NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT

FEDERAL AID JOB PROGRESS REPORTS
F-20-50
2014

EUREKA COUNTY
SMALL LAKES and RESERVOIRS
EASTERN REGION

NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION
ANNUAL PROGRESS REPORT

Table of Contents

Contents Page

SUMMARY 1

BACKGROUND 1

OBJECTIVES and APPROACHES 2

PROCEDURES 2

FINDINGS 2

MANAGEMENT REVIEW 3

RECOMMENDATIONS 3

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, 2014 through December 31, 2014*

SUMMARY

In April of 2013, Tonkin Reservoir was stocked with 500 Shasta strain rainbow trout. Objectives for JD Reservoir were not completed as permission to access was denied by the landowner; however, the Tonkin Reservoir survey was completed. Although the Tonkin Reservoir survey was conducted later in the year, it still resulted in a good sample population and the fishery appears to be healthy.

BACKGROUND

JD Reservoir

JD Reservoir, constructed prior to 1955, is on a privately owned ranch, which was purchased by Barrick Goldstrike Mining Company in 2012. The reservoir is located 40 miles north of Eureka and covers approximately 10-12 surface acres, with a maximum depth of nine feet and an average depth of 3.7 ft. Historic surveys, prior to 1988, have documented northern pike, largemouth bass, rainbow trout, brown trout, speckled dace, redside shiner, sucker, and chub in the reservoir. On May 16, 1984, the dam structure failed, completely draining the reservoir. In March of 1985, the dam was reconstructed and presumed void of fish, as it was determined that all the fish had washed downstream. Access for surveys and angling at the reservoir has been restricted for several years, with the last documented survey occurring in 1987, which found only northern pike.

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 that increased the height of the dam 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 is fed by Denay Creek, which originates from a spring approximately one mile above the reservoir. The reservoir receives 1,000 hatchery trout every spring and relies heavily on natural reproduction from the inflow creek.

OBJECTIVES and APPROACHES

JD Reservoir

Objective: General Sport Fisheries Management

Approaches:

- Initiate a meeting with the new landowner (Barrick Goldstrike Mining Company) to discuss future management of the reservoir fishery.
- Conduct a single nighttime, electrofishing survey of three established transects during the summer.

Tonkin Reservoir

Objective: General Sport Fisheries Management

Approaches:

- Conduct a pre-stocking evaluation of road conditions and water quality/quantity.
- Conduct a single nighttime electrofishing survey of three established transects during the summer.

PROCEDURES

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

FINDINGS

JD Reservoir

Contact was made with the landowner, Barrick Gold Corp, in conjunction with a planned survey of the Pine Creek drainage. Access was denied to their properties and the survey was not conducted. If an opportunity arises in the future, it would be worthwhile to pursue this survey to better understand fish species composition in this small reservoir.

Tonkin Reservoir

On April 24, 500 Shasta strain rainbow trout were stocked into the reservoir from Spring Creek Rearing Station.

On September 10, under clear and calm conditions, the electroshocking survey was conducted. The water level was down approximately 1.5 feet and was being regulated by the lowest elevation of the spillway channel. Due to the low water, a single transect was surveyed that encircled the entire reservoir. A total of 84 trout were caught during 722 electroshocking seconds, resulting in a capture rate of 418.8 fish per electroshocking hour. Shocking and netting efficiency was considered fair to good, with approximately 60% to 70% of the fish being captured.

A total of 26 trout were measured and weighed for body condition evaluation, resulting in 10 trout in poor condition (38.5%), 10 trout in fair condition (38.5%), six trout in good condition (23.0%), no trout in excellent condition, and an average rating of fair. The 84 measured rainbow trout ranged in size from 10.5 to 18.3 inches (267 to 466 mm) total length (TL), with an average length of 14.5 inches (367.8 mm).

It does appear that naturally reproduced rainbow trout make up a good proportion of trout in the reservoir, and that approximately 62% of the contacted fish were in fair to good body condition. This body condition rating was lower than past years and could be explained by the timing of the survey. Future surveys will continue to follow the overall health of this reservoir and assess the need to make adjustments to the stocking regime.

MANAGEMENT REVIEW

The two approaches for JD Reservoir were not competed in 2014, due to denied access.

The two approaches for Tonkin Reservoir were completed in 2014.

RECOMMENDATIONS

JD Reservoir

Management decisions and the future of the reservoir as a public fishery will be dependent on the level of involvement allowed by the new landowners. If an opportunity arises to further a relationship that will allow access for survey and public access, efforts should made to take advantage and move forward with the small reservoir as a potential fishery.

Tonkin Reservoir

Resample the fish population in the reservoir in 2016 to evaluate carryover rainbow trout and monitor any changes in the fishery due to increased angling pressure.

Prepared by: Jeff Petersen
Biologist III, Eastern Region

Date: January 2015