

Responses to Questions Posed At Big Flat Public Outreach Meeting August 02, 2012

TRRP Restoration Questions:

What would be the ecological impacts from just increased flows without physical projects?

All rivers adjust to natural or imposed flows and sediment regimes over time. The [Trinity River Mainstem Fishery Restoration Environmental Impact Statement / Report \(EIS\)](#) states that the combination of flow releases (up to 11,000 cfs) and channel rehabilitation projects is required to restore the needed salmon habitat. The EIS estimated that to accomplish the same level of restoration with flow releases alone would require flow releases of 30,000 cfs in wet years. This alternative (called the "Maximum Flow Alternative") was evaluated but rejected in the EIS. The Trinity River will eventually reach a state of dynamic equilibrium with the ROD flow releases with or without mechanical rehabilitation. However, this adjustment would take many decades to complete if left to natural processes alone. **Mechanical rehabilitation is necessary to accelerate physical restoration if habitat and fisheries benefits are to be achieved within a human time frame.**

Where does the allocation for fall flows come from? (i.e. lake level, central valley allocation). The water from Trinity Reservoir that was used in 2012 to augment late-summer flows in the lower Klamath River was from Central Valley Project water supply, available for Project purposes including the Trinity River Division. 2012 water allocations were not affected. Depending on refill patterns at Trinity and Shasta reservoirs, there is a possibility that allocations could be affected in future years.

Are Valley Ag water users paying for Trinity water? How much and to whom?

The total amount of water under both Standard Form and Short Form settlement contracts is approximately 2.2 million acre-feet and cover a total of almost 440,000 acres of land bordering the Sacramento River and its tributaries between Redding and Sacramento. Agricultural water users with water service contracts do pay for water provided from the Trinity River Division. The per acre foot cost varied between users, and it is somewhat complicated. Further information is available at: <http://www.usbr.gov/mp/cvpwaterrates/ratebooks/irrigation/2012/index.html>
In addition, water service contractors pay a per acre foot contribution to the Restoration Fund established by the Central Valley Project Improvement Act. The TRRP receives around \$1-3M in Restoration Funds each year.

What are the current levels of mercury in the river and what is the impact?

The U.S. Geological Survey (USGS) has been monitoring mercury levels at the TRRP rehabilitation sites; the monitoring suggests that the alluvial materials that are subject to project related disturbance contain levels of mercury well below concentrations that produce detrimental physiological responses in humans or aquatic life. The mercury concentrations in the waters of the Trinity River downstream of the Trinity River Diversion were found to be well below State and Federal water quality standards under all flow regimes, both prior to and after the completion of channel rehabilitation activities at the Hocker Flat and Canyon Creek sites (Rytuba et al. 2005). The USGS's assessment of site specific mercury data suggests that the

bioavailability (concentrations significant enough to be absorbed into other species) of mercury in the Trinity River and its floodplain is not presently high and is reduced by allowing cold, well aerated waters to move over the floodplain and through side channels as in many current restoration projects. The USGS continues to work with the TRRP in restoration areas along the Trinity River to determine the actual bioavailability of mercury and to ensure that future designs will minimize potential for release of mercury during restoration activities.

Elevated concentrations of mercury have been found in water, sediment, and biota (i.e., fish, frogs, and predatory aquatic insects) in the upper Trinity River basin upstream of Lewiston Dam (U.S. Geological Survey, unpublished data). This is primarily a result of the Altoona mine, which historically mined gold and mercury on the East Fork of the Trinity River. Downstream of the Lewiston dam, however, mercury concentrations in water have been found to be very low (Ashley 2004).

Mercury References

Ashley, R.P., Hothem, R.L., May, J.T., and Rytuba, J.J., 2004, Preliminary report on mercury and methylmercury in water, sediment, biota, and placer tailings, Hocker Flat Restoration Project Area, Trinity County, California: U.S. Geological Survey Administrative Report, 18 p.

Rytuba, J.J., and Goldstein, D., 2012, Potential for mercury methylation and release from sluice sands in dredge ponds as a result of planned side-channel construction in the Trinity River floodplain, Trinity County, California: U.S. Geological Survey Administrative Report, 35 p.

Rytuba, J.J., Ashley, R.P., and Gutermuth, F. B. 2005. Potential Availability of Soluble and Particulate Mercury Species from Sediment and Placer Tailings: Expected Environmental Effects Resulting from the Hocker Flat River Rehabilitation, Trinity County, California: U.S. Geological Survey Administrative Report, 15 p.

See following pages for responses to non-TRRP responsibility areas.

What are parameters of tribal fishing rights and how are they monitored?

Federally reserved fishing rights that are owned by Hoopa Valley and Yurok Tribes are described in a [document authored by Ronnie Pierce in 1998](#) that was funded by the Klamath River Basin Fisheries Task Force. The federally reserved fishing rights have been made clear in the [Interior Solicitor's Opinion in 1993 authored by John Leshy](#) and litigated in the [Parravano V Babbitt lawsuit in 1995 \(Cert denied\)](#).

The Hoopa Valley Tribe and Yurok have been found to be entitled to 50 % on the harvestable surplus of a fish destined to return to Klamath-Trinity River or a moderate standard of living. These reserved fishing rights are similar to this owned by Tribes in Washington and Oregon ([see Boldt and Belloni federal case law](#)).

'Harvestable surplus' is determined through the [Pacific Fishery Management Council \(PFMC\)](#) which manages ocean fisheries off the coast of California, Oregon, and Washington. PFMC has established conservation objectives that are documented in its [Fishery Management Plans \(FMP\)](#) primarily for Klamath River fall Chinook salmon.

Conservation objectives for Klamath fall Chinook are contained in PFMC's [Amendment 16 to its FMP](#). For Klamath fall Chinook, approximately 63 to 65 % of a cohort can be harvested by tribal and non-tribal fisheries and no less than 40,700 natural area spawners should be allowed to escape all fisheries and return to natural areas in the Klamath River (e.g. outside of Trinity River and Iron Gate hatcheries).

For example, for 2012 the Klamath River is being managed to include a tribal harvest of 159,900 adult fall Chinook and an in-river natural escapement of 86,000 adult fall Chinook salmon. The Hoopa Valley Tribe has a [study plan of the methods that are utilized in the monitoring](#) of the fall Chinook fishery. The HVT also monitors the in-river non-Indian sport fishery on the Trinity River from the Willow Creek weir to the Klamath confluence at Weitchpec under a separate study plan.

(Response provided by the Hoopa Valley Tribe)

What are the rules for access to the river within the tribal reservation boundaries?

The Hoopa Valley Tribal Council (HVTC) directed its staff to post signs notifying public of the [Hoopa Valley Tribe trespass and conservation ordinance \(Title 15, 1989\)](#) this past year. Since early in 2012, the HVTC has been working with its departments and entities to refine its objectives with respect to non-tribal members accessing the Trinity River through Hoopa Valley Reservation (HVR) lands. The HVTC has not taken action at this time to amend or modify its laws and ordinances to clarify access to Trinity River via HVR lands.

(Response provided by the Hoopa Valley Tribe)

"How is Trinity County compensated for Trinity County water (i.e. diversions to central valley)?"

The Trinity River Diversion Act of 1955 established the Trinity River division of the Central Valley project and granted the citizens of Trinity County "first preference" of 25% of the power that results from the diversion of Trinity River water to the Central Valley. This equates to approximately 350GWh (Gigawatt Hours), annually.

This allocation represents 25% of the actual generation that results from the diversion of Trinity water to the Sacramento River, including 25% of the generation from Trinity Dam, Carr Powerhouse, and Spring Creek as well as a smaller portion of the generation from Keswick (25% of the generation attributable to Trinity River water flowing through Keswick, which is also fed by other sources of water).

The Trinity Public Utilities District (TPUD) is the public recipient of this power allocation. The Western Area Power Administration, the federal agency that manages the power generated from these projects, delivers the TPUD an estimate of what the wholesale delivery costs are early in the year and, after reviewing the actual data at the end of each year, aligns the actual costs in a "true up" process with the TPUD.

This low-cost power allows TPUD to have the lowest electric rates in the state of California. **TPUD customers save \$ 8,000,000 every year** versus what they would have to pay if they were purchasing power from PG&E. This money is retained by local residents and much of it is spent within the county.

TPUD's total electric consumption on an annual basis is approximately 100GWh, while our first preference allocation is approximately 350GWh. This means that TPUD's load could more than triple and we would still have additional low-cost power to sell. This reserve of low-cost power is a meaningful tool for economic development.

(Response provided by Trinity Public Utilities District)

Where does the fee revenue for the purchase/renewal of water rights for mining in the tributaries go? Does any of that come back to the county?

In 2004 the Division of Water Rights (Division), State Water Resources Control Board (State Water Board), adopted regulations establishing water right fees to fund the work carried out by the Division.

For additional information please see link below.

http://www.waterboards.ca.gov/waterrights/water_issues/programs/fees/index.shtml

(Response provided by California Water Quality Control Board)

What potential political and physical impact will a new peripheral canal (delta tunnels) have on the ROD and the flows to the Trinity River?

There is fairly wide uncertainty regarding the political impact of the proposed delta tunnels, although to date a number of Northern California counties have passed resolutions opposing the project, including Humboldt County.

Some of the potential impacts could be:

- *Increased Trinity River exports to the CVP*
The Record of Decision is a first line of defense for this situation. If there were additional exports they would likely come from any excess levels in Trinity Reservoir.
- *Decreased carryover storage in Trinity Lake*
- *Increased frequency of “dead pool” storage*
Dead pool storage is the condition where lake levels are lowered to the point below where the system has the ability to release adequate amounts of water to the river and/or the Central Valley.
- *Increased water temperatures for fish*
in both Trinity Reservoir and potentially Trinity River depending on how water exports and releases are managed.
- *Less Trinity water for Trinity and lower Klamath fishery flows*
- *Increased electric power rates for TPUD Customers*
NCPA (Northern California Power Agency) commissioned a study that showed new river flows as proposed by the Delta Plan could result in a 30% decrease in annual generation from the Central Valley Project (CVP) and a 50% reduction in the value of this generation. This could mean a 50% increase in the cost of power to TPUD, which would necessitate a 20% increase in TPUD rates.

While this result is more likely if a peripheral canal (PC) is built, it could happen with or without the PC being constructed. The Delta Plan may increase flows to help with salinity in the delta even if no PC is built. The Delta Plan basically proposes to operate the dams as if they were not there except in rare cases of flood protection. Generating power under this “run of the river” scenario dramatically reduces the amount of generation and also shifts it to the spring period when it is much less valuable. The study predicted that Trinity Lake would reach dead pool in 50% of the years and Shasta would reach dead pool more often.

(Response compiled from various sources by Trinity County Resource Conservation District)