. If we lose that -- I mean, the Sacramento and the Rogue are the biggest -- it's the biggest river system in between those two large river systems. We have a great responsibility here.

60
The preferred alternative is certainly the least that would be acceptable. The least. I don't like that this is -- could be turned into a political issue. I mean, I think we have plenty of good science. We have plenty of good legal grounds that are stated in the executive summary.

So, in closing, I ask you to make the decision, to encourage the decision, that will restore the fishery, truly restore the fishery. Mechanical manipulations have proven themselves costly and not necessarily effective.

So that's all I have to say. Again, I would like to just reiterate that we're losing our wild salmon stocks all up and down the West Coast. The Trinity River is one of the most important fisheries that we had in this entire stretch of the West Coast, and I think that needs to be a priority consideration.

Thank you.

THE HEARING OFFICIAL: Thank you for your comments.

Our next speaker is Kristi Wrigley.

MS. WRIGLEY: My name is Kristi, K-R-I-S-T-I, Wrigley, W-R-I-G-L-E-Y. And I live in Elk River. I've lived in Humboldt County most of my life. I was educated out of here and lived out of the county for ten years.

I would like to say that in the last couple of months I went to a Water Quality meeting where we listened

61
to a gentleman tell us about the studies on the Trinity River, and when the dam was originally designed they did a study to see how much of the water that should be diverted, and I don't remember the exact alternative but I'll be pretty close. It was something like 52 percent -- was not more than 52 percent of the water should be diverted. And recently another study was conducted over many years at a cost to us that do our best to pay our taxes, and it determined that the process of the diversion shouldn't be more than 53 percent. And right now it stands at 71 percent. It's gone as high as 90 percent, that I'm aware of.

I do not understand how the political strengths can override the pragmatic and the science that has so strenuously been put into these studies and to take the water away. It does not make good sense. You are -- we are the ones that are really paying the price. The fish are paying the higher price. It does not make sense to divert more than 30 percent, in my understanding, of using common sense, good judgment and consideration for the environment that we are trying to live from over the long run.

I also am of farming heritage, and find it rather deplorable that we export water to an area to grow food and truck it back up here when we could produce more of

62
that food ourselves, if we could make use of some of our own growing lands up here. But it's not a very viable alternative right now. Water's pretty expensive.

So I would be advocate that you -- certainly not more than 30 percent, if that much, if you really want fish, and we do, take the dam down.

Thank you.

THE HEARING OFFICIAL: Thank you.

Jesse Noell.

MR. NOELL: My name is Jesse Noell, J-E-S-S-E N-O-E-L-L. Thank you for the opportunity to speak tonight.

It's my understanding that there are problems with fish populations. Several of the commenters have pointed this out, and I understand that that was the reason for the flow study in part, to look at the impacts on the fish population, including temperature. And Emelia Berol just pointed out that she was advocating removal of the Lewiston Dam. I'd like to know why it was that that was not considered. It seems that that would provide eight or nine more miles of habitat and for spawning and rearing, and that's one of the things that needs to be accomplished if we're to bring back the fish, is an increase in that. Seems that that would fit one of the objectives of the proposed -- I might have to put on my glasses here for a

63
minute -- the purpose and need to restore the natural production of fish and wildlife.

So it's my understanding that the scoping for this project and the alternatives was developed more than a decade ago. Can you tell me whether that was true?

Mr. Halstead?

THE HEARING OFFICIAL: Mr. Noell, we're really here to get your comments, concerns and questions, and we're not answering those questions, at least in the hearing here. If we do take a break, I would encourage you to seek some of the Fish and Wildlife Service staff that will be at the information table to have that discussion, but here we're just really taking your comments and entering into the record.

MR. NOELL: Okay. It is an invitation to come back up and speak, then?

THE HEARING OFFICIAL: Well, again, we will not have a response here this evening on the record to the questions, but they can certainly be a part of a discussion that you would have with staff from the Fish and Wildlife Service if we take a break from the hearing. But the purpose and the time allotted was really to allow everyone a chance to speak and give comments on those draft documents.

MR. NOELL: And that was to get -- I suppose to

64
give people who don't write an opportunity to speak into the microphone and have the court recorder record what they said, right?

THE HEARING OFFICIAL: Well, again, it is not intended to be a question-and-answer type of a session; we're here to listen to you and everyone else that may have something to say about the proposal.

MR. NOELL: Okay. Thank you for considering my comments, and I hope that you'll reopen the scoping to address some of these alternatives that have not been given proper consideration. I think it's important in this case, because both the coho and now other salmonids are being listed, and they weren't considered. That wasn't right at the time, at the time that the scoping of the issues was developed.

So, with that, I close my remarks, and I thank you.

THE HEARING OFFICIAL: Thank you.

Denver Nelson.

MR. NELSON: I spoke to you once before. Can I speak again?

THE HEARING OFFICIAL: Yes.

Please state your name again and spell it for the record.

MR. NELSON: Denver Nelson, N-E-L-S-O-N.

I gave you sort of a technical talk earlier today,

Main TOC Next Page

65

and I was inspired by the Hoopa tribal chairman, who outlined that he -- his people had lived in the area for 10,000 years, and, you know, the legal precedent for that, of course, is the Tribal Trust Act, which is taken care of, or at least talked about, in these documents.

There's another -- you know, I have had a place on the Klamath River for many years, and I feel probably as strongly as the tribal chairman does about the river, and I think the legal precedence for that is the Public Trust Doctrine. And I actually went home and reviewed, did a search on the CD of these documents, and there is not much mention of the Public Trust Doctrine. So I came back to make sure that the Public Trust Doctrine is included in your discussions and decisions. I have brought it up once before at a Bureau of Reclamation hearing and people didn't know what it was, so I thought I would quote to you what the Public Trust Doctrine is.

It's a -- and this is from the state lands Department, the solicitor.

"The public trust doctrine is an affirmation of the duty of the state to protect the people's common heritage in streams, lakes, marshlands and tidelands, surrounding that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust. And, of course, the Public Trust Doctrine

66

is the basis for the Mono Lake decision which overturned the water rights of Los Angeles County and that changed the flow of the Los Angeles aqueduct, and I think it's very important to understand and use that as one of the legal precedences in -- along with the Tribal Trust Doctrine for sort of nontribal people. I think it's very important that you consider and act upon the Public Trust Doctrine in the flow studies and in the EIR and EIS.

Thank you.

THE HEARING OFFICIAL: Thank you for those additional comments, Mr. Nelson.

Jaime O'Donnell.

MR. O'DONNELL: Hello. My name is Jaime, J-A-I-M-E, O'Donnell, O-D-O-N-N-E-L-L. I'm the owner of Aurora River Adventures. It's one of the largest whitewater rafting companies in the northwest part of California. We are based on the Trinity River. I am also on the board of the Friends of the Trinity River. I'm one of the liaison and lead members of the Six Rivers Outfitter Guide Association. And I'm also a designated rep for California Outdoors, which is the largest trade association for commercial whitewater rafting companies in California.

I'm here to express my concern and absolute conviction of the economic benefits and prosperity on the

67

North Coast that can result from additional water flow on the Trinity River.

Although I'm aware this decision is focused on restoration of fish and wildlife, I want to elaborate on a complementing benefit that increased water flows will have on commercial rafting and tourism. I appreciate the opportunity to finally make comment on this long overdue EIS/EIR. I believe the time has come to complete this process, and I urge you not to extend the comment period beyond the December 20th deadline that is currently established.

I'm preparing for my thirteenth year in commercial whitewater rafting industry in Northern California, with the Trinity River being my company's single biggest, most important river used in commercial rafting. Over the past decade, commercial rafting has increased dramatically on the Trinity River, with locally owned companies being the largest commercial users on the main fork and its tributaries. In the mid-nineties, the Big Bar Ranger District saw 100-percent increase annually in commercial use. In 1988, previous to additional water flow being released, there were simply 500 commercial user days. By 1994, there was 5,000 commercial user days. That's 1000-percent increase in a six-year period of time. Most of this increase occurred in the years of 1992 through

68

1994. This is the same time period the administrative appeal had been filed by the Hoopa tribe, which guaranteed a minimum water flow of 340,000 acre-feet per year. Essentially, increased water flows equated out to increased boom and business that was nonexistent to pre-1988.

Most rafting companies on the Trinity have shown a steady increase in growth over the past decade, some years showing more than a 25-percent increase annually in the number of commercial whitewater user days. It's clear to me that this demonstrates that a reliable water flow has an impact on the growth of commercial rafting on the Trinity River. Of the 22 permitted rafting companies on the Trinity River, 50 percent are Northern California, locally based operations. These 12 rafting companies boat primarily on the Trinity River, and that's defined by at least 60 percent of their gross revenues achieved on the Trinity. The approximate annual gross revenue generated by these companies is between 400,000 and $500,000. The California State Office of Tourism has statistical information that shows a recycling factor of approximately 3.5 times for the recreational tourism dollar. Specifically, this means that for every dollar generated by North Coast rafting companies, these dollars are reused within our host communities 3.5 times. Therefore, the

economic impact of commercial rafting alone comes into the range of 1.4- to 1.75 million dollars annually.

Downstream users benefitting from this explosive growth include restaurants, motels, service-provider companies, private and government campgrounds. Economic gain is not only generated by the visitor or specific client, but it is also felt throughout the counties by the amount of employment opportunities. My business has experienced a rapid growth in payroll and number of employees annually since about 1995.

Additional water releases during low run-off months, specifically, from July 1st through September 30th, would ensure an adequate, reliable supply of water to allow our industry to continue to grow and contribute to the economies of Humboldt and Trinity counties. Increased water flow during these times would have significant impact, enabling companies to book trips to the end of September. Currently, most commercial outfitter reservations are sharply reduced after Labor Day, when the flow has traditionally been cut back to an inadequate level to perform commercial ventures.

Another specific economic gain for rafting companies would be the opportunity to utilize the Burnt Ranch Gorge throughout the summer. Although there are only four permits issued on the gorge, the use can be

extremely high. The season for the gorge is completely dependent on flow and release. Increases of water from the current 450 to approximately 800 CSF from July 1st to September 15th would guarantee those outfitters an opportunity that presently ends sometime in early summer. Although my expertise is in commercial uses of the river, the use of private individual boaters, boating and canoeing clubs and rental companies also has dramatically increased over the past decade. Additional water releases would also greatly augment this use. Despite the difficulty in accumulating exact figures for private use, they also have a significant impact on the economy of the Trinity River Basin in both counties.

In closing, I'm urging you to support additional water releases for the economic benefits of the recreation industry, our affiliates, and other downstream users. The original legislation creating the Trinity River division clearly prioritized Trinity fish and wildlife over any diversions to the CVP. I believe the flow evaluation alternative will provide the Trinity River with adequate water needed to restore the fisheries and support the developing recreation tourism dependent on the Trinity River.

Thank you.

THE HEARING OFFICIAL: Thank you for your comments.

Aida Parkinson.

MS. PARKINSON: Good evening. My name is Aida Parkinson. It's A-I-D-A P-A-R-K-I-N-S-O-N. I've been a resident of Humboldt County since 1992, and I'm a native Californian for about several generations back. I'd like to comment on the recreational analysis for the whitewater boating section.

Table 3.32 identifies a preferred flow range for whitewater rafting and kayaking as 300 to 8,000 cubic feet per second. Three hundred curb feet per second is too low for safe and enjoyable whitewater kayaking. I've kayaked about 100 days a year since probably 1994. I actually have a full-time job. I have kayaked at least once a month since 1993 throughout the year, and I average about 30 runs a year on the mainstem of the Trinity at all water levels, between 300 up to about 15,000 CFS. Four hundred fifty CFS would be a more preferred minimal flow. An optimal flow was not really identified in your recreational analysis, and there are presently standards for developing preferred thresholds for whitewater kayaking. FERC is using those in its relicensing projects.

With respect to alternatives for restoration, restoration of the Trinity River ecosystem requires a minimal diversion from the river. What's good for the

fish will make the kayakers happy. The flow schedules under the flow evaluation alternative do not provide sufficient water for restoration of the fisheries. My preference would be for a dam-removal alternative, and that particular alternative should probably be carried through for a full analysis in the final EIS.

We appreciate the opportunity to comment on this. Thank you very much.

THE HEARING OFFICIAL: Thank you for your comment.

Dan Doble.

MR. DOBLE: Good evening. My name is Dan, D-A-N, D-O-B-L-E, and I represent myself and the Northern California council of Trout Unlimited, which I am the Northern California president of.

At this time our membership has had some interest, of course, and that's because we are very profoundly interested in the salmon and steelhead restoration in all of Northern California, Trinity River being a particular interest. Historically, the runs were some of the best courses in the nation. The membership that I hold myself and others representing several thousand members in our state have the unique opportunity, having been educated, to some extent or another, as to the environmental recourse and the circumstances involved with the removal of water from the river. The response has been almost

Main TOC Next Page

73
universally, even though, of course, life in the valley is somewhat dependent on water resources there, that the only fair alternative, given only two choices of 42 percent or 98 percent, would of course be favorable to the 98 percent return of water. Privately, most would support removal of Lewiston Dam with very, very little urging.

I would like to go on record as supporting the most possible return of water to the Trinity River for all the economic, recreational and, of course, for the fish themselves.

I thank you very much for allowing me to comment.

THE HEARING OFFICIAL: Thank you for your comment.

Dave Morrow.

MR. MORROW: Good evening. My name is David Morrow, M-O-R-R-O-W.

Thank you for the opportunity to speak to you tonight.

My family are farmers in the Central Valley, and in Paso Robles area of San Luis Obispo County. We grow small grains and we have vineyards, and those crops are heavy water users. We pump fossil water from deep wells, and our irrigation costs for vineyards can average about $1,000 a day for a 40-acre block. That would be usually irrigated once a week for about 20 weeks a year.

One of the problems that we have as growers is

74
trying to compete with farmers who have access to the canal water, which is heavily subsidized by the federal government through the construction of dams and canal system. And I probably would not be popular with those users in advocating more of a fair market.

The basic thing that I've seen in farming is that when a resource is cheap it's wasted. For instance, my family uses drip irrigation on our vineyards. People in other parts of the valley who have access to what we call "ditch water," or the Central Water project or other sources like that, usually use furrow irrigation, or sometimes they'll use sprinkler sets. And sprinklers have about a 40-percent evaporation rate. Furrow irrigation is very wasteful, because you have to put a lot of water in at the beginning to push it out to the far end of the field, and there's a tremendous amount of water loss down below the root zone at your initial point of pumping.

Now, people say, well, that's family farmers who are dependent upon those water sources. One of our neighbors who grows cotton is Westlake Farms. Their 9,000-acre farm, they pump water using D-8 and D-9 cats through pumps that have a 20-inch outfall in roughly 10,000 gallons a minute, and they irrigate cotton and other crops with, again, heavily subsidized water.

So when we look at the economics of this project, I

75
think, just on a fairness doctrine, it would be much more efficient if the farmers who receive water from the Trinity and other systems like this paid the fair market value and they were actually competing on a level playing field, because right now, through the system that's been devised back in the fifties and sixties, you know, it's an inefficient allocation of resources.

I went over to the dam yesterday, which was the anniversary of President Kennedy's death, and listened to his voice at the dam. You can push the button and you can hear him talking about this wonderful dam and how it's providing a use of the water and it's no longer wastefully going out into the ocean. That was a few months -- I think in July, he gave that speech, a few months before his death in 1963. Well, times have changed. You know, the population of the United States is about 100 million more, and the population of California has quintupled. There's a tremendous demand on resources for fisheries, for recreation, for wildlife, and the amount of wild resources has really diminished to the extent that the Trinity is a real gem.

And I advocate restoration of the flows to the water that will sustain a real healthy fish population. The fish is obviously a real important part of the food chain for the birds and the animals that live along the

76
river, and the people who actually lived on fish for part of the year. There's a lot of poor people in this county who have told me that they used to eat a lot of salmon and steelhead when it was an abundant resource. We've kind of forgotten about them in the whole economic matrix. Eventually, I advocate just removing the dam, and I think it's only fair to consider that in the EIS. You can look at it in terms of wildlife or in terms of recreation, but also it's just a matter of fairness to the other farmers that we remove these unfair and inequalities and these subsidies that make people like myself or my family, actually drives own tractors and don't have a big operation -- it gives us a lot more of a chance.

Thank you.

THE HEARING OFFICIAL: Thank you, Mr. Morrow, for those comments.

Wendy Ring.

MS. RING: Good evening. My name is Wendy Ring, and I'm a family doctor who's worked for the past nine years in a mobile clinic serving low-income people in Humboldt and Del Norte counties. Among my patients are hard-working fishermen who are unable to afford health care for themselves or their family; owners of small, tourism-dependent businesses severely impacted by sport-fishing limits, and Yurok and Karuk native people

77

struggling with alcohol, drugs and family disruption arising from the loss of their cultural heritage and traditional way of life.

Diverting water from the Trinity River causes not only environmental degradation but also economic, social and spiritual impoverishment of our region. The dam, in human terms, is already grave. It has taken my profession a long time not to play God. Who are we to decide that the salmon god put here in our rivers or the people who depend on them have less value than the profits of agribusiness. When you take our water, you take our future. Please give us back our wild and free-flowing river.

Thank you.

THE HEARING OFFICIAL: Thank you.

At this time we have heard from everyone that filled out a slip and registered to speak. If there's anyone in the audience who wishes to make a statement at this time, please go to the registration table and fill out a card, and you'll have an opportunity to do so.

If there's no one that wishes to do so at this time, we'll go off the record and reconvene when we have someone in addition that wishes to speak.

We're off the record.

(Off the record.)

78

THE HEARING OFFICIAL: We do have one more person that wishes to make a statement, so we're back on the record.

And at this time I'd like to invite John McKeon to come up to the microphone, please. State your name, spell it for the record, and indicate who you're representing.

MR. MCKEON: My name is John McKeon, M-C-K-E-O-N. I'm a senior associate with the environmental consulting firm of Affiliated Researchers with offices in Michigan and California. I am a commercial fisherman; until recently, owner of Fish and Game vessel number 22354, the "Cindy Lee." I'm a board member of the Humboldt Watershed Council. I am here tonight on my own behalf as a professional biologist, as an owner of a drift boat, and a sportfishing enthusiast.

Before I start, I'd like to commend all the people who have put so much hard work and time over the years in attempting to rebuild the stocks of Klamath/Trinity River fish.

The Trinity River flow studies have focused on the physical habitat parameters created by reduced flow and changed flow regimes in the Trinity River itself. The wider ecological impacts to a much greater environmental sphere have received little attention. Have the Trinity River flow studies given consideration to the temperature-

79

ameliorating effects that historically massive spring and summer snow-melt flows of the Trinity have on the temperature-plagued Klamath River? Before the reduction of flows, almost 50 miles of the Klamath below the confluence of the two rivers was once likely a highly productive nursery habitat for outmigrating juvenile salmonids of both rivers. Historically created by the warm, organically rich waters of the Klamath, flowing from the Oregon deserts and commingling with the cold mineral-rich waters of the Trinity Basin mountain snow melt, it was the classic conditions for an ecological bloom. The loss of this nursery obviously reduces the size and, thus, survivability of ocean entry of both Klamath and Trinity salmonid outmigrants. No amount of manipulation of physical habitat parameters can mitigate this present impact of the Clare Engle Dam. Return of the unimpeded natural Trinity River flows is the only physically possible method of recreating this formerly, incredibly productive habitat of the Klamath/Trinity River system.

Have the Trinity River flow studies investigated impact of the yearly loss of hundreds of millions of salmonid outmigrants of the Klamath/Trinity system on the predator/prey relationship of so-called ocean conditions? William Percy, in "Ocean Ecology of North Pacific

80

Salmonids," calculated that just the common murre marine population consumes 150,000 juvenile salmonids per day. With the crash of Klamath Trinity salmonid populations, the highly mobile predators of the sea, both avian and mammalian, obviously flock to and congregate at the other mouths of rivers up and down the coast and hammer the limited populations of the smaller rivers, such as the Chetco, the Elk, Redwood Creek, the Smith, the Mad, the Eel, the Mattole, the Sixes, the Pistol, et cetera, et cetera.

It is my opinion, as a professional biologist, that arguments of similar coast-wide fluctuations of salmonid populations which point to vaguely defined ocean conditions can, to a great degree, be attributed to this impact of Clare Engle Dam on the ocean ecology of predator/prey relationships. Again, return of unimpeded natural flows to the Trinity River is the only physically possible method of rebalancing the predator/prey relationships in protecting the smaller rivers from over-predation.

Have the Trinity River flow studies considered the impacts of Clare Engle Dam on the salmonid metapopulation structure of the Klamath/Trinity system? Cooper and Mangel, 1998, in a study titled "The Danger of Ignoring Meta Population Structure for the Conservation of

Salmonids," published in Volume 97 of the National Marine Fisheries Service "Journal of Fisheries," found that the various demes, or populations of individual streams of the Columbia River system, could be classified as either sources or sinks of the greater metapopulation of the system. They attribute this phenomenon to the evolutionarily stable strategy of a documented, up to 27-percent strain of chinook populations, and up to 40-percent strain of coho, in their spawning returns to fresh water. They found the danger to fisheries investigations are that by simply monitoring so-called pilot-indicator streams, such as Pine Creek on the Klamath or New River or Horse Linto Creek on the Trinity, that although populations may hold steady or even increase for as long as 20 years, those results can be due, to a large degree, to the strain effect from source stream populations. With the change from source streams to sinks through habitat degradation, inability to successfully complete outmigration or change predator/prey relationships of ocean conditions, entire metapopulations of salmonids can crash with little or few warning indications.

Clare Engle Dam effectively eliminated many likely source stream population demes. Genetic studies as early as 1980 chronicled in "Salmonid Ecosystems of the North Pacific," in the study "Population Structures of

Indigenous Salmonid Species of the Pacific Northwest," by Fred M. Utter, et al., identified the unique alleles carried by upriver stocks of the Columbia Basin metapopulation. The loss of the genetic diversity of alleles carried by the fish once spawning and rearing in the year-round cold water streams above Clare Engle Dam cannot be mitigated by any processes or procedures instituted at the Trinity River hatchery.

Again, return of unimpeded natural flows to the Trinity River is the only possible method of rebuilding the genetically viable and diverse Klamath/Trinity meta-population structure of salmonid stocks to historic levels.

In conclusion, I would like to read the abstract of the Cooper and Mangel study, "The Danger of Ignoring Metapopulation Structure in the Conservation of Salmonids."

"Abstract: Because of their tendency to return to natal streams, salmonid populations have often been viewed in ecological isolation. Although the notion of an evolutionarily significant unit, ESU, recognizes dispersal on evolutionary time scales, we investigated the consequences of dispersal. Strain, on an ecological time scale, where strain creates a metapopulation structure for salmonid streams within an ESU. We developed a simple

model for salmonid metapopulations, focusing on source and sink populations, and used the model to highlight the dangers of ignoring this structure in conservation efforts. We show that exactly the wrong conservation efforts may occur if metapopulation structure exists but is ignored.

Thank you very much.

THE HEARING OFFICIAL: Thank you for your comments.

Is there anyone else that wishes to make comment?

I don't have any other registration slips, but this is your last chance. If you would like to make a statement, please fill out a registration slip. We do have a few minutes left before the hearing is scheduled to be adjourned.

If not, we'll go off the record right now.

(Off the record.)

THE HEARING OFFICIAL: We're back on the record.

We have received no additional slips for people wishing to make a statement, so on behalf of the U.S. Fish and Wildlife Service and cooperating agencies, we appreciate the time and effort that you took this evening to present your comments. They've been very informative and will be fully considered in coming to a final decision.

The hearing is closed. We're off the record.

[Hearing concluded.]

STATE OF CALIFORNIA)
) ss.
COUNTY OF HUMBOLDT)

I, TANIA N. BRUNELL, Certified Shorthand Reporter of the State of California, do hereby certify that I reported and transcribed the foregoing pages 1 through 83, in the matter of the EIS/EIR for the Trinity River Mainstem Fishery Restoration, November 23, 1999.

DATED this _____ day of _____, 1999.

TANIA N. BRUNELL
CSR #4277

Main TOC Next Page

$
$1,000 73:23
$144.89 12:24
$500,000 68:19
$93,952,547 12:21

1
1 84:8
1.4 69:2
1.75 69:2
10,000 42:25, 44:10, 85:3, 92:23
100 71:12, 75:16
100-percent 67:20
1000-percent 67:24
102 32:17
109 13:21
11 3:7, 9:2, 54:21
11,000 27:18
12 27:19, 27:21, 68:15
12-year 43:18
14 3:8
14-year 43:18
15 6:25, 47:25, 52:1
15,000 71:16
150 29:6
150,000 80:2
15th 30:13, 30:24, 41:20, 70:4
16 3:9
1855 10:19, 56:12
1880's 19:8
1948 31:22
1955 73:4, 43:20
1963 75:15
1971 57:1
1973 15:16
1975 17:4
1976 12:21
1980 81:24
1984 22:14
1988 67:21
1990 8:18
1991 12:23
1992 34:7, 67:25, 71:4
1993 71:14
1994 67:23
68:1, 71:12
1995 69:10
1997 15:25
1998 12:21, 80:24
1999 1:15, 7:15, 9:6, 10:23, 52:17, 54:25, 56:16, 84:10, 84:13
1:00 1:17, 5:2, 5:17, 50:18
1st 69:12, 70:3

2
2,000 19:25
2.2.6 18:7
20 3:10, 7:15, 12:4, 47:25, 73:24, 81:15
20-inch 74:22
200 25:11, 26:6
2000 7:17, 52:18
20th 8:6, 9:16, 10:23, 21:15, 52:16, 54:25, 56:15, 67:10
22 68:13
22354 78:11
23 1:15, 3:11, 84:10
25 46:11, 47:19
25-percent 68:9
2500 19:25
27 3:12, 81:7
28 3:13
2800 2:9

3
3-32 24:5
3-33 24:5
3.32 25:10, 71:8
3.5 68:22, 68:25
30 14:8, 27:14, 61:19, 62:5, 71:15
30-or-40-year 43:20
300 23:11, 25:13, 26:6, 29:6, 29:24, 30:16, 31:3, 31:10, 71:9, 71:16
3000 26:12
30th 69:13
34 3:14
340,000 68:3
363 33:18
3:00 1:17, 48:17, 50:18

4
40 3:15, 33:16, 81:8
40-acre 73:23
40-percent 74:13
400 25:21, 29:6
400,000 68:19
42 3:16, 73:3
4277 84:18
44 34:12, 34:13, 34:15
45 3:17
450 26:5, 29:6, 31:3, 31:10, 31:15, 70:3
46 3:18
48 57:12

5
5 19:12
5,000 20:17, 20:17, 67:23
50 47:9, 68:14, 79:4
50,000 13:7, 13:12, 13:16, 13:19
500 67:22
51 32:16
518 1:11
52 61:5, 61:6
52-percent 46:21
53 61:10
56 4:3
5th 15:13

6
60 4:4, 68:17
62 4:5
64 4:6
648,457 12:22
66 4:7
6:00 1:17, 5:19, 49:2, 50:2

7
7 21:19
700 19:12
71 4:8, 61:11
72 4:9, 17:10
73 4:10
75 15:23
7500 65:21
76 4:11
78 4:12
7:00 8:9
7th 1:11, 8:9

8
8,000 71:9
800 70:3
83 84:9
85 84:9
88 67:22
8:00 5:19, 49:2, 50:20
8th 16:4

9
9 23:1, 23:4
9,000-acre 74:21
90 17:19, 61:11
90,000 53:15
95521 10:20, 56:13
95825 2:10
96 15:24, 16:14
97 15:13, 81:1
98 57:12, 73:4, 73:5
9:00 8:10

A
A-I-D-A 71:3
abandonment 65:24
able 6:4, 10:12, 47:15, 56:5
absence 26:25
absolute 40:19, 45:9, 66:24
absolutely 42:3
abstract 82:14, 82:18
abundant 76:4
acceptable 21:14, 25:14, 27:3, 60:2
accepted 9:6, 10:13, 54:25, 56:15
access 24:24, 24:24, 74:1, 74:9
accessible 25:5
accompanying 54:10
accomplished 62:22
account 39:3
accounted 13:10
accumulating 70:11
accurate 26:10
achieve 27:21
achieved 27:19, 68:17
acknowledged 15:16
acorns 42:22
acre-feet 13:7, 13:12, 13:16, 13:19, 68:3
acres 53:15
across 30:1, 30:6
act 1:8, 7:6, 12:11, 15:11, 15:19, 16:3, 16:5, 16:6, 21:21, 21:23, 22:14, 52:9, 52:10, 53:6, 54:1, 65:14, 66:7
action 10:3, 52:12, 58:4, 58:12, 58:13, 58:16
actions 7:11, 23:7
actively 6:24, 51:25
activities 22:17
acts 16:7
adaptive 14:13, 14:15, 14:20, 37:17
add 12:12, 37:20, 38:9
added 22:7
addition 10:15, 12:16, 26:17, 56:8, 77:23
additional 6:3, 23:17, 51:4, 66:11, 67:1, 69:21, 69:24, 70:9, 70:14, 83:18
address 6:15, 10:21, 20:21, 22:8, 43:21, 51:16, 56:13, 64:10
addressed 10:7, 55:25
addresses 22:22
addressing 37:13
adequate 23:6, 31:18, 39:7, 59:13, 70:20
adequately 23:1
adjourned 83:14
administers 54:19
administrative 10:3, 68:1
advance 7:21, 33:18, 52:22, 54:12
advanced 25:3
advantage 34:24
Adventures 66:15
adversely 43:25
advocate 62:4, 75:22, 76:6
advocating 62:18, 74:5
affect 31:16, 43:25
affected 24:16, 24:20, 59:3
affecting 7:11, 16:2, 36:21, 58:12
affects 41:15
affiliate 20:17
Affiliated 78:9
affiliates 70:16
affirmation 65:20
afford 76:22
afternoon 3:5, 5:2, 5:3, 5:18, 6:10, 9:15, 10:15, 10:25, 15:1, 20:14, 28:20, 44:6, 40:5, 48:2, 48:18, 48:25, 49:4, 49:5, 49:7, 50:18
against 17:19, 39:20
agencies 9:8, 9:8, 10:2, 39:24, 44:19, 55:1, 55:2, 55:20, 83:20
agency 10:8, 52:6, 53:6, 58:1
agree 18:11, 44:4, 44:16, 45:11, 46:16
agreements 43:2
agrees 18:12
agribusiness 77:11
Aida 4:8, 71:1, 71:2
al 82:2
Alameda 46:9
alcohol 77:1
alfalfa 32:13
alleles 82:2, 82:5
allocation 13:9, 70:7
allotted 63:22
allow 14:13, 19:21, 27:1, 63:22, 69:14
allowing 23:16, 73:11
alone 69:1
Alps 40:20
already 20:21, 32:6, 77:7
alternate 24:11
alternative 14:3, 22:11, 22:20, 23:6, 24:13, 27:1, 27:3, 27:13, 27:18, 34:17, 35:5, 35:16, 35:21, 45:10, 46:21, 57:12, 59:6, 60:3, 61:4, 62:5, 71:20, 72:2, 72:4, 72:5, 73:3
alternatives 7:6, 9:11, 17:1, 22:18, 35:8, 35:13, 35:20, 52:7, 55:6, 58:3, 63:4, 64:10, 71:23
although 46:15, 67:3, 69:24, 70:6, 81:13, 82:20
amazing 41:3
ameliorating 79:1
Among 76:21
amount 11:17, 29:8, 38:4, 38:17, 39:13, 39:17, 39:20, 69:8, 74:16, 75:19, 79:14
amounts 12:24, 39:17
anadromous 58:14, 58:23, 58:25
analysis 24:15, 26:18, 36:15, 69:6, 71:19, 71:6, 72:6
Angeles 66:2, 66:3
anniversary 33:16, 75:9
annual 68:18
annually 13:8, 67:20, 68:9, 69:2, 69:10
answering 63:9
anymore 32:12, 32:16, 43:8
appeal 68:2
APPEARING 2:7
appears 12:25, 21:17, 27:3
apply 35:22
appreciate 67:6, 72:7, 83:21
approach 35:8, 35:10, 35:17, 35:17
appropriate 35:14
approximate 18:19, 47:7, 68:18
approximately 17:6, 17:18, 34:13, 68:21, 70:3
April 19:13
aqueduct 66:3
Arcata 6:11, 10:20, 12:17, 56:4, 56:13, 56:24
areas 32:7
aren't 48:3
arguing 38:22
arguments 15:9, 80:12
arising 77:2
articles 57:23
aside 39:5, 42:10
aspects 7:13, 9:11, 52:14, 55:5
assigned 25:10
associate 78:8
associated 22:6, 36:25, 43:11
association 16:21, 45:6, 66:20, 66:22
Association's 45:20
assume 12:12
atmosphere 38:3
attached 19:14
attachment 46:14, 46:16
attempting 78:18
attend 7:21, 8:11, 52:22
attending 8:22
attention 78:24
attest 29:9
attitudes 18:8
attorney 46:4
attribute 81:6
attributed 80:14
audience 10:6, 10:6, 48:14, 55:24, 55:24, 77:18
augment 70:10
Aurora 66:15
available 10:21, 14:12, 25:18, 35:25, 36:2, 36:23, 38:5, 39:2, 47:20, 53:25, 56:14
average 28:25, 47:23, 71:14, 75:22
avian 80:4

B
B-E-R-O-L 56:24
B-R-O-A-D-M-A-N 15:7
background 40:15, 53:22
bad 30:1
Bar 24:23, 24:24, 25:4, 67:19
barges 47:15
bars 41:4
base 32:9, 33:4, 33:7, 33:8
basic 74:6
basically 44:3
basin 2:5, 3:14, 9:2, 22:14, 22:19, 27:2, 32:25, 35:11, 37:5, 37:6, 37:7, 37:8, 37:9, 37:12, 43:2, 43:24, 44:14, 50:15, 51:17, 54:1, 54:7, 54:21, 70:13, 79:10, 82:3
Bay 16:20
bear 15:21
beat 26:1
beautiful 28:7
become 10:2
becomes 44:19
becoming 47:5
beds 30:8
begin 9:21, 55:14, 56:22
beginner 25:3, 25:4
beginning 47:22, 74:15
behalf 5:5, 7:18, 42:16, 43:5, 50:5, 52:19, 53:11, 78:13, 83:19
behavior 16:10
behavioral 16:9
behind 54:4
beings 28:6
Belchik 34:10
belly 30:6
beneficial 18:9
benefit 27:25, 41:9, 58:6, 67:5
benefiters 58:5
benefits 66:25, 70:19
benefitting 69:3
Berol 4:3, 56:20, 56:23, 56:23, 64:17
besides 57:14, 59:15
best 13:24, 14:6, 35:22, 36:1, 43:15, 44:15, 44:20, 61:8, 72:19
better 13:2, 13:4, 13:5, 21:24, 31:13
beyond 67:10
biggest 52:17, 57:23, 59:24, 67:14
billions 47:11, 47:15
biological 21:20, 23:12
biologist 78:14, 80:11
birds 75:25
bit 27:13, 35:7, 41:21, 57:10
block 73:23
bloom 79:12
blue 40:11
bluff 17:8
board 8:8, 66:18, 78:12
boat 25:19, 26:16, 29:25, 30:3, 68:15, 78:14
boater 26:19
boaters 25:7, 70:7
boating 26:19, 70:7, 71:7
boats 19:12, 26:15
Bob 6:9, 51:11
Boise 2:5, 5:15, 50:6
book 69:17
boom 68:5
born 46:9
bottleneck 36:19, 37:3
bottom 25:23, 43:10, 43:12, 44:21, 44:17
break 48:20, 63:10, 63:21
breeding 16:11
bridge 14:12
brief 53:12
bring 22:5, 62:23
bringing 47:12
Broadman 3:8, 14:25, 15:1, 15:6, 15:6
brought 65:14

Main TOC Next Page

Bruce 2:8, 6:6, 6:10, 7:25, 51:8, 51:10, 51:12, 53:19
BRUNELL 84:6, 84:17
buckets 33:5
building 33:2
burden 15:21
Bureau 2:11, 5:7, 5:21, 7:2, 7:19, 8:24, 9:3, 21:17, 21:23, 43:11, 50:8, 50:22, 52:3, 52:20, 65:15
Burnt 69:23
businesses 32:13, 76:24
button 75:10
buzz 14:14
bypass 13:25

C

Cal 13:13
calculated 80:1
California 1:13, 2:10, 2:12, 2:15, 2:18, 7:8, 8:25, 10:20, 11:5, 15:7, 15:23, 16:1, 16:22, 16:24, 17:8, 20:16, 25:18, 34:7, 51:13, 55:10, 55:16, 59:13, 59:24, 59:25, 66:17, 66:21, 66:23, 67:13, 68:14, 68:20, 72:13, 72:14, 72:18, 75:17, 78:10, 84:2, 84:7
California/nevad 2:9
Californian 71:5
calling 17:20
campground 24:21, 24:22
campgrounds 69:5
can't 25:22, 33:14, 39:8, 48:5, 59:9
canal 74:2, 74:3
cannot 26:14, 37:2, 37:7, 82:7
canoe 25:25, 26:1
canoeing 26:5, 41:13, 70:8
canoeists 24:2, 24:4, 24:6, 24:7, 24:8, 24:18, 25:12, 25:17, 25:21, 25:24, 26:13, 26:17, 26:17, 41:19
card 42:10, 48:16, 77:20
care 27:24, 33:21, 56:11, 59:12, 65:4, 76:23
carefully 9:12, 55:7
Carol 3:11, 23:21, 23:22
carried 72:5, 82:3, 82:5
carry 15:17, 22:18, 22:19
case 64:12
cases 65:23
cast 39:5
cats 74:21
causes 77:4
caveats 36:3
CD 65:11
Cedar 24:22, 24:23, 25:3, 30:10
Central 12:6, 14:5, 25:8, 45:19, 57:19, 58:18, 73:18, 74:10
CEQA 21:3, 21:12, 22:1
ceremonial 35:1
certain 9:14, 55:9
certainly 11:22, 12:6, 63:19, 82:13
Certified 84:6
certify 84:7
cetera 80:9, 80:10
CFS 25:13, 25:21, 26:5, 26:6, 26:6, 26:12, 27:18, 27:19, 27:19, 27:20, 27:24, 71:16, 71:17
chain 75:25
chair 27:10
chairman 42:16, 65:1, 65:8
Chamber 28:22
chance 16:15, 28:16, 63:24, 76:13, 83:11
change 81:17, 81:19
changed 14:19, 66:2, 75:15, 78:22
changes 14:21
Chapter 27:11
charge 30:12
cheap 74:7
check 30:19
checking 29:1
Chetco 80:8
Chief 54:16
chinook 12:23, 34:15, 81:8
choice 14:10
choices 73:3
choose 26:14, 32:21
chosen 14:11
Chris 2:17, 52:25, 53:2, 53:3
chronicled 81:24
Cindy 78:12
circulated 19:23
circumstances 72:24
cities 32:24, 33:13
city 31:7, 31:8, 31:8, 32:19, 32:23, 40:10, 40:11
Clare 79:16, 80:15, 80:22, 81:22, 82:6
Class 25:24, 25:25, 26:4
classic 79:11
classified 81:4
clean 47:5
clear 68:10
clearly 45:16, 45:17, 70:18
client 69:7
clinic 76:20
clippings 31:23
clogged 47:2, 47:2
close 21:15, 25:17, 47:7, 47:8, 48:24, 61:5, 64:16
closed 7:15, 49:6, 52:16, 83:25
closely 23:18
closing 60:7, 70:14
clubs 70:8
co-lead 9:7, 55:1
coast 20:16, 30:18, 45:5, 60:13, 60:15, 67:1, 68:24, 80:6
coast-wide 80:12
coho 15:24, 16:1, 64:12, 81:9
cold 79:9, 82:6
collaborative 6:25, 52:1
collapse 59:19
collapsing 59:20
collected 38:25
collecting 31:22, 31:24
Colonnade 1:12
Columbia 47:14, 81:4, 82:3
comes 12:19, 38:1, 42:11, 69:1
comfortable 26:17
coming 11:10, 14:22, 18:8, 20:14, 31:4, 49:3, 53:14, 83:23
commend 78:16
commendable 38:20
comment 7:6, 7:14, 21:15, 23:24, 24:2, 52:14, 55:15, 55:17, 55:18, 67:9, 67:24, 71:6, 72:2, 72:6, 73:11, 73:12, 83:9
commenters 62:14
comments 5:9, 7:12, 7:22, 8:5, 9:5, 9:7, 9:10, 9:10, 9:12, 9:16, 9:17, 9:20, 10:1, 10:2, 10:14, 10:15, 10:16, 10:16, 10:23, 10:24, 10:25, 14:22, 14:24, 20:11, 21:5, 21:8, 22:6, 24:15, 24:24, 40:2, 40:24, 41:11, 41:14, 41:18, 42:8, 44:12, 45:11, 45:25, 48:12, 50:10, 52:23, 54:11, 62:24, 65:1, 65:5, 65:5, 65:8, 65:10, 65:13, 65:19, 65:20, 65:21, 65:25, 66:5, 66:6, 66:7, 66:8, 66:9, 66:14, 66:15, 66:16, 66:17, 66:22, 66:23, 66:24, 67:11, 70:25, 76:16, 83:8, 83:22
commerce 15:15, 15:18, 28:22
commercial 19:11, 59:1, 66:22, 67:6, 67:12, 67:15, 67:16, 67:18, 67:20, 67:22, 67:23, 68:10, 68:12, 69:1, 69:18, 69:21, 70:6, 78:10
commercially 19:8
commingling 79:9
Commission 11:8, 40:13
common 61:20, 65:21, 80:1
commonly 25:20, 25:20
communities 28:1, 33:21, 68:25
community 28:21, 29:2, 32:9, 32:15, 32:22, 40:1
companies 66:16, 66:22, 67:17, 68:7, 68:13, 68:15, 68:19, 68:24, 69:5, 69:17, 69:23, 70:8
company's 67:14
compare 39:20
compensated 13:11, 13:20
compensation 18:13
compete 74:1
competent 45:14
competing 75:4
complementing 67:5
complete 67:8, 81:18
completed 45:7
completely 32:25, 70:1
compliance 21:24, 21:25
component 22:21, 22:22, 22:23
compromise 27:4
concept 12:7, 18:17
concern 16:25, 66:24
concerning 45:8
concerns 9:16, 51:17, 63:8
concluded 49:7, 84:1
concludes 40:2
conclusion 26:23, 82:14
condition 36:6
conditions 79:11, 79:24, 80:14, 81:20
conducted 61:7
conducting 5:9
confining 35:12
confirmation 59:2
confluence 79:5
congregate 80:5
Congress 6:15, 6:20, 51:16, 51:21, 54:6, 58:16
Congressional 6:23, 51:24
connect 48:4
connecting 50:10
connection 9:25, 55:18
consequences 82:23
conservation 15:22, 80:25, 82:16, 83:3, 83:4
consider 34:22, 58:8, 66:7, 76:7
consideration 9:1, 10:24, 13:25, 33:4, 55:25, 56:17, 60:16, 61:20, 64:11, 78:25
considerations 36:20
considered 7:7, 9:13, 52:8, 55:7, 62:20, 64:13, 80:21, 83:22
considering 64:8
consistent 22:25, 65:24
constant 45:20
constituencies 21:1
constituency 41:15
constrain 26:21
constraints 26:18
construction 58:20, 74:3
consultation 21:19
consulting 78:8
consumes 80:2
containers 17:25
contiguousness 28:5
continual 47:20
continue 69:14
continued 11:15, 47:17
contribute 69:14
contributed 58:21
contributions 28:5
control 31:14
conversely 12:17, 13:18
converted 33:6
conviction 66:25
Cooper 80:23, 82:15
cooperating 9:8, 55:2, 83:20
cornerstones 13:13
correlation 12:25, 13:2, 29:8
cost 23:11, 61:8
cost-effective 14:2
cost-sharing 22:13
costly 60:10
costs 22:9, 22:10, 75:22
Cottage 2:9
cotton 59:12, 74:20, 74:23
council 24:8, 40:11, 72:13, 78:13
counties 43:11, 44:18, 69:7, 69:15, 70:13, 76:21
county 2:17, 2:18, 2:23, 7:8, 7:20, 7:24, 8:1, 8:7, 11:7, 11:10, 13:7, 13:11, 13:12, 19:23, 20:18, 46:8, 46:9, 50:9, 50:23, 52:21, 54:21, 54:24, 57:16, 57:20, 57:25, 58:7, 60:22, 60:23, 62:2, 71:4, 73:19, 76:2, 84:4
couple 41:11, 41:12, 60:24
course 62:4, 65:25, 72:16, 73:1, 73:4, 73:9
courses 72:20
court 84:2
crash 80:5, 81:21
crazy 19:22
created 43:4, 78:21, 78:7
creates 82:24
creating 70:17
credence 38:10
credibility 38:10
Creek 17:23, 43:21, 50:14, 80:24, 81:12, 81:13
critical 42:4, 58:25
crops 73:20, 74:24
cross-examined 9:25, 25:18
CSF 40:3
CSR 84:18
cubic 25:11, 30:4, 30:16, 51:3, 71:9
cultural 35:1, 44:1, 46:14, 46:16, 77:2
cumulatively 28:3
curb 71:10
current 22:16, 70:3
currently 38:5, 67:10, 69:18
customers 30:1
cut 12:20, 30:22, 69:20
CVP 70:19
CVPIA 54:7

D

D-8 74:21
D-9 74:21
D-A-N 72:11
D-O-B-L-E 72:12
D-U-G-G-A-N 28:21
dairy 17:25
dam 8:25, 13:21, 13:22, 13:23, 13:25, 20:5, 31:25, 35:16, 43:5, 43:10, 43:13, 44:22, 54:17, 57:16, 58:1, 58:8, 58:16, 59:8, 61:6, 62:16, 62:19, 63:4, 66:8, 75:10, 75:11, 76:9, 77:6, 79:16, 80:15, 80:22, 81:22, 82:6
dam's 29:5
dam-removal 72:4
dams 28:9, 46:22, 47:16, 48:2, 48:4, 58:5, 74:5
Dan 4:19, 72:10, 72:11
danger 25:25, 80:24, 81:10, 82:15
dangerous 25:24
dangers 83:3
date 30:14, 30:24, 38:18
DATED 84:12
Dave 3:15, 34:10, 40:4, 40:5, 73:13
David 4:10, 73:14
deadline 8:6, 67:10
deadlines 21:5
deal 24:15
dealing 23:11
death 75:9, 75:15
debate 38:22
decade 32:25, 33:24, 43:16, 62:16, 68:8, 70:9
decades 34:21, 35:21, 35:12, 39:23, 39:25
December 7:15, 8:6, 8:9, 9:6, 10:23, 21:15, 52:16, 54:22, 56:15, 67:10
decide 77:8
decision 7:16, 22:12, 22:13, 22:19, 23:7, 60:7, 60:8, 66:1, 67:3, 83:24
decisions 65:14
deck 57:10
decline 11:15, 11:18, 33:3, 47:17, 47:20, 48:6
declines 54:4
decrease 11:20
deep 42:24, 74:21
deer 30:21, 42:22
defined 16:5, 16:6, 16:11, 26:8, 68:16, 80:13
degradation 16:8, 77:5, 81:18
degree 36:13, 80:14, 81:15
Del 76:21
delay 21:11
delays 21:14, 45:20
deliveries 43:6
delivery 43:24
demand 32:24, 33:1, 33:19, 33:20, 72:18
demes 81:3, 81:23
demonstrates 68:11
Denver 3:7, 4:6, 11:2, 11:4, 45:13, 64:18, 64:24
Department 1:1, 6:23, 7:12, 9:2, 30:19, 33:9, 51:24, 52:13, 65:19
departments 15:17, 15:18
depend 44:1, 77:10
depended 32:14
dependent 26:19, 58:25, 70:2, 70:22, 73:2, 74:19
depleted 58:24
deplorable 61:24
described 9:11, 55:6
deserts 79:9
designated 66:20
designed 57:10, 61:2
DeSoto 3:12, 27:8, 27:9, 27:9
Despite 70:10

Main TOC Next Page

destroyed 43:7
destroying 28:3
determined 61:9
detrimental 58:18, 58:22
devastated 11:11
develop 8:3
developed 63:4, 64:15, 82:25
developing 70:22, 71:20
Development 40:12
devise 29:18
devised 75:6
devoted 39:13
didn't 65:16
died 31:12
difference 24:6
difficult 30:6
difficulty 25:1, 26:20, 70:11
diminished 75:20
direct 29:7, 36:7
directed 6:20, 51:21
directly 48:4
director 2:14, 34:7
disappeared 48:3
disappearing 59:17
discrete 37:23
discussed 18:6, 22:4
discussing 43:15
discussion 38:22, 63:12, 63:20
discussions 65:14
dismayed 27:25
dispersal 82:21, 82:23
disproportionate 15:21
disruption 77:1
distance 29:22
District 67:20
ditch 74:10
diverse 82:11
diversion 6:17, 11:12, 13:9, 13:19, 14:7, 15:24, 21:22, 46:21, 51:17, 61:9, 71:25
diversions 58:17, 70:19
diversity 82:4
divert 61:19
diverted 12:5, 27:15, 27:16, 39:19, 61:4, 61:7
diverting 14:5, 77:4
division 54:16, 54:18, 58:21, 70:17
Doble 4:9, 72:10, 72:11
doctor 76:19
doctrine 69:10, 69:12, 69:13, 69:17, 69:20, 69:25, 66:6, 66:8, 75:1
document 8:12, 18:6, 18:7, 18:16, 43:14, 53:7
documentary 57:6
documented 81:7
documents 9:5, 9:10, 9:12, 21:10, 55:5, 62:9, 63:24, 65:9, 65:11
doesn't 39:19, 43:16, 44:3, 58:6
dollar 68:22, 68:23
dollars 11:13, 12:16, 12:25, 13:4, 29:20, 38:17, 47:11, 47:15, 68:24, 69:2
Douglas 31:8
downriver 28:22, 47:4
downstream 47:16, 58:15, 69:3, 70:16
draft 5:10, 6:12, 7:15, 9:16, 23:5, 50:11, 51:14, 52:16, 52:20, 54:24, 55:5, 63:24
drained 31:13
dramatically 67:16, 70:8
drastic 32:5, 48:9, 58:23
drastically 30:25, 41:24
draws 30:3
drift 30:3, 78:14
drip 74:8
driven 37:22
drives 76:12
drop 25:23, 30:25
dropped 31:2, 31:9
dropping 31:6
drought 40:24
drugs 77:1
dry 31:11
Duane 3:16, 42:9, 42:9, 42:12
due 46:13, 81:15
Duggan 3:13, 28:18, 28:19, 28:20, 41:17, 45:12
duty 65:21

E

E-M-E-L-I-A 56:24
E.B 3:13, 28:18, 28:20
earlier 41:12, 54:15, 65:25
easily 25:5
easy 36:22
eat 76:3
ecological 78:23, 79:11, 82:20, 82:23
ecologically 41:10
ecology 79:25, 80:15
economic 32:9, 33:4, 33:7, 34:24, 35:1, 59:21, 70:12, 89:5, 66:25, 69:1, 69:5, 69:22, 70:15, 73:9, 76:5, 77:5
economically 41:10
economics 41:25, 74:25
economies 69:15
economy 70:12
ecosystem 27:24, 28:3, 37:9, 37:10, 71:24
Ecosystems 81:24
Ed 41:7, 65:12
educated 60:22, 72:22
Eel 17:17, 17:22, 19:7, 80:9
effect 47:12, 81:16
effective 60:10
effectively 81:22
effects 6:16, 51:17, 58:22, 79:11
efficient 75:2
effort 7:1, 7:20, 38:17, 43:15, 45:23, 52:2, 52:21, 83:21
efforts 35:24, 38:20, 46:25, 47:12, 83:4, 83:5
egg-sac 17:15
eggs 17:19, 17:24, 20:5
eight 29:15, 30:5, 30:20, 62:20
EIR 37:19, 66:8
EIR/EIS 24:20, 54:22
EIS 34:17, 35:11, 36:12, 58:12, 58:24, 58:16, 58:18, 58:10, 66:8, 72:6, 76:7
EIS/EIR 7:4, 7:13, 7:15, 8:3, 9:3, 9:5, 9:9, 14:9, 22:7, 22:8, 22:11, 23:5, 24:17, 26:9, 51:15, 52:5, 52:14, 52:16, 54:24, 55:3, 67:8, 84:9
either 8:5, 13:10, 23:14, 25:10, 29:1, 81:4
elaborate 67:4
elected 40:10
eliminated 13:21, 15:25, 17:1, 18:16, 19:15, 57:19, 81:22
elimination 19:11
Elk 27:10, 60:21, 80:8
elsewhere 39:19
Emelia 4:3, 56:20, 56:23, 62:17
emphasis 11:18, 36:15, 36:18
emphasizes 16:7
employees 69:10
employment 69:8
empty 36:4
enabling 69:17
enact 43:23
enacted 43:4
encourage 8:4, 8:10, 21:4, 23:17, 60:8, 63:10
encourages 7:12, 52:13
Endangered 15:10, 15:11, 15:15, 16:3, 16:5, 21:21, 21:23, 53:25
ends 70:5
Engle 79:16, 80:15, 80:22, 81:22, 82:6
enhance 13:18
enhancement 17:5, 17:13
enjoy 33:11
enjoyable 71:11
enormous 34:16
ensure 15:20, 23:2, 39:25, 69:13
entering 63:13
enthusiast 78:15
entice 33:10
entire 12:4, 28:8, 36:5, 37:9, 40:16, 60:14, 81:20
entrance 6:2
entry 79:13
environment 7:12, 52:13, 61:21
environmental 1:6, 5:10, 6:13, 6:13, 7:8, 7:9, 50:11, 52:9, 52:10, 53:6, 54:15, 57:4, 72:23, 77:5, 78:8, 78:23
environments 11:23
equated 68:4
equitable 22:13
Erickson 2:17, 52:25, 53:3, 53:3
erosion 22:22
escapement 30:3
especially 20:7
essential 16:9, 16:10
essentially 41:19, 68:4
established 67:11
establishing 13:8
estimate 19:25
estuary 36:18, 37:16
ESU 16:1, 59:22, 82:21, 82:25
et 80:9, 80:9, 82:2
Eureka 1:10, 1:13, 1:15, 19:13, 20:15, 27:10, 32:17
evaluate 6:21, 51:22
evaluation 70:19, 72:2
evaporation 74:13
evening 4:2, 5:18, 42:1, 50:2, 50:5, 50:20, 51:1, 51:22, 53:11, 54:14, 55:9, 56:8, 56:10, 59:14, 59:23, 62:13, 63:18, 71:2, 72:11, 73:14, 76:18, 83:21
evening's 34:3
Eventually 76:6
everybody 57:22
everyone 8:7, 18:12, 48:13, 63:22, 64:6, 77:16
everything 41:16
evolutionarily 81:7, 82:21
evolutionary 82:22
exact 61:4, 70:11
exactly 83:4
example 47:13
exceed 46:20
excess 13:14
Excuse 15:4, 46:5
executive 34:7, 58:17, 60:6
exempt 22:9
exists 83:5
expected 7:16, 52:18
expensive 62:3
experience 47:19
experienced 69:9
experiment 12:10, 12:10
expertise 70:6
expired 22:15
explosion 19:17, 19:19
explosive 69:3
export 43:25, 61:24
exposed 25:16
express 66:24
extend 21:5, 67:9
extension 21:1
extensively 25:7
extent 26:21, 72:23, 75:20
extremely 18:9, 40:25, 40:25, 47:2, 70:1

F

F-L-E-T-C-H-E-R 34:5
facilities 17:10, 17:11, 17:12, 17:20, 17:20
factor 68:21
factors 11:24, 35:13, 37:1, 57:3, 58:21, 59:5
fall 43:17
failure 18:7, 39:22
fair 39:23, 50:7, 75:3, 74:5, 75:3, 76:7
fairness 75:1, 76:9
fall 34:15
falling 58:10
familiar 57:7
family 43:1, 44:10, 46:9, 73:18, 74:8, 74:16, 76:11, 76:19, 76:23, 77:1
family's 46:15
fantastic 17:5, 19:17, 19:19, 19:20
farm 74:21
farmers 73:18, 74:1, 74:18, 75:2, 76:9
farming 61:23, 74:6
Farms 74:20
farther 47:4, 47:4
fashion 22:2
fast 18:10
faster 20:6
favor 58:5
favorable 73:4
favorite 24:18
Fed 13:15
federal 15:20, 16:4, 17:14, 17:6, 32:3, 39:23, 44:19, 59:2, 74:2
Federation 45:5
feeding 16:12
feel 22:8, 26:3, 31:18, 46:13, 57:9, 65:7
feeling 48:5
feelings 8:12
felt 69:7
fence 25:21
FERC 71:21
field 74:16, 75:5
Fieldbrook 15:7
fifties 75:6
fifty 71:17
fighting 38:3
figures 70:11
filed 68:2
fill 48:18, 77:19, 83:12
filled 77:17
fills 48:19
final 9:2, 13:15, 22:8, 22:11, 23:5, 26:1, 56:2, 72:6, 83:23
finalized 21:19
finally 67:7
finding 58:19, 58:24
finishing 22:1
firm 78:9
fish 1:2, 2:4, 2:8, 5:6, 5:7, 5:16, 5:21, 5:22, 6:1, 9:18, 9:21, 10:19, 11:7, 11:22, 11:25, 12:1, 12:3, 12:11, 12:13, 12:14, 12:18, 12:19, 12:24, 13:1, 13:2, 13:3, 13:5, 13:24, 14:1, 14:4, 14:16, 14:18, 16:6, 16:10, 16:14, 16:18, 17:24, 19:6, 20:8, 20:8, 22:14, 27:24, 28:2, 29:8, 29:16, 29:19, 29:20, 29:21, 30:5, 30:19, 30:20, 30:24, 31:5, 31:6, 31:12, 32:8, 33:9, 33:16, 36:9, 36:12, 36:16, 36:21, 36:24, 37:8, 37:14, 37:14, 39:2, 39:12, 39:17, 47:19, 47:20, 48:1, 50:5, 50:8, 50:15, 50:22, 50:25, 51:13, 52:7, 52:19, 53:16, 54:20, 56:11, 58:13, 58:19, 58:23, 58:25, 59:6, 61:14, 62:16, 62:23, 63:2, 64:11, 65:20, 67:4, 70:18, 72:1, 73:9, 75:23, 75:24, 76:1, 78:11, 78:16, 82:5, 83:18, 84:9
fished 19:8, 31:22
fisher 34:24
fisheries 13:18, 16:11, 16:21, 19:3, 21:15, 24:12, 32:4, 34:9, 39:1, 46:18, 47:10, 47:13, 47:18, 47:21, 59:1, 59:10, 60:14, 70:24, 81:3, 81:10, 81:12, 81:16
fisherman 11:21, 18:22, 78:10
fisherman's 19:14
fishermen 76:22
Fishermen's 45:6
fishery 1:7, 5:11, 6:12, 7:10, 17:6, 22:25, 26:25, 52:21, 53:12, 53:14, 54:1, 54:7, 59:1, 59:7, 59:9, 59:16, 60:8, 60:9, 84:10
fishing 19:10, 19:12, 28:22, 28:23, 29:1, 29:2, 30:4, 32:7, 33:7, 38:24, 40:9, 42:5, 42:19, 46:10, 76:25
fishing-related 28:1
fit 62:24
five 8:5, 57:3
Flat 24:22, 24:22, 24:23, 30:10
fleet 19:10, 19:12
Fletcher 3:14, 34:5, 34:6, 34:7, 45:12
float 25:19
flock 80:5
flow 8:19, 9:3, 12:5, 12:9, 13:4, 13:10, 13:13, 13:16, 14:3, 14:6, 14:8, 14:9, 14:11, 14:17, 14:19, 21:24, 24:7, 24:9, 25:9, 25:12, 25:15, 26:3, 29:6, 29:20, 27:20, 27:21, 30:12, 30:12, 30:15, 32:1, 45:2, 45:8, 45:21, 46:9, 57:8, 62:16, 66:3, 66:8, 67:1, 67:21, 68:3, 68:11, 69:16, 69:20, 70:2, 70:19, 71:8, 71:17, 71:18, 72:1, 72:2, 78:20, 78:21, 78:22, 78:23, 79:21, 80:21
flow-study 35:24
flowing 13:12, 29:24, 76:8
flows 13:3, 13:6, 13:11, 14:4, 14:10, 14:13, 15:10, 22:3, 26:12, 26:16, 26:22, 26:24, 29:4, 34:13, 40:17, 41:6, 41:7, 41:8, 41:14, 41:18, 41:19, 42:3, 49:5, 49:8, 82:22, 68:4, 75:22, 79:2, 79:4, 79:17, 80:17, 82:9

Main TOC Next Page

fluctuations 80:12
fly 18:21
flyfish 44:5
focus 38:16
focused 67:3, 78:20
focusing 83:1
folders 31:24
folks 45:13, 50:24
follow 9:14, 55:9
fool 59:15
foot 31:3
force 14:15, 38:2, 38:11, 38:18
foregoing 84:8
foregone 39:18
foreign 42:18
Forest 22:25
forgotten 23:13, 76:5
fork 57:1, 57:3, 67:18
formerly 79:18
fortieth 33:16
forward 9:20, 21:12, 55:14
fossil 73:21
fountain 24:25
Fred 82:2
free-flowing 77:12
fresh 81:9
front 5:20, 9:20, 10:8, 21:7, 35:23, 55:14, 55:20, 56:1
fulfilled 54:9
full 9:21, 32:12, 35:15, 55:15, 72:6
full-time 71:13
fully 35:17, 83:23
function 11:17
functions 27:4
fund 22:16, 38:23, 38:24
funded 14:16, 14:17, 22:1
funding 14:11, 23:4, 23:16, 38:4, 38:16, 38:21, 39:7, 39:13
furrow 74:11, 74:13
future 45:22, 54:2, 77:12

G

gain 69:6, 69:22
gallons 74:23
Game 11:7, 30:19, 30:20, 33:10, 78:11
garden 59:14
gather 54:11
gave 64:25, 75:14
gem 75:21
generated 68:18, 68:23, 69:6
generation 22:10
generations 44:8, 71:5
genetic 81:23, 82:4
genetically 82:11
gentleman 61:1
gentlemen 28:20
given 10:24, 11:18, 13:7, 14:1, 25:10, 56:16, 64:11, 73:3, 78:25
gives 76:13
giving 12:8, 29:21, 46:2, 48:10
glasses 62:25
goal 12:2, 12:12
goals 23:7
god 77:18, 77:9
goes 41:24, 45:13, 47:3
gold 33:3
gone 16:14, 21:6, 29:17, 61:11
gorge 26:13, 69:24, 69:25, 70:1
governing 14:15
government 15:8, 17:5, 17:10, 19:21, 69:5, 74:3
governments 44:18
gradually 47:4, 48:6
grains 73:20
grandfather 19:7
granted 21:20
grave 77:7
gravel 12:9, 12:17, 41:4
greater 20:12, 26:21, 78:23, 81:5
greatly 70:10
groceries 32:18, 32:19
gross 68:17, 68:18
grounds 60:5
grouping 20:1
groups 34:16, 44:2
grow 32:24
grown 50:12, 50:13, 50:17, 59:15, 59:18, 61:24, 69:14, 73:19
growers 73:25
growing 62:2
grows 74:20
growth 68:8, 68:12, 69:4, 69:9
guarantee 70:4
guaranteed 68:2
guide 28:23, 29:16, 66:20
guided 38:8
guidelines 21:3

H

H-E-I-N-D-O-M 10:20, 56:12
habitat 6:17, 13:22, 13:23, 14:2, 16:8, 22:10, 26:25, 36:23, 43:17, 43:8, 51:18, 58:22, 59:21, 78:25, 79:6, 79:15, 79:19, 81:17
haggling 38:22
half 57:15
Halstead 2:8, 6:6, 6:9, 6:10, 51:8, 51:11, 51:12, 63:6
hammer 80:6
handled 18:25
happen 31:25
happened 19:16, 33:14
happening 30:18, 41:5
happens 27:22, 42:1
happy 51:6, 72:1
hard-working 76:22
harder 33:10, 33:10
hardly 33:15
harm 16:4, 16:5, 16:5
harmonizes 15:19
harvest 39:2, 39:4
harvester 34:14
hatcheries 17:12
hatchery 12:1, 17:2, 18:15, 20:9, 82:8
hatchery-product 18:6
hats 40:7
haven't 22:4
having 18:4, 43:8, 72:22
Hawkins 25:23, 26:24, 27:3
Hayden 24:23, 24:22, 25:2
Hayden/cedar 25:20
Hayfork 2:18
He's 28:14
health 6:18, 6:22, 11:23, 51:24, 51:19, 51:23, 76:22
healthful 32:22
healthy 75:23
hear 5:22, 7:23, 45:16, 75:11
heard 17:4, 19:2, 22:4, 36:21, 48:13, 77:16
hearing 1:4, 5:4, 5:7, 5:15, 5:16, 5:17, 6:1, 7:14, 8:8, 8:11, 9:4, 9:9, 9:16, 9:24, 14:23, 15:4, 16:17, 20:11, 23:14, 23:20, 27:7, 28:11, 28:15, 33:25, 34:4, 40:3, 42:8, 42:14, 44:24, 45:25, 46:5, 48:11, 48:18, 48:25, 49:9, 50:4, 50:7, 50:17, 50:18, 50:23, 51:1, 52:15, 54:23, 55:4, 55:10, 55:17, 60:18, 62:8, 63:7, 63:9, 63:17, 63:21, 64:4, 64:17, 64:21, 65:15, 66:10, 70:25, 72:9, 73:12, 76:15, 77:15, 78:1, 83:8, 83:13, 83:17, 83:25, 84:1
hearings 50:19, 53:5
hears 29:10
heavily 74:2, 74:24
heavy 73:20
heed 23:9
Heindon 10:19, 56:12
Hello 66:13
helps 37:25, 38:25, 39:1, 39:3
hereby 49:6, 84:7
heritage 61:23, 65:21, 77:2
Hi 28:19
higher 26:16, 61:18
highlight 83:2
highly 79:5, 80:4
Hillemeier 34:10
historic 19:5, 82:12
historical 44:7
historically 17:22, 19:1, 19:9, 72:19, 79:1, 79:7
histories 47:10
Hokkaido 17:6, 17:7
hold 72:20, 81:14
holding 8:8
holistic 37:4
honestly 57:25
Hoopa 2:15, 5:15, 5:8, 5:21, 7:2, 7:19, 8:15, 8:16, 8:20, 42:14, 42:17, 42:20, 42:25, 42:25, 50:6, 50:22, 52:3, 52:8, 52:20, 53:8, 53:12, 53:20, 65:1, 68:2
hope 12:6, 44:14, 44:15, 45:22, 64:9
hopefully 44:9, 44:10
Horse 81:13
horseback 18:1
horsetrading 38:3
host 35:25, 68:25
Hostler 2:14, 8:14, 8:16
hotel 33:18
hours 47:24
Howard 36:9
however 36:3, 45:9
human 7:11, 28:6, 52:12, 77:7
Humboldt 11:7, 11:10, 13:7, 13:11, 13:17, 16:20, 19:23, 20:18, 40:7, 46:8, 60:22, 69:13, 71:4, 76:21, 78:12, 84:4
hundred 26:6, 43:8, 71:10, 71:16
hundreds 79:22
Hupa 53:18
hurry 21:25
hypothesis-testi 38:11

I

I-N-K 5:13, 50:14
i-plus 25:4
Idaho 2:5, 5:15, 50:16
idea 18:4, 37:23
ideal 13:22
identification 23:4
identified 38:12, 71:18, 82:2
identifies 7:5, 52:6, 71:8
identify 37:25, 39:23, 42:15, 56:22
ignored 83:6
ignoring 80:24, 82:15, 83:3
II 25:3
III 25:2
immediate 17:14
immemorial 42:19
impact 1:6, 1:6, 5:10, 5:10, 6:13, 6:14, 7:9, 36:7, 36:8, 41:20, 50:11, 50:11, 51:22, 68:12, 69:17, 70:12, 79:16, 79:22, 80:15
impacted 78:24
impacts 6:21, 7:7, 7:11, 36:20, 52:8, 52:11, 52:12, 62:16, 78:23, 80:22
impairs 16:9
imperative 30:13
implementation 22:10, 43:21
implementing 22:3
importance 9:13, 36:16, 56:17, 54:6, 55:8
impoverishment 77:6
improve 9:1, 24:13
improvement 24:10
inability 81:18
inadequate 14:10, 69:21
inches 30:3, 30:5
include 7:10, 16:3, 22:12, 52:13, 69:4
included 18:9, 24:8, 37:21, 65:13
includes 22:20
including 6:19, 40:9, 42:5, 51:19, 62:17
inclusion 22:21
incorrectly 25:10
increase 12:1, 13:6, 14:16, 26:24, 27:18, 40:17, 42:20, 62:23, 62:24, 67:25, 68:8, 68:9, 81:14
increased 13:16, 14:13, 14:18, 17:4, 18:5, 18:15, 20:5, 27:21, 47:12, 67:4, 67:16, 68:4, 68:5, 69:16, 70:9
increases 29:8, 70:2
increasing 13:10, 27:20
incredibly 79:19
independent 38:8
Indian 15:21, 34:11
indicate 9:18, 9:22, 55:12, 55:16, 78:6
indications 81:21
indicator 11:22
indigenous 82:1
individual 20:17, 42:24, 44:13, 70:7, 81:3
industries 28:2, 42:4, 42:6
industry 16:23, 41:22, 42:5, 42:12, 67:13, 69:12, 70:16
ineffective 27:23
inefficient 75:7
inequalities 76:10
inflow 27:1
influence 11:24
informal 9:24, 55:17
information 6:2, 6:3, 10:22, 21:6, 21:8, 34:9, 38:25, 39:2, 39:4, 39:7, 39:24, 51:5, 51:24, 51:25, 53:24, 56:14, 63:12, 68:21
informative 83:22
initial 74:17
initiated 6:15, 51:16
injured 21:13
injures 16:6
injustice 58:2
INN 1:10
inspired 65:1
install 13:24
instance 74:7
instead 10:14, 48:9, 56:7
Institute 16:22
instituted 17:10, 82:8
instream 6:17, 37:13, 51:17
intended 64:5
interest 20:19, 54:12, 72:15, 72:19
interested 53:5, 57:2, 72:17
interesting 41:23
interior 1:1, 6:20, 6:24, 15:14, 15:19, 51:21, 51:25, 52:18
intermediate 25:2, 25:4
international 25:1
intervened 54:6
interviewed 57:23
introduce 5:23, 6:6, 8:14, 51:8
introductory 7:23, 52:24
investigated 79:21, 82:22
investigations 81:10
invitation 63:15
invite 78:4
involved 8:18, 18:18, 43:12, 44:1, 44:19, 57:8, 72:24
involvement 20:3, 36:4
irrigate 73:23
irrigated 73:24
irrigation 73:22, 74:8, 74:11, 74:13
island 17:6, 17:7
islet 17:9
isn't 25:3, 44:17
isolation 82:20
issue 18:16, 18:14, 18:19, 18:24, 18:24, 22:4, 43:22, 44:11, 54:13, 60:3
issued 15:14, 69:25
issues 6:18, 6:21, 20:23, 23:12, 31:19, 31:22, 57:13, 57:15, 64:15
itself 47:5, 78:22

J

J-A-I-M-E 66:14
J-E-S-S-E 62:10
J-I-M-M-Y 45:3
J-O-H-N 46:7
Jack 29:9, 29:14
Jaime 4:7, 66:12, 66:13
Japanese 17:4, 17:9
Jasper 2:14, 8:14, 8:16
Jesse 4:5, 62:9, 62:10
Jimmy 3:17, 45:1, 45:3
job 71:13
Joe 10:18, 56:11
John 3:18, 4:12, 28:12, 28:12, 28:16, 34:1, 46:1, 46:2, 78:4, 78:7
join 45:22
joint 5:9, 50:10
journal 81:25
journalist 57:4, 57:19
judgment 61:20
July 19:13, 62:12, 70:3, 75:14
jump 29:25
Junction 31:7, 31:8
June 15:13, 19:13
justify 57:18
juvenile 79:6, 80:2

K

K-R-I-S-T-I 60:20
K-R-U-E-G 23:23
Karuk 76:25
kayak 44:6
kayaked 71:11, 71:13
kayakers 72:1
kayaking 24:8, 25:16, 26:4, 40:10, 41:23, 71:9, 71:11, 71:21
kayaks 26:15
Kennedy's 75:9
kept 43:5
kills 16:6
Klamath 18:23, 19:24, 34:15, 35:2, 36:6, 36:7, 36:10, 36:11, 37:5, 37:6, 37:7, 37:9, 37:16, 27:20, 39:15, 40:20, 59:21, 65:7, 79:3, 79:4, 79:8, 79:14, 80:3, 81:12
Klamath/trinity 34:12, 34:25, 35:10, 78:18, 79:19, 79:23, 80:23, 82:11
knowing 42:24
known 8:12, 21:8
Kristi 4:4, 60:12, 60:20
Kruger 2:11, 23:22, 23:22

Main TOC Next Page

L

L-A-Z-I-O 16:20
Labor 26:8, 69:19
ladder 13:25, 14:1
laid 37:19
Lake 2:12, 40:11, 66:1
lakes 65:22
lands 62:2, 65:18
language 42:18
largest 34:14, 66:15, 66:21, 67:18
Lastly 42:3
latest 6:14, 51:15
latter 27:18
Lawrence 3:9, 16:18, 16:19
lay 17:7
Lazio 3:9, 16:18, 16:19, 16:19, 20:12
lead 8:21, 8:21, 53:6, 66:19
least 26:5, 30:9, 30:10, 46:11, 53:20, 53:21, 53:25, 58:8, 60:1, 60:2, 63:9, 65:4, 68:17, 71:13
leave 10:9, 44:8, 56:2
led 52:2
Lee 78:12
legal 15:9, 21:2, 60:5, 65:3, 65:9, 66:5
legislation 13:8, 14:2, 43:4, 43:20, 43:23, 43:23, 54:8, 70:17
legislators 32:2, 32:3
lend 38:2, 40:17
lengthy 46:15
less 13:5, 34:23, 47:5, 47:5, 77:10
letting 15:2
lettuce 59:14, 59:15
level 26:19, 69:21, 75:4
levels 25:6, 34:23, 37:21, 47:8, 71:18, 82:13
Lewiston 26:13, 58:15, 59:8, 62:19, 73:6
liaison 66:19
library 8:10
life-sustaining 42:21
lifeblood 40:19
lifelong 46:8
lightly 47:22
likely 48:22, 59:2, 79:5, 81:22
limit 25:11
limited 2:9, 38:4, 52:10, 80:7
limits 76:25
lines 19:14, 20:24, 21:4, 21:10, 21:14, 21:16, 23:11
Linto 81:13
lion 19:14, 36:22
lions 19:11, 19:25
listed 15:22, 16:2, 16:14, 53:24, 54:2, 64:13
listen 23:17, 52:24, 64:6
listened 60:25, 75:9
listening 14:22, 40:22
listing 16:3
lived 31:21, 56:25, 57:9, 60:22, 60:23, 65:2, 76:1
lives 57:22
living 19:9, 33:12, 33:13
local 30:19, 32:20
locally 67:17, 68:15
located 8:25, 34:11, 43:1, 54:17
logging 32:8, 33:7
long-standing 51:16
long-term 35:9, 35:17
longer 43:17, 44:11, 75:12
longstanding 6:16
looking 19:3, 29:1, 33:13, 34:20, 37:5, 37:13, 40:16, 40:21, 42:1
looks 19:25, 37:24
los 66:2, 66:3
lose 32:6, 33:8, 59:22
losing 59:17
59:17, 60:12
loss 74:16, 77:2, 79:12, 79:22, 82:4
lost 32:13, 39:21, 39:21
low 22:9, 25:15, 26:7, 26:20, 31:1, 71:1, 71:7, 71:8, 41:6, 69:11, 71:10
low-income 76:20
lower 25:11, 34:12, 53:16, 53:20
lowest 26:3
Luis 73:19

M

M-C-K-E-O-N 28:13, 78:7
M-O-R-R-O-W 73:15
Mad 80:8
magic 30:14
magically 30:24
mailed 10:18, 56:11
main 67:18
mainstem 1:7, 5:11, 6:12, 24:19, 25:14, 26:4, 36:7, 50:13, 59:11, 50:12, 51:14, 58:16, 71:15, 84:10
maintain 32:4, 58:14
major 18:23, 19:1, 32:13, 32:18
majority 26:13
makes 30:6, 30:25
making 12:1, 17:9, 69:3
mall 32:20
mammalian 80:5
mammals 19:17
manage 39:1
management 6:18, 14:13, 14:14, 14:15, 14:20, 22:14, 34:18, 37:17, 51:18
manager 2:12, 20:16
managing 57:14
mandate 6:24, 51:24, 54:8, 58:17
mandated 34:19
Mangel 80:24, 82:15
manipulation 47:1, 79:15
manipulations 60:9
manner 15:19, 25:2
marginally 25:14
Marianne 3:12, 27:8, 27:9
marine 16:11, 19:3, 19:17, 80:1, 81:1
market 74:5, 75:3
married 33:16
marshlands 65:22
marvelously 27:23
massive 79:1
material 10:9, 56:2
matrix 76:5
matter 14:11, 76:9, 84:9
Mattole 80:9
maximum 59:6
maybe 19:25, 37:3
McConnell 34:9
McKeon 4:12, 28:12, 28:12, 32:1, 32:6, 78:4, 78:7, 78:7
meaning 15:18
meaningful 23:2, 23:8, 34:23, 38:12
means 32:9, 42:23, 68:23
measured 12:11
mechanical 47:1, 60:9
mechanism 23:4
meet 23:1, 34:22, 39:22
meeting 7:21, 8:22, 52:22, 60:25
melt 79:11
member 11:7, 34:8, 40:14, 40:12, 78:12
members 20:17, 20:18, 66:19, 72:21
membership 72:15, 72:20
Memorial 26:8
mention 40:13, 45:11, 65:12
merit 37:24
met 21:17
meta 80:25, 82:11
metapopulation 80:22, 81:2, 82:4, 82:16, 82:24, 83:5
metapopulations 81:20, 83:1
method 29:18, 79:18, 80:18, 82:10
Michael 34:10
Michigan 78:9
microphone 9:20, 10:7, 11:3, 46:12, 55:14, 55:25, 56:21, 64:2, 78:5
mid-nineties 67:19
middle 47:23
migrating 16:12
Mike 2:13, 53:8, 53:10
miles 13:21, 29:23, 32:16, 32:17, 34:12, 34:13, 43:8, 62:21, 79:4
milk 17:25
million 26:20, 69:2, 79:16
millions 11:12, 12:9, 12:16, 47:11, 79:22
mind 10:5, 55:23
mineral-rich 79:10
minimal 26:6, 34:22, 71:17, 71:25
minimally 27:3
minimum 14:19, 31:15, 45:9, 58:3
minute 5:23, 10:24, 63:1, 74:23
minutes 83:13
mitigate 79:15
mitigated 82:7
mobile 76:20, 80:4
model 83:1, 83:2
modification 16:8
money 11:17, 12:20, 13:4, 22:17, 32:18, 33:5, 39:18, 39:20, 39:25
monitor 39:6
monitoring 38:23, 38:24, 38:25, 81:11
Mono 66:1
month 71:14
months 41:3, 41:22, 46:10, 60:25, 69:12, 75:13, 75:14
Morrow 4:10, 73:13, 73:14, 73:15, 76:15
motels 69:4
mountain 79:10
mouth 19:24, 36:18, 36:21, 40:19
mouths 80:6
move 12:9, 21:12
moved 46:9, 57:1
moving 12:17
mud 19:1
murre 80:1
myself 11:9, 42:16, 72:12, 72:20, 76:11

N

N-E-L-S-O-N 11:6, 64:24
N-O-E-L-L 62:11
Nakamura 3:15, 40:4, 40:5, 40:6
name's 34:8
natal 82:19
nation 72:20
National 7:8, 16:11, 19:2, 52:9, 81:1
native 71:4, 76:25
natural 2:14, 11:20, 12:8, 12:19, 14:4, 17:13, 17:18, 18:2, 20:8, 27:4, 42:19, 46:23, 47:8, 47:8, 54:17, 58:14, 63:1, 79:17, 80:17, 82:9
naturally 12:23, 31:12, 58:24
nature 35:18
navigate 25:16
navigating 25:15
necessarily 40:13, 60:10
necessary 9:14, 22:22, 23:4, 38:15, 39:7, 39:10, 40:1, 55:8
necessities 32:15
needed 14:12, 70:21
needs 24:10, 27:15, 28:4, 32:21, 35:9, 35:15, 36:14, 36:15, 36:16, 36:17, 37:13, 37:21, 37:22, 39:7, 39:12, 39:14, 59:22, 60:15, 62:22
negative 36:8, 36:20
negotiate 25:22
neighbors 74:20
neither 10:1
Nelson 3:7, 4:6, 11:2, 11:4, 11:4, 11:6, 14:23, 45:13, 64:18, 64:19, 64:24, 64:24, 66:11
NEPA 21:3, 21:12, 22:2
net 47:17
newspaper 31:23
Nike 29:17
nine 57:24, 62:21, 76:19
nineties 40:25
NMFS 21:21
noble 12:10
Nosil 4:5, 62:9, 62:10, 62:10, 63:12, 63:25, 64:8
none 32:1
nonexistent 63:18, 68:5
nonfishing 46:12
nonflow 22:23
nontribal 66:6
nor 28:3, 55:19
Norte 76:21
north 17:8, 20:16, 30:18, 67:14, 68:24, 79:25, 81:24
Northern 8:24, 16:1, 25:7, 54:14, 56:25, 57:4, 68:12, 72:12, 72:14, 72:18
northwest 66:16, 82:1
note 26:18
noted 25:5
notice 27:17, 58:3
notion 82:20
November 1:15, 16:3, 47:23, 84:10
numbers 11:22, 11:24, 12:2, 12:11, 13:1
numerical 30:6
nurseries 17:21
nursery 17:22, 18:4, 18:17, 20:4, 79:6, 79:12

O

O'Donnell 4:7, 66:12, 66:13, 66:14
O-D-O-N-N-E-L-L 66:14
Obispo 73:19
object 57:16
objective 38:6
objectives 23:8, 62:24
obligations 15:17
observations 11:21
obstacles 25:16
obviously 79:24, 79:12, 80:5
occur 35:16, 43:25, 46:20, 46:22, 83:5
occurred 35:25, 48:6, 67:25
ocean 19:10, 29:3, 32:10, 42:14, 75:13, 79:13, 79:25, 80:13, 80:15, 81:20
October 30:13, 30:23, 30:24, 41:20
office 2:5, 2:9, 5:14, 6:11, 8:25, 50:15, 54:16, 54:19, 68:20
offices 78:9
official 2:4, 5:15, 9:6, 14:24, 15:4, 16:17, 20:11, 23:20, 37:7, 58:11, 58:15, 83:25, 34:4, 40:5, 40:10, 40:14, 42:8, 42:12, 42:24, 45:25, 46:5, 48:11, 50:4, 50:17, 54:25, 60:18, 62:16, 63:7, 63:17, 64:21, 64:21, 66:10, 70:25, 72:9, 73:12, 76:15, 77:15, 78:1, 83:8, 83:17
official-service 51:9
officially 11:8
once-abundant 6:19, 31:20
one-half 12:7, 12:8, 12:12
ones 8:19, 23:10, 31:18, 61:17
onto 33:20, 41:11
open 44:14
opening 6:8, 30:21
operate 38:2
operating 21:18
operation 58:20, 76:13
operations 2:9, 58:15
opinion 21:20, 21:22, 23:12, 24:9, 28:10, 80:11
opportunities 24:14, 24:19, 39:21, 39:22, 69:8
opportunity 20:21, 23:25, 32:24, 46:3, 48:10, 62:11, 64:14, 67:7, 69:23, 70:5, 73:16, 77:20
opposite 40:23
optimal 71:18
option 14:1, 23:1, 23:1, 57:16, 57:18, 58:8
options 34:18, 35:5
oral 8:5, 10:14, 10:15, 10:25, 56:7, 56:8, 56:17
orchard 59:14
Orcutt 2:13, 53:8, 53:11
order 15:13, 21:25, 22:7, 23:2, 32:3
Oregon 16:1, 25:8, 79:9
organically 79:8
organization 9:18, 9:23, 10:22, 55:12, 55:16
organizations 40:15
origin 34:15
original 13:8, 14:6, 43:4, 43:19, 43:23, 70:17
originally 14:7, 31:20, 61:2
originated 43:1
others 32:18, 39:24, 72:21
otherwise 46:11
ourselves 62:1
outcome 12:10, 34:16
outdoor 33:12, 33:13
Outdoors 66:21
outfall 74:22
outfitter 66:20, 69:19
outfitters 70:4
outline 14:19
outlined 14:9, 65:2
outmigrants 79:14, 79:23
outmigrating 79:6
outmigration 81:19
outrageous 32:19
outside 6:2, 9:17, 10:22, 51:2, 55:11
overdue 67:7
overemphasize 12:1
override 61:14
overturned 66:1
owned 67:17
owner 66:14, 78:11, 78:14
owners 76:23
owns 53:15

P

P-A-R-K-I-N-S-O-N 71:3

P-O-L-O-S 10:18, 56:11
P.m 1:17, 1:17, 5:2, 5:17, 5:19, 8:10, 48:17, 49:2, 50:9, 50:19, 50:20
Pacific 36:5, 45:5, 79:25, 81:25, 82:1
package 37:10
paddler 25:25
Paddling 23:24
pages 84:8
paid 75:3
panel 15:8, 37:24
papers 29:3
parameters 78:21, 79:15
Parkinson 4:8, 71:1, 71:2, 71:3
participating 6:20, 51:25
particular 20:2, 20:24, 34:18, 72:5, 72:18
Paso 73:19
past 7:5, 9:2, 16:20, 16:21, 52:6, 67:15, 68:6, 70:9, 76:19
patients 76:21
pattern 14:18
patterns 16:9, 16:10
pay 61:8
paying 61:17, 61:18
payroll 69:9
peer 35:24
people's 40:22, 65:21
per 12:24, 25:11, 26:1, 29:24, 30:16, 31:4, 68:3, 71:10, 71:10, 80:2
perceive 17:12
perceived 20:8
percent 12:17, 12:18, 14:8, 15:23, 15:24, 16:12, 17:18, 17:19, 27:14, 27:19, 27:21, 27:22, 47:9, 57:12, 57:12, 61:5, 61:6, 61:10, 61:11, 61:11, 61:19, 62:5, 68:14, 68:17, 73:4, 73:4, 73:5, 81:8, 81:9
Percy 79:25
perform 69:21
perhaps 46:15
period 18:11, 21:15, 34:15, 67:9, 67:24, 68:1
permits 69:25
permitted 68:13
persistently 48:6
personal 11:21, 29:12
perspective 40:21
pertinent 16:13
phenomenon 81:6
physical 78:21, 79:15
physically 28:25, 79:18, 80:17
pick 44:4, 44:5
Picket 25:20
pictures 19:22
piece 37:8
piecemeal 46:24, 48:9
Pigeon 24:21, 24:21, 25:1
pilot-indicator 81:11
Pine 81:12
Pistol 80:9
placed 36:15, 36:18, 38:17
places 59:12
plan 22:12, 23:1
planning 8:2, 37:18
plate 59:24
play 77:8
playing 75:4
please 9:17, 9:20, 10:5, 10:8, 10:11, 11:3, 12:4, 21:14, 33:6, 42:13, 43:12, 44:11, 55:13, 55:22, 56:1, 56:20, 64:22, 77:12, 77:19, 78:5, 83:12
plenty 31:5, 60:4, 60:5
point 6:6, 24:21, 24:21, 25:2, 43:21, 51:8, 74:17, 80:13
pointed 62:14, 62:18
Policy 7:8, 52:9
political 44:17, 44:19, 60:3, 61:13
politics 38:13
Polos 10:18, 56:11
poor 35:3, 76:2
popular 74:4
population 11:19, 66:17, 72:16, 75:17, 80:22, 81:24, 81:25, 82:12
populations 11:19, 11:25, 35:4, 58:23, 62:14, 80:3, 80:7, 80:13, 81:3, 81:8, 81:14, 81:16, 82:19, 83:2
portage 25:22
portion 37:6, 38:14, 48:25, 49:5
position 27:12, 35:7
positions 40:14
possible 20:22, 22:3, 73:8, 79:18, 80:18, 82:10
potential 7:6, 52:7
power 22:9
pragmatic 61:14
pre-1988 68:16
precedence 65:9
precedences 66:5
precedent 65:3
predation 36:22, 36:22, 80:20
predator 18:22, 19:3, 19:19
predator-control 18:24
predator/prey 79:24, 80:16, 80:18, 81:19
predators 19:22, 80:6
predict 39:1
predjversion 11:13, 12:14, 12:18
predivision 12:15
preference 72:4
preferred 14:3, 14:9, 22:11, 22:20, 23:6, 24:7, 24:9, 24:11, 24:13, 25:9, 25:12, 26:3, 26:14, 27:17, 27:21, 45:10, 46:21, 70:1, 71:8, 71:17, 71:20
prepare 9:9, 55:2
preparing 67:12
present 9:16, 9:19, 38:2, 51:2, 55:10, 55:13, 79:16, 83:22
presentation 9:21, 51:9, 55:15
presented 10:25, 56:17
presenting 10:14, 58:7
presently 40:11, 70:5, 71:19
preserve 10:4, 55:22
president 16:20, 16:21, 72:14, 75:9
President's 22:25
presiding 2:3, 50:17
previous 67:21
price 61:17, 61:18
primarily 24:15, 68:16
primary 26:9
prime 14:15
priorities 38:19
prioritized 70:18
priority 60:16
private 69:15, 70:7, 70:11
Privately 73:5
probably 19:15, 19:18, 45:10, 47:22, 54:2, 59:6, 65:7, 71:12, 72:5, 74:4
problem 18:22, 19:1, 19:4, 28:8, 43:9, 43:10, 43:13
problems 62:13, 73:25
procedures 9:14, 55:9, 82:7
process 5:9, 6:14, 7:14, 9:3, 13:13, 20:25, 21:2, 21:3, 21:19, 22:2, 37:18, 37:19, 37:22, 38:12, 43:16, 45:19, 49:21, 50:10, 51:15, 51:22, 61:9, 67:9
processes 46:23, 82:7
produce 59:16, 61:25
produced 57:5, 58:25
production 17:2, 18:15, 20:5, 58:14, 63:5
productive 79:6, 79:19
profession 77:7
professional 29:16, 78:14, 80:11
professionals 18:18
profits 77:10
profoundly 72:16
program 2:12, 2:14, 17:5, 17:10, 18:4, 18:17, 18:25, 20:4, 39:14, 39:25
programs 22:6, 40:19
project 6:5, 8:2, 8:9, 8:12, 11:12, 14:14, 14:16, 14:17, 21:18, 28:1, 38:7, 38:8, 45:20, 54:19, 54:20, 58:18, 63:4, 74:10, 74:25
projects 37:25, 37:25, 38:10, 38:23, 38:24, 38:25, 39:6, 39:8, 71:22
promise 23:3
promised 14:6, 14:7
promises 43:5
promote 27:4
proper 64:11
proposal 26:23, 64:7
proposals 24:17, 24:20, 38:7
propose 37:7, 41:9
proposed 58:13, 62:25
prosperity 66:25
protect 59:3, 65:21
protecting 80:19
protection 19:16, 22:21, 65:23
proven 60:10
provide 23:16, 25:5, 35:22, 62:20, 70:20, 72:2
provided 23:10
providing 72:12
provisions 22:13
public 1:4, 5:6, 7:9, 7:12, 7:14, 8:8, 9:5, 19:16, 22:25, 24:24, 30:19, 52:24, 52:13, 52:15, 54:24, 65:9, 65:12, 65:13, 65:17, 65:20, 65:25, 66:7
published 29:3, 81:1
PUD 22:9
pulling 19:15
pump 73:21, 74:21
pumping 74:17
pumps 74:22
purpose 2:9, 26:24, 58:4, 58:11, 63:1, 63:22
purposes 65:24
pursuant 15:15
push 30:1, 74:15, 75:10
putting 57:15

Q

quality 7:9, 56:23, 57:10, 59:6, 60:25
question-and-ans 64:15
questioned 9:25, 55:18
quick 22:3
quintupled 75:17
quite 18:21, 27:13, 41:21
quote 65:16
quote/unquote 26:1

R

R-U-E-S 5:13, 50:14
rafting 24:9, 26:4, 40:9, 41:22, 42:5, 66:16, 66:22, 67:6, 67:13, 67:15, 67:16, 68:7, 68:12, 68:13, 68:15, 68:22, 69:1, 69:22, 71:9
rafts 26:16
rain 30:16
raise 30:17, 30:21, 30:22, 31:4
Ranch 24:25, 69:24
range 25:9, 69:2, 71:8
Ranger 67:19
ranges 24:7, 24:9
ranking 38:7
rapid 25:19, 25:22, 69:9
rapids 25:17
rare 65:23
rate 74:13
rated 25:2
rates 24:4, 25:3, 25:4
rather 20:19, 26:5, 33:5, 48:9, 61:23
ratified 43:3
ratio 17:17
rational 57:13
reaches 20:7, 25:18
reading 10:11, 31:16, 31:17, 31:17, 56:4, 59:4
ready 11:1, 56:19
real 43:9, 43:10, 43:22, 75:21, 75:23, 75:24
realize 29:15, 32:20
realizing 30:11
really 21:22, 21:24, 41:9, 47:11, 57:13, 59:8, 61:17, 62:5, 63:7, 63:15, 63:22, 71:18, 75:20
rearing 16:12, 62:21, 82:5
reason 21:16, 30:13, 53:4, 62:15
reasons 18:15, 54:4, 57:18
reauthorization 22:12
rebalancing 80:18
rebuild 78:18
rebuilding 62:10
receive 9:10, 55:4, 75:2
received 78:24, 83:18
receiving 33:9
Recent 57:13
recently 16:2, 61:2, 61:7, 78:11
reclamation 5:11, 5:8, 5:22, 7:2, 7:19, 8:24, 9:3, 21:17, 43:11, 50:9, 50:22, 52:3, 52:20, 54:22, 65:15
recognize 18:22, 28:4
recognized 24:5
recognizes 56:13, 82:21
recognizing 8:19
recollection 17:23
recommendations 31:17
reconvene 48:20, 77:22
record 5:4, 7:16, 9:22, 10:2, 10:4, 10:9, 10:12, 15:2, 22:5, 22:11, 22:15, 42:14, 43:7, 46:6, 48:21, 48:22, 48:23, 49:6, 50:4, 52:17, 55:16, 55:22, 55:23, 56:5, 56:6, 56:21, 63:14, 63:18, 64:2, 64:23, 73:7, 77:24, 77:25, 78:3, 78:6, 83:15, 83:16, 83:17, 83:25
recorded 10:4, 55:21
recorder 64:2
records 53:19
recourse 72:24
recovery 18:10
recreating 46:11, 79:18
recreation 24:16, 25:21, 40:8, 41:21, 43:25, 44:2, 70:15, 70:22, 75:19, 76:8
recreational 21:3, 24:5, 24:14, 25:9, 26:7, 26:9, 26:11, 41:17, 68:22, 71:6, 71:16, 73:9
recycling 68:21
Red 17:8
Redding 2:22, 23:10, 23:13, 33:3
reds 30:8, 31:10
reduce 30:14
reduced 8:19, 69:19, 78:21
reduces 79:12
reduction 19:20, 79:3
reductions 58:23
redundant 20:22
Redwood 27:1, 40:12, 80:8
refer 10:9, 56:2
referred 25:20
refinements 33:11
regarding 1:5, 41:14, 71:18
regime 21:25, 45:8
regimes 78:22
region 40:12, 40:19, 59:20, 77:6
register 9:17, 9:18, 10:4, 55:11, 55:12
registered 48:13, 77:17
registration 6:2, 10:10, 10:17, 10:21, 48:15, 51:3, 56:3, 56:10, 56:14, 77:19, 83:10, 83:12
reiterate 45:17, 60:12
relations 29:11
relationship 17:17, 79:24
relationships 80:16, 80:19, 81:19
relatively 35:3
relaxing 32:23
release 6:12, 17:14, 51:14, 70:2
released 18:2, 67:22
releases 25:21, 31:14, 69:11, 70:9, 70:15
reliable 68:11, 69:13
reliance 35:2, 35:2
relicensing 71:21
remarks 7:25, 52:25, 53:13, 54:5, 64:16
remembering 40:23
remind 15:8
reminder 49:1
removal 28:9, 62:18, 72:24, 73:6
removals 14:12
remove 13:23, 76:10
removed 46:22
removing 43:12, 47:2, 76:6
rental 70:8
reopen 64:9
rep 66:21
report 1:6, 5:11, 6:14, 29:2, 30:12
reported 42:18, 84:8
reporter 10:4, 10:5, 10:10, 10:12, 55:22, 55:23, 56:3, 56:5, 84:7
represent 8:16, 9:22, 20:16, 52:12, 52:16, 56:22, 72:12
representative 65:7, 7:24, 43:23, 44:13, 53:1
representatives 5:20, 9:25, 10:1, 10:8, 32:9, 50:21, 50:25, 55:19, 56:1
represented 9:2, 54:22
representing

Main TOC Next Page

8:24, 9:19, 11:8, 11:9, 16:23, 28:21, 72:21, 78:6
request 23:9, 45:8, 45:16
requirements 22:25
requires 71:24
research 7:4, 52:5
Researchers 78:9
reservation 34:11, 34:14
reservations 33:17, 69:19
reserve 34:2
reside 15:7
resident 46:8, 71:4
resource 14:14, 28:23, 34:24, 52:22, 58:6, 74:7, 76:4
resources 2:14, 7:10, 33:21, 53:11, 53:16, 55:24, 57:19, 58:19, 59:3, 73:2, 75:7, 75:18, 75:20
respect 46:13, 71:23
respond 10:2, 55:20
responded 13:4
response 6:22, 51:24, 63:18, 72:25
responsibilities 15:18
responsibility 15:16, 15:20, 59:2, 59:25
responsibly 39:1
restaurants 69:4
restoration 1:7, 2:12, 5:11, 6:5, 6:13, 12:20, 12:22, 13:1, 13:3, 13:23, 13:24, 14:4, 22:19, 22:23, 23:12, 23:8, 24:2, 27:25, 32:25, 34:20, 35:10, 35:15, 39:6, 39:7, 39:14, 46:25, 47:10, 50:12, 51:4, 51:7, 51:15, 58:24, 67:4, 71:23, 71:24, 72:3, 72:17, 75:22, 84:10
restore 6:22, 11:13, 11:17, 15:9, 16:13, 37:2, 37:8, 37:6, 37:11, 37:12, 39:9, 39:11, 46:24, 51:23, 52:20, 58:14, 59:7, 59:9, 59:9, 60:9, 60:9, 63:1, 70:21
restored 11:14
restoring 7:7, 16:2, 17:2, 23:17, 46:18, 52:8, 59:5
restrictions 33:9
result 14:18, 22:9, 47:1, 47:17, 67:1
resulted 58:22
results 58:16, 81:15
retain 28:4
return 12:14, 12:18, 16:15, 31:19, 73:5, 73:8, 79:16, 80:16, 82:9, 82:18
returned 12:13, 12:15, 12:25
returning 12:3, 12:11, 13:1, 13:3
returns 14:16, 14:18, 81:9
reused 68:24
revenue 68:18
revenues 68:17
reverse 48:8
review 9:6, 21:7, 35:25, 37:24, 38:6, 38:9, 54:25
reviewed 65:10
rich 79:8
Ridge 24:23
riffles 30:1
rights 15:12, 15:12, 66:2
Ring 4:11, 76:17, 76:18, 76:18
riparian 47:2
river 1:7, 2:5, 5:11, 5:14, 6:5, 6:12, 6:18, 6:22, 7:7, 7:10, 11:11, 11:12, 11:14, 11:14, 11:16, 11:18, 11:23, 11:25, 12:5, 12:7, 12:8, 12:10, 12:22, 12:23, 13:2, 13:2, 13:5, 13:6, 13:9, 13:10, 13:13, 13:21, 14:4, 14:8, 15:10, 17:16, 17:17, 17:22, 18:20, 18:21, 18:23, 18:23, 19:2, 19:8, 19:24, 20:1, 20:20, 22:13, 22:24, 24:1, 24:5, 24:10, 24:14, 24:19, 24:24, 25:18, 26:11, 26:24, 27:2, 27:2, 27:5, 27:10, 27:15, 28:8, 28:24, 28:25, 28:25, 29:14, 30:8, 31:11, 31:21, 32:12, 32:15, 35:21, 35:25, 35:25, 35:10, 35:11, 35:18, 36:4, 36:8, 36:7, 36:9, 36:10, 36:11, 36:12, 36:16, 36:19, 36:21, 37:2, 37:12, 37:15, 39:9, 39:11, 39:14, 39:16, 40:9, 40:16, 40:18, 40:20, 40:25, 41:2, 41:8, 41:9, 41:16, 41:17, 41:19, 42:1, 42:3, 42:20, 43:5, 44:6, 46:10, 46:11, 46:14, 46:18, 46:19, 46:23, 47:3, 47:5, 47:14, 47:21, 47:24, 48:2, 50:12, 50:12, 51:6, 51:14, 51:19, 51:21, 54:8, 54:20, 54:18, 57:5, 57:6, 57:14, 58:15, 58:18, 58:19, 58:20, 59:18, 59:21, 59:24, 59:24, 60:13, 60:21, 61:2, 65:7, 65:8, 66:13, 66:17, 66:18, 67:2, 67:14, 67:12, 67:17, 68:13, 68:14, 68:16, 70:6, 70:13, 70:12, 70:20, 70:24, 71:24, 71:25, 72:18, 72:25, 73:8, 75:1, 77:4, 77:13, 78:18, 78:20, 78:22, 78:25, 79:3, 79:17, 79:19, 79:21, 80:17, 80:21, 81:4, 81:18, 82:6, 82:10, 84:10
rivers 11:16, 23:13, 26:14, 41:13, 59:16, 59:19, 66:19, 77:9, 79:5, 79:7, 80:6, 80:7, 80:19
Road 10:20, 24:25, 56:13
Robert 2:4, 5:12, 50:13
Robles 73:19
rocks 25:16, 26:2
Rogue 59:23
room 1:12, 2:9, 6:3, 9:17, 10:22, 18:12, 31:5, 33:18, 51:2, 51:11
root 74:17
roots 42:24
roughly 74:22
round 32:17
routes 25:17
Ryesink 2:4, 5:12, 50:13
run 25:20, 26:11, 26:20, 39:3, 42:24, 61:22
run-off 69:11
runs 6:19, 16:13, 24:19, 26:20, 43:5, 56:6, 56:15, 58:13, 58:15, 71:20, 71:15, 72:19
Russell 2:11, 8:23, 54:14

S

S-M-I-T-H 45:3
S-T-O-K-E-S 46:7
Sacramento 2:10, 13:12, 33:2, 59:23
safe 71:11
salmon 6:19, 11:19, 13:22, 16:2, 17:6, 17:13, 17:15, 19:8, 19:10, 19:15, 19:20, 42:22, 43:7, 51:20, 59:16, 59:16, 59:17, 60:12, 72:17, 76:3, 77:9
salmonid 11:25, 79:14, 79:23, 80:3, 80:12, 80:22, 81:24, 82:1, 82:12, 82:19, 82:25, 83:1
salmonids 64:12, 79:7, 80:1, 80:2, 81:1, 81:20, 82:17
Salyer 24:23, 29:22, 32:14
San 73:19
saying 19:18, 31:10
says 58:11, 58:13
scale 25:1, 82:24
scales 82:22
scheduled 5:17, 48:17, 50:20, 83:13
schedules 72:1
science 35:23, 36:2, 37:23, 38:13, 44:15, 44:20, 60:4, 61:14
scientific 37:24, 38:9
scoping 57:8, 63:3, 64:9, 64:14
sea 19:11, 19:14, 19:25, 36:22, 80:4
Seafood 16:22
seafood-processi 16:23
seal 36:22
seals 19:11
search 65:11
season 26:9, 26:11, 30:21, 70:1
seasons 26:8
Secondly 59:11
secretarial 15:13
Secretary 6:20, 15:14, 15:14, 32:19, 51:21, 52:17
section 21:19, 31:7, 71:7
sediment 39:11
sedimentation 6:17, 21:18
seeing 54:6
seek 63:11
seem 32:19, 58:5
seems 27:23, 62:20, 62:24
sees 29:10
segment 36:16
selected 13:15, 34:18, 38:11
selection 38:8
senior 78:8
sense 32:24, 53:13, 61:16, 61:18, 61:20
separate 37:23, 38:13
September 30:22, 30:23, 47:23, 69:12, 69:18, 70:4
series 50:19
serious 13:25
service 1:2, 2:7, 5:8, 5:6, 5:7, 5:14, 5:21, 6:1, 6:7, 6:11, 7:1, 7:18, 10:19, 19:3, 50:6, 50:8, 50:16, 50:22, 51:1, 51:13, 52:2, 52:19, 59:14, 63:21, 81:11, 83:21, 81:2, 83:20
service-provider 69:6
serving 5:15, 50:16, 76:20
session 3:5, 4:2, 5:2, 34:3, 49:7, 50:2, 64:5
sets 74:12
seven 32:13, 32:13
several 6:15, 7:5, 7:6, 20:25, 43:8, 47:24, 51:16, 52:6, 52:7, 52:14, 71:5, 72:21
severely 76:24
shallow 25:18, 25:23
shame 30:10
Sharper 24:25
sharply 12:20, 69:19
Shasta 2:12, 8:25, 54:17
sheltering 16:12
Sherman 3:16, 42:9, 42:9, 42:15, 42:16, 42:17, 44:25, 46:13, 46:16
shoes 29:19, 29:21
shopping 32:11
short 29:25
shorthand 84:6
shot 47:25
shouldn't 38:1, 39:5, 61:10
showing 68:9
shown 11:16, 47:11, 57:13, 68:7
shows 68:21
shut 31:14
Sierra 5:13, 27:11, 50:14
sight 32:25
sign 48:24
signed 15:13
significant 16:8, 35:1, 41:20, 69:17, 70:12, 82:21
significantly 16:9
similar 80:12
simple 82:25
simply 12:12, 67:22, 81:11
single 37:11, 37:11, 67:14
sink 83:2
sinks 81:5, 81:17
sites 33:19
situation 18:3, 32:6, 40:16, 40:23, 41:4, 45:14, 47:3
six 23:23, 41:13, 46:10, 66:19
six-year 67:24
Sixes 80:2
sixties 75:6
size 39:5, 79:13
skeptical 46:24, 49:25
skill 25:6, 26:19
slip 48:19, 77:17, 83:12
slips 83:10, 83:18
Slough 24:25
slowly 10:11, 56:4
smaller 80:7, 80:19
Smith 2:11, 3:12, 8:23, 8:23, 45:2, 45:3, 52:14, 54:15, 80:8
Snake 2:5, 5:14, 50:15
snow 79:10
snow-melt 79:2
so-called 79:24, 81:11
social 77:5
solicitor 65:19
solution 28:7
solved 43:13
someone 48:19, 48:20, 77:23
sometime 70:5
somewhat 73:2
somewhere 44:6, 44:6
sort 27:25, 46:24, 46:25, 64:25, 66:6
source 81:16, 81:17, 81:23, 83:1
sourced 59:18
sources 74:11, 74:19, 81:5
south 15:23, 35:3, 57:1, 57:3
Southern 15:25, 16:1, 25:8
spawn 17:18, 29:22, 39:12
spawned 31:12
spawning 12:23, 16:12, 17:13, 30:8, 30:9, 31:8, 31:13, 31:16, 62:21, 81:9, 82:5
speak 15:2, 20:23, 26:15, 28:17, 45:10, 48:3, 48:10, 48:14, 58:24, 62:11, 62:16, 63:23, 67:16, 74:20, 73:16, 77:17, 77:23
speaker 3:4, 11:1, 14:25, 16:18, 20:13, 23:21, 28:14, 28:16, 42:11, 42:14, 56:19, 60:19
speakers 20:25, 23:18
speaking 42:18, 42:23, 48:2
specie 17:14
species 15:10, 15:11, 15:15, 15:22, 16:5, 16:9, 19:20, 21:21, 21:23, 53:25, 54:1, 54:1, 82:1
specific 69:6, 69:22
specifically 17:14, 17:11, 68:23, 69:12
speech 75:14
spell 9:21, 11:6, 15:5, 46:6, 55:15, 55:21, 64:22, 78:5
spelled 15:6, 50:14
spend 13:5, 32:18, 47:11
spending 12:9
spent 11:13, 12:16, 12:21, 12:24, 12:25, 33:15, 47:15, 57:20
sphere 78:24
spiritual 77:6
spoke 64:19
sport 11:21, 76:24
sportfishing 78:15
sports 59:1
spring 7:16, 52:18, 79:1
sprinkler 74:12
sprinklers 74:12
ss 84:3
stable 81:7
stacked 57:10
staff 10:10, 10:17, 34:9, 51:5, 56:3, 56:10, 63:11, 63:20
stage 17:15, 17:25
stake 34:16
standards 71:19
stands 41:7, 61:11
start 8:19, 18:19, 20:6, 37:20, 78:16
started 31:6
starters 39:8
starting 32:6, 40:6
starts 30:22
state 15:5, 16:23, 17:7, 32:2, 32:7, 40:8, 44:18, 45:6, 46:5, 53:23, 56:21, 58:4, 64:22, 65:18, 65:21, 68:20, 72:22, 78:5, 84:6, 84:7
stated 54:5, 60:5
statement 6:8, 6:13, 10:6, 27:17, 48:15, 77:18, 78:2, 83:12, 83:19
Statement/enviro 1:6, 5:10, 50:11
statements 49:4, 55:23
States 5:5, 50:5, 75:16
statewide 16:22
stating 9:21, 55:15
statistical 68:20
status 32:5, 53:21, 53:24
steady 54:24, 68:8, 81:14
steelhead 11:19, 13:22, 17:23, 48:2, 54:1, 59:18, 72:17, 76:4
step 6:14, 36:1, 39:24, 51:15
steps 6:21, 51:22
stick 21:4, 21:12
sticking 18:25, 23:11
stocks 58:24,

Main TOC Next Page

60:12, 78:18, 82:3, 82:12
Stokely 2:16, 7:24, 7:25, 8:1
Stokes 3:18, 46:1, 46:2, 46:7, 46:11
stop 43:22
stores 32:12, 57:23
strain 81:8, 81:9, 81:16, 82:23, 82:24
strategy 81:7
stream 81:16, 81:23
streambed 47:1
streambeds 41:5, 42:2
streams 18:2, 65:22, 81:3, 81:12, 81:17, 82:6, 82:19, 82:25
Street 1:11
streets 57:21
strengths 61:13
strenuously 61:15
stretch 60:15
strive 15:20
strong 15:3, 15:9
strongly 65:8
structural 14:12
structure 80:23, 80:25, 82:12, 82:16, 82:24, 83:3, 83:5
Structures 81:25
struggled 38:19
struggling 77:1
studies 11:20, 21:6, 21:9, 57:13, 61:1, 61:15, 66:8, 78:20, 78:26, 79:21, 80:21, 81:23
studying 11:15, 43:22
stuff 58:6
submit 8:5, 10:16, 44:12, 56:8
submitted 10:17, 56:9
subsidies 76:11
subsidized 74:2, 74:24
subsistence 34:23, 35:1, 39:22
substantial 19:10
substantially 46:20
success 17:17, 39:6
successfully 81:18
sufficient 39:13, 72:3
summarizes 7:4, 52:5
summary 58:11, 60:6
summer 41:2, 69:24, 70:5, 79:2
summertime 29:24
Sunday 18:21
supervisor 2:4, 5:17, 5:13, 50:14, 52:25, 53:4
Supervisors 8:8
supply 32:18, 69:13
support 22:21, 24:11, 26:23, 28:4, 32:6, 35:20, 35:21, 36:21, 36:22, 40:17, 70:14, 70:21, 73:5
supporting 73:7
suppose 62:25
supposed 30:17
supposedly 57:18
surely 37:11
surface 25:17
surrounding 65:22
survivability 79:13
survival 17:19, 17:19, 18:3, 28:3, 36:8, 53:16
sustain 75:23
sustains 22:21
swim-up 17:14, 17:25
swimming 17:16
system 6:22, 7:7, 18:10, 18:23, 18:23, 38:7, 51:23, 52:6, 59:24, 74:6, 75:5, 79:20, 79:23, 80:23, 81:4, 81:6
system's 6:18, 51:19
systems 35:4, 59:25, 75:3

T

table 5:20, 6:2, 6:4, 9:17, 10:8, 10:17, 25:10, 48:15, 50:21, 51:3, 51:5, 55:11, 55:20, 56:1, 56:10, 63:12, 71:8, 77:19
tables 10:22, 24:5, 56:14
tag 41:11
taken 17:24, 18:1, 19:23, 32:8, 65:4, 77:7
taking 5:9, 18:19, 50:10, 54:12, 57:15, 59:7, 63:13
TANIA 84:6, 84:17
task 38:2, 38:18
taxes 61:9
TCC 38:2, 38:18
team 8:3, 38:9
technical 64:25
temperature 41:3, 62:17, 78:25
temperature-plag 79:3
ten 12:17, 12:18, 17:18, 60:23
ten-pound 30:5
tendency 82:18
tennis 29:19
terms 35:5, 35:7, 35:20, 37:16, 59:21, 74:1, 74:9, 77:7, 76:8, 76:8
terrible 58:2
testimony 10:11, 23:17, 56:4
thank 6:9, 7:20, 7:21, 7:25, 8:13, 8:22, 9:4, 11:10, 14:22, 14:23, 15:2, 16:16, 16:17, 16:19, 20:10, 22:19, 23:16, 23:20, 23:24, 27:6, 27:7, 28:10, 28:11, 33:24, 33:25, 34:4, 40:3, 42:23, 42:24, 43:25, 44:24, 45:24, 45:25, 47:4, 48:10, 48:11, 49:3, 51:11, 52:21, 52:22, 54:22, 54:23, 60:17, 60:18, 62:7, 62:8, 62:11, 64:8, 64:16, 64:17, 66:9, 66:10, 70:24, 70:25, 72:8, 72:9, 74:11, 74:12, 75:16, 76:12, 77:14, 77:15, 83:7, 83:8
thanks 20:14, 40:2, 45:24, 53:3
themselves 5:24, 60:10, 73:10, 76:23
there's 19:22, 31:5, 38:21, 48:7, 48:14, 54:5, 58:4, 65:6, 74:16, 75:18, 76:2, 77:17, 77:21
therefore 9:24, 55:17, 68:25
they'd 21:24
they'll 5:23, 74:12
they're 33:2
they've 17:15, 31:22, 31:24, 48:3, 83:22
thing 38:15, 38:20, 41:24, 74:6
third 14:10
thirteenth 67:12
though 25:11, 46:8, 73:1
thousand 72:21
thousands 31:11, 31:11
threatened 16:2
three-fourths 12:13, 12:15
threshold 26:7
thresholds 25:10, 71:20
throughout 59:20, 69:7, 69:24, 71:14
throw 39:8
thrown 57:17
thus 79:13
tidelands 65:22
tie 44:7
tight 25:23
Tim 14:25
timely 22:2
titled 80:24
today 6:7, 8:6, 10:17, 23:10, 23:13, 30:7, 42:8, 43:14, 43:15, 44:3, 44:17, 45:4, 45:12, 45:17, 46:3, 64:25
today's 6:1
tolerate 45:18, 45:19
Tom 2:16, 3:8, 3:10, 7:24, 8:1, 15:6, 20:13, 20:15, 28:19, 45:13
tomorrow 44:6
tonight 50:16, 54:11, 62:12, 73:17, 96:16, 73:17, 78:13
too 18:1
totally 35:14
tourism 33:7, 67:9, 68:20, 68:22, 70:22
tourism-dependen 76:24
town 32:11
tractors 76:12
trade 35:5, 90:21
traditional 77:3
traditionally 69:20
trained 27:2
transcribed 84:8
transportation 43:6
trapped 26:1
travel 32:16
traverse 36:9, 36:17
TRD 59:3
treaties 43:3
treaty 15:11, 15:12, 15:16
tremendous 74:16, 75:18
trend 54:3
tribal 36:1, 44:15, 44:18, 50:1, 59:2, 66:1, 66:5, 66:8, 66:9
tribe 2:15, 5:8, 5:21, 7:2, 7:19, 8:15, 8:17, 8:20, 34:8, 34:14, 34:25, 37:21, 38:24, 42:17, 42:20, 42:25, 50:9, 50:23, 52:3, 52:20, 53:15, 53:19, 68:2
tribes 8:21, 15:12, 15:20, 15:21
tributaries 39:12, 67:19
tributary 52:21
Trinities 57:6, 59:19
Trinity 1:7, 2:12, 2:18, 5:8, 5:11, 5:22, 9:5, 6:12, 6:18, 6:22, 7:2, 7:7, 7:10, 7:20, 7:24, 8:1, 8:7, 9:2, 11:11, 11:12, 11:13, 11:16, 12:2, 12:3, 12:5, 12:7, 12:19, 12:22, 12:23, 13:1, 13:3, 13:4, 13:9, 13:10, 13:15, 13:21, 14:4, 14:8, 15:10, 15:23, 18:10, 20:20, 22:13, 22:24, 23:3, 24:10, 24:14, 24:19, 25:14, 26:4, 26:11, 26:24, 27:2, 27:15, 28:8, 28:22, 28:24, 34:13, 34:20, 35:11, 36:4, 36:9, 36:9, 36:12, 37:2, 37:6, 37:8, 38:18, 39:13, 39:16, 40:18, 40:18, 40:20, 40:25, 42:20, 43:5, 46:10, 46:14, 46:19, 47:21, 50:9, 50:12, 50:23, 51:17, 51:19, 51:23, 52:3, 52:8, 52:11, 52:21, 53:1, 53:4, 53:4, 53:16, 53:20, 54:18, 54:18, 54:21, 57:1, 57:6, 57:8, 57:20, 57:25, 58:7, 58:15, 58:17, 58:19, 58:20, 59:18, 59:20, 60:13, 61:1, 66:17, 66:18, 67:2, 67:14, 67:17, 68:7, 68:13, 68:14, 68:16, 68:18, 69:15, 70:13, 70:14, 70:18, 70:20, 70:22, 71:15, 71:24, 72:18, 73:8, 75:3, 75:21, 77:4, 78:20, 78:22, 78:24, 79:7, 79:10, 79:14, 79:17, 79:21, 80:7, 80:21, 81:13, 82:8, 82:10, 84:9
trip 32:17
trips 41:22, 41:23, 69:17
Trout 20:16, 72:13
Troy 3:14, 34:5, 34:6, 45:12
truck 61:25
trucking 47:15
true 35:16, 35:17, 41:16, 47:25, 63:5
truly 60:9
trust 15:16, 15:20, 59:2, 65:4, 65:9, 65:12, 65:13, 65:17, 65:20, 65:25, 65:25, 66:5, 66:15
TUESDAY 1:15
turned 41:19, 60:3
turns 25:23, 25:25
type 38:6, 38:8, 38:11, 64:5
types 26:15

U

U.S 1:1, 1:2, 2:4, 2:8, 6:7, 6:7, 6:25, 7:1, 7:1, 7:18, 10:19, 15:17, 50:8, 50:8, 50:25, 51:13, 52:3, 52:4, 55:16, 56:11, 86:19
ultimate 12:2
unable 34:22, 76:22
understand 57:17, 61:13, 62:15, 66:4
understanding 61:19, 62:13, 63:3
undertaken 7:5, 52:6
unfair 76:10
unfunded 23:3
ungodly 30:13
UNIDENTIFIED 28:14, 42:11
unimpeded 79:17, 80:16, 82:9
unique 72:22, 82:2
Unit 82:21
United 5:5, 50:5, 75:16
units 18:1
universally 73:1
University 40:8
unless 37:2, 37:9, 46:20, 46:22, 48:19
Unlimited 72:13
unmet 38:3
upon 31:17
upper 15:15, 44:1, 77:16, 80:7, 74:19
upper 20:7, 47:3
upriver 29:21, 30:7, 82:3
upslope 22:22, 39:7
urge 67:9
urging 70:14, 73:6
user 34:16, 44:2, 67:22, 67:23, 68:10
users 13:20, 18:13, 24:5, 25:6, 67:18, 69:21, 70:16, 73:21, 74:5
uses 14:3, 70:6, 74:8
USFS 24:24
using 17:11, 61:19, 71:21, 74:21
usually 73:23, 74:11
utilize 69:23
Utter 82:2

V

vaguely 80:13
valley 2:15, 5:8, 5:21, 7:2, 7:19, 8:15, 8:17, 8:20, 12:6, 14:5, 29:13, 33:11, 73:20, 42:17, 42:25, 44:6, 44:8, 45:20, 50:8, 50:23, 52:2, 52:20, 52:21, 52:24, 53:8, 53:12, 24:19, 58:18, 73:1, 73:18, 74:9
value 75:4, 77:10
values 27:4
variety 25:6
various 21:1, 35:24, 81:3
ventures 69:21
verbalize 35:6
verbally 23:14
verbatim 10:13, 56:6
vessel 78:11
viable 62:2, 62:11
video 57:24
videographer 57:5
view 19:5, 20:7, 57:4
viewed 82:19
village 53:19
vineyards 73:20, 73:22, 74:8
violation 21:18, 21:22
virtually 48:2, 48:3
visitor 69:6
voice 75:10
Volume 81:1
vote 59:8

W

W-2606 2:9
W-E-S-E-L-O-H 20:15
W-R-I-G-L-E-Y 60:21
walk 39:9
wandering 57:21
wanted 8:7, 20:23, 53:12
wants 21:23
warm 79:8
warning 81:21
wasted 74:7
wasteful 59:12, 74:14
wastefully 75:12
watched 29:4, 45:14
water's 31:4, 62:3
waters 79:8, 79:10
watershed 6:17, 26:20, 51:18, 78:12
wave 22:1
way 21:7, 57:14
we'll 28:15, 28:16, 42:10, 43:17, 45:21, 48:18, 48:19, 77:22, 83:15
we're 18:25, 26:11, 30:17, 30:22, 31:11, 32:6, 33:9, 33:19, 34:20, 35:13, 58:22, 73:17, 73:19, 46:17, 47:7, 48:8, 48:17, 48:21, 48:23, 49:6, 50:4, 50:20, 53:5, 53:13, 54:11, 59:17, 59:22, 60:12, 62:23, 63:7, 63:8, 63:13, 64:19, 77:24, 78:4, 83:17, 83:25
we've 19:16, 19:17, 19:20, 32:13, 36:21, 44:16, 48:24, 76:4
Weaverville 8:9, 9:10, 57:20, 57:21
web 56:25
week 18:21, 26:1, 47:24, 73:24
weekend 30:21
weeks 73:24
Wejchpec 36:5
welcome 5:6, 8:4, 50:6
well-documented 11:20

wells 73:21
Wendy 4:11, 76:17, 76:18
weren't 64:13
Weseloh 3:10, 20:13, 20:14, 20:15, 45:13
West 60:13, 60:15
Westlake 74:20
westlands 59:13
what's 19:16, 20:8, 39:10, 40:1, 71:25
whatever 30:15, 31:15, 45:21
Whenever 26:12
whereby 17:24, 29:18
whether 38:23, 38:23, 48:4, 63:5
whitewater 24:2, 24:4, 24:7, 24:8, 24:13, 24:15, 24:18, 25:5, 25:7, 25:12, 25:13, 25:15, 25:21, 25:24, 26:4, 26:10, 26:13, 26:19, 26:20, 26:21, 41:15, 41:22, 42:5, 66:16, 66:22, 67:13, 68:10, 71:6, 71:9, 71:11, 71:20
who's 76:19
whole 22:19, 35:25, 37:18, 76:5
wider 78:23
wife 33:15
wild 19:22, 59:15, 59:16, 59:16, 60:12, 75:19, 77:12
wildlife 1:2, 2:4, 2:8, 5:6, 5:7, 5:14, 5:21, 6:1, 6:7, 6:11, 7:1, 7:18, 9:1, 10:19, 16:7, 16:10, 22:14, 50:6, 50:8, 50:15, 50:22, 50:25, 51:13, 52:2, 52:19, 53:16, 54:21, 56:12, 58:19, 63:2, 63:11, 63:21, 67:4, 70:18, 75:19, 76:8, 83:20
William 79:25
willing 26:16
willow 28:21, 30:8, 32:14, 41:7, 59:14
window 35:12
wish 9:16, 57:9
wishes 77:18, 77:21, 77:23, 78:2, 83:9
wishing 83:19
within 21:2, 32:7, 32:15, 33:1, 42:24, 68:25, 82:25
witnessed 47:20
woman 41:13
won't 20:22
wonderful 75:11
workable 37:20
works 57:22
worth 33:3
wouldn't 58:1
Wrigley 4:4, 60:19, 60:20, 60:21
writing 10:16, 23:15, 56:9
written 8:5, 10:9, 10:16, 10:22, 10:24, 44:12, 56:2, 56:9, 56:15, 56:16, 57:24
wrong 83:4

Y

year-round 26:12, 82:6
yearly 79:22
yesterday 75:8
yet 19:20, 22:4, 45:7
Yosemite 33:14, 33:16
you'll 5:22, 50:23, 64:9, 77:20
Yurok 34:8, 34:11, 34:14, 76:25

Z

zone 74:17