

# Man Still Pays for Ignoring Nature

## Floods were made worse by unwise human action

By Edgar Wayburn

**T**HE CHRONICLE'S coverage of recent storm damage in California is a grim and sobering litany of what can happen when humans break the laws of nature. All the accounts make it clear that the worst damage from the flooding early this year is directly or indirectly attributable to unwise human activity.

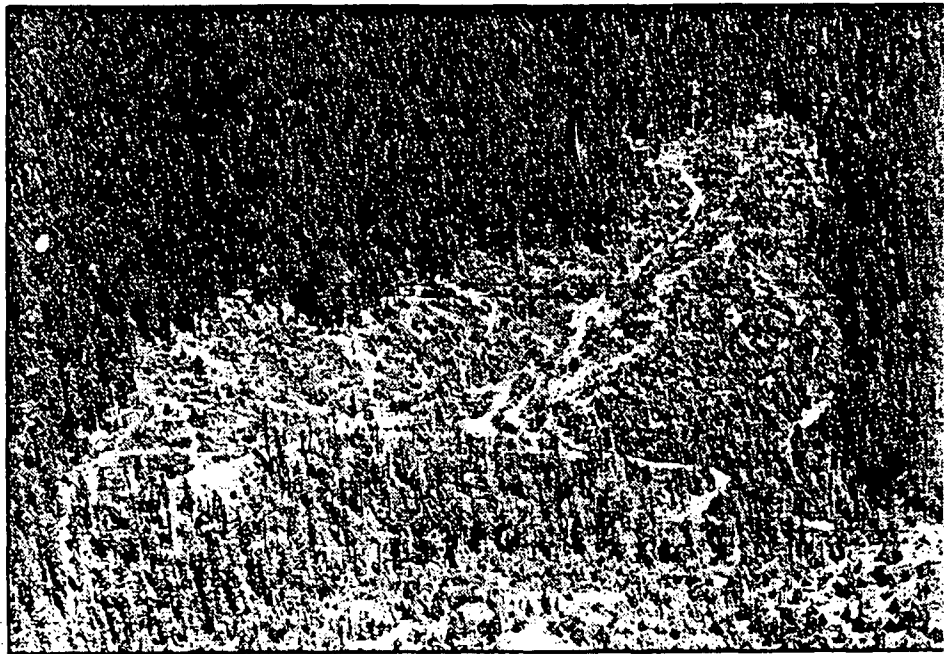
So many human actions that seem practical and desirable at the moment, turn out when viewed within a broad ecological and historical framework to have unforeseen or disastrous consequences. We need to reconsider our mad rush to impose our lasting alterations upon the natural landscape — to pave over once natural areas, divert water courses and otherwise stamp our mark on the natural course of events.

The severity of the flooding is the result of rampant clear-cutting of steep hillsides. Clear-cutting of forests, particularly on steep hillsides, prevents the fragile land from holding its moisture, so that rainwater pours off the hillsides far faster during and after a storm.

This disastrous effect was brought home to me long ago. The "100-year storms" of 1952 and 1955 caused the loss of several hundred 250-foot to 300-foot venerable redwood trees in Humboldt Redwood State Park. Although great care had been taken to protect the beautiful bottom land redwood forest, no protection had been given to the forested slopes. The torrents off the logged hillsides caused Bull Creek to swell and the rushing water to undermine the roots of the giant trees.

When I visited the scene shortly afterward, I was shocked by the devastation. My observation of the disaster and realization of its significance caused me to advocate and lead the Sierra Club campaign for a Redwood National Park and caused our insistence that the protected park area extend from ridge to ridge along a 20-mile stretch of Redwood Creek. This effort was successful in the establishment of Redwood National Park in 1968 and its expansion in 1978.

We learned this lesson on the far



MICHAEL MALONEY/THE CHRONICLE

A clear-cut logging operation near the Headwaters forest

northern coastal slopes of California, but the knowledge has not spread, has not been assimilated, has not been taken to heart by the managers or loggers of the Sierra Nevada forests or by the developers of the floodplains in the Sacramento Valley.

Adding to the injuries to hillsides in the upriver areas from the recent flooding was serious overgrazing on range lands. Both on private ranches and on public grazing allotments within national forests, the dominant theme has been how to find fodder for yet a few more cattle; we are a long way from making the ecological health of the land itself the most important objective of land management. Now, the floods show us that overgrazing has side-effects to the land that are good for no one.

Wetlands along streams and rivers and in valleys provide the natural sponging action as well as an important overflow basin to regulate the water level in low lying areas. They can no longer perform this essential function if they have been drained, filled and built over.

The extent of the impacts of the flooding have been augmented dramatically by an extraordinary increase of construction in floodplains. Developers count on the taxpayers, in the guise of the federal government, to cover the costs of rebuilding homes that should never have

been built in the floodplains.

The strong possibility exists that the severity of the rains that led to the flooding can itself be seen as a consequence of human action: climate change gradual and insidiously being brought about by increased carbon-dioxide emissions is altering weather patterns and adding to the violence of their manifestations.

Interestingly and ironically, some of the worst flooding occurred where levees were old, weak and unmaintained. Why had not more attention been paid to their upkeep and reinforcement?

And, now, as a further item of interest and irony, we note that, in these recent floods, the only river which did not cause flooding in the Sacramento area was the American. This item should be kept firmly in mind when agitation is rekindled as it most surely will be — in the 105th Congress for an Auburn Dam on the American River. Not only would such a dam be environmentally disastrous, it also unneeded. Indeed, it is possible that attention to this unsound project on the part of politicians and government officials may have diverted attention from the rebuilding and strengthening of existing levees.

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