

## Blank Boater Evaluation Form



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

River: \_\_\_\_\_ Reach: \_\_\_\_\_

Put in: \_\_\_\_\_ Take out: \_\_\_\_\_

Put in time: \_\_\_\_\_ Take out time: \_\_\_\_\_

Study Flow: \_\_\_\_\_

1. What type of craft did you use for this run?

☐ Hard shell kayak

☐ Inflatable kayak

☐ Closed deck canoe

☐ Open canoe with floatation

☐ Cataract: please indicate length: \_\_\_\_\_

☐ Self-bailing raft: please indicate length: \_\_\_\_\_

☐ Wrap-floor raft: please indicate length: \_\_\_\_\_

☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe
- f. Cataract
- g. Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

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### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) \_\_\_\_\_

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☐ No

	yes	no	Flow (cfs)
<b>Minimum Acceptable:</b> The lowest flow at which you would be willing to return to boat on this run.			
<b>Optimal:</b> The flow that creates the best combination of characteristics for your craft type and skill level.			
<b>Maximum Acceptable:</b> The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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## **Completed Boater Evaluation Forms**



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**Tunnel Chute Run**  
**September 16, 2008**  
**600 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: T. THOMAS BARTUS Date: \_\_\_\_\_  
 River: MIDDLE FORK Reach: TUNNEL CHUTE 600 CFS  
 Put in: OXBOW Take out: ROCKY CREEK  
 Put in time: 9:30 Take out time: 3:30  
 Study Flow: 600 CFS

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14 FT  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	(2)	1	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	(1)	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe

- f. Cataraft  
g. Inflatable kayak ?  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

PRESENTED CHALLENGE + EXCITEMENT. ~~SA~~ A  
FEW RAKES WERE QUITE DIFFICULT &  
REQUIRED VERY GOOD SKILLS.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) ~~III~~ 1/2
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Rucky C. Hucky	1	2	3	4	X		20 min
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30 minutes LUNCH</u>
Number of stops for scouting	<u>3</u>	Total minutes out of boat	<u>20 min</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>20 min.</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Rocky chutes	very HOT ROCKS low water
2. Parallel park	ROCKS STICKING OUT
3. KANAKA FALL CHUNDER	ROCK OUT CHOPPING STEADY DROP ROCK OUT CHOPPING

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

TO ELIMINATE OUT CHOPPING & SHALLOW WATER

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	600 CFS
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800-1000 CFS
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input type="checkbox"/>	?

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

THE RUN WAS VERY GOOD WITH A FEW AREAS WHERE HIGHER FLOWS WOULD BE HIGHLY DESIRABLE & SAFER. I BELIEVE 800 CFS WOULD BE ELIMINATE SOME OF THE MORE DIFFICULT + DANGEROUS AREAS. ALSO THE NUMBER & SKILLS OF THE INDOORS IS VERY IMPORTANT IN MAKING THIS EVALUATION. WE HAD A LIGHT WITH SKILLED RAFTERS.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Wynston Bloodsaw Date: 9/16/08  
 River: Middle Fork Reach: Tunnel (hwy)  
 Put in: Oxbow Take out: Driver's Flat  
 Put in time: 4:30 Take out time: 3:30  
 Study Flow: 600 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14 ft  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	①	0	-1	-2
Availability of powerful hydraulics	2	1	①	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	①	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak f. Cataract  
b. Closed deck canoe g. Inflatable kayak  
c. Raft h. Other: \_\_\_\_\_  
e. Open canoe

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	1	2

Please explain your rating:

makes rapids extremely difficult to maneuver

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<del>maneuvering</del>	1	2	3	4			
chunder	1	2	3	4		right	30 min
parallel parking	1	2	3	4			30 min
rock-a-chuck-f	1	2	3	4			30 min
	1	2	3	4			
	1	2	3	4			

would be portaged →

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>45 min</u>
Number of stops for scouting	<u>4</u>	Total minutes out of boat	<u>1 hour</u>
Number of stops for portaging	<u>3</u>	Total minutes out of boat	<u>1 1/2 hours</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Tunnel Chute	extremely narrow
2. Chunder	large rock at bottom left
3. Mirakell parking	extremely narrow chute w/ possibility of flipping on to rocks

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

At a higher flow this trip would be a lot safer.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,100
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,500

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

a. Yes

☒

b. No

☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

a. Yes

☒

b. No

☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Jeremiah Cooper Date: 9/16/08  
 River: Middle Fork River Reach: Tunnel Cliffs  
 Put in: Oxbow Take out: Greenwood  
 Put in time: 9:30 Take out time: 3:30  
 Study Flow: 600 CFS

1. What type of craft did you use for this run?

- |                                                     |                                                                                             |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak           | <input type="checkbox"/> Cataraft: please indicate length: _____                            |
| <input type="checkbox"/> Inflatable kayak           | <input checked="" type="checkbox"/> Self-bailing raft: please indicate length: <u>14 ft</u> |
| <input type="checkbox"/> Closed deck canoe          | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____                     |
| <input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Other: please explain _____                                        |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak

b. Closed deck canoe

c. Raft

e. Open canoe

f. Cataract

g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

Safety, time, enjoyment all compromised

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
* tunnel chute	1	2	3	4		L	15m
* chunder	1	2	3	4		R	10m
* Rock A Chucky	1	2	3	4		P	10m
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

\* assuming fully loaded commercial boats



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30 Lunch</u>
Number of stops for scouting	<u>3</u>	Total minutes out of boat	<u>45</u>
Number of stops for portaging	<u>3</u>	Total minutes out of boat	<u>1 hour</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. tunnel chute	Hole at bottom
2. chunder	vertical Pin
3. parallel parking	unramp rock

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

see all of above

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2000 CFS
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input type="checkbox"/>	<input type="checkbox"/>	1000-1500
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input type="checkbox"/>	1500-2000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

we ran two light boats with professional guides. Fully loaded commercial boats would have much more trouble

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Nikki Doyle Date: 9/16/08  
 River: MFA Reach: Tunnel Chute  
 Put in: OXBOW Take out: DF  
 Put in time: 9:30 Take out time: 3:30  
 Study Flow: 600 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14 foot  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	(-2)
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	0	-1	(-2)
Availability of whitewater "play areas"	2	1	0	(-1)	(-2)
Overall whitewater challenge	2	1	0	-1	(-2)
Safety	2	1	0	-1	(-2)
Length of run	2	1	0	-1	(-2)
Rate of travel	2	1	0	-1	(-2)
Number of portages	2	1	0	-1	(-2)

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe

f. Cataract

g. Inflatable kayak

h. Other: NONE

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

Too low — got stuck several places  
Too Dangerous — scary swimming due to  
low flow

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<u>Rickachucky</u>	1	2	3	(4)	✓		
<u>Chunder</u>	1	2	3	(4)		RR	1/2 HR
<u>Paralell Parking</u>	1	2	3	(4)		RR	1/2 HR
<u>Kanaka</u>	1	2	3	(4)		RL	1/2 HR
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1 - lunch</u>	Total minutes out of boat	<u>1 Hour</u>
Number of stops for scouting	<u>2</u>	Total minutes out of boat	<u>10 + 20</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>30</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Strainer below Good Morning rapid	— Tree Branch.
2. Kanaka Falls	Seine Rock way more exposed with more current going toward rock above it (wrap rock.)
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

We had a boat with three guides & 1 guest.  
Very light & very experienced  
1 guide & six guests would have been  
dangerous — Had to successfully negotiate  
lower ~~fast~~ water levels  
in rapids.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	✓		1000
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		1600 - 1200
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	✓		2500

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

o Dangerous for commercial trips  
o One of the guides got injured today which would it have happened in high water

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Glen Mueshauer Date: 9/16/08  
 River: American Reach: tunnel shoot  
 Put in: Oxbow Take out: Tuckachuck  
 Put in time: 9:30 Take out time: 3:30  
 Study Flow: 600

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☐ b. Closed deck canoe  
☐ c. Raft  
☐ e. Open canoe  
☐ f. Cataraft  
☒ g. Inflatable kayak  
☐ h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<input checked="" type="radio"/> -1	-2

Please explain your rating:

*Many rocks were exposed due to low water flow.*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>Muckhooky</i>	1	2	3	<input checked="" type="radio"/> 4			<i>15 min</i>
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

*- would have had to portage other sections w/ a full commercial raft.*



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1 <del>2</del></u>	Total minutes out of boat	<u><del>45</del> 30</u>
Number of stops for scouting	<u>—</u>	Total minutes out of boat	<u>—</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>15 mins</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <del>Exposed rocks</del> Multiple spots	EXPOSED ROCKS <del>in</del> w/ in rapids that normally are not exposed
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

Some rapids were impossible due to low water, a higher  
flow rate is necessary in order to commercially guide  
this section

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

*easier/less dangerous to run @ higher flow*

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Stratton Date: \_\_\_\_\_  
 River: MF Reach: Tunnel Chute  
 Put in: Oxbow Reservoir Take out: Greenwood Crossing  
 Put in time: \_\_\_\_\_ Take out time: \_\_\_\_\_  
 Study Flow: 600 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☒ Self-bailing raft: please indicate length: 14 ft.  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	(-1)	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	2	1	0	-1	(-2)
Length of run	2	1	0	(-1)	-2
Rate of travel	2	1	0	(-1)	-2
Number of portages	2	1	0	-1	(-2)

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
 b. Closed deck canoe  
 c. Raft  
 e. Open canoe  
 f. Cataract  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<input checked="" type="radio"/> -1	-2

Please explain your rating:

Boney, highly technical, dry, no waves, drops  
 were slow, almost impossible with a 6-7 pax raft.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) III - IV (or po)
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Kanaka?	1	2	<input checked="" type="radio"/> 3	4	no	left	30 min.
Chunder	1	<input checked="" type="radio"/> 2	3	4	no	right	15 min.
Ruck-a-chuck	1	2	3	<input checked="" type="radio"/> 4	<del>yes</del>	right	45 min.
Parallel Parking	1	2	<input checked="" type="radio"/> 3	4	no	right	25 min.
	1	2	3	4			
	1	2	3	4			

w/ trail recut

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>2 1</u>	Total minutes out of boat	<u>30 min.</u>
Number of stops for scouting	<u>3</u>	Total minutes out of boat	<u>15 min.</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>40 min.</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Kanakahn	river right has a large rock w/ a sieve next to it, asking for trouble!
2. Tunnel chute	Bottom hole is <del>recirculating</del> <del>recirculating</del> recirculating → high chance of a flip or worse a pile-up!
3. Ruck-a-chucky portage.	No longer safe to R1 or Ghost Boat. Boats <sup>will</sup> get stuck at top of <del>inaccessible</del> inaccessible 20 ft drop.

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<del>200</del>	X	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<del>1000</del>		1200
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<del>2000</del>	X	2000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

*This run has always served as a great step up from the popular south fork run. The drops were more powerful, the waves bigger, and the thrills that much more. At flows lower than 1000 cfs all of this is lost and the run becomes a let down from the typically easier South Fork. i.e. Hospital Bar will be ~~harder~~ more exhilarating than anything on the Middle Fork.*

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Robert Townsend Date: 9/16/08  
 River: Middle Fork Reach: Tunnel chute  
 Put in: 4300 x bow Take out: 330 Rockachuck  
 Put in time: 930 Take out time: 330  
 Study Flow: 600

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

b. Closed deck canoe

☒ c. Raft

e. Open canoe

f. Cataract

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

*good crew / good water / good distance for portaging; good whitewater - excellent challenges.*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 3/4
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>Rocks-chucky</i>	1	2	<input checked="" type="radio"/> 3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30-45</u>
Number of stops for scouting	<u>2</u>	Total minutes out of boat	<u><del>10</del> 10 ea</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>15-20</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
  - b. Slightly lower flow
  - ☒ c. About the same; this was close to an optimum flow
  - ☐ d. Slightly higher flow
  - e. Much higher flow
- > either would work*

Please explain:

*It was highly adaptable today. However, an extra 100-200 CFS would likely be better for all involved.*

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	✓		600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	✓		900 -

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Tunnel Chute Run**  
**September 9, 2008**  
**800 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Scott Armstrong Date: 9/9/08  
 River: Middle Fork Amer Reach: Oxbow → Greenwood  
 Put in: Oxbow Take out: Greenwood  
 Put in time: 10 am Take out time: 4 pm  
 Study Flow: 200 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14 ft  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	<del>-1</del>	-2
Availability of challenging technical boating	2	1	0	<del>-1</del>	-2
Availability of powerful hydraulics	2	1	0	<del>-1</del>	-2
Availability of whitewater "play areas"	2	<del>1</del>	0	-1	-2
Overall whitewater challenge	2	<del>1</del>	0	-1	-2
Safety	2	<del>1</del>	0	-1	-2
Length of run	2	<del>1</del>	0	-1	-2
Rate of travel	2	1	0	<del>-1</del>	-2
Number of portages	2	<del>1</del>	0	-1	-2

11. Other:

- The technical aspect is more difficult by a VC to a final class level  
than the South Park American. But the participant enjoyment is  
driving rapid is not a high as a the South Park <sup>(shore)</sup> ~~1300~~ At 1000  
CFS (200 CFS ~~300~~ more) there is enough water to make 17 miles nifty though the 1-1  
section to make 17 miles in a day feasible. The speed of a 1-1  
CFS combine for a class III+IV difficulty with a level of excitement  
that equals the class level. 800 CFS is not a quality whitewater  
trip. At 1000 CFS it is a high quality whitewater trip.

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 1 Total minutes out of boat 2.5 minutes  
Number of stops for scouting \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_  
Number of stops for portaging \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	800 cfs compared to 1000 increased danger level of foot a body entrapment to swimmers. <del>Also dangerous</del>
2.	<del>There is</del> 200 cfs lower creates a substantially higher number of exposed rocks with water partially going over them.
3.	This flow increases the level of swimmer being knocked from left side to right hitting rocks and not sliding over rocks

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow  
b. Slightly lower flow  
c. About the same; this was close to an optimum flow  
☒ d. Slightly higher flow 200 cfs more  
e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			800 cfs
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000-1100 cfs
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			4000 cfs

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Above 4000 there is very few rapids

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Scott Buckley Date: 8/9/08  
 River: Middle Fork American Reach: \_\_\_\_\_  
 Put in: Oxbow Res Take out: Drivers Flat  
 Put in time: 10:00 am Take out time: 4:00 pm  
 Study Flow: 800

1. What type of craft did you use for this run?

- |                                                     |                                                                                           |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak           | <input type="checkbox"/> Cataract: please indicate length: _____                          |
| <input type="checkbox"/> Inflatable kayak           | <input checked="" type="checkbox"/> Self-bailing raft: please indicate length: <u>14'</u> |
| <input type="checkbox"/> Closed deck canoe          | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____                   |
| <input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Other: please explain _____                                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☐ b. Closed deck canoe  
☒ c. Raft  
☐ e. Open canoe  
☒ f. Cataract  
☒ g. Inflatable kayak  
☐ h. Other: 13' Raft

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<u>(1)</u>	-2

Please explain your rating:

The run is alot more mellow. Really takes the fun away. No harder than the South Fork American

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 3+
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 1 Total minutes out of boat ~~30~~ 30  
Number of stops for scouting        Total minutes out of boat         
Number of stops for portaging 1 Total minutes out of boat 15

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Kanaka	A lot smaller more rocks. Boats were bouncing over rocks not good place to swim.
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow  
b. Slightly lower flow  
c. About the same; this was close to an optimum flow  
d. Slightly higher flow  
☒ e. Much higher flow

Please explain:

From a rafting view some rapids are much  
safer with more water. There might be more  
swimmers and injuries @ lower water.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	✓		800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	✓		1200

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

Flow should be higher.

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

The flow make the trip less enjoyable. More rocks to make around. People that fall out could really get hurt.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Stacey Chew Date: 9/9/08  
 River: Middle Fork A.R. Reach: \_\_\_\_\_  
 Put in: Oxbow Reservoir Take out: Downs Flat  
 Put in time: 10:00 Take out time: ~~3:30~~ 3:50  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14ft.  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	<del>2</del>	(0)	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	1	(0)	-1	-2
Length of run	2	1	(0)	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. ☒ Kayak  
 b. Closed deck canoe  
 c. ☒ Raft  
 e. Open canoe  
 f. ☒ Cataract  
 g. ☒ Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	<input checked="" type="radio"/> 0	-1	-2

Please explain your rating:

*It was the only flow available for a very good reason, I'd raft it. But it would be riskier with commercial rafts, ~~more~~ more difficult, ~~than~~ on a larger day than at regular flows. And that would suck.*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 1 Total minutes out of boat

Number of stops for scouting            Total minutes out of boat

Number of stops for portaging 1 Total minutes out of boat

30 min (Lunch)

20 min (Rock and chuday)

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. chunder	"dildo" rock out more + can toss people easier
2. Kanaka	2 small thumb rocks <sup>can</sup> catch boats more + can make this harder
3. Rock-a-chuday	boats get stuck more on River bed + more people who jump will have to do the "death sub"

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow  
b. Slightly lower flow  
c. About the same; this was close to an optimum flow.  
d. Slightly higher flow  
e. Much higher flow

Please explain:

1,000 cfs good. 800 cfs not so good.

more shallow  
tree st rocks in  
water exposed

Comrade  
people will  
have to  
paddle  
more

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			<del>1200</del> 600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1200 cfs
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1500-1600 cfs

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Bremiah Copper Date: 9/9/08  
 River: Middle Fork River Reach: \_\_\_\_\_  
 Put in: Oxbow Take out: Greenwood Creek  
 Put in time: 10:00 A.M. Take out time: 4:20 P.M.  
 Study Flow: 800 CFS

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14 Ft  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	0	(1)	-2
Overall whitewater challenge	2	1	0	(1)	-2
Safety	2	1	0	(1)	-2
Length of run	2	1	0	-1	(2)
Rate of travel	2	1	0	-1	(2)
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak  
b. Closed deck canoe  
c. Raft  
d. Open canoe

f. Cataraft  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

slow moving water, shallow rapids, increased danger out of boat, more technical obstacles, quality of experience decreases drastically, length of run.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) ~II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30 (lunch)</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>0</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. all over	increased foot entrapment!
2. all over	pin and wraps
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

1200-1200 CFS increases the experience  
and makes a safer more fun trip

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			800-1000
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000-1500
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1500-2000

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

people will be unhappy with their trips  
thus hurting business and revenues

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Bill Deitchman Date: 9-9-08  
 River: Middle Fork Reach: Oxbow → Greenwood  
 Put in: Oxbow Take out: Greenwood  
 Put in time: 1000 Take out time: 1600  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- |                                                     |                                                                                           |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak           | <input type="checkbox"/> Cataract: please indicate length: _____                          |
| <input type="checkbox"/> Inflatable kayak           | <input checked="" type="checkbox"/> Self-bailing raft: please indicate length: <u>14'</u> |
| <input type="checkbox"/> Closed deck canoe          | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____                   |
| <input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Other: please explain _____                                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(3)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
☐ e. Open canoe

- ☒ f. Cataract  
☒ g. Inflatable kayak - *Class IV level*  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	<i>(1)</i>	0	-1	-2

Please explain your rating:

*Some areas marginal to negotiate & doable but must be right on. Could be more difficult with commercial clients*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV - *less*
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>Pick a chucky</i>	1	2	<i>(3)</i>	4			<i>15 min. ghost boat</i>
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30</u>
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>15</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>15</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
<sup>1</sup> Rock a chunky rapid -	Portage trail needs repair
Parallel Parking -	Shallow tight.
<sup>2</sup> Tunnel chute -	By hole at bottom
Kanaka Falls	Fairly rocky
<sup>3</sup> Chumder -	Rock protruding at bottom

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

Flow of 1000 - 1200 cfs best.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1200-1300
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1500-1700

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

*Have mostly run this stretch at 1000 cfs for over 20 years. I feel that 800 cfs is less enjoyable and less safe at this flow as compared to 1000 cfs*



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Erin Moore-Dempsey Date: Sept 9/08  
 River: MF Reach: \_\_\_\_\_  
 Put in: Oxbow Take out: Driver's Flat  
 Put in time: 10:00 Take out time: 4:00  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☒ Self-bailing raft: please indicate length: 14 ft  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<del>2</del>	(1)	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	1	0	(-1)	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	1	(0)	-1	-2
Length of run	2	1	0	(-1)	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	(1)	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☐ b. Closed deck canoe  
☒ c. Raft  
☐ e. Open canoe  
☒ f. Cataract  
☐ g. Inflatable kayak  
☐ h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

A few really shallow spots that could potentially cause problems with normal customers paddling and/or less experienced guides.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) III - IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30</u>
Number of stops for scouting		Total minutes out of boat	
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>20</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Chunder Rapid	The rock at bottom left can cause serious problems if raft is a little off line, especially at this flow & lower. Possible wraps, Verti pins & serious injury. Also not a good place for a swim as
2. Kanaka Rapid	Ruck-a-Chucky is not too far down stream. Rock in center is exposed. Possible wraps & people falling out of rafts. Especially not good because of the sieve on river right
3. Ruck-A-Chucky	An strait forward move to R-1, but if slightly off line, could be serious consequences... more so @ lower water. Flat wrapping at top of falls a bigger possibility. Lower water also makes pushing boats get stuck more frequently, and jumping more dangerous because of shallower water.

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1200
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1400

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

*Run-able-barely. With weaker paddlers/first year/inexperienced guides on the water there is a much higher chance of swimmers/wraps at this water level, which can lead to serious injury or even death. Lots of rocks exposed to throw you off line.*

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Garice Date: 09.9.2008  
 River: Middle Fork American Reach: Oxbow → Rock-A-Chuck  
 Put in: Oxbow Take out: Devers flat  
 Put in time: 10:00 Take out time: 3:00  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 15'  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>2</u>	1	0	-1	-2
Availability of challenging technical boating	<u>2</u>	1	0	-1	-2
Availability of powerful hydraulics	<u>2</u>	1	0	-1	-2
Availability of whitewater "play areas"	<u>2</u>	1	0	-1	-2
Overall whitewater challenge	<u>2</u>	1	0	-1	-2
Safety	2	<u>1</u>	0	-1	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	<u>2</u>	1	0	-1	-2
Number of portages	2	<u>1</u>	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataraft

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>(2)</u>	1	0	-1	-2

Please explain your rating:

*I felt this flow was acceptable.  
There were a few more dangers, however*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>Ruck Creek</i>	1	2	<u>(3)</u>	4	<i>yes</i>	<i>left</i>	<i>20 mins</i>
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>2</u>	Total minutes out of boat	<u>60 mins</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Tunnel chute	This rapid would be much more hazardous if you had to swim.
2. Rock A Chute	Portaging this rapid could be more hazardous if you're doing "the jump" or
3.	"keep of feet" - more rocks are exposed.

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

a slightly higher flow would eliminate  
many rocks - which would reduce the risk.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1200

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

I felt that 800 cfs was the lowest flow acceptable for rafting.



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Grubbs Date: 9/9/09  
 River: Middle Fork American Reach: \_\_\_\_\_  
 Put in: Oxbow res Take out: Drivers Flat  
 Put in time: 9:45 10am Take out time: 3:50  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- |                                                     |                                                                                                  |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak           | <input type="checkbox"/> Cataraft: please indicate length: _____                                 |
| <input type="checkbox"/> Inflatable kayak           | <input checked="" type="checkbox"/> Self-bailing raft: please indicate length: <u>Hyside 14'</u> |
| <input type="checkbox"/> Closed deck canoe          | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____                          |
| <input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Other: please explain _____                                             |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	2	(1)	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

☒ b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataract

☒ g. Inflatable kayak

h. Other: Shredder

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<input checked="" type="radio"/> -1	-2

Please explain your rating:

O.k. boating, as a commercial quest on a grade 4 trip I would expect more. Significantly less impact on most hydraulics

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 5
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<u>Kuckachucky</u>	1	<input checked="" type="radio"/> 2	3	4		<u>River Right</u>	
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

The portage is not a very technical move but has very severe consequences for a mistake.

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>45</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>10 min</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Kanaka	Sives more exposed Safer left line tighter More potential to wrap bottom lines tight.
2. Over general river	More tree sives closer to surface
3. Portage	a lot more rocks exposed making the Running line tighter + jumping more dangerous

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow/300-1800 cfs

Please explain:

@ this flow (1300-1800) commercial quest experience harder hydrology, creating a feeling of more difficult rapids due to getting water and more dynamic movements of the boat.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	✓		1000
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		1400
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	✓		1800

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

*the river is certainly runnable at this flow or slightly lower however in the interest of a "Good" Commercial trip a higher flow would be far better.*

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Chafic Khalil Date: 9/9/08  
 River: MF Reach: \_\_\_\_\_  
 Put in: Oxbow Take out: Downs Flat  
 Put in time: 10:00 Take out time: 3:50  
 Study Flow: 800 CFS

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14 ft  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	①	0	-1	-2
Availability of challenging technical boating	2	①	0	-1	-2
Availability of powerful hydraulics	2	1	①	-1	-2
Availability of whitewater "play areas"	2	1	①	-1	-2
Overall whitewater challenge	2	①	0	-1	-2
Safety	2	①	0	-1	-2
Length of run	2	①	0	-1	-2
Rate of travel	2	①	0	-1	-2
Number of portages	①	①	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataraft

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	<input checked="" type="radio"/> 0	-1	-2

Please explain your rating:

Not nearly as enjoyable, shallow water = higher risks for swimmers

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) III
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>1 hr</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

Just not as experienced as other boaters and can't say for sure what optimal flows or what the minimum. I think that 800 would be the lowest I'd go

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Lewis Date: Sept 09 / 08  
 River: MFA Reach: Tunnel chute  
 Put in: Oxbow Take out: Drivers flat  
 Put in time: 10:00 Take out time: 4:00  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- |                                                     |                                                                                             |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak           | <input type="checkbox"/> Cataraft: please indicate length: _____                            |
| <input type="checkbox"/> Inflatable kayak           | <input checked="" type="checkbox"/> Self-bailing raft: please indicate length: <u>14 ft</u> |
| <input type="checkbox"/> Closed deck canoe          | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____                     |
| <input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Other: please explain _____                                        |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

☒ b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataraft

g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	<u>0</u>	-1	-2

Please explain your rating:

Certainly not as good as 1000 = raftable but not particularly exciting - definitely a bit scier than higher flows

### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<u>Rock a Chucky</u>	1	2	<u>3</u>	4		<u>ghost boat</u>	<u>3 mins per boat</u>
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>40 min</u>
Number of stops for scouting	<u>N/A</u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>15 mins</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Kancka	rock in Main flow - centre left
2. Chunder	rock at bottom left.
3. Everywhere	seines and strainers exposed.

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

bury a few rocks - a bit more current thru flat section

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			900
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	1		1100
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	1	1	1500 1?

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Miki Doyle Date: 9/9/08  
 River: MFA Reach: Tunnel & Chute  
 Put in: Oxbow Take out: DF / Greenwood  
 Put in time: 10:00 Take out time: 3:51  
 Study Flow: 800

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	(1)	(0)	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	1	(0)	-1	-2
Length of run	2	(1)	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	(1)	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☐ b. Closed deck canoe  
☒ c. Raft  
☐ e. Open canoe  
☒ f. Cataraft  
☒ g. Inflatable kayak  
☐ h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

Not ideal but runnable with experienced guides.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 4

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
NSA ✓	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30</u> min.
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>20</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Rock below chunder very obvious hazard	Unless right angle found - vertical pin or flat wrap possible
2. Rock in left side of Kanaka Falls	If you hit it sideways you could empty boat easily or wrap
3. Rock a chunky	More hazardous to run & the jump would be a little trickier

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow

- ☒ d. Slightly higher flow
- ☐ e. Much higher flow

Please explain:

- little more water would be better - 1,000 is much better.  
- more streamers exposed below surface  
→ entrapment possible

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	100
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1800-2000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

More hazardous to SWIMMERS for sure.  
Lots more hazards that could put swimmers in river.



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Frank Root Date: 9/9/08  
 River: MFA Reach: \_\_\_\_\_  
 Put in: Oxbow Take out: Greenwood  
 Put in time: 10:11 AM Take out time: 3:40 PM  
 Study Flow: 800

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 12  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. ☒ Kayak  
 b. Closed deck canoe  
 c. ☒ Raft  
 e. Open canoe  
 f. ☒ Cataraft  
 g. ☒ Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

*slow & mild at low flow*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) \_\_\_\_\_
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location/Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Tunnel Creek	1	2	3	4			
Santa's Mustache		2	3	4			
Bus Crash		2	3	4			
Kanaka	1	2	3	4			
Chenggo	1	2	3	4			
P-Parkway	1	2	3	4			
Texas Kansan				4			
Chunder				4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>1/2 hr lunch</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>15 min</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>Chander</u>	<u>rock in bottom of drop</u> <u>is a problem (splats)</u>
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow 1,000
- e. Much higher flow

Please explain:

1,000 CFS very manageable, still  
not a big ride

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input type="checkbox"/>	<input type="checkbox"/>	1200
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input type="checkbox"/>	1,500

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: S-Jake Tuckovsky Date: 9/9/08  
 River: MF Reach: \_\_\_\_\_  
 Put in: Ox bow Take out: Drivers Flat  
 Put in time: 10:00 Take out time: 3:50  
 Study Flow: 800 CFS

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 14'  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	<u>1</u>	0	-1	-2
Availability of challenging technical boating	2	<u>1</u>	0	-1	-2
Availability of powerful hydraulics	2	<u>1</u>	0	-1	-2
Availability of whitewater "play areas"	2	1	<u>0</u>	-1	-2
Overall whitewater challenge	2	<u>1</u>	0	-1	-2
Safety	2	1	0	<u>-1</u>	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	<del>2</del>	<u>1</u>	<del>0</del>	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataract

☒ g. Inflatable kayak

☒ h. Other: Zorb ball

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<input checked="" type="radio"/> 1	-2

Please explain your rating:

Water is a bit shallow, swimming is more dangerous and rocky.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) III
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>60</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input type="checkbox"/>	

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

More water allows for safer swimming experience and faster travel. It also presents less technical rapids.

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Mammoth Bar Run**  
**September 17, 2008**  
**600 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Patricia GIBBS Date: 9-17-08  
 River: Middle Fork Reach: \_\_\_\_\_  
 Put in: Drivers Flat Take out: Mammoth Bar  
 Put in time: 9 AM Take out time: NOON  
 Study Flow: 600 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak ☐ Cataraft: please indicate length: \_\_\_\_\_  
☒ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	<u>-1</u>	-2
Availability of challenging technical boating	2	1	<u>0</u>	-1	-2
Availability of powerful hydraulics	2	1	0	<u>-1</u>	-2
Availability of whitewater "play areas"	2	1	<u>0</u>	-1	-2
Overall whitewater challenge	2	1	<u>0</u>	-1	-2
Safety	2	1	0	<u>-1</u>	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	2	<u>1</u>	0	-1	-2
Number of portages	2	1	<u>0</u>	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe
- f. Cataract
- g Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<u>-1</u>	-2

Please explain your rating:

many rocks & boulders exposed  
raft stopped several times

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 1 Total minutes out of boat 4 to 5 minutes  
Number of stops for scouting            Total minutes out of boat             
Number of stops for portaging            Total minutes out of boat           

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>Na</u>	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.		?	

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: LEE CERSHMAN Date: 9/17/03  
 River: MID. AMERICAN Reach: MAMMOTH BAR  
 Put in: DRIVERS FLAT Take out: MAMMOTH  
 Put in time: 9:00 Take out time: 12:00  
 Study Flow: 600 cfs

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataract: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	(2)	1	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak f. Cataract  
 b. Closed deck canoe g. Inflatable kayak  
 c. Raft h. Other: \_\_\_\_\_  
 e. Open canoe

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>2</u>	1	0	-1	-2

Please explain your rating:

RAPIDS / GOOD RUN & MIX OF

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 2 Total minutes out of boat \_\_\_\_\_  
Number of stops for scouting \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_  
Number of stops for portaging \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. NONE

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

800 cfs was slightly better

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			500
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Dominic Pugliese Date: 9/17/08  
 River: Middle Fork American Reach: Mammoth Bar  
 Put in: 9 Take out: Mammoth Bar  
 Put in time: 9 AM Take out time: 12 PM  
 Study Flow: 1200 CFS

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	0	(-1)	-2
Availability of powerful hydraulics	2	1	0	-1	(-2)
Availability of whitewater "play areas"	2	1	0	(-1)	-2
Overall whitewater challenge	2	1	0	-1	(-2)
Safety	2	1	(0)	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	1	0	(-1)	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

☒ b. Closed deck canoe

c. Raft

☒ e. Open canoe

f. Cataraft

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	<input checked="" type="radio"/> -1	-2

Please explain your rating:

nice pretty stretch but lots of flat slow water  
short rapids w/ a ton of paddling

### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NA

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>NA</u>	Total minutes out of boat	<u>NA</u>
Number of stops for scouting	<u>  </u>	Total minutes out of boat	<u>  </u>
Number of stops for portaging	<u>  </u>	Total minutes out of boat	<u>  </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

more water = more cushion & hydraulic  
activity & less rocks

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

see # 9

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Tom Van Noord Date: 8-17-08  
 River: Middle Reach: Mammoth Row  
 Put in: Yan Driver's Flat Take out: Mammoth Row  
 Put in time: 9:00 AM Take out time: NOON  
 Study Flow: 600

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages <u>N/A</u>	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

(a) Kayak

(b) Closed deck canoe

(c) Raft

(e) Open canoe

(f) Cataract

(g) Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
(2)	1	0	-1	-2

Please explain your rating:

*very enjoyable - easy & comfortable for my  
novice & skill level*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). *N/A*

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>0</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. *No*

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

*- good for me*

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input type="checkbox"/>	<input type="checkbox"/>	
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input type="checkbox"/>	

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

*very pleasant*

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**Mammoth Bar Run**  
**September 10, 2008**  
**800 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Steven Boute Date: 9/10/08  
 River: Middle Fork American Reach: \_\_\_\_\_  
 Put in: Drivers Flat Take out: Mammoth Bar (continued through Muri Bar)  
 Put in time: 9:30 Take out time: 11:15  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>2</u>	1	0	-1	-2
Availability of challenging technical boating	2	1	<u>0</u>	-1	-2
Availability of powerful hydraulics	2	<u>1</u>	0	-1	-2
Availability of whitewater "play areas"	2	<u>1</u>	0	-1	-2
Overall whitewater challenge	2	<u>1</u>	0	-1	-2
Safety	<u>2</u>	1	0	-1	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	2	<u>1</u>	0	-1	-2
Number of portages	2	<u>1</u>	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
☒ e. Open canoe  
☒ f. Cataraft  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	(1)	0	-1	-2

Please explain your rating:

You could easily run a commercial rafting trip at this flow, but it would be even more fun with more water.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2-3
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Murders Bar	1	(2)	3	4	Slightly	Right	10 min
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>3</u>	Total minutes out of boat	<u>20 min.</u>
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>5 min.</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>10 min.</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. No.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

Because It would make the flat water a lot faster and the play waves bigger, more powerful hydraulics.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	x		600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	x		1,000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			2,000 to 3,000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

In order to do a rafting trip on this section you would need at least 600 cfs. Any lower and the boat won't fit through.



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: DARLIA GIBBS Date: 9-10-08  
 River: Middle Fork American Reach: Mammoth Bar  
 Put in: 9:30 AM Down's Flat Take out: Mammoth Bar  
 Put in time: 9:30 AM Take out time: 11:30 AM  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak ☐ Cataraft: please indicate length: \_\_\_\_\_  
☒ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe
- f. Cataract
- g. Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>(2)</u>	1	0	-1	-2

Please explain your rating:

Good rock coverage so no  
stoppage of boat

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>2 min to take picture</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>                    </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>                    </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <del>rocky</del> bumpy	rock debris
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ~~d. Slightly higher flow~~
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1200

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Jeffrey Hartley Date: 9/10/2008  
 River: MFA Reach: Mammoth Bar  
 Put in: 9450 Drivers Flat Take out: 11  
 Put in time: 9:30 Take out time: 11:15  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft; please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft; please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft; please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>X</u>	1	0	-1	-2
Availability of challenging technical boating	2	1	<u>X</u>	-1	-2
Availability of powerful hydraulics	2	1	<u>X</u>	-1	-2
Availability of whitewater "play areas"	2	1	<u>X</u>	-1	-2
Overall whitewater challenge	2	1	<u>X</u>	-1	-2
Safety	<u>X</u>	1	0	-1	-2
Length of run	<u>X</u>	1	0	-1	-2
Rate of travel	2	<u>X</u>	0	-1	-2
Number of portages	<u>X</u>	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a Kayak  
☒ b Closed deck canoe  
☒ c Raft  
☒ e Open canoe

☒ f Cataract  
☒ g Inflatable kayak  
☒ h Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

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#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II-III
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Mudless Bar	1	2	3	4		Right	10 min
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>10 min</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>10 min</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

No challenges @ this flow

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	X		2-3K
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			30,000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: LEE LEISHMAN Date: 9/10/09  
 River: MIDDLE FORK AMR Reach: Mammoth  
 Put in: DRIVERS FLAT Take out: Mammoth  
 Put in time: 9:30 AM Take out time: 5:30 1130  
 Study Flow: 800 CFS

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataract: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	(2)	1	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe  
f. Cataraft  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

*CRUISE RUN - GOOD MIX OF RAPIDS & CALM WATER - ESP FOR NOVICE*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>NO</u>	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

GOOD FLOW FOR BEGINNER KAYAK

\_\_\_\_\_

\_\_\_\_\_

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Alex Wolfgang Date: 9/10/08  
 River: Mammoth Fork Reach: Greenwood to Mammoth bar  
 Put in: Drivers flat/Greenwood Take out: Pine Sall  
 Put in time: 9:30 Take out time: 11:15 continued thru  
 Study Flow: 8:00 cfs Murderer's Pan  
& NFA

1. What type of craft did you use for this run?

- ☒ Hard shell kayak ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	(1)	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. ☒ Kayak  
 b. ☒ Closed-deck canoe  
 c. ☒ Raft  
 e. ☒ Open canoe

- f. ☒ Cataraft  
 g. ☒ Inflatable kayak  
 h. Other: Inner tube

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	<input checked="" type="radio"/> 0	-1	-2

Please explain your rating:

The water flow in Drivers - Mammoth was great but lower water would be acceptable for class II float

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II-III

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Murderer's Bar	1	<input checked="" type="radio"/> 2	3	4	To Lower Portage Yes	Right	30 min
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>30 min @ Mudlover</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. No Hazards beyond trees on riverbank	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- ☒ b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

lower water is acceptable for this stretch  
maybe 600 would be good for commercial gear  
boats & oar frames.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	X		1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	X		25,000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☒

If No, please explain:

I would much rather be able to drive in & park @ pump station in order to utilize the kayak play park.

14. Please provide any additional comments about the run at this flow.

The play park needs more water in order to be safe! You must be an experienced boater to use it safely.

This flow is great for "wilderness" rafting trips on Lower MF. You need adequate flows like this in order to safely use wilderness camps



**Mammoth Bar Run**

**July 31, 2008**

**1,000 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: WILLIAM AUDREY Date: 7/3/08  
 River: MFAR Reach: \_\_\_\_\_  
 Put in: Ruck-A-Chucky Take out: Hammock  
 Put in time: 11:00 Take out time: 1:30  
 Study Flow: 1,000 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak  
☐ Inflatable kayak  
☐ Closed deck canoe  
☐ Open canoe with floatation

- ☒ Cataract: please indicate length: 14'  
☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	(1)	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. ☒ Kayak  
 b. Closed deck canoe  
 c. Raft  
 e. Open canoe  
 f. ☒ Cataract  
 g. ☒ Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

easy float w/ some small rapids

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 3 Total minutes out of boat 10  
Number of stops for scouting \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_  
Number of stops for portaging \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. NO

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

there were a lot of slow spots through deep pools -  
slightly higher flows may help move the boat more along as  
but faster

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

*This was the first time I floated this area - there didn't seem to be too many difficult areas for floating*

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Jesse Carlson Date: 7/31/08  
 River: MFAR Reach: \_\_\_\_\_  
 Put in: Ruck a chunky Take out: Wannanah  
 Put in time: 11:00 Take out time: 1:30  
 Study Flow: 1000 cfs

1. What type of craft did you use for this run?

- ☒ Hard shell kayak  
☐ Inflatable kayak  
☐ Closed deck canoe  
☐ Open canoe with floatation

- ☒ Cataract: please indicate length: 14'  
☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>2</u>	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	<u>-2</u>
Availability of powerful hydraulics	2	1	0	<u>-1</u>	-2
Availability of whitewater "play areas"	2	1	0	-1	<u>-2</u>
Overall whitewater challenge	2	1	0	-1	<u>-2</u>
Safety	<u>2</u>	1	0	-1	-2
Length of run	2	<u>1</u>	0	-1	-2
Rate of travel	2	<u>1</u>	0	-1	-2
Number of portages	<u>2</u>	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
☒ e. Open canoe  
☒ f. Cataraft  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	<input checked="" type="checkbox"/>	0	-1	-2

Please explain your rating:

it was slow, working

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). none

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>2</u>	Total minutes out of boat	<u>20</u>
Number of stops for scouting	<u>8</u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. no

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

not a hard run anyways.  
if you want harder go up river

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

could always be higher!

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Garcia Date: July 31 2008  
 River: Middle fork Reach: Ruck-a-chuck → Mammoth Bar  
 Put in: Ruck-a-chuck Take out: Mammoth Bar  
 Put in time: 10:30 Am Take out time: 1:15  
 Study Flow: 900-1000

1. What type of craft did you use for this run?

- ☐ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☒ Self-bailing raft: please indicate length: 15'  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	2	(1)	0	-1	-2
Rate of travel	(3)	1	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☐ b. Closed deck canoe  
☐ c. Raft  
☐ e. Open canoe  
☒ f. Cataraft  
☐ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

I thought the flow was perfect for my craft.  
 - Not too low, Not too high

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

I felt that today's flow was optimal for a raft, cataraft, kayak or tube.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			1000
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			2000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

1000 would be the lowest flow.

#### Access

12. Was the put-in that you used adequate at today's study flow?

a. Yes



b. No



If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

a. Yes



b. No



If No, please explain:

14. Please provide any additional comments about the run at this flow.

It was perfect.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

10:45  
1:15  
2.5 hrs

**Boating Flow Study Evaluation Form**

Name: PATRICIA GIBBS Date: 7-3-08  
 River: Middle Fork American Reach: \_\_\_\_\_  
 Put in: Rock A Chucky Take out: Mammoth Bar  
 Put in time: 10:45 Take out time: 1:15 pm  
 Study Flow: 1000 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak  
☒ Inflatable kayak  
☐ Closed deck canoe  
☐ Open canoe with floatation

- ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe
- f. Cataraft
- g Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>2</u>	1	0	-1	-2

Please explain your rating:

Plenty of scenic quiet touring  
river enough white water

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. No	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

Never hit bottom with  
inflatable  
would not want to see more boulders  
at lower flow

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

Could get vehicle close to boat put in  
+ walk to parked vehicle not bad

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

Could be better parking for take out  
but good slow area to get off river here

14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Joshua Hill Date: 7/31/08  
 River: Middle Fork American Reach: Ruck's chucky  
 Put in: \_\_\_\_\_ Take out: \_\_\_\_\_  
 Put in time: 10:30 Take out time: 12:30  
 Study Flow: 1000 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak  
☐ Inflatable kayak  
☐ Closed deck canoe  
☐ Open canoe with floatation

- ☐ Cataraft: please indicate length: \_\_\_\_\_  
☒ Self-bailing raft: please indicate length: 14'  
☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>2</u>	1	0	-1	-2
Availability of challenging technical boating	2	1	<u>0</u>	-1	-2
Availability of powerful hydraulics	2	1	<u>0</u>	-1	-2
Availability of whitewater "play areas"	2	<u>1</u>	0	-1	-2
Overall whitewater challenge	2	<u>1</u>	0	-1	-2
Safety	2	<u>1</u>	0	-1	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	<u>2</u>	1	0	-1	-2
Number of portages	2	1	<u>0</u>	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe  
f. Cataraft  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

*Wish to be less exciting & would be a lot less risky  
low flow especially for rafting*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
NA	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>0</u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>0</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>NA</u>	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ~~More~~ e. Much higher flow

Please explain:

As I said increase the flow unless natural flow  
from creeks are coming in.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			1000 cfs
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			2000 cfs
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			5000 cfs

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: DAVID MARTINEZ Date: 7/31/08  
 River: MFA Reach: R-A-C  
 Put in: R-A-C Take out: Man. Ben  
 Put in time: 10:45 Take out time: 1:15  
 Study Flow: 6000

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak  
b. Closed deck canoe  
c. Raft  
d. Open canoe

e. Cataraft  
f. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

BESSING Run - WOULD ONLY  
Run TO SUPPORT BESSING PORTAGE

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

*more hydraulic*

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☒ Lower

Please explain:

might be able to get  
the same experience at slightly  
lower flow

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

OHV USE - DUST - NOISE

14. Please provide any additional comments about the run at this flow.

items  
SAW LOTS OF MOTORIZED ~~BOATS~~ <sup>DREPPES</sup>  
- CREATE ~~THE~~ EXPERIMENTAL CONFLICT

Mammoth Bar Run  
1,000

Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)

Boating Flow Study Evaluation Form

Name: Howard Penner Date: 7/31/07  
River: Middle Fork American Reach: Mammoth Bar  
Put in: River's Flat Take out: Mammoth Bar  
Put in time: 10:45 am Take out time: 1:15 pm  
Study Flow: 1000 cfs

1. What type of craft did you use for this run?

- ☒ Hard shell kayak  
☐ Inflatable kayak  
☐ Closed deck canoe  
☐ Open canoe with floatation  
☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Other: please explain \_\_\_\_\_

Flow Assessment

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	(-2)
Availability of powerful hydraulics	2	1	0	-1	(-2)
Availability of whitewater "play areas"	2	1	0	(-1)	-2
Overall whitewater challenge	2	1	0	-1	(-2)
Safety	(2)	1	0	-1	-2
Length of run	2	1	(0)	-1	-2
Rate of travel	2	1	(0)	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☐ b. Closed deck canoe  
☐ c. Raft  
☒ e. Open canoe  
☒ f. Cataract  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>(2)</u>	1	0	-1	-2

Please explain your rating:

*For this section a higher flow wouldn't really add much. Lower flow would be rocky.*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>None</i>	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>none</u>	Total minutes out of boat	<u>none</u>
Number of stops for scouting	<u>none</u>	Total minutes out of boat	<u>none</u>
Number of stops for portaging	<u>none</u>	Total minutes out of boat	<u>none</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>none</u>	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	/		800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	/		1600-1900
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	/		3000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

Moved along well enough. Much higher and there would be a lot of strainers.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: CLINT NORRELL Date: 7-31-08  
 River: M.F.R. AMERICAN Reach: \_\_\_\_\_  
 Put in: DRIVER'S FLAT Take out: MAMMOTH BAR  
 Put in time: 10:45 Take out time: 1:15  
 Study Flow: ± 1000 CFS

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataract: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	<u>1</u>	0	-1	-2
Availability of challenging technical boating	2	1	0	<u>-1</u>	-2
Availability of powerful hydraulics	2	1	0	<u>-1</u>	-2
Availability of whitewater "play areas"	2	1	0	-1	<u>2</u>
Overall whitewater challenge	2	1	0	<u>-1</u>	-2
Safety	<u>2</u>	1	0	-1	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	2	1	<u>0</u>	-1	-2
Number of portages <u>NA</u>	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

☒ b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataraft

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

MIN REC FLOW @ 1000 CFM — lower flows @ most unrunnable — @ 1500 CFM THE FEW RAPIDS BECOME SOMEWHAT MORE FUN — NOT AN ADRENALIN RUN — GREAT FOR RELAXED SIGHTSEEING — FAMILY — KIDS — LOW DIFFICULTY — LOTS OF FLATS —

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>5</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

@ 1000 CFM THERE IS  $\phi$  RISK OF CAPSIZING/SWIMMING - IN MY  
HARDSHELL THERE IS NO NEED FOR ROLL - @ HIGHER LEVELS MORE  
BLACKBERRIES WOULD BE REACHABLE

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			1000
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1500
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			4000

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Kathy Norpell Date: 7-31-08  
 River: Middle Fork American River Reach: Mammoth Bar  
 Put in: Chuck & Chucky Take out: Mammoth Bar  
 Put in time: 10:45 am Take out time: 1:15 pm  
 Study Flow: est. 1000 cfs

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataraft: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

b. Closed deck canoe

☒ c. Raft

e. Open canoe

☒ f. Cataraft

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

Good flow - rocks covered

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). N/A

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. NO

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

more water would move us faster in slow areas and combat the wind which made us paddle faster harder.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
<b>Minimum Acceptable:</b> The lowest flow at which you would be willing to return to boat on this run.			800
<b>Optimal:</b> The flow that creates the best combination of characteristics for your craft type and skill level.			1200
<b>Maximum Acceptable:</b> The highest flow at which you would be willing to return to boat this run.		<input checked="" type="checkbox"/>	

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

Noisy dirty take out due to OHV.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Sandra Perry Date: 7/31/08  
 River: MCAR Reach: \_\_\_\_\_  
 Put in: Rock-a-chucky Take out: Mammoth Bar  
 Put in time: 10:45 Take out time: 1:15  
 Study Flow: 1600

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ (a) Kayak

☐ (b) Closed deck canoe

☐ (c) Raft

☒ (e) Open canoe

☐ (f) Cataraft

☐ (g) Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

*Nice flow for my skill level. Not too pushy, good areas for me to practice ferries, eddies, etc.*  
*Nice scenery*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). *NA*

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>N 8</u>	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

see 4 above

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.		X	
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	X		100.0
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	X		1500 <del>-1700</del>

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

OHV use at take out is loud, dusty and generally annoying. I would not utilize the shade structure for beach or hanging out with OHV use happening.

14. Please provide any additional comments about the run at this flow.

This is a nice run at this flow. Nice scenery. The only negative is the dodgers. We saw 5 and they are loud and spew exhaust, both of which detracts from the river experience.

**Confluence Run**

**July 26, 2008**

**368 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Gary Cobles Date: 7/26/68  
 River: N. Fork American Reach: Confluence to Oregon Bar  
 Put in: Confluence Take out: Oregon Bar  
 Put in time: 12:30 Take out time: 4:50  
 Study Flow: 370 CFS

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataract: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak

b. Closed deck canoe

c. Raft

e. Open canoe

f. Cataract

g. Inflatable kayak

h. Other: inner tube to Bardsell

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

Great beginner run to Bardsell intermediate to Oregon Bar  
for 1.2 years

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) class 2 + to Bardsell easy class III to Oregon Bar

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). no portages

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>2</u>	Total minutes out of boat	<u>30</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Deviation Canal for pump station	2 reversals then can flip boaters
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

Double to triple the flows would make 2  
great runs for rafting

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	$\alpha$		350 <sup>00</sup>
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	$\alpha$		1200 <sup>00</sup>
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			9

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

I have run it @ 2000 cfs, I would like to run it at higher flows to see what would be best for intermediate to advanced

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

too long a walk to take it would be easy to develop a loading area closer to the river, terrible for a "horn" parking lot. where

14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Garcia Date: July 26, 2008  
 River: Middle Fork Reach: Confluence to Oregon Bar  
 Put in: Confluence Take out: Birdsland Creek  
 Put in time: 12:30 pm Take out time: 4:30 pm  
 Study Flow: 400 ± 50

1. What type of craft did you use for this run?

- |                                                     |                                                                                             |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak           | <input type="checkbox"/> Cataract: please indicate length: _____                            |
| <input type="checkbox"/> Inflatable kayak           | <input checked="" type="checkbox"/> Self-bailing raft: please indicate length: <u>15 ft</u> |
| <input type="checkbox"/> Closed deck canoe          | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____                     |
| <input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Other: please explain _____                                        |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	2	1	(0)	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
 e. Open canoe  
☒ f. Cataract  
☒ g. Inflatable kayak  
☒ h. Other: Tube

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

I was in a raft and felt that a higher flow would have been more suitable for my boat.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30 mins.</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

The water was a little low in some places for  
my raft.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	✓		350
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		1,000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	✓		2,500

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

If you were rafting the take out would be very difficult. - Long Salt

14. Please provide any additional comments about the run at this flow.

Today's flow was optimal for a person in an inner tube. It was perfect for a novice boater, and a excellent flow for beginners.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: PATRICIA GIBBS Date: 7-26-08  
 River: ~~Middle Fork~~ North Fork Reach: \_\_\_\_\_  
 Put in: 12:30 CONFLUENCE Take out: Oregon Bar  
 Put in time: 12:30 Take out time: 4:48  
 Study Flow: 368

1. What type of craft did you use for this run?

- |                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak<br><input checked="" type="checkbox"/> Inflatable kayak<br><input type="checkbox"/> Closed deck canoe<br><input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Cataract: please indicate length: _____<br><input type="checkbox"/> Self-bailing raft: please indicate length: _____<br><input type="checkbox"/> Wrap-floor raft: please indicate length: _____<br><input type="checkbox"/> Other: please explain _____ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	(1)	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe  
f. Cataract  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
(2)	1	0	-1	-2

Please explain your rating:

enough water to move the inflatable kayak stuck on rocks periodically

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2-3

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
Pump Station	1	(2)	3	4		Run left	25 min
Play area	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>5</u>
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>5</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>5</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. just below no hands	large metal frame
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

dragging inflatable kayak over rocks

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			at 7.26.08
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.		NA	
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.		NA	

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

No lower than today's flow

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

too far to portage boats  
no parking

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

too far - no trail to  
portage boats + no parking

14. Please provide any additional comments about the run at this flow.



confluence  
run  
368 cfs

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Lester Libetkin Date: 7/26/08  
 River: NFK Amer R Reach: Confl → Oregon Bar  
 Put in: confluence Take out: Oregon Bar  
 Put in time: 12:30 Take out time: 4:45  
 Study Flow: 368 cfs

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataraft: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak f. Cataraft  
 b. Closed deck canoe g. Inflatable kayak  
 c. Raft h. Other: \_\_\_\_\_  
 e. Open canoe except maybe 2 or 3 rapids

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>2</u>	1	0	-1	-2

Please explain your rating:

For my skill level, flow was adequately challenging, while not too difficult. Flat stretches were not too long, but often enough to relax

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II to III  
 only 2 or 3 rapids @ Class III
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). No portages

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>20 min</u>
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. between 49 bridge & no hands bridge	steel beams in river, just below water - steel plate on No Hands bridge
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

No experience at higher flows, but  
I was challenged at this flow as much  
as I wanted to be.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			350
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

*marginal at 350. Suggest putting in below the confluence.*

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

*I would prefer to take out at Birdsell in the future, probably although there were a few fun rapids below.*

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Manner Date: 7/24/08  
 River: MF Amer Reach: Can Flw  
 Put in: Can Flw Take out: One can Flw  
 Put in time: 12:30 Take out time: 4:45  
 Study Flow: 3EE

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak  
 b. Closed deck canoe  
 c. Raft  
 e. Open canoe

f. Cataract  
 g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

WOULD NOT BOAT THIS REACH UNLESS  
 I WAS SUPPLYING BEGINNING BOATERS

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_  
Number of stops for scouting \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_  
Number of stops for portaging \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow  
b. Slightly lower flow  
c. About the same; this was close to an optimum flow  
d. Slightly higher flow  
e. Much higher flow

Please explain:

Forster Run of Trade - more  
no DUAL.

\* PUMP STATION MAIN CHANNEL  
ALMOST UN-NAVIGATABLE DUE  
TO LOW FLOW

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		368
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			U.L.

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

THIS WAS THE MINIMUM

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

I WOULD NOT USE THE OREGON  
BAR ACCESS DUE TO THE TAKE-OUT

14. Please provide any additional comments about the run at this flow.



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: SANDRA PERLY Date: 7-26-08  
 River: NFORK Reach: CONF - OREGON BAR  
 Put in: CONFLUENCE Take out: OREGON BAR  
 Put in time: 12:50 Take out time: 2:43:30  
 Study Flow: 368 + NF FLOW

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	(1)	0	-1	-2
Number of portages	(2)	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- (a) Kayak  
(b) Closed deck canoe  
(c) Raft  
(e) Open canoe

- (f) Cataract  
(g) Inflatable kayak  
(h) Other: TUBES

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	(1)	0	-1	-2

Please explain your rating:

Nice flow for novice boater (like me). Nice scenery, clear water. Not pushing or scary.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 1-11 w/ 2 11+
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NA

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>@ 25 minutes</u>
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>@ 25 minutes</u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u></u>

> same @ pump station

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Old bridge debris just below put-in	Raft ripper Rebar and metal debris
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

This flow was the minimum I would want to  
have it. Anything lower would be hard to get through

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			600-800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1700

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

Difficult walk from take out to road and long walk  
up road to gate and then to parking

14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: LAIRD THOMPSON Date: 7/26/09  
 River: AMERICAN Reach: CONFLUENCE - GREEN RAR  
 Put in: \_\_\_\_\_ Take out: \_\_\_\_\_  
 Put in time: \_\_\_\_\_ Take out time: \_\_\_\_\_  
 Study Flow: 368

1. What type of craft did you use for this run?

- ☒ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>2</u>	1	0	-1	-2
Availability of challenging technical boating	2	<u>1</u>	0	-1	-2
Availability of powerful hydraulics	2	1	<u>0</u>	-1	-2
Availability of whitewater "play areas"	2	<u>1</u>	0	-1	-2
Overall whitewater challenge	2	<u>1</u>	0	-1	-2
Safety	2	<u>1</u>	0	-1	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	2	<u>1</u>	<u>0</u>	-1	-2
Number of portages	2	1	<u>0</u>	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
d. Open canoe  
f. Cataract  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
(2)	1	0	-1	-2

Please explain your rating:

a good surprise - very boatable with a number of interesting spots for different levels of boaters

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
First rapid	(1)	2	3	4	No	RL	30 sec
part of dense	(1)	2	3	4	No	RL	1-2 min
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>2</u>
Number of stops for scouting	<u>2</u>	Total minutes out of boat	<u>5</u>
Number of stops for portaging	<u>2</u>	Total minutes out of boat	<u>5</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. *NO (well, naked folks...)*

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

*this is a pleasant level for many novice to intermediate boaters - a higher level should also be quite good*

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			300
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000 ?
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			2000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

TAKE OUT NEEDS PARKING/SHUTTLE

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14. Please provide any additional comments about the run at this flow.

very nice, local Auburn run

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Tom Van Noies Date: 7-26-08  
 River: N.F. American Reach: Confluence to Oregon Bar  
 Put in: Confluence Take out: Oregon  
 Put in time: 12:30 Take out time: 4:50  
 Study Flow: 370 cfs

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
 b. Closed deck canoe  
 c. Raft  
☒ e. Open canoe  
 f. Cataract  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

*for my abilities it was fine*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) *not enough experience to rate*
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>N/A</i>	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>30</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Some dangerous sharp rocks in middle of stream	← below old bridge
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

rocky at spots

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	today's
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

*I do have experience to enable me to identify flow ranges*

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

*long way to parking lot*

14. Please provide any additional comments about the run at this flow.

*long stretches of flat water*

**Confluence Run**  
**September 17, 2008**  
**600 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: PATRICK GIBBS Date: 9-17-08  
 River: Middle Fork Amer Reach: Confluence Birdsall  
 Put in: Confluence Take out: Birdsall  
 Put in time: 1:30 p.m. Take out time: 3:15  
 Study Flow: 600 cfs

1. What type of craft did you use for this run?

- ☐ Hard shell kayak  
☒ Inflatable kayak  
☐ Closed deck canoe  
☐ Open canoe with floatation

- ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	2	1	0	(-1)	-2
Rate of travel	2	1	0	(-1)	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe
- f. Cataract
- ☒ g. Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<del>Highly</del>	1	0	-1	-2

Please explain your rating:

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. metal frame from bridge debris at water level	near 49 bridge
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

most room for error over rocks

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			?

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☐  
 b. No ☒

If No, please explain:

boat put-in could be closer to water.  
 not enough parking at confluence

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
 b. No ☒

If No, please explain:

too far to get vehicle

14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: JOHN HAUSCHILD Date: 7/17/08  
 River: NF CONFLUENCE Reach: \_\_\_\_\_  
 Put in: H330 Take out: 3:15 BIRD SKL  
 Put in time: 1:30 Take out time: 3:15  
 Study Flow: 600-700

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataraft: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	0	(-1)	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	2	1	(0)	-1	-2
Rate of travel	2	1	(0)	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
☐ e. Open canoe  
☒ f. Cataraft  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>2</u>	1	0	-1	-2

Please explain your rating:

*Just enough to cover rocks*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>5</u>
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>3</u>
Number of stops for portaging		Total minutes out of boat	

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. BELOW 49	BRIDGE WRECKAGE
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

FOR BELOW BIRSAUL

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	500
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15,000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: LEE LESHMAN Date: 9-17-09  
 River: MID FOR Amer Reach: CONFLUENCE  
 Put in: CONF Take out: BIRDSALL  
 Put in time: 1:30 Take out time: 3:15  
 Study Flow: 600 CFS

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataraft: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	(2)	1	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak

b. Closed deck canoe

c. Raft

e. Open canoe

f. Cataraft

g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	<u>1</u>	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>TREES/SNAGS</u>	<u>EASILY AVOIDABLE</u>
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			600
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

GOOD RUN - LOTS of SLOW WATER between RAPIDS

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Dominic Pugliese Date: 9/17/08  
 River: North Fork American Reach: Confluence  
 Put in: Confluence Take out: Birds All  
 Put in time: 1:30 Take out time: 3:15  
 Study Flow: 600

1. What type of craft did you use for this run?

- ☒ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	0	(-1)	-2
Availability of powerful hydraulics	2	1	0	-1	(-2)
Availability of whitewater "play areas"	2	1	0	(-1)	-2
Overall whitewater challenge	2	1	0	(-1)	-2
Safety	2	1	(0)	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	2	1	(0)	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
☒ e. Open canoe  
 f. Cataraft  
☒ g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	<u>0</u>	-1	-2

Please explain your rating:

slow, lots of flat slow water, few rapids, a couple of fun novice surf waves

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 1
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NA

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>NA</u>	Total minutes out of boat	<u>NA</u>
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>1</u>
Number of stops for portaging	<u>1</u>	Total minutes out of boat	<u>1</u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

more water = safer playing & more hydraulic  
fun stuff

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☒ Higher ☐ Lower

Please explain:

see #9

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

14. Please provide any additional comments about the run at this flow.

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Tom VAN Noord Date: 9-17-08  
 River: N.F. American Reach: Confluence  
 Put in: Confluence Take out: Birdsall  
 Put in time: 1:30 Take out time: 3:15  
 Study Flow: 600

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	-2
Availability of powerful hydraulics	2	1	0	-1	-2
Availability of whitewater "play areas"	2	1	0	-1	-2
Overall whitewater challenge	2	1	0	-1	-2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages <u>N/A</u>	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

☒ b. Closed deck canoe

☒ c. Raft

☒ e. Open canoe

☒ f. Cataract

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

*It's great for my novice ability*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). *N/A*

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent. 0

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Below put in	Iron "I" beams just below surface
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

I did it at ~400 cfs & thought this  
was better.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☐ Yes ☒ No

	yes	no	Flow (cfs)
<b>Minimum Acceptable:</b> The lowest flow at which you would be willing to return to boat on this run.			
<b>Optimal:</b> The flow that creates the best combination of characteristics for your craft type and skill level.			
<b>Maximum Acceptable:</b> The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

*based on the 400 vs. 700 comparison  
the 700 was better but when I did it  
at 400 I thought that was great.*

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Confluence Run**  
**September 10, 2008**  
**800 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Steven Boutte Date: 9/10/08  
 River: North Fork American Reach: \_\_\_\_\_  
 Put in: Confluence Take out: Birdsaul  
 Put in time: 1:30 pm. Take out time: 3:00 pm.  
 Study Flow: 800 cfs.

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	(1)	0	-1	-2
Availability of powerful hydraulics	2	(1)	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	2	(1)	0	-1	-2
Rate of travel	2	1	(0)	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe

f. Cataract  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

The Flow of water was good till we got to the play park, and there it was a bit shallow. More water would make me use the park more often.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 1-2
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>5 min</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

The Play Park would be much better for  
surfing waves.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		800
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	X		1,500
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			3,000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

More water for play park!

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: PATRICIA GIBB Date: 9.10.08  
 River: NORTH Fork American Reach: Confluence to China Bar  
 Put in: # Confluence Take out: Birdsall  
 Put in time: 1:30 Take out time: 3pm  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataract: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	2	(1)	0	-1	-2
Length of run	2	1	0	(-1)	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe
- f. Cataraft
- ☒ g. Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
(2)	1	0	-1	-2

Please explain your rating:

~~except for 1st rapid~~  
~~except~~  
 easy river for slow touring

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II

6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<del>Pump station</del> (2)		2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	1	Total minutes out of boat	10 min
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. bridge debris	near no hands bridge
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

more water in pump station area  
would be good

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			<del>2000</del> 1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

Need easier boat access

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Jeffrey Hartley Date: 9/10/2008  
 River: MFA Reach: \_\_\_\_\_  
 Put in: Confluence Take out: Old Bend  
 Put in time: 12:00 Take out time: 3:00  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	(1)	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
d. Open canoe

- f. Cataraft  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

River was totally navigable

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
N/A	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>20 min</u>
Number of stops for scouting	<u>          </u>	Total minutes out of boat	<u>          </u>
Number of stops for portaging	<u>          </u>	Total minutes out of boat	<u>          </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

Play park was scrappy, scrappy

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
<b>Minimum Acceptable:</b> The lowest flow at which you would be willing to return to boat on this run.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	600
<b>Optimal:</b> The flow that creates the best combination of characteristics for your craft type and skill level.	<input type="checkbox"/>	<input type="checkbox"/>	2-3K
<b>Maximum Acceptable:</b> The highest flow at which you would be willing to return to boat this run.	<input type="checkbox"/>	<input type="checkbox"/>	5K

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: LEK LEISHMAN Date: 9/10/09  
 River: MIDDLE FORK AMER. Reach: CONFLUENCE  
 Put in: CONFLUENCE Take out: BIRDSALL  
 Put in time: 1:30 Take out time: 3:00  
 Study Flow: 800 cfs

1. What type of craft did you use for this run?

- |                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak<br><input checked="" type="checkbox"/> Inflatable kayak<br><input type="checkbox"/> Closed deck canoe<br><input type="checkbox"/> Open canoe with floatation | <input type="checkbox"/> Cataract: please indicate length: _____<br><input type="checkbox"/> Self-bailing raft: please indicate length: _____<br><input type="checkbox"/> Wrap-floor raft: please indicate length: _____<br><input type="checkbox"/> Other: please explain _____ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	(2)	1	0	-1	-2
Availability of whitewater "play areas"	(2)	1	0	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe

- f. Cataraft  
g. Inflatable kayak  
h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NONE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 1 Total minutes out of boat 10  
Number of stops for scouting \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_  
Number of stops for portaging \_\_\_\_\_ Total minutes out of boat \_\_\_\_\_

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below. NO

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	✓		800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

GOOD FOR NOVICE WHO WANTS A SHORTER RUN

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Alex Wolfgang Date: 9/10/08  
 River: NFA Reach: Confluence to Birdfall  
 Put in: confluence Take out: Birdfall  
 Put in time: 12:30 Take out time: 3:45  
 Study Flow: 800

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	<u>2</u>	1	0	-1	-2
Availability of challenging technical boating	<u>2</u>	1	0	-1	-2
Availability of powerful hydraulics	2	<u>1</u>	0	-1	-2
Availability of whitewater "play areas"	2	<u>1</u>	0	-1	-2
Overall whitewater challenge	2	<u>1</u>	0	-1	-2
Safety	2	<u>1</u>	0	-1	-2
Length of run	<u>2</u>	1	0	-1	-2
Rate of travel	<u>2</u>	1	0	-1	-2
Number of portages	2	1	<u>0</u>	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak  
b. Closed deck canoe  
c. Raft  
e. Open canoe

- f. Cataraft  
g. Inflatable kayak  
h. Other: tube

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

Play park needs more water in order to avoid grinding sharp rocks.

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II-III
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>1</u>	Total minutes out of boat	<u>35</u>
Number of stops for scouting	<u>0</u>	Total minutes out of boat	<u>        </u>
Number of stops for portaging	<u>0</u>	Total minutes out of boat	<u>        </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. white water "Play" park is shallow	shallow water sharp rocks
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

High water would be easily  
contained by river banks, more water

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	X		3000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	X		8000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

No restrooms or adequate parking

14. Please provide any additional comments about the run at this flow.

It needs more water earlier in order to make play park work,



**Confluence Run**

**July 31, 2008**

**1,000 cfs**



**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: David Garcia Date: July 31 2008  
 River: North fork Reach: Confluence + Birdsell Creek  
 Put in: Confluence Take out: Birdsell  
 Put in time: 2:50 Take out time: 4:50  
 Study Flow: 1000

1. What type of craft did you use for this run?

- ☐ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☒ Self-bailing raft: please indicate length: 15'  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	2	(1)	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	(0)	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- ☒ a. Kayak  
☒ b. Closed deck canoe  
☒ c. Raft  
☐ e. Open canoe  
☒ f. Cataraft  
☒ g. Inflatable kayak  
☒ h. Other: tube

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

I didn't feel that today's flow was much different than it was last Sat. I felt that 350 cfs was more fun because there were more obstacles

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- ☒ b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

I felt that this flow was too high for this stretch.  
- It was a faster float, however.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			350
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			800
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			2000

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

This was an awesome flow for beginner boaters and families looking for an easy white water boating experience.

CONFIDENTIAL  
1000 CFS

**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: PATRICIA GIBBS Date: 7-31-08  
 River: NORTH FORK Reach: \_\_\_\_\_  
 Put in: CONFLUENCE Take out: BIRDSELL  
 Put in time: 2:50 Take out time: 4:50  
 Study Flow: 1000 CFS

1. What type of craft did you use for this run?

- |                                                      |                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------|
| <input type="checkbox"/> Hard shell kayak            | <input type="checkbox"/> Cataraft: please indicate length: _____          |
| <input checked="" type="checkbox"/> Inflatable kayak | <input type="checkbox"/> Self-bailing raft: please indicate length: _____ |
| <input type="checkbox"/> Closed deck canoe           | <input type="checkbox"/> Wrap-floor raft: please indicate length: _____   |
| <input type="checkbox"/> Open canoe with floatation  | <input type="checkbox"/> Other: please explain _____                      |

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	(2)	1	0	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	(2)	1	0	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	2	1	0	(-1)	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

- a. Kayak
- b. Closed deck canoe
- c. Raft
- e. Open canoe

- f. Cataraft
- ☒ g. Inflatable kayak
- h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<u>(2)</u>	1	0	-1	-2

Please explain your rating:

*Generally didn't hit rocks  
easier run at play area  
white water channel*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) 2
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NO PORTAGE

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks 3 Total minutes out of boat 6 minutes  
Number of stops for scouting --- Total minutes out of boat ---  
Number of stops for portaging --- Total minutes out of boat ---

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- ☒ c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- e. Much higher flow

Please explain:

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10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			1121 cfs

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

Hard to get boat to water

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

too far to parking lot

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14. Please provide any additional comments about the run at this flow.

fun & scenic

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: DAVID MANNING Date: 7-31-08  
 River: NPA Reach: CONFUC.  
 Put in: CONFUC Take out: ~~4~~ BIRDSEAL  
 Put in time: 2:50 Take out time: 4:50  
 Study Flow: 1,000 CFS

1. What type of craft did you use for this run?

- ☒ Hard shell kayak      ☐ Cataraft: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak      ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe      ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation      ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	1	0	-1	-2
Availability of challenging technical boating	2	1	0	-1	2
Availability of powerful hydraulics	2	1	0	-1	2
Availability of whitewater "play areas"	2	1	0	-1	2
Overall whitewater challenge	2	1	0	-1	2
Safety	2	1	0	-1	-2
Length of run	2	1	0	-1	-2
Rate of travel	2	1	0	-1	-2
Number of portages	2	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

a. Kayak  
 b. Closed deck canoe  
 c. Raft  
 e. Open canoe

f. Cataraft  
 g. Inflatable kayak  
 h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

Bessing Run - would do "IN-SUPPORT"  
 Play opportunity at Pump Station

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) IV
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

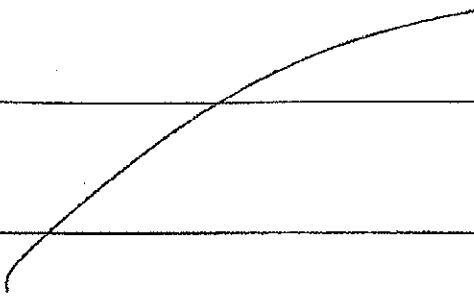
### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	_____	Total minutes out of boat	_____
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1.	
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

more hydraulics

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		350 - 400
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1500 - 3,000
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			3,000 +

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☐  
b. No ☒

If No, please explain:

1411e 70 Parking lot

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14. Please provide any additional comments about the run at this flow.

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: Howard Penn Date: 7/31/08  
 River: Confluence to Bird Sall Reach: \_\_\_\_\_  
 Put in: Confluence Take out: Bird Sall  
 Put in time: 2:50 Take out time: 4:50  
 Study Flow: 1000

1. What type of craft did you use for this run?

- ☒ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	2	(1)	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	(1)	0	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	2	1	(0)	-1	-2
Length of run	2	(1)	0	-1	-2
Rate of travel	2	1	(0)	-1	-2
Number of portages	(2)	1	0	-1	-2

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a. Kayak

☒ b. Closed deck canoe

☒ c. Raft

☒ e. Open canoe

☒ f. Cataraft

☒ g. Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
2	1	0	-1	-2

Please explain your rating:

*more would be better*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) II
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level).

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
<i>P/A</i>	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			



### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	<u>      /      </u>	Total minutes out of boat	<u>                    </u>
Number of stops for scouting	<u>      /      </u>	Total minutes out of boat	<u>                    </u>
Number of stops for portaging	<u>      /      </u>	Total minutes out of boat	<u>                    </u>

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. <u>                    /                    </u>	
2. <u>                    /                    </u>	
3. <u>                    /                    </u>	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow?  
(Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- d. Slightly higher flow
- ☒ e. Much higher flow

Please explain:

better features at higher flows

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.			1000
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.			1580
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.			3500

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

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**Access**

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

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14. Please provide any additional comments about the run at this flow.

higher would be better

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**Placer County Water Agency  
Middle Fork American River Project  
(FERC No. 2079)**

**Boating Flow Study Evaluation Form**

Name: SANDRA PERRY Date: 7-31-08  
 River: MFR Reach: \_\_\_\_\_  
 Put in: CONFLUENCE Take out: BIADSM  
 Put in time: 2:50 Take out time: 4:50  
 Study Flow: 1000

1. What type of craft did you use for this run?

- ☒ Hard shell kayak ☐ Cataract: please indicate length: \_\_\_\_\_  
☐ Inflatable kayak ☐ Self-bailing raft: please indicate length: \_\_\_\_\_  
☐ Closed deck canoe ☐ Wrap-floor raft: please indicate length: \_\_\_\_\_  
☐ Open canoe with floatation ☐ Other: please explain \_\_\_\_\_

**Flow Assessment**

2. Please evaluate this study flow for your craft and skill level for each of the following characteristics. (Circle one number for each characteristic).

Characteristic	Rating				
	Acceptable		Neutral	Unacceptable	
	Highly	Moderately		Moderately	Highly
Boatability	(2)	1	0	-1	-2
Availability of challenging technical boating	2	1	(0)	-1	-2
Availability of powerful hydraulics	2	1	(0)	-1	-2
Availability of whitewater "play areas"	2	1	(0)	-1	-2
Overall whitewater challenge	2	1	(0)	-1	-2
Safety	(2)	1	0	-1	-2
Length of run	(2)	1	0	-1	-2
Rate of travel	(2)	1	0	-1	-2
Number of portages	2	1	(0)	-1	-2

NONE

3. What type(s) of watercraft would be suitable for this reach at today's flow? (Circle all that would be appropriate).

☒ a Kayak

☐ b Closed deck canoe

☐ c Raft

☐ e Open canoe

☐ f Cataract

☐ g Inflatable kayak

h. Other: \_\_\_\_\_

4. Please rate your overall satisfaction with today's flow.

Rating				
Satisfied		Neutral	Unsatisfied	
Highly	Moderately		Moderately	Highly
<input checked="" type="radio"/> 2	1	0	-1	-2

Please explain your rating:

*Nice flow for my skill level - close to optimum for me.*

#### Difficulty

5. How would you rate the whitewater difficulty of this run? (Use American Whitewater's International Scale of Whitewater Difficulty that ranges from Class I to Class VI) III+
6. Please identify rapids or sections you needed to portage and rate the difficulty of those portages (using your type of craft at this flow level). NA

Location Description	Portage Difficulty				Requires Technical Portage Ropes	Portage Route (River Right or Left)	Estimated Portage Time
	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			
	1	2	3	4			

### Time

7. Estimate the number of times you stopped and got out of your boat for breaks, scouting, or for portaging and estimate the total amount of time spent.

Number of stops for breaks	_____	Total minutes out of boat	_____
Number of stops for scouting	<u>1</u>	Total minutes out of boat	<u>15 min</u> (pump station)
Number of stops for portaging	_____	Total minutes out of boat	_____

### Hazards

8. Did you observe any specific safety hazards beyond those normally encountered running a river of this difficulty at this flow? If so, please describe them below.

Location Description	Safety Hazard
1. Debris (old bridge) rebar near conf.	raft ripper
2.	
3.	

### Flow Estimates

9. In general, would you prefer a flow that was higher, lower, or about the same as this flow? (Circle one)

- a. Much lower flow
- b. Slightly lower flow
- c. About the same; this was close to an optimum flow
- ☒ d. Slightly higher flow
- e. Much higher flow

Please explain:

I think somewhere between 1000-1200 would  
be perfect for me.

10. Based on today's study and your experience, can you identify a range of flows that would be suitable for boating at this location ☒ Yes ☐ No

	yes	no	Flow (cfs)
Minimum Acceptable: The lowest flow at which you would be willing to return to boat on this run.	X		400-450
Optimal: The flow that creates the best combination of characteristics for your craft type and skill level.	X		1000-1200
Maximum Acceptable: The highest flow at which you would be willing to return to boat this run.	X		1700

11. If "No" to question 10, the flow should be: ☐ Higher ☐ Lower

Please explain:

#### Access

12. Was the put-in that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

Boat parking is a problem if there are a lot of users.

13. Was the take-out that you used adequate at today's study flow?

- a. Yes ☒  
b. No ☐

If No, please explain:

Good to have a ramp right to the water.  
Long walk ~~out of the po~~ to the parking lot is not fun.

14. Please provide any additional comments about the run at this flow.

Nice scenery and solitude.  
No dredgers or OHV use makes this a nice run.