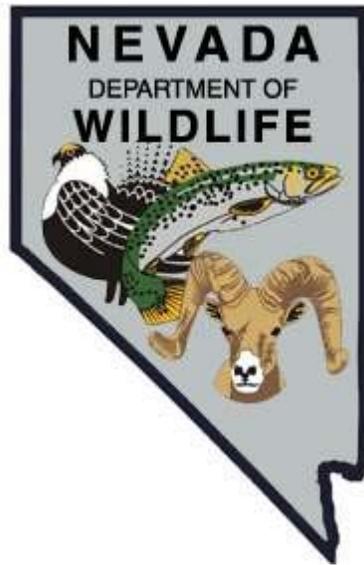


NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB PROGRESS REPORTS
F-20-53
2017

EUREKA COUNTY
SMALL LAKES and RESERVOIRS
EASTERN 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: *Eureka County Small Lakes and Reservoirs*
Period Covered: *January 1, 2017 through December 31, 2017*

SUMMARY

In May of 2017, Tonkin Reservoir was stocked with 505 Eagle Lake strain rainbow trout. The reservoir was electroshocked in April to evaluate the trout carryover after a drawdown occurred in conjunction with the dam construction project that started in August of 2016. A late afternoon electroshocking survey produced several carryover trout, which confirmed that a suitable number of trout survived and maintained the fishery throughout the construction.

BACKGROUND

Tonkin Reservoir

Tonkin Reservoir was constructed in the early 1960's and repairs/upgrades to the dam have been done twice since then. The most recent improvement to the dam occurred in 2008, which increased its height and water level by several feet. The reservoir covers less than 10 surface acres and has a maximum depth of 18 ft. The reservoir sits at an elevation of 6,470 ft and receives water from Denay Creek, which originates from a spring approximately one mile above the reservoir. The reservoir receives 500 to 1,000 hatchery trout every spring and relies heavily on natural reproduction in the inflow creek. Starting in August of 2016, repairs were made to the dam structure by the current landowner, Barrick Goldstrike Mining Company. The water level was reduced for this project to allow work to occur on the outlet structure. After completion of the dam work, the water level was allowed to increase as the fall season progressed.

OBJECTIVES and APPROACHES

Tonkin Reservoir

Objective: General Sport Fisheries Management

Approaches:

- Conduct a pre-stocking evaluation of road conditions and water quality/quantity.
- Conduct a single nighttime electroshocking survey during late summer.

PROCEDURES

Electroshocking surveys are conducted using the electroshocking barge with the fixed probes used as the anode and the barge serving as the cathode. The majority of the reservoir shoreline is shocked due to the small size and the need to evaluate the entire reservoir.

FINDINGS

Tonkin Reservoir

After construction was completed on the dam structure, water conditions were suitable for trout stocking by spring, and on May 4, there were 505 Eagle Lake strain rainbow trout stocked into the reservoir from Spring Creek Rearing Station.

The electroshocking survey of Tonkin reservoir was conducted on April 10, during the late afternoon. This survey was conducted to evaluate the trout carryover after the drawdown and construction that occurred on the dam in the fall/winter of 2016. The survey lasted approximately 20 minutes, which used only 7.2 minutes of electroshocking time and produced 12 rainbow trout that were captured and another five fish that went uncaptured. As this survey was very short and conducted during the daytime, it is expected that fish numbers in the reservoir are much greater than this survey suggests. Additionally, anglers had been reporting fair success rates for trout at the reservoir this spring.

The 12 captured trout averaged 15.6 inches (397.3 mm) total length (TL) and ranged in size from 13.4 to 18.2 inches (340 to 462 mm). All fish were measured and weighed, resulting in three fish (25.0%) in poor condition, five fish (41.7%) in fair condition, three fish (25.0%) in good condition, and one fish (8.3%) in excellent condition. All of the captured fish appeared to be in good condition and it is expected that there will be no impacts to the naturally spawning rainbow trout in the system. Impacts from the construction drawdown may be seen for the next two to three years in the form of lower angler success rates, but the continued hatchery stocking and natural reproduction will easily compensate for any short-term losses.

MANAGEMENT REVIEW

Both approaches for Tonkin Reservoir were completed in 2017, with fish being stocked in May and the electroshocking occurring in April.

RECOMMENDATIONS

Tonkin Reservoir

- Continue to coordinate trout stocking at the reservoir when water levels are conducive.

- Conduct an electroshocking survey in 2019 to monitor the fisheries health.
- Work with BLM and Barrick Goldstrike Mining Company to address the substantial weed problem at the south end of the reservoir.

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Date: January 2018