

Report on Changes in Lake Water Bacteria from Stirring Up Sediment

Camp Lake View is the county's developing residence camp on the Left Fork of Mud River Lake. This is nearly the last area before the main Mud River and the Left Fork merge at the Lake's dam. The project PI is part of the group trying to develop the camp and often lifeguards here. We ran a one-time, inconclusive analysis of water quality at the camp to see what effect stirring up water bottom sediment might have on increasing e. coli levels. The camp has enclosed swimming area which originally had a sandy bottom, but which now has begun to silt in with mud. When young children play in the water in this area, they often stir up the bottom. What began the day as clear water often ends with high turbidity. We thought it might be instructive to see if stirring up the sediment increased the e. coli level. The chart below shows the differences during one day between times before children were in the water and after children had been playing and stirring up the bottom.

Camp Lake View Waterfront on Left Fork of Mud River Lake		
	E. Coli / Total Coliform Results	E. Coli / Total Coliform Results
	11:50 am 6-1-07 Before children entered water	12:20 pm 6-1-07 After children have stirred up the bottom
Site 21 A	9 / 440	272 / 5600
Site 21 B	36 / 510	181 / 3600

Results reinforce the supposition that e. coli and total coliforms settle down in water and are lodged in sediment, and that when creek bottoms are stirred up by children or animals or heavy rainfall, one might expect e. coli and total coliform counts to increase.

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