

EXPERIENCE SUMMARY

Jeff has more than 9 years of experience in consulting engineering. He has used his background in geological engineering, hydraulics, hydrogeology, and hydrology to perform a wide variety of work on environmental and civil engineering projects.

EXPERTISE

Stormwater Management Analysis & Design
Recharge Analysis & Design
Erosion and Restoration
Thermal Impact Assessment
Floodplains
Stream Analysis & Design
Shoreline Stabilization

REGISTRATION

Professional Engineer

Wisconsin 36670
North Dakota PE-5403

EDUCATION

B.S. Geo. Engineering (High Honors), 1999
University of North Dakota
Grand Forks, ND

PROFESSIONAL HISTORY

Montgomery Associates: Resource Solutions,
LLC
Water Resources Engineer, 2002 – Present

URS Corporation
Environmental Engineer, 1999-2002

SELECTED PROJECT EXPERIENCE

Fireman’s Park Shoreline Restoration, Marshall, WI, (MARS Project Manager / Project Engineer)

- Prepared plans and specifications to stabilize approximately 1300 feet of shoreline incorporating natural stone
- Coordinated with regulatory agencies to obtain permit approvals

Sagamore Development Stormwater Management Plan, Porter County, Indiana, (MARS Project Manager / Project Engineer)

- Prepared stormwater management plan incorporating Conservation Design techniques including no increase in runoff volumes
- Completed hydrologic and hydraulic analysis of site utilizing XP-SWMM
- Integrated stormwater facilities design with overall landscape and ecological restoration plan

Groundwater Recharge System Design, Madison Gas & Electric, Madison, WI, (MARS Project Engineer)

- Prepared plans and specifications for subsurface recharge system
- Design included performance specification for filtration system, conveyance pumping and piping, valve analysis, distribution piping analysis and design for three separate recharge beds, porous media analysis and design, operational alternatives analysis, and surface restoration incorporating golf course requirements
- Analysis included development of an excel spreadsheet to model head loss through the system and develop operational strategies between the three separate recharge beds and assistance in continuous XP-SWMM modeling to characterize stormwater availability and recharge estimates

PUBLICATIONS & PRESENTATIONS

Gaffield, SJ, JM Hruby, RJ Montgomery, 2005. *West Campus Cogeneration Facility Compensatory Recharge Design II: Predicting Unsaturated Zone Behavior*, Presentation at AWRA – Wisconsin Section Annual Meeting.

Gaffield, SJ, NR Zolidis, RJ Montgomery, JM Hruby, 2007. *West Campus Cogeneration Facility Compensatory Recharge System: Initial Operational Results*, Poster at AWRA – Wisconsin Section Annual Meeting.

Lefers, JD, JM Hruby, 2004. *Stormwater Management Design in a Watershed Context*, Presentation at ASCE Wisconsin Annual Meeting.

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 at ASCE Watershed Management Conference.

West Campus Cogeneration Facility Stormwater Management Plan and West Natatorium Recreational Fields Restoration, Madison, WI, (MARS Project Manager / Project Engineer)

- Assisted in development of innovative stormwater management in the context of flood level reduction on Lake Mendota
- Prepared plans and specifications of stormwater facilities that included three separate extended detention basins vegetated with native species
- Prepared plans and specifications for restoring 10 acre construction laydown area to high quality recreation fields for the University of Wisconsin-Madison
- Managed and assisted in development of a comprehensive maintenance and management plan for turfgrass, basin vegetation, and stormwater facilities
- Coordination with Wisconsin Department of Administration, UW-Madison Facilities Planning and Development, UW-Madison Recreational Sports, and MG&E to develop common restoration goals

South Pond Outfall Structure, Middleton, WI, (MARS Project Manager / Project Engineer)

- Prepared plans and specifications to replace an existing ineffective weir structure with a weir and compound spillway structure to increase suspended solids trapping efficiency
- Design included a box weir and two stage spillway armored with articulated concrete block

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

- Performed detailed HEC-RAS modeling, stability calculations, and alternatives analysis to determine articulated concrete block stability under varying flow conditions
- Performed field survey of in-place block and subgrade conditions

JEFFREY M. HRUBY, P.E.
PROJECT WATER RESOURCES ENGINEER

**The Abbey Resort and Spa Re-Development,
Fontana, WI, (MARS Project Engineer)**

- Performed floodplain delineation and encroachment study utilizing HEC-RAS and XP-SWMM

**Stormwater Management and Erosion Control
Plans, Multiple Locations, (MARS Project
Manager / Project Engineer)**

- Prepared multiple Stormwater Management and Erosion Control Plans for utility projects throughout Wisconsin meeting both state and local criteria
- Performed hydrologic and hydraulic analyses using XP-SWMM
- Prepared preliminary site grading plans

**Multiple Utility Corridor Projects, (MARS
Project Manager/Project Engineer)**

- Assisted in development of a technically-based approach for soil loss and field implementing erosion control measures on linear projects
- Analysis included evaluating the effectiveness of vegetated buffers and silt fence in minimizing off-site transport of sediment using the USLE

**Robinson-Herrling Dam Restoration,
Greenbush, WI, (URS Staff Engineer)**

- Analyzed and designed bank stabilization alternatives for the re-routed Mullet River including gabions, riprap, and vegetated geogrid alternatives

**Lake Summerset Water Quality Improvement
Basin, Lake Summerset, IL, (MARS Project
Engineer)**

- Prepared preliminary design for the proposed new outlet structure and emergency spillway for a water quality basin

Performed XP-SWMM hydraulic analysis to determine expected inundation areas and overflow frequency

**Mixing Zone Analysis, Mandan, ND, (MARS
Project Manager / Project Engineer)**

- Performed CORMIX-GI analysis using generic effluent concentrations to support permitting of a proposed new outfall for the Mandan POTW

**Electrical Generation Facility NPDES Permit
Application, Kaukauna, WI (URS Staff
Engineer)**

- Assisted in development of economical and feasible method for using wastewater treatment plan effluent as the water source for an electrical generation facilities cooling system and boiler source water
- Performed thermal and chemical mixing zone analyses using CORMIX-GI

**Milwaukee River Floodplain Delineation, West
Bend, WI, (MARS Project Engineer)**

- Completed a detailed floodplain re-study and delineation using HEC-RAS
- Merged two previous studies with supplemental data into a single comprehensive analysis
- Prepared new floodplain maps with updated 100-yr floodplain delineations and elevations for use by the City in the new downtown TIF district planning

**Erosion Control Training, Madison Gas &
Electric, (MARS Project Manager/Project
Engineer)**

- Prepared Erosion Control Reference Manual for use by gas and electric services project member to assist in all phases of a project including planning and permitting, design, and implementation of erosion control for gas and electric projects
- Developed permitting and pre-construction checklist forms to assist staff in determining permit requirements and planning project erosion control
- Developed and delivered 2-hr training presentations for both designers and construction crews on use of the manual and erosion control principles