

Environmental Fluid Dynamics Code (EFDC) Reference List

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EFDC Technical Reports (partial list)

(Available electronically from john.hamrick@tetrattech-ffx.com)

Tetra Tech, Inc., 2002: Theoretical and computational aspects of sediment and contaminant transport in EFDC. A report to the U. S. Environmental Protection Agency, Fairfax, VA.

Tetra Tech, Inc., 2002: Hydrodynamic and transport extension to the EFDC model. A report to the U. S. Environmental Protection Agency, Fairfax, VA.

Hamrick, J. M., 1996: Users manual for the environmental fluid dynamic computer code. The College of William and Mary, Virginia Institute of Marine Science, Special Report 328, 224 pp.

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Hamrick, J. M., 1992: A three-dimensional environmental fluid dynamics computer code: Theoretical and computational aspects. The College of William and Mary, Virginia Institute of Marine Science, Special Report 317, 63 pp.

EFDC Application Reports (partial list)

(VIMS reports by Hamrick, other Hamrick Reports, and Tetra Tech Reports are available in hard copy from hamrijo@tetrattech-ffx.com. Contact Hamrick regarding availability of other listed reports)

Tetra Tech. 2000. Hydrodynamic and Water Quality Model of Christina River Basin, Final Report. For U.S. EPA Region 3, Philadelphia, PA. By Tetra Tech, Inc., Fairfax, VA. May 31, 2000.

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Halpern, Glick and Maunsell, 1999: The Port Hedland Harbour Study, Western Australia. final report prepared for the Port Hedland Port Authority. Halpern, Glick and Maunsell, Perth, Western Australia.

King County, 1999: Water quality assessment of Elliot Bay and the Duwamish River. King County Department of Natural Resources, Seattle, WA.

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Hamrick, J. M., 1991: Analysis of mixing and dilution of process water discharged into the Pamunkey River, a report to the Chesapeake Corp. The College of William and Mary, Virginia Institute of Marine Science, Gloucester Point, VA.

EFDC on the Web

Information on the EFDC application to Elliott Bay and Duwamish River can be found at:

<http://dnr.metrokc.gov/wlr/waterres/wqa/WQPAGE.HTM>

This is the most complete application of EFDC involving hydro, sediment and toxic contaminants. Specifically, the various reports (including the hydrodynamic and contaminant transport and fate model report) are under:

<http://dnr.metrokc.gov/wlr/waterres/wqa/wqrep.htm>

Some preliminary results for the application of EFDC to South Puget Sound can be found under:

http://www.ecy.wa.gov/programs/eap/spasm/spasm_results.html

A comparison of EFDC with other surface water models at the USGS's surface water modeling information clearing house:

<http://smig.usgs.gov/SMIC/SMIC.html>

The formal framework for application of EFDC to simulate riverine hydrodynamics, and sediment-contaminant transport is illustrated by the GE/Housatonic modeling framework document:

<http://www.epa.gov/region01/ge/thesite/restofriver-reports.html>

(Note: sections mfd_4.pdf and mfd_apc.pdf are particularly relevant)