

DRAFT

GOAL: 1. Protect and improve water quality in Lakes Limerick and Leprechaun to maintain them in a “mesotrophic” state without excessive plant or algae growth.

OBJECTIVE	ACTION	PROJECTs	FUNDING STATUS
<p>1.1. Lake water concentrations of plant and algal growth nutrients are maintained as follows: Total Phosphorous (TP) \geq 0.01mg/L - 0.03 mg/L; Soluble Reactive Phosphorous (SRP) TBD; Total Nitrogen (TN) \leq 0.86 mg/L; Dissolved Oxygen (DO) Concern threshold TBD.</p>	<p>1.1.1. Surface, water column and bottom water sampling for TP, SRP, TN and Dissolved Oxygen (DO) (indicator of plant material decay which can release P stimulating algae growth). Sampling sites should represent typical areas of the lakes, and the inlets and outflows.</p>		
	<p>1.1.2. Establish a data analysis and storage/archive framework allowing easy data entry and retrieval, analysis and safe storage over time. (Seek LA advice and recommendations)</p>		
	<p>1.1.3. Establish a data steward responsible for timely data entry; reporting of key indicators to the Lake Dam Committee and the LLCC community; QA/QC of data collection and storage.</p>		
	<p>1.1.4. Based on results of investigations and sampling/surveys, begin to develop alternative project plans including preliminary estimates and schedules for nutrient removal either from lakes or tributaries. Coordinate with</p>		

	LLCC BOD efforts to refine its Reserve Account funding and expenditure plans.		
1.2. Reduce the input of sediments to Lakes Limerick and Leprechaun because sediments can negatively impact habitat values including fish spawning areas; contribute nutrients for plant and algal growth; and impact recreational uses and aesthetics.	1.2.1. Identify sources and input rates of sediments by investigating inlets and upstream stream/lake areas, particularly during times of maximum transport.	1.2.1.1. Cranberry Creek soft sediment assessment including stream walk –FY 2023	\$14,000
	1.2.2. Conduct periodic bathymetric surveys of the lake to determine magnitude and impact of sedimentation over time and identify “hot spots” that may require special actions such as dredging or upstream sediment removal.	1.2.2.1. Cranberry King's Cove bathymetric surveys measuring dredge depth –FY2023	\$10,000
	1.2.3. Based on results of investigations and sampling/surveys, begin to develop alternative project plans including preliminary estimates and schedules for sediment removal either from lakes or tributaries. Coordinate with LLCC BOD efforts to refine its Reserve Account funding and expenditure plans.		
1.3 Reduce the exogenous contribution of nutrients such as those from landscape fertilizers and septic system effluent entering the lakes via groundwater and surface runoff.	1.3.1. Ensure the LLCC golf course continues to use low P fertilizers which can enter the lake via irrigation and stormwater runoff.		
	1.3.2. Conduct multi-pronged member education campaign regarding septic tank maintenance, landscaping fertilizers, etc		

	1.3.3. Continue efforts with USFWS to reduce resident and migratory Canada Goose populations.		
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GOAL: 2. For both Lakes Limerick and Leprechaun determine an appropriate lake level target balancing numerous factors such as recreational and irrigation needs, maintaining adequate flow in the fish ladder and spillway, beach maintenance, members property use and riparian tree health.

OBJECTIVE	ACTION	PROJECTs	FUNDING STATUS
2.1.	2.1. Continuously monitor lake levels throughout the year as a basis for analysis of possible actions regarding lake levels.		
	2.2. At selected locations, monitor edge of pool locations over time and correlate to measured lake levels.		
	2.3. Say “what the heck, let’s try something” and reduce the effective weir board height by 3” and see what happens.		