



Council Avenue Pond (Somerton) Fisheries Management Plan 2020-2030

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Approved [] by Chris Cantrell *D. Andrew Clark* acting for Date: 10/1/2020
Aquatic Wildlife Branch Chief

Location

Council Avenue Pond is located in the southwest corner of Council Avenue Park in Somerton, Arizona west of the intersection of N. Somerton Avenue and W. Canal Street (Figure 1).

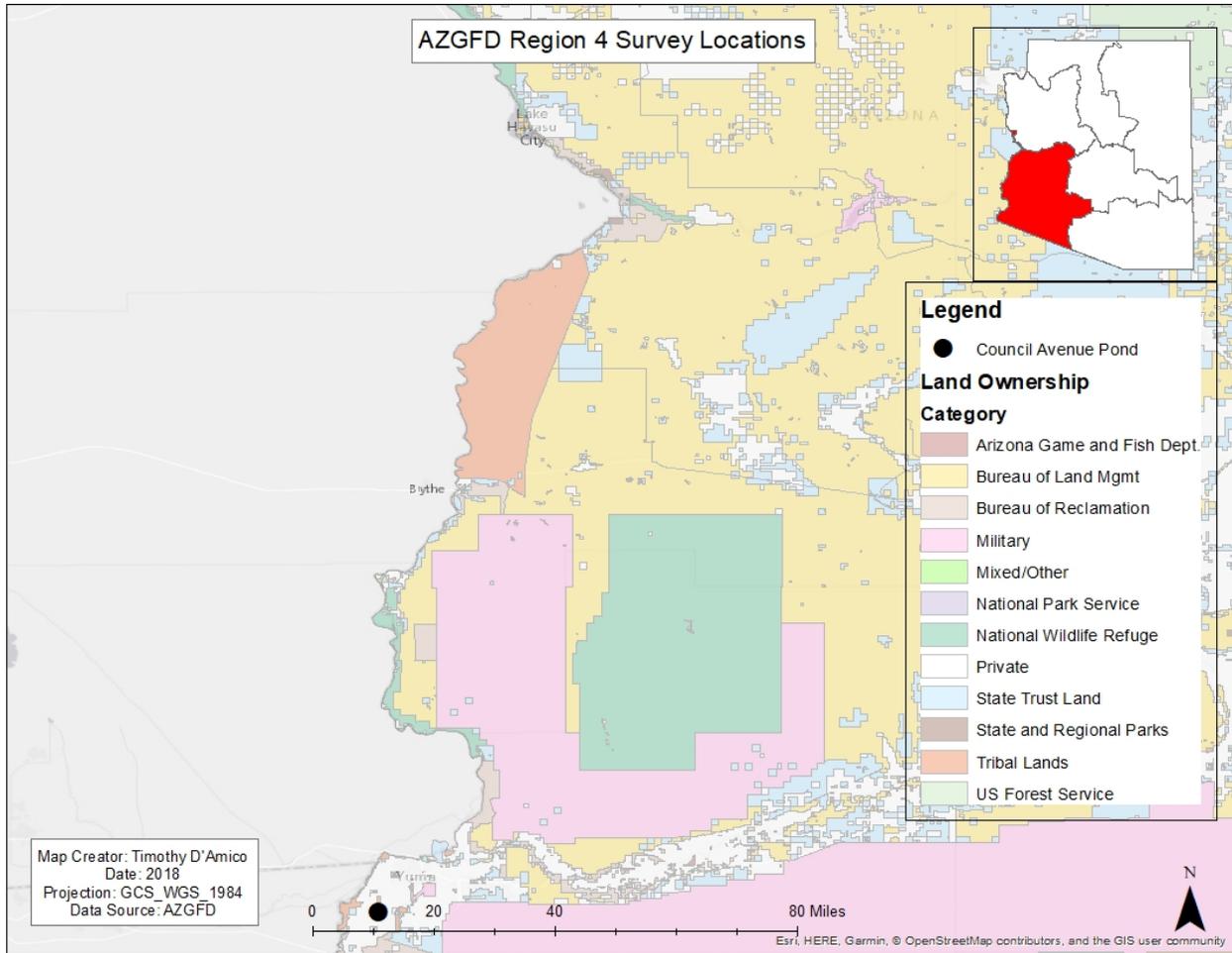


Figure 1. Council Avenue Pond location.

Management Prescription

The Arizona Game and Fish Department (Department) has developed approaches under Strategic Vision Documents (AGFD 2019a-b) to help guide fisheries management in Arizona. The Department also developed a Community Fishing Program (CFP) Vision to further guide management objectives in CFP waters (AGFD 2015). Target catch rates and angler satisfaction is the same for all CFP waters: Achieve an angler satisfaction rate of at least 85% for each individual water, and overall catch-rates greater than 0.50 fish/hour. An Intensive Use approach has been employed at Council Avenue Pond since the lake was added to the program in 2019. Because the Department cannot possibly stock all CFP waters on the same frequent basis due to funding and logistical constraints, all CFP waters are designated under one of two stocking strategies, Core or Expansion. These stocking strategies are based on the size of the water, location and angler use. Council Avenue Pond (CAP) is designated under the Expansion strategy, and stockings take place less frequently. Daily bag limits and frequency of stockings are listed in Table 1.

Management objectives and adaptive management strategies have been set under the Intensive Use approach. Monitoring activities, including frequent communication with communities and angler creel surveys will be used to determine if management objectives are being met. Guidelines and strategies to meet objectives are listed in Table 2.

Objective 1: Maintain an Intensive Use Rainbow Trout *Oncorhynchus mykiss* fishery.

Objective 2: Maintain an Intensive Use Channel Catfish *Ictalurus punctatus* fishery.

Objective 3: Maintain an Intensive Use Water for Bluegill *Lepomis macrochirus* and/or Redear Sunfish *Lepomis microlophus*.

Objective 4: Maintain an angler satisfaction rate of at least 85%.

Table 1. CAP Stocking Management Strategies:

Species	Management Strategy	Regulations	Stocking
Focal Species ¹			
Rainbow Trout	Intensive Use – Winter Months	Limit 2 per day	Monthly, November to March
Channel Catfish	Intensive Use – Summer Months	Limit 2 per day	Four times annually
Sunfish (Bluegill, Redear)	Basic Yield – Year Round	Limit 5 per day	Once per year
Other sport species ²			
Largemouth Bass <i>Micropterus salmoides</i>	Low Yield – Year Round	Limit 1 per day, 13in minimum	Maintenance as needed

¹ Species approved for stocking by U. S. Fish and Wildlife Service.

² Species is present, but future stocking would require a new environmental analysis (EAC) and consultation.

Table 2. CAP Objectives and Adaptive Management Strategies:

<i>Objective 1: Maintain an Intensive Use Rainbow Trout fishery.</i>			
Parameters	Objective Guideline	Trigger point to address unmet Objectives	Strategies if Objectives are Unmet
Angler Catch Rates	Maintain an angler catch rate of 0.5 fish/hour during stocking season	Catch rates drop below 0.5 fish/hour during assessment of catch rates on a 5 year rotational basis through creel surveys	<ul style="list-style-type: none"> • Implement changes in daily bag limit • Increase number of Rainbow Trout stocked • Increase frequency of stocking • Increase law enforcement patrols
<i>Objective 2: Maintain an Intensive Use Channel Catfish fishery.</i>			
Angler Catch Rates	Maintain an angler catch rate of 0.5 fish/hour during stocking season	Catch rates drop below 0.5 fish/hour during assessment of catch rates on a 5 year rotational basis through creel surveys	<ul style="list-style-type: none"> • Implement changes in daily bag limit • Increase number of Channel Catfish • Increase frequency of stocking • Increase the amount of artificial habitat • Increase law enforcement patrols
<i>Objective 3: Maintain an Intensive Use Water for Bluegill and/or Redear Sunfish.</i>			
Angler Catch Rates	Maintain an angler catch rate of 0.5 fish/hour	Catch rates drop below 0.5 fish/hour during assessment of catch rates on a 5 year rotational basis through creel surveys	<ul style="list-style-type: none"> • Implement changes in daily bag limit • Increase number of sunfish stocked • Increase frequency of stocking • Increase the amount of artificial habitat • Increase law enforcement patrols • Suppress predators

Objective 4: Maintain satisfaction rate of at least 85%.			
Parameters	Objective Guideline	Trigger point to address unmet Objectives	Strategies if Objectives are Unmet
Angler Satisfaction	A minimum of 85% of anglers rate fishing as fair, good or excellent	Creel census shows less than 85% of anglers rate fishing as fair, good or excellent	<ul style="list-style-type: none"> • Increase stocking rates • Increase size of fish stocked • Increase or modify efforts for angler education, preferably at the lake • Increase law enforcement efforts

Background

CAP is a 1.03-acre pond located in Council Park, a city park near the center of Somerton, Arizona. The water level in the pond is maintained at a fairly constant level by inflow from an irrigation canal (supplied by the Colorado River) that is used to irrigate the grass and sports field at the park. There is no outflow from the pond, and therefore is considered a closed system. CAP is relatively shallow, and the maximum depth is estimated between seven and eight feet.

At the urging of the Arizona Game and Fish Department, the Somerton City Council voted to open this pond to the public for fishing on March 1, 2011. Prior to the completion of the original environmental assessment checklist (EAC) by Department staff to stock sportfish into the pond, no stocking occurred into the pond. Any fish present prior to the first stocking likely arrived via the canal. These species included Bluegill, Largemouth Bass, Channel Catfish, Threadfin Shad *Dorosoma petenense*, Common Carp *Cyprinus carpio*, Striped Bass *Morone saxatilis* and Softshell Turtles (likely *Apalone spinifera*). Fish populations in CAP were relatively low prior to stocking and were likely insufficient to support a recreational fishery.

The addition of this water to the CFP was important to recreational anglers in Somerton and the surrounding area because so few waters existed that were readily available to local anglers. CAP expanded the ability of the Department to recruit and retain anglers in the area. It is located within the City of Somerton and is within walking distance for many of the youth that live there. Throughout the history of the Department’s work on CAP, employees and representatives from the City of Somerton have been extremely enthusiastic about providing fishing opportunities to the community. This has been demonstrated by their desire to conduct fishing clinics, the City Council officially opening the pond to fishing, and their efforts to establish a license vendor within the city.

Prior to 2018, the pond was in the CFP, but an official signed Inter-Governmental Agreement (IGA) between the city of Somerton and the Department had not been signed. The pond was officially incorporated into the Department’s CFP in 2019 after the IGA was signed by the Somerton City Council.

Productivity/Water Quality

The Department takes basic water quality measurements monthly at CAP. Water temperature varies from above 90° F (summer) to approximately 60° F (winter). Dissolved oxygen varies from 6 ppm (summer) to 11 ppm (winter). pH varies from 7.5 to 8.5. Conductivity varies from 1,400 to 2,200 µs. Total dissolved solids varies from 725 to 1,150 mg/L. There is no indication of severe or chronic water quality issues in the pond, and there have been no large-scale fish die-offs due to water quality issues over the last several years. The City of Somerton does maintain an aeration system to attempt to maintain adequate oxygen levels for fish.

Forage/Prey

No data has been collected by the Department on fish species assemblage from CAP since construction. Based on stocking records as well as observations the lake is known to harbor Bluegill, Redear Sunfish, Rainbow Trout (during winter months only), Threadfin Shad, and Gizzard Shad *Dorosoma cepedianum*. Gizzard Shad are the newest species found in CAP. Following their introduction to the Colorado River, Gizzard Shad have now likely spread to any water with connection to the river; impact on CAP is yet unknown.

Habitat

No fish habitat projects have been undertaken by the Department or other entities since CAP was opened to fishing on March 1, 2011. If deemed necessary, the Department may undertake projects to add fish habitat structures to help maintain or enhance the health of the fish population.

Access

Access to fishing along the shoreline is unrestricted. There is a sidewalk surrounding the lake which provides complete access to the pond. There are no boat ramps on the pond and the park posts open times from 5:30am to 10:00pm.

Species

No data has been collected by the Department on fish species assemblage from CAP since construction. Based on stocking records as well as observations the lake is known to harbor Largemouth Bass, Bluegill, Redear Sunfish, Channel Catfish, Rainbow Trout (during winter months only), Threadfin Shad, Gizzard Shad, Common Carp, and Striped Bass.

Rainbow Trout: Catchable sized Rainbow Trout will continue to be stocked monthly from mid-November to mid-February. No stocking shall take place outside of this time period due to extreme temperatures that would cause mortality to Rainbow Trout. Rainbow Trout from commercial vendors are typically stocked at a rate of 30-40 pounds per acre while trout from Page Springs Hatchery are stocked at approximately 360 pounds per acre. Stocked trout from vendors average 0.75 pounds and have an average length of 10"-13". Rainbow Trout from Page Springs Hatchery have averaged 0.37 pounds and 9.1 inches in length.

Channel Catfish: Catchable sized Channel Catfish will continue to be stocked monthly in late September/early October, April, May, and June. No stocking shall take place in July or August due to extreme temperatures. Channel Catfish are stocked at a rate of approximately 100 pounds per acre. Stocked individuals average 1.5-2.0 pounds and have an average length of 14"-18".

Bluegill and/or Redear Sunfish: Catchable sized sunfish are stocked once per year, usually in April. Sunfish are stocked at a rate of approximately 30 pounds per acre and have an average length of 5"-8".

Largemouth Bass: Catchable (13 inches or greater) or sub-catchable (less than 13 inches) Largemouth bass are stocked no more than once per year, usually in March or April depending upon available funds and need. Largemouth Bass are stocked at a rate of approximately 20-30 pounds per acre.

Invasive Species

There are no confirmed records of aquatic invasive species at CAP. The risk however, remains high because of its public and waterfowl use.

Catch/Satisfaction

A creel survey was conducted on CAP in 2015. Anglers spent an estimated 2,400 angler use days (AUDs) fishing the pond with an average catch per unit effort (CPUE) of 1.30 fish per hour (Arizona Game and Fish Department 2017). The CPUE of anglers in 2015 exceeded the management objective for catch rates of the Community Fishing Program Vision (>0.5 fish/hour) and it was the water with the highest overall catch rates within the CFP.

Anglers interviewed during the 2015 creel survey of CFP waters were generally satisfied with their angling experience while fishing CAP. The angler satisfaction question used a ten-point scale with one (1) representing extremely dissatisfied and ten (10) extremely satisfied. Satisfaction of anglers was measured at 100%. The CFP established a program vision in 2015 that set a target angler satisfaction rate of 85% or greater for each CFP water.

Department staff anticipated utilizing a creel clerk in 2019-2020 on all CFP waters within Region IV. During creel surveys and interactions with anglers, the creel clerk will ask standardized questions regarding angling success, catch and satisfaction with the fishery.

Literature Cited

Arizona Game and Fish Department. 2015. Community Fishing Program Vision for 2015-2025. Arizona Game and Fish Department, Community Fish Program, Phoenix, Arizona.

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

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

Tables and Figures



Figure 2. Council Avenue Pond location on the southwest corner of Council Avenue Park in Somerton, AZ west of the intersection of N. Somerton Avenue and W. Canal Street.