Klamath Nonuse Valuation Survey OMB Control Number 1090-0010

This document includes

- the survey instrument,
- the map that will be inserted into the instrument,
- the alternative order listing the human uses of the Klamath River Basin, and
- the experimental design for questions 14 and 16.

Restoring a U.S. River Basin: What Is Your Opinion?

Across the United States, many river systems are under stress from population growth, pollution, and competing demands for water. These stressors often harm the rivers' fish and wildlife populations, as well as the people who value these river resources. Addressing these problems is an important local and national issue, but sometimes the solutions require big changes that can be costly.

This survey focuses on one river system in particular: the **Klamath River Basin**. The federal government is considering different plans for restoring this river basin and its fish populations. These plans would improve how water in the river is managed but they would also cost U.S. households more money. Understanding the views of households like yours will help the government choose the best option.



Upper Klamath Basin (Oregon)

Iron Gate Dam on the Klamath River

Klamath River Estuary at the Pacific Ocean (California)

Your participation in this survey is voluntary. Your answers will be kept anonymous. They will not be saved or stored in a way that can be associated with your name or address.

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Page 8 illustrations by Joseph R. Tomelleri (Lost River sucker and shortnose sucker) and Timothy Knepp (coho salmon) courtesy of FWS

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About the Survey

In this survey, we will first describe the Klamath River Basin and the problems it is facing. We will then describe possible plans for changing (or not changing) how the Klamath River Basin is managed. We will describe how these plans would affect the basin and what the added cost to your household would be. You will be asked how you would vote on the different plans. Finally, we will ask for your opinions on some of the topics covered in the survey and some information about your household.

Why we need you to fill out this survey

- If one of these plans goes forward, the federal government and the states of California and Oregon will be involved in restoring the Klamath River Basin and its fish populations.
- > The Klamath River Basin is one of the 50 largest river basins in the United States.
- As with many rivers, the water of the Klamath River Basin is used by many people for many different activities. Hard choices must be made about how to use the water.
- The Klamath River Basin is home to endangered fish species, commercially important salmon, agriculture, and dams that produce hydroelectric power.

In today's economic times, resources are limited. Federal, state, and local governments face difficult decisions about how to best manage, protect, and restore rivers. The information collected from this survey will help these decision makers know what you would like to see happen. This is your chance to provide input on this important decision.

Introduction to the Klamath River Basin

A river basin is the area of land where water drains into a specific river. The Klamath River Basin is shown on the map included with this survey.

Geography

- The basin starts in the mountains of southern Oregon. The streams flow into Upper Klamath Lake, the largest natural lake in Oregon.
- The Klamath River flows from the lake, through Oregon and northern California, and into the Pacific Ocean.
- The basin occupies over 10 million acres. It is twice the size of Massachusetts.

People

- About 125,000 people live in the basin. Klamath Falls, Oregon, is the largest city, with a population of roughly 20,000.
- The basin is home to about 14,000 members of Indian tribes, including the Klamath tribes in Oregon and the Yurok, Karuk, Hoopa Valley, Quartz Valley and Resighini tribes in California.

Fish and Other Wildlife

- ➤ The basin contains over 80 fish species, including many different types of salmon, trout, and suckers.
- ➤ It also provides stopover habitat for over 1 million migratory birds each year.

Q1.	Befo	ore you started this survey, had you ever heard of the Klamath River Basin?
		Yes
		No
		I don't know
Q2.	Hav	e you ever visited the Klamath River Basin?
		Yes
		No
		I don't know

Human Uses of the Klamath River Basin Water

People use the water in the basin in many ways. Like other big rivers, it is difficult to balance how much water should go to each different activity. The following are some of the main uses:

- Farmland Irrigation. Since 1905, the U.S. Bureau of Reclamation has provided water for farms in the basin. It currently supplies water to about 200,000 acres of farmland (1,400 farms).
- ➤ **Hydroelectric Power.** From 1909 to 1962, several dams were built on the Klamath River near the Oregon-California border. They are operated by the power company PacifiCorp (also known as Pacific Power). Together, these dams can produce enough electricity to power about 70,000 homes.
- ➤ **Commercial Fishing.** The Klamath River is an important source of salmon for commercial fishermen in both the river and the Pacific Ocean. For most of the twentieth century, the Klamath River was the third largest producer of salmon on the U.S. West Coast.
- ➤ **Recreation and Tourism.** The basin supports a wide range of water-based recreation activities, including fishing, boating, and swimming. It contains blue ribbon trout streams and highly rated whitewater rapids for rafting. Salmon from the basin also support recreational fishing in the Pacific Ocean.
- ➤ **Tribal Cultural Practices.** For thousands of years, several Indian tribes have lived in the basin. Some of these tribes, including the Klamath, Yurok, Karuk, and Hoopa have relied on the river's salmon and other fish for food, for cultural and ceremonial activities, and for their economic well-being.
- Q3. People use rivers for many different purposes. We are interested in how you use rivers. From the list below, please check off all the ways that you use rivers in your area.

Recreational boating or rafting
Transportation
Swimming
Near-shore recreation (such as hiking, picnicking, or bird watching)
Recreational fishing
Commercial fishing
Irrigating farmland
Drinking water
Spiritual or ceremonial purposes
My electric power comes from a hydroelectric-power dam
Other:
None of the above

Declining Fish Populations in the Klamath River Basin

Restoring wild fish populations in the Klamath River Basin is one of the main goals of the plans being considered by the government. This page and the next page describe problems faced by fish in the basin.

Chinook salmon and steelhead trout are two important fish found in the basin. They spend most of their lives in the Pacific Ocean, but they return to rivers and streams to spawn.

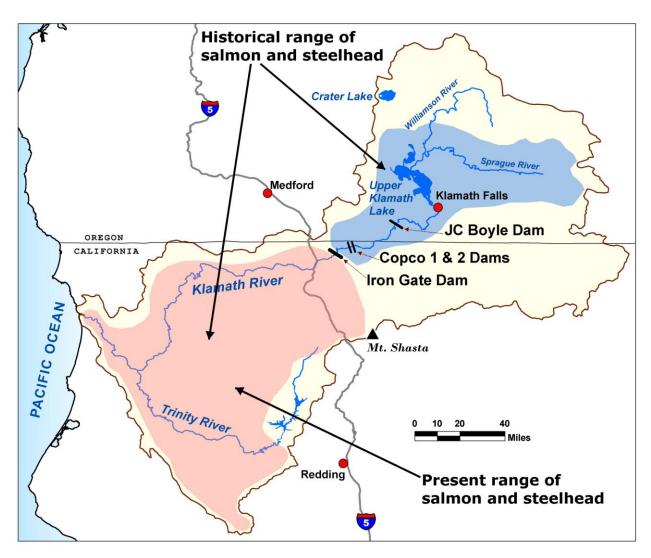
Their numbers have declined significantly since the early 1900s. At one time, between 600,000 and 1 million of these fish returned to the basin each year. Now, only 100,000 to 200,000 fish return and many of these are bred in a hatchery rather than in the wild.

The reasons for declining fish populations include the following:

- ➤ Dams on the Klamath River. Before the dams were built, the fish migrated into streams in both the pink and blue areas shown on the map on the next page. Today they migrate only into the pink area. They are blocked from the blue area by Iron Gate Dam and the other hydroelectric dams shown on the map.
- ➤ Water Use for Farm Irrigation. The use of water for crops, especially around Upper Klamath Lake, has reduced the amount of water that remains for fish downstream.
- ➤ **Water Pollution.** Pollution comes from different human activities in the basin, including forestry, agriculture, and mining.
- ➤ **Overfishing.** In the past, commercial, recreational, and tribal fishing in the Klamath area contributed to the decline in fish numbers. In recent years, these activities have been much more carefully managed.

Q4.	Plea	Please rate how much you agree or disagree with the following statement.					
		concerned about declines in the number of Chinook salmon and steelhead trouters to the Klamath River each year.					
		Strongly agree					

_	Strongly agree
	Agree
	Disagree
	Strongly disagree
	No opinion



Historical vs. Present Range of Returning Salmon and Steelhead Trout

Threatened and Endangered Fish in the Klamath River Basin

Some fish in the basin are at risk of becoming extinct because of water problems.

Three species have been listed as either **endangered** (very high risk) or **threatened** (high risk) under the U.S. Endangered Species Act. They are described in the table below.

Species Name—Status **Main Threats Species Description** 0 2 3 feet The shortnose sucker and Lost **River sucker** are found only in Low water levels in Upper Klamath Lake the areas around Upper Klamath Lake. due to drought and irrigation For thousands of years, the Shortnose Sucker (Endangered) Poor water quality in Klamath Tribes used them as a Upper Klamath Lake major source of food. They were once plentiful enough to support > Irrigation channels. commercial fishing, but now which fish swim into their numbers are greatly and get stuck reduced. Lost River Sucker (Endangered) Klamath River dams The Klamath coho salmon is blocking the river part of a distinct coho salmon Low water flows in population that lives only in the Klamath River due to Klamath River Basin and a few drought and nearby rivers in Southern irrigation Oregon and Northern California. Fish raised in Coho Salmon (Threatened) hatcheries compete They were once plentiful in the for food and spread basin, but now more are born in disease to wild coho hatcheries than in the wild. salmon

Other species that are becoming rare in the basin include the **Pacific lamprey** (an eel-like fish) and the **green sturgeon** (a very large and prehistoric-looking fish). Both were once common in the basin and were an important food source for several tribes.

Q5.	Please rate how much you agree or disagree with the following statement. I am concerned about the shortnose and Lost River suckers that are at very high risk of extinction.					
		Strongly agree Agree Disagree Strongly disagree No opinion				
Q6.	Plea	Please rate how much you agree or disagree with the following statement.				
	I am concerned about the Klamath coho salmon that are at high risk of extinction.					
		Strongly agree Agree Disagree Strongly disagree No opinion				

Resolving Conflicts over Water, Fish, and Dams in the Basin

The Klamath River Basin is important for many groups, but there is not always enough water for everyone, especially in drought years. Competing demands for water have been a source of conflict in the basin, especially in the early 2000s.

2002 was another dry year. This time more water was allowed for irrigation, but in

➤ 2001 was a very dry year. There was not enough water for both farm irrigation and endangered fish species, so large reductions in irrigation were required. This caused crop losses and economic hardships for local farmers.



late summer, over 33,000 salmon suddenly died in the Klamath River. Low water flows in the river were one of the main reasons.



Drought in Klamath Basin

➤ In 2006, commercial salmon harvests off the U.S. Pacific

Northwest Coast were cut by 90%. The main reason was a lack of fish from the Klamath River, due in part to dams and low water flows. This caused economic hardship for fishermen.

Fish Kill on Klamath River

The conflicts created by these events drew national attention and greatly increased public concern about the river basin. Lawsuits from many different parties were filed. At the same time, four dams on the river needed to be relicensed by the government. But changing the dams to allow fish to go around them would be more expensive than removing the dams and replacing their electric power.

After several years of court battles and conflict, very little progress had been made toward a solution. So the parties involved tried a different approach. Over 35 different groups agreed to work together to reach a compromise solution.

In February 2010, representatives from the Oregon and California governments, several tribes, counties, and other organizations reached an agreement. One tribe and one county in California have not yet signed the agreement.

Q7.	Before taking this survey, had you read or heard about the conflicts over water in the Klamath River Basin?					
	Yes					
	No					
	I don't know					

The Main Parts of the Agreement

The agreement defines the following three key steps for moving forward. Now the federal government must decide whether and how to implement these steps.

1. Dam Removal



- In 2020, after several years of detailed planning, the four large hydroelectric dams would be removed from the Klamath River.
- ➤ The reservoirs created by these dams (each 4 to 7 miles long) would no longer exist after 2020. The original river channel and the areas that were underwater would gradually return to their previous conditions.

2. Fish Restoration



- The agreement sets up a process for choosing projects to restore fish habitats in the basin. These projects would, for example, restore and protect fish spawning areas, improve water quality, remove barriers from the river, and prevent fish from swimming into irrigation channels.
- ➤ The agreement does NOT define the exact projects or exact amount of money that will be spent on fish restoration.

3. Water Sharing Agreement



- To protect fish, the agreement would permanently set limits on the amount of irrigation water that can be taken from Upper Klamath Lake. This would ensure enough water for fish and help people who rely on these fish for commercial, recreational, subsistence, and ceremonial purposes.
- Farm irrigators have agreed to these conditions because they define a specific and permanent schedule for annual water deliveries to farmers. Each year, the amount of water available for irrigation would depend directly on the amount of rain and snowfall in the basin.

Q8.	Before taking this survey, had you read or heard about this agreement for restoring
	the Klamath River Basin?

Yes
No
I don't know

How Would the Agreement's Activities Be Paid For?

For the agreement to move forward, money would need to come from three main sources:

- ➤ higher electricity bills for Oregon and California customers of PacifiCorp,
- Oregon and California state budget spending,
- federal government budget spending.

Under this agreement, Oregon and California residents and businesses would on average pay the more than residents from other states. But households across the country would contribute to these activities through their federal taxes.

Q9.	Do you agree or disagree that Oregon and California residents should on average pay more than residents of other states for Klamath River Basin restoration?				
		Strongly agree Agree I can see both sides of the issue Disagree Strongly disagree			
Q10.		No opinion our home's electric power provided by PacifiCorp (Pacific Power)? Yes No I don't know			

Weighing the Impacts of Implementing the Agreement

Because the federal government would be paying part of the cost, it must now decide whether and how to implement this agreement. The agreement is expected to **improve the management** of Klamath Basin resources but would also have **costs and disadvantages**.

The agreement would

- increase the number of wild salmon and trout throughout the basin—this would increase the number of wild fish migrating to ocean waters and reduce the need for a fish hatchery on the Klamath River;
- reduce the chances of extinction for some fish species;
- improve water quality in the Klamath River and Upper Klamath Lake, where toxic bluegreen algae blooms and low water oxygen levels have become common;
- reate more natural free-flowing river conditions along most of the Klamath River;
- help tribes, farmers, fishermen, and other parties avoid conflicts and lawsuits over water;
- have no effect on flood control, since the dams are not used for this reason.

The agreement would also

- > cost millions of dollars to deconstruct and remove the dams;
- cost millions of dollars to replace the dams' energy, some of which may come from renewable sources like wind or solar power, and some may come from more sources like coal which can create air pollution;
- cost millions of dollars for projects that restore fish habitat and improve water quality in the basin;
- put more limits on the amount of water available for irrigation, especially during drier years;
- release large amounts of sediment into the Klamath River during dam removal, which would harm fish and water quality for 1–2 years as it flows down towards the ocean;
- ▶ eliminate activities supported by the dams' reservoirs, like boating and fishing for nonnative fish (perch and bass); about 100 homes now located near the shores of the reservoirs would lose their lakefront view.

Q11. Do you agree or disagree that the federal government should be involved in restoring the Klamath River Basin?

Ш	Strongly agree
	Agree
	I can see both sides of the issue
	Disagree
	Strongly disagree
	No opinion

Q12. People often have different views about plans like this one. Please rate how much you agree or disagree with each of the following statements. (Circle the number that matches your answer. If you have no opinion, check the box in the No Opinion column.)

	1 Strongly Agree	2 Agree	3 See Both Sides	4 Disagree	5 Strongly Disagree	No Opinion
Some decrease in environmental quality is inevitable if we are going to continue to improve our standard of living	1	2	3	4	5	
When humans interfere with nature, it often produces disastrous results	1	2	3	4	5	
Humans should modify the natural environment to suit their needs	1	2	3	4	5	
The balance of nature is very delicate and easily upset	1	2	3	4	5	
The decision to develop natural resources should be based more on economic grounds than on environmental grounds	1	2	3	4	5	
When animals and plants become endangered, it is a sign that the whole environment is in danger and we need to protect it	1	2	3	4	5	
As long as some species of salmon are not endangered, it does not matter if other species of salmon become extinct	1	2	3	4	5	

Deciding on Future Action

To reach a decision about implementing the Klamath River Basin agreement, the federal government will need to consider different options.

- One option is to <u>not</u> implement the agreement. This is the NO ACTION plan.
- > The other option is to implement the agreement, including dam removal, water sharing, and fish restoration. There are different possible ACTION PLANS for doing this.
- The main differences between the ACTION PLANS are that they involve different types and numbers of fish restoration projects and they have different costs.

On the next two pages, we will ask \underline{you} to compare two different options: **NO ACTION** and **ACTION PLAN A**.

On the page after that, we will ask you to consider what you would do if you had the opportunity to VOTE for the option you prefer.

Please examine the options carefully and think about how you would actually vote in this situation. Some people are more willing to vote for a plan when payment is only imagined than when payment is real. Therefore, we urge you to consider your vote as though the costs for your household really would go up by the amount stated if the plan were implemented. Knowing how you would vote on these options is very important to the people who have to make decisions about this plan.

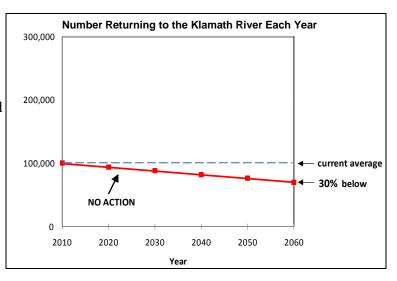
Q13.	Have you ever personally had the opportunity to vote on a similar type of government natural resource management program?			
		Yes		
		No		
		I don't know		

NO ACTION Plan

Under this option, there would be **NO DAM REMOVAL, NO FISH RESTORATION,** and **NO WATER SHARING AGREEMENT.** This would lead to:

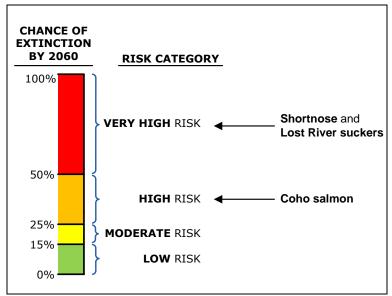
> DECLINING NUMBERS OF WILD CHINOOK SALMON AND STEELHEAD TROUT

- The dashed line shows the current average number of wild fish returning to the Klamath River each year.
- The red line shows what would happen over the next 50 years.
- Scientists expect that by 2060, there would be 30% fewer wild fish than today.



➤ SAME RISK OF EXTINCTION FOR SUCKERS AND COHO SALMON

- Suckers would stay at VERY HIGH RISK (more than 50% chance of extinction by 2060).
- Coho salmon would stay at HIGH RISK (25%–50% chance of extinction by 2060).



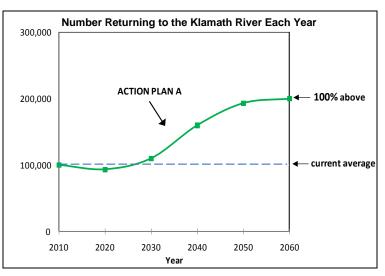
➤ **NO ADDED COST TO YOUR HOUSEHOLD:** There would be no increase in your household's taxes or electricity rates because the agreement would not be implemented.

ACTION PLAN A

This option includes **DAM REMOVAL**, a specific set of **FISH RESTORATION** projects, and the **WATER SHARING AGREEMENT**. These actions would lead to:

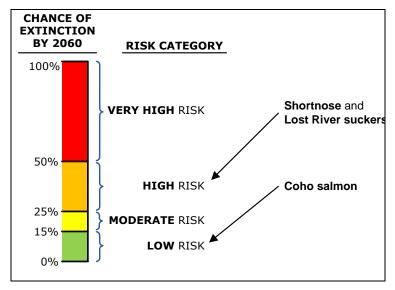
➤ INCREASING NUMBERS OF WILD CHINOOK SALMON AND STEELHEAD TROUT

- The number of wild fish returning to the Klamath River each year would increase after the dams are removed in 2020 (see green line in graph).
- Scientists expect that by 2060, there would be 100% more wild fish than today.



➤ LOWER RISK OF EXTINCTION FOR SUCKERS AND COHO SALMON

- Suckers would improve from VERY HIGH RISK to HIGH RISK.
- Coho salmon would improve from HIGH RISK to LOW RISK.



> ADDED COST TO YOUR HOUSEHOLD: This plan would be paid for by a combination of

- higher power bills for Oregon and California PacifiCorp customers,
- state taxes from Oregon and California residents, and
- federal taxes from all U.S. residents.

Assume that for your household (and similar households in your area) the plan would cost you an additional **\$48 per year** for the next 20 years (beginning in 2011). That is the same as **\$4 per month** for the next 20 years.

Choice 1: Which Option Do You Prefer?

Please imagine that all U.S. residents were presented with two options—**NO ACTION** and **ACTION PLAN A**—and asked to vote for the one they prefer. The one with the most votes would be implemented.

Ask yourself whether you believe the improvements offered under ACTION PLAN A are worth \$48 each year to your household. Voting for PLAN A would mean that you would have \$48 less each year to spend on other things. You would be making a commitment to pay this additional amount each year for the next 20 years. There may be good reasons for you to vote for PLAN A and good reasons to vote for NO ACTION. Only you know what is best for you and your household.

Q14.	Whi	ch option would you vote for?
		NO ACTION ACTION PLAN A
Q15.	How	certain do you feel about the choice you made above?
		Very certain
		Somewhat certain
	Ц	Not at all certain

Now consider a different choice...

We would now like to know how you would vote if you were presented with a completely different action plan.

For this next choice, please imagine that ACTION PLAN A is **NOT** an option.

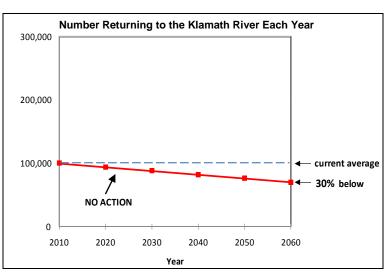
Instead, the next two pages will describe **ACTION PLAN B** and compare it to the NO ACTION plan. On the page after that, we will ask you to consider what you would do if you had the opportunity to vote for the plan you prefer. When making this choice, please imagine that the <u>ONLY</u> two options are NO ACTION and ACTION PLAN B.

NO ACTION Plan

Under this option, there would be **NO DAM REMOVAL, NO FISH RESTORATION,** and **NO WATER SHARING AGREEMENT.** This would lead to:

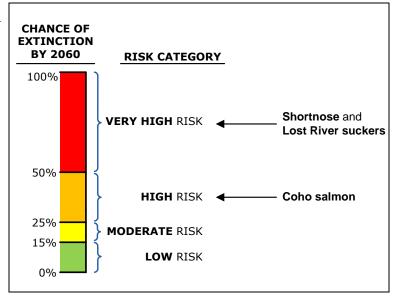
➤ DECLINING NUMBERS OF WILD CHINOOK SALMON AND STEELHEAD TROUT

- The dashed line shows the current average number of wild fish returning to the Klamath River each year.
- The red line shows what would happen over the next 50 years.
- Scientists expect that by 2060, there would be 30% fewer wild fish than today.



➤ SAME RISK OF EXTINCTION FOR SUCKERS AND COHO SALMON

- Suckers would stay at VERY HIGH RISK (more than 50% chance of extinction by 2060).
- Coho salmon would stay at HIGH RISK (25%–50% chance of extinction by 2060).



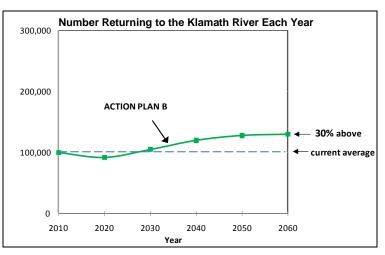
➤ **NO ADDED COST TO YOUR HOUSEHOLD:** There would be no increase in your household's taxes or electricity rates because the agreement would not be implemented.

ACTION PLAN B

This option includes **DAM REMOVAL**, a specific set of **FISH RESTORATION** projects, and the **WATER SHARING AGREEMENT**. These actions would lead to:

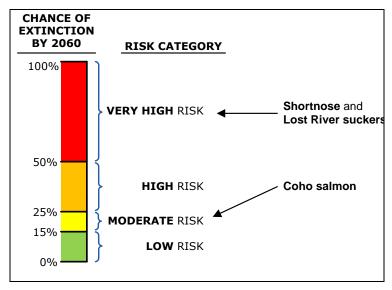
➤ INCREASING NUMBERS OF WILD CHINOOK SALMON AND STEELHEAD TROUT

- The number of wild fish returning to the Klamath River each year would increase after the dams are removed in 2020 (see green line in graph).
- Scientists expect that by 2060, there would be 30% more wild fish than today.



➤ LOWER RISK OF EXTINCTION FOR COHO SALMON

- Suckers would stay at VERY HIGH RISK.
- Coho salmon would improve from HIGH RISK to MODERATE RISK.



> ADDED COST TO YOUR HOUSEHOLD: This plan would be paid for by a combination of

- higher power bills for Oregon and California PacifiCorp customers,
- state taxes from Oregon and California residents, and
- federal taxes from all U.S. residents.

Assume that for your household (and similar households in your area) the plan would cost you an additional **\$24 per year** for the next 20 years (beginning in 2011). That is the same as **\$2 per month** for the next 20 years.

Choice 2: Which Option Do You Prefer?

Please imagine that all U.S. residents were presented with two options—**NO ACTION** and **ACTION PLAN B**—and asked to vote for the one they prefer. The one with the most votes would be implemented.

Ask yourself whether you believe the improvements offered under ACTION PLAN B are worth \$24 each year to your household. Voting for PLAN B would mean that you would have \$24 less each year to spend on other things. **You would be making a commitment to pay this additional amount each year for the next 20 years.** There may be good reasons for you to vote for PLAN B and good reasons to vote for NO ACTION. Only you know what is best for you and your household.

Q16.	Which option would you vote for?		
		NO ACTION ACTION PLAN B	
Q17.	How	certain do you feel about the choice you made above?	
		Very certain Somewhat certain Not at all certain	

Q18. Thinking about the two choices you just made, please rate how much you agree or disagree with each of the following statements. (*Circle the number that matches your answer.*)

	1 Strongly Agree	2 Agree	3 Neither Agree nor Disagree	4 Disagree	5 Strongly Disagree
My choices would have been different if the economy in my area were better.	1	2	3	4	5
It is important to restore the Klamath River Basin, no matter how much it costs.	1	2	3	4	5
I do not think I should have to contribute to the restoration of the Klamath River Basin.	1	2	3	4	5
I am concerned that the plans would hurt the economy in the Klamath River Basin.	1	2	3	4	5
The descriptions of the plans were hard to understand.	1	2	3	4	5
I do not believe that the plans will actually increase the number of fish as described.	1	2	3	4	5
Removing the dams from the Klamath River is a bad idea.	1	2	3	4	5
Some of the plans cost too much compared to what they would deliver.	1	2	3	4	5
The changes offered by the plans happen too far in the future for me to really care.	1	2	3	4	5
The survey provided me with enough information to make a choice between the options shown.	1	2	3	4	5

Q19. If you voted for NO ACTION in either of the two choices, please rate how much you agree or disagree with each of the following statements. If not, skip to Q20.

	1 Strongly Agree	2 Agree	3 Neither Agree nor Disagree	4 Disagree	5 Strongly Disagree
I voted for NO ACTION because I am against any more taxes or government spending.	1	2	3	4	5
I voted for NO ACTION because I believe my taxes are already too high.	1	2	3	4	5

Q20. If you voted for ACTION PLAN A or ACTION PLAN B, please rate how much you agree or disagree with each of the following statements. If not, skip this question.

	1 Strongly Agree	2 Agree	3 Neither Agree nor Disagree	4 Disagree	5 Strongly Disagree
I voted for the action plan because I thought it would increase the chances that the government would do the same thing in river basins closer to my home.	1	2	3	4	5
I voted for the action plan more for future generations than for myself.	1	2	3	4	5

Surveys like this are used to collect people's opinions about policies the government is considering. Information from this survey will be summarized and presented to policy makers at the Department of the Interior. This department must make the final decision about the plans.

Q21.	In your opinion, how likely do you think it is that policy makers will consider the results from this survey to make decisions about Klamath River Basin restoration?		
		Very likely	
		Somewhat likely	
		Even chances	
		Somewhat unlikely	
		Very unlikely	
		No opinion	

Your Recreational Use of the Klamath River Basin

Now we would like to ask a few questions about recreational trips to the Klamath River Basin—trips you took for fun and to relax, not for work.

If you have not visited the Klamath River Basin for a recreation trip in the past 12 months, please turn to the next page.

Q22.	How many recreation trips did you make to the Klamath River Basin in the past 12 months?			
	trips			
Q23.	What activities did you do? (Please check all the activities you did.)			
	River/stream fishing			
	Lake/reservoir fishing			
	Motorboating or jetskiing			
	Rafting			
	Canoeing or kayaking			
	Swimming			
	Camping			
	Waterfowl hunting			
	Hiking			
	Bird watching			
	Other:			

Q24.	River Basin that you visited most often on these trips? (Enter the number of hours plus minutes in the spaces provided below.)				
	l	nours and minutes			
		t the Klamath River Basin agreements had been implemented many years ago. As a ose that			
>		our dams and their reservoirs were gone, and the river and surrounding area had ady returned to their original state;			
>		on and steelhead trout were present throughout the basin (the pink and blue areas of nap on page 7); and			
>	1009	% more salmon and steelhead trout returned to the Klamath River each year than today.			
Q25.	If the agreements had been implemented years ago and current conditions were as described above, how do you think your total trips to the Klamath River Basin in the past 12 months would have changed?				
		No change in total visits			
		I would have made more visits I would have made total visits			
		I would have made fewer visits I would have made total visits			
		I would not have made any visits			

About You and Your Household

Finally, we would like to ask you a few questions about you and your household. These questions will be used to compare our survey respondents with the U.S. population as a whole. Your answers will be kept anonymous. They will not be saved or stored in a way that can be associated with your name or address.

Q26.	Are	you male or female?
		Male
		Female
Q27.	Wha	nt is your age?
		years old
Q28.	Wha	nt is your current marital status?
		Single, never married
		Married or living with a long-term partner
		Separated or divorced
		Widowed
Q29.	How	many children under age 18 are living at your home?
		children
Q30.		nt was your total pre-tax household income, including all earners in your sehold, in 2009?
		Under \$25,000
		\$25,000-\$34,999
		\$35,000-\$49,999
		\$50,000-\$74,999
		\$75,000-\$99,999
		\$100,000-\$199,999
		\$200,000 or more
Q31.	Wha	at is the highest degree or level of school you have completed?
		No high school diploma
		High school diploma or GED
		Some college credit but no degree
		Associate's degree (for example: AA or AS)
		Bachelor's degree (for example: BA or BS)
		Some graduate school or professional school credit or a graduate or professional degree

Q32.	Whi	ch of the following best describes the home or apartment you live in?
		Owned by you or someone in your household with a mortgage or loan
		Owned by you or someone in your household without a mortgage or loan
		Rented
		Other:
Q33.	wat	n average week, how many hours do you usually have for leisure activities—ching TV, reading, playing sports, or other activities? (Do not include time spent ping.)
		0-10 hours
		11-20 hours
		21-30 hours
		31-40 hours
		More than 40 hours
Q34.		ich of the following categories best describes your household employment status? ase check all that apply.)
		You Spouse/Partner
		Employed full time
		Employed part time
		Retired
		Student
		Full-time homemaker
		Unemployed
		Other (please specify)
Q35.		you Hispanic or Latino? (A person of Cuban, Mexican, Puerto Rican, South or Central erican, or other Spanish culture or origin, regardless of race.) Yes No

Q36.		Please select the racial category or categories with which you most closely identify by placing an "X" in the appropriate box. Check as many as apply.				
		American Indian or Alaska Native				
		(A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.)				
		Asian				
		(A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.)				
		Black or African American				
		(A person having origins in any of the black racial groups of Africa.)				
		Native Hawaiian or Other Pacific Islander				
	_	(A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.)				
		White				
		(A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.)				
Q37.	Do you or either of your parents belong to any of the following tribes in the Klamath River Basin?					
		Ноора				
		Karuk				
		Klamath				
		Yurok				
		Other:				
		Neither I nor my parents belong to any of these tribes				
Q38.	Have you or any member of your family ever worked for any of the following industries or jobs? (Please check all that apply.)					
		Commercial fishing				
		Farming				
		Dam operations				
		Electric power generation				
		River guiding or rafting				
		Tour guide for fishing				
Q39.	say	We are interested in how people are getting along financially these days. Would you say that you and your family are better off, just about the same, or worse off financially than you were a year ago?				
		We are better off				
		We are just about the same				
		We are worse off				

Q40.	Looking ahead, do you think that a year from now you and your family will be financially better off, just about the same, or worse off financially?				
		We will be better off We will be just about the same We will be worse off			
Q41.	Has	someone in your household been jobless in the past year?			
		Yes No I don't know			
Q42.	you box	ing the past year, what was your highest and your lowest monthly electric bill? If are not sure what your bills were, please give us your best estimate and check the for "I'm not sure what my bill was, this is an estimate." If you do not pay an tric bill, check the box by "I do not pay an electric bill."			
		I do not pay an electric bill			
	My l	nighest electric bill was \$ in (write name of month) I'm not sure what my bill was, this is an estimate			
	My l	owest electric bill was \$ in (write name of month) I'm not sure what my bill was, this is an estimate			
Q43.	Many people are looking for ways to reduce their electric bills. If your electric power company offered you a device that cost \$50 and would reduce your electricity costs by \$2 each month for the next 10 years, would you purchase the device?				
		Yes No			
Q44.	still	you the adult in your household with the most recent birthday? (If not, we are very interested in your responses and encourage you to return the survey. We ld like to know this for statistical purposes.)			
		Yes			
		No			

Thank you very much for your help.

Once you are done, please mail this completed survey back to us in the postage-paid return envelope provided. If you have any questions, please contact us toll-free at 1-866-555-6000 or email us at Klamath_survey@rti.org.

If you have comments about the survey, please add them on the lines below:					

Survey insert: Map of Klamath River Basin



Alternative order for human uses page

Version 2 of human uses page (reverse alphabetical order)

Human Uses of the Klamath River Basin Water

People use the water in the basin in many ways. Like other big rivers, it is difficult to balance how much water should go to each different activity. The following are some of the main uses:

- ➤ **Tribal Cultural Practices.** For thousands of years, several Indian tribes have lived in the basin. Some of these tribes, including the Klamath, Yurok, Karuk, and Hoopa have relied on the river's salmon and other fish for food, for cultural and ceremonial activities, and for their economic well-being.
- ➤ **Recreation and Tourism.** The basin supports a wide range of water-based recreation activities, including fishing, boating, and swimming. It contains blue ribbon trout streams and highly rated whitewater rapids for rafting. Salmon from the basin also support recreational fishing in the Pacific Ocean.
- ➤ **Hydroelectric Power.** From 1909 to 1962, several dams were built on the Klamath River near the Oregon-California border. They are operated by the power company PacifiCorp (also known as Pacific Power). Together, these dams can produce enough electricity to power about 70,000 homes.
- Farmland Irrigation. Since 1905, the U.S. Bureau of Reclamation has provided water for farms in the basin. It currently supplies water to about 200,000 acres of farmland (1,400 farms).
- ➤ **Commercial Fishing.** The Klamath River is an important source of salmon for commercial fishermen in both the river and the Pacific Ocean. For most of the twentieth century, the Klamath River was the third largest producer of salmon on the U.S. West Coast.

Experimental design for choice questions

The experimental design produced 16 blocks of 2 choice questions. The attribute levels in the choice questions vary based on the experimental design. The table below presents the levels for each question in the 16 blocks.

Attribute levels for No Action Plan (fixed across all questions)

Change in fish population from current baseline

• -30%

Extinction Risk for suckers

• Very high

Extinction Risk for coho salmon

• High

Annual cost

• \$0

Attribute levels for Action Plans

Change in fish population from current baseline

- 30%
- 100%
- 150%

Extinction Risk for suckers

- Moderate
- High
- Very high

Extinction Risk for coho salmon

- Low
- Moderate
- High

Annual cost

- \$12
- \$24
- \$48
- \$90

			111		112
VERSION 1		No Action	Action A	No Action	Action B
	change in fish				
Att 1 - 1	pop	-30%	100%	-30%	150%
Att 2 - 2	sucker risk	VERY HIGH	MODERATE	VERY HIGH	HIGH
Att 3 - 3	coho risk	HIGH	MODERATE	HIGH	HIGH
Att 4 - 4	annual cost	\$0	\$12	\$0	\$48

VERSION 2		No Action	211 Action A	No Action	212 Action B
VERSION 2	change in fish	No Action	Action A	No Action	Action D
Att 1 - 2	pop	-30%	100%	-30%	30%
Att 2 - 3	sucker risk	VERY HIGH	VERY HIGH	VERY HIGH	MODERATE
Att 3 - 4	coho risk	HIGH	LOW	HIGH	MODERATE
Att 4 - 5	annual cost	\$0	\$48	\$0	\$24
			211		212
VERSION 3		No Action	311 Action A	No Action	312 Action B
VERSION 3	change in fish	No Action	Action A	No Action	Action b
Att 1 - 3	pop	-30%	150%	-30%	30%
Att 2 - 4	sucker risk	VERY HIGH	VERY HIGH	VERY HIGH	HIGH
Att 3 - 5	coho risk	HIGH	MODERATE	HIGH	LOW
Att 4 - 6	annual cost	\$0	\$90	\$0	\$12
					44.0
AMEDICAN A		N T A 40	411	3 .7 A 4.4	412
VERSION 4	change in fish	No Action	Action A	No Action	Action B
Att 1 - 4	pop	-30%	100%	-30%	30%
Att 2 - 5	sucker risk	VERY HIGH	MODERATE	VERY HIGH	HIGH
Att 3 - 6	coho risk	HIGH	HIGH	HIGH	MODERATE
Att 4 - 7	annual cost	\$0	\$90	\$0	\$48
			511		512
VERSION 5		No Action	Action A	No Action	Action B
Att 1 - 5	change in fish pop	-30%	100%	-30%	30%
Att 2 - 6	sucker risk	VERY HIGH	HIGH	VERY HIGH	MODERATE
Att 3 - 7	coho risk	HIGH	MODERATE	HIGH	LOW
Att 4 - 8	annual cost	\$0	\$90	\$0	\$48
-			, -	, -	
			611		612
VERSION 6		No Action	Action A	No Action	Action B
Att 1 - 6	change in fish pop	-30%	150%	-30%	100%
Att 2 - 7	sucker risk	VERY HIGH	VERY HIGH	VERY HIGH	HIGH
Att 3 - 8	coho risk	HIGH	HIGH	HIGH	LOW
Att 4 - 9	annual cost	\$0	\$12	\$0	\$24
/		**	+ - -	40	
			711		712
VERSION 7		No Action	Action A	No Action	Action B
A 1 7	change in fish	200/	1500/	200/	200/
Att 1 - 7	pop	-30%	150%	-30%	30%

Att 2 - 8 Att 3 - 9 Att 4 - 10	sucker risk coho risk annual cost	VERY HIGH HIGH \$0	MODERATE HIGH \$48	VERY HIGH HIGH \$0	VERY HIGH MODERATE \$12
			811		812
VERSION 8		No Action	Action A	No Action	Action B
Att 1 - 8	change in fish pop	-30%	30%	-30%	150%
Att 2 - 9	sucker risk	VERY HIGH	MODERATE	VERY HIGH	VERY HIGH
Att 3 - 10	coho risk	HIGH	HIGH	HIGH	LOW
Att 4 - 11	annual cost	\$0	\$24	\$0	\$90
			911		912
VERSION 9	1 • 6• 1	No Action	Action A	No Action	Action B
Att 1 - 9	change in fish pop	-30%	30%	-30%	100%
Att 2 - 10	sucker risk	VERY HIGH	MODERATE	VERY HIGH	HIGH
Att 3 - 11	coho risk	HIGH	LOW	HIGH	MODERATE
Att 4 - 12	annual cost	\$0	\$90	\$0	\$12
			1011		1012
VERSION					
10		No Action	Action A	No Action	Action B
10	change in fish	No Action	Action A	No Action	Action B
10 Att 1 - 10	change in fish pop	No Action	Action A	No Action	Action B
	_				
Att 1 - 10	pop	-30%	150%	-30%	100%
Att 1 - 10 Att 2 - 11	pop sucker risk	-30% VERY HIGH	150% VERY HIGH	-30% VERY HIGH	100% HIGH
Att 1 - 10 Att 2 - 11 Att 3 - 12	pop sucker risk coho risk	-30% VERY HIGH HIGH	150% VERY HIGH MODERATE	-30% VERY HIGH HIGH	100% HIGH HIGH
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13	pop sucker risk coho risk	-30% VERY HIGH HIGH \$0	150% VERY HIGH MODERATE \$24 1111	-30% VERY HIGH HIGH \$0	100% HIGH HIGH \$48
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13	pop sucker risk coho risk annual cost	-30% VERY HIGH HIGH	150% VERY HIGH MODERATE \$24	-30% VERY HIGH HIGH	100% HIGH HIGH \$48
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13	pop sucker risk coho risk	-30% VERY HIGH HIGH \$0	150% VERY HIGH MODERATE \$24 1111	-30% VERY HIGH HIGH \$0	100% HIGH HIGH \$48
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION	pop sucker risk coho risk annual cost	-30% VERY HIGH HIGH \$0 No Action	150% VERY HIGH MODERATE \$24 1111 Action A	-30% VERY HIGH HIGH \$0 No Action	100% HIGH HIGH \$48 1112 Action B
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11	pop sucker risk coho risk annual cost change in fish pop	-30% VERY HIGH HIGH \$0 No Action -30%	150% VERY HIGH MODERATE \$24 1111 Action A 150%	-30% VERY HIGH HIGH \$0 No Action -30%	100% HIGH HIGH \$48 1112 Action B
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12	pop sucker risk coho risk annual cost change in fish pop sucker risk	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH	100% HIGH HIGH \$48 1112 Action B 30% HIGH
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12 Att 3 - 13	pop sucker risk coho risk annual cost change in fish pop sucker risk coho risk	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE MODERATE MODERATE \$48	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH	100% HIGH HIGH \$48 1112 Action B 30% HIGH HIGH \$12
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12 Att 3 - 13 Att 4 - 14	pop sucker risk coho risk annual cost change in fish pop sucker risk coho risk	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE MODERATE	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH	100% HIGH HIGH \$48 1112 Action B 30% HIGH HIGH
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12 Att 3 - 13	pop sucker risk coho risk annual cost change in fish pop sucker risk coho risk	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE MODERATE MODERATE \$48	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH	100% HIGH HIGH \$48 1112 Action B 30% HIGH HIGH \$12
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12 Att 3 - 13 Att 4 - 14 VERSION 12	pop sucker risk coho risk annual cost change in fish pop sucker risk coho risk	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH \$0 No Action	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE MODERATE MODERATE \$48 1211 Action A	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH \$0 No Action	100% HIGH HIGH \$48 1112 Action B 30% HIGH HIGH \$12 1212 Action B
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12 Att 3 - 13 Att 4 - 14 VERSION 12 Att 1 - 12	change in fish pop sucker risk coho risk annual cost	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH \$0 No Action -30%	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE MODERATE \$48 1211 Action A 150%	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH \$0 No Action -30%	100% HIGH HIGH \$48 1112 Action B 30% HIGH HIGH \$12 1212 Action B
Att 1 - 10 Att 2 - 11 Att 3 - 12 Att 4 - 13 VERSION 11 Att 1 - 11 Att 2 - 12 Att 3 - 13 Att 4 - 14 VERSION 12	pop sucker risk coho risk annual cost change in fish pop sucker risk coho risk annual cost	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH \$0 No Action	150% VERY HIGH MODERATE \$24 1111 Action A 150% MODERATE MODERATE MODERATE \$48 1211 Action A	-30% VERY HIGH HIGH \$0 No Action -30% VERY HIGH HIGH \$0 No Action	100% HIGH HIGH \$48 1112 Action B 30% HIGH HIGH \$12 1212 Action B

Att 4 - 15	annual cost	\$0	\$90	\$0	\$24
			1311		1312
VERSION 13		No Action	Action A	No Action	Action B
Att 1 - 13	change in fish pop	-30%	30%	-30%	100%
Att 2 - 14	sucker risk	VERY HIGH	VERY HIGH	VERY HIGH	MODERATE
Att 3 - 15	coho risk	HIGH	LOW	HIGH	HIGH
Att 4 - 16	annual cost	\$0	\$48	\$0	\$90
			1511		1512
VERSION 14		No Action	Action A	No Action	Action B
Att 1 - 14	change in fish pop	-30%	100%	-30%	150%
Att 2 - 15	sucker risk	VERY HIGH	VERY HIGH	VERY HIGH	HIGH
Att 3 - 16	coho risk	HIGH	MODERATE	HIGH	LOW
Att 4 - 17	annual cost	\$0	\$48	\$0	\$90
			1611		1612
VERSION					
15	ahanga in fiah	No Action	Action A	No Action	Action B
Att 1 - 15	change in fish pop	-30%	30%	-30%	150%
Att 2 - 16	sucker risk	VERY HIGH	MODERATE	VERY HIGH	VERY HIGH
Att 3 - 17	coho risk	HIGH	MODERATE	HIGH	HIGH
Att 4 - 18	annual cost	\$0	\$24	\$0	\$12
			1711		1712
VERSION 16		No Action	Action A	No Action	Action B
A 1 . 1 . 1	change in fish	2004	1,500/	200/	2027
Att 1 - 16	pop	-30%	150%	-30%	30%
Att 2 - 17	sucker risk	VERY HIGH	MODERATE	VERY HIGH	VERY HIGH
Att 3 - 18	coho risk	HIGH	MODERATE	HIGH	LOW
Att 4 - 19	annual cost	\$0	\$24	\$0	\$90