Viewpoint Lake 5-year Management Plan (draft)

(draft) 2014 - 2018



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Outline

- My credentials
- Value of a Management Plan
- Current assessment of Viewpoint Lake
- Fishery goals and desired future condition
- Management recommendations (9)
- > RCSC feedback & guidance
- Identification of next steps



Management Plan

- Documents current and historic lake conditions
- Describes current management activities and processes
- Identifies issues and concerns
- Identifies future management direction and activities
- Estimates annual management costs to assist in operational budgeting
- Tool to demonstrate management vision and commitments to homeowners

Current Lake Assessment

- > A well managed, 33 acre warm water lake
- Good water quality
- Fish habitat is lacking and is a limiting factor
- Fish populations are out of balance and lacking a reliable forage base
- Sport fishing is considered poor
- Viewpoint Lake is an excellent candidate for fish habitat and management enhancements
- Lake leakage is a driving issue to consider

Fishery Goals and Vision

Three primary goals of Recreation Centers of Sun City for Viewpoint Lake are:

- 1. To maintain a clean, biologically balanced, aesthetically pleasing lake that positively contributes to quality of life and enhancement of property values for area residents and members.
- To maintain a safe lake environment, satisfactory water quality, and manage for the efficient use and conservation of water.
- 3. To improve recreational sport fishing opportunity through:
 - the strategic stocking of sport fish, forage fish, and fish for biological controls,
 - enhancements to fish habitat components for spawning, recruitment of fry and juvenile fish, and cover and structure for adult sport fish,
 - managing and monitoring recreational fishing use and fish harvest to maintain a sustainable sport fishery.
- The focus of this 5-year management plan is on goal #3, improvement of the sport fishery at Viewpoint Lake. The desired future condition of Viewpoint Lake is to establish and maintain a viable recreational sport fishery featuring largemouth bass, sunfish and channel catfish.

Management Recommendations

- 1. Introduce and stock threadfin shad
- Install fish habitat (spawning, young-ofyear, adult)
- 3. Stocking of sport fish
- 4. Restocking of white amur
- 5. Refine, approve and implement 5-year Management Plan

Management Recommendations

- 6. Maintain lake management commitment
- 7. Revise fishing regulations
- 8. Monitor the fishery, fishing use and angler satisfaction
- Document and expand management of waterfowl to include cormorants and herons

1. Introduce and stock threadfin shad



- Viewpoint Lake lacks a viable forage fish
- Habitat and water quality is suitable
- Other options considered
- Shad will become the major food source for bass, bluegill and catfish

Cost estimates: \$5,500 to stock 12,000 threadfin shad by June 2014, and \$4,250 to stock 8,000 shad April-May 2015

2. Installation of fish habitat

- Viewpoint Lake lacks fish habitat to support a resident sport fish population
- Fish habitat improvements <u>must precede</u> supplemental stockings of largemouth bass and bluegill
- Habitat guidelines: 1) materials environmentally safe and long-lasting, 2) strategic placement that does not interfere with boating, lake operations, or property owner needs, and 3) no adverse impact to lake liner
- Utilize volunteer resources. Community service projects.

2. Install fish spawning habitat: gravel beds for bass and bluegill

- Recommend 250 spawning beds (10-15 ft² each, 3 inch gravel depth)
- Materials: 3/8 inch pea gravel, 40-50 tons





2. Install fish spawning habitat: "Catfish condos" for catfish

- Recommend 80 structures (three bundled pipes each)
- Materials: 8-10 inch diameter corrugated plastic pipe, 28-36 inch lengths, concrete, rope





2. Install habitat for fry and fingerlings: "Fingerling fortresses"

- Recommend 80 units
- Materials: snow fencing or plastic mesh, 3 inch pvc pipe, 12 inch ribbed sewer pipe, zip ties, concrete





2. Install habitat for fry and fingerlings: Christmas tree clusters

- Recommend 80 tree bundles (2-3 trees per bundle)
- Materials: donated/recycled Christmas trees (clean), rope, concrete blocks

2. Install habitat for fry and fingerlings: Hanging habitats from docks & piers

- Goal is 15 or more docks/piers with 3-7 habitat units each
- Plastic habitat materials: snow fencing or plastic mesh, 12 inch ribbed sewer pipe, zip ties, rope, concrete blocks
- Tree habitat materials: Christmas trees, rope, concrete blocks

2. Install habitat for adult bass, bluegill and catfish: "Bass bungalows"

- Recommend 50-60 units.
- Materials: three wooden pallets bound together and tethered to a concrete-filled tire





2. Install habitat for adult bass, bluegill and catfish: snow fence pens

- > Recommend 20-25 units.
- Structures are 3' x 3' x 6'
- Materials: snow fencing, 1 inch pvc pipe, zip ties, concrete blocks

2. Install habitat for adult bass, bluegill and catfish: "Pipe palaces"

- Recommend 50-60 units.
- Materials: 16-24 inch diameter corrugated plastic pipe, snow fencing, concrete



3. Stocking of sport fish: Channel catfish



- Provide immediate recreational fishing opportunity for 1-2 pound catfish
- Stock 1-2 times annually

Cost estimates: \$5,000 to stock 1,800 pounds of catchable size channel catfish (1,000 pounds in April, 800 pounds in October)

3. Stocking of sport fish: Rainbow trout



- Provide immediate recreational fishing opportunity (seasonal) for 10-12 inch trout
- Stock 1-2 times during winter (Nov. Jan.)

Cost estimates: \$2,500 to stock 500 pounds of catchable size rainbow trout (can do as one or two stockings)

3. Stocking of sport fish: Bass and bluegill



- Wait until 2015 (after shad established and habitat improvements underway) and stock in April-May
- Stock fingerling and juvenile largemouth bass
- Stock fingerling and adult bluegill

2015 cost estimates: \$19,560 to stock 2,000 fingerling bass, 350 juvenile bass, 8,000 fingerling bluegill and 800 adult bluegill



4. Restocking of white amur

- Excellent biological control of nuisance aquatic weeds and algae
- Maintain population of 500-650 white amur in Viewpoint Lake
- Annually restock 150 12-14 inch white amur to replace 20-30% loss from mortalities (fishing, predation, other)



Cost estimates: \$1,400 to restock 150 head of white amur annually between March and April

5. Refine, approve and implement Viewpoint Lake Management Plan, 2014-2018



6. Continue commitment to lake monitoring, maintenance and management

7. Revise fishing regulations to lower daily bag limits

	Current Daily Bag Limits	Proposed Daily Bag Limits
Largemouth bass	5 per day (any combination), 10-	1 bass, 12-inch minimum length
Catfish	inch minimum size	2 or 3 fish (any combination)
Trout		Combination)
Bluegill/sunfish	unlimited	5 fish (any combination)
Common carp	unlimited	
Other sport fish?		
White amur	0 fish limit, catch and release only	No change

8. Monitor the fishery, fishing use, and angler satisfaction

- Important to assess fish populations
- Data on fishing use and effort is important to establish a baseline and quantify improvements
- Measuring angler satisfaction with their fishing experience is vital to serving Viewpoint Lake "customers"

8. Monitor the fishery, fishing use, and angler satisfaction





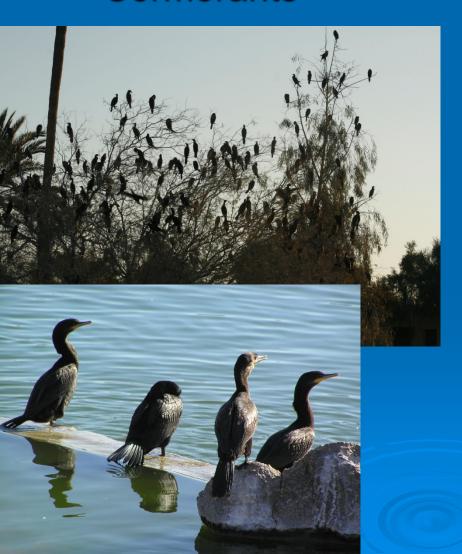
Recommended to assess fishing effort and success by use of angler fishing cards and angler counts.

9. Document management guidelines for waterfowl and expand to include cormorants and herons

- Continue with no feeding of waterfowl and wildlife regulations
- Decide on population management limits for ducks and geese
- Develop management strategies to discourage use of Viewpoint Lake by cormorants and herons
- Document cormorant and heron numbers and incidences of fish consumption

Waterfowl Challenges

Cormorants



Geese & Ducks





Questions?

Next steps