

Exhibit B
Abbreviated Shasta Safe Harbor Mast Flow Chart

STREAM REACH: UPPER SHASTA		
<i>Flow Investigations: McBain and Trush, Cal-Trout temperature monitoring investigation</i>		
Entity Name	Season or lifestage	Bypass Flow
Montague Water Conservation District (MWCD) --Shasta River		Releases to <u>Upper Shasta River</u>: <i>Very Dry Years</i>
	October 1 to December 31	3 cfs
	January 1 to February 28	2 cfs
	Beginning of March	4 cfs
	Late March until mid-April	15 cfs
	End of April	10 cfs
	End of April until mid-May	Taper down to 5 cfs
	Mid-May until June 15	3 cfs
	June 16 to September 30	3 cfs of exchange or environmental water, in addition to the 2-10 cfs of prior rights releases
		Releases to <u>Upper Shasta River</u>: <i>Dry Years</i>
	October 1 to October 31	3 cfs
	November 1 to November 30	4 cfs
	December 1 to December 31	3 cfs
	January 1 to February 28	2 cfs
	March 1 to mid-March	4 cfs
	Mid-March to end of April	15 cfs
	May 1 to mid-May	10 cfs
	Mid-May to June 15	5 cfs
	June 16 to September 30	3 cfs of exchange or environmental water, in addition to the 2-10 cfs of prior rights releases
		Releases to <u>Upper Shasta River</u>: <i>Normal Years</i>

Entity Name	Season or lifestage	Bypass Flow	
	October 1 to December 31	6 cfs	
	January 1 to February 28	4 cfs	
	March 1 to mid-March	4 cfs	
	Mid-March to March 31	15 cfs, with 4-day period of 25 cfs for pulse flows at the end of March	
	April 1 to April 30	15 cfs	
	May 1 to mid-May	10 cfs	
	Mid-May to mid-June	5 cfs	
	June 16 to September 30	3 cfs of change or environmental water, in addition to the 2-10 cfs of prior rights releases	
			Releases to <u>Upper Shasta River</u>: <i>Wet Years</i>
	October 1 to December 31	10 cfs, and a 684 acre-foot block of water to be used adaptively in fall/winter of Wet Years for flushing, habitat maintenance, or migration	
	January 1 to February 28	4 cfs	
	March 1 to mid-March	8 cfs	
	Mid-March to March 30	15 cfs, with 25 cfs for pulse flows at the end of March	
	April 1 to mid-April	20 cfs	
	Mid-April to April 30	15 cfs	
	May 1 to mid-May	10 cfs	
	Mid-May to mid-June	5 cfs	
	June 15 to September 30	3 cfs of exchange or environmental water, in addition to the 2-10 cfs of prior rights releases	
			Releases to <u>Upper Shasta River</u>: <i>Very Wet Years</i>
	October 1 to November 30	13 cfs	
	December 1 to December 31	10 cfs, and a 1,154 acre-foot block of water to be used adaptively in fall/winter of very wet years for flushing, habitat maintenance, or migration	
	January 1 to February 28	4 cfs	
	March 1 to mid-March	10 cfs	

Entity Name	Season or lifestage	Bypass Flow
	Mid-March to mid-April	15 cfs, with 25 cfs for pulse flows at the end of March until mid-April.
	Mid-April to April 30	20 cfs
	May 1 to mid-May	15 cfs
	Mid-May to May 31	10 cfs
	June 1 to June 15	5 cfs
	June 16 to September 30	3 cfs of exchange or environmental water, in addition to the 2-10 cfs of prior rights releases.
	October 1 to December 31	0.5 to 4.5 cfs (spring production is variable in winter; during very dry years the spring might be completely dry).
	January 1 to February 28	0.5 to 4.5 cfs (spring production is variable in winter; during very dry years the spring might be completely dry).
	March 1 to June 15	0.5 cfs
	June 16 to September 30	0.5 to 3 cfs
Hidden Valley Ranch	October 1 to December 31	0.5 to 3.0 cfs (spring production is variable in winter; during very dry years the spring might be completely dry).
	January 1 to February 28	0.5 to 3.0 cfs (spring production is variable in winter; during very dry years the spring might be completely dry).
	March 1 to June 15	1.5 cfs
	June 16 to September 30	0.5 to 3 cfs
	October 1 to December 31	0.5 to 3.0 cfs (spring production is variable in winter; during very dry years the spring might be completely dry).
Seldom Seen Ranch	N/A	N/A
Hole in the Ground Ranch		Diversion # 165 and #166
	October 1 to December 31	0.7 to 3.4 cfs
	January 1 to February 28	0.7 to 3.4 cfs

Entity Name	Season or lifestage	Bypass Flow
	March 1 to June 15	0.7 to 1.2 cfs (Clear Springs flow – HIG diversion 2.5 cfs)
	June 16 to September 30	0.7 to 3.4 cfs (Clear Springs flow)
Big Springs Ranch	January 1 to December 31	Bypass all water rights from Big Springs Creek, Little Springs Creek, and Hole in the Ground Creek all year (15.81 cfs)(0.77 – 9.29 cfs consumed portion depending on month protected by 1707). Water may be diverted if salmonid temperature and flow objectives are met

STREAM REACH: UPPER PARKS

Flow Investigations: McBain and Trush, NOAA/Upper Parks Creek Flow Strategy

Entity Name	Season or lifestage	Bypass Flow
Parks Creek Ranch		Upper Parks Creek Sub-Reach
	March 1 to March 31	3.4 cfs or more if needed, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy.
	June 16 to September 30	3.4 cfs or more if needed, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy. Participant will conduct an evaluation of the east pasture springs to determine how to irrigate those pastures more efficiently while providing adequate spring water instream for rearing.
Edson Foulke	October 1 to November 1, dependent upon available flow and priority	3.0 or whatever is required to by-pass, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy.
	November 1 to January 15	3.0 cfs or whatever is required to by-pass, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy.
	January 16 to February 28	3.0 cfs or whatever is required to by-pass, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy.
	March 1 to March 31	3.0 cfs or whatever is required to by-pass, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy.
	April 1 to June 15	3.0 cfs or whatever is required to by-pass, per decree priority, to meet flow target at verification site, PCE, per Upper Parks Creek Flow Strategy.
MWCD -- Parks Creek		Upper Parks Creek Flow Strategy/Parks Creek Bypass

Entity Name	Season or lifestage	Bypass Flow
	October 1 to December 31	Assure 21 cfs is at PCE prior to diverting to aid adult migration and spawning
	January 1 to February 28	Minimum 6 cfs at PCE prior to diverting: <ol style="list-style-type: none"> 1. PCE must equal 6 cfs before Participant can begin bypass and can divert up to 20 cfs; 2. In order for Participant to bypass more than 20 cfs but less than 90 cfs, 20 cfs must be provided for instream flow at PCE; 3. In order for Participant to bypass more than 90 cfs but less than 150 cfs, 30 cfs must be provided for instream flow at PCE; and 4. In the event PCE has not received pulse events of over 100 cfs at PCE in over 24 months, Participant will cease bypass for up to 24 hours during a significant storm event to provide a pulse flow event in coordination with NOAA and CDFW.
	March 1 to June 15	21 cfs at PCE prior to diverting: <ol style="list-style-type: none"> 1. PCE must equal 21 cfs before Participant can begin diversion and can divert up to 20 cfs; 2. In order for Participant to divert more than 20 cfs but less than 90 cfs, 30 cfs must be provided for instream flow at PCE; and 3. In order for Participant to divert more than 90 cfs but less than 150 cfs, 40 cfs must be provided for instream flow at PCE.
	Diversion # 160 and 161 -- Spring Release Schedule	
	October 1 to December 31	0.5 to 3 cfs. During very dry years, the spring might dry completely and not be available for instream use.
	January 1 to February 28	0.5 to 3 cfs, when the spring is producing. During very dry years, the spring might dry completely and not be available for instream use.
	March 1 to June 15	0.5 cfs, but in normal to very wet years when spring production is in excess, the Participant could release up to 8 cfs
	June 16 to September 30	0.5 to 3 cfs cold spring water.
STREAM REACH: MID PARKS		
<i>Flow Investigations: McBain and Trush</i>		
Entity Name	Season or Lifestage	Bypass Flow
Shasta Springs Ranch --	March 1 to June 15	2.25 cfs until Parks #4 point of diversion

Mid Parks	June 16 to September 30	1 cfs
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STREAM REACH: LOWER PARKS
Flow Investigations: McBain and Trush

Entity Name	Season or Lifestage	Bypass Flow
Shasta Springs Ranch - Lower Parks	October 1 to December 31	Shasta Springs Ranch does not have active diversions
	January 1 to February 28	Shasta Springs Ranch does not have active diversions
	March 1 to June 15	Remainder of spring production in Kettle Springs Creek beyond 1.15 cfs diversion (2.85-6.35)
	June 16 to September 30	Remainder of spring production in Kettle Springs Creek from beyond 1.15 cfs diversion (2.85-6.35)
Cardoza	October 1 to December 31	The Cardoza diversion is not active
	January 1 to February 28	The Cardoza diversion is not active
	When water temperatures first reach 19°C at the Parks Big Springs real-time monitoring location	Participant will remove dam boards at the existing point of diversion. After 7 days, Participant can resume normal diversion operations throughout the rest of the irrigation season. Participant will also remove the dam boards when a high flow event is likely to occur to ensure emigration through the reach
	June 16 to September 30	Participant will not participate in the flow management during this life stage, as the existing diversion has impacts to water temperature and juvenile are not likely to utilize the impoundment for rearing. Instead, Participant is committing to relocate the point of diversion from Parks Creek approximately 2.5-miles downstream to the Shasta River and pump the water to the ranch via pipeline.

STREAM REACH: MID SHASTA
Flow Investigations: McBain and Trush

Entity Name	Season or Lifestage	Bypass Flow
Grenada Irrigation District (GID)	April 1 to April 9	GID commits not to divert from 4/1 through 4/9.
	April 10 to May 20	Reduce max diversion volume from 40 cfs to 24 cfs
	May 21 to September 6	No confirmation of conserved water on dry years or wet years during this period
	September 7 to September 30	Reduce max diversion volume from 40 cfs to 18 cfs

Novy Ranches		Novy Pump
	March 1 to June 15	7.5 cfs
	October 1 to November 30	2 cfs for maximum of 10 days.
		Novy-Rice-Zenkus Diversion
	April 10th-November 1	Cumulatively diverted volume of 10 cfs from March 1 to November 1 of 10 cfs will be reduced to a maximum diversion of 6.0 cfs, conserving 4.0 cfs for instream benefit.
	April 1 to April 10	Cumulatively reduce diversion to a maximum diversion of 3.0 cfs and participate in spring pulse
	September 20 to September 30	Cumulatively reduce diversion to a maximum diversion of 3.0 cfs through participation of Water Trust
Rice Livestock		Huseman Diversion
	April 1 to September 30	Reduce diversion from 11.9 to 10 cfs resulting from delivery efficiency project. Conserving 1.9 cfs.
		The Huseman diversion, under the Rice and Nicolletti Site Plan agreements, will not initiate diversion from April 1 - April 6 and will turn off diversion on September 25- September 30.
	October 1 to March 30	Huseman Ditch has a 5.0 cfs winter diversion right. Huseman will not divert more than 4.0 cfs at any one time and will not divert more than 200 acre-feet total from October 1 to March 30.
		Novy-Rice-Zenkus Diversion
	April 10th-November 1	Cumulatively diverted volume of 10 cfs from March 1 to November 1 of 10 cfs will be reduced to a maximum diversion of 6.0 cfs, conserving 540 cfs for instream benefit.
	April 1 to April 10	Cumulatively reduce diversion to a maximum diversion of 3.0 cfs and participate in spring pulse
September 20 to September 30	Cumulatively reduce diversion to a maximum diversion of 3.0 cfs through participation of Water Trust	

NB Ranches		Huseman Diversion
	April 1 to September 30	Reduce diversion from 11.9 to 10 cfs resulting from delivery efficiency project. Conserving 1.9 cfs.
	April 1- April 6	The Huseman diversion, under the Rice and Nicolletti Site Plan agreements, will not initiate diversion From April 1 - April 6 and will turn off diversion from September 25-30.
	April 1-September 30	Release up to .3 cfs Spring water from two springs to provide refugia habitat at Shasta River.
	October 1 to March 30	Huseman Ditch has a 5.0 cfs winter diversion right. Huseman will not divert more than 4.0 cfs at any one time and will not divert more than 200 acre-feet total from October 1 to March 30.