



WESTERN REGION TECHNICAL ATTACHMENT

NO. 87-50

December 15, 1987

COMMENT ON WALLS OF WATER -- DEADLY FENCES

The following comment from Chris Hill, DMIC at WSFO Boise, makes a good point about another way that a "wall of water" can be released and cause a flash flood problem.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Weather Service Forecast Office
3905 Vista Avenue
Boise, Idaho 83705-0126

December 7, 1987

TO: Director, Western Region *G 10/9*
Attn: W/WR3

FROM: *Christopher D. Hill*
DMIC

SUBJ: WRTA 87-48

I read with great interest the latest Western Region Technical Attachment, WRTA 87-48, which is a reproduction of a Southern Region Tech Attachment.

The article is very well written. It does an excellent job of sensitizing field forecasters to the problem and proposed a possible way which "walls of water" can develop. I am concerned, however, that the article's failure to mention the phenomenon of "debris-loading" may result in erroneous conclusions by some readers. This is especially true in light of the article's statement that "They (walls of water) can only occur with intense and copious rainfalls over a drainage".

Even light to moderate precipitation can carry considerable debris in a normally dry channel. In some cases the debris may produce a temporary natural dam. Subsequent run-off or precipitation above this obstruction can cause the dam to break and release a "wall of water".

A few years ago, such a debris dam, aided by the prior work of a few industrious beavers, developed near one of Idaho's state highways. Excellent assessment of the situation by county Disaster Services officials helped WSFO Boise issue a flash flood warning nearly one hour prior to the "dam failing" and a "wall of water" washing across the highway.

