



FOOTHILLS WATER NETWORK

**Foothills Water Network Middle Fork American Working Group
Interests by Reach for
PCWA Middle Fork American Hydropower Relicensing
February 22, 2010**

Foothills Water Network Middle Fork American Work Group

The Foothills Water Network Middle Fork Work Group members have provided interest statements to this joint interest document.

This document includes specific information on interest groups' recreational use preferences in terms of seasonal and daily timing. This information is included as a guide to inform initial discussions regarding alternative flow scenarios. The specificity regarding timing is not meant to constrain the discussion of interests and finding solutions that meet multiple interests.

- Protect American River Canyons, Gary Estes
- California Outdoors, Nate Rangel
- Horseshoe Bar Fish and Game Preserve, Tom Bartos
- Member of the Public, John Donovan
- Member of the Public, Bill Center
- Private Boater, Hilde Schweitzer
- American Whitewater, Dave Steindorf
- Upper American River Foundation, Bill Templin
- Western States Trail Foundation, Gene Freeland
- Northern California Federation of Fly Fishers, Gary Flanagan
- Current Adventures, Dan Crandall
- Upper American River Foundation, Spring Creek Guide Services, Bill Carnazzo
- Tony Fabian, Granite Bay Flycasters
- Mel Oldemar, Granite Bay Flycasters
- Angler, Monte Hendricks
- Angler, Ed Wahl
- California Sportfishing Protection Alliance, Chris Shutes
- Trout Unlimited, Brian Johnson
- Marilyn Jasper, Sierra Club

GENERAL – ALL REACHES

Sediment

- Sediment pass-through valves to restore sediment function to the river below Ralston, Interbay, French Meadows, and Hell Hole

- If no pass-through management is possible on some dams, a secondary alternative sediment deposition sites along the river for recovery to the river at high flows.
- Preservation of sandy beaches in lower peaking reach for recreation.

Protect Fish, BMI during Outages

- Enhance flow / habitat for fish health during outage period and water transfer period to reduce stranding in all project reaches. Low flows during outages decrease water temperatures, habitat, and refuge for BMIs. Enhancement and protection of BMI and fish populations depends on a seasonally appropriate outage flow regime that is in keeping in terms of magnitude, duration, frequency, and rate of change.

Benthic Macroinvertebrates

- Enhance benthic macroinvertebrate populations with special attention to stonefly and mayfly larvae, as well as the giant October Caddis larvae, which have historically gotten stranded during outages and water transfers or other operations in which flows and ramping rates exceed the seasonal flow regime.

Restore Characteristics or Mimicry of Spring Snowmelt Hydrograph

- Manage to reduce and avoid spills from reservoirs during and after spring snowmelt hydrograph to protect spring frog egg masses, fish spawning, and riparian recruitment.
- Manage stable descending limb of spring snowmelt hydrograph.

Large Woody Debris

Collect and transport large woody debris around the dams for deposition in the downstream river reaches. Large woody debris offers good habitat for fish, reptiles, and BMI.

FRENCH MEADOWS TO INTERBAY

- Aquatics
 - Enhance Rainbow trout
 - Enhance and protect Benthic Macroinvertebrate population through enhanced flows, lower temperatures, and restoration of the shape of the snowmelt hydrograph.
 - Restore characteristics of natural flow regime for benthic macroinvertebrates, and fish spawning

- Recreation
 - Real-time online flow gauges for angling and boating
 - Adequate public access points from which anglers can move up or downriver by hiking and wading.
 - *Fishing*
 - Preserve wilderness fishing experience
 - Adequate public access
 - Access to the MFA above Interbay
 - Non-motorized vehicle access right at river level
 - *Boating*
 - Private recreational kayak use compatible with ecosystem flows within the natural hydrograph.
 - Predictable scheduled recreational boating flows compatible with timing of ecosystem high flows
 - Use and enjoyment of whitewater boating
 - Boater safety - avoid encroachment of riparian vegetation to reduce strainers that can endanger boaters.

INTERBAY TO RALSTON

- Aquatics
 - Enhance and protect Foothill Yellow Legged Frogs
 - Enhance and protect Rainbow and Brown Trout and Hardhead
 - Restore healthy trout fishery and attendant BMI populations by mimicking a stable descending limb of the spring snowmelt hydrograph and reducing risk of spill from reservoirs during and after the descent of the spring hydrograph.
 - Reduction of algae

- Recreation
 - Real-time online flow gauges for angling and boating

- *Fishing*
 - Improved safety for public pedestrian access to the river at Interbay.
 - Restoration of historic trout fishery of small rainbows and browns and attendant BMI populations through mimicking spring snowmelt hydrograph and higher base summer and fall flows.
 - Reduction of algae
 - Enhance fall flows to support brown trout fishing.
 - Fall outage should include instream flows to support brown trout
 - Protect brown trout redds from desiccation and stranding in Oxbow Reservoir during the fall outage.
- *Boating*
 - Recreational hardshell and inflatable kayaking, rafting, and perhaps instructional kayaking.
 - Boating on winter/spring high flows or pulse designed for ecosystem compatibility to mimic the natural hydrograph.
 - Publicly available information and predicted schedule for winter/spring boating flows on this reach.
 - Real-time online flow gauges.

HELL HOLE TO RALSTON

- Aquatics
 - Protect values that maintain this reach as eligible for Wild & Scenic status
 - Enhance FYLF, BMI, hardhead, and trout populations.
 - Mimic descending limb of the spring snowmelt hydrograph to preserve temperatures, flows, habitat for target species
 - Increased fish and BMI habitat and populations for recreational angling and ecosystem values.
 - Enhance and protect Benthic Macroinvertebrate population
 - Channel maintenance flows to reduce encroachment of riparian resources and ensure FYLF habitat on cobble bars not crowded by dense riparian vegetation.
 - Increase licensee's capacity to release refined flow regime to shape the descending limb of the snowmelt hydrograph and descending limb of channel maintenance flows from Hell Hole to enhance FYLF habitat and boating opportunities
 - Improve the HB valve release below Hell Hole so it does not erode the opposite bank when opened nor damage the powerhouse.
- Recreation
 - Real-time online flow gauges for angling and boating
 - Real-time online gauge information at Ellicotts Bridge and above Ralston Afterbay for boating and angling. (Gauge at Afterbay is important because accretion is so high on Rubicon.)

- *Fishing*
 - Preserve wilderness fishing experience
 - Safe and adequate public access
 - Adequate access and facilities at Hales Crossing and Ellicotts Bridge
 - Increased fish and BMI habitat and populations for recreational angling and ecosystem values.
 - Flows to reduce uniform lines of riparian growth to allow for more room for bank fishing and back casting for anglers. Reducing dense uniform lines of stands of trees at riverside also reduces angler access upstream and downstream at the river's edge. Accordingly, anglers wade – sometimes in dangerous waters. Reduction of riparian encroachment and continuous lines of stands of trees at riverside would make for a healthier riparian community and increase angler safety and access.
 - Protect and improve the trout fishery
 - Enhance fall flows to support brown trout fishing.
 - Fall outage should include instream flows to support brown trout
 - Protect brown trout redds from desiccation and stranding in Oxbow Reservoir during the fall outage.

- *Boating*
 - Protection of premier Sierra Class V boating run. This is a classic Sierra gem of a whitewater run. Protection and enhancement of boating access put-in at Ellicotts with option to hike upstream to put-in at confluence of the Rubicon and South Fork Rubicon.
 - Private rafting and kayak use on high flows or pulse designed for ecological compatibility to mimic the natural hydrograph.
 - Investigate commercial rafting opportunity on Rubicon compatible with ecosystem high flows.
 - Predictable scheduled whitewater boating opportunity days compatible with ecosystem high flows.
 - Boating on winter/spring high flows or pulse designed for ecological compatibility to mimic the natural hydrograph.
 - Whitewater boating for kayaking and rafting on flows compatible with channel maintenance and sediment mobilization flows.
 - High preference for spring rather than winter boating flows due to lack of access when snow is on the ground and character of camping for 2-3 day trip.
 - Channel maintenance flows that scour and flush riparian vegetation to reduce choking of the channel. Riparian growth can pose danger of strainers to boaters.
 - Boating opportunities on the descending limb of the hydrograph, which is safer than on the ascending limb because there is less woody debris in the water and less accretion as boaters move downstream. Large accretion can change the class of the run to be more difficult. In addition, boaters enjoy

more safety for camping spots because the river is going down rather than up.

- Preservation of existing access at Hunter's Trail for boaters and anglers. Boaters use the trail to put-in above Ellicotts Bridge.

NORTH AND SOUTH LONG CANYON

- Aquatics
 - Restore spring snowmelt hydrograph to enhance RT fishery, BMI, and recreational angling.
 - Mimic the spring snowmelt hydrograph
 - Mechanical infrastructure upgrade to allow flows higher than the minimum flows instream to enhance trout fishery. (Consider re-structuring of low-level outlet which is currently not used because slide gates are too hard to operate.
 - Avoid fish entrainment in diversion.)
 - Protect consistent instream flows in summertime to protect fishery, BMI, and recreational angling. Protect from swimmers who plug the minimum flow outlet with plywood. Consider installing a grizzly to protect the minimum flow outlet from vandalism.
- Recreation
 - Real-time online flow gauges for angling and boating
 - *Angling*
 - Enhance RT populations
 - Increased summer and fall flows to enhance trout fishery and BMI populations
 - *Boating*
 - Recreational private kayaking, Class V on spring high flows
 - Predictable scheduled flows for boating that are compatible with high flows for ecosystem values

DUNCAN CREEK

- Aquatics
 - Mimic spring snowmelt hydrograph to enhance RT fishery, BMI, and recreational angling.
 - Mechanical infrastructure upgrade to allow flows higher than the minimum flows instream to enhance trout fishery. (Consider re-structuring of low-level outlet which is currently not used because slide gates are too hard to operate.)
 - Avoid decrease in fish entrainment
- Recreation

- Real-time online flow gauges for angling and boating
- *Fishing*
 - Enhance RT and BT and BMI in summer and fall for recreational angling.
 - Angling in spring, summer, and fall.
 - Adequate public access. (Consider access below Duncan diversion facility).
- *Boating*
 - Recreational private kayaking, Class V on spring high flows
 - Predictable scheduled flows for boating that are compatible with high flows for ecosystem values
 - Real-time online gauge information at the diversion.

RALSTON TO FOLSOM

- Aquatics
 - Enhance RT and BT and attendant BMI population
 - Winter-spawning o. mykiss. Winter flows for spawning and rearing of winter-spawning o.mykiss in the Ralston reach and Rubicon and Interbay reaches.
 - Enhance habitat for Chinook baby salmon migrating up from Folsom.
 - Avoid stranding fish in small pools adjacent to the river channel where they die from lack of oxygen, high temperatures, and predation by birds. Under current operations stranding occurs during the fall outage and during water transfers to meet water sales to consumers downstream. In both cases, the project should operate so that flows and their rate of change fall within the flow regime set for the year. Under current operations, minimum flows during the fall outage and ramping rates during water transfers have stranded fish.
- Recreation
 - Public Safety and Information for Recreational Use
 - Real-time online flow gauges for angling and boating
 - Predictable flows for public safety for inner-tubing, swimming, wading, angling, and boating.
 - Removal of debris in North Fork American below Confluence – concrete bridge abutments and iron for safety and aesthetic reasons.
 - *Fishing*
 - Ralston to Folsom
 - Enhance fishery by reducing stranding, overheating, and stress on fish and BMI during outage periods. Replace current outage flows with flows in keeping with the flow regime for the fall season by bypassing powerhouses.
 - Reduce danger of stranding for anglers and other members of the public with predictable scheduled flow releases available

online in real-time and with signage at public access and take-out points.

- Protect wild and native fish
- Improve boat ramp near Ralston picnic area to improve angler access to Oxbow lake. The existing ramp is rudimentary and difficult to use.
- Season - May – October primary fishing season. Winter fishing is popular also.
- Daily Timing
 - Preference for mornings 7 am – 12:00 noon
 - Preference for late afternoon and/or evening 3:00 / 4:00 pm – 9pm (July)/ 8 pm (August)/ 7 pm (September).
- Ralston – Folsom
 - Flows that support healthy fishery to facilitate enjoyable and successful angling experience year-round.
 - Bank and wading angling
 - Adequate public fishing access.
 - Predictable flows
- *Boating*
 - Ralston – Ruck-A-Chucky
 - Commercial rafting
 - Daily timing of flows - Consideration for commercial and raftable flow for four increment morning to noon.
 - Raftable flows that allow for a quality and safe boating experience with 6-8 person rafts.
 - Preference for minimum of 3-hour window on weekdays, or 4-hour window of time on weekends for commercial rafting
 - Full commercial rafting flows until around noon.
 - Rafting flows arrive at Fords Bar by 11 am to allow overnight rafting trips to get downstream.
 - Days of the week: Preference for Sunday, then weekends, then weekdays
 - Private boating – rafting and kayaking
 - Adequate and safe access for private boaters
 - Ruck-A-Chucky Campground – Mammoth Bar
 - Primary boating use is for private boating and kayak instruction in spring, summer, fall.
 - Commercial rafting as Class II option as alternative to South Fork American for kids trips in busy summer months or dry years.

- Private kayak use
 - Spring, summer, fall use
 - Interest in daylight hours for use
 - Minimum 3-hour window
 - Boatable on some weekday evenings, weekday afternoons, and weekends
 - Beginner boating flows and intermediate boating flows
- Instructional kayaking
 - Interest in using this reach during summer months of July and August when the South Fork American is busy with commercial rafting.
 - Adequate flows for safe instructional kayaking experience for beginners.
 - Interest in afternoon classes with full instructional kayaking flows before noon.
 - High priority for Sunday classes and then weekends.
- Mammoth Bar – Confluence
 - Inflatable and hardshell kayaks boating use
- Confluence – Folsom
 - Private rafting and kayaking, and kayak instruction in the summertime.
 - Summer, Fall, Winter, Spring
 - Private kayakers preference for weekday daytime and evening, and weekend daytime and evening in mid-summer; daytime flows for spring and fall.
 - Improvement of access at takeout for whitewater boating at Birdsall for Confluence Run.
 - Flows that make whitewater boating features enjoyable quality experience at the Auburn Dam site features.
- Equestrian
 - Appropriate and safe access for equestrian crossing at the river. This could include bridges at certain crossing locations.
 - For Tevis Cup and Western States Foundation events, flows should be appropriate for safe river crossings.