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Articles and Papers:

Lake Erie-Lake Saint Clair Drainage

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Water-Resources Investigations Report


Thomas, Mary Ann, 2000, Ground-water quality and vulnerability to contamination in selected agricultural areas of southeastern Michigan, northwestern Ohio, and northeastern Indiana: U.S. Geological Survey Water-Resources Investigations Report 00-4146, 22 p.

Articles and Papers:


Long Island & New Jersey Coastal Drainages

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Eastern Iowa Basins

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Kolpin, Dana, Hallberg, George, Sneck-Fahrer, Debra, and Libra, Robert, 1997, Agricultural chemicals in Iowa’s ground water, 1982-95--What are the trends? U.S. Geological Survey Fact Sheet FS-116-97, 4 p. (also listed under NS--Nutrients, and NS--Pesticides)


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Ging, Patricia B., Pesticides and their breakdown products in Lake Waxahachie, Texas, and in finished drinking water from the lake: U.S. Geological Survey Fact Sheet 032-02, 2 p.


Open-File Reports:


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Articles and Papers:


Talmage, Philip John, 2000, Relation of instream habitat and physical conditions to fish communities of agricultural streams in the northern Midwest: University of Minnesota, Master of Science Thesis, 38 p.

Yellowstone River Basin

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NAWQA-CCPT Related Publications:

Reports published by U.S. Geological Survey using NAWQA data for objectives beyond the scope of the NAWQA Program.


Other:

Block, Elizabeth, 1993, Aquatic biota within the Central Columbia Plateau NAWQA Study Unit: A review of existing information: U.S. Fish and Wildlife Service, Moses Lake, WA, 92 p. (prepared for USGS NAWQA CCPT)
Cook Inlet Basin

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Great Salt Lake Basins

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Naftz, David L., Stephens, Doyle W., Callender, Edward, and Van Metre, Peter C., 2000, Reconstructing historical changes in the environmental health of watersheds by using sediment cores from lakes and reservoirs in Salt Lake Valley, Utah: U.S. Geological Survey Fact Sheet FS-164-00, 6 p.(also listed under Trace Element Synthesis)


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Puget Sound Basin

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Fact Sheets:


Voss, Frank D., Enbrey, Sandra S., Ebbert, James C., 1999, Pesticides detected in urban streams during rainstorms and relations to retail sales of pesticides in King County, Washington: U.S. Geological Survey Fact Sheet 097-99, 4 p.

Open-File Reports:


Water-Resources Investigations Reports:


Articles and Papers:

Black, Robert W., Haggland, Alan L., Voss, Frank V., 2000, Predicting the probability of detecting organochlorines pesticides and polychlorinated biphenyls in stream systems on the basis of land use in the Pacific northwest, USA: Environmental Toxicology and Chemistry, vol. 19, no. 4, p.1044-1054.


Sacramento River Basin

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Articles and Papers:

Brown, Larry R., and May, Jason T., 2000, Macroinvertebrate assemblages on woody debris and their relations with environmental variables in the lower Sacramento and San Joaquin River Drainages: Environmental Monitoring and Assessment vol. 64, p. 311-329. (also listed under San Joaquin-Tulare River Basins)


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Brown, L.R., 1997, Concentrations of chlorinated organic compounds in biota and bed sediment in streams of the San Joaquin Valley, California: Archives of Environmental Contamination and Toxicology, vol. 33, p. 357-368.

Brown, Larry R., and May, Jason T., 2000, Macroinvertebrate assemblages on woody debris and their relations with environmental variables in the lower Sacramento and San Joaquin River Drainages: Environmental Monitoring and Assessment vol. 64, p. 311-329. (also listed under Sacramento River Basin)


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Carpenter, Kurt D., and Waite, Ian R., 2000, Relations of habitat-specific algal assemblages to land use and water chemistry in the Willamette Basin, Oregon: Environmental Monitoring and Assessment vol. 64, p. 247-257.


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Kolpin, Dana, Hallberg, George, Sneck-Fahrer, Debra, and Libra, Robert, 1997, Agricultural chemicals in Iowa’s ground water, 1982-95--What are the trends? U.S. Geological Survey Fact Sheet FS-116-97, 4 p. (also listed under Eastern Iowa Basins, and NS--Nutrients)


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Kolpin, Dana W., 1997, Agricultural chemicals in ground water of the midwestern United States: Relations to land use: Journal of Environmental Quality, vol. 26, no. 4, July-August 1997, p. 1025-1037. (also listed under NS--Nutrients)


Kolpin, Dana W., Squillace, P.J., Barbash, J.E., Zogorski, J.S., 1997, Pesticides and volatile organic compounds in shallow urban ground water of the United States, in Chilton, J., ed., Ground water in the urban environment: A.A. Balkema, Netherlands, p. 469-474. (also listed under NS-VOCs)


NATIONAL SYNTHESIS--Trace Elements

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Ging, Patricia B., VanMetre, Peter C., and Callender, Edward, 1999, Bottom sediments of Lorence Creek Lake, San Antonio, Texas, reflect contaminant trends in an urbanizing watershed: U.S. Geological Survey Fact Sheet FS-149-99, 4 p. (also listed under South Central Texas)

Naftz, David L., Stephens, Doyle W., Callender, Edward, and Van Metre, Peter C., 2000, Reconstructing historical changes in the environmental health of watersheds by using sediment cores from lakes and reservoirs in Salt Lake Valley, Utah: U.S. Geological Survey Fact Sheet FS-164-00, 6 p. (also listed under Great Salt Lakes)


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