### Figure 3.6.3-1b: Single Flow Evaluation Form

# SINGLE FLOW EVALUATION FORM Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run: 7/	19/14			
Name:				
		•		
Indicate which flow	release this survey corresp	onds	to (check appropriate box)	:
Flow 1	2500	cfs	Date/time 7/19/14 9:90-1115	Aur
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	
Flow 4		cfs	Date/time	
Flow 5, if applicable		cfs	Date/time	
Flow 6, if applicable		cfs	Date/time	
Watercraft used	(Circle appropriate one):			•
Hard shell	kayak		Stand up paddle boa	ard .
Inflatable l	kayak		C2	
OC1			Raft	
OC2			Cataraft	- Lu L. D. Illesit
C1		. *	. Other (describe): Other	r Rigged Hyside Paddlast check
2. Your whitewater	r boating skill level for the	water	craft used for this flow (Ci	rcle appropriate one):
Beginner			Advanced	
Novice			Expert	

Intermediate

	Strong by suggest that "right of way" be obtained at take-out that goes from Poplar Street down to sandbar at rivers edge on
7 3. Plea	Muer Perht - just upstream of the takeout that we used today.  Note- people were combine and fishing the record sturday ase evaluate the boating access for this segment of river (Circle appropriate one):

Put-in Access:

easy

moderate

Take-out Access:

easy

moderate

sary difficult for Raft

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam

Portage Rock Dam

Paddle alternate canal (avoid Rock Dam,)

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

> If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	-1	0		2		
Availability of powerful hydraulics	-2	-1	0	1	2		
Availability of whitewater play areas	-2	-1	0	1 .	2		٤
Overall whitewater challenge	-2	-1	0	1	2		
Safety	-2	-1	9	1	2		
Aesthetics	-2	-1	0_	(1')	2		
Length of run	-2	-1	(0)	1	2		
Number of portages	-2	-1	(o)	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	0	1	2		

Saw three bold eagles!
portaging Roell Dann, 14 would be only moderately difficult

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

Acceptable for Class I booter

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
			-2	-1	0	1	2		

7.	Are you likel	v to return for fut	ure boating in the	he Turners Falls	bypass at this flow?	(Circle one)
, .	I II o j ou iiitoi	j to rotarn ror rat	are counting in a	iic i ailicib i ailis	o j pubb at tillo 110 m.	(Circle one)

Definitely no

Possibly

Probably

Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance-may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9.	What skill level does a paddler need t	o safely paddle the bypass at this flow? (Circle one)
	Beginner	Advanced
	Novice	Expert
	Intermediate	
10.		ider the minimum acceptable flow (enough flow for an e higher, lower, or about the same as this flow? Circle one
	Much lower	Higher, to reconstructor of fishing Authority of Much higher
	Lower	Much higher
	No change	coma be
11.	Relative to this flow, would you consi about the same as this flow? Circle or	ider the optimum flow for this type of trip to be higher, lower, or ne
	Much lower	Higher
	Lower	. Much higher
	No change	
13.	Using site numbers or locations, pleas difficulty (using the International Whi	e identify challenging features, rapids or sections and rate their itewater Scale at this flow).
	Site numbers/Locations1 Strainers at Various location	ing present hazards
	Strainers at Various location Book tem - class III + 2	at This level
14.	Estimate the number of hits, stops, boa anything and did you have to stop or g	at drags, and portages you had at this flow (i.e., did you hit get out of the boat to continue?).
	Number of hits (but did not stop)	_>_
	Number of hits with stops (did not have	ve to get out of boat)
	Number of hits with stops (had to get of	out of boat to continue)
	Number of portages	<u>_O</u>
		•

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	1	2	. 3	4
,	1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..

Difficulty	Location
I saw two strainers. Tom Christopher was swept underneath	Right Ede, River Right Channel
oue - very dangerous setuetion	below button

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

#### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:

Flow 1	2500	cfs	Date/time	930AM.	
Flow 2		cfs	Date/time /	**************************************	
Flow 3		cfs	Date/time		
Flow 4		cfs	Date/time		
Flow 5, if applicable		cfs	Date/time		
		cfs	Date/time	•	
applicable  . Watercraft	used (Circle appropriat			rd	
applicable  . Watercraft  Hard	used (Circle appropriat shell kayak able kayak		Date/time  Stand up paddle boa  C2	rd	
applicable  . Watercraft  Hard	shell kayak		Stand up paddle boa	rd	
. Watercraft  Hard	shell kayak		Stand up paddle boa	rd	
. Watercraft  Hard  Inflata	shell kayak		Stand up paddle boa C2 Raft	rd	
Hard : Inflata OC1 C1	shell kayak able kayak	te one):	Stand up paddle boa C2 Raft Cataraft		
. Watercraft  Hard  Inflata  OC1  OC2  C1	shell kayak able kayak ) water boating skill leve	te one):	Stand up paddle boa C2 Raft Cataraft Other (describe):		

3.	Please evaluate the boat	ing access for	this segment of riv	ver (Circle appropriate one):	
	Put-in Access:	easy	moderate	difficult	
	Take-out Access:	easy	moderate	difficult	
4.	At "Rock Dam" did you	(Circle approp	oriate response):		
	Run Rock Dam	Portage R	ock Dam Pac	Idle alternate canal (avoid Rock Dam.)	)

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

If unacceptable, was flow:

•	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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		2		
Aesthetics	-2	-1	0	(1)	2_		
Length of run	-2	-1	0	ī	(2)		
Number of portages	-2	-1	0	1	Ž.		
Boating instruction	-2	-1	0	1	2	_	
Overall Rating	-2	-1	0	(1)	2	, , , , , , , , , , , , , , , , , , , ,	

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release ate/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
	2500	11 (2)	-2	-1	0	(1)	2		

	Definitely no	Possibly	Probably	(Definitely yes)
8.				yould you rate the whitewater f whitewater classifications for

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

This flow rates at Class:	is flow rates at Class:	7	
---------------------------	-------------------------	---	--

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
10.	Relative to this flow, would you consider the minimum enjoyable recreation experience) to be higher, lower, or		
	Much lower	Higher	
	Lower	Much higher	•
	No change		
11.	Relative to this flow, would you consider the optimum about the same as this flow? Circle one	n flow for this type of trip to b	e higher, lower, or
	Much lower	Higher	
	Lower	Much higher	
	No change		
13.	Using site numbers or locations, please identify challe difficulty (using the International Whitewater Scale at		ons and rate their
	Site numbers/Locations <sup>1</sup>		Rating
	POCK DAM		3_
	FIRST RAPIO		<u></u>
14.	Estimate the number of hits, stops, boat drags, and por anything and did you have to stop or get out of the boat		., did you hit
	Number of hits (but did not stop)	0	
	Number of hits with stops (did not have to get out of b	oat)	
	Number of hits with stops (had to get out of boat to co	ntinue) <u> </u>	_
	Number of portages		<u> </u>
			¢

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portag	ge Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
ROCK DAM		2	3 .	. 4
	1	2	3	4
	1	2	3	4
16. Did you experience any difficulties (e.g., pinned, (e.g., downed trees, woody growth in the river be description and location of these experiences or id	d) during	your run at	this flow? Pro	vide a brief
Difficulty		L	ocation	
			W	
	P			
17. Provide any additional comments about this flow numbers/locations to identify specific locations.	below. If	necessary,	please use site	
	55 J	Boar	ters	
Nice Level for CLA				

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#### **Figure 3.6.3-1b: Single Flow Evaluation Form**

#### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1	2500 cfs	Date/time	7/19 8-15
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	· cfs	Date/time	
Flow 6, if applicable	cfs	Date/time	
	M		
. Watercraft used (	Circle appropriate one):	Stand up paddle bo	pard
The state of the s	ayak	Stand up paddle bo	oard
Hard shell k	ayak	~ <b>*</b>	oard
Hard shell k	ayak	C2	oard
Hard shell k Inflatable ka	ayak	C2 Raft	oard
Hard shell k Inflatable ka OC1 OC2 C1	ayak	C2 Raft Cataraft Other (describe):	
Hard shell k Inflatable ka OC1 OC2 C1	ayak	C2 Raft Cataraft Other (describe):	•
Hard shell k Inflatable ka OC1 OC2 C1 Your whitewater	ayak	C2 Raft Cataraft Other (describe): rcraft used for this flow (C	•

Please evaluate the boating access for this segment of river (Circle appropriate one):
 Put-in Access: easy moderate difficult
 Take-out Access: easy moderate difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam Portage Rock Dam Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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	c	
Overall whitewater challenge	-2	-1	0	1	2		
Safety	-2	-1	0	1	2		
Aesthetics	-2	-1	0	1	2		
Length of run	-2	-1	0	1	2		
Number of portages	-2	-1	0	1	2		
Boating instruction .	2	-1	0	1	2		
Overall Rating	( -2)	-1	0	1	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Flow Date/Time (cfs)	Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 250	74 TE/TIT	-2	(-1/	0	1	2		

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

Definitely no

Possibly

Probably

Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class: \_\_\_

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advar	nced
	Novice	Exper	t
	Intermediate		
10.	Relative to this flow, would you enjoyable recreation experience	ou consider the minimum acce ce) to be higher, lower, or abou	ptable flow (enough flow for an at the same as this flow? Circle one
	Much lower	High	er
	Lower	Much	n higher
	No change		
11.	Relative to this flow, would yo about the same as this flow?		for this type of trip to be higher, lower, or
	Much lower	High	er
	Lower	Much	n higher
	No change		·
13.	Using site numbers or location difficulty (using the Internation		Features, rapids or sections and rate their ow).
	Site numbers/Locations <sup>1</sup>	sock lan	Rating
	Estimate the number of hits, st anything and did you have to s		rou had at this flow (i.e., did you hit ntinue?).
	Number of hits (but did not sto	pp)	No
	Number of hits with stops (did	not have to get out of boat)	
	Number of hits with stops (had	to get out of boat to continue)	O
	Number of portages		_0

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/loc	ation and reason for portag	e Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	V/A	1	2	3	4
	<u> </u>	1	2	3	4
**************************************		1	2	3	4
-		a alassa TE		1	
7. Provide any additional			necessary i	nleace lice cife	

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### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1	2500	cfs	Date/time	7/19	9:30-12
Flow 2		cfs	Date/time		
Flow 3		cfs ·	Date/time		
Flow 4		cfs	Date/time	_	_
Flow 5, if applicable		cfs	Date/time		
Flow 6, if		cfs	Date/time		
· .					
applicable .	(Circle appropriate o	one):	Stand up padd	lle board	
watercraft used	kayak	one):		lle board	
. Watercraft used	kayak	one):	Stand up padd	lle board	
. Watercraft used Hard shell Inflatable	kayak	one):	Stand up padd	lle board	
. Watercraft used Hard shell Inflatable 1	kayak	one):	Stand up padd C2 Raft		
. Watercraft used Hard shell Inflatable 1 OC1 OC2 C1	kayak Kayak		Stand up padd C2 Raft Cataraft	e):	riate one):
. Watercraft used Hard shell Inflatable 1 OC1 OC2 C1	kayak Kayak		Stand up padd C2 Raft Cataraft Other (describ	e):	riate one):

3.	Please evaluate the boat	ing access for	this segment of river (Ci	ircle appropriate one)	:
	Put-in Access:	easy	moderate	difficult	
	Take-out Access:	easv	moderate	difficult	

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam Portage Rock Dam Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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	6	1	2		
Safety	-2	-1	0	1	24		
Aesthetics	-2	-1	0	1	(2)		
Length of run	-2	-1	0	1	(2)		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	0	(1)	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19	7200	2	-2	-1	0	(D)	2		

7.	Are you likely to retur	n for future boating in	n the Turners Falls bypass	s at this flow? (Circle one)
	Definitely no	Possibly	Probably	Definitely yes

8.	Based on the International Whitewater Scale (defined below), how would you rate the whitewater
	difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for
	this flow)

This flow rates at Class:	2-1

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
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- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
	elative to this flow, would you consider the minimu goyable recreation experience) to be higher, lower,		
	Much lower	Higher	
	Lower	Much higher	
	No change		
	elative to this flow, would you consider the optimum out the same as this flow? Circle one	n flow for this type of trip to	be higher, lower, or
	Much lower	Higher	
	Lower .	Much higher	
	No change		
	sing site numbers or locations, please identify challe fficulty (using the International Whitewater Scale at		ions and rate their
Sit	te numbers/Locations <sup>1</sup>		Rating
_(	Locu Dam		3
	timate the number of hits, stops, boat drags, and por ything and did you have to stop or get out of the boa		e., did you hit
Nu	umber of hits (but did not stop)		
Nu	umber of hits with stops (did not have to get out of b	ooat) <u> </u>	
Nu	umber of hits with stops (had to get out of boat to co	ontinue)O	
Nu	imber of portages		

 $<sup>^{1}</sup>$  Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for por	tage Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
No partages	<u>.</u> .1	2	3	4
	1	2	3	4
	1	2	3	4
(e.g., downed trees, woody growth in the river description and location of these experiences of Difficulty		isks	ocation	
description and location of these experiences of Difficulty		isks		
description and location of these experiences of Difficulty		isks		
description and location of these experiences of Difficulty		isks		
Difficulty  Nonc  Provide any additional comments about this florumbers/locations to identify specific locations.	or identified r	isks  L  necessary,	ocation  please use site	
Difficulty  Nonc  Provide any additional comments about this florumbers/locations to identify specific locations.	or identified r	isks  L  necessary,	ocation  please use site	
Difficulty  Nonc  Provide any additional comments about this flo	or identified r	isks  L  necessary,	ocation  please use site	

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#### Figure 3.6.3-1b: Single Flow Evaluation Form

#### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1	2500 cfs	Date/time	AM 7/19/14
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	•
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	· Date/time	
El ( :e	cfs	Date/time	
	CIS	Date/time	
Watercraft used	l (Circle appropriate one):		
applicable	l (Circle appropriate one):	Stand up padd	le board
Watercraft used	l (Circle appropriate one):	•	le board
Watercraft used	l (Circle appropriate one):	· Stand up padd	le board
Watercraft used Hard shell Inflatable	l (Circle appropriate one):	Stand up padd	le board
Watercraft used Hard shell Inflatable OC1	l (Circle appropriate one):	Stand up padd C2 Raft	
Watercraft used Hard shell Inflatable OC1 OC2 C1	l (Circle appropriate one):	Stand up padd C2 Raft Cataraft Other (describe	e):
Hard shell Inflatable OC1 OC2 . C1	l (Circle appropriate one):  kayak  kayak  .	Stand up padd C2 Raft Cataraft Other (describe	e):

3.	Please evaluate the boat	ing access for	this segment of river (C	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)
Dlagge avaluate this flow f	or your graft and skill lay	val for each of the fall and a show the date (C)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	-1	0	1	2		
Availability of powerful hydraulics	-2	<u>-1</u>	0	. 1	2	9	
Availability of whitewater play areas	٠-2	(-1)	ó	1	2	· ,	
Overall whitewater challenge	-2	(-1)	0	1	2	1	
Safety	-2	-1	( <u>0</u> )	1	2		
Aesthetics	-2	-1	0	(1)	2		
Length of run	-2	-1	(0)	1	2		
Number of portages	-2	-1	0	1	(2)		
Boating instruction	-2	-1	0		2		
Overall Rating	-2	-1	(,0,)	1	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 AM	2500	11 6 11 )	-2	-1	0		2		

	Definitely no	Possibly	Probably	Definitely yes
8.				ould you rate the whitewater whitewater classifications for

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

,	1			1	
This flow rates at Class:	phones.	Spenner.	**		

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

Beginner	Advanced
Novice	Expert
Intermediate	
	consider the minimum acceptable flow (enough flow for an to be higher, lower, or about the same as this flow? Circle one
Much lower	Higher
Lower	Much higher
No change	
11. Relative to this flow, would you c about the same as this flow? Circ	onsider the optimum flow for this type of trip to be higher, lower, one
Much lower	Higher
Lower	Much higher
No change	•
13. Using site numbers or locations, p difficulty (using the International	lease identify challenging features, rapids or sections and rate their Whitewater Scale at this flow).
Site numbers/Locations <sup>1</sup>	Rating
PUT IN RAPID	
Pac V - A	
	, boat drags, and portages you had at this flow (i.e., did you hit or get out of the boat to continue?).
Number of hits (but did not stop)	_0
Number of hits with stops (did not	have to get out of boat)
Number of hits with stops (had to	get out of boat to continue)
Number of portages	

or

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, it the difficulty of the portages (for your type of water			ections you por	taged and rate
,	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	N/A	1	2	3	4
		1	2	3	4
		1	2	3	4
	Did you experience any difficulties (e.g., pinned, wr (e.g., downed trees, woody growth in the river bed) description and location of these experiences or iden	during y	your run at t		
	Difficulty		L	ocation	
	At First and log on top a	7 lodg	<u> </u>		,

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

			·
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•			í

### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:	7/19/14			
Name: Own	( herstooner			
•				
Tadiaata sabiah (	January 1, 100 41 in 1997			
	low release this survey correspon			
Flow 1	2,500 cf	S	Date/time	Mosuras
Flow 2	cf	s	Date/time	
Flow 3	cf	s	Date/time	¢
Flow 4	cf	s	Date/time	
Flow 5, if	· cf	s	Date/time	
applicable				,
Flow 6, if	cfs	S	Date/time	
applicable				
Watercraft u	used (Circle appropriate one):	•		
			~	_
	hell kayak		Stand up paddle boa	ırd
Inflatal	ole kayak .		C2	
OC1			Raft	
OC2			Cataraft	
<b>C</b> 1			Other (describe):	
2. Your whitew	vater boating skill level for the w	atero	craft used for this flow (Cir	rcle appropriate one):
Beginn	er		Advanced	
Novice	• •		Expert	
Interme	ediate		- Carlotte	

3.	Please evaluate the boat	ing access for	this segment of river (C	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	eacv	moderate	(difficult)

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam

Portage Rock Dam

Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	(1)	2		
Availability of challenging technical boating	-2	-1	<u></u>	1	2		
Availability of powerful hydraulics	-2	(-1)	0	1	2		
Availability of whitewater play areas	-2	-1	<u>(0)</u>	1	2		
Overall whitewater challenge	-2	-1	(b)	1	2		
Safety	-2	-1	0	(1)	2,		
Aesthetics	-2	-1	0	1	Q2		· · · · · · · · · · · · · · · · · · ·
Length of run	-2	-1	0	1	2)		
Number of portages	-2	-1	<u>(0)</u>	1	2		
Boating instruction	-2	-1	0	1	Ø		
Overall Rating	-2	-1	0	(1)	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19	2500		-2	-1	0	(1)	2		

7.	Are you likely to	return for future	boating in the	Turners Falls	bypass at this	flow? (Circle one)
----	-------------------	-------------------	----------------	---------------	----------------	--------------------

Definitely no	Possibly	Pro

obably Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

	The state of the s
This flow rates at Class:	

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced		
	Novice	Expert		
	Intermediate			
10. Relative to this flow, would you consider the minimum acceptable flow (enough flow for an enjoyable recreation experience) to be higher, lower, or about the same as this flow? Circle one				
	Much lower	Higher		
	Lower No/change/	Much higher		
11	Relative to this flow, would you consider the optimulabout the same as this flow? Circle one	m flow for this type of trip to	be higher, lower, o	
	Much lower	Higher		
	Lower	Much higher		
	No change			
13.	13. Using site numbers or locations, please identify challenging features, rapids or sections and rate their difficulty (using the International Whitewater Scale at this flow).			
	Site numbers/Locations <sup>1</sup>		Rating	
	Rock DAM		31	
14.	14. Estimate the number of hits, stops, boat drags, and portages you had at this flow (i.e., did you hit anything and did you have to stop or get out of the boat to continue?).			
	Number of hits (but did not stop)		<u> </u>	
	Number of hits with stops (did not have to get out of	boat)	<u> </u>	
	Number of hits with stops (had to get out of boat to c	ontinue)	2	
	Number of portages		<u></u>	
	_			
	·	•		

or

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, identify rapids or sections you portaged and rat	te
	the difficulty of the portages (for your type of watercraft at this flow)	

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
Nove.	1	2	3	4
	1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..

Difficulty	Location
WAS DEINNED LIGHT A LOC & WA	Toplespes along RIVERIGHT
swept under. Had to wetgrit	
and swim	

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

Better Flow Flow what I experiences has year.

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## Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:	2/19/14 2209AY ARUS			
Name: Jo	LLUGAY CAGA			
				•
Indicate which	flow release this survey	corresponds	to (check appropriate box)	:
Flow 1	2500	cfs	Date/time 7/19 - 8AM	
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	
Flow 4	•	cfs	Date/time	£
Flow 5, if applicable		cfs	Date/time	
Flow 6, if applicable		cfs	Date/time	
Watercraft v	used (Circle appropriate	one):	•	
Hard s	hell kayak		Stand up paddle boa	ard
The state of the s	ble kayak		C2	
OC1	•		Raft	
OC2			Cataraft	
C1			Other (describe):	
2. Your whitev	vater boating skill level	for the water	rcraft used for this flow (Ci	rcle appropriate one):
. Beginn	er		Advanced	
Novice			Expert	
Interme	ediate		•	

3.	Please evaluate the boat	ting access for	this segment of river (C	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)
Please evaluate this flow	for your craft and skill le	vel for each of the following characteristics (Circle

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	(-1)	0	1	2	X	
Availability of powerful hydraulics	(-2)	(-1)	0	1	. 2	X	
Availability of whitewater play areas	(2)	1	0	1	2	X	•
Overall whitewater challenge	-2	(-1)	0	1	2	X	
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	(0)	1	2		
Length of run	-2	-1	(0)	1	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	(-1)	0	1	(2)	X	
Overall Rating	(-2)	-1	0	1	2	X	

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

	Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
L	7/19	5209	工+(四)	-2	-1	(0)	1	2		

7.	Are you likely to return	for future boating in the	Turners Falls bypass at this	flow? (Circle one)
----	--------------------------	---------------------------	------------------------------	--------------------

- C: : 1	D '11	D 1 11	75. 01. 1. 1
Definitely no	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential. 9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one) Beginner Advanced Novice Expert Intermediate 10. Relative to this flow, would you consider the minimum acceptable flow (enough flow for an enjoyable recreation experience) to be higher, lower, or about the same as this flow? Circle one Much lower Lower No change 11. Relative to this flow, would you consider the optimum flow for this type of trip to be higher, lower, or about the same as this flow? Circle one Much lower Higher Much highe Lower No change 13. Using site numbers or locations, please identify challenging features, rapids or sections and rate their difficulty (using the International Whitewater Scale at this flow). Site numbers/Locations<sup>1</sup> Rating

anything and did you have to stop or get out of the boat to continue?).

Number of hits (but did not stop)

Number of hits with stops (did not have to get out of boat)

Number of hits with stops (had to get out of boat to continue)

Number of portages

14. Estimate the number of hits, stops, boat drags, and portages you had at this flow (i.e., did you hit

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
NA.	1	2	3	4
	1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..

Difficulty	Location
DOWNED TREE, LEFT OF	#1
CENTER H'He charles	
on the	

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

				ti .
		•	,	
•	•			
•				
,			•	

### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1	2500	cfs	Date/time 7-19-14 9 AM
Flow 2		cfs	Date/time
Flow 3		cfs	Date/time
Flow 4	•	cfs .	Date/time
Flow 5, if applicable	· · · · · · · · · · · · · · · · · · ·	cfs	Date/time
Flow 6, if applicable	A STATE OF THE STA	cfs	Date/time
. Watercraft us	sed (Circle appropriate	one):	•
Hard sh	sed (Circle appropriate ell kayak le kayak	one):	Stand up paddle board C2
Hard sh	ell kayak	one):	
Hard she	ell kayak	one):	C2
Hard sh Inflatab	ell kayak	one):	C2 Raft
Hard she Inflatable OC1 OC2	ell kayak le kayak		C2 Raft Cataraft
Hard she Inflatable OC1 OC2	ell kayak le kayak ater boating skill level		C2 Raft Cataraft Other (describe):

	Put-in Access:	easy	moderate	difficult	
	Take-out Access:	easy	moderate	difficult	
4.	At "Rock Dam" did you	(Circle appro	priate response):		
	Run Rock Dam	Portage R	ock Dam Paddle	alternate canal (avoid Rock D	am,))

3. Please evaluate the boating access for this segment of river (Circle appropriate one):

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

If unacceptable, was flow:

			·				
	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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	<u>(0</u>	1	2		
Overall whitewater challenge	-2	-1	Ô	1	2		
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	0	(1)	2		
Length of run	-2	-1	0	71)	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	0	(1)	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7-191-14	2500	2+	-2	-1	0	(1)	2		

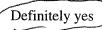
9 AM

7.	Are you likely	y to return fo	or future	boating in t	he Turners l	Falls byp	pass at this	flow?	(Circle one)
----	----------------	----------------	-----------	--------------	--------------	-----------	--------------	-------	--------------

De	fin	iite	lv.	nΛ
שכי	111	uu	ΉY	110

Possibly

Probably



8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced						
	Novice	Expert	• .					
	Intermediate							
10	Relative to this flow, would you enjoyable recreation experience	consider the minimum acceptable flow (ende) to be higher, lower, or about the same as the	ough flow for an is flow? Circle one					
	Much lower	Higher						
	Lower	Much higher						
	No change							
11.	Relative to this flow, would you about the same as this flow? Ci	a consider the optimum flow for this type of ircle one	trip to be higher, lower, or					
	Much lower	Higher						
	Lower	Much higher						
	No change							
13.	Using site numbers or locations, please identify challenging features, rapids or sections and rate their difficulty (using the International Whitewater Scale at this flow).							
	Site numbers/Locations <sup>1</sup>		Rating					
	Rock Dam		工士					
			<del></del>					
14.		ps, boat drags, and portages you had at this for or get out of the boat to continue?).						
	Number of hits (but did not stop	))	O Few					
	Number of hits with stops (did n	not have to get out of boat)	<i>D</i>					
	Number of hits with stops (had t	to get out of boat to continue)	0					
	Number of portages		0					
		¢						

 $<sup>^{1}</sup>$  Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)								
	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult				
	None	1.	2 .	3	4				
		1	2	3	4				
		1	2	3	4 .				
16.	Did you experience any difficulties (e.g., pinned, wr (e.g., downed trees, woody growth in the river bed) of description and location of these experiences or iden	during y	our run at						
	Difficulty		L	ocation	3				
	Downed Tree		_ <u> </u>	ivs rapi	2 route:	4 3/19			
				and the second specific second se					
			_						

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

					N
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## Figure 3.6.3-1b: Single Flow Evaluation Form

## SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run: \_\_\_

Flow 1	2,500 cfs	Date/time	7/19	9:30ar
Flow 2	cfs	Date/time		
Flow 3	· cfs	Date/time		
Flow 4	cfs	Date/time		c
Flow 5, if applicable	cfs	Date/time		
Flow 6, if applicable	cfs	Date/time		
• . Watercraft used (C	Circle appropriate one):			
Hard shell ka	ıyak	Stand up pado	lle board	
Inflatable kay	yak	C2		
OC1		Raft		
OC2		Cataraft		
C1		Other (describ	oe):	
	oating skill level for the water		-	riate one):
	oating skill level for the wate.		-	riate one):
. Your whitewater b	oating skill level for the water.	rcraft used for this flo	-	riate one):
Your whitewater b	oating skill level for the wate.	Advanced	-	riate one):

э.	Please evaluate the boati	ng access for	this segment of river (C	ircle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam

Portage Rock Dam

Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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	X	
Overall whitewater challenge	-2	-1	0		2	400 d	ick de
Safety	-2	-1	0	$\bigcirc$	2.		
Aesthetics	-2	-1	0		(2)	-	
Length of run	-2	-1	0	(1)	2		
Number of portages	-2	-1	0	1	2	, ,	
Boating instruction	-2	-1	0		2		
Overall Rating	-2	-1	0	1	2	*	

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19/2014	2500	1+(3)	-2	-1	0	(1)	2		

7.	Are you likely to return	for future boating in	the Turners Falls	bypass at this flow?	(Circle one)
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Definitely no	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:  $\boxed{1 + (\boxed{11})}$ 

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9.	What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)				
	Beginner	Advanced			
	Novice	Expert			
	Intermediate				
10.		nsider the minimum acceptable flow (enough be higher, lower, or about the same as this			
	Much lower	Higher ).			
	Lower	Much higher			
	No change				
11.	Relative to this flow, would you con about the same as this flow? Circle	nsider the optimum flow for this type of tri one	ip to be higher, lower, or		
	Much lower	Higher			
	Lower	Much higher	v		
	No change	•			
13.	Using site numbers or locations, pleadifficulty (using the International W	ase identify challenging features, rapids or hitewater Scale at this flow).	r sections and rate their		
	Site numbers/Locations <sup>1</sup>		Rating		
	Rock Dam		3		
14.	Estimate the number of hits, stops, be anything and did you have to stop or	oat drags, and portages you had at this floget out of the boat to continue?).	ow (i.e., did you hit		
	Number of hits (but did not stop)	·	0_		
	Number of hits with stops (did not ha	ave to get out of boat)			
	Number of hits with stops (had to ge	t out of boat to continue)	<u> </u>		
	Number of portages	-			

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	1	2	3	4 .
	1	2	3	4
	1	2	3	4
(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider Difficulty	during y	your run at t isks	or identify any this flow? Province ocation	specific risk vide a brief
(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider	during y	your run at t isks	this flow? Prov	specific risk vide a brief
description and location of these experiences or ider  Difficulty	during y	your run at t isks	this flow? Prov	v specific risk vide a brief
(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider Difficulty	during y	your run at tisks L	chis flow? Provocation	v specific risk vide a brief

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## Figure 3.6.3-1b: Single Flow Evaluation Form

## SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1 250	cfs	Date/time	
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	Date/time	
Flow 6, if applicable	cfs	Date/time	
. Watercraft used (Circle	appropriate one):		
. Hard shell kayak		Stand up paddle b	oard
. Hard shell kayak Inflatable kayak		Stand up paddle b	ooard
			ooard
Inflatable kayak		C2	ooard
Inflatable kayak OC1		C2 Raft	
Inflatable kayak OC1 OC2 C1	g skill level for the water	C2 Raft Cataraft	
Inflatable kayak OC1 OC2 C1	g skill level for the water	C2 Raft Cataraft Other_(describe):_	
Inflatable kayak OC1 OC2 C1 Your whitewater boatin	g skill level for the water .	C2 Raft Cataraft Other (describe):	

3.	Please evaluate the boa	ting access for th	his segment of river (C	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response): .

Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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		
Aesthetics	-2	-1	0	_1_	(2)		
Length of run	-2	-1	0	(1)	2		
Number of portages	-2	-1	0	1	2	8	-
Boating instruction	-2	-1	0	1	2		_
Overall Rating	-2	(-1)	0	1	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
	1500	2	-2	-1	0	1	2		

7.	Are you likely to return	for future boating in t	he Turners Falls	s bypass at this flow	? (Circle one)
				71	,

(Definitely no )	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:	2-3
This from faces at Class.	

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced	
•	Novice	Expert	
	Intermediate		
	delative to this flow, would you consider the minimal njoyable recreation experience) to be higher, lower		
	Much lower	Higher	
	Lower	Much higher	r
	No change		
11. R al	elative to this flow, would you consider the optimus bout the same as this flow? Circle one	um flow for this type of trip	to be higher, lower, or
	Much lower	Higher	
	Lower	Much higher	
	No change		
13. U di	sing site numbers or locations, please identify chal efficulty (using the International Whitewater Scale	lenging features, rapids or sat this flow).	ections and rate their
<u>Si</u>	MAVE RIVER PLANT @ ROSK JAN PROP	TOP	Rating
	ROCK JAM DROP		<u>_</u> 3=
14. Es	stimate the number of hits, stops, boat drags, and paything and did you have to stop or get out of the b	ortages you had at this flow	(i.e., did you hit
N	umber of hits (but did not stop)		<u> </u>
N	umber of hits with stops (did not have to get out of	boat)	0
N	umber of hits with stops (had to get out of boat to	continue)	N
N	umber of portages		<u> </u>

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extr Dif
		1	2	3	
		1	2	3	
		1	2	3	
	description and location of these experiences or iden			ocation	
	Nonk				
		- ***			
	_ '				
17.	Provide any additional comments about this flow be numbers/locations to identify specific locations.	low. If	necessary,	please use site	
17.	numbers/locations to identify specific locations.	•	•		
17.		•	•		

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## Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:

Name:	zchory Hv	izdak		
				ı
Indicate which	flow release this survey	corresponds	to (check appropriate bo	ox):
Flow 1	2500	cfs	Date/time	7/19/14 10:00
Flow 2	·	cfs	Date/time	
Flow 3		cfs ·	Date/time	
Flow 4		cfs	Date/time	
Flow 5, if applicable		cfs	Date/time	
Flow 6, if applicable		cfs	Date/time	
1. Watercraft	used (Circle appropriate	one):		
Hard	shell kayak		Stand up paddle	board
Inflata	able kayak		C2	
OC1			Raft	
OC2			Cataraft	
C1			Other (describe):	
2. Your white	water boating skill level	for the water	craft used for this flow	(Circle appropriate one):
Begin	ner		Advanced	
Novic	ee		Expert	
Interm	nediate			

3.	Please evaluate the boating	access for this	segment of river	(Circle appropriate one)	):

Put-in Access: easy moderate difficult

Take-out Access: easy moderate difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam Portage Rock Dam Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	<del>(1</del> )	0	1	2	X	
Availability of powerful hydraulics	· -2	ش	0	1	2	X	
Availability of whitewater play areas	(-2)	-1	0	1	2 .	X	. •
Overall whitewater challenge	(3)	-1	0	1	2	X	
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	0	1	2)		
Length of run	-2	-1	0	(1)	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	(-1)	0	1	2	X	
Overall Rating	(-2)	-1	0	1	2	X	

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 10:00	2500	Ī+	-2	-1	0	1	2		

7.	Are you likely to	o return for future	boating in the	Turners Falls	bypass at this	flow? (Circle one)
----	-------------------	---------------------	----------------	---------------	----------------	--------------------

,		8	(
Definitely no	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Clas	s: / <del>/</del>

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
10.		you consider the minimum acceptable flow (enougnee) to be higher, lower, or about the same as this	
	Much lower	Higher	
	Lower	Much higher	
	No change		
11.	Relative to this flow, would y about the same as this flow?	you consider the optimum flow for this type of trip Circle one	p to be higher, lower, or
	Much lower	Higher	
	Lower	Much higher	
	No change		
13.		ons, please identify challenging features, rapids or onal Whitewater Scale at this flow).	sections and rate their
	Site numbers/Locations <sup>1</sup>		Rating
	Rock Damn		111
	anything and did you have to Number of hits (but did not so Number of hits with stops (di		w (i.e., did you hit
		_	

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	1	2	3	4
	1	2	3	4
	1	2	3	4
description and location of these experiences or ide	ntified r			
description and location of these experiences or ide  Difficulty	ntified r		ocation	
•	ntified r		ocation	

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### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run: \_

Flow 1	2500 cfs	Date/time	9:30
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	Date/time	
Flow 6, if	cfs	Date/time	
applicable			
	(Circle appropriate one):	Stand up paddle	board
Watercraft used	kayak .	Stand up paddle C2	board
Watercraft used	kayak .		board
. Watercraft used Hard shel Inflatable	kayak .	C2	board
Hard shell Inflatable OC1	kayak .	C2 Raft	
Hard shel Inflatable OC1 OC2 C1	kayak .	C2 Raft Cataraft Other (describe):	
Hard shel Inflatable OC1 OC2 C1	kayak kayak	C2 Raft Cataraft Other (describe):	

3.	. Please evaluate the boating access for this segment of river (Circle appropriate							
	Put-in Access:	easy	moderate	difficult				
	Take-out Access:	easy	moderate	difficult				

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam

Portage Rock Dam

Paddle alternate canal (avoid Rock Dam,)

Please evaluate this flow for your craft and skill level for each of the following characteristics (Gir

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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		2		
Overall whitewater challenge	-2	-1	0	1	2		
Safety	-2	-1	0	1	(_2)		
Aesthetics	-2	-1	0	1	(2)		
Length of run	-2	-1	0	(1)	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0		2		
Overall Rating	-2	-1	0	(1)	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
	140	11/	-2	-1	0	(1/)	2		

7.	Are you likely to retu	rn for future boating in the	he Turners Falls bypass	s at this flow? (Circle one)
		and the same of th		
	Definitely no	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class	: 11 -	111	
--------------------------	--------	-----	--

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced		
	Novice	Expert		
	Intermediate			
10.	Relative to this flow, would yo enjoyable recreation experience	ou consider the minimum acceptable flow (enore) to be higher, lower, or about the same as thi	ugh flov s flow?	v for an Circle one
	Much lower	Higher		
٠	Lower	Much higher		
	No change			
11.	Relative to this flow, would yo about the same as this flow? C	ou consider the optimum flow for this type of tr Circle one	ip to be	higher, lower, or
	Much lower	Higher		
	Lower	Much higher		
	No change	•		
13.	Using site numbers or locations difficulty (using the Internation	s, please identify challenging features, rapids on al Whitewater Scale at this flow).	r section	ns and rate their
	Site numbers/Locations <sup>1</sup>			Rating
				***************************************
14.	Estimate the number of hits, sto anything and did you have to st	ops, boat drags, and portages you had at this floor or get out of the boat to continue?).	ow (i.e.,	did you hit
	Number of hits (but did not stop	p) .	5	_
	Number of hits with stops (did	not have to get out of boat)	0	_
	Number of hits with stops (had	to get out of boat to continue)	<u> </u>	_
	Number of portages			-

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	1	2	3	4
	1	2	3	4
•	1	2	3	4
Difficulty		L	ocation	
	WHA A			

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## Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1 $\supset S$	cfs cfs	Date/time 7   9   14	8:30
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	Date/time	
Flow 6, if applicable	cfs	Date/time	
• Watercraft used (Circle	appropriate one):		
Hard shell kavak		Stand up paddle bo	pard
Hard shell kayak Inflatable kayak		Stand up paddle bo	oard
Hard shell kayak Inflatable kayak OC1			pard
Inflatable kayak		C2	pard
Inflatable kayak OC1		C2 Raft	oard
Inflatable kayak OC1 OC2 C1	; skill level for the water	C2 Raft Cataraft	
Inflatable kayak OC1 OC2 C1	; skill level for the water	C2 Raft Cataraft Other (describe):	
Inflatable kayak  OC1  OC2  C1  Your whitewater boating	skill level for the water	C2 Raft Cataraft Other (describe): rcraft used for this flow (C	

3. Please evaluate the boating access for this segment of river (Circle appropriat						
	Put-in Access:	easy	moderate	difficult		
	Take-out Access:	easy	moderate	difficult		

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)
--------------	------------------	--

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too ) high
Navigability	-2	-1	0		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	W	
Overall whitewater challenge	-2	-1	0	1	2		
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	0_	(1)	2		
Length of run	-2	-1	/9/	1	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	(0)	1	2		

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
2:30	2507	土土	-2	-1	0	(1)	2		

	Definitely no	Possibly	Probably	Definitely yes
8.			Scale (defined below), how wou oppropriate, provide a range of when the state of which is the state of the st	•

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

This flow rates at Class:

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9.	What skill level does a paddler	need to safely paddle the bypass at this flow? (Circle one)
	Beginner	Advanced
	Novice	Expert
	Intermediate	
10.	Relative to this flow, would yo enjoyable recreation experience	u consider the minimum acceptable flow (enough flow for an e) to be higher, lower, or about the same as this flow? Circle one
	Much lower	Higher
	Lower	Much higher
	No change	
11.	Relative to this flow, would yo about the same as this flow? C	u consider the optimum flow for this type of trip to be higher, lower, or ircle one
	Much lower	Higher
	Lower	Much higher
	No change	
13.		s, please identify challenging features, rapids or sections and rate their al Whitewater Scale at this flow).
	Site numbers/Locations1  Begin ing ROCK Dan	ledges II
14.	Estimate the number of hits, sto	ops, Boat drags, and portages you had at this flow (i.e., did you hit op or get out of the boat to continue?).
	Number of hits (but did not stop	o)
	Number of hits with stops (did	not have to get out of boat)
	Number of hits with stops (had	to get out of boat to continue)
	Number of portages	

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

)	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
-		1	2	3	4 .
_		1	2	3	4
_		1	2	3	4
(	Did you experience any difficulties (e.g., pinned, wr (e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider Difficulty	during	your run at t isks		
(	(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider	during	your run at tisks	chis flow? Pro	vide a brief
(	(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider Difficulty	during	your run at tisks	chis flow? Pro	vide a brief
(	(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider Difficulty	during	your run at tisks	chis flow? Pro	
() II -	(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider Difficulty	during y	your run at tisks L	chis flow? Proceedings	vide a brief

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### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

### Turners Falls Hydroelectric Project FERC No. 1889

## Whitewater Controlled Flow Study

			2	soo ets
Date of run: Sal	t July 19 les Mura			
Name: Char	les Mura	y		
	•			
T 1' / 1' 1 M		•		
	release this survey corre		to (check appropriate box):	
Flow 1	2500	cfs	Date/time IOAM	July 19 (5A7
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	-
Flow 4		cfs	Date/time	
Flow 5, if		cfs	Date/time ·	
applicable				
Flow 6, if		cfs	Date/time	
applicable			,	
<ol> <li>Watercraft used</li> </ol>	(Circle appropriate one)	<u>.</u>		•
			04-1111-1	•
Hard shell	•		Stand up paddle boa	ra .
Inflatable l	kayak		C2	
(OC1)			Raft	
OC2			Cataraft	
<b>C</b> 1	ŧ		Other (describe):	
Your whitewate	r boating skill level for th	ne water	craft used for this flow (Cir	cle appropriate one):
· Beginner .			Advanced	
Novice			Expert	
Intermedia	te )		•	•

3.	Please evaluate the	boating access:	for this segment	of river	(Circle appropriate	one):

Put-in Access: easy moderate difficult

Take-out Access: easy moderate difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam

Portage Rock Dam

Paddle alternate canal (avoid Rock Dam,

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		-
Availability of challenging technical boating	-2	-1	0	(1)	2		
Availability of powerful hydraulics	-2	-1	0	1	2	e	·
Availability of whitewater play areas	· -2	-1	<u>(1)</u>	1	2		
Overall whitewater challenge	-2	-1	0	1	2		
Safety	-2	-1	0	<u>L</u>	(2)		
Aesthetics	-2	-1	0	(1)	2		
Length of run	-2	-1	0	(î)	2		
Number of portages	-2	-1	0	1	(2)		
Boating instruction	-2	-1	0	. ①	2	,	
Overall Rating	-2	-1	0	(1)	2		

note: rock dam was not like rest of the run.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
			-2	-1	0	(1)	2		

Definitely no	Possibly	Probably	Definitely yes
---------------	----------	----------	----------------

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

8.	Based on the International Whitev	water Scale (defined below), how would you rate the whitewater
	difficulty of the river at this flow?	(if appropriate, provide a range of whitewater classifications for
	this flow)	not including rack dam
	1 ,	

This flow rates at Class: / - // -

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

	Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll proper equipment, extensive experience, and practiced rescue skills are essential.
9.	What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

Advanced Expert Intermediate 10. Relative to this flow, would you consider the minimum acceptable flow (enough flow for an enjoyable recreation experience) to be higher, lower, or about the same as this flow? Circle one Much lower Higher Much higher Lower No change 11. Relative to this flow, would you consider the optimum flow for this type of trip to be higher, lower, or about the same as this flow? Circle one Much lower Lower Much higher No change 13. Using site numbers or locations, please identify challenging features, rapids or sections and rate their difficulty (using the International Whitewater Scale at this flow). Site numbers/Locations<sup>1</sup> Rating OCK 14. Estimate the number of hits, stops, boat drags, and portages you had at this flow (i.e., did you hit anything and did you have to stop or get out of the boat to continue?). Number of hits (but did not stop) Number of hits with stops (did not have to get out of boat) Number of hits with stops (had to get out of boat to continue) Number of portages

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and	rate
the difficulty of the portages (for your type of watercraft at this flow)	

Place site numbers/location and reason for portage	Easy	Slightly	Moderately	Extremely
		Difficult	Difficult	Difficult
rock dam	(1)	. 2	3	4
	1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks...

Difficulty		Location
	none	

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

					8.7
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			•		
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			¢ -		

### SINGLE FLOW EVALUATION FORM

## Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:	7/19/2014	_		
Name: MI	7/19/2014 UE Duccor			
•			to (check appropriate box):	
Flow 1	2500	cfs	Date/time 7/19/2014 AVM	
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	
Flow 4		cfs	Date/time	
Flow 5, if applicable		cfs	Date/time	700 50
Flow 6, if applicable		cfs	Date/time	
Watercraft u	sed (Circle appropriate	one):		
Hard sh	nell kayak		Stand up paddle boar	rd
Inflatab	ole kayak		C2	
OC1			Raft	
OC2			Cataraft	
C1			Other (describe):	
2. Your whitew	ater boating skill level f	or the water	rcraft used for this flow (Cir	cle appropriate one):
Beginne	er		Advanced	
Novice			Expert	
Interme	diate	¢		

	Put-in Access:	easy	moderate	difficult	٠
	Take-out Access:	easy	moderate	difficult	
. 4.	At "Rock Dam" did you	u (Circle appro	priate response):	genedic of the Parts and a Parts and a Parts and a Company of the	
	Run Rock Dam	Portage R	ock Dam Paddle al	ternate canal (avoid Ro	ock Dam,)

3. Please evaluate the boating access for this segment of river (Circle appropriate one):

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	-1	0	1	2		
Availability of powerful hydraulics	-2 ·	-1	0	1	2	X	
Availability of whitewater play areas	-2	-1	0	1	ż		
Overall whitewater challenge	-2	<u>-1</u>	0	1	2	X	
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	0	1	(2)		
Length of run	-2	-1	0	1	(2)		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	0	1	(2)		

If unacceptable, was flow:

	Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
AM	7/19/14	2500	TH-	-2	-1	0	1	2		

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

Definitely no	Possibly	Probably	Definitely yes
	)	•	

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

	* Company of the Comp	
	1/_	
This flow rates at Class:	with the same of t	
Tills flow faics at Class.		

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts.	A very reliable eskimo roll
proper equipment, extensive experience, and practiced rescue skills ar	e essential.

9.	what skill level does a paddler need to safely paddle	the bypass at this flow? (Circle one)	
	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
10	. Relative to this flow, would you consider the minimu enjoyable recreation experience) to be higher, lower,	im acceptable flow (enough flow for an or about the same as this flow? Circle one	
	Much lower	Higher	
	Lower	Much higher	
	No change		
11.	Relative to this flow, would you consider the optimum about the same as this flow? Circle one	m flow for this type of trip to be higher, low	er, or
	Much lower	Higher	
	Lower	Much higher	
	No change		
13.	Using site numbers or locations, please identify challed difficulty (using the International Whitewater Scale at		heir
	Site numbers/Locations <sup>1</sup>	Rating	
	FIRST RAPED BELOW DAIN		
	ROCH DAM		
14.	Estimate the number of hits, stops, boat drags, and por anything and did you have to stop or get out of the boat		
	Number of hits (but did not stop)	_5	
	Number of hits with stops (did not have to get out of b	boat) <u>4</u>	
	Number of hits with stops (had to get out of boat to co	ontinue) $\underline{\phi}$	
	Number of portages		
		·	

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
<u> </u>	1	2	3	4
	1	2	3	4
	1	2 *	3	4
(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ide.  Difficulty		isks	this flow? Pro-	vide a brief
description and location of these experiences or idea		isks		vide a brief
Difficulty  Difficulty	ntified ri	isks L 	ocation	vide a brief
Difficulty  Provide any additional comments about this flow be numbers/locations to identify specific locations.	low. If	isks L — — — — — — necessary,	ocation  , please use site	
Difficulty  Provide any additional comments about this flow be	low. If	isks L — — — — — — necessary,	ocation  , please use site	· .

· • 

### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

## Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:	7/19/14 Julia Khorana					
Name:	Julia Khorana					
			,			
Indicate which f	low release this survey co	rresponds	to (check appropriate box)	:		
Flow 1	2500	cfs	Date/time am			
Flow 2		cfs	Date/time	V		
Flow 3	e e	cfs	Date/time			
Flow 4	·	cfs	Date/time			
Flow 5, if applicable		cfs	Date/time			
Flow 6, if applicable		cfs	Date/time			
Watercraft u	sed (Circle appropriate on	e):	•			
. Hard sl	nell kayak		Stand up paddle bo	ard		
Inflatab	ole kayak		C2			
(OC1			Raft			
OC2			Cataraft			
C1			Other (describe):			
2. Your whitewater boating skill level for the watercraft used for this flow (Circle appropriate one):						
Beginner · Advanced						
Novice			Expert			
Interme	diate					

3.	Please evaluate the boat	ting access for	this segment of river	r (Circle appropriate one)	:
	Put-in Access:	easy	moderate	difficult	
•	Take-out Access:	easy	moderate	difficult	
4.	At "Rock Dam" did you	ı (Circle appro	priate response):		
	Run Rock Dam	Portage R	ock Dam Paddl	le alternate canal (avoid R	lock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	-1	0	1	2		
. Availability of powerful hydraulics	-2	-1	0	1	2	J	-
Availability of whitewater play areas	-2	-1	0	1	2.		
Overall whitewater challenge	-2	-1	0	1	2	V	
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	0	1	(2)		
Length of run	-2	-1	0	1	(2)		
Number of portages	-2	-1	0	1	2)	•	
Boating instruction	-2	-1	0	(1)	2		
Overall Rating	-2	-1	(0)	1	2		

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
A/19/1m	2500	] - []	-2	-1	(0)	1	2		
1 .44,									

7.	Are you likely to return f	or future boating	g in the Turners Falls bypass a	t this flow? (Circle one)
	(D. C. 14.1	D. 111	D 1 11	75. 01. 1. 1
	(Definitely no	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

	_	1	
This flow rates at Class:			

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often di	fficult even for experts.	A very reliable eskimo roll
proper equipment, extensive experience, and	practiced rescue skills a	re essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced	
•	Novice	Expert	
	Intermediate		
10.		you consider the minimum acceptable flow ace) to be higher, lower, or about the same	
	Much lower	Higher	
	Lower	Much higher	•
	No change		
11.	Relative to this flow, would y about the same as this flow?	you consider the optimum flow for this type Circle one	e of trip to be higher, lower, or
	Much lower	Higher	
	Lower	Muçh higher	
	No change	•	
13.	Using site numbers or location difficulty (using the Internation	ns, please identify challenging features, raponal Whitewater Scale at this flow).	pids or sections and rate their
	Site numbers/Locations <sup>1</sup> Rock Oam		Rating
		stops, boat drags, and portages you had at the stop or get out of the boat to continue?).	his flow (i.e., did you hit
	Number of hits (but did not st	cop).	<u> </u>
	Number of hits with stops (die	d not have to get out of boat)	
	Number of hits with stops (ha	d to get out of boat to continue)	
	Number of portages		

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and ra the difficulty of the portages (for your type of watercraft at this flow)						
	Place site numbers/location and reason for portage	Easy	Slightly	Moderately	Extremely		

Place site numbers/location and reason for portage	Easy	Difficult	Difficult	Difficult
no porteje.	1	2	3	. 4.
	1	2	3	4
	1	2	3	4

16.	Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk
	(e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief
	description and location of these experiences or identified risks

Difficulty			Location
	Y I ()		

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

a 101 of flat water 1 scw a bold eagle

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			-		
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		•			

### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

## Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:

Flow 1	cfs cfs	Date/time	7/19/14 - 9/1
Flow 2	cfs	Date/time	7 / 1
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	Date/time·	
Flow 6, if applicable	cfs	Date/time	
Watercraft used (Circle ap	ppropriate one):	•	
Hard shell kayak		Stand up pado	lle board
Inflatable kayak		C2	
		Raft	
OC1		Rait	
OC1 OC2		Cataraft	
			pe):
OC2 C1 .	Skill level for the water	Cataraft Other (describ	ve): w (Circle appropriate one):
OC2 C1 .	skill level for the water	Cataraft Other (describ	

3.	Please evaluate the boating access for this segment of river (Circle appropriate one):						
	Put-in Access:	easy	moderate	difficult			
	Take-out Access:	A2CV	moderate	difficult			

4. At "Rock Dam" did you (Circle appropriate response):

1	Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)
- (			

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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	<u>.</u> 1 .	2		•
Overall whitewater challenge	-2	-1	0	1	2		
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	0	(I)	2		
Length of run	-2	-1	0	<u>/1)</u>	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	$\mathcal{E}_{1}$	2		
Overall Rating	-2	-1	(0)	1	2		

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19-90m	2500		-2	-1	0	(1)	2		

	Definitely no	Possibly	Probably	Definitely yes
8.			ale (defined below), how wou copriate, provide a range of w	

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

	TI	
This flow rates at Class:		•

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
10.	Relative to this flow, would you consider the minimum enjoyable recreation experience) to be higher, lower, or		
	Much lower	Higher	
	Lower	Much higher	
	No change		
11.	Relative to this flow, would you consider the optimum about the same as this flow? Circle one	n flow for this type of trip to b	e higher, lower, or
	Much lower	Higher	
	Lower	Much higher	
	(No change		
13.	Using site numbers or locations, please identify challe difficulty (using the International Whitewater Scale at		ons and rate their
	Site numbers/Locations <sup>1</sup>		Rating
	Rtin		1
	Rock Dam		3
l4.	Estimate the number of hits, stops, boat drags, and por	tages you had at this flow (i.e	., did you hit
	anything and did you have to stop or get out of the box		, <b>,</b>
	Number of hits (but did not stop)	5	<u> </u>
	Number of hits with stops (did not have to get out of b	oat)	<del></del> .
	Number of hits with stops (had to get out of boat to co	ntinue)	
	Number of portages		
	·	-	

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, the difficulty of the portages (for your type of water			ections you por	rtaged and rate
	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	——————————————————————————————————————	1	2	3	4
		1	2	3	4
		1	2	3	4
16.	Did you experience any difficulties (e.g., pinned, wr (e.g., downed trees, woody growth in the river bed) description and location of these experiences or iden	during y	your run at t	or identify any	y specific risk vide a brief
	Difficulty — MA		·L	ocation	

numbers/locations to identify specific locations.

Very easy, can avoid anything dangerous

Take out would be tough

17. Provide any additional comments about this flow below. If necessary, please use site

- I'd one only if nothing else running - Rock Dam was fun

- Rt-in surfing was decent, nothing to hard but nothing of note

	•				
•		·	•		•
				*	
		•			

#### Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:	7/19/2014 m Micha			
Name:	m Micha	ud		
Name				
Indicate which f	flow release this survey co	orresponds	to (check appropriate box)	:
Flow 1	2500	cfs	Date/time	7/19/AM
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	
Flow 4		cfs	Date/time	
Flow 5, if applicable		cfs	Date/time	A A A A A A A A A A A A A A A A A A A
Flow 6, if applicable		cfs	Date/time	
	•	***************************************		
1. Watercraft u	sed (Circle appropriate or	ne):		
Hard sl	nell kayak		Stand up paddle boa	ard
Inflatal	ole kayak		C2	
OC1			Raft	
OC2			Cataraft	
Ç1			Other (describe):	
2. Your whitew	vater boating skill level fo	r the water	craft used for this flow (Ci	rcle appropriate one):
Beginn	er		Advanced	
Novice			Expert	
Interme	ediate			

3.	Please evaluate the box	ating access for t	his segment of river (C	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

easy

Take-out Access:

Run Rock Dam Portage Rock Dam Paddle alternate canal (avoid Rock Dam,)

moderate

difficult

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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		٤
Overall whitewater challenge	(-2)	-1	0	1	2		
Safety	-2	-1	0	1	(2)		
Aesthetics	-2	-1	(0)	1	2		
Length of run	-2	-1	0	1	(2)		
Number of oportages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	/-1/	0	1	2		

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 A19	3500	は、	-2	-1	0	1	2		

	Definitely no	Possibly	Probably	Definitely yes
8.	Based on the Intern	ational Whitewater Scale	(defined below), how w	ould you rate the whitewater
	difficulty of the rive	er at this flow? (if approx	oriate provide a range of	whitewater classifications for

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

difficulty of the river at this flow?	(if appropriate,	provide a range	of whitewater	classifications for
this flow)				
MANA				

This flow rate's at Class:	

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk. Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex demanding routes. Rapids may continue for long distances between pools, demanding a high level of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9.	what skill level does a paddler	need to safely paddle the bypass at this flow? (Circle one)
	Beginner	Advanced
	Novice	Expert
	Intermediate	•
10.		consider the minimum acceptable flow (enough flow for an e) to be higher, lower, or about the same as this flow? Circle one
	Much lower	Higher
	Lower	Much higher
	No change	
11.	Relative to this flow, would you about the same as this flow? Ci	n consider the optimum flow for this type of trip to be higher, lower, carcle one
	Much lower	Higher
	Lower	Much higher
	No change	And the second difference of the second differ
13.		, please identify challenging features, rapids or sections and rate their al Whitewater Scale at this flow).
	Site numbers/Locations <sup>1</sup> Pock Par	Rating  III
14.		ps, boat drags, and portages you had at this flow (i.e., did you hit op or get out of the boat to continue?).
	Number of hits (but did not stop	<u>. O</u>
	Number of hits with stops (did r	not have to get out of boat)
	Number of hits with stops (had t	to get out of boat to continue)
	Number of portages	

or

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)										
	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult						
	wysk.	1	2	3	4						
		1	2	3	4						
		1	2	3	4						
16.	or identify any this flow? Prov										
	Difficulty	Location									
	MARALANDO										
17.	Provide any additional comments about this flow be numbers/locations to identify specific locations.	low. If	necessary, j	please use site							

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		c					
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¢.							

#### Figure 3.6.3-1b: Single Flow Evaluation Form

#### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run: 7/19/14

Name: 1<en Glusman

Flow 1	2500	cfs	Date/time	Morning
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	·
Flow 4		cfs	Date/time	٤
Flow 5, if applicable		cfs ·	Date/time	
Flow 6, if applicable		cfs	Date/time	
Watererst	sed (Circle appropriate or	٠.)،		
	nell kayak	ie).	Stand up paddle b	ooard
Hard sh		ie):	Stand up paddle b	ooard
Hard sh	nell kayak	ie):	~ ~	ooard
Hard sh	nell kayak	ie):	C2	ooard
Hard sh Inflatab	nell kayak	ie):	C2 Raft	
Hard sh Inflatab OC1 OC2	nell kayak		C2 Raft Cataraft Other (describe):	
Hard sh Inflatab OC1 OC2	nell kayak ole kayak ) · · · · · · ·		C2 Raft Cataraft Other (describe):	

Э.	Please evaluate the boath	ig access for t	ms segment of river	(Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult
.4.	At "Rock Dam" did you	(Circle approp	riate response):	
	Run Rock Dam	Portage Ro	ock Dam Paddle	e alternate canal (avoid Rock Dam,)

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

If unacceptable, 'was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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	(o)	1	2		
Overall whitewater challenge	-2	<u>-1</u> )	0	1	2		
Safety	-2	-1	0	1	2)		
Aesthetics	-2	<b>~1</b> )	0	11	2		
Length of run	-2	7-17)	0	1	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	(0)	1	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19	2500	11	-2	-1	0	1	(2/		

A.m.

7.	Are you likely	to return for future	boating in the Tu	rners Falls bypass	at this flow? (Circle one)
----	----------------	----------------------	-------------------	--------------------	----------------------------

	Definitely no	Possibly	Probably	Definitely yes
2	Daniel and the Interna	diamat Wildermakan Cast	I - (	-1.3

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:	5200
---------------------------	------

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced
	Novice	Expert
	Intermediate	
10.	Relative to this flow, would you co enjoyable recreation experience) to	onsider the minimum acceptable flow (enough flow for an o be higher, lower, or about the same as this flow? Circle one
	Much lower	Higher
	Lower	Much higher
	No change	
11.	Relative to this flow, would you co about the same as this flow? Circle	onsider the optimum flow for this type of trip to be higher, lower, or e one
	Much lower	Higher
	Lower	Much higher
	No change	
13.	Using site numbers or locations, pl difficulty (using the International V	ease identify challenging features, rapids or sections and rate their Whitewater Scale at this flow).
	Site numbers/Locations <sup>1</sup>	Rating
	Roch Dam	111-4
14.	Estimate the number of hits, stops, anything and did you have to stop of	boat drags, and portages you had at this flow (i.e., did you hit or get out of the boat to continue?).
	Number of hits (but did not stop)	
	Number of hits with stops (did not	have to get out of boat)
	Number of hits with stops (had to g	get out of boat to continue)
	Number of portages	

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

. Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)						
Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult		
Roch Dam	1	2	3	4		
	1	2	3	4		
	1	2	3	4		
(e.g., downed trees, woody growth in the river bed)	during y	our run at t				
Difficulty me dypactics		L	ocation			
1 11 11 11 11 11 11			•			
	Place site numbers/location and reason for portage  Rock Dame  Did you experience any difficulties (e.g., pinned, wr (e.g., downed trees, woody growth in the river bed) description and location of these experiences or ider  Difficulty  Provide any additional comments about this flow be	the difficulty of the portages (for your type of watercraft at Place site numbers/location and reason for portage Easy  Took Daniel 1  Did you experience any difficulties (e.g., pinned, wrapped be (e.g., downed trees, woody growth in the river bed) during y description and location of these experiences or identified river Difficulty  Myprodus  Provide any additional comments about this flow below. If	the difficulty of the portages (for your type of watercraft at this flow)  Place site numbers/location and reason for portage Easy Slightly Difficult  Took Dam 1 2  1 2  1 2  Did you experience any difficulties (e.g., pinned, wrapped boat, swam) (e.g., downed trees, woody growth in the river bed) during your run at the description and location of these experiences or identified risks  Difficulty Leg.  Provide any additional comments about this flow below. If necessary, provide any additional comments about this flow below. If necessary, provide any additional comments about this flow below. If necessary, provide any additional comments about this flow below.	the difficulty of the portages (for your type of watercraft at this flow)  Place site numbers/location and reason for portage Easy Slightly Difficult Difficult  Tool Dam 1 2 3  1 2 3  Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any (e.g., downed trees, woody growth in the river bed) during your run at this flow? Prodescription and location of these experiences or identified risks  Difficulty Location  Provide any additional comments about this flow below. If necessary, please use site		

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#### Figure 3.6.3-1b: Single Flow Evaluation Form

#### SINGLE FLOW EVALUATION FORM

## Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run: 7/19/14

Name: Stephen Robinson (20ar Dutdoor)

Flow 1	2500 cfs	Date/time AM	7/19
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	Date/time	
Flow 6, if	cfs	Date/time	
applicable			
Watercraft used (C	ircle appropriate one):	Stand up paddle be	pard
Watercraft used (C	/ak	Stand up paddle bo	gard
Watercraft used (C	/ak	Stand up paddle bo	gard
Watercraft used (C Hard shell kay Inflatable kay	/ak	C2	gard
Watercraft used (C Hard shell kay Inflatable kay OC1	/ak	C2 Raft	gard
Hard shell kay Inflatable kay OC1 OC2 C1	vak ak	C2 Raft Cataraft	
Watercraft used (C Hard shell kay Inflatable kay OC1 OC2 C1	vak ak	C2 Raft Cataraft Other (describe):_	

3.	Please evaluate the boar	Please evaluate the boating access for this segment of river (Circle appropriate one):					
	Put-in Access:	easy	moderate	difficult			
	Take-out Access:	easy	moderate	difficult			

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)
--------------	------------------	--

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	(1)	2		
Availability of challenging technical boating	-2	-1	0	1	2		
Availability of powerful hydraulics	-2	(-1)	0	1	. 2	V	
Availability of whitewater play areas	-2	. (-1)	0	ì	2		•
Overall whitewater challenge	-2	(-1)	0	1	2	/	
Safety	-2	-1	0	_1	(2)		
Aesthetics	-2	-1	0	(1)	2		
Length of run	-2	-1	$\langle 0 \rangle$	1	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	<b>/-1</b> )	0	1	2	V	

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 AM	2500	11+	-2	(-1)	0	1	2	~	

7. Are you likely to return for future boating in the Turners Falls bypass at this flo	mis now : (C	ricle one,
--	--------------	------------

Definitely no	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9.	What skill level does a paddler r	need to safely paddle the bypass at this flow?	(Circle one)
	Beginner	Advanced	
	Novice	Expert .	
	Intermediate		
10.		consider the minimum acceptable flow (eno) to be higher, lower, or about the same as thi	
	Much lower	Higher Much higher	
	Lower	Much higher	
	No change		
11.	Relative to this flow, would you about the same as this flow? Cir	consider the optimum flow for this type of treele one	rip to be higher, lower, o
	Much lower	Higher	
	Lower	Much higher	
	No change		
13.	Using site numbers or locations, difficulty (using the International	please identify challenging features, rapids of Whitewater Scale at this flow).	or sections and rate their
	Site numbers/Locations <sup>1</sup>		Rating
	Rock dam		
			<u>I-I</u>
14.		os, boat drags, and portages you had at this flop or get out of the boat to continue?).	ow (i.e., did you hit
	Number of hits (but did not stop)		_2_
	Number of hits with stops (did no	ot have to get out of boat)	
	Number of hits with stops (had to	o get out of boat to continue)	
	Number of portages		<u> </u>
		•	

or

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
None	1	2	3	4
	1	2	3	4
	1	2	3	4
Some downed trees, easily avoided		.L	ocation	
			ocation	

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## Figure 3.6.3-1b: Single Flow Evaluation Form

## SINGLE FLOW EVALUATION FORM

## Turners Falls Hydroelectric Project FERC No. 1889

## **Whitewater Controlled Flow Study**

Flow 1	3500	cfs	Date/time
Flow 2		cfs	Date/time ( /
Flow 3		cfs <sup>,</sup>	Date/time
Flow 4	·	cfs	Date/time
Flow 5, if applicable		cfs	Date/time
Flow 6, if applicable		cfs	Date/time
аррисаме 			
. Watercraft	used (Circle appropriate one):	;	Stand up paddle board
. Watercraft t			Stand up paddle board C2
. Watercraft t	hell kayak		
. Watercraft of Hard s	hell kayak		C2
. Watercraft of Hard so Inflata	hell kayak		C2 Raft
. Watercraft of Hard so Inflata OC1 OC2 C1	hell kayak ble kayak		C2 Raft Cataraft
. Watercraft of Hard so Inflata OC1 OC2 C1	hell kayak ble kayak water boating skill level for th		C2  Raft Cataraft Other (describe):
Hard s Inflata OC1 OC2 C1 Your whites	hell kayak ble kayak water boating skill level for th		C2  Raft Cataraft Other (describe): craft used for this flow (Circle appropriate or

3.	Please evaluate the boa	ating access for the	is segment of river	(Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

Ruil Rock Dain Tollage Rock Dain Taddie alternate canal (avoid Rock D	Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam
---	--------------	------------------	--

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

If unacceptable, was flow:

-	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0		2	~	
Availability of challenging technical boating	-2	-1	0	1	2	X	
Availability of powerful hydraulics	-2	-1	0/	1	2	Z	
Availability.of whitewater play areas	-2	-1	0		2	Y	•
Overall whitewater challenge	-2	-1	0	1	2	X	
Safety	-2	-1	0	1	(2)	*	
Aesthetics	-2	-1_	0	11	(2)		
Length of run	-2	(-1)	0_	1	2	X	
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0)	1	2		
Overall Rating	-2	-1	(0)	1	2	X	

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
		W	-2	-1	(0)	1	2	X	
								/ )	

7.	Are you likely	to return fo	or future	boating:	in the	Turners ?	Falls	bypass	at this	flow?	(Circle	one)
----	----------------	--------------	-----------	----------	--------	-----------	-------	--------	---------	-------	---------	------

Definitely no

Possibly

**Probably** 

Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

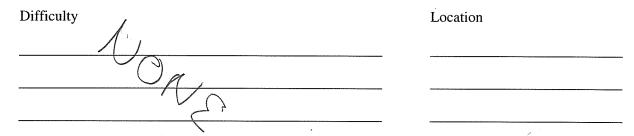
	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
10.	Relative to this flow, would you consider the minime enjoyable recreation experience) to be higher, lower		
	Much lower	Higher	
	Lower	Much higher	
	No change		
11.	Relative to this flow, would you consider the optimu about the same as this flow? Circle one	m flow for this type of trip	to be higher, lower, or
	Much lower	Higher	
	Lower	Much higher	
	No change		
13.	Using site numbers or locations, please identify chall difficulty (using the International Whitewater Scale a		sections and rate their
	Site numbers/Ioocations  Rock  Down		Rating
14.	Estimate the number of hits, stops, boat drags, and per anything and did you have to stop or get out of the bound of hits (but did not stop)		(i.e., did you hit
	Number of hits with stops (did not have to get out of	boat)	
	Number of hits with stops (had to get out of boat to c		-
	Number of portages	_	<u></u>

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	1	2	3	4
	1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks...



17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.



. 

## Figure 3.6.3-1b: Single Flow Evaluation Form

## SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run: $\frac{7/19/14}{}$							
Name: JONATHAN PENNELL							
			•				
Indicate which	flow release this survey correspond	s to (check appropriate box):					
Flow 1	2500 cfs	Date/time 7/19/14/14/14	9 AM				
Flow 2	cfs	Date/time					
Flow 3	cfs	Date/time					
Flow 4	cfs	Date/time					
Flow 5, if applicable	· cfs	Date/time					
Flow 6, if applicable	cfs	Date/time					
Watercraft v	• ased (Circle appropriate one):						
Hard sl	hell kayak	Stand up paddle board					
Inflatal	ble kayak	C2					
OC1		Raft					
OC2		Cataraft					
C1		Other (describe):	¢ C				
2. Your whitew	vater boating skill level for the water	rcraft used for this flow (Cir	cle appropriate one):				
Beginn	er	Advanced	•				
Novice		Expert					
Interme	ediate ·						

3.	Please evaluate the boat	ing access for	this segment of river (	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

(	Run Rock Dam	Porta	ge Rock	Dam	Paddl	le alt	ernat	e cana	al (av	oid Ro	ock	Dan	n,)	
`														
	11		C.		1.0									

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

If unacceptable, was flow:

	Totally, unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	((0))	<u> </u>	2	V	
Availability of challenging technical boating	-2	(-1)	0	1	2	V	
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)))		
Aesthetics	-2	-1		1	2		
Length of run	-2	-1	(0))	1	2		
Number of portages	-2	-1		1	2		
Boating instruction	-2	-1	0	1	<b>(2)</b>		
Overall Rating	-2	(-1))	0	1	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high '
7/19 9AM	2500	2 II+	-2	(-1)	0	1	2		

7.	Are you likely to return	for future boating:	in the Turners Falls bypass a	t this flow? (Circle one)
	(Definitely no)	Possibly	Probably	Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:	II+

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

Beginner	Advanced
Novice	Expert
(Intermediate)	
10. Relative to this flow, would you c enjoyable recreation experience) t	onsider the minimum acceptable flow (enough flow for an o be higher, lower, or about the same as this flow? Circle one
Much lower	Higher
Lower	Much higher
No change	
11. Relative to this flow, would you coabout the same as this flow? Circle	onsider the optimum flow for this type of trip to be higher, lower, one
Much lower	Higher
Lower	Much higher
No change	
13. Using site numbers or locations, podifficulty (using the International V	lease identify challenging features, rapids or sections and rate their Whitewater Scale at this flow).
Site numbers/Locations <sup>1</sup>	Rating
O ROCK DAM	<u>工口</u>
2 ByPASS	$\mathcal{J}$
	boat drags, and portages you had at this flow (i.e., did you hit or get out of the boat to continue?).
Number of hits (but did not stop)	3
Number of hits with stops (did not	have to get out of boat)
Number of hits with stops (had to g	get out of boat to continue)
Number of portages	
	-
•	

or

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate
	the difficulty of the portages (for your type of watercraft at this flow)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
. & By PASS UPPER		(2)	3	4
1) ROCK dAM	. 1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..

Difficulty	Location		
NO 155UL			
•	***************************************		

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

Flow cess than optimum. More water would make for A Better RECREATIONAL flow.

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## Figure 3.6.3-1b: Single Flow Evaluation Form

## SINGLE FLOW EVALUATION FORM

## Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1	2500 cfs	Date/time Telly	9:30 AM ->11:30
Flow 2	cfs	Date/time	
Flow 3	cfs	Date/time	
Flow 4	cfs	Date/time	
Flow 5, if applicable	cfs	Date/time	
El ( '6	cfs	Date/time	
· i		Buttortime	
	Circle appropriate one):		poard
• Watercraft used (	Circle appropriate one): ayak	Stand up paddle b	poard
watercraft used (	Circle appropriate one): ayak		ooard
. Watercraft used ( Hard shell k Inflatable ka	Circle appropriate one): ayak	Stand up paddle b	ooard
watercraft used ( Hard shell k Inflatable ka	Circle appropriate one): ayak	Stand up paddle b  C2  Raft  Cataraft	ooard
Watercraft used (  Hard shell k  Inflatable ka  OC1  OC2  C1	Circle appropriate one): ayak	Stand up paddle b  C2  Raft  Cataraft  Other (describe):	
Watercraft used (  Hard shell k  Inflatable ka  OC1  OC2  C1	Circle appropriate one): ayak ayak	Stand up paddle b  C2  Raft  Cataraft  Other (describe):	

Put-in Access:	easy	moderate	difficult
Take-out Access:	easy	moderate	difficult

3. Please evaluate the boating access for this segment of river (Circle appropriate one):

4. At "Rock Dam" did you (Circle appropriate response):

	Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,)
5	Please evaluate this flow for	or your craft and skill lev	vel for each of the following characteristics (Circle

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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)	<u>l</u>	2		
Aesthetics	-2	-1	0	(1)	2		
Length of run	-2	-1	0		2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	(0)	1	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release  Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally – Acceptable	Too Low	Too high
7/19/14	JE00.	TI	-2	(-1)	0	1	2		

7.	Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

Definitely n	o Possibly	Probably	Definitely yes
		•	• •

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

	4-	
This flow rates at Class:	耳'	

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

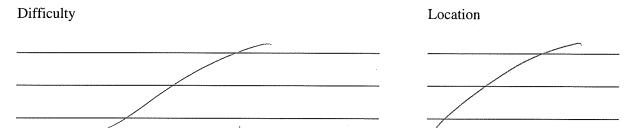
	Beginner	Advanced	
	Novice	Expert	
	Intermediate		
10.	Relative to this flow, would you consider the minimu enjoyable recreation experience) to be higher, lower,		
	Much lower	Higher	
	Lower	Much higher	4
	No change		
11.	Relative to this flow, would you consider the optimum about the same as this flow? Circle one	m flow for this type of trip to be higher, lower,	, or
	Much lower	Higher	
	Lower	Much higher	
	No change		
13.	Using site numbers or locations, please identify challed difficulty (using the International Whitewater Scale at		ir
	Site numbers/Locations <sup>1</sup>	Rating	
	Rock Dam	314	
	Rock Dain Everything Else	<u> </u>	
14.	Estimate the number of hits, stops, boat drags, and po anything and did you have to stop or get out of the bo	ortages you had at this flow (i.e., did you hit	
	Number of hits (but did not stop)	20r3	
	Number of hits with stops (did not have to get out of b	boat)	
	Number of hits with stops (had to get out of boat to co	ontinue)	
	Number of portages	_O_	

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15.	Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate
	the difficulty of the portages (for your type of watercraft at this flow)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
Rock Dan	1	2	3	4 .
	1	2	3	4
	1	2	3	4

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..



17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

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#### Figure 3.6.3-1b: Single Flow Evaluation Form

#### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Flow 1	1500 cfs	Date/time / 9;30
Flow 2	cfs	Date/time
Flow 3	cfs	Date/time
Flow 4	cfs	Date/time
Flow 5, if applicable	cfs	Date/time ·
Flow 6, if	cfs	Date/time
applicable		•
applicable	rcle appropriate one):	Stand up paddle board
Watercraft used (Cir	rcle appropriate one):	Stand up paddle board C2
Watercraft used (Cir Hard shell kay	rcle appropriate one):	~ ~
Watercraft used (Cin Hard shell kaya Inflatable kaya	rcle appropriate one):	C2
watercraft used (Cin Hard shell kaya Inflatable kaya OC1	rcle appropriate one):	C2 Raft
Watercraft used (Cin Hard shell kaya Inflatable kaya OC1 OC2	rcle appropriate one): ak k	C2 Raft Cataraft
Applicable  Watercraft used (Cin  Hard shell kaya  Inflatable kaya  OC1  OC2  C1	rcle appropriate one): ak k	C2 Raft Cataraft Other (describe):

	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult
4.	At "Rock Dam" did you	(Circle appro	priate response):	
	Run Rock Dam	Portage R	lock Dam Paddle	alternate canal (avoid Rock Dam,)

3. Please evaluate the boating access for this segment of river (Circle appropriate one):

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-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		2		
Safety	-2	-1	0	(1)	2		
Aesthetics	-2	-1	0	Ĭ	(2)		
Length of run	-2	-1	0	1	(2)		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	0	(1)	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 9:30	9 1		-2	-1	0	1	(2)		

, .	The you mery to return	in for rutare boating in	in the Turners Lans by pass a	tuns now: (Chele one)
	Definitely no	Possibly	Probably	Definitely yes

Are you likely to return for future hoating in the Turners Falls bypass at this flow? (Circle one)

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

	, 1	
This flow rates at Class:	L	

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

		rescue is often difficult even for experts. A very reliable eskimo roll, ve experience, and practiced rescue skills are essential.
9.	What skill level does a paddler	need to safely paddle the bypass at this flow? (Circle one)
	Beginner	Advanced
	Novice	Expert
	Intermediate	
10.		ou consider the minimum acceptable flow (enough flow for an e) to be higher, lower, or about the same as this flow? Circle one
	Much lower	Higher
	Lower	Much higher
	No change	
11.	Relative to this flow, would yo about the same as this flow? C	u consider the optimum flow for this type of trip to be higher, lower, or fircle one
	Much lower	Higher
	Lower	Much higher
	No change	
13.		s, please identify challenging features, rapids or sections and rate their all Whitewater Scale at this flow).
	Site numbers/Locations <sup>1</sup>	Rating
14	Estimate the number of hits sto	ons boat drags and nortages you had at this flow (i.e. did you hit

anything and did you have to stop or get out of the boat to continue?).

Number of hits (but did not stop) Number of hits with stops (did not have to get out of boat) Number of hits with stops (had to get out of boat to continue) Number of portages

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult
	. 1	. 2	3	4
	1	2	3	4
Did you experience any difficulties (e.g., pinned, w				
Did you experience any difficulties (e.g., pinned, w (e.g., downed trees, woody growth in the river bed) description and location of these experiences or ide	rapped l	ooat, swam) your run at isks	or identify any	specific ris
(e.g., downed trees, woody growth in the river bed) description and location of these experiences or ide	rapped l	ooat, swam) your run at isks	or identify any this flow? Pro	specific ris

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## Figure 3.6.3-1b: Single Flow Evaluation Form

## SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:	7/9/14			
Name:	Tack Gill			
	low release this survey corresp	onds t	to (check appropriate box):	
Flow 1	2500	cfs	Date/time_//9 Morr	in e
Flow 2	(	cfs	Date/time	77.3
Flow 3		cfs	Date/time	
Flow 4		cfs	Date/time	
Flow 5, if applicable		cfs	Date/time	·
Flow 6, if applicable		efs	Date/time	,
Watercraft u	sed (Circle appropriate one):			•
Hard sl	nell kayak		Stand up paddle boa	ard .
Inflatal	ole kayak		C2	
OC1			Raft	
OC2			Cataraft	
(C1)			Other (describe):	
2. Your whitew	vater boating skill level for the	watero	eraft used for this flow (Cir	rcle appropriate one):
Beginn	er .		Advanced	
Novice			Expert	
Interme	t			

3.	Please evaluate the boating	ng access for	this segment of river (Circle	e appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easy	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam

Portage Rock Dam

Paddle alternate canal (avoid Rock Dam,)

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	· -2	-1	0		2		
Availability of powerful hydraulics	-2	-1	0	1	2		e e
Availability of whitewater play areas	-2	-1	0 .		2	£	
Overall whitewater challenge	-2	-1	0		2		
Safety	-2	-1	0	(1)	2		
Aesthetics	-2	-1	0_	1	. (2)		
Length of run	-2	-1	$\langle 0 \rangle$	1	2		
Number of portages	-2	-1	0		2		
Boating instruction	-2	-1	0	1	2		
Overall Rating	-2	-1	0	(1)	2		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19 Min	2500	Cl 2	-2	-1	0	(1)	2		

7.	Are you likely to retur	low? (Circle one)			
	Definitely no	Possibly	Probabl	ly [1	Definitely yes
8.	Based on the International difficulty of the river at this flow)				
Th	is flow rates at Class:	2	Except	For Rock	Dam

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages or around ledges are often required; large waves or strainers may be present but are easily avoided. Strong eddies and powerful current effects can be found, particularly on large-volume rivers. Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9. What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)

	Beginner	Advanced		
	Novice	Expert		•
	Intermediate			
10.	Relative to this flow, would you consider the minimu enjoyable recreation experience) to be higher, lower,	m acceptable flow (enough or about the same as this flo	flow ow?	for an Circle one
	Much lower	Higher		
	Lower	Much higher		
	No change			
11.	Relative to this flow, would you consider the optimum about the same as this flow? Circle one	n flow for this type of trip to	to be I	higher, lower, or
	Much lower	Higher		
	Lower .	Much higher		
	No change			
13.	Using site numbers or locations, please identify challe difficulty (using the International Whitewater Scale at		ection	s and rate their
	Site numbers/Locations <sup>1</sup>		]	Rating
			-	
14.	Estimate the number of hits, stops, boat drags, and por anything and did you have to stop or get out of the boa		(i.e., o	lid you hit
	Number of hits (but did not stop)	_3		
	Number of hits with stops (did not have to get out of b	oat)		
	Number of hits with stops (had to get out of boat to co	ntinue)		
	Number of portages			

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate the difficulty of the portages (for your type of watercraft at this flow)

Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult	
Stopped at Rock Dam and scouted from	1	2	2	Difficult 4	
shore and then ran.	1	4	. 3	4	
	1	2	3	4	
	1	2	3	4	

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..

Difficulty			1		Location	
Morde	several	roll	attempts befor		Rock Dam	
		1.	Success			
Downed	tree at	the k	eginning low	Ked	like a ledge,	

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

					* ,
		• .			
		•		•	
			•		
	•				
·.	•				

## Figure 3.6.3-1b: Single Flow Evaluation Form

### SINGLE FLOW EVALUATION FORM

# Turners Falls Hydroelectric Project FERC No. 1889 Whitewater Controlled Flow Study

Date of run:/	7/19/14 ert Brean			
Name: Rob	ert Brean			
,				
Indicate which	flow release this survey cor	responds	to (check appropriate box)	):
Flow 1	2500	cfs	Date/time 7/19/14	9 Am
Flow 2		cfs	Date/time	
Flow 3		cfs	Date/time	,
Flow 4	6	cfs	Date/time	
Flow 5, if applicable		cfs	Date/time	
Flow 6, if applicable		cfs	Date/time	
1. Watercraft u	used (Circle appropriate one	e):	and the state of t	_
Hard s	hell kayak		Stand up paddle bo	pard
Inflatal	ble kayak		C2	and the same of th
OC1			Raft	
OC2			Cataraft	
,C1			Other (describe):	
2. Your whitev	vater boating skill level for	the water	craft used for this flow (C	ircle appropriate one):
Beginn	er		Advanced	•
Novice			Expert	
Interme	ediate		ı	
The same of the sa				

3.	Please evaluate the boa	ting access for	this segment of river (C	Circle appropriate one):
	Put-in Access:	easy	moderate	difficult
	Take-out Access:	easv	moderate	difficult

4. At "Rock Dam" did you (Circle appropriate response):

Run Rock Dam	Portage Rock Dam	Paddle alternate canal (avoid Rock Dam,

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

If unacceptable, was flow:

	Totally unacceptable	Unacceptable	Neutral	Acceptable	Totally acceptable	Too Low	Too high
Navigability	-2	-1	0	1	(2)		
Availability of challenging technical boating	-2	-1	0	1	2		
Availability of powerful hydraulics	-2	-1	<u></u>	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)		
Aesthetics	-2	-1	0	1	(2)		
Length of run	-2	-1	0	(1)	2		
Number of portages	-2	-1	0	1	2		
Boating instruction	-2	<u>-1</u>	0	1	2		
Overall Rating	-2	-1	0	1	(2)		

6. Evaluate the recently completed flow for your craft based on your perceived difficulty of the run for a "typical user". For example, if you perceived that a flow of 2,500 cfs was Class II, please rank this flow for a typical Class II boater.

If unacceptable, was flow:

Release Date/Time	Flow (cfs)	Your Perceived Difficulty of the run (Class I-V+)	Totally Unacceptable	Unacceptable	Neutral	Acceptable	Totally Acceptable	Too Low	Too high
7/19/19 90	7500		-2	-1	0	1	(2)		
1	\	ass IF							

7. Are you likely to return for future boating in the Turners Falls bypass at this flow? (Circle one)

Definitely no

Possibly

Probably

Definitely yes

8. Based on the International Whitewater Scale (defined below), how would you rate the whitewater difficulty of the river at this flow? (if appropriate, provide a range of whitewater classifications for this flow)

This flow rates at Class:

- Class I Fast moving water with riffles and small waves. Few obstructions, all obvious and easily
  missed with little training. Risk to swimmers is slight; self-rescue is easy.
- Class II Straightforward rapids with wide, clear channels which are evident without scouting.
  Occasional maneuvering may be required, but rocks and medium-sized waves are easily missed by
  trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom
  needed.
- Class III Rapids with moderate, irregular waves which may be difficult to avoid and which can
  swamp an open canoe. Complex maneuvers in fast current and good boat control in tight passages
  or around ledges are often required; large waves or strainers may be present but are easily avoided.
  Strong eddies and powerful current effects can be found, particularly on large-volume rivers.
  Scouting is advisable for inexperienced parties. Injuries while swimming are rare; self-rescue is
  usually easy but group assistance may be required to avoid long swims.
- Class IV Intense, powerful but predictable rapids requiring precise boat handling in turbulent water. Depending on the character of the river, it may feature large, unavoidable waves and holes or constricted passages demanding fast maneuvers under pressure. A fast, reliable eddy turn may be needed to initiate maneuvers, scout rapids, or rest. Rapids may require "must" moves above dangerous hazards. Scouting may be necessary the first time down. Risk of injury to swimmers is moderate to high, and water conditions may make self-rescue difficult. Group assistance for rescue is often essential but requires practiced skills. A strong eskimo roll is highly recommended.
- Class V Extremely long, obstructed, or very violent rapids which expose a paddler to added risk.
  Drops may contain large, unavoidable waves and holes or steep, congested chutes with complex
  demanding routes. Rapids may continue for long distances between pools, demanding a high level
  of fitness. What eddies exist may be small, turbulent, or difficult to reach. At the high end of the
  scale, several of these factors may be combined. Scouting is recommended but may be difficult.

Swims are dangerous, and rescue is often difficult even for experts. A very reliable eskimo roll, proper equipment, extensive experience, and practiced rescue skills are essential.

9.	What skill level does a paddler need to safely paddle the bypass at this flow? (Circle one)				
	Beginner	Advanced			
	Novice	Expert			
	Intermediate				
10.	Relative to this flow, would y enjoyable recreation experien	ou consider the minimum acceptable flow (enough flow for an ce) to be higher, lower, or about the same as this flow? Circle one			
	Much lower	Higher			
	Lower	Much higher			
	No change				
11.	Relative to this flow, would ye about the same as this flow?	ou consider the optimum flow for this type of trip to be higher, lower, or Circle one			
	Much lower	Higher			
	, Lower	Much higher			
	No change	•			
13.		is, please identify challenging features, rapids or sections and rate their nal Whitewater Scale at this flow).			
	Site numbers/Locations <sup>1</sup> Rock Dam	Rating			
14.	14. Estimate the number of hits, stops, boat drags, and portages you had at this flow (i.e., did you hit anything and did you have to stop or get out of the boat to continue?).				
	Number of hits (but did not sto	op)			
	Number of hits with stops (did	not have to get out of boat)			
	Number of hits with stops (had to get out of boat to continue)				
	Number of portages				

<sup>&</sup>lt;sup>1</sup> Site numbers/locations will be defined in consultation with the whitewater boating stakeholders during the field investigations for the IFIM study (Study No. 3.3.1)

the difficulty of the portages (for your type of watercraft at this flow)						
2	Place site numbers/location and reason for portage	Easy	Slightly Difficult	Moderately Difficult	Extremely Difficult	
ol"	· · · · · · · · · · · · · · · · · · ·	1	2	3	4	
		1	2	3	4	

15. Using site numbers/locations on the map provided, identify rapids or sections you portaged and rate

16. Did you experience any difficulties (e.g., pinned, wrapped boat, swam) or identify any specific risk (e.g., downed trees, woody growth in the river bed) during your run at this flow? Provide a brief description and location of these experiences or identified risks..

1

2

3

Difficulty		Location
None		
	-	

17. Provide any additional comments about this flow below. If necessary, please use site numbers/locations to identify specific locations.

No rec!

. .