



All sections must be addressed, or the application will be considered invalid

| |
|--|
| |
|--|

C. Brief Project Description (attach additional information to end of application):

- D. Length of stream or size of lake that will be treated (project extent): _____
Length/size of impact, if larger than project extent (e.g. stream miles opened): _____

E. Project Budget:

Grant Request (Dollars): \$ _____

Matching Dollars: \$ _____

Matching In-Kind Services:* \$ _____

**salaries of government employees are not considered matching contributions*

Other Contributions (not part of this application) \$ _____

Total Project Cost: \$ _____

- F. **Attach** itemized (line item) budget – see *budget template*

- G. **Insert** or **attach** a project location map showing the project area in relation to a major landmark or town. Please indicate if the project location is on public or private property.

- H. **Attach** specific project plans (e.g. detailed sketches, plan views [showing location and type of channel modifications], example photographs), current condition photographs, and maps. **If project involves water leasing or water salvage complete and attach a supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).*

- I. **Attach** letters or statements of support. This includes landowner consent, community or public support, and fish biologist support.

- J. The project agreement includes a 20-year maintenance commitment. Please indicate (yes or no) that you will ensure project protection for 20 years. Discuss your ability to meet this commitment.

Yes ☐ No ☐

- K. **Describe** or **attach** land management & maintenance plans, including changing to grazing regimes, that will ensure protection of the restored area.

III. PROJECT BENEFITS (attach additional information to end of application):

A. What species of fish will benefit from this project?

B. How will the project protect or enhance wild fish habitat?

C. Will the project improve fish populations and/or fishing? To what extent?

D. Will the project increase public fishing opportunity for wild fish and, if so, how?

E. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?

F. What public benefits will be realized from this project?

G. Will the project interfere with water or property rights of adjacent landowners? (explain):


H. Will the project result in the development of commercial recreational use on the site? (explain):

I. Is this project associated with the reclamation of past mining activity?

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:  Date: _____

Sponsor (if applicable): _____

Submittal: Applications must be *signed and received before December 1 and June 1 of each year to be considered for the subsequent funding period.* Late or incomplete applications will be rejected.

| | |
|---|--|
| Mail to: FWP Future Fisheries Fish Management Bureau PO Box 200701 Helena, MT 59620-0701 | Email: Future Fisheries Coordinator FFIPFWP@mt.gov (electronic submissions must be signed) For files over 10MB, use https://transfer.mt.gov |
|---|--|

Applications may be rejected if this form is modified.

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

| WORK ITEMS (ITEMIZE BY CATEGORY) | NUMBER OF UNITS | UNIT DESCRIPTION* | COST/UNIT | TOTAL COST | CONTRIBUTIONS | | | |
|---|--------------------|----------------------|-------------|---------------|-----------------------------|-----------------------|--------------|---------------|
| | | | | | FUTURE FISHERIES REQUEST | IN-KIND SERVICES** | IN-KIND CASH | TOTAL |
| Personnel*** | | | | | | | | |
| Survey | | | | \$ - | | | | \$ - |
| Design & build | 1 | | \$30,000.00 | \$ 30,000.00 | 30,000.00 | | | \$ 30,000.00 |
| Engineering | | | | \$ - | | | | \$ - |
| Permitting | | | | \$ - | | | | \$ - |
| Oversight | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | Sub-Total | \$ 30,000.00 | \$ 30,000.00 | \$ - | \$ - | \$ 30,000.00 |
| Travel | | | | | | | | |
| Mileage | | | | \$ - | | | | \$ - |
| Per diem | | | | \$ - | | | | \$ - |
| | | | Sub-Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| Construction Materials**** | | | | | | | | |
| Rock and gravel | 3000 | cubic yards | \$100.00 | \$ 300,000.00 | 40,000.00 | | 55,000.00 | \$ 95,000.00 |
| Rock piles | 150 | 11 Tons 9.50/t | \$104.50 | \$ 15,675.00 | 10,000.00 | | | \$ 10,000.00 |
| Trees large wood | 20 | per tree | \$300.00 | \$ 6,000.00 | | | | \$ - |
| Excavation | 32000 | cubic yards | \$2.00 | \$ 64,000.00 | 15,000.00 | | | \$ 15,000.00 |
| Tall PVC | 300 | plant | \$150.00 | \$ 45,000.00 | | | | \$ - |
| Short PVC | 600 | plant | \$60.00 | \$ 36,000.00 | | | | \$ - |
| Concrete blocks | 100 | block | \$4.00 | \$ 400.00 | | | | \$ - |
| Catfish Condos | 50 | box | \$50.00 | \$ 2,500.00 | 675.00 | | | \$ 675.00 |
| Assorted pipe | 400 | sticks | \$10.00 | \$ 4,000.00 | | 2,500.00 | | \$ 2,500.00 |
| Christmas Tree | 500 | supplies | \$2.00 | \$ 1,000.00 | | 1,000.00 | | \$ 1,000.00 |
| Concrete mix | 450 | bags | \$4.50 | \$ 2,025.00 | | 2,025.00 | | \$ 2,025.00 |
| | | | Sub-Total | \$ 476,600.00 | \$ 65,675.00 | \$ 5,525.00 | \$ 55,000.00 | \$ 126,200.00 |
| Equipment, Labor, and Mobilization | | | | | | | | |
| Volunteers | 1000 | hour | \$10.00 | \$ 10,000.00 | | 10,000.00 | | \$ 10,000.00 |
| | | | | \$ - | | | | \$ - |
| | | | | \$ - | | | | \$ - |
| | | | Sub-Total | \$ 10,000.00 | \$ - | \$ 10,000.00 | \$ - | \$ 10,000.00 |
| TOTALS | | | | | \$ 95,675.00 | \$ 15,525.00 | \$ 55,000.00 | \$ 166,200.00 |

OTHER REQUIREMENTS:

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

All of the columns in the budget table and the matching contribution table MUST be completed appropriately or the application will be invalid. Please see the example budget sheet for additional clarification.

*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used for calculations). Describe here or in text.

Reminder: Government salaries cannot be used as in-kind match

***The Review Panel suggests that design and oversight costs associated with a proposed project not exceed 15% of the total project budget. If design and oversight costs are in excess of 15%, applications must include a minimum of two competitive bids for the cost of undertaking the project.

****The Review Panel recommends a maximum fencing cost of \$1.50 per foot. Additional costs may be the responsibility of the applicant and/or partners.




MATCHING CONTRIBUTIONS (do not include requested funds)

| CONTRIBUTOR | IN-KIND SERVICE | IN-KIND CASH | TOTAL | Secured? (Y/N) |
|--|-----------------|---------------|---------------|----------------|
| MTFWP Community Pond Grant | \$ - | \$ 10,000.00 | \$ 10,000.00 | Y |
| Montana Pikemasters | \$ - | \$ 20,000.00 | \$ 20,000.00 | N |
| Montana Fish Wildlife and Parks Future Fisheries | \$ - | \$ 40,000.00 | \$ 40,000.00 | Y |
| Walleyes Unlimited- | \$ - | \$ 30,000.00 | \$ 30,000.00 | N |
| MTFWP Trust | \$ - | \$ - | \$ - | |
| NRD, Silver Tip | \$ - | \$ - | \$ - | |
| MTFWP, AIS program | \$ - | \$ - | \$ - | |
| MTFWP, Fisheries Program | \$ - | \$ - | \$ - | |
| MTFWP, Parks Program | \$ - | \$ - | \$ - | |
| Magic City Fly Fishers | \$ - | \$ - | \$ - | |
| Montana BASS AFTCO | \$ - | \$ 5,000.00 | \$ 5,000.00 | Y |
| TOTALS | \$ - | \$ 105,000.00 | \$ 105,000.00 | |

The total budget for our proposed efforts at Lake Elmo is an estimate using costs for material and finished products as advertised on various websites and from quotes for current pricing for stone, gravel, and equipment use to place materials. Final designs and plans will be produced as part of the design cost. Based on secured funding, final plans will be bid out, and managed cooperatively by FWP and the design company. We are asking to fully secure the design component through this grant request and any additional funds to maximize available funding to complete as much as 1,000 linear feet of shoreline features as part of Jetties and various nodes and the natural and artificial fish habitat components. I don't want to over state PikeMasters and Walleyes Unlimited Billings Chapter however they may bring an additional 50 to 60 thousand dollars to the project. Several other grants will be applied for once the preliminary design is completed. The week of December 7th 2020 the Design Statement of Work should be developed with selection of a contractor in the very near future.

| Lake Elmo Budget | Estimated costs | Funding Source | Funding |
|-----------------------------------|-----------------|-----------------------------------|---------------|
| Aquatic Invasive Species | | | |
| Drawdown | \$ 5,000.00 | | |
| Contingency | \$ 5,000.00 | | |
| Aquatic Invasive Species Subtotal | \$ 10,000.00 | | |
| | | | |
| Fisheries Projects | | | |
| Jetties | \$ 20,000.00 | PikeMasters | \$ 20,000.00 |
| Nodes | \$ 100,000.00 | Walleyes Unlimited | \$ 30,000.00 |
| Artificial Habitat | \$ 30,000.00 | American Fisheries Tackle Company | |
| Imported Habitat | \$ 50,000.00 | Montana BASS Nation | \$ 5,000.00 |
| Sediment Retention | \$ 30,000.00 | Community Pond Grant MTFWP | \$ 10,000.00 |
| Excavation | \$ 50,000.00 | Future Fisheries Grant | \$ 40,000.00 |
| Contingency | \$ 47,500.00 | | |
| Design and Build Bid Package | \$ 30,000.00 | | |
| Fisheries Subtotal | \$ 357,500.00 | Subtotal of Current Funding | \$ 105,000.00 |
| | | | |
| Park Projects | | | |
| Boardwalk | \$ 67,500.00 | | |
| Boardwalk Nodes | \$ 15,000.00 | | |
| Irrigation Headgate | \$ 2,500.00 | | |
| Jetty Surfaces | \$ 15,000.00 | | |
| Program Stage | \$ 5,000.00 | | |
| Dispersed Picnic Nodes | \$ 25,000.00 | | |
| Dog Park Shoreline | \$ 7,500.00 | | |
| Shoreline Erosion | \$ 20,000.00 | | |
| Trail Improvements | \$ 100,000.00 | | |
| Contingency | \$ 25,000.00 | | |
| | | | |
| Parks Subtotal | \$ 282,500.00 | | |
| | | | |
| Estimated Total | \$ 650,000.00 | | |



-  State Park
-  FWP Launch
-  FWP Fishing Access

Elevation: 3198 Feet
Area: 63 Acres
Max Depth: 16 Feet
Volume: N/A
Ave Depth: 8 Feet



Lake Elmo Nodes And Jetties



Printed from fwp.mt.gov
November 29, 2020

1:9,028

0 0.075 0.15 0.3 mi

0 0.1 0.2 0.4 km

This map was generated from the Montana Fish, Wildlife & Parks (FWP) internal FWP Mapper online mapping system. Data layers on this map may depict sensitive species level information. This map is not intended for distribution or use beyond work associated with FWP.

Lake Elmo State Park Fish Enhancement Project supplemental information

- 1) *Photos, schematics, and examples of the proposed habitat structures (correlate with budgeted items)*



Figure 1. Examples of catfish condos; 50 boxes (\$2,500)



Figure 2. Examples of rock jetties; \$104.50 per foot (~\$15,675 for rock in one jetty)



Figure 3. Perch (left) and bass (right) spawning substrate; sand and gravel

- 2) *List of proposed structures based on priority (high, medium, low) which includes the number and estimated cost*
 - a. Fishing jetties; needs lots of rock (high; \$40,000)
 - b. Catfish condos (high; \$2,500; buy supplies)
 - c. Spawning substrate/rock piles (medium; \$10,000; install several shallow beds)
 - d. Excavation (low; \$15,000)
- 3) *Species that would benefit from each proposed structures and any high priority species*
 - a. Although there are no species of concern in Lake Elmo State Park, the fish enhancement project is prioritizing native Channel Catfish. Channel Catfish are frequently targeted by anglers and natural recruitment could help support the population and fishing opportunities. Channel Catfish will benefit from well-placed, long-lasting catfish condos, rock jetties (complex habitat, support submerged vegetation) and additional nursery habitat (e.g., PVC habitat, tree reefs).
 - b. Other species that would benefit from the proposed structures are popular sport fish including Largemouth and Smallmouth bass and Yellow Perch. These species will benefit from artificially-placed spawning substrate and habitat (e.g., rock jetties, PVC structures, Christmas tree reefs).
- 4) *Clarify the timeline of construction*
 - a. The project is set to take place over the course of two years. We anticipate using the funds from the June 2020 Future Fisheries grant cycle beginning in January of 2021 to purchase supplies. Also starting in January 2021, using FWP and volunteer labor, construction of several components such as catfish condos and PVC artificial habitat will begin. Deployment of these structures will likely occur once Lake Elmo has reached its full draw-down elevation in late 2021. Depending on funds and lake elevation, we anticipate constructing at least one of three proposed rock jetties. Constructing and deploying Christmas tree reefs will take place in January and February 2021, after the holiday season is over and Christmas trees can be donated. Additionally, we may begin placing a few acritical spawning beds in shallow areas (2–3') during the winter of 2020–2021, but most of this activity will take place when the lake is completely drained (October 2021–March 2022).
 - b. The bidding process and other activities may cause delay for some efforts. Having available funding to start is important to the success of the project and ability to gather additional contributions for final work in 2021 and early 2022.

Videos:

<http://magazine.outdoornebraska.gov/2018/06/aquatic-habitat-program/>

<https://www.youtube.com/watch?v=IRiiUlk7Rdo>

<https://www.youtube.com/watch?v=2MaMI5IL6Xc>

Small Impoundment Management in North America (American Fisheries Society book).

November 30th, 2020

Montana Fish, Wildlife & Parks
2300 Lake Elmo Drive
Billings, MT 59105

Michelle McGree
Montana Fish, Wildlife & Parks Future Fisheries Coordinator
P.O. Box 200701
Helena, MT 59620-0701

Dear Ms. McGree and Future Fisheries committee,

Included are materials for the November 2020 Future Fisheries grant cycle. Since the last grant cycle in June of 2020, an environmental assessment written by staff from the Fisheries, Parks, and Information & Education departments of Montana Fish, Wildlife & Parks (FWP)'s Region 5 office was released for public review. Comments gathered from both the environmental assessment and a public scoping session in April 2020 indicate that the community is very supportive of the Lake Elmo State Park Enhancement project. As such, FWP is moving forward and are actively planning and seeking additional funds. If all project components are included, it is anticipated that the final project could reach \$500,000. In this application, we hope to secure \$30,000 towards a bid package for a professional consultant to oversee the design and build phases as required by the state for projects exceeding \$75,000. If available, the remaining amount (\$65,6765) will be applied towards purchasing materials for habitat enhancement features (e.g., rock jetties, fishing nodes, artificial structures) and excavation to install the materials and create usable space for fish by the jetties and open water. The structures are intended to increase habitat complexity in Lake Elmo to support self-sustaining, wild populations of native fish such as Lake Chub, Fathead Minnow, and Channel Catfish, as well as sport fish (e.g., bass, crappie, Bluegill, Yellow Perch).

This is a rare opportunity to renovate an ageing but heavily used public reservoir in a state park. The project anticipates it will be funded in part by local angling groups such as Pike Masters and Walleyes Unlimited, and other organizations (e.g., American Fishing Tackle Company). Funds from BASS Nation, and FWP's Future Fisheries and Community Ponds grants have already been accepted and allocated. Currently, we are about \$360,000 short of our goal and are pursuing numerous grants. Please let us know if there are additional questions or more information is needed. Again, thank you for your time and attention in reviewing this application.

Sincerely,

Shannon Blackburn and Mike Ruggles

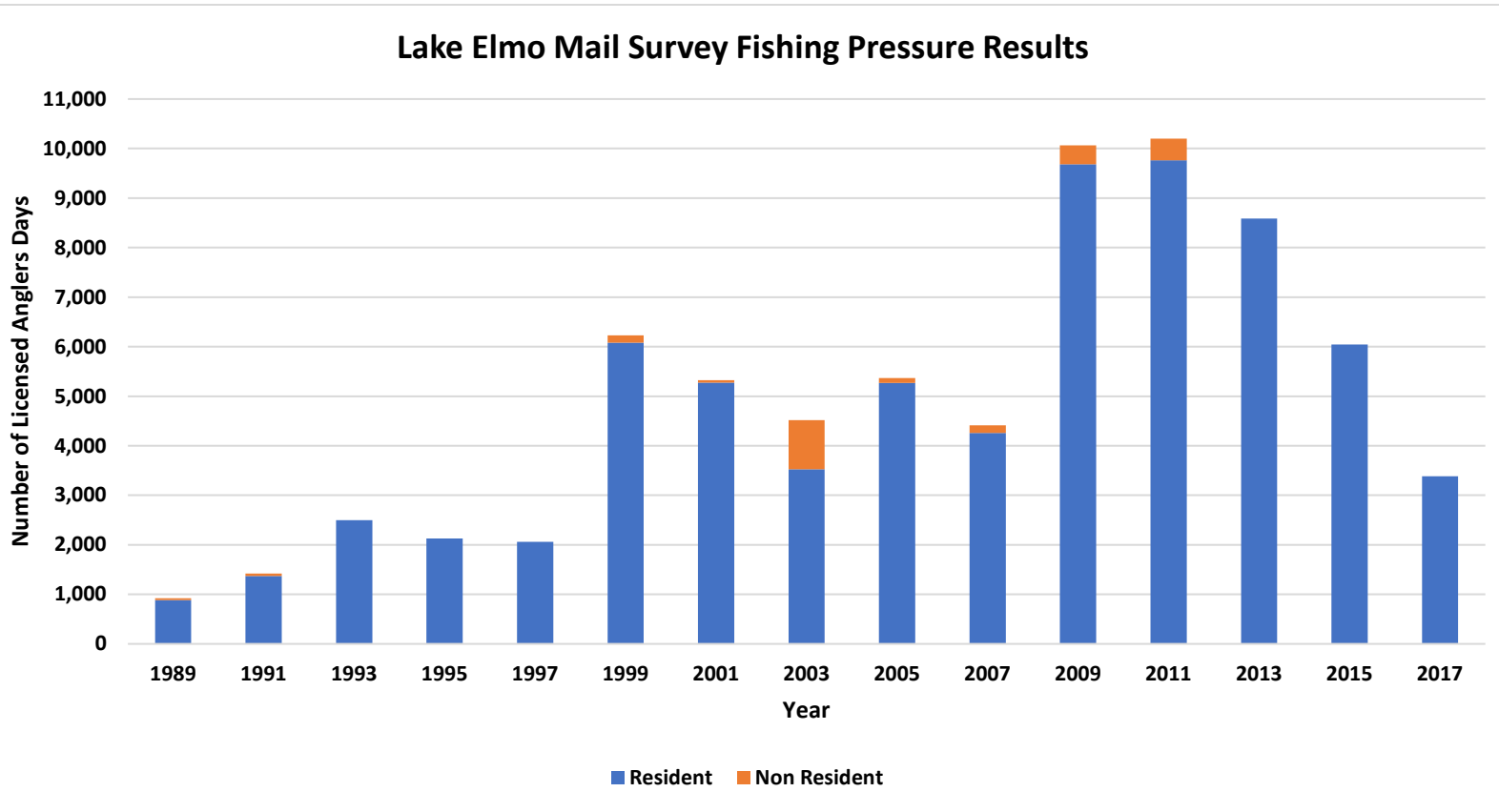
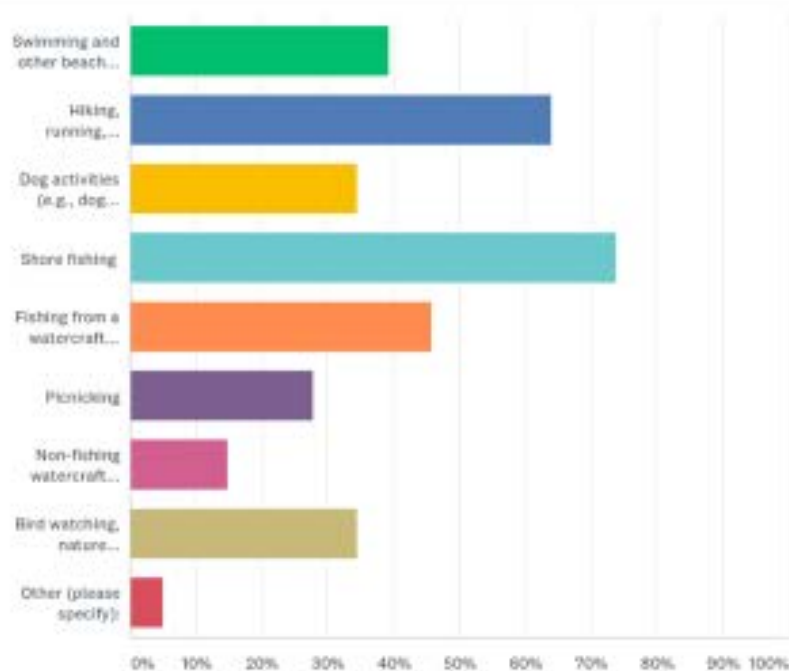


Figure 1. Licensed anglers are randomly contacted by mail to measure angling efforts across Montana. Figure 1 describes the creel results for Lake Elmo from 1989 to 2017. However, the survey does not measure fishing pressure from anglers 12 years old and younger, which likely represents a large portion of the angling effort at Lake Elmo. For example, the past 10 years of Kid’s Fishing Days and other youth events alone would add nearly 1,000 angler days annually. Using the 2017 survey data to compare angler days per water body size (measure in acres) results in 3,386 angler days at Lake Elmo, which is 64 acres, and 53 licensed angler days/surface acre. In comparison to Fort Peck, Bighorn Lake, and Georgetown Lake, licensed angler days/surface area were 0.45, 0.89, and 27, respectively. Urban waterbodies are valuable natural resources and these data help define the importance of fishing opportunities and the need to provide a more robust fishery to better serve the local community.

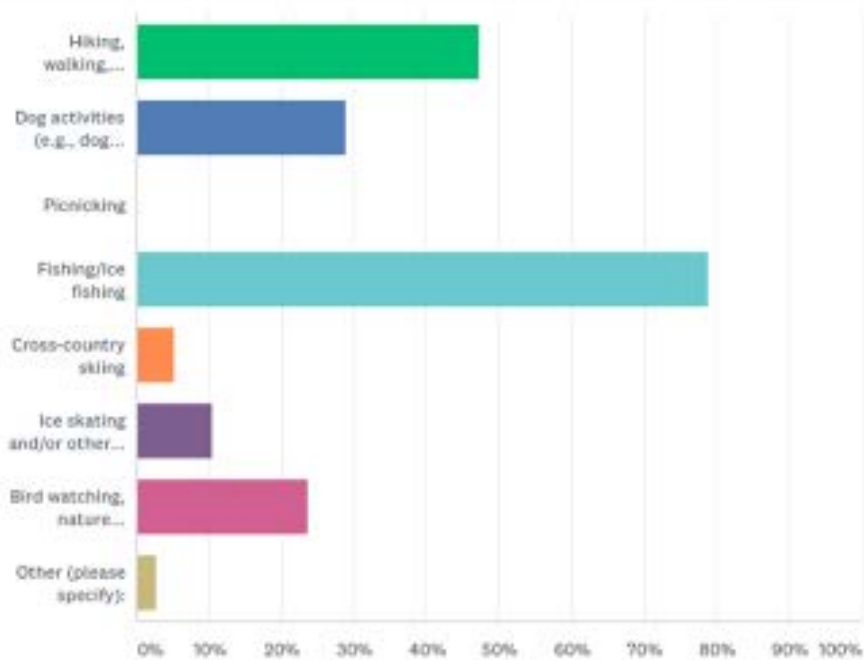
Q6...What recreational activities do you typically participate in when visiting Lake Elmo State Park during the open water season (April thru October). (check all that apply)



Powered by  SurveyMonkey

Figure 2. Results from a March 2020 public scoping efforts evaluating how people use Lake Elmo State Park and interest in removing Asian Clams, and improve fisheries and park amenities. Results depicted in Figure 2 indicate that angling is the most popular activity at Lake Elmo in the open water season.

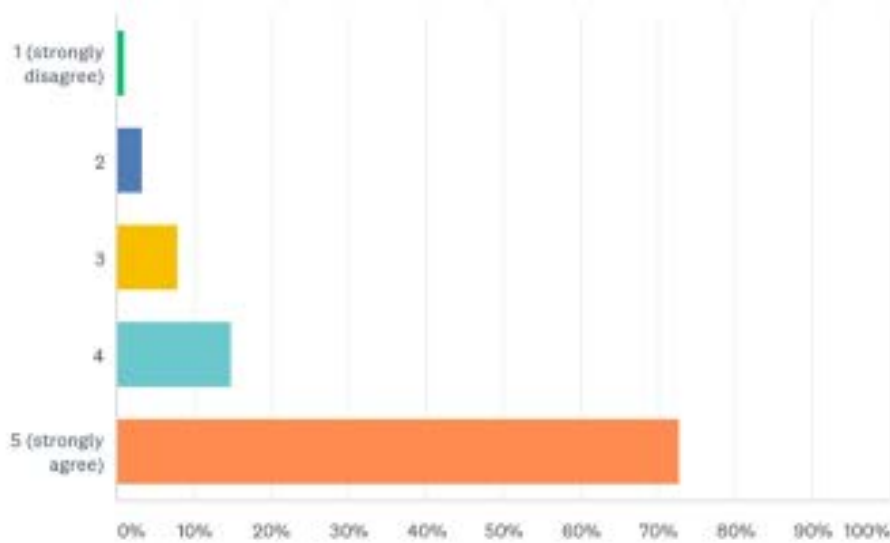
Q8...What recreational activities do you typically participate in when visiting Lake Elmo State Park during the winter (November thru March). (check all that apply)



Powered by  SurveyMonkey

Figure 3. Additional results from the Lake Elmo State Park March 2020 public scoping efforts further suggest that angling is the most popular activity at Lake Elmo in the winter months.

Q3...If work was done to remove Asian Clams, there would be an opportunity for FWP to do additional work to help improve aquatic fish habitat within Lake Elmo (e.g., increase the depth of the lake, improve aquatic vegetation, install gravel/rock jetty areas, create a sediment retention area, etc.). On a scale from 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree or disagree FWP should do additional work to help improve aquatic fish habitat within Lake Elmo?



Powered by  SurveyMonkey

Figure 4. Results from the Lake Elmo State Park March 2020 public scoping efforts indicates that the public strongly supports improving the habitat and the fishery. MTFWP is now in the process of searching for funds to meet the public expectation.

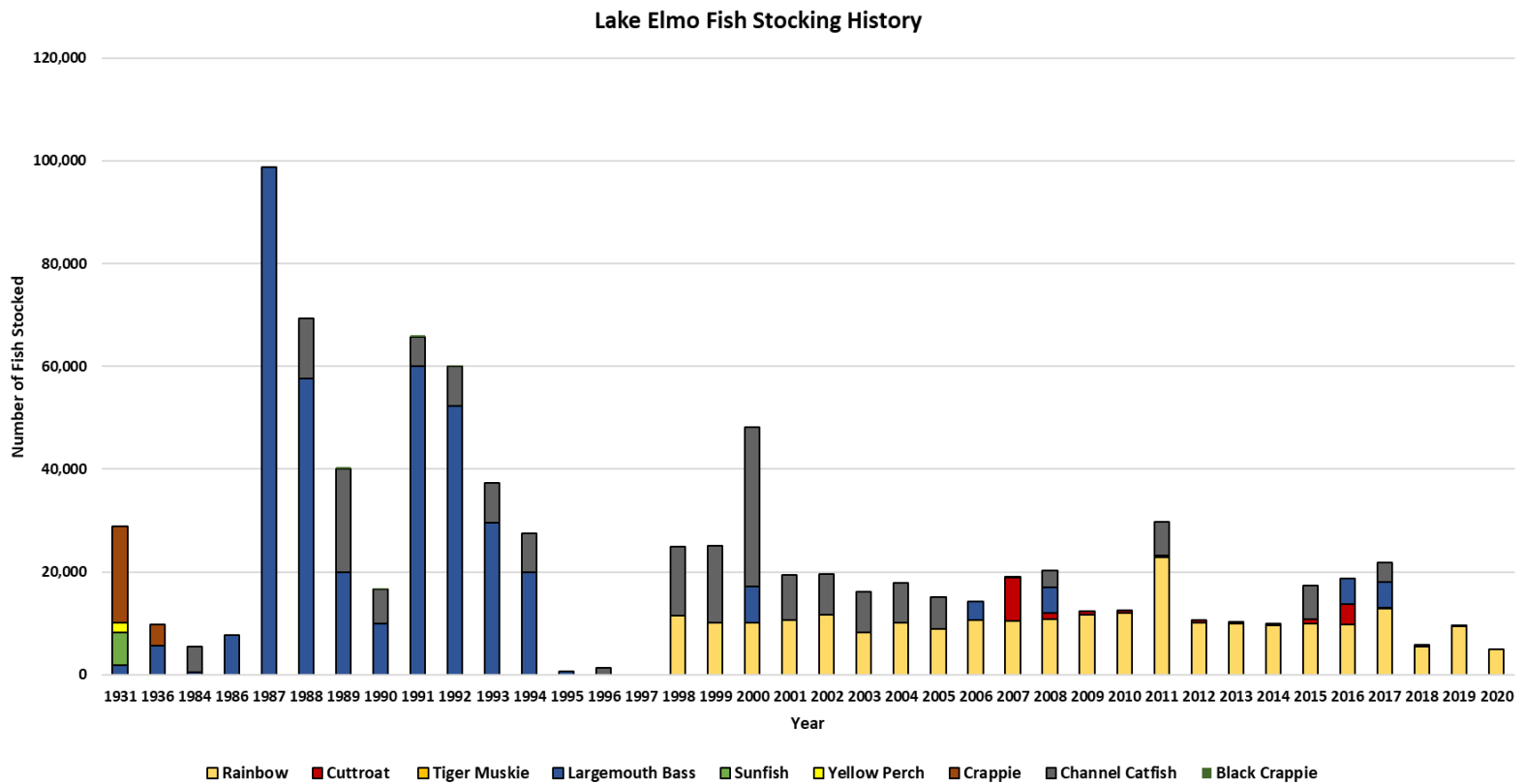


Figure 5. Montana Fish, Wildlife & Parks stocking history of Lake Elmo. The 1931 introduction of crappie, perch and sunfish were successful as those species have persisted in Lake Elmo. Poor recruitment of Largemouth Bass is likely a result of limited suitable habitat and rearing cover. However, bass over 5 pounds are caught on occasion in Lake Elmo. Channel Catfish have a similar history to bass; stocked with good growth and recruitment to the fishery with the occasional fish caught over 8 pounds. The addition of trout stocks increased angler visitation to the Park. The trout are managed as a put-grow-and-take fishery.