



## **Yuma West Wetlands Pond Fisheries Management Plan 2020-2030**

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Approved [ X ] by Chris Cantrell D. Andrew Clark acting for Date: 10/1/2020  
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## 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 Yuma West Wetlands Pond since the lake was added to the program in 2014. 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. Yuma West Wetlands (YWW) 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.** YWW Pond Stocking Management Strategies:

Species	Management Strategy	Regulations	Stocking
Focal Species <sup>1</sup>			
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 <sup>2</sup>			
Largemouth Bass	Low Yield – Year Round	Limit 1 per day, 13in minimum	Maintenance as needed

<sup>1</sup> Species approved for stocking by U. S. Fish and Wildlife Service.

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

**Table 2. YWW Pond Objectives and Adaptive Management Strategies:**

<b><i>Objective 1: Maintain an Intensive Use Rainbow Trout fishery.</i></b>			
<b>Parameters</b>	<b>Objective Guideline</b>	<b>Trigger point to address unmet Objectives</b>	<b>Strategies if Objectives are not met</b>
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"> <li>• Implement changes in daily bag limit</li> <li>• Increase number of Rainbow Trout stocked</li> <li>• Increase frequency of stocking</li> <li>• Increase law enforcement patrols</li> </ul>
<b><i>Objective 2: Maintain an Intensive Use Channel Catfish fishery.</i></b>			
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"> <li>• Implement changes in daily bag limit</li> <li>• Increase number of Channel Catfish</li> <li>• Increase frequency of stocking</li> <li>• Increase the amount of artificial habitat</li> <li>• Increase law enforcement patrols</li> </ul>
<b><i>Objective 3: Maintain an Intensive Use Water for Bluegill and/or Redear Sunfish.</i></b>			
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"> <li>• Implement changes in daily bag limit.</li> <li>• Increase number of bluegill stocked</li> <li>• Increase the amount of artificial habitat.</li> <li>• Suppress predators</li> </ul>
<b><i>Objective 4: Maintain satisfaction rate of at least 85%.</i></b>			
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"> <li>• Increase stocking rates</li> <li>• Increase size of fish stocked</li> <li>• Increase angler education</li> <li>• Increase law enforcement efforts</li> </ul>

## **Background**

YWW Pond is approximately 1.3 acres in size and located in an urban park (City of Yuma), approximately 1 mile downstream of the Interstate 8 Bridge over the Colorado River. 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 at the park. There is no outflow from the pond, and therefore is considered a closed system. The pond is inside the levees of the Colorado River but is essentially considered to be a closed system because it is not connected to the Colorado River and it would take an extraordinary flood event (approximately a 100-year event) to connect it to the river (Russ Phelps and John Nichol, Bureau of Reclamation, pers comm). YWW Pond is relatively shallow, and the maximum depth is estimated between 12 and 14 feet.

This pond receives relatively heavy fishing pressure and stocking is needed to maintain a fishery and support fishing clinics. Due to its location within the City of Yuma, it provides an excellent opportunity for families to experience an outdoor activity at a minimal cost.

Prior to 2019, the pond was in the Community Fishing Water program, but an official Inter-Governmental Agreement (IGA) between the city of Yuma and the Department had not been signed.

## **Productivity/Water Quality**

The Department takes basic water quality measurements monthly at YWW Pond. Water temperature varies from varies from above 90 F (summer) to approximately 60 F (winter). Dissolved oxygen varies from 7 ppm (summer) to 16 ppm (winter). pH varies from 7.5 to 8.5. Conductivity varies from 1,500 to 2,400  $\mu$ s. Total dissolved solids varies from 600 to 1,200 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 Yuma does maintain an aeration system to attempt to maintain adequate oxygen levels for fish.

## **Forage/Prey**

Very little data has been collected by the Department on forage or prey species assemblage from YWW pond since construction. Based on stocking records as well as observations, the lake is known to harbor Fathead Minnow *Pimephales promelas* as well as Bluegill and Redear Sunfish.

## **Habitat**

No projects to add fish habitat structure into the pond have been undertaken by the Department. Though official documentation does not exist, City of Yuma Parks and Recreation Department employees have mentioned that fish habitat structures were placed into the pond following construction by the city (Ryan Follmuth personal communication with Damon Chango, City of Yuma Parks and Recreation Department). 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 YWW Pond since construction. Based on stocking records as well as observations the lake is known to harbor Largemouth Bass, Channel Catfish, Bluegill, Redear Sunfish, and Rainbow Trout (during winter months only).

**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 most often stocked at a rate of 30-40 pounds per acre while trout from Page Springs are stocked at approximately 280 pounds per acre for West Wetlands. Stocked trout from vendors average 0.75 pounds and have an average length of 10"-13". Trout from Page Springs Hatchery have averaged 0.31 pounds and 9.1 inches in length. A daily bag limit of 2 trout per day has been established and will remain unless objectives are not being met for catch rates and satisfaction.

**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". An established bag limit of 2 Channel Catfish per day shall remain until further notice.

**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". An established bag limit of 5 sunfish per day shall remain until further notice.

**Largemouth Bass:** Catchable (13 inches or greater) or sub-catchable (less than 13 inches) Largemouth bass are stocked periodically depending upon available funds, but no more than once per year and usually in March or April. Largemouth Bass are stocked at a rate of approximately 20-30 pounds per acre. An established bag limit of 1 Largemouth Bass per day (Minimum length of 13 inches) shall remain until further notice.

### *Invasive Species*

There are no confirmed records of aquatic invasive species at Yuma West Wetlands Pond. The risk however, remains high because of its public and waterfowl use, as well as proximity to the lower Colorado River.

## **Angler Catch and Satisfaction**

A creel survey was conducted on Yuma West Wetlands Pond in 2015. Anglers spent an estimated 9,300 angler use days (AUDs) fishing the pond with an average catch per unit effort (CPUE) of 0.89 fish per hour (Arizona Game and Fish Department 2017). The CPUE of anglers at West Wetlands was one of seven waters in 2015 exceeded the management objective for catch rates of the Community Fishing Program Vision (>0.5 fish/hour).

Anglers interviewed during the 2015 creel survey of CFP waters were generally satisfied with their angling experience while fishing Yuma West Wetlands Pond. The angler satisfaction question used a ten-point scale with one (1) representing extremely dissatisfied and ten (10) extremely satisfied. Anglers gave an average rating of 95% with a median score of ten. 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 anticipate 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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