

Summary of AAR Adjustments in Response to Stakeholder Comments Nevada-Yuba-Placer Ranger Unit FRAP 7/26/96

Hydroelectric

Stakeholder	Comment	Action/Response
YCWA	There are 2 plants at Englebright Lake, and since their output is over 50 it should be ranked medium	They were added to the database from the DWR list. However, all reservoir based plants are treated as Low ranking, regardless of capacity
YCWA	Sedimentation of storage facilities can reduce power generation	The primary impact on power we considered was sedimentation affecting equipment. Since reservoirs help to settle out particles, reservoir based plants are all ranked low. If others in this stakeholder group also think that power reduction due to lowered storage capacity is significant, we may want to rethink how we rank reservoir based power plants.
PCWA	There are missing plants in Michigan Bluff and Foresthill quads	The DWR list has the Oxbow and Ralston plants in this area (both PCWA). PCWA provided lat-lon for these plants.
PCWA	Provided lat-lon coordinates for 5 plants	Used the data to generate new locations for these plants
NID	Provided erodibility estimates for some lakes/reservoirs	Changed ranking for Bowman and Spaulding reservoir based plants from Low to unranked due to low erodibility
NID	Provided a map showing plants and canals	Led to some minor adjustments in plant locations, major adjustment for Chicago Park Plant. Also was invaluable for locating additional canals. Assumed that the canals above NID were primarily for power, at or below NID are for water supply.

Fire-Flood

The input from stakeholders is difficult to use in its current form, since they identified streams, not watersheds. I suggest we start printing copies of the 3D large stakeholder map and add CALWATER planning watershed boundaries. We can provide these to stakeholders to identify actual watersheds.

Secondly, the rankings they are assigning are not consistent with the description of this AAR. The ranking should be based on downstream population that might be affected by the fire-flood

sequence (this is a public safety issue!). Stakeholders need to be given proper direction to distinguish this AAR from the soil erosion AAR, which is related exclusively to erodibility.

Some areas they identified in lower elevations certainly have a flooding problem, but fire probably has a minimal impact due to low erodibility and flat slopes. After further discussions between our hydrologist and the stakeholders, we eliminated all areas except the Bear River drainage, which is assigned a Low ranking.

Water Storage

Stakeholder	Comment	Action/Response
NID	Provided a map and a list of facilities with dead storage capacity and erodibility 1) a number of smaller facilities we missed were listed, but they all had low erodibility 2) Rollins was listed as having high capacity 3) Bowman, Jackson Meadows, and Lake Spaulding were identified as having low erodibility	1) these facilities would not be ranked so we did not add them in 2) changed ranking to Low 3) Changed to unranked
YCWA	Bullards is a critical source of ag water for Yuba County	Under our criteria this is still classified as a storage facility. Since they consider it to be high value, we could rank it High for storage under our criteria if it also has a low dead storage capacity. Based on their concerns, I changed the rank to High.
YCWA	Camptonville quad cells 27, 36, and 43 contribute to sedimentation which is a big problem here	Changed rank of these cells to High

Water Supply

Stakeholder	Comment	Action/Response
NID	Provided maps of ditch locations	Within the NID area, ditches on the map were captured and assigned as water supply features.
	Combie?	

Scenic

Stakeholder	Comment	Action/Response
?	Tahoe Basin should be ranked High - designated as a National Treasure by Congress	Assigned a High ranking to Tahoe Basin
?	The American and Yuba rivers are designated scenic rivers	According to our information, the American is designated, and this has been added. However, the Yuba is designated as study and was not added
?	I80 and hwy49 are designated scenic	We have parts of them included
?	All areas over 5500' should be designated as scenic	Many of these areas are (e.g. Tahoe Basin). Ranking all these lands would diminish the relative importance of the areas that are currently ranked
?	Trails should be designated as scenic	Some of the more prominent trails may be ranked in the recreation AAR. Capturing and ranking all trails is probably not realistic.
?	Hwy89 and 267 in Tahoe should be included	Part of 89 is in the scenic loop. Also, part of 89 that starts at the county line but goes into El dorado county is designated scenic - its viewshed does extend into NEU.

Air

Concerns were raised over the studies used as the basis for the methodology. While the absolute dollar values can be questioned, the real issue is whether relative rankings between air basins/veg types are correct. Since no stakeholder provided meaningful comments to suggest changes, the initial rankings were retained.

Recreation

Based on stakeholder input, the Western States Trail was added as a recreation feature.

Non-game Wildlife

We were never able to get participation from the local Fish and Game biologist, i.e. the data were never validated. Kevin Schaefer suggested that we just use the initial rankings.

Also, the Forest Service did not agree with the representation of their lands. In the future, we need to work closer with them to take advantage of the expertise they have related to USFS lands.

Infrastructure

Since this was added relatively late in the NEU process, it was never validated.

Soil Erosion

We attempted to construct rankings based on stakeholder input, but it was never received. Late in the NEU process we implemented a methodology for ranking cells for soil erosion, but this was not validated.

Recommendations for Ignition Resistant Building Construction

One of the major objectives of wildfire control in general, and pre-fire management hazard reduction in particular, is reducing the loss of life and property. The historical pattern of building loss during Interface fires indicates that vegetation fuel management must go hand-in-glove with ignition resistant building construction to maximize the effectiveness of fire loss mitigation measures.

Building loss and survival on the 1961 Bel Air fire, which destroyed 505 houses, was well documented. The report “**Decision Analysis of Fire Protection Strategy for the Santa Monica Mountains**” (available at <http://www.ucfpl.ucop.edu/UWI%20Documents/167.pdf>) found that 71% of the buildings with 26-50 feet of brush clearance survived the fire. However, the survival rate of buildings exposed to the fire increased to 95% for houses that had both brush clearance and ignition resistant building construction (in this case non-wood roof covering). A similar pattern was seen on the 1990 Santa Barbara Paint fire (Source: “**California’s I-Zone: Urban/Wildland Fire Prevention & Mitigation**” p.120).

On the Paint fire, which destroyed 479 houses and major buildings, the survival rate (above) was 86% for houses with both non-flammable roofing and 30 feet of brush clearance. Only 4% of the 438 houses surveyed in the Paint fire survived where non-flammable roofing and 30 feet of brush clearance were absent. The modeling of structure loss and survival on the Paint fire revealed that brush clearance alone only “explained” or accounted for 11% of the variation seen in the structure survival patterns.

This is strong evidence that vegetation management *alone* will not be able to fully explain, nor mitigate, building loss on wildfires. Hence the need for the comprehensive approach in this plan, using a combination of vegetation management and addressing recommendations for ignition resistant building construction. This is also strong evidence that this comprehensive approach will work. The “**Los Angeles Times**” (1 April 2004) reporting on the Southern California conflagrations of October 2003 clearly revealed the need for, and effectiveness of, combining vegetation management and ignition resistant building construction for reducing building loss in wildfires:

“Amid the ashes of the most costly wildfires in California's history lies evidence of a crucial lesson: Fire-resistant construction and vigilant removal of flammable vegetation significantly improved the odds of a home's survival, according to a Times analysis of fire records from more than 2,300 destroyed structures.

The impression left by an out-of-control fire racing through communities can be one of random destruction, with one house, or a whole block, burned to the ground and the next one spared for no apparent reason.

In fact, according to the Times analysis - which covered homes destroyed by the deadliest of the blazes, San Diego County's Cedar fire - houses built since 1990 were far less likely to burn than those constructed in any previous decade. Houses built during the 1990s were damaged or destroyed at less than half the rate of houses built earlier."

The communities and homeowners covered by this plan have, for the past 40 years, had recommendations that can be (and have been) taken to reduce the ignitability of structures. An outcome of the 1961 Bel Air fire was publication of the "**Fire Safety Guides for California Watersheds**" by the County Supervisors Association of California in 1965. These recommendations have been updated through the years. The current version of these "Fire Safe Guides" is "**Structural Fire Prevention Field Guide for Mitigation of Wildfires**" and can be found at <http://osfm.fire.ca.gov/structural.html>.

These recommendations for ignition resistant building construction include: ☉ Roofing ☉ Eaves & Balconies ☉ Exterior Walls ☉ Rafters ☉ Windows ☉ Doors ☉ Attic ventilation openings ☉ Underfloor Areas

In response to the persistent loss of life and property in wildfires the most important of the recommendations is now a requirement. All new buildings, and significant re-roofing of existing buildings in the communities covered by this plan are required to have ignition resistant roofing (California Building Code §1503).

Additional information regarding Structural Ignitability may be found on the Internet at http://www.nps.gov/fire/download/pub_public_wildlandfirethreat.pdf