

Appendix C : Groundwater Research & Monitoring Projects 1985-2009

Project title	Investigators	Contract Period	Funding Agency	Project Number
Volatile Organic Compound Contamination of Private Water Supplies Adjacent to Abandoned Landfills in Marathon County	Thomas Witthopf, Environmental Health Division-Marathon County	1985	DNR	41
Environmental Investigation of the City of Two Rivers Landfills, Manitowoc County, Wisconsin	Thomas Van Biersel, Michael Noel, Hydro-Search Inc.	01/30/1986-06/30/1987	DNR	24
West Bend Area Road Salt Study	Marianna Sucht, DNR	1986-1991	DNR	8
Filtration Preservation Study of Groundwater Samples	David Sauer, John Schwalbe, DNR	1985	DNR	21a
Groundwater Quality and Laundromat Wastewater: Summit Lake, Wisconsin	Jack G. Saltes, Ed Krueel, DNR	1985	DNR	29
Graphical and Statistical Methods to Assess the Effect of Landfills on Groundwater Quality	Kenneth W. Potter, Iris Goodman, UW-Madison	08/30/1985-06/30/1987	DNR	14a
Groundwater Monitoring Project for Pesticides	Jeffrey K. Postle, Kevin Brey, DATCP.	08/13/1985-06/30/1990	DNR	2
Fate and Mobility of Radium-226 in Municipal Wastewater Sludge Following Agricultural Landspreading	Thomas L. Portle, Carolyn Hunger, DNR	1985	DNR	19
Monitoring of Volatile Organic Compounds in Tomah, Wisconsin	Charles J. Krohn	1985	DNR	31a
Fate of Aldicarb Residues in a Groundwater Basin Near Plover, Wisconsin	George J. Kraft, WGNHS.	12/05/1985-06/30/1988	DNR	3
Groundwater Quality Monitoring - Long Term Effects of Intensive Farming and Sprinkler Irrigation on Groundwater Quality	Phil Kammerer, USGS	1986	DNR	15
The Occurrence of Volatile Organic Compounds in Wastewater, Sludges and Groundwater at Selected Wastewater Treatment Plants in Wisconsin	Carolyn Hunger, John Melby, DNR	1985	DNR	18
Evaluation Techniques for Groundwater Transport Models	John A. Hoopes, Howard Trussell, UW-Madison	09/25/1985-06/30/1986	DNR	7
The Use of Groundwater Models to Predict Groundwater Mounding Beneath Proposed Groundwater Gradient Control Systems for Sanitary Landfill Designs	John A. Hoopes, Kathleen O. Slane, UW-Madison	09/30/1985-06/30/1986	DNR	6
A Simple Stochastic Model Predicting Conservative Mass Transport Through the Unsaturated Zone Into Groundwater	John A. Hoopes, John A. Brasino, UW-Madison.	07/30/1985-06/01/1986	DNR	1
Field Investigation of Groundwater Impacts from Absorption Pond Systems Used for Wastewater Disposal	John A. Hoopes, Laurie Parsons, UW-Madison	01/21/1985-06/30/1986	DNR	17a
Barron County Nitrate Study	Dave Hanson, William McKinley, DNR	1985	DNR	37
Volatile Organic Compounds in Groundwater and Leachate at Wisconsin Landfills	Marci A. Friedman, DNR	1985-1987	DNR	4a
The Effect of Construction, Installation and Development Techniques on the performance of Monitoring Wells in Fine-Grained Glacial Tills	Douglas S. Cherkauer, Carl D. Palmer, Duane G. Paul, UW-Milwaukee	10/01/1985-06/30/1986	DNR	16

Project title	Investigators	Contract Period	Funding Agency	Project Number
The Prediction of Nitrate Contamination Potential Using Known Hydrogeologic Properties	Douglas S. Cherkauer, Cynthia L.W. Cruciani, University of Wisconsin-Milwaukee	11/25/1985-06/30/1987	DNR	10
Hydrogeology of the Wisconsin River Valley in Marathon County, Wisconsin	Kenneth R. Bradbury, WGNHS. Eloise Kendy, UW-Madison	05/01/1986-06/30/1986	DNR	22
Investigation of Hydrogeology and Groundwater Geochemistry in the Shallow Fractured Dolomite Aquifer in Door County, Wisconsin	Kenneth R. Bradbury, Maureen A. Muldoon, WGNHS. Margaret C. Blanchard, UW-Madison.	03/06/1986-06/30/1990	DNR	12
Volatile Organic Compounds in Small Community Wastewater Disposal Systems Using Soil Absorption	William C. Boyle, William C. Sonzogni, James C. Converse, John A. Hoopes, James O. Peterson, E. Jerry Tyler, Bruce A. Greer: UW-Madison.	10/25/1985-06/30/1986	DNR	5
A Case Study of Nitrogen Transformation at a Rapid Infiltration System Used for the Disposal of Food Processing Wastewater	William C. Boyle, John A. Hoopes, John Niewoehner, UW-Madison	11/15/1985-06/30/1986	DNR	17b
Treatment of Cheese Processing Wastewater by Ridge and Furrow Disposal - Nitrogen Transformations	William Boyle, Frederic J. Doran, UW-Madison	1985	DNR	23
Hydrogeological Investigation of VOC Contaminated Private Wells Near Hudson, Wisconsin	Jim Anklam, William J. Evans, DNR	1985	DNR	31b
Lead Migration from Contaminated Sites - Door County, Wisconsin	James J. Wiersma, Ronald D. Stieglitz, UW-Green Bay	08/07/1986-09/30/1988	DNR	13
Nitrate Contamination in West-Central Wisconsin with Emphasis on Mill Run First Edition Subdivision	John R. Tinker, UW-Eau Claire	1987-1990	DNR	11
Hydrogeologic Investigation and Groundwater Quality Assessment (Havenswood Landfill)	Pratap N. Singh, Miller Consulting Associates, Anthony R. Pawloski, Miller Consulting Engineers	1986	DNR	28
Investigation of Large Scale Subsurface Soil Absorption Systems	Daniel Peerenboom, DNR	11/13/1986-06/30/1987	DNR	42
Groundwater Survey of Bacterial Contamination Near Rapid Infiltration Wastewater Treatment System	Chris Norenberg, Jon Standridge, Wisconsin State Laboratory of Hygiene	1986	DNR	21b
Flambeau Paper Sulfite Lagoon Site Contamination Study	William Lantz, Dan Detroit, DNR	07/08/1986-08/15/1986	DNR	30
1987 Volatile Organic Compound Testing Project in Rock County, Wisconsin	David Holman, Environmental Health Division, Rock County	1986	DNR	40
Downward Movement of Water Below Barnyard Grass Filter Strips - Case Studies	Gary D. Bubenzer, James C. Converse, John W. Patoch, UW-Madison	08/26/1986-09/30/1988	DNR	39
Research and Data Analysis of Groundwater Contamination from Municipal Rapid Infiltration Land Disposal Systems	William C. Boyle, John A. Hoopes, Kenneth W. Potter, John Schwalbe, UW-Madison	1986	DNR	56
Characterization of Groundwater Impacts at an Above Ground Petroleum Storage Terminal	Gregory T. Becker, Robert K. Ham, UW-Madison	08/13/1986-06/30/1987	DNR	43
Plover Area Nitrate Study	Fred Bailey, DNR	1986	DNR	48

Project title	Investigators	Contract Period	Funding Agency	Project Number
Lead Contamination Study of Door County	Rick Stoll, DNR	1987	DNR	44
Analytical Determination of Atrazine Alachlor and Their Selected Degradation Products in Contaminated Groundwater: Implication for Wisconsin Groundwater	William Sonzogni, Wisconsin State Laboratory of Hygiene. Deborah B. DeLuca, UW-Madison.	09/1987-08/1989	DNR	47
Methods for Determining Compliance with Groundwater Quality Regulations at Waste Disposal Facilities	Kenneth W. Potter, Sarah R. Fisher, UW-Madison	08/05/1987-12/31/2988	DNR	14b
Evaluation of the Effect of Stormwater Disposal on Groundwater	Byron Shaw, Gerald Nienke, James Berndt, UW-Stevens Point	07/16/1987-06/30/1989	DNR	53
Mineralogical and Geophysical Monitoring Naturally Occurring Radioactive Elements in Selected Wisconsin Aquifers	Robert W. Taylor, Gregory Mursky, UW-Milwaukee	07/15/1987-12/30/1988	DNR	51
Mutagenic Effects of Selected Toxicants Found in Wisconsin's Groundwater	Lorraine F. Meisner, UW-Madison. David A. Belluck, DHSS. Boyd Roloff, UW-State Laboratory of Hygiene	08/01/1987-12/31/1989	DNR	38
Sealing Characteristics of Sodium Bentonite Slurries for Water Wells	Tuncer Edil, Michael M.K. Chang, Ahmad S.H. Mahanna, L.T. Lan, UW-Madison	07/27/1987-06/30/2988	DNR	34
Radionuclides in Drinking Water of North central Wisconsin	Chuck Fitzgerald, Bill Dobbins, DNR	1987	DNR	54
Degradation of Atrazine, Alachlor, Metolachlor in Soils and Aquifer Materials	Gordon Chesters, Geronimo Simsiman, Riyadh Fathulla, Bashar Alhajar, Robin Harris, John Harkin, Jonathan Levy, UW-Madison	07/10/1987-09/30/1989	DNR	52
Digital Simulation of Solute Transport to Green Bay and Lake Michigan by Groundwater from Door County, Wisconsin	Douglas S. Cherkauer, Peter McKereghan, Linda Schalch, UW-Milwaukee	07/1987-09/1990	DNR	57
Assessment of Geologic Controls on Groundwater Flow and Distribution in Precambrian Bedrock, Central Wisconsin, Using Remote Sensing and Geophysical Analysis	Donald M. Davidson Jr., Northern Illinois University. Bruce A. Brown, WGNHS	07/13/1987-06/30/1989	DNR	49
VOC Contamination at Selected Wisconsin Landfills - Sampling Results and Policy Implications	Janet R. Battista, DNR	1988-1989	DNR	4b
A Ground Penetrating Radar Study of Water Table Elevation in a Portion of Wisconsin's Central Sand Plain	Mary P. Anderson, Charles R. Bentley, Geoffrey C. Bohling, UW-Madison	07/22/1987-06/30/1988	DNR	50
Effect of Soil Type on Atrazine and Alachlor Movement Through Unsaturated Zone	Tommy Daniel, Rick Wietersen, Kevin Fermanich, UW-Madison	10/05/1988-06/20/1989	DNR-DATCP	62
Effects of Volatile Organic Compounds on clay landfill liner performance	Edil, Berthouex, Park, Sandstrom		DNR	61
Grade A Dairy Farm Water Well Quality Survey	Gary LeMasters, DATCP. Douglas J. Doyle, WASS.	09/02/1988-06/30/1989	DNR	58

Project title	Investigators	Contract Period	Funding Agency	Project Number
Groundwater Quality Investigation of Selected Townships in Jefferson County, Wisconsin	Fred Madison, UW. Andrea Kenter, Wisconsin Geological & Natural History Survey	12/27/1988-07/01/1989	DNR	60
Designs for wellhead protection in Central Wisconsin	Osborne, Sorenson, Knaak, Mechenich		DNR	63
Pesticide Migration Study	Byron Shaw, UW - Stevens Point, and Mike Heitman, UW - Stevens Point	07/01/1989 – 06/30/1991	DNR	55
Optimum Manure Application Rate - Corn Shaw Fertility Management and Nitrate Leaching to Groundwater in Sandy Soils	Byron Shaw, Paul Trapp, UW - Stevens Point	07/01/1989 - 06/30/1991	DNR	71
Subdivision impacts on groundwater quality	Shaw, Ameson, VanRyswyk	07/01/1989 – 6/30/1991	DNR	67
Demo of low input strategies for potato/vegetable production in irrigated sands	Shaw, Curwen, Kraft, Osborne	07/01/1989 – 6/30/1991	DNR	59
A Field Evaluation of Drainage Ditches as Barriers to Contaminant Migration	Jean Bahr, Lucy W. Chambers, UW-Madison	11/16/1989-09/30/1991	DNR	75
Incorporation of County Groundwater Inventory Data into the DNR Groundwater Information Network (GIN)	Bohn	07/01/1989 – 06/30/1990	DNR	68
Atrazine Contamination of Groundwater in Dane County, Wisconsin	Bradbury, McGrath	07/01/1989 – 06/30/1991	DNR	64
Sources and Extent of Atrazine Contamination of Groundwater at a Grade A Dairy Farm in Dane County, Wisconsin	Chesters, UW-Madison, and Levy, Miami University	07/01/1989 – 06/30/1991	DATCP, UWS, DNR	GCC-UWS-14
Follow Up to the Grade A Dairy Farm Well Water Quality Survey	Cowell, LeMasters	07/01/1989 – 06/30/1990	DNR	70
Report on Bacteriological Water Quality Monitoring of Door County Variance and Special Casing Approval Wells	Keith Hutchinson, Bruce Urben, and Sue Beaumier, DNR	07/01/1989 – 06/30/1991	DNR	72
DNR and DATCP Rural Well Survey	LeMasters	01/1990 - 03/1991	DNR	69
Variation in Hydraulic Conductivity in Sandy Glacial Till: Site Variation Versus Methodology		01/1990 - 03/1992	DNR	74
Analytical Determination of Pesticide Metabolites and Carrier Chemicals in Wisconsin Wells	Sonzogni, Eldan., Lawrence, WSLH, UW-Madison	01/1990 - 03/1991	DNR	77
Nitrogen Isotope Monitoring at Unsewered Subdivisions		01/1990 - 03/1991	DNR	76
Volatile Organic Compound Attenuation in Unsaturated Soil Above and Below an On-site Wastewater Infiltration System	Tyler, Peterson, Sauer	07/01/1989–06/30/1991	DNR	73
Integrated decision support for wellhead protection	Adams, Benson	07/01/1990–06/30/1991	UWS	
Role of mobile colloids in the transport of chemical contaminants in groundwater	Armstrong, Shafer	07/01/1990-06/30/1992	UWS	
On-site nitrogen removal systems research demonstration project: Phase 1	Ayers and Associates	07/01/1990-06/30/1991	UWS	

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Evaluation of Potential Phytotoxicity and Crop Residues when Using Sprayer Rinsate as a Portion of the Diluent in Pesticide Spray Mixtures	Binning	07/01/1990–06/30/1991	UWS	
To Expand Groundwater Sampling in the Lower Wisconsin River Valley	Cates, Madison, Postle	07/01/1990–06/30/1991	DNR	78
Renovation of Pesticide Contaminated Rinse Water	Gordon Chesters, John Harkin	07/01/1990–06/30/1991	UWS	
In-situ Removal of Fe, Mn, and Ra from groundwater	Christensen, Cherkauer	07/01/1990–06/30/1991	UWS	
Reactions of Chlorohydrocarbons on Clay Surfaces	Fripiat	07/01/1990–06/30/1991	UWS	
The Biological Impact of Landfill Leachate on Nearby Surface Waters	William Sonzogni, Jonathon Standridge, and Steven Geis, UW - State Laboratory of Hygiene	07/01/1990–06/30/1991	DNR	83
Chemical transport across a sediment-water interface	Green	07/01/1990–06/30/1992	UWS	
Adsorptive Behavior of Atrazine and Alachlor in Organic-Poor Sediments	Grundl, Small	07/01/1990–06/30/1991	UWS	UWS 91-PTC-1
The Effects of Complex Mixtures of Chemicals in Leachates on the Transport of Pollutants in Groundwater	Grundl, Cherkauer	07/01/1990–06/30/1992	UWS	GCC-UWS-04
Bioremediation of Herbicide-Contaminated Soil and Water	Robin F. Harris, UW-Madison	07/01/1990–06/30/1992	UWS	GCC-UWS-19
Near-source transport of contaminants in heterogeneous media	John Hoopes	07/01/1990–06/30/1991	UWS	UWS
Design of a small scale transportable mixing/loading system	Kammel	07/01/1990–06/30/1992	DATCP	
Municipal wastewater project	Kopecky	07/01/1990–06/30/1991	DNR	85
Dependence of aldicarb residue degradation rates on groundwater chemistry in the Wisconsin Central Sands	George Kraft, Phil Helmke	07/01/1990–06/30/1991	DNR	84
Using ground-penetrating radar to predict preferential solute movement and improve contaminant monitoring in sandy soils	Kiung, Madison	07/01/1990–06/30/1992	UWS	UWS
Nitrate Movement through the Unsaturated Zone of a Sandy Soil in the Lower Wisconsin River Valley	Lowery, Fermanich, Grant, McSweeney, Kussow	07/01/1990–06/30/1991	UWS	GCC-UWS-03
Effect of Soil Type, Selected Best Management Practices, and Tillage on Atrazine and Alachlor Movement through the Unsaturated Zone	Lowery, McSweeney, Fermanich, Hart, Wang, Seybold	8/18/89-12/31/91	DNR	66
A Study of the Response of Nitrate and Atrazine Concentrations in Groundwater from Agricultural use on a Sandy, Irrigated Corn Field in the Lower Wisconsin River Valley	Kim Cates, Fred Madison	07/01/1990–06/30/1993	DNR	81
Facility plan amendment for wastewater collection for Green Lake Sanitary District, Green Lake, WI		07/01/1990–06/30/1991	DIHLR	
Contamination Attenuation Indices for Sandy Soils: Tools for Information Transfer.	Kevin McSweeney, UW-Madison, Fred Madison, Geological and Natural History Survey	07/01/1990–06/30/1991	UWS	GCC-UWS-09

Project title	Investigators	Contract Period	Funding Agency	Project Number
Tracking contaminant pathways in groundwater using a geologically based computer code for outwash	David Mickelson, Mary Anderson	07/01/1990–06/30/1992	UWS	UWS
A tracer technique for measuring regional groundwater velocities from a single borehole	Monkmeyer	07/01/1990–06/30/1991	UWS	UWS
The economic effects of groundwater contamination on real estate	Page	07/01/1990–06/30/1991	UWS	UWS
Prediction of organic chemical leachate concentrations from soil samples	Jae Park	07/01/1990–06/30/1991	UWS	UWS
Crop Rotations Effects on Leaching Potential and Groundwater Quality	J. L. Posner, G. D. Bubenzer, F. Madison, UW-Madison	06/01/1990-12/31/1992	DNR	80
Barnyard Management Practices: Effect on Movement of Nitrogen Through Soils and Impact on Groundwater Quality	Byron Shaw, Michael J. Travis, Bryan D. Bowen, UW-Stevens Point. Bob Wilson, Soil Conservation Service. Tim Victor, PCLCC. Dave Jelinski, DATCP.	08/25/1988-09/30/1990	DNR	9
A Comparative Study of Nitrate Loading to Groundwater from Mound, In-Ground Pressure and At-Grade Septic Systems	Byron Shaw, Nancy Turyk	7/01/1991-6/30/1992	DNR	82
Waupaca County groundwater project: Towns of St. Lawrence and Little Wolf	Wilson, Blonde	7/01/1990-6/30/1992	DNR	79a
Waupaca County: Towns of Lebanon and Scandinavia	Wilson, Blonde	07/01/1991–06/30/1992	DNR	79b
Arsenic as a naturally elevated parameter in water supply wells in eastern Winnebago and Outagamie Counties	Rick Stoll	07/01/1991–06/30/1992	DNR	87
Evaluation of denitrification systems for improving groundwater from on-site waste disposal systems	Byron Shaw	07/01/1991–06/30/1993	DNR	95a
Assessment of Wisconsin's Groundwater Monitoring Plan (GWM) Program for Active Non-Approved Landfills (1985-1990)	Laura Pugh, DNR, Barbara Gear, DNR	07/01/1991–06/30/1992	DNR	92
Investigation of Potential Groundwater Impacts at Demolition Landfills and Deer Pits	Laura Pugh, DNR, Barbara Gear, DNR	07/01/1991–06/30/1993	DNR	98a
Estimating the spatial distribution of groundwater recharge rates using hydrologic, hydrogeologic, and geochemical methods	Ken Potter and Carl Bowser	07/01/1991–06/30/1993	UWS/DA TCP	UWS/DA TCP
New approaches to measuring biologic effects of groundwater contaminants	Warren Porter	07/01/1991–06/30/1992	UWS	UWS
Nitrogen removal from domestic wastewater in unsewered area	Otis, Converse	07/01/1991–06/30/1993	DIHLR	DIHLR
Spatial attributes of the soil-landscape-groundwater system of the lower Wisconsin River Valley	McSweeney, Madison, Attig, Bohn, Falk	07/01/1991–06/30/1993	DNR	88
Herbicide and nitrate movement in a sandy soil aquifer in the Lower Wisconsin River Valley	Lowery, McSweeney	07/01/1991–06/30/1993	UWS	UWS/DA TCP
Remediation of Soils Contaminated by Leaking Underground Storage Tanks by Vapor Extraction and in situ Bioremediation	Hickey, Jacobsen, Bubenzer	07/01/1991–6/30/1993	DNR	96
Living mulch systems for nitrate trapping in vegetable production	Harrison	07/01/1991–06/30/1993	UWS	UWS

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Municipal wastewater absorption pond renovation for enhanced nitrogen removal	Gilbert	07/01/1991–06/30/1993	DNR	97
Use of tire chips to attenuate VOC's	Tuncer Edil, Jae Park	07/01/1991–06/30/1993	UWS	UWS
Dane County atrazine/lead management project	Conners, Bohn, Madison, Muldoon, Richardson	07/01/1991–06/30/1992	DNR	99
Distribution, Sources and Fate of Atrazine in a Sandy-Till Aquifer	Gordon Chesters, Jonathan Levy	07/01/1991–06/30/1993	UWS & DATCP	UWS/DATCP
GIS Mapping of Groundwater Contaminant Sources Quality and Contamination Susceptibility for Door County	Richard Stoll, Mike Hronek	07/01/1991–06/30/1993	DNR	93
Preliminary comparison of a discrete fracture model with a continuum model for groundwater movement in fractured dolomite	Bradbury, Muldoon	07/01/1991–06/30/1992	DNR	89
Evaluation of NURE hydrogeochemical groundwater data for use in Wisconsin groundwater studies	Bradbury, Mudrey, Shrawder	07/01/1991–06/30/1992	DNR	90
Distribution of radionuclides in Wisconsin groundwater	Bradbury, Mudrey	07/01/1991–06/30/1992	DNR	91
GIS for subsurface characterization	Bosscher, Adams	07/01/1991–06/30/1993	UWS	UWS
Effects of transient cross-stratification flow on contaminant dispersion	Jean Bahr	07/01/1991–06/30/1993	UWS	UWS
The Impact of Atrazine Management Areas Designation on Weed Control Strategies in Wisconsin Corn Production	Nowak, Wolf, McCallister, Hartley, UW – Madison	07/01/1992–06/30/1994	DATCP and Ciba Geigy	DATCP-92-01
Variability of hydraulic conductivity in supraglacial sediments	David Mickelson	07/01/1992–06/30/1994	UWS	UWS
Field evaluation of near source transport of contaminants in heterogeneous media	John Hoopes	07/01/1992–06/30/1994	UWS	UWS
Long-term Transformation and Fate of Nitrogen in Mound-type Soil Absorption Systems for Septic Tank Effluent	John Harkin, Chen Peng Chen	07/01/1992–06/30/1994	DNR	103
Ultrasonic verification technique for evaluating well seals	Tuncer Edil	07/01/1992–06/30/1994	UWS	UWS
A further study of organics at municipal solid waste landfills	Jack Connelly	07/01/1992–06/30/1994	DNR	104
Impact of tunnel dewatering on surface water bodies in Milwaukee County	Doug Cherkauer	07/01/1992–06/30/1994	UWS	UWS
Management of sweet corn processing to protect groundwater quality	Larry Bundy	07/01/1992–06/30/1994	UWS	UWS
Evaluation of Groundwater Susceptibility Assessment Systems in Dane County, Wisconsin	Bohn, Muldoon, Madison, Bradbury, Zaporozec	07/01/1992–06/30/1994	DNR	100
Tracer Study for Characterization of Groundwater Movement and Contaminant Transport in Fractured Dolomite	Maureen A. Muldoon, Kenneth R. Bradbury	07/01/1992–06/30/1994	DNR	101
Trace metal transport affected by groundwater stream interactions	Jean Bahr	07/01/1992–06/30/1994	UWS	UWS
Urban stormwater infiltration: Assessment and enhancement of pollutant removal	David Armstrong	07/01/1992–06/30/1994	DNR	102
The use of peat as an absorbitive medium	Jim Wiersma, Ron Stieglitz	07/01/1993–6/30/1994	DATCP	DATCP
Groundwater Survey for Alachlor and ESA its Polar Metabolite in Southern Wisconsin	James Vanden Brook, DATCP	01/6/1994 – 05/30/1994	DATCP, DNR, Monsanto Company	112

Project title	Investigators	Contract Period	Funding Agency	Project Number
The further incidence of native arsenic in eastern Wisconsin water supply wells: Marinette, Oconto, Shawano and Brown Counties	Rick Stoll	07/01/1993–06/30/1994	DNR	110
Integrated computerized mapping of point source contaminants and physical environmental characteristics to protect and manage groundwater quality	Rick Stoll	07/01/1993–06/30/1994	DNR	105
Factors affecting the determination of radon in groundwater	William Sonzogni	07/01/1993–06/30/1994	DNR	111
Optimization of two recirculating sans filters for nitrogen and organic chemical removal from domestic wastewater	Byron Shaw	07/01/1993–06/30/1994	DNR	95b
Investigation of potential groundwater impacts at yard waste sites	Pugh, Connelly	07/01/1993–06/30/1994	DNR	98b
Groundwater hydrogeology of an agricultural watershed	Ken Potter	07/01/1993–06/30/1995	DNR/DATCP	109
Cover Crops to Limit Herbicide Use on Sweet Corn	Astrid Newenhouse	07/01/1993-08/30/1995	DATCP	DATCP-93-04
Cover crops to limit herbicide use on sweet corn	Newenhouse	07/01/1993–06/30/1994	DATCP	DATCP
Leaching potential of Imazethapyr and nicosulfuron in Sparta sand	Birl Lowery	07/01/1993–06/30/1994	DATCP	DATCP
Comparative evaluation of biostimulation approaches for enhancing in situ TCE degradation in contaminated aquifers	William Hickey	07/01/1993–06/30/1995	UWS	94REM6 B2
Using "PREDICT" to reduce herbicide usage and improve groundwater quality	Harvey	07/01/1993–06/30/1995	UWS	94PES6B 2
Stratigraphy, sedimentology and porosity distribution of the Silurian rocks of Door County, Wisconsin	Mark Harris	07/01/1993–06/30/1995	UWS	94HGE2B 2
Mineral Phase Sorption of Selected Agrichemicals to Wisconsin Soils	Timothy J. Grundl and Greg Small, UW-Milwaukee	1994 – 1995	UWS	GCC-UWS-13
Mineral phase sorption of selected agrichemicals to Wisconsin soils	Tim Grundl	07/01/1993–06/30/1995	UWS	94PES1B 2
An investigation of field-filtering and low-field pumping when sampling for metals	Jack Connelly	07/01/1993–06/30/1994	DNR	106
Herbicide contamination of soil and groundwater at a mixing and loading site	Gordon Chesters	07/01/1993–06/30/1995	UWS & DATCP	94PES2B 2
Improved design of pump and treat systems for heterogeneous aquifers	Jean Bahr	07/01/1993–06/30/1995	UWS	94REM3 B2
Photocatalytic degradation of volatile organic carbon	Marc Anderson	07/01/1993–06/30/1995	UWS	94REM2 B2
Collection of hydraulic and geologic data to improve the quality of the Wisconsin Groundwater Monitoring Network	Zaporozec	07/01/1994–06/30/1996	DNR	118
An evaluation of long-term trends and a mineralogical interpretation of naturally occurring metals contamination and acidification	Weissbach	07/01/1994–06/30/1996	DNR	115
Evaluation of enzyme-linked immunosorbent assay for herbicide analysis of Wisconsin soil in comparison to gas chromatography	William Sonzogni	07/01/1994–06/30/1995	UWS	UWS

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Characterization of E. coli and total coliform organisms isolated from Wisconsin groundwater and reassessment of their public health significance	William Sonzogni	07/01/1994–06/30/1995	DNR	117
Geologic constraints on arsenic in groundwater with applications to groundwater modeling	Tony Simo	07/01/1994–06/30/1995	UWS	UWS
Development and demonstration of an accurate manure spreading system to protect water quality, improve waste management and farm profitability	Shinners	07/01/1994–06/30/1996	UWS	UWS
Synergistic effects of endocrine disrupters in drinking water	Warren Porter	07/01/1994–06/30/1996	UWS	UWS
Vertical and horizontal variability of hydrogeologic properties of glaciated landscapes	David Mickelson	07/01/1994–06/30/1995	DNR	119
Agrichemical impacts to groundwater under irrigated vegetables in the Central Sand Plains	George Kraft, Bryant Browne	07/01/1994–06/30/1996	DNR	116
Use of heavy nitrogen to study nitrate flux from septic systems	John Harkin	07/01/1994–06/30/1996	UWS & Comm	
A low-input crop management plan for Wisconsin fresh-market vegetable growers	Delahunt	07/01/1994–06/30/1995	DATCP	
A comparison of low flow pumping and bailing for VOC sampling	Jack Connelly	07/01/1994–06/30/1995	DNR	114
Integration of hydraulics and geology into a hydrostratigraphic model for the Paleozoic Aquifer of eastern Dane County, Wisconsin	Doug Cherkauer	07/01/1994–06/30/1995	UWS	UWS
Direct and residual effects of land-applied sweet corn processing wastes on nitrate loss to groundwater	Larry Bundy	07/01/1994–06/30/1996	DNR	120
Application of a discrete fracture flow model for wellhead protection at Sturgeon Bay, Wisconsin	Ken Bradbury, Maureen Muldoon	07/01/1994–06/30/1996	DNR	113
Tracer study for characterization of groundwater movement and contaminant transport in fractured dolomite	Ken Bradbury	07/01/1994–06/30/1996	UWS	UWS
Evaluating the effectiveness of landfill liners	Craig Benson	07/01/1994–06/30/1996	UWS	UWS
An integrated approach to the management of insects in sweet corn grown for fresh market	Wedberg	07/01/1995–06/30/1997	UWS	
The use of azimuthal resistivity and self potential measurements to delineate groundwater flow direction in fractured media	Taylor	07/01/1995–06/30/1996	UWS	
GIS as a tool to prioritize environmental releases, integrate their management and alleviate their public threat	Stoll	07/01/1995–06/30/1997	DNR	126
Evaluation of shallow-soil adsorption fields associated with on-site disposal systems	Ron Stieglitz	07/01/1995–06/30/1997	UWS & DNR & DATCP	
Stratigraphic controls on the mobilization and transport of naturally-occurring arsenic in groundwater: Implication for wellhead protection	Tony Simo	07/01/1995–06/30/1996	UWS	
Land Use Effects on Groundwater and Streamwater Quality in the Little Plover River Watershed	Byron Shaw and Phillip Albertson, UW-Stevens Point	07/01/1995–06/30/1997	DATCP	DATCP
Groundwater recharge and contamination in Wisconsin's Driftless Area	Ken Potter	07/01/1995–06/30/1997	DATCP	DATCP
Characterization of the role of evapotranspiration on groundwater movement and solute chemistry in groundwater-fed wetlands	Ken Potter	07/01/1995–06/30/1997	UWS	

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Variability of nitrate loading and determination of monitoring frequency for a shallow sandy aquifer, Arena, Wisconsin	Fred Madison	07/01/1995–06/30/1996	DNR	123
Optimum management of groundwater resources in the Lower Fox River Valley	Jim Krohelski	07/01/1995–06/30/1997	DNR	122
Bio-stimulation of trichloroethylene degradation in contaminated aquifers	William Hickey	07/01/1995–06/30/1997	UWS	
Iron-based abiotic destruction of chlorinated pesticides in groundwater	Gerry Eykholt	07/01/1995–06/30/1996	UWS	
Evaluation of well seals using an ultrasonic probe	Tuncer Edil	07/01/1995–06/30/1996	UWS	
Responses of biological toxicity tests to mixtures of pesticides and metabolites	Gordon Chesters	07/01/1995–06/30/1997	UWS	
Delineation of capture zones for municipal wells in Dane County, Wisconsin	Ken Bradbury	07/01/1995–06/30/1997	DNR	121
Bioremediation of Hydrocarbons influenced by air sparging: A multi-model approach to assess contaminant mass removal	Jean Bahr	07/01/1995–06/30/1997	UWS	
A study of well construction guidance for arsenic contamination in northeast Wisconsin	Weissbach	07/01/1996–06/30/1998	DNR	127
Determining compatibility between herbicide release and habitat for Karner Blue butterfly in red pine plantations	Sucoff	07/01/1996–06/30/1997	DATCP	DATCP
Improved detection limits for groundwater monitoring	William Sonzogni	07/01/1996–06/30/1997	UWS & DNR	128
Stratigraphic controls on distribution of hydraulic conductivity in carbonate aquifers	Tony Simo	07/01/1996–06/30/1998	DNR	129
Evaluation of the use of DUMPSTAT to detect the impact of landfills on groundwater quality	Ken Potter	07/01/1996–06/30/1997	DNR	
Treatment of groundwater contaminated with chlorinated aliphatics using silicone tubing supported methanotrophic biofilm reactor	Jae Park	07/01/1996–06/30/1998	UWS	130
Fate of nicosulfuron in Sparta sand	Birl Lowery	07/01/1996–06/30/1997	DATCP	
Nitrate-contaminated drinking water followback study	Marty Kanarek	07/01/1996–06/30/1997	DNR	131
Molecular techniques for detection and identification of sewage-borne human pathogens in soils	William Hickey	07/01/1996–06/30/1998	Commerce	
Stratigraphy, sedimentology and porosity distribution of the Silurian Aquifer of Ozaukee County, Wisconsin	Mark Harris	07/01/1996–06/30/1997	UWS	
Experimental verification of models used to evaluate landfill liner effectiveness	Tuncer Edil	07/01/1996–06/30/1997	UWS	
Groundwater bioremediation: Monitoring with MMO probes	MLP Collins	07/01/1996–06/30/1998	UWS	
Development of a variable rate nitrogen application approach for corn	Larry Bundy	07/01/1996–06/30/1998	UWS	
Holding tank effluent and fecal-contaminated groundwater: sources of infectious diarrhea in central Wisconsin	Mark Borchardt	07/01/1996–06/30/1998	Comm	Comm
Groundwater protection by application of modern portfolio theory to microbiotesting strategies	George Blondin	07/01/1996–06/30/1997	UWS	
In situ air sparging: Air plume characterization and removal effectiveness	Craig Benson	07/01/1996–06/30/1998	UWS	

Project title	Investigators	Contract Period	Funding Agency	Project Number
Hydrogeochemical and microbiological studies for enhanced groundwater bioremediation	Jean Bahr	07/01/1996–06/30/1998	UWS	
Improved estimation of groundwater recharge rates	Mary Anderson	07/01/1996–06/30/1997	UWS	
Evaluation of geology and hydraulic performance of Wisconsin groundwater monitoring wells	Alex Zaporozec	07/01/1997–06/30/1998	DNR	135
Effects of Fosamine, Glyphosate, Picloram, Triclopyr, and Sodium Tetraborate on Reducing Aspen in Prairie Bush Clover Habitat	Paul C. West	07/01/1997–06/30/1998	DATCP	DATCP
Northeast region public water supply location utilizing GIS and GPS	Stoll	07/01/1997–06/30/1998	DNR	133
Impact of Ginseng Production on Groundwater Quality	William DeVita and Byron Shaw	07/01/1997–06/30/1998	DATCP	DATCP
Relationships between water quality in stream base flow and private wells and land use in the Tomorrow/Waupaca watershed	Byron Shaw	07/01/1997–06/30/1999	DNR	132
The direct effect of agricultural chemicals on Wisconsin's declining and endangered amphibians	William Karasov	07/01/1997–06/30/1999	UWS & DATCP	
Investigation of air sparging: Numerical modeling, laboratory verification and design guidelines	Hoopes	07/01/1997–06/30/1999	UWS	
Fate of metolachlor, alachlor and nitrate in granular iron/soil/ water systems	Eykholt, Davenport, Wonsettler	07/01/1997–06/30/1998	DATCP	DATCP
Evaluation of exploration borehole seals using Time Domain Reflectometry	Tuncer Edil	07/01/1997–06/30/1999	UWS	
Further evaluation of well seals using ultrasonic probes	Tuncer Edil	07/01/1997–06/30/1998	DNR	136
Characterization of the hydrostratigraphy of the deep sandstone aquifer in southeastern Wisconsin	Timothy Eaton	07/01/1997–06/30/1999	DNR	134
Determining Ground-Water Recharge Rates in Southern Wisconsin County	Douglas S. Cherkauer, UW-Milwaukee, and Craig J. LaCosse, UW-Milwaukee	07/01/1999–06/30/2001	UWS	R/UW-HDG-005
Watershed-scale nitrate contamination and chlorofluorocarbon ages in the Little Plover Basin: A study at the groundwater/surface water interface	Bryant Browne	07/01/1997–06/30/1999	UWS	
Evaluation of the Confining Properties of the Maquoketa Formation in the SEWRPC Region of Southeastern Wisconsin	Timothy T. Eaton, Kenneth R. Bradbury	07/01/1997–06/30/1998	DNR	138
Groundwater-surface water interactions in the Nine Springs watershed	Jean Bahr	07/01/1997–06/30/1999	DNR	137
Assessment of impacts on groundwater/lake and wetland systems	Mary Anderson	07/01/1997–06/30/1998	UWS	
Hydraulic Conductivity and Specific Storage of the Maquoketa Shale	Eaton, Hart, Bradbury, Wang. WGNHS and UW-Madison	07/01/1998–06/30/2000		
Fate of herbicides atrazine, cyanazine and alachlor and selected metabolites	Stoltenberg	07/01/1998–06/30/1999		
Natural Attenuation of fuel and related groundwater contaminants - A measurement method	William Sonzogni	07/01/1998–06/30/1999	UWS	
Water and land use: interpretation of existing data to foster constructive public dialog and policy formulation	Harry Read	07/01/1998–06/30/1999	UWS	
Using GIS and soil landscape models to predict critical sites for nonpoint source pollution	Birl Lowery	07/01/1998–06/30/2000	DATCP	

Project title	Investigators	Contract Period	Funding Agency	Project Number
Assessing and Reducing Leaching of Agricultural Chemicals on Silt Loam Soils under Different Farming Systems	K-J Samuel Kung, Joshua Posner, Gary Bubenzer, and John Hall, UW - Madison	07/01/1998–06/30/2000	DATCP	DATCP 98-03
Analysis of Microbiological and Geochemical Processes Controlling Biodegradation of Aromatic Hydrocarbons in Anaerobic Aquifers	Hickey, Bahr, Schreiber, Zwolinski,, and Taglia, UW-Madison	07/01/1998–06/30/2000	DNR	143
Sedimentology, stratigraphy, and porosity-conductivity relations of the Silurian aquifer in Ozaukee County, Wisconsin	Harris	07/01/1998–06/30/2000	UWS	
Maquoketa Shale as Radium Source for the Cambro-Ordovician Aquifer in Eastern Wisconsin	Tim Grundl	07/01/1998–06/30/2000	DNR	141
Acute and chronic toxicity of nitrate to brook trout <i>Salvelinus fontinalis</i>	Ronald Crunkilton, UW-Stevens Point, and Todd Johnson, UW-Stevens Point	07/01/1998–06/30/2000	DNR	140
Mechanical controls on fracture development in carbonate aquifers: implications for groundwater flow systems	Cooke	07/01/1998–06/30/2000		142
Monitoring: Evaluation of the Abundance, Diversity, and Activity of Methanotroph Populations in Groundwater	Mary Lynne Perille Collins and Charles C. Remsen, UW-Milwaukee	07/01/1998–06/30/2000	UWS	R/UW-99-SAM-01
Groundwater Flow and Heat Transport in Wetlands: Transient Simulations and Frequency-Domain Analysis	Hector Bravo, UW-Milwaukee	07/01/1998–06/30/2000	UWS	R/UW-99-WLA-01
Viral contamination of household wells near disposal sites for human excreta	M. Borchart, W. Sonzogni	07/01/1998–06/30/2000	DNR	
A rational design for permeable reactive walls	Craig Benson	07/01/1998-06/30/2000	UWS	
On-line SFE/GC for Improved Detection of Trace Organic Pollutants in Ground Water Monitoring	David E. Armstrong, Robert J. Noll, UW - Madison	07/01/1998–06/30/1999	UWS/DA TCP	DATCP 98-02
Field Monitoring of Drainage and Nitrate Leaching from Managed and Unmanaged Ecosystems	John Norman, UW-Madison	07/01/1999-06/30-2001	UWS & USGS-B	00-BMP-2
Compatibility of Containment Systems with Mine Waste Liquids.	Tuncer B. Edil , Craig H. Benson, S. Basak Gulec, UW-Madison	07/01/1999 06/2001	UWS	R/UW-CTP-001S
Macropore Flow: A Means for Enhancing Groundwater Recharge or a Potential Source of Groundwater Contamination	Kenneth Potter, Peter Bosscher, UW-Madison	7/1/1999 06/30-2001	UWS	00-HDG-5
Development of Neural Network Models for Predicting Nitrate Concentration in Well Water in the Tomorrow-Waupaca Watershed	Hangshen Lin	7/1/1999-06/30-2001	UWS	00-HDG-6
Causes of Historical Changes in Groundwater Recharge Rates in Southeastern Wisconsin	Douglas Cherkauer	7/1/1999 06/30-2001	UWS	00-HDG-1
Remediating Groundwater Using Reactive Walls Containing Waste Foundry Sands	Benson, Eykholt UW-Madison	7/1/1999 06/30-2001	UWS & DNR	00-REM-3
Admicelle-Catalyzed Reductive Dechlorination of Perchloroethylene (PCE) by Zero Valent Iron	Dr. Zhaohui Li, UW – Parkside	07/01/1999–06/30/2001	UWS	R/UW-REM-002
A groundwater model for the Central Sands of Wisconsin: Assessing the environmental and economic impacts of irrigated agriculture	Anderson, Bland, Kraft	7/1/1999-06/30-2000		
Improvement of Wisconsin groundwater monitoring network	Zaporozec	7/1/1999-06/30-2000	DNR	
Time Domain Electromagnetic Induction Survey Of Eastern Waukesha County And Selected Locations	John Jansen, Aquifer Science and Technology; Robert Taylor,	7/1/1999-06/30-2000	UWS	00-HDG-8

Project title	Investigators	Contract Period	Funding Agency	Project Number
Evaluating options for changing groundwater and leachate monitoring requirements for landfills to reduce mercury used by laboratories	Connelly, Stephens, Shaw	7/1/1999-06/30-2001	DNR	
Refinement of two methods for estimation of groundwater recharge rates	Bradbury, Anderson, Potter	7/1/1999-06/30-2000	DNR	
Field Verification of Captures Zones for Municipal Wells at Sturgeon Bay, Wisconsin	Bradbury, Rayne, Muldoon	7/1/1999-06/30-2000	DNR/DA TCP	HDG
Importance of Groundwater in Productions and Transport of Methyl Mercury in Lake Superior Tributaries	David Armstrong	7/1/2000-6/30/2002	UWS & USGS-B	01-GSI-1
A Basin-Scale Denitrification Budget for a Nitrate Contaminated Wisconsin Aquifer: A Study at the Groundwater/Surface Water Interface	Bryant Browne, George Kraft	7/1/2000-6/30/2002	UWS & USGS-B	01-GSI-3
Removal of As(III) and As(V) in Contaminated Groundwater with Thin-Film Microporous Oxide Adsorbents	Marc Anderson	7/1/2000-6/30/2002	UWS	01-REM-2
Remediation of Soil and Groundwater Using Effectively and Ineffectively Nodulated Alfalfa	Nancy Turyk, Byron Shaw	7/1/2000-6/30/2002	UWS & DNR	01-REM-4
Effect of Clean and Polluted Groundwater on <i>Daphnia</i> Reproduction and Development	Stanley Dodson	7/1/2000-6/30/2001	UWS	01-SAM-1
The Spatial and Temporal Variability of Groundwater Recharge	Mary Anderson, Kenneth Potter	7/1/2000-6/30/2001	UWS	01-HDG-3
An analysis of arsenic replacement wells to determine validity of current DNR well construction guidance	O'Connor	7/1/2000-6/30/2002	DNR	156
Pesticide and nitrate leaching in soils receiving manure	Lowery, Arriaga, Stoltenberg	7/1/2000-6/30/2001	DATCP	
Public health impacts of arsenic contaminated drinking water	Knobeloch	7/1/2000-6/30/2002	DNR	158
Screening of agricultural and lawn care pesticides for developmental toxicity using the mouse embryo assay	Greenlee	7/1/2000-6/30/2001	DATCP	
Geologic and geochemical controls on arsenic in groundwater in northeastern Wisconsin	Gotkowitz	7/1/2000-6/30/2002	DNR	152
Groundwater Modeling: Semi-Analytical Approaches for Heterogeneity and Reaction Networks	Lin Li, Gerald R. Eykholt, Craig H. Benson; UW-Madison	7/1/2000-6/30/2001	UWS	R/UW-CTP-002
Verification and characterization of a fracture network within the Maquoketa shale confining unit, SE Wisconsin	Eaton	7/1/2000-6/30/2001	DNR	157
Effectiveness of phytoremediation and hydrogeologic response at an agricultural chemical facility in Bancroft, WI	DeVita, Dawson	7/1/2000-6/30/2002	DATCP	
Evaluation of pathogen and nitrogen movement beneath on-site systems receiving domestic effluent from single pass sand filters	Converse	7/1/2000-6/30/2001	Comm	
VOC trend analysis of WI solid waste landfill monitoring data: A preliminary analysis of the natural attenuation process	Connelly	7/1/2000-6/30/2002	DNR	153
New approaches to the assessment of microbes in groundwater: application to monitoring bioremediation and detection of pathogens	Collins	7/1/2000-6/30/2002	DNR	155
A study of microbiological testing of well water quality in Door County and incidence of illness in humans	Braatz	7/1/2000-6/30/2001	DNR	159

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Development of analytical methods for comprehensive chemical and physical speciation of arsenicals in groundwater	Aldstadt	7/1/2000-6/30/2002	DNR	154
Field Evaluation of Rain Gardens as a Method for Enhancing Groundwater Recharge	Kenneth Potter	7/1/2001-6/30/2002	UWS	02-BMP-1
Investigation of Changing Hydrologic Conditions of the Coon Creek Watershed in the Driftless Area of Wisconsin	Randy Hunt	7/1/2001-6/30/2002	UWS	02-GSI-2
Groundwater-Lake Interaction: Response to Climate Change in Vilas County, Wisconsin	Mary Anderson	7/1/2001-6/30/2002	UWS	02-GSI-1
Impacts of Land Use and Groundwater Flow on the Temperature of Wisconsin Trout Streams	Stephen Gaffield	7/1/2001-6/30/2003	UWS	02-GSI-3
Impacts of Privately Sewered Subdivisions on Groundwater Quality in Dane County, Wisconsin	Kenneth Bradbury	7/1/2001-6/30/2003	UWS	02-OSW-1
Removal of Heavy Metals and Radionuclides from Soils Using Cationic Surfactant Flushing	Christine Evans, Zhaohui Li	7/1/2001-6/30/2003	UWS & USGS-B	02-REM-3
Removal of Arsenic in Groundwater Using Novel Mesoporous Sorbent	Jae Park	7/1/2001-6/30/2003	UWS	02-REM-5
Co-occurrence and Removal of Arsenic and Iron in Groundwater	Paul McGinley	7/1/2001-6/30/2003	UWS	02-REM-2
Monitoring and Scaling of Water Quality in the Tomorrow-Waupaca Watershed	Bryant Browne (Henry Lin was also a PI, but he left USTP)	7/1/2001-6/30/2003	UWS	02-SAM-1
Chloroacetanilide and atrazine residue penetration and accumulation in two Wisconsin groundwater basins	DeVita, McGinley, Kraft	7/1/2001-6/30/2003	DATCP	DATCP
Time domain electromagnetic induction survey of the sandstone aquifer in the Lake Winnebago area	Taylor, Jansen	7/1/2001-6/30/2002	DNR	173
Development of a culture method for detection of <i>Helicobacter pylori</i> in groundwater	Sonzogni, Standridge, Degnan	7/1/2001-6/30/2002	DNR	167
Preservation and survival of <i>E. coli</i> in well water samples submitted for routine analyses	Sonzogni, Standridge, Bussen	7/1/2001-6/30/2002	DNR	173*
Importance of disinfection on arsenic release from wells	Sonzogni, Bowman Standridge, Clary	7/1/2001-6/30/2003	DNR	172
Agrochemical leaching from sub-optimal, optimal, and excessive manure-N fertilization of corn agroecosystems	Norman, Brye	7/1/2001-6/30/2003	DATCP	DATCP 01-01
Nitrate loading history, fate, and origin for two WI groundwater basins	Kraft	7/1/2001-6/30/2003	DNR	171
Occurrence of antibiotics in wastewater effluents and their mobility in soils. A case study for Wisconsin	Karthikeyan, Bleam	7/1/2001-6/30/2003	DATCP & DNR	169
Susceptibility of La Crosse municipal wells to enteric virus contamination from surface water contributions	Hunt, Borchardt	7/1/2001-6/30/2002	DNR	165
Delineation of High Salinity Conditions in the Cambro-Ordovician Aquifer of Eastern Wisconsin	Tim Grundl, and Lori Schmidt, UW – Milwaukee	7/1/2001-6/30/2002	DNR	170
Monitoring contaminant flux from a stormwater infiltration facility to groundwater	Dunning, Bannerman	7/1/2001-6/30/2003	DNR	168
Monitoring the Effectiveness of Phytoremediation and Hydrogeologic Response at an Agricultural Chemical Facility	William DeVita	7/1/2002-6/30/2004	UWS & USGS-B	03-REM-06
Role of the Hyporheic Zone in Methylmercury Production and Transport to Lake Superior	David Armstrong	7/1/2002-6/30/2004	UWS & USGS-B	03-CTP-02

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Arsenic Contamination in Southeast Wisconsin: Sources of Arsenic and Mechanisms of Arsenic Release	Jean Bahr, Madeline Gotkowitz	7/1/2002-6/30/2004	UWS & DNR	03-HDG-01
F Test for Natural Attenuation in Groundwater: Application on Benzene	Fe Evangelista	7/1/2002-6/30/2003	UWS	03-REM-08
Photocatalytic Adsorption Media and Processes for Enhanced Removal of Arsenic from Groundwaters	Marc Anderson	7/1/2002-6/30/2003	UWS	03-WSP-02
Determination of Aquitard and Crystalline Bedrock Depth Using Time Domain Electromagnetics	David Hart, David Alumbaugh	7/1/2002-6/30/2003	UWS & USGS-B	03-HDG-03
Evaluation of Enzyme Linked Immunosorbent Assay for Analysis of Di Amino Atrazine in Wisconsin Groundwater in Comparison to Chromatography	John Strauss, William Sonzogni	7/1/2002-6/30/2003	DNR	175
An Experimental and Mathematical Study of the Alpha-Particle Activity of Wisconsin Ground Waters with High Gross Alpha	Sonzogni, Arndt, West	7/1/2002-6/30/2003	DNR	176
Design and Evaluation of Rain Gardens for Enhancement of Groundwater Recharge	Kenneth Potter	7/1/2003-6/30/2005	UWS	04-BMP-01
A Combined Hydrogeologic/Geochemical Investigation of Groundwater Conditions in the Waukesha County Area, WI	Timothy Grundl, Kenneth Bradbury, Daniel Feinstein and David J. Hart	7/1/2003-6/30/2005	UWS	04-WSP-02
Coupled Modeling of Gravity and Aeromagnetic Data For Analysis of the Waukesha Fault, Southeastern Wisconsin	John Skalbeck	7/1/2003-6/30/2004	UWS	04-HDG-03
What happens when the confined Cambrian-Ordovician aquifer in SE Wisconsin is "dewatered"?	Timothy Eaton	7/1/2003-6/30/2004	UWS	04-HDG-02
An Assessment of Aquifer Storage Recovery for Selected Generic Hydrogeologic Settings in Wisconsin	Mary Anderson	7/1/2003-6/30/2004	UWS	04-HDG-01
Evaluation of Contamination of Groundwater around Landfills	Tuncer Edil, Craig Benson and Jack Connelly	7/1/2003-6/30/2005	UWS	04-CTP-04
Providing Communities with the Groundwater Information Needed for Comprehensive Planning.	Douglas Cherkauer	7/1/2003-6/30/2005	UWS & USGS-B	04-WSP-01
Fate Of Representative Fluoroquinolone, Macrolide, Sulfonamide And Tetracycline Antibiotics In Subsurface Environments	K.G. Karthikeyan and Joel Pedersen	7/1/2003-6/30/2005	UWS	04-CTP-02
Combination of Surfactant Solubilization with Permanganate Oxidation for Groundwater Remediation	Zhaohui Li	7/1/2003-6/30/2005	UWS	04-REM-04
Groundwater Pollutant Transfer and Export in Northern Mississippi Loess Hills Watersheds	Kraft, Browne	7/1/2003-6/30/2005	DNR	181
Monitoring and predictive modeling of subdivision impacts on groundwater in Wisconsin	Bradbury, Bahr	7/1/2003-6/30/2005	DNR	178
Development of a groundwater flow model for the Mukwonago River watershed, southeastern Wisconsin	Bahr	7/1/2003-6/30/2005	DNR	180
Field and Laboratory Validation of Photoactivated Adsorption for Removal of Arsenic in Groundwaters	Anderson (Marc)	7/1/2003-6/30/2004	DNR	179
Mercury Speciation along a Groundwater Flowpath	David Armstrong and Christopher L. Babiarz	7/1/2004-6/30/2006	UWS	05-CTP-01
Delineation of Flow Paths, Capture Zones and Source Areas, Allequash Basin, Vilas County, Wisconsin	Mary Anderson	7/1/2004-6/30/2005	UWS	05-HDG-01
A Comparison of USEPA-Approved Enzyme-Based Total Coliform/E. coli Tests for Microbiological Groundwater Monitoring and Laboratory Consultation	James Schauer, Jeremy Olstadt, Jon Standridge and Sharon Kluender	7/1/2004-6/30/2005	UWS	05-SAM-01
Occurrence of Estrogenic Endocrine Disruptors in Groundwater	William Sonzogni, Jocelyn Hemming, Miel Barman and Steven Geis	7/1/2004-6/30/2006	UWS	05-BEP-01

Project title	Investigators	Contract Period	Funding Agency	Project Number
Development of Tools to Address Groundwater in Comprehensive Planning	Lynn Markham, Charles Dunning and Chin-Chun Tang	7/1/2004-6/30/2005	UWS	05-BMP-01
Hydrostratigraphy of West-Central Wisconsin: A New Approach to Groundwater Management	David L. LePain and Kenneth R. Bradbury	7/1/2004-6/30/2005	UWS	05-HDG-02
Monitoring Environmental Effects at an Established Phytoremediation Site	William M. DeVita and Mark Dawson	7/1/2004-6/30/2006	UWS	05-REM-01
Foundry Slag for Treating Arsenic in Groundwater and Drinking Water	Craig H. Benson and David W. Blowes	7/1/2004-6/30/2006	UWS	05-REM-02
Arsenic Species (III,V) Distribution in Wisconsin Groundwaters: Field Measurements and Prediction Using Multivariate Analysis of Geochemical Data	Martin Shafer, Kristie Ellickson, James Schauer	7/1/2005-6/30/2007	UWS & USGS-B	06-CTP-03
Measuring and Modeling Macroporous Soil Water and Solute Flux Below the Root Zone of a Plano Silt-Loam Soil	Birl Lowery, John Norman, Brian Lepore	7/1/2005-6/30/2007	UWS	06-CTP-05
Nitrate and Pesticide Penetration into a Northern Mississippi Valley Loess Hills Aquifer	George Kraft, Bryant Browne	7/1/2005-6/30/2007	UWS & USGS-B	06-CTP-07
Assessing the Ecological Status and Vulnerability of Springs in Wisconsin	Susan Swanson, Kenneth Bradbury, David Hart	7/1/2005-6/30/2007	UWS	06-GSI-09
Climate Signals in Groundwater and Surface Water System: Spectral Analysis of Hydrologic Processes	Hector Bravo	7/1/2005-6/30/2007	UWS	06-GSI-10
Evaluation of On-Site Wastewater Treatment as a Source of Antibiotic Resistance Genes in Groundwater	Katherine McMahon	7/1/2005-6/30/2006	UWS	06-SAM-02
Transient Functioning of a Groundwater Wetland Complex, Allequash basin, Wisconsin	Mary Anderson	7/1/2005-6/30/2007	UWS	06-WLA-01
Validation of Transport of VOCs from Composite Liners	Tuncer Edil, Craig Benson,	7/1/2005-6/30/2007	UWS	06-CTP-06
Disinfection of Enteric Viruses in Wisconsin Municipal Groundwater Systems	Harrington, Borchardt, Xagorarakis	7/1/2006-Cancelled	DNR	188
Evaluating drinking-well vulnerability to viruses	Hunt, Borchardt	7/1/2006-6/30/2008	DNR	187
Identification and characterization of springs in west-central Wisconsin	Grote	7/1/2006-6/30/2007	DNR	184
Mapping and Characterization of Springs in Brown and Calumet Counties	Fermanich, Stieglitz, Zorn	7/1/2006-6/30/2007	DNR	183
Groundwater Mounding and Contaminant Transport Beneath Stormwater Infiltration Basins	Thompson	7/1/2006-6/30/2008	DNR	189
A Survey of Baseflow for Groundwater Protection Areas Western Fox-Wolf Watershed	Kraft	7/1/2006-6/30/2008	DNR	186
Centralizing Access to Groundwater Information for Use in Comprehensive Planning	Markham, Tang, Dunning	7/1/2006-6/30/2008	DNR	190
Mechanisms of Groundwater Flow across Aquitards	Hart, Bradbury, Feinstein and Yikoff	7/1/2006-6/30/2007	DNR	191
Multi-Parameter, Remote Groundwater Monitoring with Referencing Using Crossed Optical Fiber Fluorescent Sensor Arrays	Peter Geissinger	7/1/2006-6/30/2008	UWS	07-SAM-02
Enhanced Reductive Dechlorination of Chlorinated Aliphatic Hydrocarbons: Molecular and Biochemical Analyses	William Hickey, Payne	7/1/2006-6/30/2008	UWS & USGS-B	07-REM-02
Application of LSQR to Calibration of a Regional MODFLOW Model: Trout Lake Basin, Wisconsin	Mary Anderson, Haijiang Zhang	7/1/2006-6/30/2007	UWS	07-HDG-05

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Mineral transformation and release of arsenic to solution under the oxidizing conditions of well disinfection	Gotkowitz WGNHS	7/1/2006-6/30/2007	DNR	192
Precambrian Basement Surface Estimation using Coupled 3D Modeling of Gravity and Aeromagnetic Data in Fond du Lac County and Southeastern, Wisconsin	Skalbeck UW- Park	7/1/2006-6/30/2008	DNR	193
Groundwater recharge through a thick sequence of fine-grained sediment in the Fox River Valley, east-central Wisconsin	Hooyer UWEX	7/1/2006-6/30/2007	DNR	194
Use of Human and Bovine Adenovirus for Fecal Source Tracking	Pedersen UW- Mad	7/1/2006-6/30/2008	DNR	195
Knowledge Development for Groundwater Withdrawal Management around the Little Plover River	Clancy UW-SP	7/1/2006-6/30/2008	DNR	196
Geochemical characterization of sulfide mineralization in eastern Wisconsin carbonate rocks	Luczaj and McIntire	7/1/2007-6/30/2008	UWS	08-GCP-01
Assessment of virus presence and potential virus pathways in deep municipal wells	Bradbury , Gotkowitz, Borchardt and Hunt	7/1/2007-6/30/2008	DNR	197
Assessing Seasonal Variations in Recharge and Water Quality in the Silurian Aquifer in Areas with Thicker Soil Cover	Muldoon and Bradbury	7/1/2007-6/30/2008	DNR	198
Hydrostratigraphy and Groundwater Flow Model: Troy Valley Glacial Aquifer, Southern Waukesha Co., WI	Mickelson and Anderson	7/1/2007-6/30/2008	DNR	199
Investigating groundwater recharge to the Cambrian-Ordovician aquifer through fine-grained glacial deposits in the Fox River Valley, Wisconsin	Hooyer, Hart, Mickelson and Bradbury	7/1/2007-6/30/2008	DNR	200
Transport and Survival of Pathogenic Bacteria Associated With Dairy Manure in Soil and Groundwater	Li , Yang	7/1/2007-6/30/2009	UWS	08-BEP-03
Is phosphorus-enriched groundwater entering Wisconsin streams?	Browne, Kraft – UW-SP	7/1/2007-6/30/2009	UWS	08-CTP-01
Occurrence and generation of nitrite in ground and surface waters in an agricultural watershed	Stanley	7/1/2007-6/30/2009	UWS	08-CTP-03
Monitoring Septic Effluent Transport and Attenuation using Geophysical Methods	Fratta, Hart and Masarik	7/1/2007-6/30/2009	UWS	08-OSW-01
A thermal remote sensing tool for mapping spring and diffuse groundwater discharge to streams	Loheide	7/1/2007-6/30/2009	UWS	08-SAM-03
Influence of wetland hydrodynamics on subsurface microbial redox transformations of nitrate and iron	Bahr and Roden	7/1/2007-6/30/2009	UWS	08-WLA-02
Controls on methylation of groundwater Hg(II) in hyporheic zones of wetlands.	Shafer, Babiarez, Armstrong and Roden	7/1/2007-6/30/2009	UWS	08-WLA-03
Water Balance Modeling for Irrigated and Natural Landscapes in Central Wisconsin	Lowery and Bland	7/1/2007-6/30/2009	DNR	201
Understanding the Effects of Groundwater Pumping on Lake Levels	Kraft, Clancy and Mechenich	7/1/2007-6/30/2009	DNR	202
Assessing the Potential of Hormones from Agricultural Waste to Contaminate Groundwater	Hemming, Landreman and Hedman	7/1/2007-6/30/2009	DNR	203
Use of the 2009 Behavioral Risk Factor Surveillance Survey to Assess the Safety of Private Drinking Water Supplies	Knobeloch	7/1/2008 – 6/30/2010	UWS	09-SOS-01

Project title	Investigators	Contract Period	Funding Agency	Project Number
Combination of Co-Precipitation with Zeolite Filtration to Remove Arsenic from Contaminated Water	Li	7/1/2008 – 6/30/2010	UWS	09-REM-01
The lethal and sublethal effects of elevated groundwater nitrate concentrations on infaunal invertebrates in the Central Sand Plains	Stelzer, Eggert, and Muldoon	7/1/2008 – 6/30/2010	UWS	09-BEP-01
Assessing Levels and Potential Health Effects of Endocrine Disrupting Chemicals in Groundwater Associated with Karst Areas in Northeast Wisconsin	Bauer-Dantoin, Fermanich, Zorn	7/1/2008 – 6/30/2009	UWS	09-CTP-02
Drawdown in the Northeast Groundwater Management Area (Brown, Outagamie, and Calumet Counties, Wisconsin)	Luczaj, Hart	7/1/2008 – 6/30/2009	DNR	204
Human viruses as tracers of wastewater pathways into deep municipal wells	Bradbury, Borchardt and Gotkowitz	7/1/2008-12/31/2009	DNR	205
Development and Validation of a PCR-based Quantification Method for <i>Rhodococcus coprophilus</i>	Long	7/1/2008 – 6/30/2009	DNR	206