

February 8, 1955

DEPUTY DIRECTOR

REGIONAL MANAGER, REGION II

**BENEFITS FROM STREAM FLOW AND LAKE LEVEL MAINTENANCE DAMS CONSTRUCTED
IN 1954**

Recently we transmitted a report of costs in connection with the 1954 stream flow maintenance dam program and indicated in our letter of transmittal that we would submit a summary of benefits at a later date. These benefits are listed below.

1. Gilmore Lake Stream Flow Maintenance Dam, El Dorado County

This dam on Gilmore Lake will supply water through the dry season of the year to maintain flows to one and three-quarter miles of the unnamed outlet stream of Gilmore Lake. This unnamed outlet stream flows in to Glen Alpine Creek which in turn is tributary to Fallen Leaf Lake.

Flows from Gilmore Lake will supplement flows in Glen Alpine Creek derived from existing stream flow maintenance dams on Susie and Heather lakes. This supplemental benefit to Glen Alpine Creek involves two and one-half miles of stream below the confluence of the unnamed outlet stream from Gilmore Lake. This additional storage in the Glen Alpine Creek storage also has a tendency to improve flows in Taylor Creek below Fallen Leaf Lake Dam which is owned by the U. S. Forest Service. At the present time, we are negotiating with the U. S. Forest Service for a constant release of water from the Fallen Leaf Lake Dam for maintenance of fish life in Taylor Creek. Taylor Creek is one of the three most important spawning tributaries to Lake Tahoe.

2. Spider Lake Dam, El Dorado County

The unnamed outlet stream of Spider Lake is tributary to the Rubicon River but because of its steep gradient it has negligible value for fish life. However, the Rubicon River is an extremely important trout stream which suffers severely from inadequate water flows in late summer, and therefore it is planned to use the Spider Lake water storage for supplementing late summer flows in the Rubicon River. The water stored here will add to benefits derived from dams on Clyde, Lois, and Schmidell lakes located higher up in the drainage. As a group these dams improve over 40 miles of the Rubicon River. Without these dams the Rubicon River would go dry in most years. Additional storage is still needed to improve the situation on this river but these dams which have

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already been constructed have prevented the river from going totally dry in the last few years. It is hoped that additional storage may be obtained on Rockbound, Buck Island, and Highland lakes in the near future.

3. Maria Lake, Nevada County - Lake Level Maintenance Dam

This shallow lake lies in a heavily used recreation area near Donner Summit and is subject to level reduction through seepage losses which detract from its suitability as a trout producing lake. The small dam at the outlet will raise the water level about one foot and should prevent seepage losses, resulting in an anticipated over-all average lake level increase of about three feet.

The Truckee Outdoor Sportsmen Club requested that screens be placed on this dam to prevent egress of fish from the lake into the outlet stream where they perish in large numbers each year when the stream goes dry. Since the Sportsmen Club entered into a written agreement with us whereby they will clean, maintain, and replace these stationary screens it relieves the Department of all responsibility for maintenance which we would not ordinarily undertake in situations of this nature. These screens were constructed from scrap material at a very nominal cost. If the screens are maintained properly by the Club it should result in better fish populations in the lake and a reduction of fish losses in the outlet stream.

4. Upper and Lower West Lakes, Nevada County - Lake Level Maintenance Dam

The dams on the outlets of these lakes were constructed under the same program as described above for Maria Lake and the same benefits are anticipated.

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Benefit From Stream Flow And Lake Level Maintenance
R2F El Dorado. Spitzer Lake.