

Lake Management Districts:	Primary Responsible Party:
1 Bone Lake	EOR
2 Little Comfort Lake	District staff
3 Forest Lake	Subconsultant: SMU/BWS/WCD
4 Comfort Lake	Contractor

Comfort Lake - Forest Lake Watershed District
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EOR Project Tracking	Project Tasks	2019	2020												2021	2022	2023	Recent Activities	Upcoming Activities	Comments		
			Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.								
1000 - Administration																						
1004	Professional Services	Ongoing																				
3000 - Programs																						
3002	Permitting	As submitted																		Numerous erosion control permits. Field meetings with District Permit Coordinator.	Ongoing permit reviews.	
3003	Monitoring & Data Assessment	District-led Monitoring Assistance																		Assist District staff set lake gage benchmarks on 5/28. Review volunteer sampling protocol.	Assist District staff as needed.	
		Lake Monitoring																		First round of lake monitoring took place for all lakes over the course of three dates: 5/26, 6/5, and 6/11. There were challenges with the Sonde so lake profiles were not taken for School Lake and could only be taken down to 10 meters for Moody, Keewahtin, and Little Comfort Lakes.	Second round of lake monitoring is tentatively going to begin 6/24. Coordinate CAMP volunteer observations.	
		Stream Monitoring																		WQ sampling conducted at all sites on 5/27. On 6/19, sampling staff went out to collect samples but only collected about 75% of the samples due to low precipitation in some parts of the watershed. Level logger data downloaded through June 5, ISCO logger data downloaded through June 19.	WQ sampling planned for 5/25 if rain event occurs this weekend.	
3006	Tech Resource Sharing	3006C - H&H Model Update																		Draft Heath Avenue Investigation technical memo for District staff review. Coordination with District staff and local partners on modeling needs in the Bone Lake Management District. Develop 2019 H&H model update presentation for the Board.	Present 2019 H&H model update summary, 2020 H&H model update scope of work and the Heath Avenue Investigation summary memo to the Board on July 9.	Multi-year effort.
		3006F - Watershed Management Plan Update																		Facilitated Workshop #3 (5/26) and assisted in facilitation of Workshop #4 (6/9). Met with District staff to review outline and make final revisions to outline. Outlined tasks for EOR & district staff to begin summarizing the work to-date. Developed webmap (https://eorinc.github.io/CLFLWD/).	Revise goals, objectives, and metrics for Board consideration based on feedback from workshops. Develop issue statements for all issue areas. Revise Land and Water Resources Inventory Appendix to include data collected for the workshops and the supporting interactive webmap and write "watershed summary" based on this information. Complete LMD Profiles. Develop 2022-2031 implementation schedule and budget.	Multi-year effort.
3007	Research	Claros P nanotechnology																		Claros media production was delayed due to Covid19 restrictions on U of M facilities. 2020 field test delayed until July at the earliest. 2019 field test still deployed in Hayward Avenue subwatershed.	Assess winter test period results. Trial site design and implementation.	
3009	Grant Research & Preparation	Various																		FY20 CWF grant agreements executed.	Brainstorm with District staff about FY21 grant applications.	
3010	O&M	Moody and Shields Lake aerators																		Aerators turned off for the season and thin-ice signs removed.	None.	
		Forest Lake outlet repairs																		Water levels still high due to higher than average rainfall in 2016-2018.	Re-Solicit for bids once more favorable site conditions allow.	
		Bone/Shields Lake fish barriers																		Assist District staff review Bone Lake O&M manual.	Assist District staff as needed.	
3011	AIS Management	Project management																		None.	Provide assistance as requested by District Staff.	
5000 - Projects																						
5220A	Volume Control Planning	Regional Treatment Location Identification																		Provide City with modeling data for modeling/regional treatment assessment.	Additional feasibility and planning of regional stormwater treatment sites in coordination with City of Forest Lakes effort.	
1- 5421A	Moody Wetland Rehabilitation	Wetland C construction																		Final grading and restoration by Contractor. WQ sampling on 5/27 and 6/19.	Final project effectiveness monitoring for grant in 2020. ID remaining loads.	Multi-year grant, end date is August 31, 2020. Life cycle cost estimate: \$124/lb TP/yr
		Final project monitoring																				
1- 5221C	Moody Lk Alum Treatment	Site repairs																		Site repairs completed and retainage pay application submitted by contractor. Bottom water phosphorus samples collected as part of Lake Monitoring.	Bottom water phosphorus sampling throughout 2020.	Life cycle cost estimate: \$55/lb TP/yr
1- 5222E	Bone Lake Alum Treatment	Internal load assessment																		Bottom water phosphorus samples collected as part of Lake Monitoring.	Bottom water phosphorus sampling throughout 2020. Internal load assessment. Sediment core collection & analysis, alum dosing calculations as needed.	
1- 5222F	Bone Lake SWA Implementation	Tasks TBD																		None.	Assist with project implementation as directed by District staff.	Multi-year grant, ending Dec. 2021. Preliminary life cycle cost estimate: \$469-1,239/lb TP/yr (may change during final design)
1- 5422H	Bone Lake Drained Wetlands	Dunn Property																		Assist District in obtaining grading permit. Call with Blayne to go over RFQ process. Developed preliminary RFQ documents. Conducted, reviewed and presented soil boring information to the District.	Add hauling route and disposal site to plans when approved. Assist District with preparing bidding and send out RFQ to contractors.	Multi-year grant, ending June 2020. Preliminary life cycle cost estimate: \$220/lb TP/yr (may change during final design)
2- 5225C	Little Comfort Alum Treatment	Internal load assessment																		Bottom water phosphorus samples collected as part of Lake Monitoring.	Bottom water phosphorus sampling throughout 2020. Internal load assessment. Sediment core collection & analysis, alum dosing calculations as needed.	
2- 5225D	Little Comfort Implementation	July Avenue Tributary agricultural BMP																		None.	District staff to lead outreach of July Avenue tributary agricultural BMPs.	
		School Lake paleo core analysis																		School Lake paleo core collected on June 12, 2019.	Awaiting paleo core results.	
		Bone Lake outlet wetland complex monitoring																		Feasibility memo report completed. DIY wetland water level logger installed by District staff on 4/16.	Assist with 2020 recommendations as directed by District staff.	
3- 5226D	Shields Lake Reuse System & Alum Treatment	Construction & site restoration																		Effectiveness monitoring on 5/27 and 6/19. Reuse system walk through and check-in on 6/5. Correspondence with FHGC regarding irrigation system operation and native prairie vegetation maintenance.	Native prairie maintenance. Effectiveness monitoring in 2020.	Life cycle cost estimate (reuse and alum treatment combined): \$51/lb TP/yr
		O&M and Educational Materials																				
		Effectiveness monitoring																				
3- 5228A	Forest Lake Diagnostic	Internal load assessment																	Coordination and assistance with District-led DIY diagnostic monitoring. Bottom water phosphorus samples collected as part of Lake Monitoring.	Bottom water phosphorus sampling throughout 2020. Internal load assessment. Sediment core collection & analysis, alum dosing calculations as needed.		
3- 5228B3	Castlewood Assess. & Feasibility	Agricultural field BMP installation																	Field walk-through with District staff to identify erosion control needs.	More monitoring to reassess effectiveness of ag BMPs and to ID other projects.		
3- 5228B4	Hayward Ave Assess. & Feasibility	R15 Cattail Harvesting																	None.	Project implementation for cattail harvesting pilot project on hold.	Task 2. R15 Neighborhood Raingardens on hold due to lower cost-benefit	
3- 5228K	WJD 6 Assessment & Feasibility	R15 Neighborhood Raingardens																				
		R5 Pond Cleanout																				
3- 5228L	WJD 6 Implementation	WJD6 Headwater Restoration																	Load monitoring at R7U, R7E and R7D on 5/27 and 6/19.	Load monitoring at R7U, R7E and R7D.		
3- 5228M	WJD 6 Implementation	R7D Wetland Enhancement																				
3- 5228N	WJD 6 Implementation	CR-50 IESF Feasibility Design																	Assist District staff vet alternative project location.	Conceptual design of IESF at CR-50. Field data collection.	Preliminary life cycle cost estimate: \$700-900/lb TP/yr (may change during final design)	
4- 5229A	Comfort Lake Diagnostic Phase 2	Tasks TBD																	Develop 2020 scope for Comfort and Little Comfort Lake Diagnostic studies to update the lake water quality response models based on the updated H&H model and recent monitoring data.	Present 2020 scope at the July 9 board meeting. Bottom water phosphorus sampling throughout 2020. Internal load assessment. Sediment core collection & analysis, alum dosing calculations as needed.	Multi-year effort.	
4- 5229E	BMP Impl. on Tax Forfeit Land	Sunrise River Drained Wetland Restoration Feasibility Design																	Vetting geotech proposals, site survey, vetting inlet options, and correspondence with MnDOT.	Vetting inlet options, and correspondence with MnDOT.	Preliminary life cycle cost estimate: \$152/lb TP/yr (may change during final design)	
5420B	Wetland Bank Feasibility Study	Wetland Bank Feasibility Study																	None.	Advance concept design, coordinate with landowner.		
5920A	Land Acquisition Review	Fourth Lake Parcels																	None.	Initiate additional phases in work plan as directed by staff and Board.		