Table 1: All objectives and targets, with their associated management actions, recommended by TRRP technical workgroups.

Objective	Target	Management Action
Fish 1: Increase naturally produced fall-run Chinook Salmon adult production to the extent necessary to meet or exceed escapement objectives and facilitate expanded harvest opportunity	Increase escapement of naturally produced fall-run Chinook Salmon to 62,000 adults. Harvest of 131,750 adult fall Chinook Salmon across all tribal, recreational, and commercial fisheries in ocean and in-river sectors	Channel rehabilitation, flow management, gravel augmentation, watershed restoration
Fish 2: Increase naturally produced spring-run Chinook Salmon adult production to the extent necessary to meet or exceed escapement objectives and facilitate expanded harvest opportunity	Increase escapement of naturally produced spring-run Chinook Salmon to 6,000 adults. Harvest of 12,750 adult spring Chinook Salmon across all tribal, recreational, and commercial fisheries in ocean and in-river sectors	Channel rehabilitation, flow management, gravel augmentation, watershed restoration
Fish 3: Increase naturally produced Coho Salmon adult production to the extent necessary to meet or exceed escapement objectives and facilitate expanded harvest opportunity	Increase escapement of naturally produced Coho Salmon to 1,400 adults. Harvest target is undefined.	Channel rehabilitation, flow management, gravel augmentation, watershed restoration

Objective	Target	Management Action
Fish 4: Increase naturally produced steelhead adult production to the extent necessary to meet or exceed escapement objectives and facilitate expanded harvest opportunity	Increase escapement of naturally produced steelhead to 40,000 adults. Harvest target is undefined.	Channel rehabilitation, flow management, gravel augmentation, watershed restoration
Fish 5: Increase naturally produced green sturgeon adult production to the extent necessary to meet or exceed escapement objectives and facilitate expanded harvest opportunity	Not quantified to measure program success. No target.	Flow management
Fish 6: Increase naturally produced Pacific lamprey adult production to the extent necessary to meet or exceed escapement objectives and facilitate expanded harvest opportunity	Not quantified to measure program success. No target.	Channel rehabilitation, flow management, sediment management
Fish 7: Reduce brown trout population to decrease predation on and competition with native naturally produced fish	No more than 5 individuals over 35 cm per day at Junction City weir and carcass surveys combined.	Non-native species management in TRRP-funded projects, e.g., weirs and juvenile outmigrant traps
	No more than 200 1+ brown trout (approx. 10 cm) at the North Fork screw trap between 1 January and 31 August.	Non-native species management in TRRP-funded projects, e.g., weirs and juvenile outmigrant traps

Objective	Target	Management Action
Fish 8: Increase the amount and improve the quality of rearing habitat available to native juvenile salmonids	Restoration sites will maintain at least 80% of the gain in area-under-the-curve (AUC) of the flow-to-Capacity relationship estimated for the design condition compared to the pre-construction condition for at least ten years post-construction. Current and future site designs should estimate gains in AUC from 300-3,500 cfs.	Channel rehabilitation, gravel augmentation, watershed restoration
Fish 9: Link the phenology of prey species and salmonid species to disturbance caused by management actions to enhance production of BMI assemblage with species of appropriate size and vulnerability	Annual streambed disturbance event (>6,000 cfs) between 6 and 12 weeks prior to peak Chinook Salmon fry emergence in ≥90% of the restoration reach to reset BMI succession and promote the production of abundant vulnerable prey. Streambed disturbance events which occur 3-18 months prior to peak emergence are desirable in the absence of more recent disturbance.	Flow management
Fish 10: Increase/maintain the amount and improve the quality of spawning habitat available to native salmonids	Not quantified to measure program success. No target.	Channel rehabilitation, flow management, gravel augmentation, watershed restoration
Fish 11: Maintain or increase adult holding habitat from baseline conditions	Target remains undefined	Channel rehabilitation, flow management, watershed restoration

<table>
<tr><th>Objective</th><th>Target</th><th>Management Action</th></tr>
<tr><td rowspan="2">Fish 12: Provide thermal regimes that promote growth and survival throughout the rearing and outmigration periods for native juvenile salmonids</td><td>Outmigration: current temp targets for Weitchpec, but need to be revisited</td><td>Flow management</td></tr>
<tr><td>Rearing: 7-day average of the daily average (7DADA) of 13.0-16.5 C upstream of NF Trinity from 1 April to 31 July</td><td>Flow management</td></tr>
<tr><td>Fish 13: Provide thermal regimes to promote spawning success of spring and fall Chinook Salmon</td><td>Current temp targets for Douglas City and North Fork, but need to be revisited</td><td>Flow management</td></tr>
<tr><td>Fish 14: Minimize competition and predation by hatchery smolts on wild fry and juveniles</td><td>Target remains undefined</td><td></td></tr>
<tr><td>Flow 1: Provide suitable ramp up rates by time of year for target species by water year class</td><td>EIS ramp up rates (CFS):<table><tr><td>≥6,000</td><td>1,000 cfs/2 hrs</td></tr><tr><td>4,000 to 5,999</td><td>1,000 cfs/2 hrs</td></tr><tr><td>2,000 to 3,999</td><td>500 cfs/2 hrs</td></tr><tr><td>500 to 1,999</td><td>250 cfs/2 hrs</td></tr><tr><td>300 to 500</td><td>100 cfs/2 hrs</td></tr></table></td><td>Flow management (rate of change)</td></tr>
</table>

<table>
<tr><th>Objective</th><th>Target</th><th>Management Action</th></tr>
<tr><td>Flow 2: Provide suitable ramp down rates by time of year for target species by water year class</td><td>EIS ramp down rates (CFS):<table><tr><td>≥6,000</td><td>500 cfs/4 hrs</td></tr><tr><td>4,000 to 5,999</td><td>400 cfs/4 hrs</td></tr><tr><td>2,000 to 3,999</td><td>200 cfs/4 hrs</td></tr><tr><td>500 to 1,999</td><td>100 cfs/4 hrs</td></tr><tr><td>300 to 500</td><td>50 cfs/4 hrs</td></tr></table></td><td>Flow management (rate of change)</td></tr>
<tr><td>Flow 3: Release allocated flow volumes by water year class and implement prescribed hydrographs</td><td>Extremely Wet WY 815.2k AF
Wet WY 701.0k AF
Normal WY 646.9k AF
Dry WY 452.6k AF
Critically Dry WY 368.6k AF</td><td>Flow management (total water volume)</td></tr>
<tr><td>Flow 4: Provide flows that inundate ephemeral surfaces above the winter baseflow channel for variable durations to meet ecological needs</td><td>Inundate ephemeral habitats for 35 to 84 days between January 1 and May 1 for fish prey food production and groundwater recharge; inundate floodplain surfaces <4,500 cfs for ≥21 days to facilitate natural riparian regeneration between May 1 and June 20.</td><td>Flow management (provide suitable annual hydrographs)</td></tr>
</table>

Objective	Target	Management Action
Physical 1: Increase topographic variability of active channel as measured by R*	R^* targets are applied at the reach scale dependent on local geomorphic controls. Target values of R^* has not yet been defined but can be determined by adopting a value representative of reaches that are deemed to be satisfactorily complex. Increases in R^* generally indicate an increase in channel complexity.	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.
Physical 2: Inundation effectiveness as measured by A_w^*	A_w^* targets are applied at the reach scale dependent on local geomorphic controls. Target values are under development. Increases in A_w^* are perceived as indication that availability of habitat is increased.	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.
Physical 3: Increase rates of bed mobility and scour	Mobilization of matrix surface particles (D_{84}) on alternate bar surfaces during Normal and wetter water years >6,000 cfs) Mobilization of subsurface particles ($\geq 1D_{84}$ depth) during Wet and Extremely Wet years Mobilization of subsurface particles ($\geq 2D_{84}$ depth) during Extremely Wet years	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.
Physical 4: Increase area of active bars	Target values set at reach scale based on local controls. Target trends are to increase number of active bars and spatial extent of active bars	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.

Objective	Target	Management Action
Physical 5: Maintain sediment mobility at thresholds that aide physical and biological processes	Maintain observed critical Shields stress at Lewiston, Limekiln Gulch, and Douglas City sediment monitoring transects for the median grain size (τ^*_{c50}) between 0.025 and 0.085.	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.
Physical 6: Maintain fine sediment storage at levels that promote healthy river functioning	Maintain storage of fine sediment in substrate at level where mobility is not limited by sheltering effects of coarse grains.	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.
Physical 7: Promote channel migration	Targets set at reach scale based on channel design guide (Hoopa Valley Tribe et.al, 2011).	Global: Flow management Reach Scale: Channel rehabilitation, gravel augmentation.
RAE 1 Increase the width of the aquatic-terrestrial interface within the restoration reach that are colonized by native wetland and riparian plants	Increase area less than 6 feet above summer baseflow water surface elevation within the margins of the maximum fishery flow	Flow releases, gravel augmentation, channel rehabilitation
RAE 2 Maintain a range of temperatures over various flow	Increase the diversity of water temperature (residence time of water) at rehabilitation sites	Flow releases, gravel augmentation, channel rehabilitation

Objective	Target	Management Action
regimes needed by native species	Achieve daily average water temp of 10 C at the above gage above NF (USGS 11526400) on or before May 1 during critically dry and dry water years; and maintain or increase for 14 days	
	Promote timely oviposition and reduce scour of FYLF egg masses by limiting magnitude of discharge increase to less than 1000 cfs for 24 hrs and 500 cfs for longer, until July 1, after daily mean water temperature of 10 C has been achieved, AND water stage has been stable (less than 0.05 m/d change), at the gage above NF (USGS 11526400) for 7 days.	
RAE 3 Promote dominance of native flora and fauna species in the ecological community structure	Increase richness, abundance, and diversity of native cover types	N/A
	Increase richness, abundance, and diversity of native species of fish, wildlife, invertebrates, and algae	