

From: Palenscar, Kai
To: [Woelfel, David@Waterboards](mailto:Woelfel_David@Waterboards)
Cc: Cleary-Rose, Karin; Brandt, Jeff@Wildlife; Christine_Medak@fws.gov
Subject: Re: Basin Plan Amendment updating Beneficial Use Tables A
Date: Monday, November 21, 2016 11:03:05 AM

Hi Dave,

Sediment transport is important for all of our alluvial fan and aquatic species. This includes San Bernardino kangaroo rat, Santa Ana River woolly-star, Santa Ana sucker, and to a lesser extent slender-horned spineflower. Diminished sediment transport combined with increased peak flows leads to channel incision and increased rates of bank erosion. The component of the sediment most important to sucker is large-grained sediment (cobble and gravel for foraging purposes) but all sediment is important to the long-term functioning of the river. Inputs of sediment (small and large-grained) from the upper watershed keep the gradient of the river intact. With diminished sediment input the river will erode and flatten out, decreasing flow velocity and degrading habitat for sucker.

Long-term channel incision leads to a hydrologically disconnected floodplain and a hardening of the channel bottom (proportionately more gravels and cobbles to sand). Effects of this impact to alluvial fan species include reduced rates of flood disturbance on the upper terraces and increased rates of eroded alluvium (bank erosion). Bank erosion removes portions of the seed bank and creates impediments (steep banks) within kangaroo rat habitat. The hardening of the channel bottom degrades the habitat for kangaroo rats, as well as creates a low flow channel that is more likely to be regularly inundated with flood water, potentially drowning kangaroo rats and replacing alluvial fan plant species with riparian species.

The major tributaries to consider as important for sediment transport in the San Bernardino Basin are Lytle-Cajon Creek, City Creek, Plunge Creek and Mill Creek. The upper Santa Ana River is confined by Seven Oaks Dam and San Timoteo Creek has multiple basins that trap sediment. Getting sediment transported through these large sediment traps would benefit species downstream.

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In addition to sediment transport, nuisance runoff has allowed riparian habitats to persist in otherwise ephemerally moist habitats. Reduction in nuisance discharge may also indirectly effect listed species. Least Bell's vireo is heavily impacted by the replacement of riparian tree canopy with non-riparian plant species, but sucker may also be impacted in the Santa Ana River. Reduced flows degrades spawning habitat (degraded lowland tributaries) and encourages the growth of cattails and sedges, further reducing flow velocity.

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Let me know if you want to chat.

Thanks,
Kai

Kai Palenscar, Ph. D.
Fish and Wildlife Biologist

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T: 760-322-2070 x 108 (extension recently changed)
E: kai_palenscar@fws.gov

On Mon, Nov 21, 2016 at 7:55 AM, Woelfel, David@Waterboards
<David.Woelfel@waterboards.ca.gov> wrote:

Hello,

If sediment transfer was important for a species we would very much consider that when issuing a permit. So in our Reach 4 of the Santa Ana River (the 215 / 10 freeway interchange downstream to Mission Ave Riverside, we have designated RARE for the sucker. Reach 5 of the River, upstream of the 10 freeway, we have not listed RARE for the sucker (however, RARE is listed in Reach 5 for the wholly star). I know sediment transport is important for the sucker. If you believe we should list Reach 5 as RARE also because of the sucker then let us know. So comments, email is OK, by end of next week. Sorry for the late notice.

thanks

From: Cleary-Rose, Karin [mailto:karin_cleary-rose@fws.gov]
Sent: Friday, November 18, 2016 2:35 PM
To: Woelfel, David@Waterboards
Cc: Brandt, Jeff@Wildlife; Christine_Medak@fws.gov; Palenscar, Kai (kai_palenscar@fws.gov)
Subject: Re: Basin Plan Amendment updating Beneficial Use Tables A

Thank you Dave,

Is sediment transport captured anywhere as a beneficial use?

By when do you need a response?

Thanks,

Karin

Karin Cleary-Rose

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Inland Division Chief
U.S. Fish and Wildlife Service
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92220
(760) 322 2070 ext 406 - Please note new extension.

On Fri, Nov 18, 2016 at 1:40 PM, Woelfel, David@Waterboards
<David.Woelfel@waterboards.ca.gov> wrote:

Hi,

I have attached a table showing proposed waters and their designated beneficial uses that we hope to incorporate into our Basin Plan in an upcoming basin plan amendment. In addition, I attached tables showing beneficial uses we want to add to waters already listed in the Basin Plan. Many of the beneficial uses apply to habitat and as such you all are well qualified to comment on these designations. If you are able would you look over the tables and provide comments. As background the beneficial uses we are adding and which we would like your input on are:

RARE = Rare, Threatened, or Endangered Species waters support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered. (note we consider CDFW species of special concern as RARE as well as those listed under the Federal and State endangered species acts).

SPWN = Spawning, Reproduction, and Development (SPWN) waters support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife. (note, In the 1995 Basin Plan version we only listed waters that had native fish spawning as designated with this use. All marine waters have this use. So we plan on designating SPWN in fresh waters that have sucker, chub, stickleback, trout, and dace populations. I realize all sorts of non-native fish spawn in flood control channels but would we consider those as "high quality aquatic habitats"?)

EST = Estuarine Habitat waters support estuarine ecosystems, which may include, but are not limited to, preservation and enhancement of estuarine habitats, vegetation, fish, and shellfish, and wildlife such as waterfowl, shorebirds, and marine mammals. (note, Chris of USFWS asked us to designate this use for several estuaries in Orange County which we are doing)

COMM = Commercial and Sportfishing waters are used for commercial or recreational

collection of fish or other organisms, including those collected for bait. These uses may include, but are not limited to, uses involving organisms intended for human consumption. (note, our State Board has asked us to designate this use for waters where people fish as they are going to develop objectives for fish consumption. Our marine waters already have this use but no fresh waters do.)

Here are the issues we must consider;

- Clean Water Act and State Water Code require the Regional Board Staff to identify waters and the uses to be protected. (We have these listed in Table 3-1 of our Basin Plan)
- As a result of Federal and state listing of new species and a more thorough understanding where species are found there are several waters in which the RARE beneficial use should now be designated. Table 3-1 has been updated somewhat since 1995 but most beneficial uses listed in the table were designated in the 1995.
- We consider RARE to be placed on waters where the protection of endangered or threatened species depends on the water either directly or **to support its habitat**. So if a species is found in a waters of the state (like the K-rat is in some places) we will designate the RARE use.
- Our Table 3-1 is for information purposes, to highlight the existence of a use to tell regulators and dischargers alike that any plans made for that body of water will be carefully scrutinized for potential impacts to uses. We realize Table 3-1 gets out of date and so we are trying to update it. We depend on CEQA analysis and the Wildlife Agencies for the final word on the presence of listed species.
- We consider uses as existing or potential. An existing use is one that has occurred at some time since November 1975.
- We used the CDFW Natural Diversity Database to locate RARE species.
- The REC1 (water contact recreation), REC1 (non-water contact recreation) WARM or Cold (warm or cold water ecosystem) uses are what USEPA considers as presumed (fishable/swimmable) uses for all waters. To not designate a “fishable / swimmable use” a structured study (UAA) must be completed to show that the use can’t or has not been attained. This is difficult to do. We do not proposing completing a UAA on any of the waters we want to add. The MUN use is municipal and domestic supply. The MUN use can be excepted if certain conditions exists (water designed to carry storm / urban runoff, extreme low flow, carries treated effluent).

Thanks for your assistance. Please contact me if you have any questions. We plan to go to our Regional Board December 16 for approval of the amendment.

Dave Woelfel, M.S.

Environmental Scientist

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