

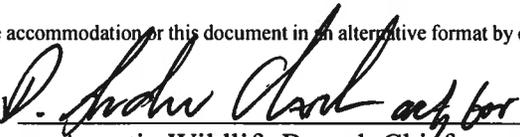


**Elk Tank
Fisheries Management Plan
2019-2029**

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Approved [] by Chris Cantrell  Date: 10/1/19
Aquatic Wildlife Branch Chief

Location

Elk Tank is located on the Williams District of the Kaibab National Forest about 15 miles South of the Town of Williams near Whitehorse Lake at UTM 403324, 3882768.

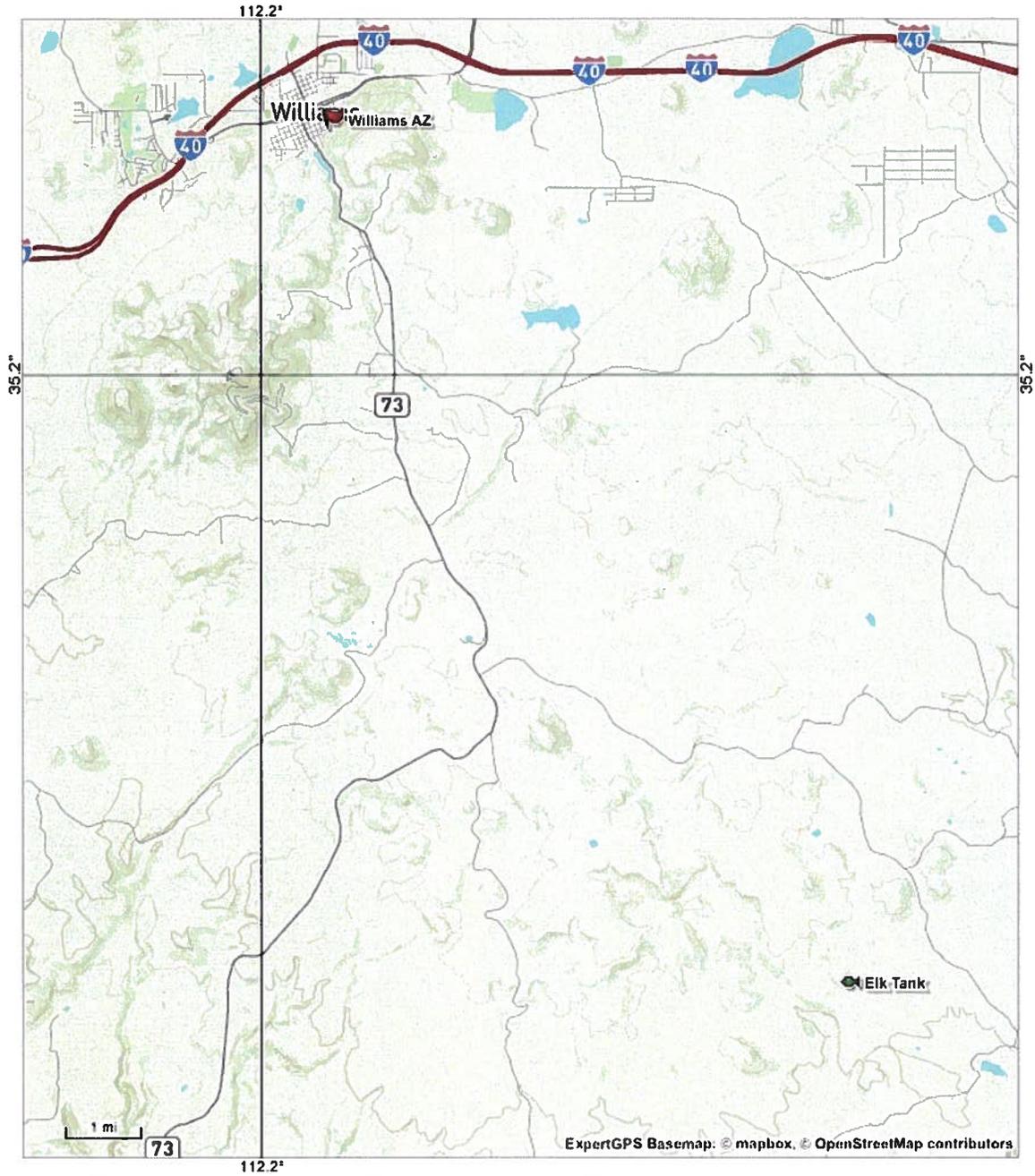


Figure 1. Map of area around Elk Tank, south of Williams.

Management Prescription

The Arizona Game and Fish Department (Department) has developed concepts to guide coldwater species management under the Coldwater Sportfisheries Strategic Vision Document (AGFD 2019). The primary management approach will follow the Quality designation as defined in the Coldwater Vision (AGFD 2019) for Rainbow Trout *Oncorhynchus mykiss* and Brown Trout *Salmo trutta*. This management will be supported through annual stocking of Rainbow Trout and Brown Trout.

Elk Tank is the smallest of the four special regulation waters in the Williams area with catch and release regulations and artificial fly and lure single barbless hook gear restrictions.

Objective 1: Maintain a Quality concept fishery for Rainbow Trout and Brown Trout as listed in the Coldwater Sportfisheries Strategic Vision Document.

Objective guidelines are listed in Table 1 below.

Table 1. Elk Tank Goals, Objectives and Adaptive Management Strategies:

Parameters	Objective guideline	Trigger point to address unmet objectives	Strategies if objectives are not met
<i>Objective 1: Maintain a Quality concept fishery for Rainbow Trout and Brown Trout as listed in the Coldwater Sportfisheries Strategic Vision Document.</i>			
Angler Catch Rates	Angler catch rate greater than 2 fish per hour as reported by angling club members.	Angler catch rates of less than 2 fish per hour as reported by angling club members for two consecutive years.	<ul style="list-style-type: none"> Investigate increasing stocking rates.
Brown Trout and Rainbow Trout persistence	Multiple age classes of Brown Trout and Rainbow Trout are caught by anglers.	Brown Trout and Rainbow Trout caught by anglers are only from that years stocking.	<ul style="list-style-type: none"> Investigate forage enhancements.

Background

Elk Tank is the most upstream impoundment on JD Dam Wash. It is located 18 miles southeast of the City of Williams and 4 miles southwest of White Horse Lake on the Kaibab National Forest. The tank is 0.89 surface acres when full and has a depth of 30 feet.

The water that spills from JD Dam Lake (JD) flows about 2 miles down the wash and then drops off a 100+ foot waterfall into a tributary of Sycamore Canyon. Elk Tank has been managed as a walk in, special regulation trout fishery since 1999. The Northern Arizona Flycasters Club and Grand Canyon Chapter of Trout Unlimited in cooperation with the

Kaibab National Forest and the Department maintains Elk Tank including maintenance of the spillway and maintaining the fence at the parking area for the tank.

On November 16, 2016, a meeting was held with members of the Northern Arizona Flycasters (NAF), the Grand Canyon Chapter of Trout Unlimited (GCTU) and representatives from the Kaibab National Forest (KNF) in order to develop fisheries management objectives for the special regulation fisheries in this area. As a result of input from this meeting, it was decided that Elk Tank would be managed using a Quality approach with a target catch rate of 2 fish per hour and that this fishery would be managed for Rainbow and Brown Trout.

Productivity/Water Quality

Elk Tank, like other tanks and lakes in the area, can experience low water levels and poor water quality. Water quality should be monitored on Elk Tank. The Region II Aquatic Wildlife staff will assist the Department's Water Quality Specialist in collecting water quality data as needed. Elk Tank generally sustains the suitable water quality and productivity to sustain a Quality concept fishery.

Forage/Prey

The primary forage in Elk Tank are zooplankton and aquatic insects. Currently there are no plans to inventory the zooplankton community in Elk Tank. This inventory may be considered if objective guidelines are not being met.

Habitat

Elk Tank is the smallest of the 4 special regulation waters, but it also the deepest. The tank's dam was breached by heavy runoff in 2006. The Department drained the lake and salvaged the fish for stocking into JD. The breach was repaired and the tank was restocked after runoff refilled it. The NAF and GCTU have repaired the spillway on the tank several times since 2006. The fish habitat in Elk Tank is primarily aquatic plants.

Much of the work to maintain Elk Tank as a fishery is conducted in cooperation with KNF, NAF and GCTU. The following activities are required to maintain the fishery:

1. Maintain the kiosk and the fence at the parking area for Elk Tank.
2. Maintain the spillway.
3. Maintain and repair the dam as needed.

In addition, a plan needs to be developed with the same partners to monitor and mitigate sedimentation of the tank.

Species

Recent fish surveys have not been conducted at Elk Tank; however, based on stocking records and angler reports, Rainbow Trout and non-native bullfrogs are present in the tank. Elk Tank has been stocked with subcatchable Rainbow Trout and Brown Trout annually.

Access

Elk Tank is a walk in fishery located off of Forest Service Road 11. A parking pulloff for the tank is located along the west side of the road and is marked by a wood fence. Elk Tank is located approximately $\frac{1}{4}$ of a mile west of the pulloff and has a trail leading to it.

Launching float tubes in the lake can be difficult at times due to the amount of silt along the shore. We recommend the Department work with NAF, GCTU and KNF to place a float tube “ramp” with a handrail on Elk Tank.

Catch/ Satisfaction

Members of the NAF and GCTU clubs are extremely interested in the management of Elk Tank and are the primary source of information on the fishery. Club members have provided the Regional Aquatic Wildlife staff with information on the species, number, and size of the fish caught during their angling trips to Elk Tank. Club member reports will be the primary method used to determine if the objectives for the fishery are being met.

Creel census has not been conducted on Elk Tank because angler use is relatively low. A system using angler diaries or angler cards could be used along with cameras to get estimates of use, satisfaction and catch rates. It would be beneficial to work with the clubs in order to develop a mobile device application or online method for club members to record their angling data.

Compliance with the special regulations on Elk Tank has been a problem at times. The NAF and GCTU expressed a concern about the perceived lack of compliance with the regulations. The following actions could improve compliance:

1. Work with Law Enforcement personnel, Northern Arizona Flycasters, Grand Canyon Chapter Trout Unlimited, and the Kaibab National Forest to place signs on Elk Tank.
2. Work with the Kaibab National Forest, Northern Arizona Flycasters and the Grand Canyon Chapter Trout Unlimited to ensure anglers must pass a regulation sign to get to the tank.
3. Investigate placing cameras and/or camera signs at the tank.

Literature Cited

Arizona Game and Fish Department. 2019. Coldwater Sportfisheries Strategic Vision Document. Arizona Game and Fish Department, Statewide Sportfish Program, Phoenix, Arizona.