

Vision, Objectives and Management Actions (updated following 1/26/10 meeting)

Proposed Vision: *Leech Lake supports a healthy, self-sustaining walleye population that provides recreational and commercial opportunities in a manner that supports a sustainable quality of life.*

Table 1. Comparison of current and proposed walleye population objectives (yellow highlights indicate 1/26/10 preference)

	Leech Lake Plan 2005 – 2010	LLFTF Proposal 1/13/10	LLAC Potential Objectives (considered Oct 2009 – Jan 2010)	LLAC Recommendations for 2011 – 2015 Plan
<i>Objectives</i>				
Spawner biomass	1.25 – 1.75 pounds/acre		1.25 – 1.75 pounds/acre	Proposed 1/26/10: 1.5 – 2.0 lbs/acre
Gillnet catch rate	At least 7.4 WAE/net		At least 7.5 WAE/net	Proposed 1/26/10: 1. > 7.5 WAE/net 2. > 8.5 WAE/net (preferred on 1/26/10; 9 yes, 3 no, 3 neutral) Considered and rejected separate objectives for main lake and western bays (1/26/10).
Gillnet size distribution	50% gillnetted WAE < 15”			Proposed 1/26/10: 1. 45 – 65% ≤ 15” (preferred on 1/26/10) 2. 60 – 80% ≤ 18”
Year class strength	Two strong year classes by 2009		Average or above average strength year class produced every 3 years	Proposed 1/26/10: 1. Consider assessing YCS in combination with climate trend information for following year management decisions (Is this a

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2. Management actions consist of activities under management control (e.g., harvest, stocking, restoration). Alternative actions typically focus on alterations of resource status or process rates. The suite of available actions should be designed to promote learning.
3. Because of natural variation, resource systems are often extraordinarily difficult to control with management actions and “cause and effect” relations are usually unclear and difficult to recognize.

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				measurable objective or a potential recommendation for future evaluation?) 2. Average or above average strength year class every 2 years (using “rolling” average for period 1983 – present) 3. Average or stronger year classes produced 2 out of 4 years or 3 out of 6 years or 4 out of 8 years (depends on timeline; suggested by Doug Schultz following 1/26/10 meeting)
Age 1	Age 1 trawl catch rate 45 fish/hour			
Biological performance indicators			BPI return from “stress” to “normal” and are maintained at “normal” level • Female length at 50% maturity: threshold 17.3” • Female age at 50% maturity: threshold 4 years • Female age diversity: threshold 0.6 (Shannon index to 15 years)	

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Creel census			All angler harvest rate: 0.1 WAE/hour	
			Targeted WAE harvest rate: 0.2 WAE/hour	Targeted WAE harvest rate proposed for discussion 2/10/10
			Targeted WAE catch rate: 0.5 WAE/hour	
			Total WAE harvest: 140,000 lbs/year	
			Proportion of WAE in protected slot: 30 – 35%	
Natural reproduction		Natural reproduction alone can maintain a healthy WAE population		
Qualitative	Protect and maintain existing spawner biomass	Make LL best managed WAE fishery in state		
	Improve age structure of WAE population			

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Table 2. Comparison of current and proposed management actions

	Leech Lake Plan 2005 – 2010	LLFTF Proposal 1/13/10	LLAC Discussion 1/26/10	LLAC Recommendations for 2011 – 2015 Plan
<i>Management Actions</i>				
Stocking	<p>MDNR stock 5.0 million marked fry in 2005, 2006, 2007 to enumerate wild fry production</p> <p>Actual stocking: 2005 – 7.5 million 2006 – 22 million 2007 – 7.5 million 2008 – 22 million 2009 – 22.5 mil. (legislated) 2010 – 22.5 mil. (legislated)</p>	<p>Decision to stock based on previous year’s sampling results (trawling, seining, electro-fishing, gill netting)</p> <p>Stock 22.5 million until 75% of year class from natural hatch (safely taken from Boy River run)</p>	<p>DNR proposed planned stocking of WAE fry 2 out of 4 years using Boy River run as follows</p> <p>2010: 22.5 million (legislated) 2011: blank 2012: blank 2013: 22.0 million 2014: 22.0 million 2015: blank 2016: blank 2017: 22.0 million 2018: 22.0 million</p>	<p>Questions regarding “blank” years (1/26/10):</p> <ol style="list-style-type: none"> 1. Stock 5 million fry 2. Stock minimal amount 3. No stocking
Special regulations	<p>Possession limit of 4 walleye with only 1 greater than 28” allowed</p> <p>Protected slot: 18 – 26” (must be returned to water)</p>	<p>Limit 4 WAE, only 1 > 18”</p>		<p>Proposed to consider reviewing PSL more frequently than every 5 years (e.g., every 2, 3, or 4 years; 1/26/10)</p>

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<i>Management Actions</i>				
Cormorants	Cooperating agencies establish a preliminary target population range of 250 – 750 nesting pairs	Reassess total number (breeders and nonbreeders); current total too high		
	Cooperating agencies prepare an Environmental assessment To evaluate appropriate level of population reduction and feasible control measures	Support LLBO management efforts		
	Assess diets of cormorants			
Habitat	Continue mapping aquatic vegetation			
	Environmental review			
	Education			
	Regulations enforcement			
	Habitat acquisition			
	Shoreland rules			

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<i>Management Actions</i>				
	Control of exotic species (monitor and control/eradicate)	Support all efforts to prevent/remove invasive species		
Other Recommendations				DNR should develop and evaluate methods for obtaining observations from guides and resorts on fish populations and potential factors affecting fish populations (1/13/10)
				DNR should consider relationship between climate trends and Leech Lake WAE population metrics (1/26/10)

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