

Impact of Channel Dredging on Phosphorus Concentrations in Cedarville Bay

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Summary: Phosphorus levels in Cedarville Bay were monitored during and after dredging of Les Cheneaux federal navigation channels. Data show that phosphorus levels in Cedarville Bay waters were temporarily elevated during the 2010 maintenance dredge but returned to normal concentrations upon project completion. During preparation of a barge turning basin phosphorus concentrations increased about eightfold in the turning basin area. Phosphorus concentration in this area remained three or four times higher than normal during the dredge project. Samples taken following dredge completion indicate that turning basin phosphorus levels returned to normal levels. One of the mid-bay sites closest to the turning basin had slightly elevated phosphorus during project start-up but then dropped to normal levels during the operation. Two distant control monitoring sites exhibited consistently low phosphorus concentrations throughout the dredge project.

(To view the complete report, go to the Les Cheneaux Watershed web site “Resource Library”. The report is available under “Reports and Studies – Water Quality”).