

LAKE LEVELS AND THEIR INFLUENCES

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Lafayette Club

Drought and its effects on irrigation systems and pumping plants is not a new problem for golf course superintendents, but one that certainly causes much discomfort as evidenced by last year. This discomfort becomes even more severe when your major source of irrigation water is surface water as it is at Lafayette Club. With a huge reservoir of water like Lake Minnetonka at your pump house door, water shouldn't be a problem. Lack of rainfall, social concern, and government regulation have turned this natural resource into one of the hot issues of 1989.

Lake Minnetonka is one of the largest lakes in Minnesota and probably one of the most widely used. Past years have seen almost record highs in lake elevation, but the recent lack of rainfall has seen lake levels drop dramatically. Water levels have historically been much higher. Lafayette club pumps directly out of the lake and our suction lines reflect these higher historical levels. At present, we run our suction lines on the surface of the lake using a sectional dock and elbow into the lake at sufficient depth to accommodate our rotating screen. At one time, 35 feet of suction line was sufficient. Now, due to lowered lake levels, 75 feet is required. If the lake drops another 3 inches, we will need over 90 feet of suction line to serve our needs. This extra length can cause a number of problems. Pump motors draw more wattage than specifications allow. Susceptibility to cavitation increases. Boat traffic and its wakes put undo stress on the support structure causing peaks and valleys that require realignment of the suction line. Stress cracks in the line and joints (no matter how well anchored) increase and seasonal replacement becomes a must. We must constantly respond to changes in lake elevation and respond quickly to avoid costly pump problems and irrigation system downtime.

To add insult to injury, a new pest has invaded the shores of Lake Minnetonka, Eurasian Water Milfoil. This aquatic weed, recently introduced, has the potential to choke every inch of shoreline. It propagates from cuttings which are compounded by boat props. Under ideal conditions, the plant obtains a growth rate of up to two inches per day. At this rate, I'll take crabgrass! Obviously, we must remove the weed by mechanical and/or chemical means to insure proper operation of our water supply system. Both methods require a permit from the DNR which can be time consuming and laden with red-tape.

In response to these problems, the Greens Committee at Lafayette is considering a proposal for a new pump station with wet well and automation of our present irrigation. Once again, permits must be obtained from the DNR. With lake levels dropping, will they readily issue such a permit? Should we abandon the lake as a source of irrigation water or opt for a deep well and use the lake on a contingency basis? Should we make use of the existing water supply structure since new structures are not allowed on the lake shore? All these questions will have to be answered before we can improve on our situation and many decisions will be made by those outside of Lafayette as government and regulatory bodies determine our fate.

Low lake levels pose all sorts of problems from lost boat props to higher insurance premiums to water management difficulties. Lake Minnetonka is quickly becoming a hotbed of political, economical and social controversies. Certainly nothing, outside of Mother Nature, is being done to increase the lake's water level. The question is how to deal with the current situation, meet the demands of the public, and still maintain the ecological balance of this highly used natural resource. We at Lafayette are still determining the answers.

CLASSIFIED

HELP WANTED

Golf Course Maintenance Person. Greenskeeping experience preferred. Mechanical aptitude helpful. Contact Harley Flor, Kate Haven Golf Course. 612/784-3218.

FOR SALE

1973 Cushman Top Dresser (P.T.O. Driver, converted Belt Conveyors). \$1,000 or Best Offer. Contact Denny Owen, Terrace View Golf, High. 22 So. Box 3225, Mankato, Minn. 56001. 507/388-7912.

1971 John Bean Sprayer Model 1010T. Trailer Mounted. 6 1/4 hp Kohler Engine. 200 Gal Tank \$900.

1980 Stewart Spread All Topdressor Model SC-71 will fit Cushman EZ-GO or Toro Workmaster. Best Offer.

Call Guy Lohman, Voyager Village. 715/259-3926