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Of Dams and Water Buffaloes

California Water Politics

By FELICE PACE

California Governor Schwarzenegger wants to build two new dams - Sites and Temperance Flat. They are being sold as necessary to cope with the reduction in Sierra Nevada, Cascade and Klamath Mountains snowpack expected as a result of climate change. New and "enhanced" storage are being marketed by Lester Snow, director of California's Department of Water Resources (DWR) as part of a "portfolio approach" which, in addition to "enhanced" storage, calls for urban water conservation, better groundwater facilities, improved wastewater processing and research into lowering the cost of desalination. The dams are to provide increased capacity in order to catch earlier runoff that - according to climate change data and predictions - will no longer be held in mountain snowpack.

Schwarzenegger and Snow are counting on the climate change predictions to be fairly accurate. If the actual climate does not follow the predictions, the new and "enhanced" reservoirs might never fill. Furthermore, increasing surface storage would result in more extensive water loss through evaporation. In 1998 the measured evaporation from California reservoirs was about a million acre feet - that's enough water to cover a million acres of land with a foot of water. That's a lot of water but the amount will rise if new and "enhanced" reservoirs are developed. Furthermore, if climate change results in higher summer temperatures evaporation from all reservoirs will increase.

The Schwarzenegger/Snow "portfolio approach" ignores the states largest "reservoir" - upland forest soils - and its biggest water user - irrigated agriculture. Let's look at the forests first.

Upland forest soils in the Sierra Nevada, Cascade and Klamath Mountains are the states largest reservoir. Healthy forest soils are on average about 1/3 empty spaces. In the winter wet season these spaces fill up with water which is released slowly to springs, streams and groundwater during the summer/fall dry season. Road building and logging are known to compact forest soils - reducing their ability to store water.

Increases in flood flows in streams and rivers and a corresponding decreases in base flow as a result of intensive logging are well documented in research and by experience on the

ground. But apparently no one in the California state establishment is looking at how upland California forests should be managed to restore the ability of California's forest soil reservoirs to store water. The state is not even looking at hard research that tells us we can maximize snowpack retention by limiting clearcuts to no more than an acre.

The failure to address upland management in the "portfolio approach" may have something to do with the fact that the vast majority of Sierra Forests are owned by Sierra Pacific Industries – a private forest products company that is California's largest landowner.

The other big California forest "owner" – the Forest Service – has a research focus on climate change that also ignores the forest soil reservoir. Instead Forest Service climate change scientists prefer to look at how climate change may impact fire behavior. Few who know Forest Service's history and culture are surprised that the agency's preferred response to climate change is more logging to "fire proof" our forests.

California officials are also ignoring the state's #1 water consumer – irrigated agriculture. Irrigation engineers tell us that – depending on current irrigation methods used – agricultural operations in California can reduce consumptive water use by 20% to 70% by installing modern irrigation methods and adopting modern irrigation management. This leads one to suspect that California's water supply "crisis" has been created or exaggerated in order to convince California taxpayers to build new dams and reservoirs. Since California irrigation interests are already leasing water to urban water agencies, they stand to gain billions if new reservoirs are built.

Thus it comes as no surprise that one of the most vocal backers of the Schwarzenegger/Snow "portfolio approach" is the California Farm Bureau (CFB) – an organization that has never seen a dam it did not like. The proposed Sites dam/reservoirs is very near the site of the Paskenta-Newville dam proposed back in the early 70's when Ronald Reagan was California's governor. That reservoir was intended as the terminus of a tunnel to transfer Northcoast California water to the Central Valley where it could be used to expand corporate agriculture. Conspiracy theorists will be tempted to see the Sites dam/reservoir proposal as part of a long-term CFB strategy to get a hold of more Northcoast water. If the new reservoir is built but there is not enough water to fill it calls to transfer more Northcoast water south may gain new impetus.

In the 1970s Northcoast California leaders rebuffed efforts to send more Northcoast/Klamath water south. In 1982 California voters also defeated an initiative to build the "Peripheral Canal" which was designed to send more water from the Sacramento River south. Voters correctly saw the reservoirs and canal as water grabs by irrigation and other Southern California interests.

One lesson in this history is that corporate agriculture and its operatives in the Farm Bureau Federation and California state government can be beaten back but never defeated. I guess that's why they call them "water buffaloes". The water buffaloes are back now riding the climate change wave. It remains to be seen whether California citizens will once again see through the propaganda and defeat the latest effort to move more Northern California water south.

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