Introduction

To address habitat issues in reservoirs, the National Fish Habitat Reservoir Partnership was created in 2009 under the auspices of the National Fish Habitat Action Plan. The goal of the reservoir partnership is to set a strategy for tackling habitat issues at a national scale leading to enhanced quality of life for both fish and humans. To gather baseline information for the development of a blueprint for a national reservoir habitat strategy, we are asking you to complete a survey about reservoirs in your jurisdiction.

This survey takes a broad view of reservoirs by considering their watershed, tributaries, riparian zone, and the tailwater below the dam. Much of the specifics about watersheds and tributaries are currently being assembled from existing databases, so most of this survey focuses on in-reservoir habitat and the reservoir's tailwater. In addition, the survey includes general questions about the fish communities, selected fish populations, and the fisheries.

We estimate it may take you 20 minutes to complete the survey for each reservoir. If other responsibilities require you to leave the survey partly finished, leave the browser window open. You may return at a later time without losing your work. Your participation is completely voluntary and your responses will be strictly confidential, with data reported only in the aggregate. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point.

In questions where an answer may depend on the time period considered, your response should reflect the current status of the reservoir (i.e., situation within the last 5 years). In questions where an answer requires that you contrast among reservoirs, answer in relation to similar reservoirs within your geographical region whether within your state or a nearby state. If there is another staff member in your agency that has more experience with this reservoir than you, please collaborate with that individual in formulating your responses. Because blank responses complicate analyses, a good guess is preferred over a blank response, but a blank response is better than a bad guess.

For further questions about this survey, feel free to get in touch with your agency contact, Rebecca Krogman(641-780-5201; rebecca.krogman@gmail.com) or Steve Miranda (662-325-3217; smiranda@cfr.msstate.edu).

Thank you very much for your time and support. Please start the survey by clicking on the Next button below.

PLEASE NOTE: Dropdown menus do NOT work in the PDF version. Please enter your response by typing.

Choose Reservoir

* 1. Please choose your reservoir from the dropdown list.

The reservoir database is currently organized by the name of the dam. If multiple structures are listed for the same reservoir, choose the primary impounding structure. You will then be directed to a page for entering the most commonly used name of the reservoir. If the reservoir is not listed, select "NOT IN LIST" and you will be directed to a page for entering a new reservoir.

Dam name - River - County

Update Reservoir

* 2. Please enter the name most commonly used for the reservoir.

Reservoir Name:

Please enter the surface area of the entire reservoir at normal pool elevation (enter exact area if known, otherwise select from approximate area):

Exact surface area (acres)

Approximate surface area (acres)

Enter New Reservoir

* 2. Please enter as much of the following information as possible. For reservoir name, enter the name most commonly used for the reservoir.

Reservoir Name:

Dam Name:

River Name:

County:

Please enter the surface area of the entire reservoir at normal pool elevation (enter exact area if known, otherwise select from approximate area):

Exact surface area (acres)

Approximate surface area (acres)

Basic Information

3. Please indicate the primary uses of the reservoir (check primary uses only):

- ☐ Flood control
- ☐ Navigation
- ☐ Hydroelectric power
- ☐ Irrigation
- ☐ Municipal/industrial water supply
- ☐ Cooling for factory or plant effluents
- ☐ Water quality improvement downstream
- ☐ Assimilation of waste effluents
- ☐ Fish/wildlife habitat or conservation
- ☐ Recreation (camping, fishing, etc.)
- ☐ Unknown
- ☐ Other (please specify)

4. Please rank the dominant landcover types in the portion of the watershed that you believe has the most influence on the reservoir (rank up to three):

	First	Second	Third
Evergreen forest	○	○	○
Deciduous forest	○	○	○
Mixed evergreen-deciduous forest	○	○	○
Shrubland	○	○	○
Grassland	○	○	○
Wetland	○	○	○
Cropland	○	○	○
Barren rock	○	○	○
Desert	○	○	○
Urban	○	○	○

Habitat Availability

5. Based on your experience with this reservoir, please indicate the extent to which the following fish habitat concerns apply to this reservoir (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	None (0)	Low (1)	Low to Moderate (2)	Moderate (3)	Moderate to High (4)	High (5)
Excessively shallow reservoir	○	○	○	○	○	○
Excessive littoral mudflats	○	○	○	○	○	○
Insufficient adjoining backwaters and wetlands	○	○	○	○	○	○
Insufficient connectivity to backwaters and wetlands	○	○	○	○	○	○
Insufficient connectivity to tributaries due to sedimentation	○	○	○	○	○	○
Excessive aquatic macrophytes	○	○	○	○	○	○
Insufficient aquatic macrophytes	○	○	○	○	○	○
Invasive plant species	○	○	○	○	○	○
Invasive animal species capable of altering habitat	○	○	○	○	○	○
Insufficient structural habitat	○	○	○	○	○	○
Excessively shallow littoral zone	○	○	○	○	○	○
Deep or steep littoral zone	○	○	○	○	○	○
Insufficient bank shading	○	○	○	○	○	○
Insufficient allochthonous inputs	○	○	○	○	○	○
Excessive disturbance of riparian zone	○	○	○	○	○	○
Harmful levels of agriculture in the surrounding watershed	○	○	○	○	○	○
Harmful levels of livestock production in the surrounding watershed	○	○	○	○	○	○
Harmful levels of logging in the surrounding watershed	○	○	○	○	○	○
Harmful levels of mining in the surrounding watershed	○	○	○	○	○	○
Harmful levels of urbanization in the surrounding watershed	○	○	○	○	○	○

Water Quality

6. Based on your experience with this reservoir, please indicate the extent to which the following water quality concerns apply to this reservoir (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	None (0)	Low (1)	Low to Moderate (2)	Moderate (3)	Moderate to High (4)	High (5)
Excessive nutrients	○	○	○	○	○	○
Insufficient nutrients	○	○	○	○	○	○
Excessive suspended sediments or inorganic turbidity	○	○	○	○	○	○
Excessive organic turbidity	○	○	○	○	○	○
Extreme seasonal variation in turbidity	○	○	○	○	○	○
Harmful algae blooms	○	○	○	○	○	○
Extreme diel variation in dissolved oxygen	○	○	○	○	○	○
Oxygen stratification	○	○	○	○	○	○
Excessively high temperatures	○	○	○	○	○	○
Excessively low temperatures	○	○	○	○	○	○
Temperature stratification	○	○	○	○	○	○
Untimely or frequent turnovers	○	○	○	○	○	○
Thermal pollution	○	○	○	○	○	○
Contaminants (heavy metals, biocides)	○	○	○	○	○	○
Point-source pollution	○	○	○	○	○	○
Non-point source pollution	○	○	○	○	○	○

Water Regime

7. Based on your experience with this reservoir, please indicate the extent to which the following water regime concerns apply to this reservoir (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	None (0)	Low (1)	Low to Moderate (2)	Moderate (3)	Moderate to High (4)	High (5)
Unfavorable seasonal hydrograph (or rule curve, if one exists)	◯	◯	◯	◯	◯	◯
Residual effects of upstream impoundments	◯	◯	◯	◯	◯	◯
Insufficient retention time	◯	◯	◯	◯	◯	◯
Insufficient water storage	◯	◯	◯	◯	◯	◯
Seasonally mistimed water level fluctuations	◯	◯	◯	◯	◯	◯
Excessive yearly drawdown	◯	◯	◯	◯	◯	◯
Excessive long-term drawdowns	◯	◯	◯	◯	◯	◯
Excessive short-term fluctuations	◯	◯	◯	◯	◯	◯
Rapid water level change	◯	◯	◯	◯	◯	◯

Processes

8. Based on your experience with this reservoir, please indicate the extent to which the following processes burden this reservoir (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	None (0)	Low (1)	Low to Moderate (2)	Moderate (3)	Moderate to High (4)	High (5)
Sedimentation	○	○	○	○	○	○
Shoreline erosion	○	○	○	○	○	○
Loss of cove habitat due to depositional filling	○	○	○	○	○	○
Shoreline homogenization	○	○	○	○	○	○
Homogenization of littoral substrates	○	○	○	○	○	○
Disturbances in upstream watersheds	○	○	○	○	○	○
Disturbances in adjacent watersheds	○	○	○	○	○	○

9. Are there any other habitat problems that you believe have a large effect on fish habitat in this reservoir, and if so, to what extent?

Fish Community

10. Please score the following fish community characteristics in this reservoir in relation to reservoirs with similar geomorphology, whether within your state or within nearby states (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	Low (1)	Below average (2)	Average (3)	Above average (4)	High (5)
Standing stock	○	○	○	○	○
Prey standing stock	○	○	○	○	○
Predator standing stock	○	○	○	○	○
Prey-predator ratio	○	○	○	○	○
Standing stock of undesirable exotic fish species	○	○	○	○	○
Species richness	○	○	○	○	○
Species evenness	○	○	○	○	○
Supplementary stocking of native species	○	○	○	○	○
Maintenance stocking of non-native species	○	○	○	○	○
Undesirable species introductions	○	○	○	○	○
Fish kills	○	○	○	○	○

11. Does the reservoir support a recreational fishery, or has it supported a recreational fishery in the past?

○ Yes

○ No

The Fishery

11a. Please score the following fishery characteristics in this reservoir in relation to reservoirs with similar geomorphology, whether within your state or within nearby states (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	Low (1)	Below Average (2)	Average (3)	Above Average (4)	High (5)
Fishing pressure	○	○	○	○	○
Catch rates	○	○	○	○	○
Size of fish caught	○	○	○	○	○
Annual variability in catch rates	○	○	○	○	○
Angler satisfaction	○	○	○	○	○
Frequency of tournaments	○	○	○	○	○
Ratio of fishing to other recreational activities	○	○	○	○	○

11b. Please identify the top 1, 2, or 3 most important target species in the recreational fishery (select one from each drop-down menu; if it is not listed, please enter it in the text box provided):

First Most Important:

Second Most Important:

Third Most Important:

11c. For the first most important species identified above, check the approximate composition of the catch...

	<25%	25-50%	50-75%	>75%
In the total recreational fishery:	○	○	○	○
Made up of fish large enough to satisfy anglers:	○	○	○	○
Made up of stocked fish:	○	○	○	○

11d. Please score the following population characteristics for the first most important species in relation to reservoirs with similar geomorphology, whether within your state or within nearby states (check appropriate column):

Descriptions are available by hovering the pointer over each variable.

	Low (1)	Below Average (2)	Average (3)	Above Average (4)	High (5)
Population density	◯	◯	◯	◯	◯
Quality of size structure	◯	◯	◯	◯	◯
Condition	◯	◯	◯	◯	◯
Growth rate	◯	◯	◯	◯	◯
Natural mortality	◯	◯	◯	◯	◯
Recruitment to age 1	◯	◯	◯	◯	◯
Recruitment to adulthood	◯	◯	◯	◯	◯

The Tailwater

* Does the tailwater have sufficient flow to support a fish assemblage throughout the year?

- ◯ Yes
- ◯ No

The Tailwater

12. Discharges from the reservoir affect the stream environment below the dam (i.e., tailwater) for roughly:

- ◯ <1 mile
- ◯ 1-5 miles
- ◯ 5-10 miles
- ◯ 10-20 miles
- ◯ >20 miles

13. Based on your experience with the tailwater below the reservoir, please indicate the extent to which the following concerns apply to the tailwater (check appropriate box):

Descriptions are available by hovering the pointer over each variable.

	None (0)	Low (1)	Low to Moderate (2)	Moderate (3)	Moderate to High (4)	High (5)
Shore erosion	◯	◯	◯	◯	◯	◯
Bed scouring	◯	◯	◯	◯	◯	◯
Change in depth	◯	◯	◯	◯	◯	◯
Minimum flow	◯	◯	◯	◯	◯	◯
Flow fluctuation	◯	◯	◯	◯	◯	◯
Flow timing	◯	◯	◯	◯	◯	◯
Insufficient structural habitat	◯	◯	◯	◯	◯	◯
Insufficient dissolved oxygen	◯	◯	◯	◯	◯	◯
Temperature out of range	◯	◯	◯	◯	◯	◯
Excessive dissolved gases	◯	◯	◯	◯	◯	◯
Other water quality issues	◯	◯	◯	◯	◯	◯
Nutrients out of range	◯	◯	◯	◯	◯	◯
Harmful algae blooms	◯	◯	◯	◯	◯	◯
Abundance of aquatic macrophytes	◯	◯	◯	◯	◯	◯
Invasive species	◯	◯	◯	◯	◯	◯
Fish passage	◯	◯	◯	◯	◯	◯

14. Does the tailwater support a recreational fishery, or has it supported a recreational fishery in the past?

- ◯ Yes
- ◯ No

Tailwater Fishery

14a. Please identify the top 1, 2, or 3 most important target species in the recreational fishery in this tailwater in order of fishing effort (select one from each drop-down menu; if it is not listed, please enter it in the text box provided):

First Most Important:

Second Most Important:

Third Most Important:

Additional Comments

15. Do you have any additional comments to clarify your answers or provide us with feedback regarding fish habitat in this reservoir or tailwater?

16. Approximately how many years have you managed or supervised this reservoir?

(Please enter a whole number.)

Please make sure you click Done below!

Otherwise your work will not be saved to the server.