

# Upper Midwest Environmental Sciences Center - 2005

**2630 Fanta Reed Road**

**La Crosse, Wisconsin 54603**

**Mission:** The Upper Midwest Environmental Sciences Center (UMESC) began in 1959 as the Fish Control Laboratory of the U.S. Fish and Wildlife Service with the mission of developing chemical agents to manage undesirable freshwater fish. Besides a continuing program of research and development for fishery management chemicals, UMESC has added additional research elements including River Ecology, Restoration of Degraded Habitats, Declining Species, Invasive Species, and Decision Support Model Development. Teams of UMESC researchers address national issues related to river ecology and management, nutrient loading of surface water, wildlife and fishery contaminant issues, habitat assessments, and restoration of threatened species including paddlefish, sturgeon, mussels, and amphibians. The UMESC has lead responsibility for the Upper Midwest Amphibian Research and Monitoring Initiative and the Long Term Resource Monitoring Program on the Upper Mississippi River. The research of UMESC scientists supports the efforts of natural resource managers to develop strategies for managing invasive species in the Great Lakes and Mississippi River basins. The UMESC has developed decision support systems now being used by managers of National Wildlife Refuges for development of Comprehensive Conservation Plans.

**Special Capabilities:** The UMESC is on an island bounded by the Mississippi and Black Rivers. The nearly 73,000 ft<sup>2</sup> of space in the main complex encompasses wet and dry laboratories, including an aquatic invasive research and culture complex; a science library; a fish culture facility; and offices. The physical plant also includes several features rarely found at other research facilities, such as 45 ponds (0.01–0.5 acres in size), 13 raceways, and indoor environmental chambers providing controlled conditions for studies under simulated field environments. The outdoor mesocosm facility—used for aquatic ecology experiments—features controlled water inflow, effluent sterilization and filtration, automated systems for supplying river water, temperature control, and remote communication linkage for automated data collection. The water supply capacity is 3,000 gallons per minute. A system of water processors, tanks, and pumps provides the high levels of water quality needed for laboratory studies. An onsite wastewater treatment system also ensures the effluent from the studies is properly treated and discharged.

**Consolidation Issues:** In 1999, the previously existing Upper Mississippi Science Center (West Campus) and the Environmental Management Technical Center (East Campus) merged into UMESC. As the consolidation of staff and facilities



**Year Built:** 1974–78

**Operation and Maintenance Costs:** \$736K in FY2005

**Employees:** 68 permanent federal staff; 16 federal term and students; 17 university cooperators; approximately 36 state field staff.

**Structures:** Office/lab complex; vehicle and equipment storage, metal/woodworking shop; 45 experimental ponds and raceways; 3 well houses and Effluent Treatment System

**Acreage:** 65 acres

**Square Footage:** 72,724 ft<sup>2</sup> Office/Lab buildings, 18,866 ft<sup>2</sup> shop/storage/auxiliary space; Total of 91,590 ft<sup>2</sup>.

**Field Stations:** Six state-operated field stations in Illinois, Iowa, Minnesota, Missouri, and Wisconsin funded through a reimbursable partnership.

continued, UMESC management decided to allow the lease on the East Campus to expire and move all staff and equipment to the West Campus facility. Although the decision eliminated a difficult facilities and employee management challenge and saved the Center \$448K in annual lease costs, merging the two Centers into one facility created cramped staff quarters.

To resolve the limited space issue, the Center Director proposed the USGS construct an additional building wing (D) at a cost of \$3.0M to accommodate the merger of the two facilities into one. The construction of wing D would provide additional required space for offices, meeting rooms, a data processing and storage center, and a Geospatial Sciences and Decision Support Laboratory to accommodate the combined staff of UMESC. In addition, the laboratory, garage, and storage space temporarily converted to offices would be returned to their original use. In April 2004, the USGS approved the business plan for the construction of a new wing (21,500 ft<sup>2</sup>). The funding strategy allows the Center to retain (through Working Capital Fund) the lease rent savings for a fixed period beginning in FY2004 as the capital investment base for the project.

**For more information, contact**

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