

**SNAKE RIVER
AREA OFFICE**

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Payette River Operations

Cascade and Deadwood Releases - Water is released from Cascade and Deadwood reservoirs for four purposes. These are:

1. irrigation deliveries
2. power production
3. flood control releases
4. instream flow including salmon flow augmentation

Irrigation Releases - Irrigation releases are ordered as necessary between April 1 and October 31 whenever the natural flow of the Payette River is insufficient to meet irrigation demand. Irrigators place their water orders with the Water District 65 Watermaster and the watermaster delivers the ordered water in accordance with state law. When the natural flow is insufficient to meet a given water order the irrigator must have a storage contract in one of the upstream reservoirs in order to receive delivery of storage water. In some cases irrigators without storage contracts may receive stored water if they lease water through the Payette rental pool.

The watermaster places a water order with the Bureau of Reclamation. Reclamation adjusts the reservoir releases as necessary to complement the natural flow so that the downstream flow at Black Canyon dam will match the watermaster's order.

Reservoir releases are managed so that the available irrigation storage in Deadwood Reservoir is usually utilized in the months of July and August. This minimizes the draft of Cascade Reservoir during these months in order to benefit recreation and water quality at Cascade Reservoir. After Labor Day, in a typical water year, the release from Deadwood is decreased and the release from Cascade is increased. Late season irrigation demand is met primarily with releases from Cascade Reservoir.

Payette Lake and three smaller lakes upstream from Payette Lake are managed by the Lake Reservoir Company. The Lake Reservoir Company is private and the operation of the upstream lakes is not managed by the Bureau of Reclamation. Payette Lake is kept full until early September in accordance with a court decree. Water is released from Payette Lake in September and October.

Flood Control - The Bureau of Reclamation operates Cascade and Deadwood reservoirs for flood control on an informal basis. The goal of the flood control operation is to limit the flow at Horseshoe Bend to 12,000 cfs. In good water years water may be released from Cascade Reservoir in late winter and early spring to provide space to contain high peak runoff later in the spring and early summer.

Since much of the Payette basin is unregulated by reservoirs the flow at Horseshoe Bend sometimes exceeds 12,000 cfs even when reservoir releases are at a minimum. In recent years flows of 20,000 to 25,000 cfs at Horseshoe Bend would have been observed in the absence of Reclamation flood control operations.

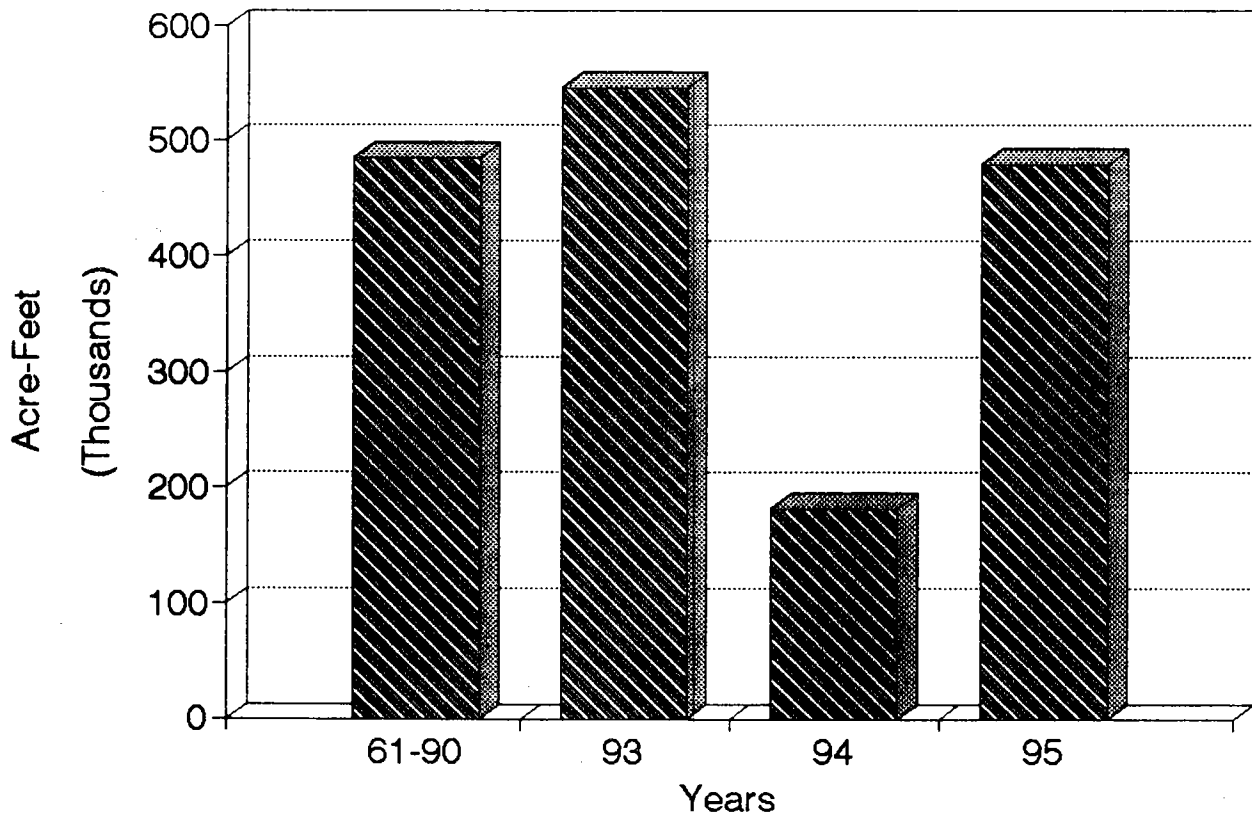
Power Production - The Idaho Power Company operates a power plant at Cascade Reservoir. This plant has a year-round natural flow water right for 200 cfs. The Bureau of Reclamation operates a power plant at Black Canyon Dam near Emmett. Typically, Reclamation uses the available natural flow or downstream water orders for power generation at Black Canyon.

Instream Flow and Salmon Flow Augmentation - The Bureau of Reclamation releases 50 cfs from Deadwood Reservoir throughout the year whenever there are no irrigation storage releases from the reservoir in order to maintain a minimum streamflow in the Deadwood river. The 200 cfs release for power production by the Idaho Power Company at Cascade Reservoir has the effect of providing a minimum instream flow in the North Fork of the Payette River.

In recent years water has been released on the Payette for salmon flow augmentation. Reclamation has identified a total of 95,000 acre feet of uncontracted storage for this purpose, approximately 70,000 acre feet in Cascade Reservoir and about 25,000 acre feet in Deadwood Reservoir. Additionally, each year irrigators have the option of leasing storage water for release for salmon flow augmentation through the auspices of the Watermaster and Water District Rental Pool. Irrigator's water is not released for salmon flow augmentation except on a voluntary willing seller basis.

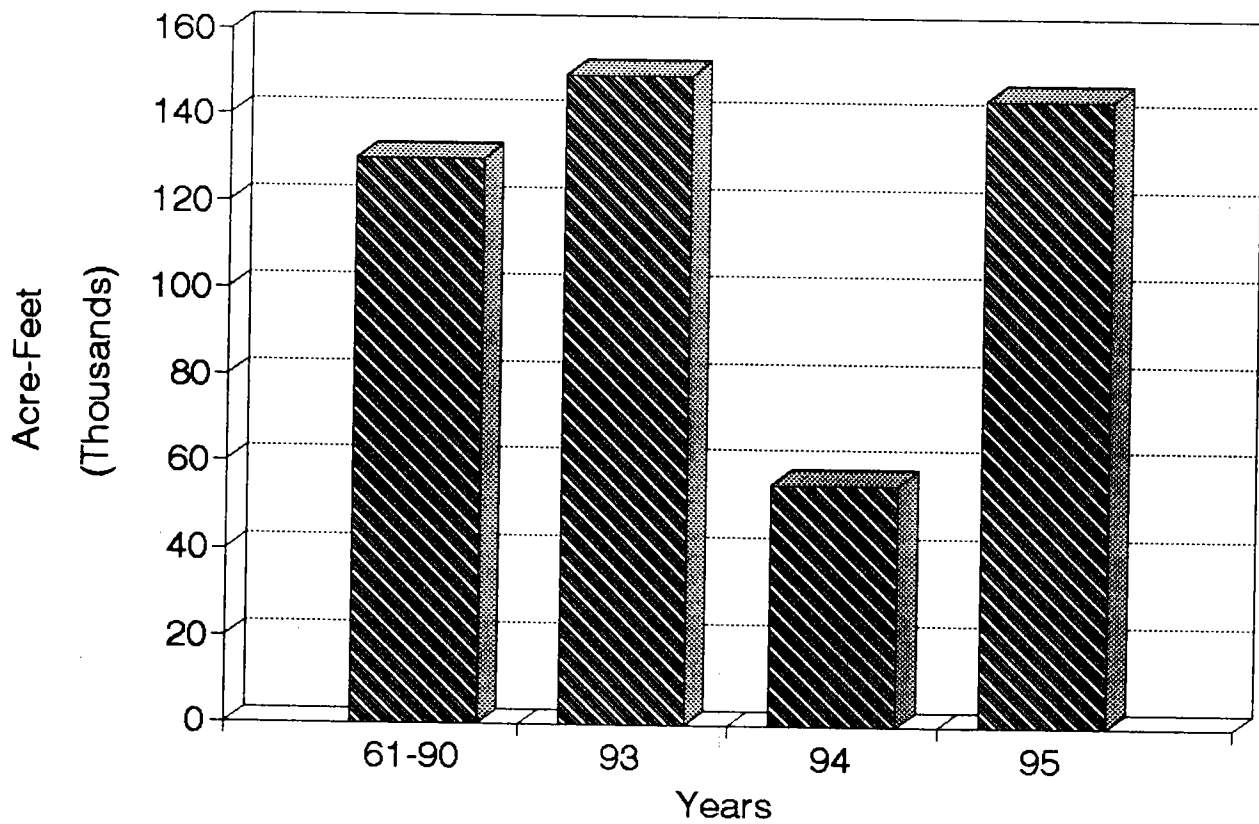
Runoff at Cascade Reservoir

April 15 through July 15



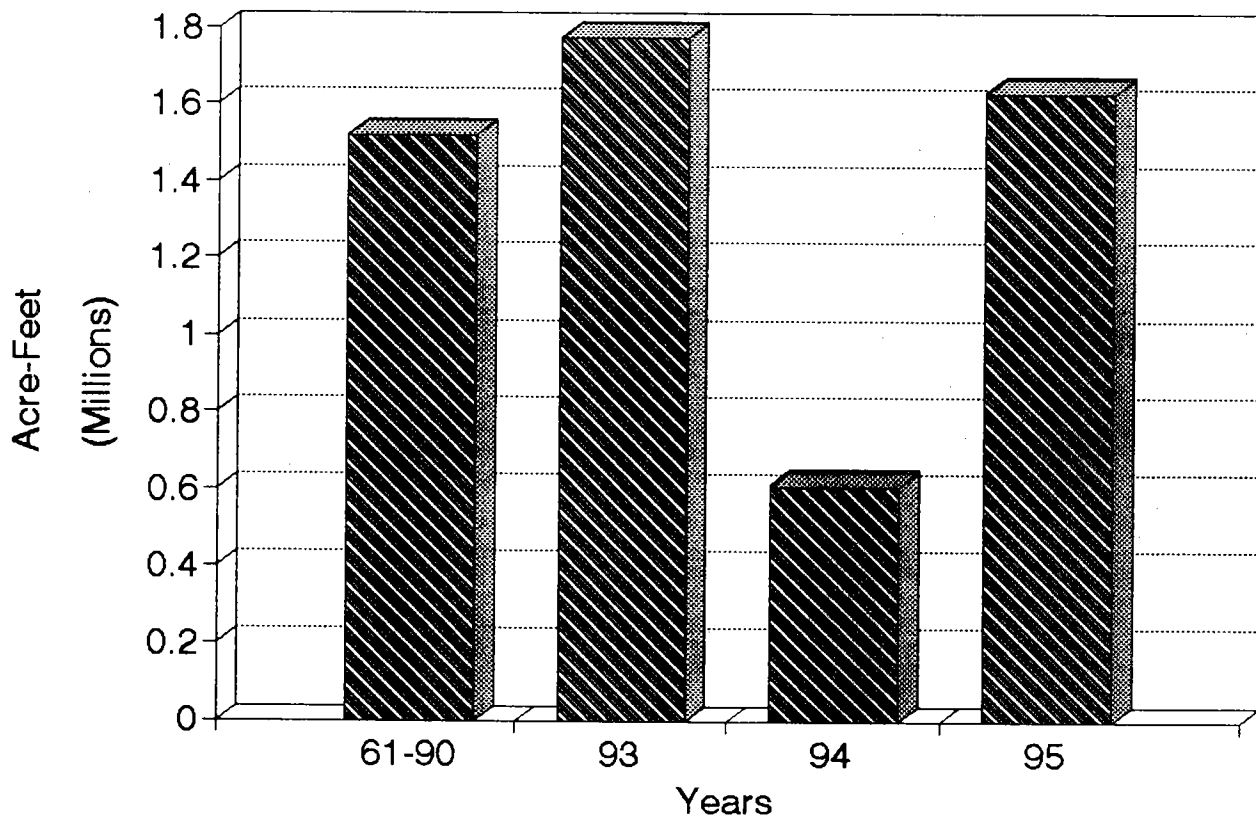
Runoff at Deadwood Reservoir

April 15 through July 31



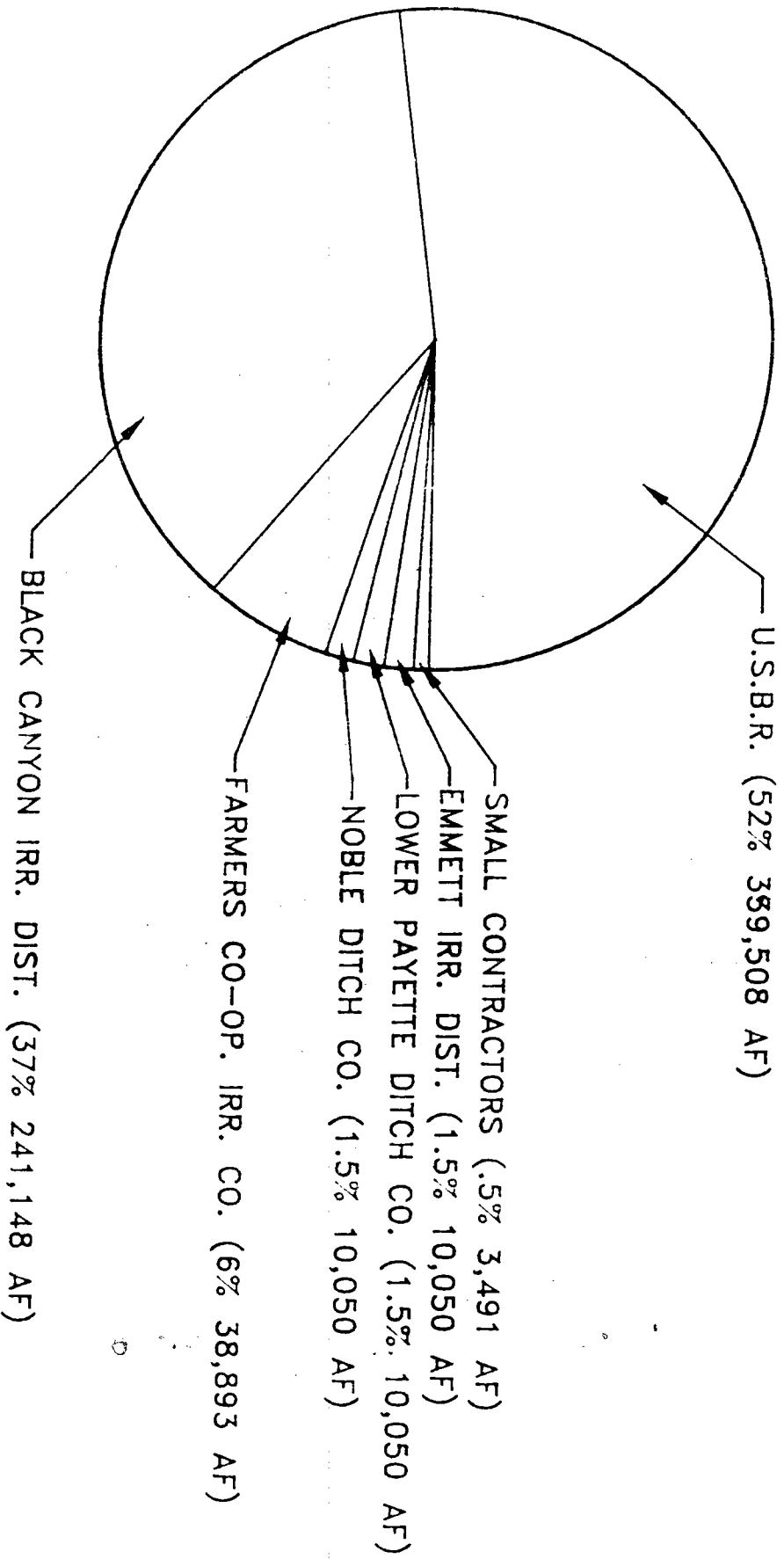
Runoff at Horseshoe Bend

April 15 through July 31



CASCADE RESERVOIR

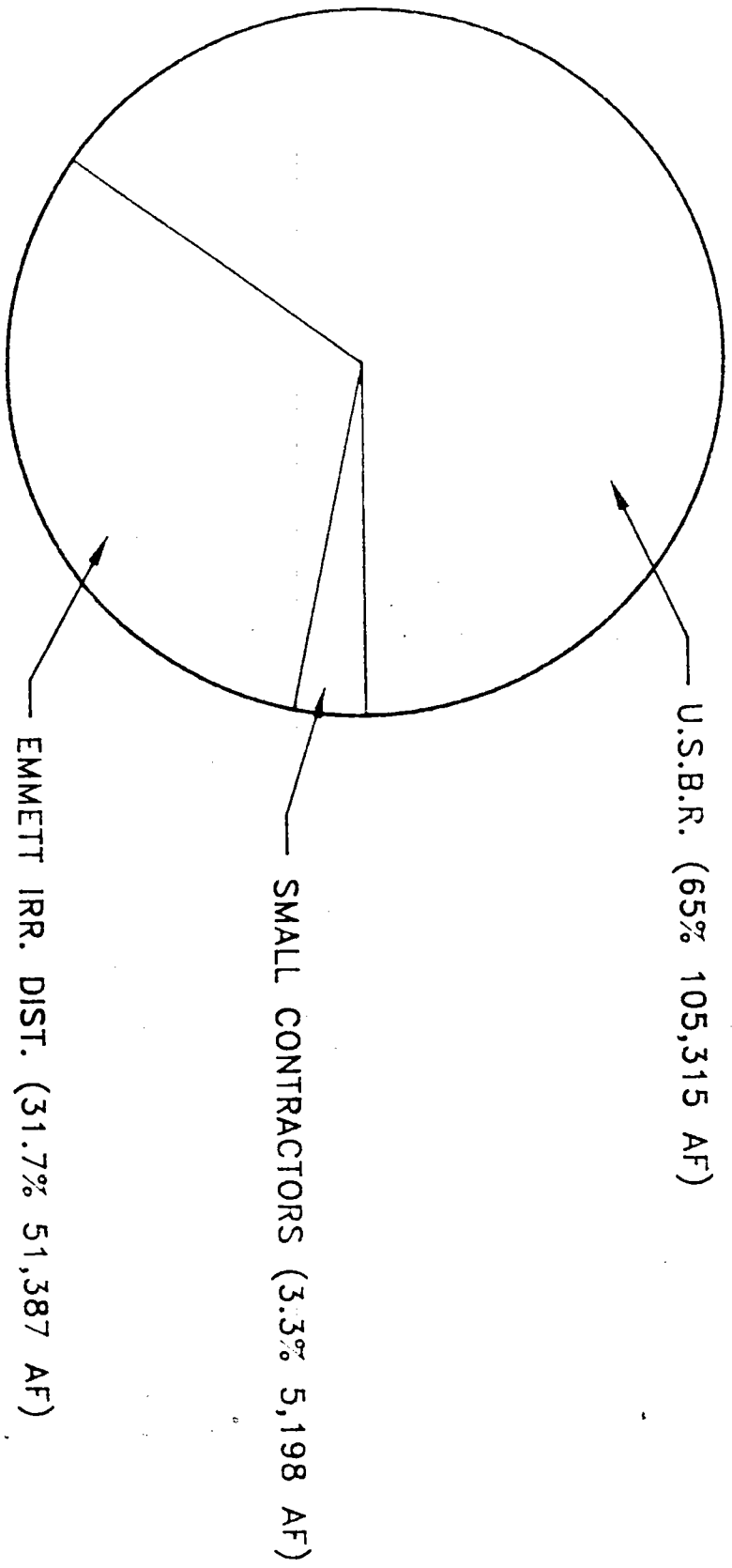
653,190 ACRE-FEET



TOTAL ACTIVE CAPACITY

DEADWOOD RESERVOIR

161,900 ACRE-FEET

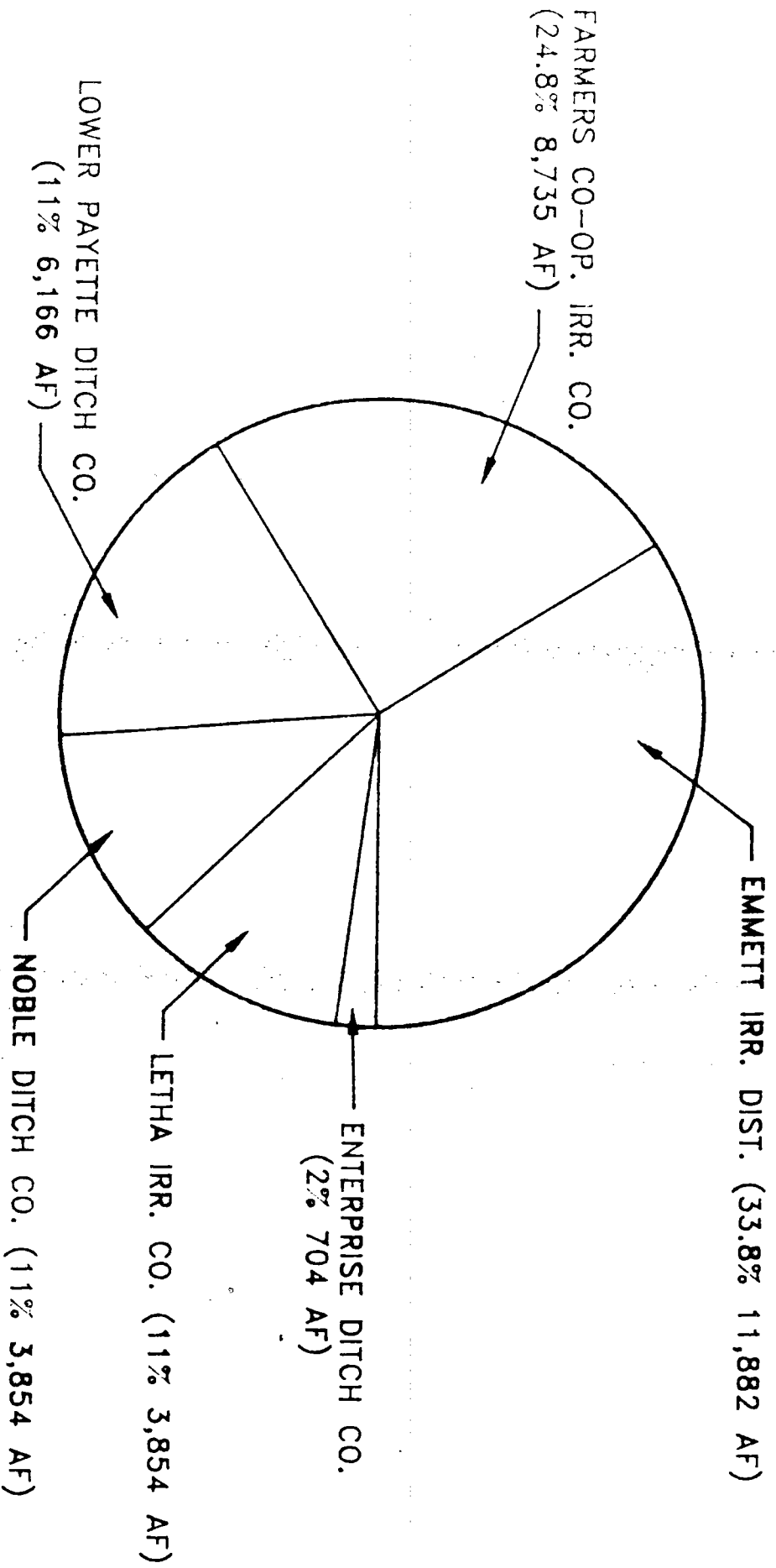


TOTAL ACTIVE CAPACITY

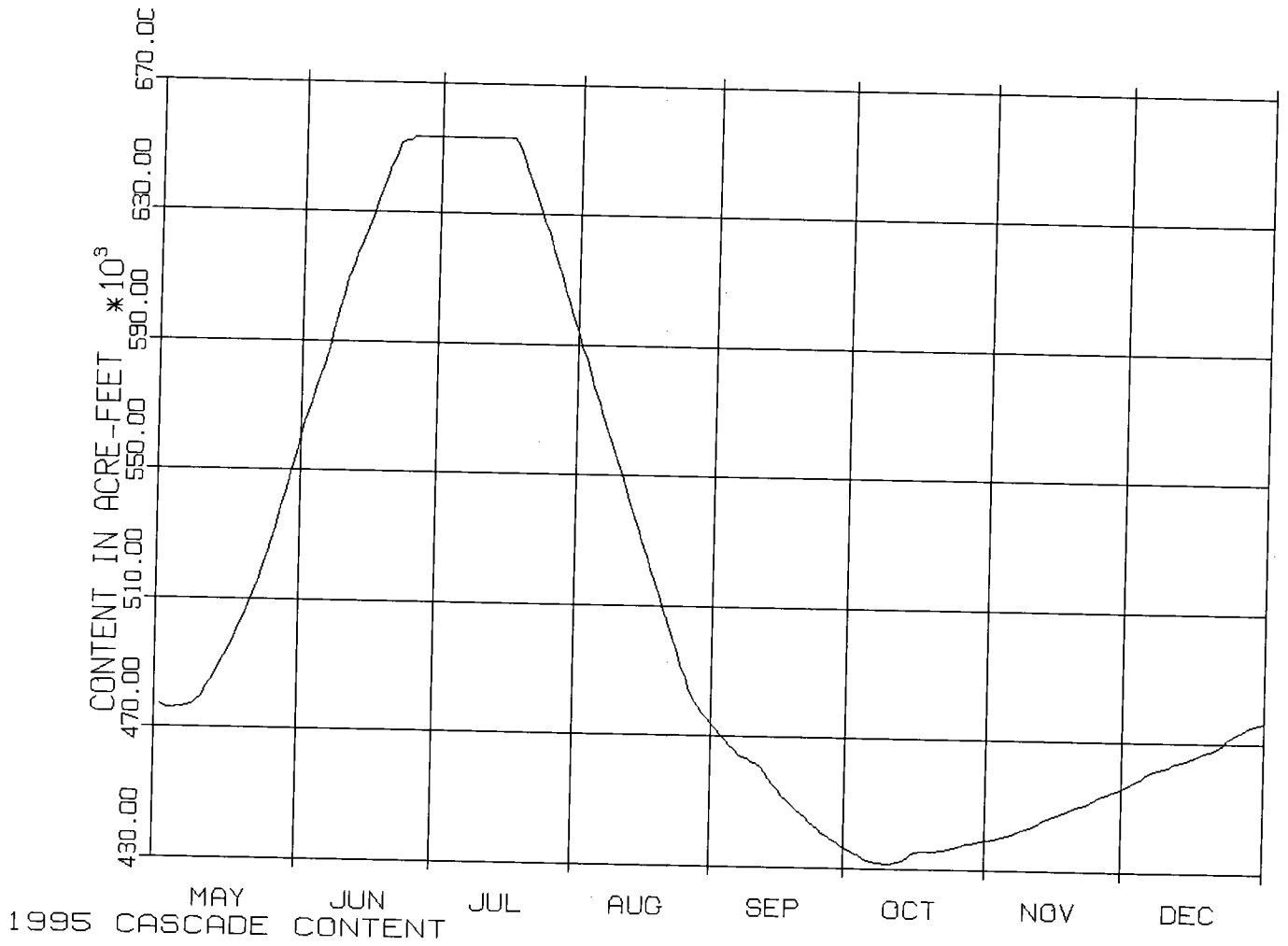
LAKE RESERVOIR COMPANY

(Payette Lake, Upper Payette Lake, Granite Lake, Box Lake)

35,195 ACRE-FEET



TOTAL ACTIVE CAPACITY



min in 1994: 280 active

