



**EXPERIENCE SUMMARY**

Rob has more than 25 years consulting experience applying hydrology and hydraulic engineering to a wide variety of water resources, environmental and civil engineering projects. Expertise includes the hydrology and hydraulics of rivers, streams and wetlands, stormwater quantity and quality management, management of contaminated lands, especially those adjacent to watercourses, and shoreline protection design.

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**EXPERTISE**

Stormwater Management Analysis & Design  
Water Supply Planning & Design  
Recharge Analysis & Design  
Stream Analysis & Design  
Shoreline Stabilization  
Environmental Engineering  
Landfill Design

**REGISTRATION**

Professional Engineer  
Wisconsin 21276

**EDUCATION**

BS – Civil Engineering (High Honors), 1976  
U. of Illinois – Champaign-Urbana

MS – Civil Engineering, 1980  
Colorado State University

**PROFESSIONAL HISTORY**

Montgomery Associates: Resource Solutions,  
LLC: Principal, 1998 - Present

Woodward-Clyde Consultants,  
Middleton, WI: Consultant, 1995 - 1998

Johnson Johnson & Roy, Madison, WI:  
Principal, 1992 - 1995

Warzyn Engineering, Madison, WI:  
Project and Tech. Manager, 1980 - 1992

W H Radford & Son, Nottingham, UK:  
Staff Engineer, 1976 to 1978

**SELECTED PROJECT EXPERIENCE**

**Odana Hills Groundwater Recharge System Design,  
Madison, WI, (MARS Project Manager).**

- Directed detailed soil and groundwater investigation program to determine site suitability for a large-scale subsurface groundwater recharge system
- Directed and developed approach for hydrologic and hydraulic analysis of system performance and impacts to water levels and water supply wells
- Navigated complex and involved public process

**Kohler Company, Whistling Straits Golf Course project,  
Sheboygan, WI, (MARS Principal)**

- Developed a comprehensive analysis of vegetation, surface and groundwater hydrology and civil engineering issues to analyze options for wetland impact minimization
- Developed a detailed impact mitigation plan, including compensatory wetland construction, which resulted in approval by Wisconsin DNR and the Corps of Engineers
- Implemented a wetland impact and mitigation monitoring program for the project

**San Diego Creek Channel Repair Design, Irvine, CA, (MARS  
Project Manager)**

- Led investigation of failure mechanisms and preparation of repair design alternatives for approximately 1-mile of channel lined with articulated concrete block.
- Managed geotechnical investigation, detailed hydraulic modeling, analysis of block stability, and hydraulic flume testing
- Coordinated extensive meetings with large client group and municipal personnel

**Cherokee Park Low Impact Stormwater Management Plan,  
Madison, WI, (MARS Project Manager).**

- Evaluated stormwater infiltration feasibility to minimize hydrologic impacts to adjacent natural resources
- Provided input on integrating de-centralized stormwater management practices into neo-traditional block layouts.

### PUBLICATIONS & PRESENTATIONS

Lecturer, UW-Madison Engineering  
Professional Development on Water Quality  
and Stormwater Infiltration

Lecturer, WI DNR Web Seminar on  
Stormwater Infiltration

Gaffield, S.J., Zolidis, N.R., Montgomery,  
R.J., and J.M. Hruby. 2007. *West Campus  
Cogeneration Facility Compensatory Recharge  
System: Initial Operation Results*. Poster  
presented at American Water Resources  
Association-Wisconsin Section 31<sup>st</sup> Annual  
Meeting held 1-2 March, Wisconsin Dells,  
Wisconsin.

Montgomery, R.J., Gaffield, S.J., and N.R.  
Zolidis. 2005. *Infiltration of Stormwater  
Runoff for Groundwater Recharge, Dane  
County, Wisconsin*. Paper presented at the  
10<sup>th</sup> International Conference on Urban  
Drainage, Copenhagen, Denmark, 21-26  
August.

Zolidis, N.R., Lefers, J., and R. J.  
Montgomery. 2005. *West Campus  
Cogeneration Facility Compensatory Recharge  
Design I: Integrated Modeling Approach*.  
Paper presented at American Water  
Resources Association-Wisconsin Section  
29<sup>th</sup> Annual Meeting held 3-4 March,  
Delavan, Wisconsin.

Lefers, JD, RJ Montgomery, JM Hruby, KW  
Potter, 2005. *Stormwater Management Criteria  
and Design to Address Downstream Flooding  
Concerns on Lake Mendota, Dane County,  
Wisconsin*, Paper and Presentation at ASCE  
Watershed Management Conference.

### TECHNICAL COMMITTEES

Chair, ASCE Wisconsin Section Report Card  
on Infrastructure - Rivers & Dams

Member of Dane County Advisory  
Committee on Revised Stormwater  
Infiltration Ordinance

Member of Wisconsin DNR Standard  
Oversight Committee for Proprietary  
Stormwater Treatment Devices

### **Lake Mendota Surface Water Intake Design to Control Zebra Mussels, Dane County, WI (MARS Project Manager)**

- Analyzed options for protecting a high capacity pumping system from zebra mussel infestation drawing water from Lake Mendota for irrigation supply.
- Performance, schematic design and costing analyses were prepared to develop a recommended control system.

### **Design and Impact Analysis of High Capacity Well, Deerfield, WI, (MARS Principal)**

- Developed design for irrigation pond and well location considering site geology and hydrogeology, regulatory requirements and site landscape design objectives.
- Scoped and directed groundwater modeling analysis of the performance of the well for the intended purpose, as well as the potential for the well to adversely affect municipal water supply wells in the area.

### **Water Resource Impact Analysis, Fond du Lac, WI, (MARS Principal)**

- Evaluated the water balance of Lake Winnebago considering municipal withdrawals for potable use, industrial use, and the inflow and outflow of the Fox River and other streams.
- Evaluated impacts of proposed additional water supply withdrawals.
- Projected influent and discharge temperature differential and likely impacts on aquatic resources.

### **Orchard Pointe Stormwater Management Design, Orchard Pointe development, Fitchburg WI, (MARS Project Manager)**

- Directed field investigation, analysis, and design for a stormwater management system that included substantial stormwater runoff volume infiltration.
- Provided extensive public and regulatory agency interaction and coordination

### **Milwaukee County Zoo Stormwater Management Plan, Wauwatosa, WI (MARS Project Manager)**

- Conducted stormwater drainage and water quality study
- Conducted field investigations, hydrologic and water quality modeling
- Developed a plan to improve runoff quality, addressing unique issues associated with the animal displays, in collaboration with Zoo, DNR, MMSD and Milwaukee County personnel

## **ROBERT J. MONTGOMERY, P.E.**

### **PRINCIPAL**

#### **Compensatory Recharge Site Selection, Dane County, WI, (MARS Project Manager).**

- Directed site selection evaluation of multiple potential sites within Dane County for feasibility of providing groundwater recharge from existing stormwater discharge for 80 million gallons per year of recharge
- Developed site selection criteria and evaluation strategy for comparing and ranking the alternative site locations

#### **Shore Protection and Environmental Management, former Lakeside Generation Station, St. Francis, WI (MARS Project Manager)**

- Conducted site investigation of groundwater and soil contamination and the physical remains of the structures along and in Lake Michigan
- Developed remedial action strategy
- Evaluated shore protection options and redevelopment strategies

#### **Menomonee River Drop Structure Removal, Milwaukee, WI (MARS Project Manager)**

- Directed complex hydrologic and hydraulic analyses, natural channel restoration design, and floodplain and contamination permitting
- Established Phase II investigation scope, prepared permit and environmental assessment submittals, & reviewed construction documents
- Coordinated with other MMSD consultants & attended public meetings

#### **Robinson/Herrling Dam Restoration, Greenbush, WI, (MARS Principal)**

- Prepared extensive hydrologic, structural and environmental impact analysis for permitting of restoration of a 1850s dam, millpond, and sawmill, and subsequent design of the hydraulic and civil engineering aspects of the project.
- Developed multiple multiple alternatives to avoid impact to environmental resources of the Mallet River, especially two state-threatened mussel species.
- Coordinated closely with WDNR, the Corps of Engineers, and the Client, The State of Wisconsin Historical Society.
- The project is now completed and has received several awards.