962-C1-476 Ravinder Kumar* (rkumar@lorman.alcorn.edu), Dept Math, Alcorn State University, Lorman, MS 39096, and Mike Pepe (mdpepe@att.net). Delivering Interactive and Dynamic Instruction with MathWright: Operation Lakes.

This MathWright book titled "Operation Lakes" has been developed under Project WELCOME awarded to MAA (NSF Grant #DUE9952530). A student project concerning cleaning of Lakes appears in the materials developed by Langkamp and Hull for their NSF project QELP at Central Seattle Community College. This MathWright presentation demonstrates how MathWright authorware can be used to present materials dynamically empowering a student or instructor to conduct an interactive exploration. The problem under consideration has three lakes including L.Cecil. The aim of this MathWright book is to explore cleaning of L.Cecil subject to the given parameters. The two cases considered are when the other two lakes flow into L.Cecil in series and in parallel. The book contains numerical and visual interaction. Mathematics behind the solution is explained. A report page prompts students to explore and answer a few questions using the book and communicate the same to the instructor using e-mail. Push buttons, colors, animation, speed of animation, and sound are used to deliver the interaction effectively. This book can be used in college algebra, precalculus, and elementary mathematical modeling courses. This and other books produced under the project will be placed in MathWright Library by Fall'01. (Received September 14, 2000)