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Division of Water Rights
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References: AB2121 North Coast Instream Flow Policy
Notice of Preparation of a Substitute Environmental Document (SED)
North Coast Instream Flow Policy Project Description and Environmental Checklist
http://www.waterrights.ca.gov/HTML/instreamflow_nccs.html

Dear Ms. Niiya:

I recently received a copy of the Notice of Preparation of a Substitute Environmental Document and Notice of Public Scoping Meeting for the North Coast Instream Flow Policy. Subsequently, I obtained a copy of the North Coast Instream Flow Policy Project Description and Environmental Checklist. The subject of this letter is to comment on these documents, in the context of the Environmental Checklist. I should mention that I live in Redwood Valley 12 miles north of Ukiah in Mendocino County. Our ranch is adjacent to and spans the West Fork of the Russian River.

At the outset, let me say that the discussions are well thought out and professionally done. In most cases, the Checklist analyzes the potential impacts realistically. However, I would like to add some things which I believe will be helpful or to expand on topics you have discussed.

**SECTION 1. Environmental Checklist**

**6.0 Environmental Issues to be Analyzed.**

I would simply comment that it is all but certain that if limitations on diversions are too restrictive, some affected landowners will respond as you suggest, by: 1) pumping groundwater; 2) directly diverting using their riparian rights; and 3) allowing previously irrigated land to lie fallow. As you point out, each of these potential actions could result in significant environmental impacts.

**Checklist Topics**

**1. Aesthetics**

**c) Degradation of existing visual character or quality of the site.**

The narrative says that the impacts would be less than significant with mitigation incorporated.

If the policy is implemented in such a way as to force a landowner (or public agency) to drain a pond or a large reservoir, it will degrade the existing visual character of the site, and will directly cause a significant impact to aesthetics. In a Mediterranean climate such as this, nearly all people appreciate the visual qualities of bodies of water of any size. I realize the narrative discusses long-term effects but it concludes that, "It is expected that with mitigation, these potential indirect impacts of the policy will be less than significant." The aesthetic impact of lost reservoirs cannot be mitigated even with construction of pit ponds, which themselves are strictly utilitarian, generally unattractive, and which seldom are constructed with any aesthetic purpose whatever.

**2. Agricultural Resources**

**b) Conflict with existing zoning for agricultural use or a Williamson Act contract.**

Your narrative states that, "Adoption of the policy will not result in a conflict with zoning for agricultural use or a Williamson Act contract."

I think that this conclusion is wrong, and that there could be significant potential impacts. Under the Williamson Act, landowners promise to keep land in production agriculture (Type I) or for grazing (Type II). In return for retaining agricultural uses for the property, the real estate taxes are substantially lower than on land not under a Williamson Act contract.

The Williamson Act is clear that land must be retained in agricultural use and from time to time a county may require the landowner to document the agricultural use using receipts and inventories for crops or livestock. If the land is not kept in agricultural production, a county may initiate termination of the contract because of the production provision not being met. Therefore, the landowner will no longer be eligible for tax breaks.

Under the proposed instream flow policy, it is very possible that some landowners will lose current water diversion and storage, and may have to let land lie fallow. Your narrative on page 7 includes a bullet point addressing this. If that land is covered under a Williamson Act contract, the landowner may no longer be able to conform with the terms of the contract due to loss of water essential to successful farming. In consequence, a county has the authority to terminate that Williamson Act contract based on noncompliance, and might do so. The landowner in turn, no longer being under the obligations of the Williamson Act and faced with the burden of much higher property taxes, may well subdivide and sell the land for development, which will lead to many significant impacts.

Thus, I think that 2b) needs to be changed because this policy could lead to a conflict with a Williamson Act contract, and is also an agricultural zoning issue. The box should be checked for "potentially significant impacts" and deserves further study. This leads back to your discussion of 2a) and 2c) which are correct.

**4. Biological Resources**

**a-d)**

Your narrative expresses the issues perfectly. While it is clear that the listed anadromous fish

species are considered most important, adoption of the policy could result in significant impacts to many other species. The forced removal of ponds built especially for wildlife will result in loss of habitat for resident and migratory birds such as ducks, geese, loons, herons, egrets and others. Mammals such as deer, raccoons, otters, muskrat and others routinely use such ponds and were these ponds removed, these species could no longer exist at those sites. Although the three species of *Oncorhynchus* are listed and discussed, other vertebrate and invertebrate species cannot be ignored. They too are important elements in an ecosystem. Pond removal could be hazardous for some individuals, and would at the least result in forced migration by others. If many ponds are removed in an area, whole populations of aquatic invertebrates such as dragonflies and damselflies, hemipterous water bugs, beetles and the like could go extinct. The same could happen to frogs and salamanders. The potential loss of species other than fish must be studied carefully.

**7. Hazards and Hazardous Materials**

**g) Impair implementation of or physically interfere with emergency response plan.**

The narrative says there will be no impact because the implementation of the policy will not "physically interfere with an adopted emergency response plan or emergency evacuation plan."

This may not be the case. The instream policy could interfere with the Army Corps of Engineers (COE) emergency flood control releases from Lake Mendocino or Lake Sonoma. In a flood or potential flood emergency the COE may want to release more water and the instream flow policy might dictate lower flows to ensure salmonids are able to swim upstream at the same time there is a flood emergency because with very high releases and concurrent flooding, ascending salmonids might leave main channels for temporary backwaters, become stranded and die. This is a significant potential impact, but probably one that can be mitigated. In any case, this issue should be carefully studied.

**h) Exposing people or structures to significant risk involving wildfires.**

The narrative discusses the potential loss of water for firefighting purposes which is correct. However, the fire risk will likely become greater along highways as well.

If as a result of the policy implementation, cropland along roadways is reduced or eliminated, the risk of wildfire along the roadways will increase. If pastures aren't irrigated, or if vineyards are removed and non-irrigated grasses and forbs take their place, the risk of fire is increased. If landowners lose ponds, there's no guarantee that landowners will build offstream storage, so again the risk is increased and no mitigation is available on this point. Therefore, this is a potentially significant impact, and one not easily mitigated unless substitute water sources for fire protection are available.

**12. Population and Housing**

**a) Induce substantial population growth in an area.**

Your narrative says there will not be any impact to population or housing due to implementation of the policy.

I believe the impact to population and housing is potentially highly significant if certain provisions of the policy are implemented. If water becomes unavailable for storage or if construction of offstream storage is too expensive, there is a high probability that some landowners will let their land lie fallow and pull it out of production. See your bullet on page 7 which acknowledges this possibility, and your comment on page 10 for 2c) which suggests some landowners might convert farmland to non-agricultural use. A likely land use change would be to development and houses, especially in areas peripheral to cities, and to rural residential areas away from cities. Implementation of the policy will result in potentially significant impacts to housing and population. This topic needs further study.

**13. Public Services**

**a) Fire protection.**

The narrative says there will be no impact on fire protection services. This directly contradicts what the narrative says on page 22, 7h) where the narrative says "Actions taken by affected parties in response to adoption of the policy, specifically the removal of on-stream reservoirs that provide water for fire suppression, could limit the ability to contain fires that may arise in proximity to these reservoirs."

CDF helicopters routinely use onstream ponds to fill their bags of 325 gallons and then dump the water to put out rangeland fires. If the policy is implemented to remove existing ponds, one possible alternative is for the landowner to construct offstream storage. However, offstream pit ponds are almost always of larger surface area but are much shallower than corresponding onstream storage ponds of similar volume. Being quite shallow, helicopters cannot fill the bags as easily as in a deeper pond, so there will likely be a significant impact to fire protection services.

Another and in many cases a more likely consequence of policy implementation of pond removal is that if a pond is removed the landowner will not replace the pond at all. This will deprive CDF and other firefighters of using this water at all, either for a helicopter bag or for filling fire engines or water tankers from a pond. Potential impacts are significant and may on occasion be catastrophic.

**b-e)**

The narrative says that, "Adoption and implementation of the policy, as well as any actions taken by affected parties in response to adoption of the policy, would not result in a change in the level of fire or police protection services provided in the policy area, and would not result in the construction of any facilities that would directly or indirectly induce population growth and necessitate the need for additional school facilities, parks, or other public facilities in the policy area, and would therefore have no impact on public services."

If water storage becomes unavailable, there is a possibility of land use conversion to higher density development. Higher density development always requires more police and fire protection, which are significant impacts. The increased development may or may not have an impact on schools or parks, so this should be treated as less than significant provided mitigation is incorporated. The

topic deserves further study.

**SECTION 2. Additional Environmental Impacts**

Having made what I hope are useful comments about the scoping process for this proposed instream flow policy, I would like to add some more material. Although adoption of the policy itself may not lead to significant impacts not already considered, its implementation will. While I realize your narrative and box checking may be constrained, there are two areas which have been overlooked in this request for public input. Both deal with the potential impacts to the environment should this instream flow policy be implemented. Thorough study should address each of these issues.

**1. Department of Fish and Game Draft Guidelines of 2000 (slightly revised in 2002)**

The proposed discussions for the instream flow policies include treatment of the draft guidelines and to evaluate a policy based on these guidelines.

Before the Division of Water Rights does this, staff and the public need to understand what is actually contained in the guidelines. Specifically, people need to understand just how much water is proposed to go for anadromous fishes, and how little there will be for other wildlife species or for human use. This leads directly to the need to study this subject in the light of the environmental impacts when so little water is available for anything except anadromous fishes. Your narrative discusses these potential impacts and they will be studied. But what is missing is a discussion of the draft guidelines, and how they would be applied to each of the rivers and streams of the Policy Area.

I will give one actual example of application of these draft guidelines. There is a stream gage on the West Fork of the Russian River which has operated continuously since 1952. It is located not far upstream from the confluence of the East Fork which contains Lake Mendocino. The West Fork's flow is basically unimpaired, and there are no large reservoirs. Stream flow data and summaries from this gage are available at http://nwis.waterdata.usgs.gov/ca/nwis. The following table shows the average monthly flow in acre-feet at this gage.

| Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 504 | 6181 | 22748 | 34488 | 29382 | 21749 | 9544 | 2682 | 682 | 145 | 38 | 37 | 128180 |

| Dec 1-14 | Dec 15-31 |
|---|---|
| 7949 | 14799 |

The draft guidelines specify that all water from the beginning of the rainy season on October 1 until the 15th of December be passed through for benefit of fish. This amounts to 14,634 acre-feet.

The guidelines then say that the unimpaired flow during the collection season of December 15 through March 31 should result in no more than 5% cumulative impairment at any point on the

river or any of its tributaries. In other words, 95% of the water during the 3 ½ month collection season should go downstream for the benefit of fish. On average, during the collection season from December 15 through March 31, there is 100,418 acre-feet flowing past the gage. The fish are to get 95% of this, or 95,397 acre-feet, and no more than 5,021 acre-feet will be available for storage.

(I should mention that there is a provision that there may be impairment of up to 10%, but only after special studies are done, and it is clear that DFG and NMFS do not want that provision exercised. The draft guidelines are preparing agencies and the public to accept a policy in which 95% of the winter flow is reserved for anadromous fish and that the 5% available water be collected only in that 3 ½ month season.)

After March 31, the collection season is over and all water from April 1 through September 30 prior to the beginning of the subsequent rainy season is to go downstream. On the average, this is 13,128 acre-feet for the West Fork.

Let me summarize these average values of flow in acre-feet in the table shown below.

| | Oct 1 - Dec 14 | Dec 15 - Mar 31 | Apr 1 - Sep 30 | Total |
|---|---|---|---|---|
| Flow (acre-feet) | 14,634 | 100,418 | 13,128 | 128,180 |
| Storage allowed (acre-feet) | -0- | 5,021 | -0- | 5,021 |
| Storage allowed (%) | 0.0% | 5.0% | 0.0% | 3.9% |

Looked at the other way, anadromous fish are to get more than 96% of the annual average water flow in the entire West Fork of the Russian River. Here is an issue which warrants critical and unbiased study, to demonstrate why anadromous fish need 95% of the water during the collection period. I have yet to see the scientific data that supports such a percentage during that time of maximum water availability, often to the point of flooding.

As written, the draft guidelines do not stand up to such a conclusion. Before you adopt these guidelines, there must be a better justification than that presented or the guidelines themselves need to be changed. In other words, the issue for this scoping process is a thorough study in order to justify why 95% of the water is necessary for salmonids during December 15 - March 31. It may well prove to be the case that a significantly lower percentage is sufficient. Please refer to the report of August 1997 which was prepared by the Division of Water Rights staff. This report concluded that far more water is available for storage (as much as 35,000 acre-feet in a dry year and 70,000 acre-feet in a normal year) and far less is needed for anadromous fish to thrive. Further study should be made to determine why these professional estimates are in such vast disagreement. The Division of Water Rights study wanted a certain minimum amount of water reserved for anadromous fish each year, and this makes more sense than to require 95% of a variable quantity, no matter what that amount is. Perhaps the actual needs for fish should be based on an absolute minimum value, and perhaps the anadromous fish can thrive with less than 95% of the seasonal flow. This is a topic for further study.

**2. Potential Removal of On-Stream Reservoirs**

Section 4.0 of the Notice of Preparation and Public Scoping Meeting for the North Coast Instream Flow Policy SED proposes discussion of the policy with an end to protecting the environment by ensuring water rights are administered in a manner designed to maintain stream flows. The Notice reads, "Future actions that could occur as a result of adoption and implementation of the policy include the removal of existing, on-stream storage reservoirs and the construction of off-stream storage reservoirs."

This policy will have significant environmental impacts as discussed in the scoping document. However, the environmental impact discussion also must include an answer to the following question: Why would existing legal onstream water storage and water storage structures be an issue if there is an agreement to restrict the collection dates from December 15 through March 31? This Division of Water Rights has in the past proposed these dates when water availability is at a maximum, quite often to the point of flooding in numerous places. The Division has studied potential environmental impacts and developed the collection season based on environmental needs for anadromous fish.

If this policy is adopted and results in removal of onstream ponds, it will cause many landowners severe hardship and may result in some closing down their vineyards and their ranches. Even though the current focus must be on environmental impacts of the policy, there is a "tipping point" at which economic reality must also come into play. I can't easily think of a more cruel regulation to be imposed on landowners than to be forced into removing their legally licensed ponds which they operate in a legal manner. Already, under the draft guidelines the fish are to get 96% of the annual water flow, and now it is proposed to potentially deny landowners the remaining 4% by denying storage.

I noticed that the actual water right is not being challenged, but the method of storage is, and this policy will affect ponds built many decades ago. It may be beyond the scope of the Environmental Checklist but at some time in the near future there should be a full and open discussion about what appears to be an "end run" to take away water rights by taking away the ability to store water, especially on older permitted ponds. This is a legal, political, moral and ethical issue rather than an environmental one, but at some time it must be addressed if government agencies wish to retain the confidence of the citizenry.

There is a suggestion to construct new off-stream storage to substitute for onstream storage. This will never happen. To build a new pond requires permits from DFG, the Army Corps of Engineers, Division of Water Rights, and in some places, the county. In all probability, no one will ever get a new permit from DFG or from the Division of Water Rights. The Division cannot finish the permitting process for ponds from applications which go back 12 years, so why would anyone believe a landowner will obtain a permit for any pond in the future? Although this may look on the surface like a procedural matter rather than an environmental one, the fact of the matter is, that based on the requirements for environmental reviews, environmental impact reports and protests on environmental grounds, the likelihood of a permit for a new offstream storage pond is essentially nil.

Furthermore, as a practical matter, the cost of construction of a pit pond is much greater than for an onstream pond because more dirt has to be moved. Also, many locations don't have flat ground to put a pond in, so it is environmentally impossible to construct an offstream storage facility. Once more, this is an issue for detailed further study, the goal of which would be to answer the following questions.

1) Will it be possible to get a permit for a new pond?
2) How realistic is it for all landowners to actually build offstream storage?

The paragraph in Section 4.0 of the Notice of Preparation of a Substitute Environmental Document is worth quoting because it sums up the problem and probable consequences.

> "Adoption and implementation of the policy also could lead water diverters to switch to alternative water supplies in order to avoid any limitations applicable to new water right applications that may be contained in the policy. Some diverters might switch to groundwater pumping, which could impact groundwater levels, potentially resulting in a reduction in summer instream flows. Other diverters might choose to directly divert under riparian rights, instead of seasonally storing water, for which a permit is required. An increased reliance on riparian rights could result in increased surface water diversions during the spring, summer, and fall, potentially reducing instream flows to levels that might cause reductions in or loss of habitat. Decreases in summer groundwater elevations and instream flows due to groundwater pumping and riparian diversions could result in the loss of riparian vegetation. The loss of riparian vegetation could affect terrestrial and aquatic species that rely on riparian vegetation for habitat and food and lead to declines in water quality, such as increased water temperature and fine sediment levels. Finally, some diverters might choose to cease diverting altogether, and fallow lands that are currently being irrigated, or switch to dryland farming, or convert existing farmland to non-agricultural uses."

Further discussion is in order. A likely response to that portion of the policy which would require removal of existing ponds is that many people will convert farmland to non-agricultural use or go out of business. They will simply quit rather than attempt to secure new water supplies. Given that expense and the potential impacts to the environment, there must be a careful study about the switch to alternative water supplies. I recognize that environmental impacts at this stage are more of an issue for study than are economic impacts, but at some point of restriction of water use and storage, there will be economic consequences which will have highly significant environmental impacts. These must be studied integrally and not merely confined to the environment.

Well drilling and well development are expensive, and there are significant annual pumping costs. Furthermore, in many areas, there is no underground water to use, no matter how deep the well is drilled. So, wells may be an option for some people but not for others. This alternative must be studied more recognizing the connection of environmental and economic impacts. Considering direct diversion, some landowners may be able to take advantage of this, but they may do so only if

their lands adjoin a river. Given the annual rainless period of five to seven months and the low flows of naturally running streams, this alternative will be sparingly adopted. As your narrative points out, there will be environmental impacts. These impacts may well be more harmful than letting the ponds remain in place. Both wells and direct diversion are obvious areas which need careful study.

I can't leave this topic without injecting a bit of humor. No mention is made to exempt large reservoirs. If this policy is implemented, does DFG and the Division expect that Lake Mendocino and Lake Sonoma will be removed to ensure unimpaired instream flow? Opening up these streams will result in the beneficial acquisition of several hundred miles of spawning habitat currently unavailable for anadromous salmonids. Fish would no longer be subject to rapid artificial flow changes in the Russian River. Given the benefits to the fish if these dams were removed, perhaps there should be a study to examine the effects of these dams on spawning.

Thank you for the opportunity to submit comments regarding the proposed Instream Flow Policy. If it is implemented with the requirement to remove legal onstream storage reservoirs, the environmental and economic impacts will be more severe than anyone can imagine.

Very truly yours,

Rudolph H. Light

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