Forest managers told to protect rivers

By Dana M. Nichols, Stockton Record

McCLELLAN — State and federal scientists met here this week to consider something most Californians take for granted: The health of the rivers flowing from the Sierra Nevada.

It may seem obvious that the humans who drink that water and the fish who swim in it benefit if it is clean and plentiful. Yet it is only recently that the officials in charge of the place where those waters are born have had marching orders to make sustained flow of those rivers a priority.

"The national forests are located in the headwaters of the major rivers," said Barry Hill, a U.S. Forest Service hydrologist who spoke Wednesday during the opening session of a dialogue between government scientists and advocates for various other groups including anglers, conservationists and the residents of rural counties.



The Upper Truckee River is part of the Lake Tahoe Basin Management Unit. Photo/LTN file

Under the new National Forest Service rule for creating forest

management plans, the work is being done publicly and is supposed to take into consideration the long-term sustainability of the forests and of the economy.

Last year, the Forest Service adopted a new rule for forest planning that requires forests to make sustainability a priority, and defined that as making sure that the needs of the present generation are met "without compromising the ability of future generations to meet their needs."

That means that for the first time, forest managers are required to adopt practices intended to ensure just as much clean water for fish and people in the future.

In contrast, the Forest Service previously followed a "multiple use" approach that tried to balance the demands of interests such as logging, ranching, recreation and water, but was not necessarily focused on long-term sustainability.

Also, for the first time, the new rule emphasizes the sustainability of human communities as integral to the health of forests and rivers.

"Who knows it better than the people?" said Jo Ann Fites-Kaufman, an ecologist on the planning team for the Forest Service's Pacific Southwest Region that serves forests in California.

Forest management has a huge impact on water.

Scientists say many forests are overgrown after decades of fire suppression by humans. That means they tend to burn hotter when they do burn. Hotter fires do more damage to plants and soils, allowing sediment to flow into reservoirs and reducing the ability of soils to hold snowmelt and release it slowly.

Other human activities such as road building, cattle grazing and mining also can pollute rivers or reduce their flows. And

then there's climate change, which scientists say is reducing average snowpack and sending more precipitation as rain.

Yet it was clear during Wednesday's session that coming to a consensus on what to do about all these changes will be difficult.

One current debate, for example, is whether forest thinning projects should emphasize the use of mechanical cutting by human crews, or instead rely more on periodic fires, whether set naturally by lightning or deliberately by humans.

Conservation groups tend to advocate for more fire and less cutting. Their argument: the road networks required for cutting contribute eroding sediment into rivers and fragmenting habitat for fish and other wildlife. Also, Sierra Nevada plants and wildlife need the periodic fires to replenish nutrients in soils and support many plant life cycles.

"Mechanical treatment alone can not replace the ecological function that fire plays," said Greg Haller of Pacific Rivers Council, conservation director for Pacific Rivers Council.

Yet there are scientists who say the net benefit of mechanical cutting outweighs the harm done by machines and roads. At the same time, many mountain communities are benefiting from the jobs created by forest thinning projects.

Bill Wickman of the Sustainable Forest Action Coalition advocates on behalf of rural communities seeking to put more people to work restoring forests. Wickman said lighter cutting machines available in recent years do much less damage to forest soils.

Questions remain over the future of cattle grazing in the Sierra. Conservationists at Wednesday's meeting expressed frustration at spending money to repair mountain meadows only to see those meadows trampled and degraded the following year by cattle.

Forest officials admit that they feel pressure to allow continued grazing despite the problems.

"There are some concerns about grazing," said Hill, the Forest Service hydrologist. "The status quo is not working very well."

Inyo, Sequoia and Sierra national forests will be the first three in California to revise their forest management plans under the new rule. Forests farther north, including Stanislaus, will follow suit in coming years.

Fites-Kaufman noted another change under the new planning rule: All the development of the proposed plans is being done publicly and documents in process are posted online.

Previously, forest managers drafted the plans in private and once they were largely finished held public meetings during the environmental review stage.