

2024 BCWMC Operating Budget

| | 2020 Budget | 2020 Gross Expenses | 2020 Revenue | 2020 NET Expenses | 2021 Budget | 2021 Gross Expenses | 2021 Revenue | 2021 NET Expenses | 2022 Budget | 2022 Gross Expenses | 2022 Revenue | 2022 NET Expenses | 2023 Budget | Proposed 2024 Budget | See Notes |
|--|------------------|---------------------|---------------------------------|-------------------|------------------|---------------------|---------------------------------|-------------------|------------------|---------------------|---------------------------------|-------------------|------------------|----------------------|------------------|
| ENGINEERING & MONITORING | | | | | | | | | | | | | | | |
| Technical Services | 130,000 | 143,081 | - | 143,081 | 134,000 | 105,492 | \$ - | 105,492 | 145,000 | 132,541 | | 132,541 | 145,000 | 145,000 | (A1) |
| Development/Project Reviews | 75,000 | 94,267 | 63,000 | 31,267 | 68,000 | 89,507 | \$ 73,554.00 | 15,953 | 75,000 | 103,851 | 77,617 | 26,234 | 80,000 | 90,000 | (A) |
| | | | Review fees | | | | Review fees | | | | Review fees | | | | |
| Non-fee and Preliminary Reviews | 20,000 | 16,851 | - | 16,851 | 24,000 | 38,406 | \$ 10,000.00 | 28,406 | 22,000 | 17,788 | 1,000 | 16,788 | 30,000 | 30,000 | (B) |
| | | | | | | | Cost share w/ MPLS | | | | Cost share w/ MPLS | | | | |
| Commission and TAC Meetings | 12,000 | 10,478 | - | 10,478 | 12,000 | 10,961 | \$ - | 10,961 | 14,000 | 13,119 | | 13,119 | 15,000 | 15,000 | (C) |
| Surveys and Studies | 10,000 | 3,745 | - | 3,745 | 9,000 | 7,683 | \$ - | 7,683 | 10,000 | 14,283 | | 14,283 | 15,000 | 15,000 | (D) |
| Water Quality / Monitoring | 102,600 | 119,397 | - | 119,397 | 129,000 | 132,432 | \$ - | 132,432 | 110,000 | 109,478 | | 109,478 | 105,000 | 160,500 | (E) |
| Water Quantity | 6,500 | 6,229 | - | 6,229 | 7,000 | 7,205 | \$ - | 7,205 | 8,000 | 6,369 | | 6,369 | 9,000 | 9,000 | (F) |
| Annual Flood Control Project Inspections | 12,000 | 69,149 | 69,149 | 0 | 12,000 | 14,999 | \$ 14,999.00 | - | 12,000 | 21,290 | 21,290 | - | 15,000 | 85,000 | (G) |
| | | | Transfer from long term account | | | | Transfer from long term account | | | | Transfer from long term account | | | | |
| Municipal Plan Review | 2,000 | 1,548 | - | 1,548 | 2,000 | - | \$ - | - | 2,000 | 1,464 | | 1,464 | 2,000 | 2,000 | (H) |
| Watershed Outlet Monitoring Program | 20,500 | 20,837 | 4,500 | 16,337 | 23,000 | 18,257 | \$ 5,500.00 | 12,757 | 28,500 | 28,425 | 3,750 | 24,675 | 27,000 | 26,500 | (I) |
| | | | Grant from Met Council | | | | Grant from Met Council | | | | Grant from Met Council | | | | |
| Annual XP-SWMM Model Updates/Reviews | - | - | - | - | - | \$ - | \$ - | - | 5,000 | 8,983 | | 8,983 | 3,000 | 3,000 | (J) |
| APM/AIS Work | 30,000 | 11,634 | 1,128 | 10,506 | 14,000 | 13,533 | \$ 5,601.00 | 7,932 | 13,000 | 41,844 | 22,500 | 19,344 | 40,000 | 40,000 | (K) |
| | | | Cost share with TRPD | | | | DNR Grant & Cost share w/ TRPD | | | | DNR Grant & Cost share w/ TRPD | | | | |
| Subtotal Engineering & Monitoring | \$420,600 | \$497,215 | \$137,777 | \$359,438 | \$434,000 | \$438,475 | \$ 109,654.00 | \$328,821 | \$444,500 | \$499,435 | \$126,157 | \$373,278 | \$486,000 | \$621,000 | See Notes |
| PLANNING | | | | | | | | | | | | | | | |
| Next Generation Plan Development | 18,000 | 18,000 | - | 18,000 | 18,000 | 10,001 | \$ - | 10,001 | 18,000 | 47,372 | 11,000 | 36,372 | 53,250 | 35,650 | (L) |
| | | | | | | | | | | | Transfer from Plan account | | | | |
| Subtotal Planning | \$18,000 | \$18,000 | \$0 | \$18,000 | \$18,000 | \$10,001 | \$ - | \$10,001 | \$18,000 | \$47,372 | \$11,000 | \$36,372 | \$53,250 | \$35,650 | |

Continued next page

| | | | | | | | | | | | | | | | |
|--|------------------|------------------|---------------------------|------------------|------------------|------------------|---------------------------|------------------|------------------|------------------|---------------------------|------------------|------------------|------------------|------|
| ADMINISTRATION | | | | | | | | | | | | | | | |
| Administrator | 69,200 | 64,764 | 30,000 | 34,764 | 67,400 | 67,481 | \$ 29,495.00 | 37,986 | 70,848 | 69,174 | 34,000 | 35,174 | 78,750 | 78,750 | (M) |
| | | | Transfer from CIP account | | | | Transfer from CIP account | | | | Transfer from CIP account | | | | |
| MAWD Dues | 500 | 500 | - | 500 | 3,750 | 3,750 | \$ - | 3,750 | 7,500 | 7,500 | | 7,500 | 7,500 | 7,500 | (N) |
| Legal | 15,000 | 20,996 | - | 20,996 | 15,000 | 16,280 | \$ - | 16,280 | 17,000 | 20,204 | | 20,204 | 17,000 | 21,000 | (O) |
| Financial Management | 3,500 | 3,500 | - | 3,500 | 4,000 | 10,600 | \$ - | 10,600 | 13,500 | 14,260 | | 14,260 | 14,540 | 17,000 | (P) |
| Audit, Insurance & Bond | 18,000 | 18,684 | - | 18,684 | 18,000 | 14,949 | \$ - | 14,949 | 18,700 | 18,218 | | 18,218 | 18,700 | 18,700 | (Q) |
| Meeting Catering | 1,500 | 317 | - | 317 | 1,300 | - | \$ - | - | 1,300 | 1,830 | | 1,830 | 2,400 | 2,400 | (R) |
| Administrative Services | 15,000 | 11,887 | - | 11,887 | 8,000 | 5,960 | \$ - | 5,960 | 8,000 | 5,993 | | 5,993 | 7,240 | 2,570 | (S) |
| Subtotal Administration | \$122,700 | \$120,648 | \$30,000 | \$90,648 | \$117,450 | \$119,020 | \$29,495 | \$89,525 | \$136,848 | \$137,179 | \$34,000 | \$103,179 | \$146,130 | \$147,920 | |
| OUTREACH & EDUCATION | | | | | | | | | | | | | | | |
| Publications / Annual Report | 1,300 | 1,069 | - | 1,069 | 1,300 | 375 | \$ - | 375 | 1,300 | 1,164 | | 1,164 | 1,000 | 1,200 | (T) |
| Website | 1,000 | 1,264 | - | 1,264 | 1,800 | 544 | \$ - | 544 | 1,800 | 645 | | 645 | 1,600 | 1,600 | (U) |
| Watershed Education Partnerships | 15,850 | 16,535 | - | 16,535 | 17,350 | 13,080 | \$ - | 13,080 | 18,350 | 15,410 | | 15,410 | 18,350 | 18,350 | (V) |
| Education and Public Outreach | 22,000 | 38,321 | 28,811 | 9,510 | 26,000 | 23,073 | \$ 6,295.00 | 16,778 | 28,000 | 36,591 | 13,013 | 23,578 | 28,000 | 28,000 | (W) |
| | | | Grant from BWSR | | | | Grant from BWSR | | | | Grant from BWSR | | | | |
| Public Communications | 1,000 | 1,113 | - | 1,113 | 1,000 | 1,028 | \$ - | 1,028 | 1,100 | 69 | | 69 | 1,100 | 1,000 | (X) |
| Subtotal Outreach & Education | \$41,150 | \$58,302 | \$28,811 | \$29,491 | \$47,450 | \$38,100 | \$6,295 | \$31,805 | \$50,550 | \$53,879 | \$13,013 | \$40,866 | \$50,050 | \$50,150 | |
| MAINTENANCE FUNDS | | | | | | | | | | | | | | | |
| Channel Maintenance Fund | 25,000 | 25,000 | - | 25,000 | 20,000 | \$20,000 | \$ - | 20,000 | 25,000 | 25,000 | | 25,000 | 25,000 | 25,000 | (Y) |
| Flood Control Project Long-Term Maint. | 25,000 | 25,000 | - | 25,000 | 25,000 | 25,000 | \$ - | 25,000 | 25,000 | 25,000 | | 25,000 | 35,000 | 35,000 | (Z) |
| Subtotal Maintenance Funds | \$50,000 | \$50,000 | \$0 | \$50,000 | \$45,000 | \$45,000 | \$0 | \$45,000 | \$50,000 | \$50,000 | \$0 | \$50,000 | \$60,000 | \$60,000 | |
| TMDL WORK | | | | | | | | | | | | | | | |
| TMDL Implementation Reporting | 10,000 | 263 | - | 263 | 7,000 | 6,989 | \$ - | 6,989 | 7,000 | 3,397 | - | 3,397 | - | - | (AA) |
| Subtotal TMDL Work | \$10,000 | \$263 | \$0 | \$263 | \$7,000 | \$7,000 | \$7,000 | \$7,000 | \$7,000 | 3,397 | - | 3,397 | \$0 | | |
| GRAND TOTAL | \$662,450 | \$744,428 | \$196,588 | \$547,840 | \$668,900 | \$657,596 | \$152,444 | \$512,152 | \$706,898 | \$791,262 | \$184,170 | \$607,092 | \$795,430 | \$914,720 | |

| | |
|---|-------------------|
| Estimated 2024 Revenues | |
| Expected Income | |
| | Income |
| Assessments to cities | \$ 622,500 |
| Investment Income | \$ - |
| CIP Administrative Funds (2.0% of est. requested levy of \$1.972M) | \$ 39,440 |
| Project review fees | \$ 77,000 |
| Transfer from Long-term Maint Fund for Flood Control Proj Inspections | \$ 85,000 |
| WOMP reimbursement | \$ 5,000 |
| TRPD reimbursement | \$ 5,000 |
| Transfer from Plan Development Savings | \$ 13,000 |
| TOTAL EXPECTED INCOME | \$ 846,940 |
| Expected Expenses | |
| Total operating budget | \$ 914,720 |
| Fund Balance Details | |
| Est. Beginning Fund Balance (Jan 31, 2024) | \$ 517,671 |
| Change in Fund Balance (income - expenses) | \$ (67,780) |
| Est. Remaining Fund Balance (Jan 31, 2025) | \$ 449,891 |

| Community | For Taxes Payable in 2023 | 2023 Percent of | Area Watershed (w/ 2022 changes) | Percent of | Average | City Assessments | | | | | | | 2024 Budget | Percent increase by city over 2023 |
|----------------|---------------------------|-----------------|----------------------------------|---------------|---------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|------------------------------------|
| | | | | | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | | |
| | Net Tax Capacity | Valuation | in Acres | of Area | Percent | \$500,000 | \$515,050 | \$529,850 | \$550,450 | \$554,900 | \$565,998 | \$ 617,430 | \$ 622,500 | |
| Crystal | \$12,385,383 | 5.58 | 1,297 | 5.11 | 5.35 | \$25,704 | \$26,904 | \$27,877 | \$29,062 | \$29,898 | \$30,206 | \$32,948 | \$33,280 | 0.8% |
| Golden Valley | \$56,201,654 | 25.34 | 6,615 | 26.05 | 25.70 | \$131,270 | \$134,649 | \$138,553 | \$144,693 | \$145,228 | \$148,477 | \$160,438 | \$159,957 | -0.3% |
| Medicine Lake | \$1,436,006 | 0.65 | 199 | 0.78 | 0.72 | \$3,561 | \$3,783 | \$3,846 | \$3,975 | \$3,928 | \$3,988 | \$4,472 | \$4,455 | -0.4% |
| Minneapolis | \$16,265,139 | 7.33 | 1,685 | 6.64 | 6.98 | \$33,609 | \$34,763 | \$35,805 | \$37,631 | \$37,983 | \$39,103 | \$43,643 | \$43,481 | -0.4% |
| Minnetonka | \$14,598,518 | 6.58 | 1,108 | 4.36 | 5.47 | \$28,199 | \$28,053 | \$28,989 | \$29,967 | \$29,622 | \$30,437 | \$34,091 | \$34,069 | -0.1% |
| New Hope | \$12,585,791 | 5.68 | 1,368 | 5.39 | 5.53 | \$25,917 | \$26,740 | \$27,987 | \$28,987 | \$29,464 | \$30,087 | \$33,078 | \$34,431 | 4.1% |
| Plymouth | \$93,993,300 | 42.38 | 12,001 | 47.26 | 44.82 | \$224,531 | \$231,682 | \$237,986 | \$245,942 | \$247,860 | \$252,307 | \$275,216 | \$279,012 | 1.4% |
| Robbinsdale | \$4,329,509 | 1.95 | 369 | 1.45 | 1.70 | \$7,747 | \$8,189 | \$8,523 | \$8,937 | \$9,299 | \$9,288 | \$10,314 | \$10,599 | 2.8% |
| St. Louis Park | \$9,974,412 | 4.50 | 752 | 2.96 | 3.73 | \$19,463 | \$20,287 | \$20,284 | \$21,257 | \$21,618 | \$22,105 | \$23,230 | \$23,216 | -0.1% |
| TOTAL | \$221,769,712 | 100.00 | 25,394 | 100.00 | 100.00 | \$500,000 | \$515,050 | \$529,850 | \$550,450 | \$554,900 | \$565,998 | \$ 617,430 | \$ 622,500 | 0.8% |

NOTES

(A1) General technical services by Barr Engineering; 2021 budget based on actual expenditures in 2019 and 2020. 2024 Budget same as 2022 and 2023.

(A) Partially funded by application fees; with the creation of the preliminary and non-fee budget category, most of the review costs will be covered by application fees. Budget based on recent actual expenses and projected number of projects submitted for review. New review fees effective Aug 1, 2022. Increase in 2024 to better align with 2022 costs.

(B) This was a new line item in 2015 used to cover reviews for which either we do not receive an application fee or it's too early in the process for us to have received an application fee. Includes DNR application reviews, MnDOT project reviews, and other prelim reviews requested by administrator and member cities. Reviews for large projects such as SWLRT reviews and North Loop Green Project have been partially or fully reimbursed to Commission.

(C) Includes attendance at BCWMC meetings, TAC meetings and other committee meetings, as needed. 2017 budget increased to allow for additional BCWMC Engineer staff to attend Commission/TAC meetings (total of 3 assumed). 2018 - 2020 budgets were reduced from 2017 and assumed 12 BCWMC meetings and 5 other meetings (TAC, etc.). 2021 budget also assumes 17 meetings including BCWMC meetings (12), TAC meetings (3), Administrative Services Committee meetings (1), Budget Committee meetings and other meetings (1). 2022 and 2023 budgets increased to reflect return to in-person meetings, plus additional staff attendance at meetings. 2024 Budget same as 2023.

(D) For Commission-directed surveys and studies not identified in other categories - e.g., past work has included watershed tours, Medicine Lake outlet work, Flood Control Project Maintenance and Responsibilities, Sweeney Lake sediment monitoring, stream monitoring equipment purchase. 2018 budget was reduced from previous years for overall budget savings. 2019 budget is more in line with previous years and gives Commission flexibility to investigate or tackle unforeseen issues that arise. Lowered again in 2020, 2021, and 2022 for budget savings. Among other surveys and studies, in 2023 this budget may be used to review and develop agreements with Minneapolis related to tunnel roles and responsibilities. There are not yet specific plans for this budget in 2024 but it allows BCWMC to address unforeseen issues.

(E) Routine lake and stream monitoring. Follows monitoring schedule laid out in Appendix A of Watershed Plan. Higher budget than 2023 due to monitoring 3 lakes instead of 2, biological monitoring on streams, and higher water quality monitoring costs for North Branch than Plymouth Creek (partnership with TRPD brought down costs for Plymouth Creek). See details on next page. https://www.bassettcreekwmo.org/application/files/7914/4676/6436/Appendix_A_Monitoring_Plan.pdf

(F) Water Quantity (lake level) monitoring. 2018 budget lowered for budget savings and resulted in fewer data points. 2019 budget back to earlier budget levels. 2020 budget lowered again for budget savings. 2022 and 2023 budget increase allows for additional measurements and benchmark checks, beyond the once/month lake level measurements to assist with proper maintenance of hydrologic and hydraulic modeling and climate resiliency preparations. 2024 same as 2023 budget

(G) 2024 budget includes double box inspection, along with annual inspections. Budget assumes \$70,000 for double box inspection (includes \$25,000 in subcontractor fees for Rescue Resources and a crane), and \$15,000 for regular annual inspections. The BCWMC Flood Control Project Double Box Culvert Repairs CIP project (FCP-1) is slated for 2027; a feasibility study is needed in 2025 or 2026. Therefore, the double box inspection includes meeting with contractor in double box culvert to discuss repairs for 2025/2026 feasibility study. The last deep tunnel inspection was 2020, next one is due 2030. Unsubmerged deep tunnel inspection due in 2025.

http://www.bassettcreekwmo.org/application/files/4514/9637/1815/2016_FCP_Policies.pdf

(H) Municipal plan approvals completed in 2019; however, this task has also included review of adjacent WMO plan amendments, and review of city ordinances; \$2,000 budget recommended annually.

(I) Monitoring at the Watershed Outlet Monitoring Program (WOMP) site in Minneapolis through an agreement with Met Council (MCES). Commission is reimbursed \$5,000 from Met Council. Met Council pays for equipment, maintenance, power, cell service, and lab analyses. Monitoring protocol changed in 2017 with collection of bi-monthly samples (up from once-per-month sampling). Both Barr and Stantec (previously Wenck) have tasks related to WOMP activities. Station was moved in late 2020. In 2022, Barr portion was set at \$10,000 because MCES requested additional high flow measurements due to the new station location. Stantec portion was similar to previous years at \$18,500 due to similar sampling regime. 2024 budget reflects actual 2023 contract with Stantec and Barr estimates (\$7,500 for Barr + \$19,000 for Stantec).

(J) This item is used to make updates to the XP-SWMM model, coordinate with P8 model updates, and assist cities with model use. No XP-SWMM updates were performed 2019 - 2021 due to work on the grant funded FEMA modeling project. 2022 budget includes finalizing updates to the Commission's official model and flood elevations to match the "FEMA model" (this work was started in 2021 using "Surveys and Studies" budget). 2024 budget is same as 2023: budget assumes Barr will request, compile, and review information provided by the cities and flag those that are large enough/significant enough to incorporate into the XP-SWMM and P8 model updates. As this covers both XP-SWMM and P8, we assumed \$0 for the TMDL Implementation Reporting (P8 model update) budget.

Notes (continued)

(K) Funds to implement recommendations of Aquatic Plant Management/Aquatic Invasive Species Committee likely including curly-leaf pondweed control in Medicine Lake and small grant program for launch inspectors, education/outreach, etc. by other organizations including TRPD, AMLAC, others. TRPD shares cost (17%) of treatments. In 2021, recieved \$5,000 DNR grant. In 2022, recieved \$10,000 DNR grant. In 2022 and for a few years thereafter, treatment costs are expected to be significantly higher due to expanded treatment area allowed under Lake Vegetation Management Plan. No DNR grant in 2023 awarded in 2023. 2024 budget same as 2023.

(L) The scope and budget for development of the 2025 Watershed Plan was approved in February 2022. \$38,000 has already been set aside 2019 - 2022 in a long term account for Plan development, of which \$11,000 was initially planned to cover work in 2022. The Commission approved a revised Plan scope and budget in September 2022 to include additional funding to address "complex issues." In 2022, Barr spent approximately \$41,000 as part of the original Plan update and complex issues tasks. In 2023, Barr estimates spending \$42,000 and Administrator estimates spending \$11,250 on Plan development (total = \$53,250) and Barr estimates spending \$16,300 to address complex issues. Barr estimates spending \$26,700 in 2024 and Administrator estimates spending \$8,950 on Plan development (total = \$35,650).

(M) Amended Administrator contract approved March 2022 includes 87.5 hours per month at \$75/hour starting in FY23 for total of \$78,750.

(N) MN Association of Watershed District Annual dues. New budget item. 2019 and 2020 dues were \$500 because WMOs were newly allowed to join the organization. 2021 dues \$3,750. Starting in 2022 dues went to the max of \$7,500 similar to other Metro watersheds.

(O) For Commission attorney. 2022 budget included 3% hourly rate increase over 2021 + more work expected. Acutal costs in 2022 were \$3,000 over budget. 2024 proposed budget is in line with acutal 2022 costs. Legal costs for some CIP projects will be charged to specific CIP budgets, as warranted.

(P) In 2021, Commission began contractoing with Redpath for accounting services. 2023 contract includes NTE of \$16,650. Increased 2024 budget to reflect slight potential increase from 2023 contract.

(Q) Insurance and audit costs have risen considerably in the last few years.

(R) Assumes 12 in-person meetings @ \$200 per meeting

(S) Recording Secretary \$40/hr rate * 8 hrs/mo for 6 months for minutes (\$1,920 total) + \$250/mo meeting packet printing/mailling + \$400 supplies (envelopes, stamps, etc).

(T) Budget was decreased in last few years to be more in line with actual expenses. Costs associated with Commission Engineer assistance with annual report

(U) Based on agreement with HDR for website hosting and maintenance activities.

(V) Includes CAMP (\$7,000), River Watch (\$2,000), Metro Watershed Partners (\$3,500), Metro Blooms Workshops (\$1,500), Children's Water Festival (\$350), Metro Blooms resident engagement in Minneapolis neighborhoods (\$4,000).

(W) Includes funding for West Metro Water Alliance at \$13,000 and \$15,000 for work by educational contractors + supplies and materials including educational signage, display materials, Commissioner training, etc. [2024 may be a good year to redesign and print watershed map for estimated \$15,000]

(X) Public Communications covers required public notices for public hearings, etc.

(Y) Will be transferred to Channel Maintenance Fund for use by cities with smaller projects along main streams.

(Z) Will be transferred to Long-Term Maintenance Fund. Budget increased in 2023 to be more in line with expected costs at TAC's recommendation.

(AA) This task is meant for updating the P8 pollution model; will be done in conjunction with the work in budget line J with XP-SWMM model updates.

| BCWMC 2024 Water Quality Monitoring Budgets - by item | | |
|---|------------------|---|
| Item | Budget | Notes |
| Reporting on 2023 (and 2022 biological) monitoring: | | |
| Plymouth Creek stream flow and quality monitoring (2022 & 2023), and biological monitoring (2022) | \$15,500 | Stream flow, water quality, and biological monitoring will be combined into one report for Plymouth Creek. Report will follow template of recent reports. |
| Sweeney Lake & Twin Lake | \$13,000 | Report will follow template of recent reports. |
| 2024 monitoring: | | |
| Year 1 of North Branch stream flow and quality monitoring | \$42,000 | Flow and monitoring equipment will be installed in the North Branch of Bassett Creek. Samples will be collected during 8 storm events and 7 baseflow events. Water depth, flow, temperature, and specific conductance will be continuously measured during the 2024 monitoring period. Dissolved oxygen will be continuously measured for 4 days during July or August. Storm and base flow samples will be analyzed for nutrients (total phosphorus, ortho phosphorus, dissolved phosphorus, nitrate/nitrite, ammonia, and total Kjeldahl nitrogen), solids (total suspended solids and volatile suspended solids), chlorides, hardness, calcium, and magnesium. Base-flow samples will also be analyzed for chlorophyll a, and E. coli bacteria. Quarterly grab samples will be analyzed for metals (chromium, cadmium, copper, lead, nickel, and zinc). Instantaneous dissolved oxygen and pH measurements will be taken when baseflow samples are collected. MCES Lab will perform the analyses. Four manual flow measurements will be taken to verify/adjust the rating curve. Budget assumes an average level of maintenance and trouble-shooting efforts. Budget also includes purchase of a new 4G cell modem, as the existing modem is obsolete. Cellular data services will be purchased directly from the vendor (Campbell Scientific), rather than Verizon (saves time and costs). Equipment that cannot withstand winter weather (e.g., specific conductance probe) will be removed at the end of the monitoring period. Data will be reviewed and |
| Parkers Lake (Priority 1 Deep lake) | \$20,000 | Detailed lake monitoring includes monitoring one location on Parkers Lake on 6 occasions for selected parameters (total phosphorus, soluble reactive phosphorus, total nitrogen, chlorophyll a, chloride, temperature, pH, DO, and specific conductance), plus parameters associated with AIS vulnerability (alkalinity, sodium, hardness, calcium, and magnesium) sample analysis, phytoplankton and zooplankton collection and analysis, an aquatic plant survey (two occasions), calculation of aquatic plant IBIs, preparation of dissolved oxygen, temperature, total phosphorus, and specific conductance isopleths, completion of trend analyses of total phosphorus, chlorophyll a, and Secchi disc average summer values. Three Rivers Park District staff will collect water quality, phytoplankton, and zooplankton samples, perform aquatic plant surveys, and complete lab analysis of samples (except for AIS vulnerability parameters) at a reduced cost to BCWMC. Final report preparation (following template of recent reports) and presentation costs deferred to 2025. |
| Westwood Lake (Priority 1 Shallow lake) | \$23,000 | Detailed lake monitoring includes monitoring one location on six occasions for selected parameters (total phosphorus, ortho phosphorus, total nitrogen, nitrate +nitrite nitrogen, total Kjeldahl nitrogen, chlorophyll a, chloride, Secchi disc, temperature, pH, DO, and specific conductance), plus parameters associated with AIS vulnerability (alkalinity, hardness, calcium, magnesium, and sodium) and sample analysis, monitoring phytoplankton, and zooplankton and sample analysis, an aquatic plant survey (two occasions), calculation of aquatic plant IBIs, preparation of dissolved oxygen, temperature, total phosphorus, and specific conductance isopleths, completion of trend analyses of total phosphorus, chlorophyll a, and Secchi disc average summer values. Final report preparation (following template of recent reports) and presentation costs deferred to 2025. |
| Cavanaugh Lake (Priority 2 Shallow lake) | \$23,000 | Detailed lake monitoring includes monitoring one location on six occasions for selected parameters (total phosphorus, ortho phosphorus, total nitrogen, nitrate +nitrite nitrogen, total Kjeldahl nitrogen, chlorophyll a, chloride, Secchi disc, temperature, pH, DO, and specific conductance), plus parameters associated with AIS vulnerability (alkalinity, hardness, calcium, magnesium, and sodium) and sample analysis, monitoring phytoplankton, and zooplankton and sample analysis, an aquatic plant survey (two occasions), calculation of aquatic plant IBIs, preparation of dissolved oxygen, temperature, total phosphorus, and specific conductance isopleths, completion of trend analyses of total phosphorus, chlorophyll a, and Secchi disc average summer values. Final report preparation (following template of recent reports) and presentation costs deferred to 2025. |
| Biological monitoring - Main Stem & North Branch | \$14,000 | Assumptions: 1) one sample event during late September to early October of 2024; 2) macroinvertebrate samples will be collected and a habitat survey completed at one location on the North Branch and three locations on the Main Stem; 3) microscope identification/ enumeration by subconsultant (Dr. Dean Hansen); and 4) MPCA computes MIBI at no cost to BCWMC. Budget does not include report and presentation to Commission, which will likely occur in 2026 (and be included in 2026 budget), to coincide with the reporting on the North Branch stream flow and water quality monitoring. This monitoring could be deferred to 2025, if needed. |
| General water quality | \$10,000 | |
| Total Water Quality Monitoring | \$160,500 | |