

NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB PROGRESS REPORTS

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2016

WASHOE LAKE
WESTERN REGION



**NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION
ANNUAL PROGRESS REPORT**

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**NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION
ANNUAL PROGRESS REPORT**

State: *Nevada*
Project Title: *Statewide Fisheries Program*
Job Title: *Washoe Lake*
Period Covered: *January 1, 2016 through December 31, 2016*

SUMMARY

The expanded mail-in, angler questionnaire data for 2015 estimated use for Washoe Lake at 146 anglers. Anglers fished for 1,263 days and caught 6,817 fish. Resulting angler success was 5.4 fish per day, the highest on record since this program started in 1980. This data is somewhat misleading as Big Washoe Lake was close to 100% dry in 2015 and large fish die offs were observed. Most likely, anglers fished Little Washoe Lake where fish were confined to a smaller, more angler friendly body of water. Only eight people reported fishing in 2016 and caught a large numbers of fish. Unfortunately, when a limited amount of data is expanded, it produces unreasonable results.

Washoe Lake benefitted from a near 100% of average winter (2015-2016) and maintained some water for the entire year.

BACKGROUND

Washoe Lake is a eutrophic, shallow body of water located in western Nevada between Reno and Carson City. It covers an area of 5,800 acres at spillway stage and consists of Big Washoe Lake, Little Washoe Lake, and the marshy area connecting the two. The shallow depth of the big lake (maximum 12 ft) coupled with winds nearly every day in Washoe Valley account for its high turbidity.

Drought cycles and resulting low water conditions continue to negatively impact this fishery. Recent droughts have occurred during 1976-77, 1987-1994, 2000-2004, and 2012-2015. The fishery at Washoe Lake does not fare well during these periods and many of these droughts have either dramatically reduced or nearly eliminated fish populations. Two fish eradication projects at Washoe Lake (1960 and 1991) targeted nongame fish species including yellow perch, bullhead catfish, common carp, and tui chub. Neither of these projects was successful and, with the exception of yellow perch, all species still occur in both lakes.

The fishery at Washoe Lake is typically comprised of common carp, bullhead catfish, tui chub, Sacramento perch, white bass, and channel catfish. These species reproduce in the lake and populations are self-sustaining under favorable environmental conditions. Due to fluctuating water levels and subsequent declines in fish populations, white bass and channel catfish are supplemented with either hatchery-produced fish or wild fish collected from other local waters as needed to boost the fishery.

OBJECTIVES

- Conduct a general assessment of angler use, success, and harvest through mail-in angler questionnaire data.
- Conduct a general habitat assessment through visual observations of water quantity (lake level) when onsite.
- Augment the reservoir with 2,500 channel catfish if available

PROCEDURES

Conduct a general assessment of angler use, success, and harvest through opportunistic angler contacts and mail-in angler questionnaire data. Angler use and success was assessed through the statewide Mail-in Angler Questionnaire Survey. Angler questionnaire data was derived from a survey mailed to 30,000 license purchasers.

Conduct a general habitat assessment through visual observations of water quantity (lake level) when onsite and using USGS gage data. General assessments of habitat conditions were completed during the year through visual observations of Big and Little Washoe lakes.

Augment the reservoir with 2,500 channel catfish if available. No channel catfish were available for stocking into Washoe Lake in 2016.

FINDINGS

Conduct a general assessment of angler use, success, and harvest through mail-in angler questionnaire data. The expanded mail-in, angler questionnaire data for 2015 estimated use for Washoe Lake at 146 anglers. Anglers fished for 1,263 days and caught 6,817 fish. Resulting angler success was 5.4 fish per day, the highest on record since this program started in 1980. This data seems to be somewhat misleading as Washoe Lake was close to 100% dry in 2015 and large fish die offs were observed. The reason for the extremely high estimated catch calculations is that only a small number of people reported fishing Washoe Lake in 2016 (eight) but those few people reported to have caught large numbers of fish. It is believed that these anglers were fishing Little Washoe Lake where the remainder of the fish in the system had been confined to a smaller, more angler friendly body of water. During the survey, anglers report fishing Washoe Lake and there is no distinction to which lake, Big or Little, is fished.

Conduct a general habitat assessment through visual observations of water quantity (lake level) when onsite and using USGS gage data. Visual assessments were made at Washoe Lake on almost a weekly basis during 2016. These assessments indicated that the big lake benefitted from a near 100% of average winter (2015-2016) and maintained water for the entire year. As a number of fall and winter storms landed in the region in late 2016, the lake level rose rapidly and finished

the year at the highest level seen since 2013. The water level reached a maximum of four to five feet deep.

Augment the reservoir with 2,500 channel catfish if available. No channel catfish were available for stocking into Washoe Lake in 2016.

MANAGEMENT REVIEW

With relief from the drought being realized in 2016 being on the heels of a winter that was nearly 100% of the long-term average, the rebuilding of the Washoe Lake fishery has begun. Future stocking of warm water game fish should be the priority for Washoe Lake in order to speed up the process of recovery.

Little Washoe Lake continues to maintain a sport fishery with a variety of game fish. This fishery has become increasingly more important in the recent years due to the drought and subsequent desiccation of Big Washoe Lake. It is expected that the game fish populations in this lake have begun to out-migrate into the big lake and will aid in the rebuilding of that fishery.

It is expected that it will take several years for the fishery to recover with a return to a more normal weather pattern that brings average to above average precipitation to the region.

RECOMMENDATIONS

- Conduct a general assessment of angler use, success, and harvest through mail-in, angler questionnaire data.
- Conduct a general habitat assessment through visual observations of water quantity (lake level) when onsite.
- Augment the reservoir with 2,500 channel catfish if available.

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