

## **APPENDIX 2E**

### **PHASE II CONTROLLED FLOW SURVEY INSTRUMENTS**



# KLAMATH BOATER PRE-FIELDWORK INFORMATION FORM

Date: \_\_\_\_\_ / \_\_\_\_\_ / 2002

Your name: \_\_\_\_\_

1. For the following types of whitewater craft, please indicate 1) the frequency you use each compared to other craft, 2) the years of experience you have with each, and 3) your skill level with that craft (the highest class of whitewater you feel comfortable running).

Craft	Frequency of use (circle one for each craft)				Years of experience	Skill level (circle one class)			
Hard shell kayak	No	Rare	Occasional	Frequent		II	III	IV	V
Inflatable kayak	No	Rare	Occasional	Frequent		II	III	IV	V
Raft/cataract (length: _____)	No	Rare	Occasional	Frequent		II	III	IV	V
Other: _____	No	Rare	Occasional	Frequent		II	III	IV	V

2. In general, how many days per year do you spend whitewater boating? \_\_\_\_\_ days per year
3. What is your age? \_\_\_\_\_ years
4. Are you  male or  female?
5. Please respond to each of the following statements about your river-running preferences.

	Strongly disagree	Moderately disagree	Slightly disagree	No Opinion	Slightly agree	Moderately agree	Strongly agree
I prefer running rivers with difficult rapids (Class IV and V).	1	2	3	4	5	6	7
Running challenging whitewater is the most important part of my boating trips.	1	2	3	4	5	6	7
I often boat short river segments (under 3 miles) to take advantage of whitewater play areas.	1	2	3	4	5	6	7
I often boat short river segments to experience a unique and interesting place.	1	2	3	4	5	6	7
I often boat short river segments to run challenging rapids.	1	2	3	4	5	6	7
Good whitewater play areas are more important than challenging rapids.	1	2	3	4	5	6	7
I am willing to tolerate difficult put-ins and portages in order to run interesting reaches of whitewater.	1	2	3	4	5	6	7
I prefer boating rivers that feature large waves and powerful hydraulics.	1	2	3	4	5	6	7
I prefer boating steep, technical rivers.	1	2	3	4	5	6	7
I enjoy boating both technical and big water rivers.	1	2	3	4	5	6	7

## **KLAMATH BOATER POST-RUN EVALUATION FORM**

Date of run: \_\_\_\_ / \_\_\_\_ / 2002      Reach: Hell's Corner    Boyle Bypass      Flow: \_\_\_\_ cfs

Your name: \_\_\_\_\_

1. What type of craft did you use for this run? (*Circle one*)  
 Kayak      Inflatable kayak      Raft/cat: length \_\_\_\_ & number of people \_\_\_\_      Other \_\_\_\_\_
2. In general, what class (I to VI) was the whitewater difficulty at this flow?      \_\_\_\_
3. Please estimate the number of **hits**, **stops**, **boat drags**, and **portages** you had on this run.  
 I **hit** rocks or other obstacles (but did not stop) about...      \_\_\_\_ times  
 I was **stopped** after hitting rocks or other obstacles about...      \_\_\_\_ times  
 I had to get out to **drag or pull my boat** off rocks or other obstacles about...      \_\_\_\_ times  
 I had to **portage** around unrunnable rapids or sections...      \_\_\_\_ times
4. Did you have any significant problems (e.g., became pinned, wrapped a boat, had to swim, etc.) during your run? Please provide a brief description and location of any incident (continue on back if needed).
5. Please evaluate the flow on this run for your craft and skill level for each of the following characteristics. (*Circle one number for each item*).

	Totally Unacceptable			Marginal			Totally Acceptable	
Boatability	1	2	3	4	5	6	7	
Availability of technical rapids	1	2	3	4	5	6	7	
Availability of powerful hydraulics	1	2	3	4	5	6	7	
Availability of play areas	1	2	3	4	5	6	7	
Overall whitewater challenge	1	2	3	4	5	6	7	
Safety	1	2	3	4	5	6	7	
Aesthetics	1	2	3	4	5	6	7	
Rate of travel	1	2	3	4	5	6	7	
Number of portages	1	2	3	4	5	6	7	
Overall Rating	1	2	3	4	5	6	7	

6. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (*Circle one*).
  1. Much lower flow
  2. Slightly lower flow
  3. About the same; this was close to an optimum flow
  4. Slightly higher flow
  5. Much higher flow
7. If this flow were provided periodically, are you likely to return for future boating? (*Circle one*).
  1. Definitely no
  2. Possibly
  3. Probably
  4. Definitely yes
8. Provide any additional comments about this flow on the back.

## **KLAMATH BOATER "CLOSE-OUT" FORM**

Date: \_\_\_\_ / \_\_\_\_ / 2001      Reach: Hells Corner Boyle Bypass      Your name: \_\_\_\_\_

1. Given what you know about the quality of whitewater and other features on the Hells Corner/Boyle Bypass Reach, please tell us maximum number of **hits**, **stops**, **boat drags**, and **portages** that are tolerable for a high quality trip in your craft? If you "don't care," place an X in the space provided.

I will tolerate up to \_\_\_\_ **hits** per trip (contacts with rocks/other obstacles that do not stop you).

I will tolerate up to \_\_\_\_ **stops** per trip (contacts with rocks or other obstacles that stop you, but you do not have to get out of your boat to continue downstream).

I will tolerate up to \_\_\_\_ **boat drags** per trip (times where you have to get out of your boat to get it off of rocks or other obstacles).

I will tolerate up to \_\_\_\_ **portages** around unrunnable rapids per trip.

2. Compared to other rivers, how would you rate boating opportunities on this reach. (*Circle one number for each; if you are unsure about a comparison, leave that item blank*).

Compared to...	This reach is...				
	Worse than average	Average	Better than average	Excellent	Among the very best
...other reaches on the Upper Klamath	1	2	3	4	5
...other rivers in the area (within 3 hours)	1	2	3	4	5
... other rivers in the Pacific Northwest	1	2	3	4	5
... other rivers in the country	1	2	3	4	5

3. Please provide overall evaluations for the reach for the following flows for your craft and skill level. Please consider all the flow-dependent characteristics that contribute to high quality trips (e.g., boatability, whitewater challenge, safety, availability of surfing or other play areas, aesthetics, and rate of travel). (*If you do not feel comfortable evaluating a flow you have not seen, don't circle a number for that flow*).

	Totally unacceptable			Marginal			Totally acceptable	
350 cfs	1	2	3	4	5	6	7	
500 cfs	1	2	3	4	5	6	7	
700 cfs	1	2	3	4	5	6	7	
1,000 cfs	1	2	3	4	5	6	7	
1,300 cfs	1	2	3	4	5	6	7	
1,600 cfs	1	2	3	4	5	6	7	
2,000 cfs	1	2	3	4	5	6	7	
2,500 cfs	1	2	3	4	5	6	7	
3,000 cfs	1	2	3	4	5	6	7	
4,000 cfs	1	2	3	4	5	6	7	
5,000 cfs	1	2	3	4	5	6	7	

Based on your boating trips on the Hells Corner/Boyle Bypass Reach, please specify the flows that provide the following types of experiences. (Note: you can specify flows that you have not seen, but which you think would provide the type of experience in question).

FLOW IN CFS

Think of the river as a waterway used for transportation. What is the lowest flow you need to simply get down the reach in your craft?

\_\_\_\_\_

Some people are interested in a “technical” whitewater trip at lower flows. Think of this “**technical**” trip in your craft.

What is the lowest flow that provides an acceptable experience for this type of trip?

\_\_\_\_\_

What is the best or optimal range of flows for this type of trip?

\_\_\_\_\_ to \_\_\_\_\_

Some people are interested in taking trips at somewhat higher flows that feature stronger hydraulics but may offer less technical routes through rapids. Think of this “**standard trip**” in your craft.

What is the lowest flow that provides an acceptable experience for this type of trip?

\_\_\_\_\_

What is the best or optimal range of flows for this type of trip?

\_\_\_\_\_ to \_\_\_\_\_

Some people are interested in taking trips at much higher flows that feature more powerful hydraulics and large waves. Think of this “**big water trip**” in your craft.

What is the lowest flow that provides an acceptable experience for this type of trip?

\_\_\_\_\_

What is the best or optimal range of flows for this type of trip?

\_\_\_\_\_ to \_\_\_\_\_

For those willing to evaluate “**standard**” **commercial rafting** on the reach (13 to 14 foot boats with 5 to 6 passengers + one guide)...

What is the lowest flow that would provide an acceptable commercial rafting experience?

\_\_\_\_\_

What is the best or optimal range of flows for a “standard” commercial rafting trip?

\_\_\_\_\_ to \_\_\_\_\_

For those willing to evaluate “**low flow**” **commercial rafting** on the reach (11 to 13 foot boats with 2 to 4 passengers + one guide)...

What is the lowest flow that would provide an acceptable “low flow” commercial rafting experience?

\_\_\_\_\_

What is the best or optimal range of flows for a “low flow” commercial rafting trip?

\_\_\_\_\_ to \_\_\_\_\_

What is the highest safe flow for your craft and skill level?

\_\_\_\_\_

If PacifiCorp released only one flow for boating, what flow would you prefer?

\_\_\_\_\_

If PacifiCorp released two flow levels that offer different types of boating experiences, what two flows would you prefer?

\_\_\_\_\_ & \_\_\_\_\_

How important is it to release a variety of flow levels on the reach? Please rate the importance of providing several different flows for the two reasons below, or check the box if variety is not important.

Providing several different flows is necessary to...	Not at all important	Slightly important	Moderately important	Very important	Extremely important
...provide different types of boating experiences.	1	2	3	4	5
... provide opportunities for people with different skill levels and craft types.	1	2	3	4	5

Or... Check here  if it isn't important to provide a variety of flow levels.

# **KLAMATH ANGLER PRE-FIELDWORK INFORMATION FORM**

Date: \_\_\_\_ / \_\_\_\_ / 2002

Your name: \_\_\_\_\_

1. For each of the following types of fishing, please 1) estimate the number of years of experience you have doing that type of fishing and 2) the importance of that type of fishing to you on streams like the Upper Klamath River (*circle one number for each*).

Type of fishing	Years of experience	Not important	Slightly important	Important	Very important	Extremely important
Fly fishing	___	1	2	3	4	5
Spin fishing	___	1	2	3	4	5
Bait fishing	___	1	2	3	4	5

2. In general, how many days per year do you spend fishing? \_\_\_\_ days per year
3. Please describe your fishing experience on the Klamath River between Upper Klamath Lake and Iron Gate Dam? (*Complete the following table for the segments you fish*).

Reach	Check if you fish this reach	Number of years fishing	Average days per year	Average size of caught fish (inches)	Average number of fish caught per 2 hours
Link River	___	___	___	___	___
Keno Reach	___	___	___	___	___
Boyle Bypass	___	___	___	___	___
Hells Corner (OR)	___	___	___	___	___
Hells Corner (CA)	___	___	___	___	___

7. Are you  male or  female?
8. What is your height? \_\_\_\_ feet/inches
10. Do you consider yourself a whitewater boater?  No  Yes
11. What is your age? \_\_\_\_ years

12. Please respond to each of the following statements about your fishing preferences on California and Oregon rivers.

	Strongly disagree	Moderately disagree	Slightly disagree	No Opinion	Slightly agree	Moderately agree	Strongly agree
In general, I prefer to wade when I fish.	1	2	3	4	5	6	7
In general, I prefer to fish from a boat.	1	2	3	4	5	6	7
In general, I prefer to fish from the bank.	1	2	3	4	5	6	7
In general, I prefer to fish smaller streams than larger rivers.	1	2	3	4	5	6	7
In general, I prefer to fish riffles, runs, or “pocket water” rather than pools.	1	2	3	4	5	6	7
I use many different types of tackle (flies, lures, & bait) rather than specializing in one type.	1	2	3	4	5	6	7
I fish for several different species rather than one or two key target species (e.g., rainbow trout).	1	2	3	4	5	6	7
In general, catching <b>many fish</b> is the most important component of a high quality fishing trip.	1	2	3	4	5	6	7
In general, catching <b>trophy-sized fish</b> is the most important component of a high quality fishing trip.	1	2	3	4	5	6	7
In general, <b>catching fish</b> is only one component of a quality fishing trip.	1	2	3	4	5	6	7
In general, I consider myself skilled at wading in relatively swift rivers.	1	2	3	4	5	6	7
I prefer dry fly fishing rather than nymph or wet fly fishing. (Fly anglers only – if you do both equally, choose 4).	1	2	3	4	5	6	7



## **KLAMATH DAILY ANGLER FLOW EVALUATION FORM**

Date: \_\_\_\_\_ / \_\_\_\_\_ / 2002  
 Corner  
 Flow (if known) \_\_\_\_\_ cfs

Reach (circle): Boyle Bypass      Hells

Your name: \_\_\_\_\_

1. Please describe the locations you fished on the reach today.
  
2. Using short phrases, please describe the advantages and disadvantages of today's flow for this reach:

*Advantages:*

*Disadvantages:*

3. Using the following scale from 1 to 7, please rate the flow level for each of the following types of locations for different types of fishing. Please also rate wadeability at those locations and overall. *Write a number in each "cell" of the table; if you don't want to rate a type of fishing water or type of fishing, leave those "cells" blank.*

Totally unacceptable		Marginal		Totally acceptable
1	2	3	4	5

	Rating for fly-fishing	Rating for spin fishing	Rating for bait fishing	Wadeability
Pools				
Runs				
Pocket water and riffles				
Overall rating				

5. In general, would you prefer a flow that was higher, lower, or about the same as this flow?
  1. Much lower flow
  2. Slightly lower flow
  3. About the same; this was close to an optimum flow
  4. Slightly higher flow
  5. Much higher flow
  
6. If you have other comments about the flow, fishing, or the study, please write them on the back.

## **KLAMATH ANGLER CLOSE-OUT FORM**

Date: \_\_\_\_ / \_\_\_\_ / 2002  
Bypass

Reach: Hells Corner (OR)      Hells Corner (CA)      Boyle

Your name: \_\_\_\_\_

1. Compared to other rivers, how would you rate fishing opportunities on this reach (assume flows will be provided at your preferred levels for most of the year). *(Circle one number for each; if you are unsure about a comparison, leave that item blank).*

Compared to...	This reach of the Klamath River is...				
	Worse than average	Average	Better than average	Excellent	Among the very best
...other reaches on the Klamath	1	2	3	4	5
...other reaches in the region (3 hours drive)	1	2	3	4	5
...other rivers in California	1	2	3	4	5
...other rivers in the Western U.S.	1	2	3	4	5

2. Using the following scale, please evaluate the following flows for the three types of fishing, while considering all the flow-dependent characteristics that contribute to a high quality trip. *Write a number in each column for each flow; if you don't want to rate a flow for a certain type of fishing, leave that blank.*

Totally unacceptable	Marginal				Totally acceptable	
1	2	3	4	5	6	7

Flow (in cfs)	Fly fishing	Spin fishing	Bait fishing
350			
500			
700			
1,000			
1,300			
1,600			
2,000			
3,000			
5,000			

3. Based on your experience on this reach, please specify the flows that provide the following types of experiences for California/Oregon anglers. (Note: you can specify flows that you have not seen, but which you think would provide the type of experience in question).

FLOW IN CFS

Please specify the **acceptable range** of flows for...

Fly-fishing \_\_\_\_\_ to \_\_\_\_\_

Spin fishing \_\_\_\_\_ to \_\_\_\_\_

Bait fishing \_\_\_\_\_ to \_\_\_\_\_

Please specify the **optimal or best range** of flows for...

Fly fishing \_\_\_\_\_ to \_\_\_\_\_

Spin fishing \_\_\_\_\_ to \_\_\_\_\_

Bait fishing \_\_\_\_\_ to \_\_\_\_\_

If PacifiCorp released only one base flow for fishing, what flow would you prefer? \_\_\_\_\_

If PacifiCorp released two base flow levels that offer different types of fishing opportunities during the year, what two flows would you prefer? \_\_\_\_\_ & \_\_\_\_\_

Post Run Boater Focus Group Questions:

1. Advantages?
2. Disadvantages?
3. What do you think it would be like with more water?
4. What would it be like with less water?
5. Was this technical, standard, or high challenge?
6. Was this flow raftable and in what craft?
7. Was this flow commercially raftable and in what craft?
8. What skill level would a boater need for you to bring them at this flow?

Close Out Boater Focus Group Questions:

1. Do the technical, standard, or high challenge labels work?
2. What other rivers in the area (based on your experience) offer similar qualities and benefits (difficulty).
3. Describe unique, special or important features on the reach compared to other whitewater opportunities on the Klamath or other nearby rivers.
4. Estimate use levels on the reach at optimum flows for technical, standard, and high challenge if offered on weekends in summer or weekends in winter.
5. Is the run too short; would you run it multiple times?

Post Fieldwork Angler Focus Group Questions:

1. Advantages?
2. Disadvantages?
3. What do you think it would be like with more water?
4. What would it be like with less water?
5. Was wading the key issue? Or availability of good fishing water
6. Wading for older, younger, and less skilled
7. Substitute resources?
8. Biological issues?
9. User conflict issues?

# Upper Klamath Recreation Controlled Flow Studies

PacifiCorp and Confluence Research and Consulting · September 2002

For more information call Doug Whittaker at (907) 346 - 3769

The following document lays out planned logistics and schedule for the recreation controlled flow studies in September, 2002. It includes:

1. A brief summary of "general logistics" for each type of user.
2. Preliminary schedules ("where should I go to participate?") for each group
3. Preliminary master schedules that provide more detail about the timing of flows and research activities through the study.
4. Direction to key study locations.

All information should be considered preliminary; schedules may change based on several factors. However, assume these schedules are accurate unless you hear differently.

## General Logistics

### Hell's Corner Boaters

- Boaters will meet at Frain Ranch about an hour before a scheduled flow to fill out surveys and rig (see schedule below).
- Once flows to be evaluated have stabilized, they will run to Stateline.
- At Stateline they will complete post-run surveys and be shuttled back upstream to Frain Ranch.
- On Friday, there will be two flows (1,700 cfs in the morning and 1,300 cfs in the afternoon).
- On Saturday, there will be one flow to evaluate (1,000 cfs in the morning).
- On Sunday, there will be one flow to evaluate (700 cfs in the afternoon).
- Boaters may opt to park their vehicles at Spring Island or Stateline, but they will have to arrange their own shuttles from those places. The study will only provide shuttles from Stateline to Frain Ranch at the end of each run.
- Focus group meetings after each run will be held as time permits at Stateline.
- About 15 boaters in single-person craft are expected (hard shell kayaks, small cats, and IKs). At least three rafts with paddle crews made up of guides and agency staff are expected.
- If boaters do not want to run a flow (e.g., 1,000 or 700 cfs) after scouting Caldera, they don't have to. We will work to get those boats and people back to their vehicles.

### Hell's Corner Oregon Anglers (Frain Ranch or Powerhouse Road anglers)

- Oregon anglers have the option of meeting researchers at Frain Ranch (river left or east side) about an hour before a scheduled flow to fill out pre-study surveys (see schedule below).
- If some Oregon anglers plan to fish from the river right or west side (from the Boyle Powerhouse to the BLM picnic area about three miles downstream), we will send them a packet of evaluation forms and call them with instructions on how to use and return them.
- During the evaluation period shown on the schedule, anglers may fish anywhere from Boyle Powerhouse to Stateline.
- On Friday, there will be two flows (1,700 cfs in the morning and 1,300 cfs in the afternoon).
- On Saturday, there will be one flow to evaluate (1,000 cfs in the morning).
- On Sunday, there will be one flow to evaluate (700 cfs in the afternoon).
- Optional focus group meetings after each flow will be held as time permits; the schedule proposes times and places. Other arrangements may be made with individual anglers depending upon turn-out and on-site logistics.

### **Hell's Corner California Anglers (Access areas 1-6)**

- California anglers will receive a packet of evaluation forms and a call with instructions on how to use and return them.
- During the evaluation period shown on the schedule, anglers may fish anywhere from Stateline to Copco Reservoir (access areas 1 to 6).
- On Friday, there will be two flows (1,700 cfs around mid-day and 1,300 cfs in the late afternoon).
- On Saturday, there will be one flow to evaluate (1,000 cfs in the morning).
- On Sunday, there will be one flow to evaluate (700 cfs in the afternoon).

### **Boyle Bypass Boaters**

- Boaters will meet at Spring Island about an hour before a scheduled flow to fill out surveys and rig (see schedule below).
- They will be shuttled up to the dam about a half hour before the scheduled release.
- Once flows to be evaluated have stabilized, they will run back to Spring Island.
- At Spring Island, they will complete post-run surveys (and shuttled back to the dam for the next flow).
- On Monday, there will be two flows (1,000 cfs in the morning and 1,300 cfs in the afternoon).
- On Tuesday, there will be two flows (1,600 cfs in the morning and 700 cfs in the afternoon).
- Focus group meetings after each run will be held as time permits at Spring Island.
- About 10 boaters in single-person craft are expected (hard shell kayaks, small cats, and IKs). At least three rafts with paddle crews made up of guides and agency staff are expected.

### **Boyle Bypass Anglers**

- Anglers will meet at Spring Island about an hour before a scheduled flow to fill out surveys (see schedule below).
- During the evaluation period shown on the schedule, anglers may fish anywhere from the Dam to Spring Island.
- At Spring Island after an evaluation period, they will complete post-flow surveys and take part in a focus group (time permitting).
- On Monday, there will be two flows (1,000 cfs in the morning and 1,300 cfs in the afternoon).
- On Tuesday, there will be two flows (1,600 cfs in the morning and 700 cfs in the afternoon).

## Boater Schedule

<b>Friday September 13 · Hell's Corner</b>		
9:15 am	Meet at Frain Ranch put-in near Caldera Rapid	Fill out pre-study forms, rig boats
10:00 am	Begin boating from Frain Ranch	1,700 cfs
12:00 pm	Take-out at Stateline	Fill out post-run surveys and short focus group
12:30 pm	Shuttle back to Frain Ranch	Shuttle provided by PacifiCorp
1:30 pm	Lunch and set-up for second run	Lunch provided by PacifiCorp
2:00 pm	Begin boating	1,300 cfs
4:30 pm	Take-out at Stateline	
5:00 pm	Shuttle back to Frain Ranch	Shuttle provided by PacifiCorp
6:00 pm	Arrive at Frain Ranch	
7:00 pm	Frain Ranch potluck and camping	All welcome; bring food to share

<b>Saturday September 14 · Hell's Corner</b>		
8:30 am	Meet at Frain Ranch put-in near Caldera Rapid	Rig boats and prepare to begin boating by 9 am
9:00 am	Begin boating from Frain Ranch	1,000 cfs
12:00 pm	Take-out at Stateline	Fill out post-run surveys an short focus group
12:30 pm	Shuttle back to Frain Ranch	Shuttle provided by PacifiCorp
1:30 pm	Lunch	Lunch provided by PacifiCorp
Afternoon	1,600 cfs flows available for non-study runs	Provide your own shuttle
7:00 pm	Frain Ranch BBQ and camping	All welcome; food provided by PacifiCorp

<b>Sunday September 15 · Hell's Corner</b>		
Morning	1,600 cfs flows available for non-study runs	Provide your own shuttle
1:30 pm	Meet at Frain Ranch put-in near Caldera Rapid	Rig boats and prepare to begin boating by 2 pm
2:00 pm	Begin boating from Frain Ranch	700 cfs
5:00 pm	Take-out at Stateline	Fill out post-run surveys an short focus group
5:30 pm	Shuttle back to Frain Ranch	Shuttle provided by PacifiCorp
6:30 pm	At Frain Ranch; campers move to Topsy CG	Dinner on your own

<b>Monday September 16 · Boyle Bypass</b>		
8:00 am	Meet at Spring Island access	Fill out pre-study forms and rig boats
8:30 am	Shuttle to dam (put-in)	Shuttle provided by PacifiCorp
9:00 am	Begin boating at dam	1,000 cfs
11:00 am	Take-out at Spring Island	Fill out post-run surveys and short focus group
11:30 am	Lunch and shuttle to dam (put-in)	Lunch and shuttle provided by PacifiCorp
12:00 pm	Begin boating at dam	1,300 cfs
2:00 pm	Take out-at Spring Island	
2:30 pm	Focus group meeting at Spring Island	Fill out post-run surveys and short focus group
7:00 pm	BBQ dinner and camping at Topsy CG	All welcome; food provided by PacifiCorp

<b>Tuesday September 16 · Boyle Bypass</b>		
10:00 am	Meet at Spring Island access	Rig boats and prepare for shuttle by 10:30 am
10:30 am	Shuttle to dam (put-in)	Shuttle provided by PacifiCorp
11:00 am	Begin boating at dam	1,600 cfs
1:00 pm	Take-out at Spring Island	Fill out post-run surveys and short focus group
1:30 pm	Lunch and shuttle to dam (put-in)	Lunch and shuttle provided by PacifiCorp
2:00 pm	Begin boating at dam	700 cfs
4:30 pm	Take out-at Spring Island	
5:00 pm	Focus group meeting at Spring Island	Fill out post-run surveys and short focus group

## Oregon Angler Schedule

<b>Friday September 13 · Hell's Corner</b>		
9:00 am	Optional meeting at Frain Ranch	Fill out pre-study forms
10:00 am	Begin evaluations for 1,700 cfs	
12:30 pm	End evaluations for 1,700 cfs	Fill out post-flow survey
1:00 pm	Lunch	Lunch provided by PacifiCorp
1:30 pm	Alternative meeting at Frain Ranch	Fill out pre-study forms
2:00 pm	Begin evaluations for 1,300 cfs	
4:30 pm	End evaluations for 1,300 cfs	Fill out post-flow survey
6:00 pm	Optional focus group meeting at Frain Ranch	Meet near Caldera Rapid boat launch
7:00 pm	Frain Ranch potluck and camping	All welcome; bring food to share

<b>Saturday September 14 · Hell's Corner</b>		
8:00 am	Optional meeting at Frain Ranch	Fill out pre-study forms
8:30 am	Begin evaluations for 1,000 cfs	
12:30 pm	End evaluations for 1,000 cfs	Fill out post-flow survey
1:00 pm	Lunch	Lunch provided by PacifiCorp
1:15 pm	Optional focus group meeting at Frain Ranch	Meet near Caldera Rapid boat launch
7:00 pm	Frain Ranch BBQ and camping	All welcome; food provided by PacifiCorp

<b>Sunday September 15 · Hell's Corner</b>		
1:00 pm	Optional meeting at Frain Ranch	Fill out pre-study forms
1:30 pm	Begin evaluations for 700 cfs	
5:00 pm	End evaluations for 700 cfs	Fill out post-flow survey
6:00 pm	Optional focus group meeting at Frain Ranch	Meet near Caldera Rapid boat launch

<b>Monday September 16 · Boyle Bypass</b>		
8:00 am	Meet at Spring Island access	Fill out pre-study forms
9:00 am	Begin evaluations for 1,000 cfs	
11:00 am	End evaluations for 1,000 cfs	Fill out post-flow survey
11:30 am	Lunch at Spring Island	Lunch provided by PacifiCorp
12:00 pm	Begin evaluations for 1,300 cfs	
2:00 pm	End evaluations for 1,300 cfs	
2:30 pm	Focus group meeting at Spring Island	Fill out post-run surveys and short focus group
7:00 pm	BBQ dinner and camping at Topsy CG	All welcome; food provided by PacifiCorp

<b>Tuesday September 17 · Boyle Bypass</b>		
10:00 am	Meet at Spring Island access	Fill out pre-study forms
10:30 am	Begin evaluations for 1,600 cfs	
11:00 am	End evaluations for 1,600 cfs	Fill out post-flow survey
1:00 pm	Lunch at Spring Island	Lunch provided by PacifiCorp
1:30 pm	Begin evaluations for 700 cfs	
2:00 pm	End evaluations for 700 cfs	
4:30 pm	Focus group meeting at Spring Island	Fill out post-flow surveys and short focus group



## California Angler Schedule

Anglers will receive evaluation forms by mail; they will not need to attend “on river” meetings.

<b>Friday September 13 · Hell's Corner</b>		
11:00 am	Begin evaluations for 1,700 cfs	
2:30 pm	End evaluations for 1,700 cfs	Fill out post-flow survey
3:00 pm	Begin evaluations for 1,300 cfs	
5:30 pm	End evaluations for 1,300 cfs	Fill out post-flow survey
7:00 pm	Frain Ranch potluck and camping	All welcome; bring food to share

<b>Saturday September 14 · Hell's Corner</b>		
10:00 am	Begin evaluations for 1,000 cfs	
1:30 pm	End evaluations for 1,000 cfs	Fill out post-flow survey
7:00 pm	Frain Ranch BBQ and camping	All welcome; food provided by PacifiCorp

<b>Sunday September 15 · Hell's Corner</b>		
3:00 pm	Begin evaluations for 700 cfs	
5:30 pm	End evaluations for 700 cfs	Fill out post-flow survey

# Master Schedule

## FRIDAY SEPTEMBER 13 · HELL'S CORNER REACH

Time	Target scheduled flow in cfs at...				Boaters	OR Anglers	CA Anglers
	Spring Is.	Frain	Stateline	Access 1			
7:00 am	1,400	1,000	600	Base			
7:30							
8:00	1,600	1,300	1,000	Base			
8:30					In @ Spg. Is		
9:00	1,700	1,500	1,300	600	.	Frain meeting	
9:30					Frain meeting	Start	
10:00	1,700	1,700	1,500	1,000	Frain put in	evaluations	
10:30							
11:00	1,700	1,700	1,700	1,400			Start
11:30							evaluations
12:00 pm	1,600	1,700	1,700	1,600			
12:30					Out Stateline	End	
1:00	1,300	1,600	1,700	1,700	Shuttle		
1:30					Back @ Frain	Frain meeting	
2:00	1,300	1,300	1,600	1,700	Frain put in	Start evaluations	End
2:30							
3:00	1,300	1,300	1,300	1,700			Start evaluations
3:30							
4:00	1,000	1,300	1,300	1,600			
4:30					Out Stateline		
5:00	600	1,000	1,300	1,300	State. meeting	End	
5:30					Shuttle		
6:00	Base	600	1,000	1,300	Back @ Frain	Frain meeting	End
6:30							
7:00	Base	Base	600	1,300	Frain Ranch Potluck		
7:30							
8:00	Base	Base	Base	1,000			
8:30							

**Notes:**

Base flow = 325 (100 from fish ladder + 225 from springs and accretion)

Target evaluation flows for this day = 1,700 cfs and 1,300 cfs

Pre-study meeting (optional for OR anglers)

End of day focus group meetings (optional for OR anglers)

No meetings required for CA anglers (information to be collected via post-study phone interviews)

## SATURDAY SEPTEMBER 14 · HELL'S CORNER REACH

Time	Target scheduled flow in cfs at...				Boaters	OR Anglers	CA Anglers
	Spring Is.	Frain	Stateline	Access 1			
7:00 am	600	Base	Base	Base			
7:30					In @ Spg. Is.		
8:00	1,000	600	Base	Base		Frain meeting	
8:30					Frain meeting	Start	
9:00	1,000	1,000	600	Base	Frain put in		
9:30							
10:00	1,000	1,000	1,000	Base			Start
10:30							
11:00	1,450	1,000	1,000	600			
11:30					Out Stateline		
12:00 pm	1,600	1,450	1,000	1,000	State. meet.	End	
12:30					Shuttle		
1:00	1,600	1,600	1,450	1,000	Back @ Frain	Frain meet.	
1:30							End
2:00	1,600	1,600	1,600	1,000			
2:30							
3:00	1,400	1,600	1,600	1,450			
3:30							
4:00	1,000	1,400	1,600	1,600			
4:30							
5:00	600	1,000	1,400	1,600			
5:30							
6:00	Base	600	1,000	1,600			
6:30							
7:00	Base	Base	600	1,400	Frain Ranch BBQ		
7:30							
8:00	Base	Base	Base	1,000			
8:30							

**Notes:**

Base flow = 325 (100 from fish ladder + 225 from springs and accretion)

Target evaluation flows for this day = 1,000 cfs

Pre-study meeting (optional for anglers)

End of day focus group meetings (optional for anglers)

Commercial rafting opportunity provided (optional for boaters to run; arrange own shuttles)

No meetings required for CA anglers (information to be collected via post-study phone interviews)

## SUNDAY SEPTEMBER 15 · HELL'S CORNER REACH

Time	Target scheduled flow in cfs at...				Boaters	OR Anglers	CA Anglers
	Spring Is.	Frain	Stateline	Access 1			
7:00 am	1,300	1,000	600	Base			
7:30							
8:00	1,600	1,300	1,000	Base			
8:30							
9:00	1,600	1,600	1,300	600			
9:30							
10:00	1,600	1,600	1,600	1,000			
10:30							
11:00	1,450	1,600	1,600	1,300			
11:30					In @ Spg. Is.		
12:00 pm	1,000	1,450	1,600	1,600			
12:30							
1:00	700	1,000	1,450	1,600		Frain meeting	
1:30					Frain meeting	Start	
2:00	700	700	1,000	1,600	Frain put in		
2:30							
3:00	600	700	700	1,450			Start
3:30							
4:00	Base	600	700	1,000			
4:30					Out Stateline		
5:00	Base	Base	600	700	State. meet	End	
5:30					Shuttle		
6:00	Base	Base	Base	700	Back @ Frain	Frain Meeting	
6:30							End
7:00	Base	Base	Base	600	Move to Topsy Campground on Boyle Reservoir No organized dinner		
7:30							
8:00	Base	Base	Base	Base			
8:30							

**Notes:**

Base flow = 325 (100 from fish ladder + 225 from springs and accretion)

Target evaluation flows for this day = 700 cfs

Pre-study meeting (optional for anglers)

End of day focus group meetings (optional for anglers)

Commercial rafting opportunity provided (optional for boaters to run; arrange own shuttles)

No meetings required for CA anglers (information to be collected via post-study phone interviews)

## MONDAY SEPTEMBER 16 · BYPASS REACH

Time	Target scheduled flow in cfs at...				Boaters	OR Anglers
	Near dam	Spg. Is.	Frain	Stateline		
7:00 am	600	Base	Base	Base		
7:30						
8:00	900	600	Base	Base	Spg Is meeting	Spg Is meeting
8:30					Dam meeting	Dam meeting
9:00	1,000	900	600	Base	In at dam	Start
9:30						
10:00	1,000	1,000	900	600		
10:30						
11:00	1,000	1,000	1,000	900	Out at Spg Is	End
11:30					Shuttle	
12:00 pm	1,300	1,000	1,000	1,000	In at dam	Start
12:30						
1:00	1,300	1,300	1,000	1,000		
1:30						
2:00	950	1,300	1,300	1,000	Out at Spg Is	End
2:30					Meeting at Spg. Is.	Meeting at Spg. Is.
3:00	500	950	1,300	1,300		
3:30						
4:00	Base	500	950	1,300		
4:30						
5:00	Base	Base	500	950		
5:30						
6:00	Base	Base	Base	500		
6:30						
7:00	Base	Base	Base	Base	At Topsy Campground On Boyle Reservoir BBQ dinner	
7:30						
8:00	Base	Base	Base	Base		
8:30						

**Notes:**

Base flow = 325 (100 from fish ladder at dam + 225 from springs and accretion just downstream)

Target evaluation flows for this day = 1,000 cfs and 1,300 cfs

Pre-study meeting (optional for anglers)

End of day focus group meetings (optional for anglers)

## TUESDAY SEPTEMBER 17 · BYPASS REACH

Time	Target scheduled flow in cfs at...				Boaters	OR Anglers
	Near dam	Spg. Is.	Frain	Stateline		
7:00 am	Base	Base	Base	Base		
7:30						
8:00	500	Base	Base	Base		
8:30						
9:00	600	500	Base	Base		
9:30						
10:00	1,000	600	500	Base	Spg Is meeting	Spg Is meeting
10:30					Dam meeting	Dam meeting
11:00	1,600	1,000	600	500	In at dam	Start
11:30						
12:00 pm	1,600	1,600	1,000	600		
12:30						
1:00	1,000	1,600	1,600	1,000	Out at Spg Is	End
1:30					Shuttle	
2:00	700	1,000	1,600	1,600	In at dam	Start
2:30						
3:00	700	700	1,000	1,600		
3:30						
4:00	700	700	700	1,000		
4:30					Out at Spg Is	End
5:00	700	700	700	700	Meeting at Spg. Is.	Meeting at Spg. Is.
5:30						
6:00	700	700	700	700		
6:30						
7:00	700	700	700	700		
7:30						
8:00	700	700	700	700		
8:30						

**Notes:**

Base flow = 325 (100 from fish ladder at dam + 225 from springs and accretion just downstream)

Target evaluation flows for this day = 1,600 cfs and 700 cfs

Pre-study meeting (optional for anglers)

End of day focus group meetings (optional for anglers)

## **Upper Klamath River Whitewater Boating Study: Safety Plan**

American Whitewater (AW) will employ the following safety plan during the controlled flow study on the Hell's Corner and J.C. Boyle bypass reaches of the Upper Klamath River. Both reaches may include Class III, IV, and V rapids as well as potential hazards associated with riparian vegetation growth, downed trees, log jams, mining debris, or road construction debris. As such, only advanced and expert paddlers will be participating in the controlled flow study. Paddlers of this ability are generally highly skilled in whitewater rescue. These paddlers descend a river of this difficulty as a team, providing safety mechanisms as needed for each other in a self-reliant manner. Furthermore, each team will contain at least one team member with Wilderness First Responder or better medical training.

Prior to the first descent through the canyon, boaters will scout the reaches as possible at the initial test release flow. The teams will have a meeting prior to putting on the water to discuss their observations while scouting. Preliminary reconnaissance of both reaches has been conducted by AW members and will also be communicated to potential boaters prior to putting on the river.

American Whitewater requests that PacifiCorp provide line-of-sight radio communications at two locations along each reach when boaters are in the river. PacifiCorp should also provide whitewater boaters with one radio per four boaters. This will allow communication in case of emergency. We don't expect that cell phone coverage will be available in the canyons, but a cell phone communication system should be provided as well in case coverage is available.

Each participating paddler should be responsible for having the following equipment:

- Whitewater clothing appropriate to the air and water temperature (this may include wet or dry tops/suits, as well as foot and hand protection).
- A high quality Type III personal floatation device.
- A good helmet.
- A boat and paddle in good condition.
- A throw rope.

Each team of participating paddlers should have:

- A small rescue kit (should include nuts, one rescue rope, a couple of prussiks, a couple of web slings, and several carabiners).
- A small medical kit (to handle abrasions, a twisted ankle, or other similar minor injuries).
- A spare (break-down) paddle for every two kayakers.

When teams are being formed, people should be assigned so that rescue skill and experience are evenly distributed on each. An incident leader and backup leader should probably be anointed for each team too.

Before teams go into the canyon, even for scouting, they should conduct a brief “safety talk” to review potential safety situations and the roles that people might play in case of a mishap. This is also a good time to go over how radio communications will work and review hand signals that can be used if radios fail. All boaters and observers should be in attendance at this briefing.

Before teams go on either reach, boaters and observers should review the estimated time schedule to determine when or if search and rescues should be initiated if boaters don’t reach specific locations by a certain time.