

Item 5C.  
BCWMC 8-15-19

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Proposed 2020 Operating Budget</b>												
2	<b>Item</b>	<b>2015 Budget</b>	<b>2015 Actual</b>	<b>2016 Budget</b>	<b>2016 Actual</b>	<b>2017 Budget</b>	<b>2017 Actual</b>	<b>2018 Budget</b>	<b>2018 Actual</b>	<b>2019 Budget</b>	<b>Original 2020 Proposed Budget</b>	<b>Revised 2020 Proposed Budget</b>	<b>See Notes</b>
3	<b>ENGINEERING &amp; MONITORING</b>												
4	Technical Services	120,000	116,972	120,000	112,502	125,000	140,702	125,000	126,154	130,000	130,000	130,000	(A1)
5	Development/Project Reviews	65,000	51,622	65,000	94,619	65,000	71,791	75,000	45,070	80,000	75,000	75,000	(A)
6	Non-fee and Preliminary Reviews	15,000	53,686	15,000	35,253	15,000	20,906	10,000	23,073	15,000	20,000	20,000	(B)
7	Commission and TAC Meetings	14,500	11,525	13,000	11,808	14,000	11,753	12,000	10,575	12,000	12,000	12,000	(C)
8	Surveys and Studies	20,000	22,109	25,000	24,444	20,000	16,347	12,000	-	20,000	10,000	10,000	(D)
9	Water Quality / Monitoring	63,000	77,429	76,000	75,892	74,300	70,855	80,700	120,728	78,000	102,600	102,600	(E)
10	Water Quantity	11,500	9,115	11,500	8,731	11,500	8,570	6,300	5,678	10,000	6,500	6,500	(F)
11	Assistance on Erosion Control Inspections	1,000		1,000	-	1,000	-	1,000	-	-	-	-	(G)
12	Annual Flood Control Project Inspections	10,000	9,996	10,000	8,867	12,000	7,678	48,000	20,279	48,000	12,000	12,000	(H)
13	Municipal Plan Review	2,000		2,000	2,491	8,000	1,835	8,000	26,779	4,000	2,000	2,000	(I)
14	Watershed Outlet Monitoring Program	17,000	15,786	17,000	17,002	15,500	19,994	20,500	18,145	20,500	20,500	20,500	(J)
15	Annual XP-SWMM Model Updates/Reviews					10,000	5,650	10,000	8,918	-	-	-	(K)
16	APM/AIS Work					35,000	34,920	32,000	35,977	32,000	30,000	30,000	(L)
17	<b>Subtotal Engineering &amp; Monitoring</b>	<b>\$339,000</b>	<b>\$368,240</b>	<b>\$355,500</b>	<b>\$391,609</b>	<b>\$406,300</b>	<b>\$411,001</b>	<b>\$440,500</b>	<b>\$441,376</b>	<b>\$449,500</b>	<b>\$420,600</b>	<b>\$420,600</b>	
18	<b>PLANNING</b>												
19	Next Generation Plan Development	30,000	28,277	-	-	-				12,000	18,000	18,000	(M)
20	<b>Subtotal Planning</b>	<b>\$30,000</b>	<b>\$28,277</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>\$0</b>	<b>\$0</b>	<b>\$12,000</b>	<b>\$18,000</b>	<b>\$18,000</b>	

Item	2015 Budget	2015 Actual	2016 Budget	2016 Actual	2017 Budget	2017 Actual	2018 Budget	2018 Actual	2019 Budget	2020 Proposed Budget	2020 Proposed Budget	See Notes
<b>ADMINISTRATION</b>												
Administrator	62,000	59,395	62,000	59,033	67,200	60,559	67,200	59,955	69,200	69,200	69,200	(N)
MN Assoc. Watershed Dist. Dues										7,500	500	(O)
Legal	18,500	12,969	18,500	15,470	18,500	16,249	17,000	13,313	17,000	15,000	15,000	(P)
Financial Management	3,200	3,200	3,200	3,277	3,200	3,200	3,200	3,200	3,500	3,500	3,500	(Q)
Audit, Insurance & Bond	15,500	13,181	15,500	14,606	15,500	17,304	15,500	17,648	18,000	18,000	18,000	(R)
Meeting Catering Expenses	2,500	1,564	2,200	1,572	2,000	1,198	1,600	1,295	1,500	1,500	1,500	(S)
Administrative Services	32,000	29,843	25,000	11,583	18,000	13,346	15,000	14,240	15,000	15,000	15,000	(T)
<b>Subtotal Administration</b>	<b>\$133,700</b>	<b>\$120,152</b>	<b>\$126,400</b>	<b>\$105,541</b>	<b>\$124,400</b>	<b>\$111,856</b>	<b>\$119,500</b>	<b>\$109,651</b>	<b>\$124,200</b>	<b>\$129,700</b>	<b>\$122,700</b>	
<b>OUTREACH &amp; EDUCATION</b>												
Publications / Annual Report	4,000	1,430	2,500	1,246	2,500	1,138	1,500	937	1,300	1,300	1,300	(U)
Website	12,000	11,802	3,500	2,275	4,400	1,228	4,200	443	3,000	1,000	1,000	(V)
Watershed Education Partnerships	15,500	10,700	15,500	9,550	15,500	12,354	13,850	13,454	15,850	15,850	15,850	(W)
Education and Public Outreach	17,000	12,830	22,500	25,710	20,000	19,302	22,000	18,585	25,000	22,000	22,000	(X)
Public Communications	3,000	2,270	2,500	1,128	2,500	732	2,500	563	1,000	1,000	1,000	(Y)
<b>Subtotal Outreach &amp; Education</b>	<b>\$51,500</b>	<b>\$39,032</b>	<b>\$46,500</b>	<b>\$39,909</b>	<b>\$44,900</b>	<b>\$34,754</b>	<b>\$44,050</b>	<b>\$33,982</b>	<b>\$46,150</b>	<b>\$41,150</b>	<b>\$41,150</b>	
<b>MAINTENANCE FUNDS</b>												
Channel Maintenance Fund	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	(Z)
Flood Control Project Long-Term Maint.	25,000	25,000	25,000	25,000	25,000	25,000	25,000	4,000	25,000	25,000	25,000	(AA)
<b>Subtotal Maintenance Funds</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$29,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	<b>\$50,000</b>	
<b>TMDL WORK</b>												
TMDL Implementation Reporting	20,000	15,881	20,000	18,950	20,000	19,209	10,000	4,668	10,000	10,000	10,000	(BB)
<b>Subtotal TMDL Work</b>	<b>\$20,000</b>	<b>\$15,881</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$19,209</b>	<b>\$10,000</b>	<b>\$ 4,668</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$10,000</b>	
<b>GRAND TOTAL</b>	<b>\$624,200</b>	<b>\$621,582</b>	<b>\$598,400</b>	<b>\$607,059</b>	<b>\$645,600</b>	<b>\$626,820</b>	<b>\$664,050</b>	<b>\$618,677</b>	<b>\$691,850</b>	<b>\$669,450</b>	<b>\$662,450</b>	

<b>2019 Financial Information</b>		
Fund Balance as of January 31, 2019 (draft audit)	\$	380,136
Income from assessments in 2019	\$	529,850
Expected interest income in 2019		
Expected income from project review fees	\$	60,000
Expected income from CIP Administrative Funds	\$	28,000
Expected transfer from Long-term Maint Fund for Flood Control Project I	\$	48,000
Expected income from WOMP reimbursement	\$	5,000
Expected income from reimbursements from 2019 work <sup>1</sup>	\$	10,000
Estimated funds available for fiscal year 2019	\$	1,060,986
Estimated expenditures for fiscal year 2019	\$	691,850
Estimated fund balance as of January 31, 2020	\$	369,136
<sup>1</sup> SWLRT = \$7,000; BLLRT = \$3,399		
<b>Revenues</b>		
<b>2020 Revenues</b>		
<b>Expected Income</b>	<u>Original</u>	<u>Revised</u>
Proposed Assessments to cities	\$ 553,950	\$ 550,450
Use of fund balance	\$ 18,500	\$ 15,000
CIP Administrative Funds (2.0% of est. requested levy of \$1.5M)	\$ 30,000	\$ 30,000
Project review fees	\$ 50,000	\$ 50,000
Transfer from Long-term Maint Fund for Flood Control Proj Inspections	\$ 12,000	\$ 12,000
WOMP reimbursement	\$ 5,000	\$ 5,000
Expected reimbursement for Blue Line LRT work	\$ -	\$ -
Interest income in 2020	\$ -	\$ -
	\$ 669,450	\$ 662,450
<b>Expected Expenses</b>		
Total operating budget	\$ 669,450	\$ 662,450
<b>Fund Balance Details</b>		
Est. Beginning Fund Balance (Jan 31, 2020)	\$ 369,136	\$ 369,136
Use of Fund Balance (see income above)	\$ 18,500	\$ 15,000
Est. Remaining Fund Balance (Jan 31, 2021)	\$ 350,636	\$ 354,136

City Assessments

	2015	2016	2017	2018	2019	Original 2020 Proposed Assessments +4.5% over 2019	Revised 2020 Proposed Assessments +3.9% over 2019
<b>Community</b>	<b>\$490,345</b>	<b>\$490,345</b>	<b>\$500,000</b>	<b>\$515,050</b>	<b>\$529,850</b>	<b>\$553,950</b>	<b>\$550,450</b>
Crystal	\$25,868	\$25,771	\$25,704	\$26,904	\$27,877	\$29,247	\$29,062
Golden Valley	\$121,964	\$127,675	\$131,270	\$134,649	\$138,553	\$145,613	\$144,693
Medicine Lake	\$3,543	\$3,600	\$3,561	\$3,783	\$3,846	\$4,000	\$3,975
Minneapolis	\$33,235	\$32,885	\$33,609	\$34,763	\$35,805	\$37,870	\$37,631
Minnetonka	\$28,121	\$27,536	\$28,199	\$28,053	\$28,989	\$30,157	\$29,967
New Hope	\$25,681	\$25,627	\$25,917	\$26,740	\$27,987	\$29,171	\$28,987
Plymouth	\$225,159	\$220,974	\$224,531	\$231,682	\$237,986	\$247,505	\$245,942
Robbinsdale	\$7,587	\$7,843	\$7,747	\$8,189	\$8,523	\$8,994	\$8,937
St. Louis Park	\$19,184	\$18,433	\$19,463	\$20,287	\$20,284	\$21,392	\$21,257
<b>TOTAL</b>	<b>\$490,345</b>	<b>\$490,345</b>	<b>\$500,000</b>	<b>\$515,050</b>	<b>\$529,850</b>	<b>\$553,950</b>	<b>\$550,450</b>

Community	For Taxes Payable in 2019	2019 Percent of	Area Watershed	Percent of	Average
	Net Tax Capacity	Valuation	in Acres	of Area	Percent
Crystal	\$9,014,087	5.47	1,264	5.09	5.28
Golden Valley	\$42,743,405	25.95	6,615	26.63	26.29
Medicine Lake	\$1,059,589	0.64	199	0.80	0.72
Minneapolis	\$11,317,855	6.87	1,690	6.80	6.84
Minnetonka	\$10,589,981	6.43	1,108	4.46	5.44
New Hope	\$9,048,320	5.49	1,252	5.04	5.27
Plymouth	\$70,171,876	42.59	11,618	46.77	44.68
Robbinsdale	\$3,061,898	1.86	345	1.39	1.62
St. Louis Park	\$7,736,955	4.70	752	3.03	3.86
<b>TOTAL</b>	<b>\$164,743,966</b>	<b>100.00</b>	<b>24,843</b>	<b>100.00</b>	<b>100.00</b>

## NOTES

(A1) Same as this year, slightly higher than 2018 and earlier due to new and more complicated issues continue to arise requiring engineer review, analyses, input.

(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. 2020 budget assumes 34 submittals at average cost of \$2,000 - \$2,500

(B) Assumes a slight increase in non-fee reviews in 2020 based on recent activity. 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. Through agreements with Met Council, \$56,000 of these costs have been reimbursed since 2015.

(C) Includes attendance at BCWMC meetings, TAC meetings, Administrative Services Committee meetings, Budget Committee meetings and other meetings. 2015 estimate based on 24 meetings. 2016 and 2017 estimates based on 18 meetings (12 BCWMC meetings & 6 TAC meetings). 2017 budget increased to allow for additional BCWMC Engineer staff to attend Commission/TAC meetings (total of 3 assumed). 2018 and 2019 budgets were reduced from 2017. Same for 2020 budget: assumes 12 BCWMC meetings and 5 other meetings (TAC, etc.).

(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. Proposing lowering it again in 2020 to allow for higher monitoring budget.

(E) Routine lake and stream monitoring. See details on next page.

(F) Water Quality (lake level) monitoring. 2018 budget lowered for budget savings and resulted in fewer data points. 2019 budget back to earlier budget levels. Proposed 2020 budget lowered again for budget savings. (Engineer proposes \$10,000 for 2020)

(G) After recommendations from the TAC and Budget Committee, the Commission's ended the erosion and sediment control inspection program (Watershed Inspection) in 2014 due to duplication with activities required by the member cities. Some budget remained here to provide, as requested by the Commission, some oversight of city inspection activities (reports of inspections are available from each city). However, little or no expenses have been incurred since 2014. In 2019 it was removed from budget. If inspections are needed they can be charged to general technical services.

(H) 2020 budget includes annual typical inspection of Flood Control Project (FCP) features without tunnel inspections. Budget varies widely by year depending on the FCP features being inspected. New FCP policies and inspection schedules were adopted in 2016. (See link below)

[http://www.bassettcreekwmo.org/application/files/4514/9637/1815/2016\\_FCP\\_Policies.pdf](http://www.bassettcreekwmo.org/application/files/4514/9637/1815/2016_FCP_Policies.pdf)

(I) 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 in 2020 for these types of reviews.

(J) Monitoring at the Watershed Outlet Monitoring Program site in Minneapolis through an agreement with Met Council. 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). \$20,500 includes \$16,000 for Wenck or similar contractor + \$4,500 for Barr's data management and analyses

- (K) This item is used to make updates to the XP-SWMM model, coordinate with P8 model updates, and assist cities with model use. However, no XP-SWMM updates are expected in 2019 and 2020 due to work on the grant funded FEMA modeling project. This line item will return in the 2021 operating budget
- (L) 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
- (M) Funding that will be set aside and accrued over next 5 years to pay for 2025 Watershed Plan development which will start in 2023. (See 6-10-19 Memo)
- (N) Includes \$72/hour for average of 80 hours per month.
- (O) MN Association of Watershed District Annual dues. New budget item. 2019 dues were \$500 because WMOs were newly allowed to join the organization. 2020 were recently set at \$500. 2021 dues likely to be \$7,500.
- (P) For Commission attorney. Decrease recommended to be more in line with recent expenditures.
- (Q) Funding for City of GV staff's monthly accounting activities and coordination of annual audit.
- (R) Insurance and audit costs have risen considerably in the last few years.
- (S) Meeting catering expenses from Triple D Espresso (includes delivery)
- (T) Recording Secretary \$42/hr rate \* 21 hrs/mo (6.5 hrs for minutes, 14.5 for social media, writing articles, coordinating with city communication staff) + \$370 annual mileage + \$250/mo meeting packet printing/mailing + \$546 contingency
- (U) Budget was decreased in last few years to be more in line with actual expenses. Costs associated with Commission Engineer assistance with annual report
- (V) Based on 2017-2019 agreement with HDR for website hosting and maintenance activities and closer to actual funds spent in 2017 and 2018.
- (W) Includes CAMP (\$7,000), River Watch (\$2,000), Metro Watershed Partners (\$3,500), Metro Blooms Workshops (\$3,000), Children's Water Festival (\$350). Does not allow for additional partnerships or increases in contributions. CAMP costs set by Met Council increased significantly in 2019 (after 16 years w/o increases)
- (X) Includes funding for West Metro Water Alliance at \$13,000 plus \$9,000 for other educational supplies and materials including educational signage, display materials, Commissioner training, etc.
- (Y) Public Communications covers required public notices for public hearings, etc.
- (Z) Will be transferred to Channel Maintenance Fund
- (AA) Will be transferred to Long-Term Maintenance Fund (less actual costs of FCP inspections in line (H)).
- (BB) Budget reduced in 2018 and 2019 for overall budget savings. Task includes reporting on TMDL implementation and updating P8 model to include new BMPs.

**MONITORING NOTES**

<b>2020 Lake and Biotic Index Monitoring</b>	<b>Total budget</b>	<b>2020 proposed budget</b>	<b>2021 proposed budget</b>
Sweeney Lake/Twin Lake WQ Monitoring Program	\$60,000	\$50,000	\$10,000
Medicine Lake Monitoring	\$12,000	\$7,000	\$5,000
Biotic Index Program - Plymouth Creek or Sweeney Branch	\$12,000	\$5,600	\$6,400
General water quality tasks	\$10,000	\$10,000	
<b>Total</b>	<b>\$94,000</b>	<b>\$72,600</b>	<b>\$21,400</b>
<b>2020 - 2021 Stream Monitoring</b>	<b>Total</b>	<b>2020</b>	<b>2021</b>
Stream Monitoring - Plymouth Creek or Sweeney Branch	\$63,000	\$30,000	\$33,000
<b>Total</b>	<b>\$63,000</b>	<b>\$30,000</b>	<b>\$33,000</b>
<b>Total proposed budgets</b>	<b>\$157,000</b>	<b>\$102,600</b>	<b>\$54,400</b>

## MONITORING NOTES

The table below provides the details of the monitoring programs summarized above:

Budget item	Item description	Estimated cost
<b>Sweeney Lake and Twin Lake (Golden Valley) detailed lake monitoring</b>	Detailed lake monitoring includes monitoring two locations on Sweeney Lake and one location at Twin Lake on six occasions for selected parameters (total phosphorus, soluble reactive phosphorus, total nitrogen, chlorophyll a, chloride, temperature, pH, DO, specific conductance, and oxidation reduction potential), plus parameters associated with AIS vulnerability (calcium, alkalinity, hardness, sodium, magnesium, potassium, dissolved inorganic carbon, and dissolved organic carbon), sample analysis, phytoplankton and zooplankton collection and analysis, an aquatic plant survey (two occasions), calculation of aquatic plant IBIs, preparation of a presentation and preparation of a final report (following template of recent reports). Report preparation and presentation costs deferred to 2021.	<b>Total =</b> \$60,000
		<b>2020 =</b> \$50,000
		<b>2021 =</b> \$10,000
<b>Medicine Lake (Plymouth) detailed lake monitoring</b> - Field work and water chemistry analyses by Three Rivers Park District; data analyses including phytoplankton and zooplankton analyses by Commission Engineer	<ul style="list-style-type: none"> <li>• Collect water quality monitoring samples in the main basin of the lake, once just after ice-out, biweekly from May through Sept, and once in Oct. The following parameters will be measured/analyzed/collected:               <ul style="list-style-type: none"> <li>o Temperature profiles</li> <li>o Dissolved oxygen profiles</li> <li>o Specific conductance profiles</li> <li>o pH profiles</li> <li>o Secchi Disc measurements</li> <li>o Total phosphorus (3 depths) – Surface (0-2 m composite) – top of hypolimnion – and 1-m from the bottom</li> <li>o Soluble reactive phosphorus (3 depths) – Surface (0-2 m composite) – top of hypolimnion – and 1-m from bottom</li> <li>o Chlorophyll a (0-2 m)</li> <li>o Total nitrogen (0-2 m)</li> <li>o Chlorides (surface and near-bottom)</li> </ul> </li> <li>• Perform aquatic vegetation surveys – at least two surveys, one in June and one in August</li> <li>• Collect phytoplankton and zooplankton samples</li> </ul>	<b>Total =</b> \$12,000
		<b>2020 =</b> \$7,000
		<b>2021 =</b> \$5,000



**MONITORING NOTES**

<p><b>First year of two-year stream water quality/quantity monitoring effort (automatic sampling) on Plymouth Creek or the Sweeney Branch</b></p>	<p>The stream water quality monitoring program is designed to approximate the Metropolitan Council's Watershed Outlet Monitoring Program (WOMP) design for one location—Plymouth Creek or the Sweeney Branch (the final location will be monitored in years 5-6). The costs include 24 grab samples (approximately 1.5 per month for the open water period) and 16 storm samples. This approximates the change to the WOMP sampling protocols from monthly to bi-monthly samples (some WOMP stations do not collect grab samples in the winter).</p> <p>Parameters to be monitored include:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• Total Phosphorus</li> <li>• Ortho Phosphorus</li> <li>• Chloride</li> <li>• E. Coli</li> <li>• Hardness</li> <li>• Sulfate</li> </ul> </td> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• Dissolved Phosphorus</li> <li>• TKN</li> <li>• TSS</li> <li>• Chl-a</li> <li>• Metals</li> </ul> </td> <td style="width: 33%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• Nitrate/Nitrite</li> <li>• Ammonia N</li> <li>• VSS</li> <li>• Alkalinity</li> <li>• TOC</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• Total Phosphorus</li> <li>• Ortho Phosphorus</li> <li>• Chloride</li> <li>• E. Coli</li> <li>• Hardness</li> <li>• Sulfate</li> </ul>	<ul style="list-style-type: none"> <li>• Dissolved Phosphorus</li> <li>• TKN</li> <li>• TSS</li> <li>• Chl-a</li> <li>• Metals</li> </ul>	<ul style="list-style-type: none"> <li>• Nitrate/Nitrite</li> <li>• Ammonia N</li> <li>• VSS</li> <li>• Alkalinity</li> <li>• TOC</li> </ul>	<p><b>Total = \$63,000<sup>1</sup></b></p> <p><b>2020 = \$30,000</b></p> <p><b>2021 = \$33,000</b></p>
<ul style="list-style-type: none"> <li>• Total Phosphorus</li> <li>• Ortho Phosphorus</li> <li>• Chloride</li> <li>• E. Coli</li> <li>• Hardness</li> <li>• Sulfate</li> </ul>	<ul style="list-style-type: none"> <li>• Dissolved Phosphorus</li> <li>• TKN</li> <li>• TSS</li> <li>• Chl-a</li> <li>• Metals</li> </ul>	<ul style="list-style-type: none"> <li>• Nitrate/Nitrite</li> <li>• Ammonia N</li> <li>• VSS</li> <li>• Alkalinity</li> <li>• TOC</li> </ul>			
<p><b>Biotic index monitoring of Plymouth Creek or the Sweeney Branch</b></p>	<p>Biotic index monitoring to correspond with stream water quality monitoring on Plymouth Creek or the Sweeney Branch. Includes macroinvertebrate monitoring and habitat survey, macroinvertebrate analyses (microscopic identification/ enumeration), computation of HBI and M-IBI, trend analyses, data summary/analyses, and preparation of report and presentation for BCWMC meeting. Report preparation and presentation costs deferred to 2021.</p>	<p><b>Total = \$12,000<sup>1,2</sup></b></p> <p><b>2020 = \$5,600</b></p> <p><b>2021 = \$6,400</b></p>			
<p><b>General Water Quality Task</b></p>	<p>Potential items/issues include:</p> <ul style="list-style-type: none"> <li>• Inventorying chloride sources and/or improvement measures</li> <li>• Preparing for TMDL studies on Northwood Lake and the Bassett Creek fish impairments, including coordination with the MPCA</li> <li>• Internal load assessments and/or investigation(s) of alternative chemical treatments for Medicine Lake, Lost Lake, Sweeney, etc.</li> <li>• Addressing new AIS species</li> </ul> <p>If any of these become larger efforts, they could be charged to the Surveys &amp; Studies budget.</p>	<p><b>\$10,000</b></p>			
<p><b>Total Estimated 2020 Budget</b></p>		<p><b>\$102,600</b></p>			

**MONITORING NOTES**

<sup>1</sup>The above proposed budgets for the two-year stream water quality/quantity monitoring and biota monitoring will change if the MPCA approves the BCWMC's soon-to-be submitted request for inclusion in the MPCA's Cycle II monitoring.

<sup>2</sup> The BCWMC revised the biotic index monitoring schedule to line up with the stream monitoring schedule. This changes the frequency of the biotic index monitoring so that it is no longer consistent with the BCWMC Plan, which calls for biotic index monitoring every 3 years in Priority Streams. The most recent monitoring of all biotic index stations occurred in 2015. In 2018, biotic index monitoring occurred on the Main Stem and North Branch. By waiting to align stream monitoring with biotic index monitoring it will be 5 to 7 years between the 2015 and next monitoring events for Sweeney Lake Branch and Plymouth Creek. One will be monitored in 2020 and one in 2022. Going forward, BCWMC will have a 6 year frequency between biotic index monitoring events. The BCWMC should consider revising the monitoring plan (Appendix A of the Plan) to reflect the changes to the stream monitoring and biotic index monitoring programs.