

Table 7. Estimated annual program costs (1988) for 2 remote and 30 accessible ponds encompassing 58 and 530 acres respectively, in DEC's current liming program. Estimates based on actual cost records from 10 Region 6 ponds limed between 1984 and 1988 (Table 8). Annual costs based on 6 year effective life of treatment for both remote and accessible waters.

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<u>Cost Component</u>	<u>ANNUAL COSTS</u>		
	<u>Remote</u>	<u>Accessible</u>	<u>Combined</u>
Treatment	\$2,550	\$ 4,682	\$ 7,232
Monitoring Analysis	476	4,140	4,616
Fish Stocking	0*	15,370	15,370
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Total Annual Cost Current Program	\$3,026	\$24,192	\$27,218
Annual Program Cost Per Acre (1988)	\$ 52	\$ 46	\$ 46

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\*NSA - Heritage strain waters

of large acidic episodes the possibility of a lake reacidifying remains a concern.

## 2. Program Costs

The Division of Fish and Wildlife program includes a diverse set of activities, and the liming program must compete for personnel and financial resources that could be used to address other priorities. The initiation of a liming program on a water includes a long-term commitment of funds and personnel. The revised liming policy guidelines include the statement that, "a decision to neutralize an acidified water will include a commitment to intensively manage, monitor, and retreat the water on a regular basis to prevent the water from reacidifying." The reliming of waters in the DEC liming program will therefore receive high priority because of the negative environmental impacts which could result if these waters were allowed to reacidify. Once included in the liming program, ponds can only be removed from the program if post-liming water chemistry shows the pond to be a poor liming candidate (higher than anticipated flushing rate or poor post-treatment temperature or dissolved oxygen regime) and after approval from the Regional Fisheries Manager and the Chief of the Bureau of Fisheries. Water chemistry samples will be obtained and analyzed at least once a year for all limed ponds and retreatment will occur after water surface samples collected during the summer reach a pH of 6.0.

Major components of the costs associated with the liming program were divided among treatment, water chemistry monitoring and fish stocking costs. Total costs are directly affected by the numbers of ponds included in the program. While that number may not be static in the future, a total of 32 ponds were considered to be in DEC's liming program as of August 31, 1988. Only 2 of the 32 ponds must be limed using helicopters due to their remoteness from access points, so the total cost estimate in Table 7 was based on the current roster of 30 accessible ponds and 2 remote ponds. Since neither remote pond on the roster is stocked due to the presence of heritage brook trout strains, there is no stocking cost for these waters. All of the accessible limed ponds receive hatchery-reared fish, and 90% of the fish are brook trout stocked in the fall. The remaining stocked fish are rainbow trout and brown trout.

## 3. Societal Concerns about Liming

### a. Draws Attention Away From Resolution of Primary Causes of Acid Deposition Problem

Liming may be viewed by some as detracting from the meaningful resolution of the acid deposition problem. The politics of the liming issue are such that the most vigorous proponents of this mitigative technique are frequently directly associated with fossil fuel production and polluting industries. It is easy to assume that these proponents would promote large-scale liming as an alternative to the reduction of polluting emissions and as a plausible solution to the acid deposition problem. Such an effort would serve to draw attention

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