

Appendix D

State Water Resources Control Board Questions for November 30, 2009

Below are answers to questions posed by SWRCB staff as a starting point for discussion at the meeting scheduled to discuss SWRCB Resolution 2009-6004. In addition there are questions that could be posed by work Group members at the November 30 meeting.

Question: Among the several types of land and resource management activities and recreational activities that take place on NFS lands in California and that can generate NPS pollution:

- Which ones are best handled by a statewide approach and should be addressed in a statewide WQMP and which ones should not?
- Which ones most need immediate attention, and which can be deferred for a few years?

One of the most substantial concerns in the Klamath-Trinity at present on public lands is recreational dredge mining. The Karuk Tribe has been successful in prompting legislative action in California that prohibits suction dredge mining. The SWRCB should recognize problems with recreational suction dredging and codify the ban going forward, if an MOU is crafted for state-wide USFS policy.

Erosion related to recreational vehicle use was a very significant issue on BLM and Shasta Trinity National Forest holdings in the Grass Valley Creek sub-basin of the Trinity River and ORV closures, enforcement and erosion control have helped stem this source of sediment. Anywhere in the Klamath-Trinity in with decomposed granitic terrain can be expected to have a similar sensitivity to ORV use and should be prevented or closely controlled. Other problem watersheds are in the Upper Trinity and Westside Scott rivers and Horse, Beaver and Cottonwood creeks in the Middle Klamath Basin. In the southern Cascade Range and Sierra Nevada, decomposed rhyolite behaves similarly to decomposed granite and high recreational use on these soil types may also cause significant surface and gully erosion.

Nutrient and pathogen loading has been documented upstream of the Quartz Valley Indian Reservation on USFS lands with grazing allotments (Bowman 2008 and 2009). *E.coli* is a public health threat and should be addressed immediately.

Question: In addition to sediment and thermal pollution, what other pollutants generated by NPS on NFS lands are common or likely enough that they should be addressed in a statewide WQMP?

Pesticides are increasingly recognized as adversely affecting Pacific salmon species and the Work Group would like to see MOU policy moving away from chemical vegetation management and more use of natural tools like fire and hand thinning from below to reduce fire risk.

There is now an increasing specter that industrial gold mining may cause a wave of degradation of streams on public land because of the extremely high price of gold and the extremely permissive policy of the 1872 Mining Law that makes prevention of such activities difficult for the USFS itself (Times Standard 11/26/09). The law puts the USFS in a position to require mitigations, but not to disallow projects. Gold mining is well known to be associated with heavy metal pollution and other point source pollutants. The areas proposed for these projects represent extremely high quality aquatic habitats that are of vital importance to at-risk Pacific salmon species. The SWRCB should use anti-degradation authority or other statutes to prevent this unwise use of land and degradation of clean water on USFS lands by incorporating language in the MOU should one be developed.

Question: In addition to certain forest road segments, what other types of “legacy” problem sites (i.e., those that were produced by past activities, but are still discharging pollution into the State’s waters) on NFS lands should be addressed by the WQMP?

Landings with major perched fill are a significant source of landslides in the KNF (de la Fuente and Elder 1998). Clear cuts with lack of forest re-growth extend windows for cumulative effects, including increased peak flows, especially in the rain-on-snow zone. Also, it is not only “certain road segments” that pose risk, but rather the cumulative effects risk of over-all high road densities and high numbers of road-stream crossings. All culverts have a limited life span and all crossings on USFS road systems should be considered for decommissioning unless they are on critical transportation routes. Road closures and full decommissioning needs to be employed to obliterate most streamside roads or those crossing high risk slopes. The USFS transportation system of the future should rely mostly ridge top roads and should be of a scale that routine maintenance and strategic response during storm events is possible.

Other major mine sites are on USFS lands within the Middle Klamath Basin in Indian Creek (Grey Eagle Mine) and in Dillon Creek have been recognized as major on-going sources of pollution, although there is some activity on remediation under the U.S. EPA. Attempts to cap old mine sites like Grey Eagle Mine in the Indian Creek drainage are not always successful (Kier Associates 1999) and monitoring and adaptive management are necessary to prevent insidious on-going sources of pollution that may damage fisheries or bio-accumulate in fish tissue.

Question: What criteria should be used to prioritize remediation of legacy problem sites on a statewide basis?

There is a tendency for water quality authorities to work on the most impaired sites first. Current prevailing restoration theory on Pacific salmon restoration (Bradbury et al. 1995) suggests the opposite. The best habitats or refugia need to be protected and then the next highest priority would be for those basins adjacent and connected to refugia. In crafting the WQMP and MOU the SWRCB and USFS should use the U.S. EPA (2003) guidance to States and tribes for abating water temperature pollution and pay particular attention to the sections on cold water salmonid refugia. The SHALSTAB model should be used to identify road segments of high risk of failure in watersheds with a high priority for salmon recovery and decommissioning funds identified as soon as possible. Stream side roads and roads at

high elevations with “stacked crossings” in the rain-on-snow zones should also be high priority targets.

Question: For watersheds on NFS lands that do or could contribute pollutants to a water body segment that has been listed as impaired pursuant to CWA Section 303(d):

- In addition to implementing more rigorous pollution prevention practices and/or remediation of legacy problem sites, what else should be done to contribute to restoring the quality and beneficial uses of water?
- What criteria should be used to prioritize 303(d)-related restoration activities on NFS lands on a statewide basis?

Reeves et al. (1995) point out that Pacific salmon evolved with disturbance regimes where only a portion of any watershed would be disrupted by fire or other natural disasters (“patch disturbance”) at any one time. Failure to limit rates of watershed disturbance has changed the timing and amount of sediment, large wood and water contributed to stream systems. This has resulted in greatly simplified stream habitats and diminished their ability to support diverse fish communities. Reeves et al. (1995) point out that unless we set aside a network of watersheds and allow recovery of aquatic conditions similar to those with which salmon co-evolved, restoration efforts are not likely to succeed. This is similar to the guidance of FEMAT (1993), Bradbury et al. (1994) and Moyle and Yoshiyama (1994). If recovery of salmon and steelhead is one of the objectives of the SWRCB/USFS MOU, then prioritization should target Key Watersheds or those adjacent and also sites identified by Moyle and Yoshiyama (1992, 1994) as aquatic diversity management areas.

In addition to remediating past problems and reducing human caused erosion risk, the SWRCB and USFS need to set prudent limits for disturbance and limit activities that cause undesirable increases in cumulative effects risk. After watershed restoration has reduced cumulative effects risk to acceptable levels, then restoration of riparian zones should be pursued, with a focus on accelerating succession from hardwoods that increase future large wood recruitment.

Question: • Of the USFS administrative procedures for ensuring that appropriate pollution control practices 1) identified in NEPA documents, 2) specified in project plans and contract documents, and 3) implemented during project activity:

- Which are most effective?
- Which need improvement (and how)?

As explained in comments, there are many different problems with Klamath National Forest that are not remedied by NEPA and project planning documents or contracts. Projects implemented have caused great harm and reports of recovery from 1997 flood damage (437 miles of stream scour) have never been produced despite significant data collection.

In effect the USFS is making management decisions more on local community sentiment and relationships than on science or guidance of policy documents. Logging and road

building on steep unsuitable lands in the Lower Westside Scott was unwise, but KNF chose to operate there because it was not declared a Key Watershed and they wanted to supply logs to local mills.

The KNF environmental documentation for a grazing permit on the Kidder Creek Allotment in the Scott River ignored previous studies proving harm in Marble Mountain meadows to endangered willow flycatchers from grazing. In the permit it also states that the Region 5 riparian assessment methods were not accepted by KNF but that KNF had no current guidance for meadow inventories of sensitive riparian zones. Monitoring agreed to as part of prior lease weren't always carried out and when they were results showed negative habitat trends.

Question: The USFS currently conducts statewide randomized programmatic monitoring of whether pollution control practices have been implemented as specified and have been effective in preventing or minimizing the generation of NPS discharges. What other types of monitoring should be performed (e.g., paired watershed validation monitoring, project-specific instream monitoring)?

Forest wide monitoring at strategic locations to discern aquatic habitat trends is what is needed. As described in comments, AREMP protocols and EMDS model reference system should be adopted CA wide or standard techniques as identified in Kier Associates and NMFS (2008) selected. SWRCB must force monitoring because the USFS is resistant at the Forest or Ranger District level. Focused monitoring is needed to assess downstream benefits after road decommissioning and watershed restoration activities. SWRCB/USFS should commit to a network of photo-monitoring points and publish results annually on the Internet.

As important as it is for data to be collected, the SWRCB must require that the USFS publish monitoring reports in a timely fashion. Data sharing with metadata and raw data could be greatly facilitated if a database such as KRIS were adopted for State-wide use.

Question:• What changes would improve the effectiveness and/or efficiency of the process (i.e., collaborative interagency staff group with policy-level group oversight and stakeholder committee advise) proposed for updating the WQMP? Regarding the proposed 12-member stakeholder committee (see attachment)

What entities/interests should be represented?

How should it function?

This process should not supersede Regional Board authority and oversight of USFS. Need active and engaged NCRWQCB staff. The MOU with the USFS can't be administered more effectively from Sacramento when problems with compliance can often occur at the Ranger District level. Current oversight is not meeting work Group needs and the prospects for improvement will diminish if State cuts staff and removes NCRWQCB authority.

Tribes are not just stakeholders. They are indigenous peoples living in ancestral territories and federally as sovereign Nations.

Making appointments today to your panel is premature. WORK Group would like more discussion as to whether this is the best way to approach USFS management and meeting CWA objectives. If seating goes forward November 30, consider nominating Danny Hagans and Dr. Chris Frissell (see email).

References

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