

## NCWQR History



The National Center for Water Quality Research (NCWQR), formerly known as the Water Quality Laboratory (WQL), was founded in 1969 by Dr. David B. Baker, Professor of Biology at Heidelberg College. Initiated as the Sandusky River Project, the NCWQR began studies of nutrients and sediment transport in 1974 with initial focus on two major tributaries to Lake Erie: the Maumee and Sandusky Rivers.

By 1978, the National Center for Water Quality Research had expanded its investigations to include Lake Erie itself with participation in the Lake Erie Intensive Surveillance Program of the USEPA's Great Lakes National Program Office. This multi-institutional effort to study the quality of Lake Erie's water and sediments was a response to the degraded condition of Lake Erie that had become evident in the 60's and early 70's.

Monitoring of tributaries to both Lake Erie and the Ohio River has grown over the years so that today the NCWQR manages the Ohio Tributary Monitoring Program which encompasses over half of the state of Ohio with thirteen river watershed sampling stations. Collectively, these studies now provide the longest and most detailed record of nonpoint source pollution available for any river system in the United States.



In 1986, the NCWQR received a grant from the State of Ohio to investigate groundwater quality in three counties by offering low-cost testing for nitrates to well-owners. Word of the program spread and within three years, the results from 16,000 wells in 76 counties were published in "Nitrate and Pesticides in Ohio – A State Atlas". The American Farm Bureau Federation was impressed and requested similar programs in Indiana and other states. To date, the NCWQR has tested nearly 60,000 private wells in 25 states and has the analytical equipment and expertise to test for a wide variety of inorganic constituents, pesticides, volatile organic compounds, and metals.



Biological studies of the NCWQR focus on the ecology of aquatic macroinvertebrates and their role as bioindicators of pollution and habitat degradation. Recent studies have investigated the responses of macroinvertebrate communities in agricultural ditches and maintained headwater streams to various management practices, the

response of macroinvertebrate communities to dam removal in rivers, and the ecology of burrowing mayflies (*Hexagenia*) in Lake Erie and their application to lake quality indexes.

Our staff members have backgrounds in chemistry, biology, toxicology and geology and hold Ohio EPA Level 3 certification as Quality Data Collectors for biological indices and chemical water quality assessment. In January 2005, the NCWQR moved into state-of-the-art facilities on the third floor of the newly constructed Gillmor Science Hall, where it occupies 7,800 square feet of laboratory and office space.

Currently under the direction of Dr. Gary Winston, the NCWQR continues to be supported solely by research grants, contracts for professional services, and donations. Funding sources have included agencies of federal and state governments, nongovernmental agencies, foundations, industries and individuals.



The scientific and educational mission of the NCWQR has grown out of the passion our staff has for water quality and has resulted in hundreds of publications and presentations (level 1 Outreach-level2 Presentations) being shared with water professionals and the general public. Consequently, numerous organizations, including the USEPA, USDA, USGS, Ohio EPA, and Ohio DNR, have come to rely on the data and analyses that the NCWQR produces. We invite you to learn more about the NCWQR by exploring our research (level 1 Research) activities, accessing the Tributary Loading (level 1 Watershed Data) and Sandusky River bibliography (Level 1 Outreach-level2 Sandusky bibliography) databases and taking advantage of our water testing (level 1 Water Testing) services.