

WRI Project	PI Information		Project Title	Report Date	Report Number	Report Title
	Name	University				
2015						
15-07-SE	Hunt, William	NCSU	Person Street Green Infrastructure Monitoring			
15-06-U	Sobsey, Mark	UNC-CH	Microbial Quality and Health Risks of Alternative Surface Sources of Drinking Water Impacted by Waste Water			
15-05-U	de los Reyes, Francis	NCSU	Improving Startup and Operation of Anaerobic Co-Digestion of Grease Interceptor Waste			
15-04-W	Buchwalter, David	NCSU	Coal ash constituents at the base of aquatic food webs: Processes affecting bioaccumulation and trophic transfer of arsenic			
15-03-W	DiGiulio, Richard	Duke University	Legacy impacts of coal combustion residues on freshwater ecosystems in North Carolina			
15-02-W	Hershey, Anne	UNCG	Heavy metal analysis, gene proxies, and stable isotopes tracers of coal ash contamination in the Dan River food web			
15-01-W	Call, Douglas	NCSU	Improving the Anaerobic Treatment of Sludges and High-Strength Wastewaters through Addition of Electrically-Conductive Particles			
2014						
14-09-WSG	Manda, Alex	ECU	Coastal Groundwater Watch			

14-08-WSG	Dobbins, Cathy	UNC-TV	Drought Resilience: An Interactive Project			
14-07-WSG	Daniels, Harry	NCSU	Land Application of Aquaculture Effluents to Prevent Surface Water Eutrophication and Promote Groundwater Re-Infiltration in Coastal North Carolina			
14-06-U	Knappe, Detlef	NCSU	1,4 Dioxane in North Carolina Drinking Water Sources: Occurrence and Treatment Options			
14-05-S	Paul, Michael	Tetra Tech, Inc.	A review of biological condition ratings in urban settings in North Carolina: A proposal for the North Carolina Water Resources Research Institute: Amended Proposal	March 2015	UNC-WRRI-452	A Review of Biological Condition Ratings in Urban Settings in North Carolina for the North Carolina Water Resources Research Institute
14-04-W	Tsui, Martin	UNC-Greensboro	Linkages of mercury and methane cycles in Piedmont streams and rivers in North Carolina, and implications for mercury bioaccumulation in food webs			
14-03-UW	Sobsey, Mark	UNC-CH	Microbial Quality and Risk Assessment of Type 2 NC Reclaimed Water for Non-potable and Potable Reuse			
14-02-W	Mallin, Michael	UNCW	Quantification of Fecal Bacteria Removal by Micro-zooplankton Grazing in Stormwater BMPs			
14-01-UW	Arumugam, Sankar	NCSU	Integrated Drought Management and Assessment Portal for the State of			
2013						
13-10-SE	Hunt, William	NCSU	Person Street Low Impact Development Design Project			
13-09-S	Hunt, William	NCSU	Nutrient and Carbon Loading in Gross Solids in Urban Catch Basins: A Nutrient Accounting Opportunity?			
13-08-U	Hughes, Jeffrey	UNC-CH	Expanding and Enhancing Customer-Level Billing Analysis: Non-Residential Customer Sales Profiles and Resilient Pricing Structures Modeled (and			
13-07-SE	Dorton, Jennifer	UNCW	City of Durham Water Quality Web	June 2014	UNC-WRRI-446	City of Durham Water Quality Web

13-06-W	Sobsey, Mark	UNC-CH	Methods to detect fecal indicator viruses and protozoan surrogates in NC reclaimed water: optimization, performance evaluation, protocol development, validation, collaborative	October 2014	UNC-WRRI-448	Methods to Detect Fecal Indicator Viruses and Protozoan Surrogates in NC Reclaimed Water: Optimization, Performance Evaluation, Protocol Development, Validation,
13-05-W	Polizzotto, Matthew	NCSU	Surface and Subsurface Properties Regulating Manganese Contamination of Groundwater in the North Carolina			
13-04-UW	Knappe, Detlef	NCSU	Bromide occurrence in North Carolina drinking water sources effect on disinfection by-product formations			
13-03-W	Burchell, Michael	NCSU	A mesocosm study to determine nitrogen assimilation capacity of a restored wetland slated to receive pumped drainage water - a critical component to maximize improvement			
13-02-SW	Buchwalter, David	NCSU	Environmental approaches to understanding temperature and flow responses of select North Carolina			
13-01-W	Aziz, Tarek	NCSU	Sustainable Anaerobic Co-Digestion of Grease Interceptor Waste	Nov 2014	UNC-WRRI-449	Sustainable Anaerobic Co-Digestion of Grease Interceptor Waste
2012						
12-12-SE	Hunt, William	NCSU	Evaluating the Hydrologic and Water Quality Performance of Infiltrating Wet Ponds and Development of Supplemental Infiltrating Pond Design			
12-11-W	Burchell, Michael	NCSU	Predicting Water Quality Impacts of Rerouting Drainage Water From the Pamlico Sound to Restored Wetlands			
12-10-SE	Hunt, William	NCSU	Implementing Permeable Pavement in Triassic Soils and Statewide to Reduce Runoff Volume and Nutrient Loads			
12-09-SE	Hunt, William	NCSU	Downspout Disconnection & Rain Catchers Assistance			
12-08-U	Guyer, Regina	UNCC	Fats, Oil, and Grease Communications Implementation	April 2014	UNC-WRRI-442	Tailoring Fats, Oil, and Grease Communication Platforms to Fit the
12-07-W	Humphrey, Charles	ECU	Geophysical and water quality characterization of on-site wastewater	July 2013	UNC-WRRI-445	Geophysical and water quality characterization of on-site wastewater
12-06-W	McLaughlin, Richard	NCSU	Optimizing Soil-Polyacrylamide Interactions for Erosion Control at	January 2014	UNC-WRRI-441	Optimizing Soil-Polyacrylamide Interactions for Erosion Control at
12-05-W	Jackson, Robert B.	Duke	Establishing a Pre-drilling Baseline of Water-Quality Measurements in North Carolina Before Shale-gas Extraction			

12-04-UW	Paerl, Hans W.	UNC-CH	Bioavailability and fate of organic nitrogen loading to Neuse River	February 2014	UNC-WRRI-440	Bioavailability and fate of organic nitrogen loading to Neuse River
12-03-W	McMillan, Sara	Purdue University	Nutrient retention and floodplain connectivity in restored Piedmont	June 2015	UNC-WRRI-447	Nutrient Retention and Floodplain Connectivity in Restored Piedmont
12-02-W	Vepraskas, Michael	NCSU	Evaluation of the P Balance of a Restored, Previously Farmed Wetland			
12-01-W	Zechman, Emily M.	NCSU	An Integrated Framework for Assessing the Dynamics of Population Growth, Land Use and Climate Change for Urban Water Resource	May 2014	UNC-WRRI-450	An Integrated Framework for Assessing the Dynamics of Population Growth, Land Use and Climate Change for Urban Water Resources
2011						
11-13-S	Dorton, Jennifer	UNCW	City of Durham Water Quality Web			
11-12-W	Hunt, William	NCSU	Proposal to WRRI for Comprehensive Rainwater Harvesting Literature Review, Synthesis & Research Needs	February 2014	UNC-WRRI-425	Rainwater Harvesting: A Comprehensive Review of Literature
11-11-U	Arumugam, Sankar	NCSU	Experimental Reservoir Storage Forecasts Utilizing Climate-Information Based Streamflow Forecasts			
11-10-WS	Birgand, Francois	NCSU	Quantification of nutrient and organic matter fluxes in a restored tidal marsh			
11-09-UE	Hughes, Jeffrey	UNC-CH	Shifting Baselines in Water Utility Management: New Tools for Addressing Financial Impacts of	July 2012	UNC-WRRI-409	Shifting Baselines in Water Utility Management: Using Customer-Level Analysis to Understand the Interplay
11-08-W	Vengosh, Avner	Duke	The impact of Coal Combustion Products on the quality of water	August 2012	UNC-WRRI-414	The Impact of Coal Combustion Residuals on the Quality of Water
11-07-W	Venditti, Richard	NCSU	The production and characterization of inexpensive renewable hydrogel based material from natural North Carolina Resources for water desalination and heavy metal removal applications	August 2013	UNC-WRRI-433	The Production and Characterization of Inexpensive Renewable Hydrogel Based Material From Natural North Carolina Resources for Water Desalination and Heavy Metal
11-06-W	Song, Bongkeun	UNCW	Factors Controlling Microbial Nitrogen Removal Efficacy in Constructed	June 2014	UNC-WRRI-443	Factors Controlling Microbial Nitrogen Removal Efficacy in Constructed
11-05-W	Serre, Marc	UNC-CH	Space/time geostatistical estimation of nitrate and radon groundwater	October 2013	UNC-WRRI-444	Space/time geostatistical estimation of nitrate and radon groundwater
11-04-U	de los Reyes, Francis	NCSU	Microbial Risk Assessment of Graywater Reuse using Quantitative	January 2014	UNC-WRRI-437	Microbial Risk Assessment of Graywater Reuse using Quantitative
11-03-W	Coronell, Orlando	UNC-CH	Identification of membrane foulants and optimum cleaning strategies for nanofiltration and reverse osmosis membranes treating groundwaters	March 2013	UNC-WRRI-417	Identification of Membrane Foulants and Optimum Cleaning Strategies for Nanofiltration and Reverse Osmosis Membranes Treating Groundwaters
11-02-S	Clinton, Sandra	UNC-Charlotte	Evaluating Restoration Success in the Watershed Context	October 2014	UNC-WRRI-451	Evaluating Restoration Success in the Watershed Context

11-01-W	Arumugam, Sankar	NCSU	Uncertainty in Surface Water Availability over North Carolina under climate and land use changes	August 2013	UNC-WRRI-435	Uncertainty in Surface Water Availability Over NC Due to Climate and Land Use Changes
2010						
70257	Birgand, Francois	NCSU	Deriving Sampling Frequency Guidelines For Water Quality			
70256	McMillan, Sara	UNC-C	Nitrogen Retention in Urban Streams: Implications for Ecologically Based Stream Restoration	September 2013	UNC-WRRI-438	Nitrogen Retention in Urban Streams: Implications for Ecologically Based Stream Restoration
70255	Hunt, William	NCSU	Long-term Modeling of Bioretention Hydrology with DRAINMOD	August 2011	UNC-WRRI-415	Long-term Modeling of Bioretention Hydrology with DRAINMOD
70254	Wegmann, Karl	NCSU	Legacy Sediments and Stream Water Quality: Estimating Volume, Nutrient Content, and Stream Bank Erosion in 303(d)-Impaired Waterways of the	August 2013	UNC-WRRI-434	Legacy Sediments and Stream Water Quality: Estimating Volume, Nutrient Content, and Stream Bank Erosion in 303(d)-Impaired Waterways of the
70253	White, Jeffrey	NCSU	Mineralization, Plant Availability, and Water Quality Consequences of Nitrogen and Phosphorus in Land-	July 2013	NC-WRRI-432	Mineralization, Plant Availability, and Water Quality Consequences of Nitrogen and Phosphorus in Land-
70252	Stewart, Jill	UNC-CH	Microbial Contaminants Associated with Urbanization of a Drinking Water	September 2011	UNC-WRRI-403	Microbial Contaminants Associated with Urbanization of a Drinking Water
70251	Heitman, Joshua	NCSU	Improved Statewide Soil Moisture Estimation for Hydrologic Assessment	March 2011	UNC-WRRI-418	Improved Statewide Soil Moisture Estimation for Hydrologic Assessment
70250	Characklis, Greg	UNC-CH	Ensuring Water Supply Reliability and Financial Stability for NC Water Utilities	September 2012	UNC-WRRI-412	Financial Effects of Including Water Use Restrictions and Transfer
50396	Mallin, Michael A.	UNCW	Water Quality and Illicit Discharge Investigations in Wilmington			
50395	Scott, Cliff	UNC-Charlotte	Improving Grease Disposal in Multi-family Housing and Latino Populations	August 2013	UNC-WRRI-431	Improving Grease Disposal in Multifamily Housing and Latino
50394	Hughes, Jeffrey	UNC-CH	Irrigation Pricing, Policies, and Practices: A comparative analysis of 12 utilities in North Carolina	August 2010	UNC-WRRI-410	Municipal Irrigation Pricing, Policies and Practices in North Carolina
2009						
70249	Anderson, Richard	Pacific Northwest National Laboratory (formerly at Duke U)	How Explicit Identification and Valuation of Ecosystem Services Can Improve Management of Oyster and Oyster Reef Restoration	July 2011	UNC-WRRI-421	How Explicit Identification and Valuation of Ecosystem Services Can Improve Management of Oyster and Oyster Reef Restoration
70248	Song, Bongkeun	UNC-W	Using PCR-based methods to assess microbial contamination from swine CAFOs in surface and groundwaters	December 2013	UNC-WRRI-436	Monitoring swine fecal contamination in the Cape Fear River Watershed based on the detection and

70247	Arumugam, Sankar	NCSU	Seasonal Streamflow Forecasts for the Hydrological Unit Code (HUC-8) Basins in North Carolina Utilizing	May 2011	UNC-WRRI-419	Seasonal Streamflow Forecasts for the Hydrologic Unit Code (HUC-8) Basins in North Carolina Utilizing
70246	Knappe, Detlef	NCSU	Protecting Receiving Waters: Removal of Biochemically Active Compounds from Wastewater by Ozonation and Activated Carbon Adsorption	June 2013	UNC-WRRI-413	Treatment Options for the Removal of Emerging Pollutants of Concern
70245	Urban, Dean	Duke	Assessing the impacts of watershed development history and levels of hydrologic alteration on stream	August 2011	UNC-WRRI-408	Assessing the Impacts of Watershed Development History and Levels of Hydrologic Alteration on Stream
50393	Arumugam, Sankar	NCSU	Vulnerability of Coastal Watersheds to Climate Change and Variability	May 2011	UNC-WRRI-420	Vulnerability of Coastal Watersheds to Climate Change and Variability
50392	Hunt, William	NCSU	Demonstrating Water Conservation in the Community: Fire Station Rainwater Harvesting, WRRI Urban Water Consortium Enhancement			
50391	Hughes, Jeffrey	UNC-CH	Technical Assistance for Sustainable Urban Water Use	August 2012	UNC-WRRI-416	416-1: An Exploration of Alternative Business Models for the Beaufort-Jasper Water and Sewer Authority 416-2: Interruptible Irrigation Rates: A
50390	de los Reyes, Francis	NCSU	Factors Affecting the Formation of Fats, Oils, and Grease (FOG) Deposits in Sewer Systems / Fate of Fats, Oils, and Grease (FOG) Deposit Forming	February 2012	UNC-WRRI-404	Factors affecting the formation of fats, oils, and grease deposits in sewer systems; and fate of FOG deposit forming precursors in sewer systems
50389	Hughes, Jeffrey	UNC-CH	Utility Financial Comparative and Water Service Customer Sales	December 2009	UNC-WRRI-423	Refining Residential: Using Customer Consumption Records To Tell A Story
50388	Weinburg, Howard	UNC-CH	Occurrence and Fate of Biochemically Active Compounds in North Carolina	June 2013	UNC-WRRI-413	Treatment Options for the Removal of Emerging Pollutants of Concern
50387	Knappe, Detlef	NCSU	Treatment Options for the Removal of Emerging Pollutants of Concern	June 2013	UNC-WRRI-413	Treatment Options for the Removal of Emerging Pollutants of Concern
2008						
70244	Phaneuf, Dan	NCSU	RA funding for EPA Nutrient Valuation			
70243	von Haefen, Roger	NCSU	Measuring the Benefits of Nutrient Management Strategies at North Carolina Reservoirs using Linked Non-market Valuation and Environmental			
70242	Serre, Marc	UNC-CH	Improving the Effectiveness of Mercury Water Quality Monitoring in North Carolina using the Spatiotemporal Integration of Data from Multiple	August 2011	UNC-WRRI-393	Space/Time Estimation of Fish Tissue Mercury Along Unsampled Streams in Eastern North Carolina

70240	Robarge, Wayne	NCSU	Development of the Semi-Empirical Ammonia Deposition and Emission (SEADE) Model for Application to North Carolina Coastal Watersheds	May 2010	UNC-WRRI-394	Development of the Semi-Empirical Ammonia Deposition and Emission (SEADE) Model for Application to North Carolina Watersheds
70239	Knappe, Detlef	NCSU	Development of an Analytical Method for Taste and Odor Compounds and Application to NC Drinking Water	June 2011	UNC-WRRI-422	Development of an Analytical Method for Taste and Odor Compounds Commonly Found in Drinking Water
50386	Hunt, William	NCSU	Evaluating Pathogen Removal in Stormwater BMPs	November 2010	UNC-WRRI-427	Evaluating Pathogen Removal in Stormwater BMPs
50385/ 50384	Walsh, Steve/Hatch	NCSU/UNC-CH	Identification of Potential Reservoir Sites for Public Water Supplies in			
50383/ 50382	Hunt, William/ Voiland	NCSU	Watershed Retrofit and Management Evaluation for Urban Stormwater Management Systems in North Carolina, Including Projected Costs	September 2012	UNC-WRRI-411	Watershed Retrofit and Management Evaluation for Urban Stormwater Management Systems in North Carolina, Including Projected Costs
2007						
70237	Aday, Derek	NCSU	Exploring Mercury Transport Mechanisms in Aquatic Systems: A Statewide Assessment of Factors Affecting Methylmercury Contamination of Food Webs and Fish			
70236	O'Driscoll, Michael	ECU	Stable Isotope Tracers to Quantify Impervious Area Effects on Baseflow to Coastal Plain Streams	March 2008	UNC-WRRI-395	Impervious Area Effects on Groundwater Inputs to Coastal Plain Streams
70235	Graves, Alexandria	NCSU	Antibiotic Resistance and Water Quality: Land Application of Swine Lagoon Effluent as a Potential Source of Antibiotic Resistant Genes in			
70234	Knappe, Detlef	NCSU	Protecting Receiving Waters: Removal of Biochemically Active Compounds from Wastewater by Sequential Photochemical & Biological Oxidation	July 2010	UNC-WRRI-396	Protecting Receiving Waters: Removal of Biochemically Active Compounds from Wastewater by Sequential Photochemical and Biological
70233	Bernhardt, Emily	Duke	Water Quality Impacts of NC's Largest Wetlands Mitigation Bank	May 2008	UNC-WRRI-386	Water Quality Impacts of NC's Largest Wetlands Mitigation Bank
70232		NCSU	Reducing Bacterial Loads from Ocean Outfalls Using Dune Infiltration			
50381	Knappe, Detlef	NCSU	Impact of UV Location and Sequence on By-Product Formation			
50380	Weinberg, Howard	UNC-CH	Impact of UV Location and Sequence on By-Product Formation			

50379	Linden, Karl	University of Colorado	Impact of UV Location and Sequence on By-Product Formation			
50378	Voiland, Michael	NCSU/WRRI	Impact of UV Location and Sequence on By-Product Formation			
50377	Moreau, David	NCSU	External Review of Activities to Comply with the Lead and Copper Rule for Public Drinking Water Supplies by the City of Durham, NC			
50376	Hughes, Jeffrey	UNC-CH	Analyzing Relationships Among Customer Base Characteristics, Consumption Patterns, Rate Structures	September 2008	UNC-WRRI-439	Residential Customer Water and Wastewater Sales Analyses and Profiles
2006						
70231	McLaughlin, Richard	NCSU	Improving Construction Site Sediment Control Through Integration with Storm Water Control Measures and			
70230	Weinberg, Howard	UNC-CH	Screening for Anthropogenic Sources of Contamination in Surface Waters Using Synchronous Scan			
70229	Allan, Craig	UNC-C	Riparian Buffer Function During Episodic Runoff Events in the Piedmont and Blue Ridge Regions of			
70228	Tobias, Craig	UNC-W	Tracing Nitrogen Transformations and Food Chain Uptake in an Urbanized	October 2011	UNC-WRRI-405	Tracing Nitrogen Transformations and Food Chain Uptake in an Urbanized
70227/ 70241	Arumugam, Sanker	NCSU	Improved Water Management Strategies for the Neuse Basin Utilizing Climate-Information based Probabilistic			
	Arumugam, Sanker	NCSU	Improved Water Management Strategies for the Neuse Basin Utilizing Climate-Information based Probabilistic			
70226	Bernhardt, Emily	Duke	Restoring Biogeochemical Functions in Degraded Urban Stream Ecosystems	June 2007	UNC-WRRI-390	Restoring Biogeochemical Functions in Degraded Urban Stream
70225	Cope, Gregory	NCSU	Endocrine & Repro Effects of the Pharm Fluxetine on Native Freshwater Mussels: Proximity to Measured Environmental Concentrations	October 2007	UNC-WRRI-382	Endocrine and Reproductive Effects of the Pharmaceutical Fluoxetine on Native Freshwater Mussels: Proximity to Measured Environmental
70224	Weinberg, Howard	UNC-CH	Use of Indicators to Distinguish Between Point & Non-Point Sources of Chemical Contamination in NC			
50375	Characklis, Gregory	UNC-CH	Improved Strategies for Inter-Utility Transfer Agreements			
50374	Classen, John	NCSU	Opportunities for Biofuel Feedstock at the Neuse River Wastewater			

2005						
70223	Piehler, Michael	UNC-CH	Effects of Tidal Flow on Riparian Zone Hydraulics and Nitrogen Dynamics: Implications for Nutrient Management	July 2007	UNC-WRRI-383	Effects of Tidal Flow on Riparian Zone Hydraulics and Nitrogen Dynamics: Implications for Nutrient Management
70222	Burkholder, Joann	NCSU	Longitudinal Statistical Analysis of Nutrient Data from Streams Draining Watersheds with Intensive Livestock Production			
70221	LeBlanc	NCSU	Mechanistic Evaluation of the Combined Action of Environmentally - Relevant Chemical Mixtures on	April 2008	UNC-WRRI-373	Mechanistic Evaluation of the Combined Actions of Environmentally-Relevant Chemical Mixtures on
70220	Paerl, Hans	UNC-CH	Importance of Groundwater Discharge as a Source of Nutrients for the Neuse River Estuary, NC, USA			
70219	Moreau, David	UNC-CH	The Neuse River Basin Agricultural Nitrogen Reduction Strategy: A	December 2007	UNC-WRRI-381	The Neuse River Basin Agricultural Nitrogen Reduction Strategy: A
70218	Shah	NCSU	Determining Plant-Available Nitrogen in Hog Anaerobic Lagoon Effluent Applied with Traveling Gun and Drag Hose Systems			
70217	Kullman	Duke	Bioanalytical Analysis and Reproductive Effects of Environmental Endocrine Disruptors at Concentrated Animal Feed Operations Affecting	April 2007	UNC-WRRI-376	Bioanalytical Analysis of Natural Estrogens at Concentrated Animal Feeding Operations Affecting North Carolina River Waters
70216	Touchette	Elon	A Comparison of Drought Tolerance in Common Herbaceous Wetland Macrophytes as Indicated by Plant Growth, Water Status, and Oxidative Stress			
70215	O'Driscoll, Michael	ECU	Characterization of Surface Water/Ground Water Interactions along the Tar River Using Ground	May 2008	UNC-WRRI-370	Surface Water/Ground Water Interactions Along the Tar River, NC
70214	Noble, Rachel	UNC-CH	Estuarine Sediment Beds as a Reservoir for Human Pathogens: Monitoring Transport of Populations of Enterococci and Vibrio sp. in the	October 2007	UNC-WRRI-368	Estuarine Sediment Beds as a Reservoir for Human Pathogens: Monitoring Transport of Populations of Enterococci and Virbrio Sp. in the
70213	Weinberg, Howard	UNC-CH	Use of Indicators to Distinguish Between Point and Non-Point Sources of Chemical Contamination in NC Streams			

50370	Singer, Philip	UNC-CH	Assessment and Control of Chloramination Practices for Water Distribution Systems in North Carolina	January 2009	UNC-WRRI-430	Assessment of Nitrification Potential and Occurrence in Drinking Water Systems in North Carolina Using Chloramination
50369	Reckhow, Kenneth	Duke	Evaluating Eutrophication - Related Water Quality Parameters in North Carolina Lakes & Reservoirs	January 2007	UNC-WRRI-385	Evaluating Eutrophication-Related Water Quality Parameters in North Carolina Lakes and Reservoirs
50368	Characklis, Gregory	UNC-CH	Identifying the Origins and Attachment Behavior of Non-Point Source	June 2008	UNC-WRRI-368	Identifying the Origins and Attachment Behavior of Non-Point Source
50367	Royall	UNC-G	Urban Sediment Source Tracing and Deliver Ratios: A Mineral Magnetic	January 2007	UNC-WRRI-375	A Mineral-Magnetic Assessment of Urban Sediment Sources and
50366	Band, Larry	UNC-CH	Drought Vulnerability in North Carolina: Low Flow Response to Expected Climate and Land Use Change in			
50365/ 70225	Cope, Gregory	NCSU	Endocrine & Reproductive Effects of the Pharmaceutical Fluoxetine on Native Freshwater Mussels: Proximity to Measured Environmental Concentrations			
50364	Hughes, Jeff	UNC-CH	Multi-level Financial Analysis of Residential Water and Wastewater Rates and Rate Setting Practices in	November 2006	UNC-WRRI-389	Multi-Level Financial Analysis of Residential Water and Wastewater Rates and Rate-Setting Practices in
50363	Hunt, William	NCSU	Quantifying Mosquito Presence at Stormwater Treatment Wetlands and Innovative Wet Ponds: Phase II			
50362	Osmond, Deanna	NCSU	The Necessity of Starter Fertilizer Phosphorous on Soils Testing Very	June 2008	UNC-WRRI-391	The Efficacy of Starter Fertilizer Phosphorous for Corn and Cotton
50356	Wu	UNC-G	Developing and Implementing a Near Real-Time Precipitation Estimation Tool and Preliminary Flood Forecasting System at Local Levels			
2004						
50354	Hunt, William	NCSU	Quantifying Mosquito Presence at Stormwater Treatment Wetlands and Innovative Wet Ponds			
50353	Characklis, Gregory	UNC-CH	Reducing the Cost of Maintaining Regional Water Supply Reliability			
50352	Gilliam, James	NCSU	Stream Fish as Bioindicators of Water Quality: Assessing Threshold Responses to Urbanization and			

70211	Wossink, A./McLaughlin	NCSU	Assessment of Standard and Alternative Sediment and Turbidity Control Systems for Impacts on Water	July 2005	UNC-WRRI-360	The Cost Effectiveness of Standard and Alternative Sediment and Turbidity Control Systems on
70210	Hershey, Anne E.	UNC-G	Trophic Basis for Restoration of Fish Fauna in Restored Urban Streams	September 2005	UNC-WRRI-359	Trophic Basis for Restoration of Fish Fauna in Restored Urban Streams
70209	Cahoon, Lawrence B.	UNC-W	Is There a Relationship Between Phosphorus and Fecal Microbes in	October 2007	UNC-WRRI-366	Is There A Relationship Between Phosphorus and Fecal Microbes in
70208	Shah, Sanjay B.	NCSU	Arsenic and Heavy Metal Leaching Potential from Turkey Litter Stockpiled	October 2007	UNC-WRRI-371	Arsenic and Heavy Metal Leaching Potential from Turkey Litter Stockpiled
70207	Kharram, Siamak	NCSU	Integration of High Resolution Imagery in Cost-effective Assessment of Land Use Practices Influencing Erosion and	May 2008	UNC-WRRI-378	Integration of High-Resolution Satellite Imagery In Cost-Effective Assessment of Land Use Practices Influencing
70212	Maguire, Rory	NCSU	Validating the Phosphorus Loss Assessment Tool for the Organic Soils	February 2008		Influence of Mehlich-3 Extractable Aluminum on Phosphorus Retention in
2003						
70206	Band, Larry	UNC-CH	Sources, Transport, and Fate of Sediment and Nutrients from a Redeveloping Watershed: Hydrology of			
70205	de los Reyes, Francis	NCSU	Improving Dewatering of Wastewater Biosolids Using Innovative Approaches	July 2005	UNC-WRRI-358	Improving Dewatering of Wastewater Biosolids Using Innovative
70204	Kramer, Randy	Duke	Designing Programs to Improve Water Quality through Wetlands Restoration	December 2004	UNC-WRRI-428	Designing Programs to Improve Water Quality Through Wetlands Restoration
50349	Hunt, William	NCSU	Developing Standards and Associated Costs for Stormwater BMP Inspection and Maintenance	July 2008	UNC-WRRI-SRS-27	Determining inspection and maintenance requirements and costs for structural BMPs in North Carolina
50347	Jennings, Gregory	NCSU	Monitoring of Stream, Wetland, and Buffer Restoration Projects			
50346	DiGiano	UNC-CH	Assessment of the State-of-the-Art of Membrane Treatment of Secondary Wastewater Effluent for Subsequent Use			
50345	Singer	UNC-CH	Compliance with Stage 2 DBP Rules for Urban Water Consortium Utilities	May 2008	UNC-WRRI-365	Estimated Compliance with the Proposed Stage 2 Disinfection By-
50344	Hunt, William	NCSU	Monitoring Study and Maintenance Plan Development for 12 Stormwater BMPs for The City of Charlotte	January 2006	UNC-WRRI-367	Monitoring Study of the Performance of Stormwater Best Management Practices in the City of Charlotte
50343	Gosnell	NCCU	Water Quality Indicators: Nutrient Impacts on Chlorophyll A or Algae Species Composition			

50342	Wetzel	UNC-CH	Water Quality Indicators: Nutrient Impacts on Chlorophyll A or Algae Species Composition			
50341	Reckhow, Kenneth	Duke	Water Quality Indicators: Nutrient Impacts on Chlorophyll A or Algae Species Composition			
50340	Reckhow, Kenneth	NCSU	Water Quality Indicators: Nutrient Impacts on Chlorophyll A or Algae Species Composition			
50338	Green/Rannells	NCSU	Biosolids and Realistic Yield Expectations	August 2007	UNC-WRRI-392	Biosolids and Realistic Yield Expectations
50337	Tomas, Carmelo	UNC-W	Harmful Algal Species from the New River - Composition and Nutrient	October 2007	UNC-WRRI-369	Harmful Algal Species from Wilson Bay, New River, North Carolina:
50336	Paerl, Hans	UNC-CH	Ferry Mon: Ferry-based Monitoring and Assessment for Water Quality for North Carolina's Pamlico Sound	July 2008	UNC-WRRI-387	FerryMon, Ferry-Based Monitoring and Assessment of Water Quality for North Carolina's Pamlico Sound
50335	Characklis, Gregory	UNC-CH	Impact of Microbial-Particle Interaction on Microbial Fate and Transport in Stormwater			
50334	Gregory	NCSU	Hydrologic, Biologic, and Geomorphic Character of Headwaters Streams in	2005		Relationship Between Flow Regime and Aquatic Macroinvertebrate
50333	Reckhow, Kenneth	NCSU	Development of a Prototype Long Term Hydrologic Observatory (LTHO) for the Neuse Watershed			
50332	Reckhow, Kenneth	NCSU	Technical Support for Design of the Neuse Prototype Hydrologic Observatory			
50331	Jennings, Gregory	NCSU	Ecosystem Mitigation and Watershed Management Conference			
50330	Jennings, Gregory	NCSU	Sediment Removal Demonstration and Evaluation for Mountain Streams			
50329	Jennings, Gregory	NCSU	Stream Restoration Design Aids for the NC Coastal Plain			
50328	Showers	NCSU	RIVERNET Monitoring	April 2006	UNC-WRRI-351-A	Nitrate Flux From Ground to Surface Waters Adjacent to the Neuse River Waste Water Treatment Plant
70203	Genereux, David	NCSU	Pilot Project on Groundwater Dating in Confined Aquifers of the North Carolina Coastal Plain	August 2005	UNC-WRRI-355	Pilot Project on Groundwater Dating in Confined Aquifers of the North Carolina Coastal Plain
70202	Hershey	UNC-G	Evaluation of Ecological Function in Restored Urban Streams	April 2008	UNC-WRRI-372	Evaluation of Ecological Function in Restored Urban Streams

70201	Miller	WCU	The Role of Flood Flows on the Lead Isotopic Composition of Stream Waters, Suspended Sediments, and Rainbow Trout Downstream of Lead Contaminated Soils in Barber's Orchard			
50326	Jennings, Gregory	NCSU	Low Impact Development: Adaptation for use in Piedmont NC: An Education Initiative			
50325	McLaughlin, Richard	NCSU	Evaluation of Temporary and Permanent Ground Cover Establishment Methods for Erosion Control			
50324	Schwartz	NCSU	CUAHSI Sciene Plan Development			
50323	Schwartz	NCSU	Development of Technical Literature to Assist Child Care Centers and Schools in Complying with Requirements			
50322	Maguire	Duke	A Negotiated Approach to Developing TMDL's for Nitrogen in the Neuse Basin: Finalizing the Allocation Strategy			
50321	Chescheir	NCSU	Application of DRAINMOD Based Nigrogen Loading Models to Lower Coastal Plain Watersheds			
50320	White	NCSU	Evaluation of Watershed Change and Small Marina Impacts on Bacterial Contamination of Estuarine Waters		UNC-WRRI-398	
50319	Hershey	UNC-G	Effect of Riparian Buffer Zones on Water Quality and Biodiversity in Piedmont Urban Streams			
50318	Osmond, Deanna	NCSU	Determing the Effectiveness of Shrub Buffers to Reduce Nitrate-Nitrogen from Agricultural Fields in a Coastal Plain Setting			
50317	Palmquist, Raymond	NCSU	Land Use Patterns and Pollution in the Upper Neuse River	December 2003	UNC-WRRI-348	Land Use Patterns and Pollution in the Upper Neuse River
2002						

70200	Berke	UNC-CH	Water Quality and Quantity Impacts of Urban Form: A Comparative Analysis of Compact and Low-Density Development			
70199	Whalen	UNC-CH	Influence of Nutrient Reduction on Phytoplankton Primary Production, Standing Stock and Community Composition in the Lower Neuse River			
70198	Franklin	NCSU	Detention and Export of Phosphorous and Sediment in Vegetated Piedmont Filter Zones Bordering Agricultural	August 2008	UNC-WRRI-402	Detention and Export of Phosphorous and Sediment in Vegetated Piedmont Filter Zones Bordering Agricultural
70197	Khorram	NCSU	One-Meter Resolution Mapping and Monitoring of Stream Riparian Buffer Zones and Adjacent Land Use and	November 2003	UNC-WRRI-400	High Resolution Mapping Land Cover Classification of the Hominy Creek Watershed
70196	McLaughlin, Richard	NCSU	A Systematic Evaluation of Polyacrylamide for Sediment and	December 2004	UNC-WRRI-352	A Systematic Evaluation of Polyacrylamide for Sediment and
70195	Characklis, Gregory	UNC-CH	Reduced Cost Strategies for Regional Integration of Surface and Ground-Water Use	Nov/Dec 2006		Equilibrium Approach to Integrating Regional Surface Water Treatment and Limited Groundwater Pumping Capacity (Journal of Water Resources Planning and Management)
70194	Allan	UNC-C	Hydrological and Biogeochemical Investigations of Riparian Buffers in the Piedmont and Blue Ridge Regions of			
50316	Gilliam, James	NCSU	Urbanization and Decline in Water Quality: Do Statistically Identifiable			
70171						
70177	Mallin, Michael A.	UNC-W		August 2002	UNC-WRRI-341	Seeking Science-Based Nutrient Standards for Coastal Blackwater
50261	Lebo, Martin E.	UNC-CH	Neuse River Estuary Modeling and Monitoring Project	May 2002	UNC-WRRI-325-H	Neuse River Estuary Modeling and Monitoring Project Stage 1: Evaluating
2001						
70193	Overcash	NCSU	Environmental Evaluation of Alternatives for Animal Waste	September 2004	UNC-WRRI-350	Environmental Analysis of Swine Waste Management Technologies
70192	Woods, Terri	ECU	Geochemical Tracers of Water Movement between the Castle Hayne Aquifer, Associated Shallow Aquifers, and Surface Water in Brunswick and New Hanover Counties, North Carolina			

70191	Richardson	Duke	Role of Sediment Processes in Regulating Water Quality of the Cape	October 2007	UNC-WRRI-362	Role of Sediment Processes in Controlling Water Quality in the Cape
70190	Hershey, Anne	UNC-G	Effect of Riparian Buffers on Removal of Nutrients and Sediment in Urban	April 2008	UNC-WRRI-374	Effects of Riparian Buffers on Removal of Nutrients and Sediment in
70189	Amoozegar, Aziz	NCSU	Reuse of Wastewater from Septic Systems			
70188	Band, Larry	UNC-CH	Tracking Drought Impact on Managed and Unmanaged Ecosystems of NC			
70187	Corbett	ECU	Sediment Resuspension in the Pamlico and Neuse River Estuaries - An Additional Source of Nutrients and	October 2007	UNC-WRRI-363	Sediment Resuspension in the Pamlico and Neuse River Estuaries An Additional Source of Nutrients and
50307	Whalen, Stephen C./Weinberg	UNC-CH	Investigation of the Occurrence of Residual Antibiotics and their Metabolites in Drinking Water	February 2004	UNC-WRRI-356	Method Development for the Occurance of Residual Antibiotics in Drinking Water
50311	Leidy	NCSU	Further Evaluation of Pesticide Residue Levels in the Water Supply Watersheds of the City of Winston-Salem			
50306	DiGiano	UNC-CH	Assessment of the State-of-the-Art of Membrane Treatment of Secondary Wastewater Effluent for Subsequent Use			
50315	Wu, Jy	UNC-C	A Feasibility Study for Developing Real-Time Flood Forecast Systems			
50304	Robarge	NCSU	Monitoring of Atmospheric Concentrations of Ammonia/Ammonium in Eastern NC using Annular Denuder and Passive Filter Technology			
50314	McLaughlin, Richard	NCSU	Sediment & Erosion Control: Evaluation of Costs and Effectiveness			
2000						
70186	Vasudevan, Dharni and Cooper, Ellen	Duke	Influence of Phosphorus on the Mobilization and Attenuation of Ionogenic Herbicides in NC Piedmont	May 2008	UNC-WRRI-377	Influence of Phosphorus on the Mobilization and Attenuation of Ionogenic Herbicides in NC Piedmont
70185	Berke	UNC-CH	Water Quality and Quantity Impacts of Urban Forms: A Comparative Analysis of Compact and Low-Density Development			

70184	Franklin	NCSU	Effectiveness of Four "Best Management Practices" for Reducing Nonpoint-Source Pollution from Piedmont Tobacco Fields			
70183	Christian, Robert	ECU	Episodic Cultural Eutrophication of Pamlico Sound: Hurricane Loading and	July 2004	UNC-WRRI-349	Episodic Nutrient Loading Impacts on Eutrophication of the Southern
70182	Overcash, Michael	NCSU	Technical and Economic Evaluation of Alternatives for Animal Waste	September 2004	UNC-WRRI-350	Environmental Analysis of Swine Waste Management Technologies
70181	Miller, Jerry	WCU	Assessment of Changing Land-Use Practices on Basin Sediment yields and Provenance in Western North Carolina Using Multivariate Finger	June 2003	UNC-WRRI-345	Assessment of Changing Land-Use Practices on Basin Sediment Yields and Provenance in Western North Carolina Using Multivariate Finger
70180	Hilger, Helene	UNC-C	An Assessment of the North Carolina Water Reuse Regulations	October 2003	UNC-WRRI-346	An Assessment of the North Carolina Water Reuse Regulations: Their Application to a New Reclamation
50301	Devine, Hugh A	NCSU	An Environmental Water Quality Data Visualization System for Private Ground Water Supplies	February 2002	UNC-WRRI-399	An Environmental Water Quality Data Visualization System for Private Groundwater Supplies
50300	Hilger	UNC-C	Method Development to Determine Fecal Contaminant Source Information for TMDL Aesessments			
50299	Hunt, William	NCSU	Field Study of Bio-Retnetion Pollutant Removal Ability			
50298	Tomas, Camelo	UNC-W	Harmful Algal Species from the New River and Cape Fear Estuaries	May 2006	UNC-WRRI-406	Harmful Algal Species from Wilson Bay, New River, North Carolina.
50297	Benninger, Larry	UNC-CH	Impact of Hurricane Floyd on Sediment Dposition, Erosion and Benthic Nutrient Fluxes in Pamlico Sound, NC	April 2008	UNC-WRRI-364	Impact of Hurricane Floyd on Sediment Deposition, Erosion, and Benthic Nutrient Fluxes in Pamlico
50296	Amoozegar, Aziz	NCSU	Movement of Pollutants from Septic Systems and Performance of Riparian Buffers in Suburban Settings	2004	UNC-WRRI-424	Movement of Pollutants from Septic Systems and Performance of Riparian Buffers in Suburban Settings
50302	Paerl, Hans	UNC-CH	Establishing Spatial and Temporal Trends of Atmospheric Nitrogen Deposition in Eastern North Carolina: The Neuse River Basin and Estuary	December 2002	UNC-WRRI-SRS-23	Establishing Spatial and Temporal Trends of Atmospheric Nitrogen Deposition in Eastern North Carolina
50288	Maguire	Duke	A Negotiated Approach to Developing TMDL's for Nitrogen in the Neuse Basin			
50293	Gregory	NCSU	Functional Capacity Assessment of a Flood Plain Stormwater Treatment Wetland, Greensboro, NC			

50294	Gregory	NCSU	Development of Stream Identification Methodology, Greensboro, NC			
50287	Holman	NCSU	Research to Address Erosion & Sediment Control Issues			
50286	Holman	NCSU	Lock and Dam Project: Middle Cape Fear Basin Data Evaluation (Fayetteville)			
50285	Burkholder, Joanne & Glasgow, Howard	NCSU	Routine Quantification of Pfiesteria Piscicida in Water Samples from the Mesohaline Neuse Estuary			
20161	Franklin, E. Carlyle	NCSU		January 2000	UNC-WRRI-312	Management of Forested Filter Zones
1999						
70179	Galbreath	WCU	Evaluation of Nutrient Loading from Tributaries to Santeetlah Lake			
70178	Phaneuf	NCSU	Benefits of Quality Improvements in North Carolina's Water Resources	March 2001	UNC-WRRI-332	Benefits of Quality Improvements in North Carolina's Water Resources
70177	Mallin, Michael	UNCW	Algal, Bacterial, and BOD Responses to Nutrient Gradients in Coastal Plain	August 2002	UNC-WRRI-341	Seeking Science-Based Nutrient Standards For Coastal Blackwater
70176	Alperin	UNC-CH	Impact of Sediment Processes on Water Quality in the Neuse River	June 2008	UNC-WRRI-429	Impact of Sediment Processes on Water Quality in the Neuse River
50266	Whalen		Denitrification and Sediment - Water Nutrient Exchange in the Upper Neuse	December 2006	UNC-WRRI-361	Denitrification and Sediment-Water Nutrient Exchange in the Upper Neuse
50261	Luetlich	UNC-CH	Neuse River Modeling and Monitoring Project: Phase II Monitoring	October 2002	UNC-WRRI-426	Neuse River Estuary Modeling and Monitoring Project Phase 2:
50260	Wossink, Ada/Hunt	NCSU	Cost Effectiveness Analysis of Structural Stormwater Best	May 2003	UNC-WRRI-344	The Economics of Structural Stormwater BMPs in North Carolina
50282	Whalen	UNC-CH	Influence of Lock and Dam Structures on Water Quality in the Lower Cape Fear River			
50283	Richardson	Duke	A Proposal to Assess Present and Historical Water Quality on the Cape Fear River: Effects of Lock and Dam Structures			
50284	Francisco	UNC-CH	Analysis of Stream Data from the Middle Cape Fear River			
50244	Linden, Karl G.	Duke	Comparison of Performance and Operations and Maintenance Costs for Three Biological Nutrient Removal Schemes at Full-scale Wastewater	June 2001	UNC-WRRI-334	Evaluation of Performance and Operational Costs for Three Biological Nutrient Removal Schemes At a Full-Scale Wastewater Treatment Plant

50272	DiGiano, Francis A.	UNC-CH	Analysis of the Occurrence of Nitrification and Other Regrowth Problems in the Raleigh Distribution System	April 2002	UNC-WRRI-338	Occurrence of Bacterial Regrowth and Nitrification in the Raleigh Distribution System and Development of an Epanet Model for Future Assessments
50267	Christian, Robert R.	ECU	Contribution to Long-Term Modeling Tier of the Neuse River and Estuary as Functional Assessment of Environmental Phenomena through Network Analysis	February 2004	UNC-WRRI-343-E	Monitoring and Modeling of the Neuse River Estuary, Phase 2: Functional Assessment of Environmental Phenomena Through Network Analysis
50266	Whalen	UNC-CH	Denitrification & Sediment Water Nutrient Exchange in the Upper Neuse River			
50270	Holman	NCSU	Evaluation of Urban Pesticide Residue Levels and Their Removal From Selected NC Drinking Water Supplies			
50273	Leidy	NCSU	Evaluation of Pesticide Residue Levels in North Carolina Urban Environments and Their Removal From Public Drinking Water Supplies			
50277	Holman	NCSU	Evaluation of Pesticide Residues and Their Removal in Burlington, North Carolina, Water Supply Watersheds: Phase III	May 2006	NC-WRRI-407	Evaluation of Pesticide Residues and Removal in Burlington's Water Supply Watersheds: Phase III
50278	Leidy	NCSU	Evaluation of Pesticide Residues and Their Removal in Burlington, North Carolina, Water Supply Watersheds:	May 2006	NC-WRRI-407	Evaluation of Pesticide Residues and Removal in Burlington's Water Supply Watersheds: Phase III
50265	Stow	Duke	Interrelationships of Water Quality Characteristics in the Neuse River Basin			
50281	Holman	NCSU	A Review of Using Benthic Macroinvertebrates in Determining the Effectiveness of Best Management Practices			
50257	Reckhow	Duke	Neuse River Modeling and Monitoring: Stage II			
50261	Luetlich	UNC-CH	Neuse River Modeling and Monitoring Project: Phase II Monitoring			
50263	Peterson	UNC-CH	ModMon Phase II: Benthic Fisheries Habitat			
50264	Crowder	Duke	Neuse River Estuary Fish Monitoring Project: Phase II Monitoring			

50258	Paerl	UNC-CH	Ammonia/Ammonium Monitoring and Modeling in Eastern North Carolina			
50259	Robarge	NCSU	Development of GIS-Based Nitrogen Budget for the Neuse River Basin			
70174	Vasudevan, Dharni	Duke	Soil Processes Impacting Groundwater quality in the North Carolina Piedmont: Contamination by Organic	February 2002	UNC-WRRI-336	Soil Processes Impacting Groundwater Quality in the North Carolina Piedmont: Contamination by
50254	Reckhow	Duke	A Conceptual Framework for the Assessment of Nitrogen Assimilation Capacity of Coastal Plain Aquifers			
50262	Hieronymus, JeffreyBowen	UNC-C	Additional Development of the Neuse Estuary Eutrophication Model for Prediction of Water Quality	July 2004	UNC-WRRI-343-C	Additional Development of the Neuse Estuary Eutrophication Model for Prediction of Water Quality
50255	Reckhow	NCSU	Neuse River Modeling and Monitoring: Stage II			
70175	Vepraskas, Michael	NCSU	Predicting Long-Term Wetland Hydrology For Hydric Soil Field Indicators	August	UNC-WRRI-342	Predicting Long-Term Wetland Hydrology From Hydric Soil Field Indicators
1998						
50245	DiGiano, Francis A.	UNC-CH	Data Collection to Support a Simplified Regrowth Model for Distribution Systems Incorporating Uncertainty Analysis	February 2001	UNC-WRRI-331	Data Collection to Support a Simplified Bacterial Regrowth Model for Distribution Systems
50243	Borden	NCSU	Optimization of Wet Detention Ponds for Phosphorus and Nitrogen Removal	Mar-2004	NC-WRRI-SRS-24	Mathematical Modeling of Nutrient Removal in Wet Detention Ponds
70172	Piehler, Michael F./Paerl	UNC-CH	Biologically Medicated Nitrogen Dynamics in Eutrophyng Estuaries: Assessing Denitrification & N ₂ Fixation Responses to Proposed N Loading Reductions in the Neuse River Estuary	May 2002	UNC-WRRI-339	Biologically Mediated Nitrogen Dynamics in Eutrophyng Estuaries. Assessing Denitrification, N ₂ Fixation and Primary Productivity Responses to Proposed N Loading Reduction in the Neuse River Estuary
70169	McLaughlin, Richard A.	NCSU	Using Natural & Landscaped Buffers to Reduce Pollutant Loading from Agricultural Runoff	December 2002	UNC-WRRI-340	Using Natural and Landscaped Buffers to Reduce Pollutant Loading From Agricultural Runoff
50241	Stow	Duke	An Erosion and Sedimentation Study of Lake Jeanette and the Lake Jeanette Watershed, Greensboro, NC	November 2002	NC-WRRI-SRS-22	Sedimentation and Water Quality in Lake Jeanette, Greensboro, NC
70167	Stanley	ECU	Historical Trends in Watershed Nutrient Production, Nutrient Loading, and Water Quality in the Neuse and Tar-Pamlico			

70168	Amoozegar	NCSU	Water Flow Analysis for Large Septic			
50237	Maloney, Karin A./Maguire	Duke	Stakeholders' role in Developing a Neuse River Water Quality Model	January 2000	UNC-WRRI-325-G	Neuse River Estuary Modeling and Monitoring Project Stage 1:
50242	Arya	NCSU	Measurement and Modeling of Ammonia Flux and Dry Deposition Above Natural Surfaces in Eastern NC			
70173	Sobsey	UNC-CH	Hog Waste Treatment to Control Microbial Contamination	June 2008	UNC-WRRI-380	Hog Waste Treatment to Control Microbial Contamination
70171	Mallin, Michael	UNCW	Seeking Science-Based Nutrient Standards for Coastal Blackwater	August 2002	UNC-WRRI-341	Seeking Science-Based Nutrient Standards For Coastal Blackwater
1997						
50225	Stow, Craig A.	Duke	An Examination of Long Term Nutrient Data in the Neuse River Watershed	July 2000	UNC-WRRI-325-E	Neuse River Estuary Modeling and Monitoring Project Stage 1: An Examination of Long Term Nutrient Data in the Neuse River Watershed
70165	Kabala	Duke	An Improved Characterization of a Fractured-Rock Aquifer by Transient Flowmeter Test			
70166	Paerl	UNC-CH	Biologically Mediated Nitrogen Dynamics in Dutrophying Estuaries: Assessing Denitrification and N ₂ Fixation Responses to Proposed N Loading Recution in the Neuse River Estuary			
70163	Franklin, E. Carlyle	NCSU	Effectiveness of Four "Best Management Practices" for Reducing Non-Point Pollution from Piedmont	February 2003	UNC-WRRI-357	Effectiveness of Three "Best Management Practices" for Reducing Non-Point Source Pollution from
50224	Christian, Robert R.	ECU	Contribution to Long-Term Modeling Tier of the Neuse River and Estuary	June 2000	UNC-WRRI-325-F	Neuse River Estuary Modeling and Monitoring Project Stage 1: Network
70164	Moreau, David H.	UNC-CH	Development of Methods for Estimating the Cost of Watershed	August 2000	UNC-WRRI-330	Sampling Strategies for Estimating Status and Cost of Watershed
70162	Amatya, D. M./Skaggs	NCSU	Parameter Models for Predicting Nitrogen Loading from Lower Coastal	October 2003	UNC-WRRI-347	Lumped Parameter Models for Predicting Nitrogen Loading from
50213B	Reckhow	Duke	Research and Development of Working Group on Water Quality and Related Issues			
70161	Cooper, Sherri R.	Duke	The History of Water Quality in NC Estuarine Waters as Documented in the Stratigraphic Record	May 2000	UNC-WRRI-327	The History of Water Quality in North Carolina Estuarine Waters as Documented in the Stratigraphic
50219	Reckhow, Kenneth H.	UNC	Neuse River Modeling and Monitoring	August 2000	UNC-WRRI-325-A	Neuse River Estuary Modeling and Monitoring Project Stage 1: Stage 1

50220	Luetlich, Richard A.	UNC-CH	An Interdisciplinary Observational Program for the Neuse River Estuary, NC	August 2000	UNC-WRRI-325-B	Neuse River Estuary Modeling and Monitoring Project Stage 1: Hydrography and Circulation, Water
50223	Eby, Lisa/Crowder, Larry	Duke	Coordinated Modeling and Monitoring Program for the Neuse River Estuary	March 2000	UNC-WRRI-325-C	Neuse River Estuary Modeling and Monitoring Project Stage 1: Effects of
50222	Bowen, James D.	UNC-C	Neuse River Water Quality Modeling	October 2000	UNC-WRRI-325-D	Neuse River Estuary Modeling and Monitoring Project Stage 1: Effects of
50213C	Reckhow	Duke	Neuse River Modeling and Monitoring			
50218	Holman	NCSU	Pesticides II			
50221	Alperin	UNC-CH	An Interdisciplinary Observational Program for the Neuse River Estuary, NC			
50233	Leidy	NCSU	Analyses of Public Water Supply Watersheds for Selected Pesticide Residues			
50226	Devine	NCSU	The Prototype Water Quality Data Retrieval System for the Neuse River Basin			
50227	Shelton	NCSU	Manual of Best Management Practices for Compost Utilization			
70170	Whalen, Stephen C.	UNC-CH	Denitrification and Nitrification in Agricultural Soils Fertilized with Liquid	July 2004	UNC-WRRI-354	Nitrogen Cycling Dynamics in Agricultural Fields Fertilized with
50232						
70097	Calvo-Alvarado, Julio Cesar	NCSU		February 1997	UNC-WRRI-307	Predicting Mean Annual Runoff and Suspended Sediment Yield in Rural
Unknown Number				1998	UNC-WRRI-SRS-19	The Raleigh Report 1998 - Pfiesteria Research Needs and Management Actions
1996						
70151	Whalen, Stephen C.	UNC-CH	Effect of Management Practice on Denitrification in Soils Fertilized with	July 2004	UNC-WRRI-353	Effect of Management Practices on Denitrification in Soils Fertilized with
50215	Knappe	NCSU	Optimization of Treatment to Mitigate Impacts of Algae and Algae Control on Finished Water Quality			
50217	Burkholder	NCSU	Optimization of Treatment to Mitigate Impacts of Algae and Algae Control on Finished Water Quality			
50216	Gray	NCSU	Protecting and Restoring Forested Stream Buffers in Existing Urban Residential Areas of Wake County			
70150	Crawford-Brown, Douglas J.	UNC-CH	A Decision Support System for Microbial and Disinfection By-Product Rich Analysis in NC Water Supplies	August 1999	UNC-WRRI-323	Development of an Environmental Decision Support System (EDSS) for Comparing Drinking Water Treatment

70158	Shaw	MS	Utilizing Vegetative Filter Strips of Varying Widths to Reduce Herbicides in Runoff			
70159	Miller	AR	Agronomic and Environmental Effects of Water Treatment Sludge applications to Pastures in Northwest Arkansas			
70160	Brion	KY	Indicators of Mammalian Fecal Contamination in Surface Water			
70157	Showers	NCSU	Stable Nitrogen Isotopic Tracers of Nitrogen Sources to Surface and Groundwaters Near Animal Production			
50213A	Reckhow	Duke	Uncertainty and Risk Analysis in Water Quality Modeling			
70153	Kota, Sreenivas/Borden	NCSU	Influence of Protozoan Grazing on Intrinsic Bioremediation Under	September 1999	UNC-WRRI-324	Anaerobic Biodegradation in Contaminated Aquifers: Influence of
50212	DiGiano, Francis A.	UNC-CH	Bacterial Regrowth in Drinking Water Distribution Systems: A Comparison of Durham and Raleigh	January 2000	UNC-WRRI-326	Bacterial Regrowth in Drinking Water Distribution Systems: A Comparison of Durham and Raleigh
50214	Aneja, Viney P.	NCSU	Characterization of Ammonia Emissions from Animal and Poultry	June 2000	UNC-WRRI-329	Characterization of Atmospheric Ammonia Emissions From Swine
70154	Barlaz	NCSU	Anaerobic Biodegradation of Benzene in Contaminated Aquifer Sediment	April 2000	UNC-WRRI-SRS-21	Preliminary Investigation on Anaerobic Biodegradation of Benzene in
70155	Singer, Philip C.	UNC-CH	Control of Haloacetic Formation in NC Drinking Water	May 2008	UNC-WRRI-379	Control of Haloacetic Acid Formation in North Carolina Drinking Water
70156	Mallin, Michael A.	UNC-W	Effect of Swine Waste Lagoon Constituents on Photo-synthetic and Heterotrophic Biota of Receiving Waters	July 1998	UNC-WRRI-315	Effect of Organic and Inorganic Nutrient Loading on Photosynthetic and Heterotrophic Plankton
70149	Reilly, James D./Kirby-Smith	Duke	Development of the Technical Basis and a Management Strategy for Reopening a Closed Shellfishing Area	June 1999	UNC-WRRI-321	Development of the Technical Basis and a Management Strategy for Reopening a Closed Shellfishing Area
70148	Woods, Terri L.	ECU	Geochemical Tracers of Groundwater Movement Between the Castle Hayne and Associated Coastal Plain Aquifer	February 2000	UNC-WRRI-328	Geochemical Tracers of Groundwater Movement Between the Castle Hayne and Associated Coastal Plain Aquifers
70000	Moreau, David H.	NCSU	Directors Office Administration and Technology Transfer			
50211	Borden, Robert C.	NCSU	Evaluation of Ponds and Wetlands for Protection of Public Water Supplies -	October 2001	UNC-WRRI-335	Performance Evaluation of Regional Wet Detention Ponds and Wetland for
20160	Chescheir, G. M.	NCSU		1996	UNC-WRRI-301	Effects of Drainage and Water Table Control on Groundwater and Surface
20162	Aitken, Michael D.	UNC-CH		1996	UNC-WRRI-299	Bacterial Biodegradation of Polycyclic Aromatic Hydrocarbons (PAH) and

70152	Sobsey, Mark	UNC-CH	Microbial Impacts of Animal Wastes and Other Fecal Wastes on Water	September 2000	UNC-WRRI-401	Microbial Impacts of Animal Wastes and Other Fecal Wastes on Water
1995						
50210	Weinberg, Howard S./Singer	UNC-CH	Assessment of Trace Element Concentration in Municipal Wastewater Treatment Plant Discharges in NC	May 2002	UNC-WRRI-337	Assessment of Trace Elements Concentrations in Municipal Wastewater Treatment Plant
50208	Moreau, David H.	NCSU	Status of Water and Sanitary Sewer System Information in Rural NC Counties			
70144	Aitken, Michael D.	UNC-CH	Slurry Phase Bioremediation of Contaminated Soil From a Former	December 1998	UNC-WRRI-320	Slurry-Phase Bioremediation of Contaminated Soil From a Former
70145	DiGiano, Francis A.	UNC-CH	Compliance with EPS's Information Collection Rule for NC Surface Water Supplies: Bench-Scale Testing of the Efficacy of Carbon Adsorption and	June 1999	UNC-WRRI-322	Compliance with EPA's Information Collection Rule for North Carolina Surface Water Supplies: Bench-Scale Testing of the Efficacy of Carbon
50209	Lauria	UNC-CH	Optimization Model for Durham Reservoir System			
70146	Gilliam	NCSU	Grass and Riparian Buffer Treatment of Runoff from Land Receiving Animal Waste			
70141	Monteverdi, George H./DiGaulio	Duke	In Vitro Methods for Screening & Evaluating Reproductive Impacts of Aquatic Pollutants on Fish	September 1998	UNC-WRRI-318	An In Vitro Test for Estrogenicity Combining Cultured Hepatocytes and an Enzyme-Linked Immunosorbant
70142	Christman, Russell F.	UNC-CH	A New Method for Characterizing Aquatic Organic Matter	October 1998	UNC-WRRI-319	A New Method for Characterizing Aquatic Organic Matter
70147	Evans	NCSU	Assessing the Impact of Septic Discharge on Water Quality on the Cape Hatteras National Seashore			
50204	Leidy	NCSU	Selective Pesticide Analysis for Surface Water Supplies			
70140	Amoozegar, Aziz	NCSU	Impact of Wastewater Quality on the Long-Term Acceptance Rate of Soils for On-Site Wastewater Disposal	July 1998	UNC-WRRI-316	Impact of Wastewater Quality on the Long-Term Acceptance Rate of Soils for On-Site Wastewater Disposal
70139	Thompson, Suzanne P./Paerl	UNC-CH	Denitrification Dynamics of an Estuarine Headwater Creek Receiving Agricultural Runoff: The South River	August 1998	UNC-WRRI-317	Denitrification Dynamics of an Estuarine Headwater Creek Receiving Agricultural Runoff
20157	Paerl, Hans W.	UNC-CH		January 1995	UNC-WRRI-291	Nitrogen Loading Sources and Eutrophication of the Neuse River
50220	Pfeifer, Christopher E.	UNC-CH		July 1995	UNC-WRRI-294	An Evaluation of Wetlands Permitting and Mitigation Practices in North
1994						

50202	Welby, Charles W.	NCSU	A Study of Nitrate Movement to Ground Water at the Neuse River Wastewater Treatment Plant Facility -	Jan 2000	UNC-WRRI-SRS-20	A Study of Nitrate Movement to Ground Water at the Neuse River Waste Water Treatment Plant
70138	Grimberg, Stefan J./Aitken	UNC-CH	Assessment of the Use of Surfactants in Bioremediation of Contaminated Soil and Groundwater: Development of	September 1996	UNC-WRRI-305	Assessment of the Use of Surfactants for Biodegradation of Hydrophobic Pollutants and Development of
50200	Kaiser	UNC-CH	Evaluation of Wetland Permits and Mitigation Practices in NC			
50201	Holman	NCSU	Development of a Comprehensive Wetland Restoration and Creation Database			
70136	Mallin, Michael A.	UNC-W	Nutrient Limitation and Eutrophication Potential of the Cape Fear River and...	September 1997	UNC-WRRI-313	Nutrient Limitation and Eutrophication Potential in the Cape Fear and New
70137	Hunt, W. F./Skaggs	NCSU	Development of Methods for Evaluating Wetland Hydrology	June 2001	UNC-WRRI-333	Examination of the Wetland Hydrologic Criterion and Its Application in the Determination of Wetland Hydrologic Status
50193	Shelton	NCSU	Evaluation of Wastewater Biosolids Compost for Production of Agronomic and Horticultural Crops			
70098	Singer, Philip C.	UNC-CH		1994	UNC-WRRI-281	Treatability Assessment of Jordan Lake
70088	Munster, C.	NCSU		1994	UNC-WRRI-283	Effects of Drainage and Water Table
20155						Movement and Dissipation of
20156	Weber, Jerome B.	NCSU		1994	UNC-WRRI-285	Toxicants and Water in Natural Soil
70089						Reduction in Sediment and Chemical
70105	Parsons, John E.	NCSU		1994	UNC-WRRI-286	Load Agricultural Field Runoff by
70107	Sobsey, Mark D.	UNC-CH		1994	UNC-WRRI-288	An Improved Viral Indicator of Fecal Contamination and Treatment Process
70102	Zublena, J.P.	NCSU		March 1994	UNC-WRRI-282	Assessment of Municipal Sludge
70100	San Juan, Francisco C., Jr.	ECSU			UNC-WRRI-SRS-13	Preliminary Investigation of the Uranium Isotope Disequilibrium in the
Unknown Number	Bisese, James A.	UNC-CH		March 1994	UNC-WRRI-SRS-14	Sedimentation in University Lake, Orange County, North Carolina
1993						
70135	Rublee	UNC-G	Toxi Dinoflagellate Probe Development			
70132	Kota, Sreenivas/Borden	NCSU	Influence of Iron Reduction on the Natural Bioremediation of Petroleum	July 1997	UNC-WRRI-308	Intrinsic Bioremediation of Gasoline-Contaminated Aquifers:
50192	Gray	NCSU	Development and Initiation of a Newsletter/Communication Program			

70134	Allan, Craig/Forsythe	UNC-C	Evaluation of Environmental Factors Impacting on Wet Retention Basin Performance and Fates of Adsorbed/Desorbed Constituents in	July 1997	UNC-WRRI-309	Piedmont N.C. Wet Retention Basins: Performance Factors, Sedimentation Dynamics, and Seepage Losses
70133	Verchot, Louis Vincent/Franklin	NCSU	Nitrogen Biogeochemical Cycling in Three Piedmont Forested Filter Zones	August 1997	UNC-WRRI-310	Nitrogen Biogeochemical Cycling in Piedmont Vegetated Filter Zones
70131	Sutton, Lynn C.	ECU	Ground-Water Chemistry of the Castle Hayne Aquifer in Capacity Use Area	July 1994	UNC-WRRI-SRS-15	Groundwater Geochemistry of the Castle Hayne Aquifer in the Region of
70130	Gilliam, James F.	NCSU	Water Quality Effects of Above-Stream Feeders in Low Nutrient North Carolina	December 1997	UNC-WRRI-314	Water Quality Effects of Above-Stream Fish Feeders in Low-Nutrient North
70129	Kay, Stratford H.	NCSU	Evaluation of Summer Drawdown as a Potential Tool for Management of Monoecious Hydrilla	December 1995	UNC-WRRI-298	Decreases in Yadkin River Basin Sedimentation: Statistical and Geographic Time-Trend Analyses, 1951-1990
50182	Francisco, Donald E.	UNC-CH	An Evaluation of the Source(s) of Test Animals as a Component of Inter-Laboratory Variability in NC Mini Chronic Pass/Fail Ceriodaphnia Effluent Toxicity Test	1996	UNC-WRRI-302	An Evaluation of the Source(s) of Test Animals as a Component of Interlaboratory Variability in the "NC Mini-Chronic Pass/Fail Ceriodaphnia Effluent Toxicity Test"
70127	Waggoner, M. G.	NCSU	Reduction of Nitrate Leaching in Agricultural Soils via Cover Crops	September 1996	UNC-WRRI-303	Reduction of Nitrate Leaching in Agricultural Soils via Cover Crops
50184	Borden, Robert C./Liehr	NCSU	Evaluation of Ponds and Wetlands for Protection of Public Water Supplies	August 1997	UNC-WRRI-311	Evaluation of Wet Ponds for Protection of Public Water Supplies
50183	Rogers, W.J.	NCSU	Use of Lime-Stabilized Product as an Agricultural Liming Agent	May-1997	NC-WRRI-SRS-18	Use of Lime-Stabilized Product as an Agricultural Liming Agent
20159	Danielson, Leon E.	NCSU		1993	UNC-WRRI-273	Groundwater Contamination and Cost of Pesticide Restrictions in the
70109	Burkholder, JoAnn M.	NCSU		1993	UNC-WRRI-274	Sediment and Phosphorus Loading: Predicting Water Quality in an Urban
70096	Rizzo, William M.	ECU		1993	UNC-WRRI-275	Sediment-Water Phosphate Exchange
70101	House, Claude H.	NCSU		1993	UNC-WRRI-277	a Constructed Upland-Wetland Wastewater Treatment System
20158	Eufemia, Nancy A.	Duke		1993	UNC-WRRI-278	Biomarkers for Redox-Active Genotoxins in Contaminated
20154	Amoozegar, Aziz	NCSU		1993	UNC-WRRI-279	Evaluation of Saprofite for On-Site
70103	Francisco, Donald E.	UNC-CH		August 1993	UNC-WRRI-276	Chronic Toxicity Bioassay with Ceriodaphnia dubia: (1) An Evaluation of a Toxicity Test-Based Approach for
Unknown Number	Holman, Robert E.	NCSU		November 1993	UNC-WRRI-SRS-12	CRYPTOSPORIDIUM: A Drinking Water Supply Concern
1992						

70128	DiGiano, Francis A.	UNC-CH	Feasibility of Wastewater Reuse at the National Spinning Company Inc.,	February 1995	UNC-WRRI-292	Feasibility of Wastewater Reuse at the National Spinning Company, Inc.,
50187	Kaiser	UNC-CH	Mapping Water & Sewer Customer Records with Desktop Geographic Information System			
50188	Peterson	UNC-CH	Bay Scallop Recruitment Failure in NC: A Case of Spawner Limitation or Environmental Deterioration			
50189	Holman	NCSU	Evaluation of Pesticides in Three Water Supply Watersheds			
50186	Holman, Robert E.		Development of a Handbook for the Restoration and Creation of Wetlands	January 1995	UNC-WRRI-289	Wetland Restoration and Creation: Development of a Handbook Covering
70126	Evans	NCSU	Funds to Assist in Drilling Experimental Wells on Centennial Campus at NCSU			
70124	Wainwright, Jennifer S./DiGiulio	Duke	Biomarkers for Bleached Kraft Mill Effluent Exposures and Effects in	July 1995	UNC-WRRI-295	Investigation of Potential Biomarkers of Exposure to Bleached Kraft Mill
70125	Liehr, Sarah K.	NCSU	Innovative Methods for Treatment of Municipal Landfill Leachate	January 1996	UNC-WRRI-SRS-17	Potential for Using Constructed Wetlands to Treat Landfill Leachate:
70122	Evet, Jack B.	UNC-C	Effects of Urbanization and Land Use Changes on Low Streamflows	1994	UNC-WRRI-284	Effects of Urbanization and Land-Use Changes on Low Stream Flow
70123	Richter, D. D.	Duke	Statistical and Time Series Analyses of Long-Term Suspended Concentrations and Yields in the Yadkin River Basin, NC	November 1995	UNC-WRRI-297	Decreases in Yadkin River Basin Sedimentation: Statistical and Geographic Time-Trend Analyses, 1951-1990
70121	Vepraskas, Michael J.	NCSU	Predicting Contaminant Transport Along Veins and Fractures Above the Water Table (Revised)	October 1995	UNC-WRRI-296	Predicting Contaminant Transport along Veins and Fractures in Saprolite above the Water Table
50180	Holman	NCSU	Support of a Regional and National Pollution Prevention Rountable Metting			
50178	Burkholder	NCSU	Coastal Eutrophication and Disappearing Submersed Vegetation: Lethal Effects of Nitrate Enrichment on Eelgras sand Other Beneficial Aquatic Plants			
50179	Burkholder	NCSU	The Role of a New Toxic Dinoflagellate in Estuarine Finfish and Shellfish Kills in the Neuse and Pamlico Estuaries			
20152	Miller, Cass T.	UNC-CH		1992	UNC-WRRI-263	Investigation of Multicomponent Sorption and Desorption Rates in
70104	Jersey, James A.	UNC-CH		1992	UNC-WRRI-265	Development of Analytical Methods for the Identification of Organic Nitrogen

70095	Franklin, E. Carlyle	NCSU		1992	UNC-WRRI-270	Enhancement of the Effectiveness of Forested Filter Zones by Dispersion of
	Moreau, David H.	UNC-CH		December 1992	UNC-WRRI-272	Declining Rates of Expansion of Reservoir Capacity in North Carolina
50150	DiGiano, Francis A.	UNC-CH		February 1992	UNC-WRRI-261	Application of the Toxicity Reduction Evaluation Protocol for Municipal
70093	Miller, Cass T.	UNC-CH		February 1992	UNC-WRRI-262	Effect of Vapor-Phase Mass Transfer on Aquifer Restoration
70108	Hinze, Willie L.	Wake F.		July 1992	UNC-WRRI-269	Cloud Point Extraction and Preconcentration Procedures for
50165	Burkholder, JoAnn M.	NCSU		June 1992	UNC-WRRI-264	A Study of Water Quality in Lake Raleigh
70087	Douglass, James L.	NCSU		June 1992	UNC-WRRI-266	The Impact of a Piedmont Sanitary
70111	Roenigk, Dale J.	UNC-CH		June 1992	UNC-WRRI-267	Evaluation of Urban Stormwater
70085	DiGiano, Francis A.	UNC-CH		June 1992	UNC-WRRI-268	Application of Passive Dosimetry for
unknown number	Moreau, David H.	UNC-CH		November 1992	UNC-WRRI-271	North Carolina's Water Supply Watershed Protection Act: History and
unknown number	Watts, Kathy N.			January 1992	UNC-WRRI-SRS-8	Water Reuse in Selected States
unknown number	Holman, Robert E.	NCSU		October 1992	UNC-WRRI-SRS-9	Residuals Management in North Carolina: A Challenge to POTW's
unknown number	Smith, Katrina			August 1992	UNC-WRRI-SRS-10	Report on the Usage of Computer Models of Estuaries by Eastern
1991						
50173	Moreau, David H.	NCSU	Mapping Water & Sewer Customer Records with Desktop Geographic Information System			
50174	Amoozegar	NCSU	Use of Lime Treated Wastewater Sludge-Soil Mixtures for Daily Cover in	January 1995	NC-WRRI-SRS-16	Use of Lime-Treated Wastewater Sludge-Soil Mixtures for Daily Cover in
50175	Rubin	NCSU	Use of Lime Treated Wastewater Sludge-Soil Mixtures for Daily Cover in	January 1995	NC-WRRI-SRS-16	Use of Lime-Treated Wastewater Sludge-Soil Mixtures for Daily Cover in
50176	Barlaz	NCSU	Use of Lime Treated Wastewater Sludge-Soil Mixtures for Daily Cover in	January 1995	NC-WRRI-SRS-16	Use of Lime-Treated Wastewater Sludge-Soil Mixtures for Daily Cover in
50157	Aitken, Michael D.	UNC-CH	Investigation of Odor Problems Associated with Wastewater Treatment Facilities in North Carolina	January 1991	NC-WRRI-SRS-6	Investigation of Odor Problems Associated with Wastewater Treatment Facilities in North Carolina
70119	Burby, Raymond J.	UNC-CH	Economic and Fiscal Impact of Regulations to Protect Public Water Supplies: The Case of North Carolina			
70120	Moreau, David H.	NCSU	Economic and Fiscal Impact of Regulations to Protect Public Water Supplies: The Case of North Carolina			

70113	DiGiano, Francis A.	UNC-CH	Improvement of the Nanofiltration Membrane Process by Addition of Powdered Activated Carbon for Enhanced Removal of Precursors to	May 1995	UNC-WRRI-293	Hollow-Fiber Nanofiltration for Treatment of a Surface Water High in Natural Organic Matter
70115	Amoozegar, Aziz	NCSU	Evaluation of Aerobic pretreatment/Land Disposal Systems for On-Site Wastewater Disposal	September 1996	UNC-WRRI-304	Evaluation of Aerobic Pretreatment/Land Disposal Systems for On-Site Wastewater Disposal
70114	Gilliam, J. W.	NCSU	Evaluation of Potential for Aquifer Contamination from Agricultural	November 1996	UNC-WRRI-306	Contamination of Surficial Aquifers with Nitrogen Applied to Agricultural
70116	Johnston, James J.	NCSU	Anaerobic Biodegradation of Hazardous Organics in Groundwater Downgradient of a Sanitary Landfill	November 1994	UNC-WRRI-287	Anaerobic Biodegradation of Hazardous Organics in Groundwater Down Gradient of a Sanitary Landfill
70117	Imhoff, Paul T./Miller	UNC-CH/NCSU	An Evaluation of Enhanced Aquifer Remediation Strategies for Subsurface	January 1995	UNC-WRRI-290	An Experimental Investigation of Hot Water and Cosolvent Flushing for
70112	Burkholder, Joann	NCSU	Sediment and Phosphorus Loading Predicting Water Quality in Urban and Agricultural Piedmont Reservoirs			
70118	Heath Jr., Milton S.	UNC-CH	Artificial Watercourses			
50172	Holman, Robert E.	NCSU	Evaluation of Land Use Changes Within APES Area Utilizing the GIS	June 1993	UNC-WRRI-SRS-11	Evaluation of the Albemarle-Pamlico Estuarine Study Area Utilizing
50168	Singer, Philip C.	UNC-CH	Disinfection By-Products in NC	1996	UNC-WRRI-300	Disinfection By-products in Selected
70091	Amoozegar, Aziz	NCSU		1991	UNC-WRRI-255	Characterization of Soils and Saprolites from the Piedmont Region
50151	DiGiano, Francis A.	UNC-CH		1991	UNC-WRRI-256	Impact of Safe Drinking Water Act Amendments of 1986 on Selected
20153	Robinson, Peter J.	UNC-CH		1991	UNC-WRRI-257	Precipitation Regime Changes
70090	Christman, Russell	UNC-CH		1991	UNC-WRRI-259	Identification of Mutagenic By-
70099	Watson, James E.	UNC-CH		1991	UNC-WRRI-260	Use of Activated Carbon to Remove
50169	Moreau, David H.	UNC-CH		July 1991	UNC-WRRI-SRS-7	Water Conservation in Durham: Economic and Financial Impacts of
1990						
70110	Wagger, M. G.	NCSU	Runoff Potential and Chemical Transport in Agricultural Soils	1993	UNC-WRRI-280	Runoff Potential and Chemical Transport in Agricultural Soils
50167	Welby, Charles W.	NCSU	A Study of Nitrate Movement to Ground Water at the Neuse River Wastewater Treatment Plant Facility	Jan 2000	NC-WRRI-SRS-20	A Study of Nitrate Movement to Ground Water at the Neuse River Waste Water Treatment Plant
70073						
70074	Showers, William J.	NCSU		1990	UNC-WRRI-253	Stable Isotope Traces of Nitrogen Sources to the Neuse River, North
70080	Chescheir, G. M.	NCSU		1990	UNC-WRRI-254	Analysis of Stormwater Infiltration
70083	Kuenzler, Edward J.	UNC-CH		February 1990	UNC-WRRI-251	Nutrient Processing and Water Quality in a Piedmont Bottomland Receiving

unknown number	Howells, David H.	NCSU		November 1990	UNC-WRRI-258	Quest for Clean Streams in North Carolina: An Historical Account of
unknown number	Moreau, David H.	UNC		1990	UNC-WRRI-252	Agricultural Pesticides and Groundwater in North Carolina:
1989						
50228	Holman	NCSU	Holman Special Consortium Award			
70056						Effects of Agricultural Water Table Management on Drainage Water
70081	Evans, R. O.	NCSU		1989	UNC-WRRI-237	Historical Account of Public Water
	Howells, David H.	NCSU		1989	UNC-WRRI-244	Fish Diseases of the Albemarle-
70054	Noga, Edward J.	NCSU		April 1989	UNC-WRRI-238	Tentative Identification of Organic Compounds at the Westside
70062	Storm, Julia F.	UNC-CH		July 1989	UNC-WRRI-245	Modeling Organic Contaminant
70078	Miller, Cass T.	UNC-CH		July 1989	UNC-WRRI-246	Evaluation of Detention Basin
70077	Wu, Jy S.	UNC-C		July 1989	UNC-WRRI-248	North Carolina Sanitary Landfills: Leachate Generation, Management
70087	Borden, Robert C.	NCSU		March 1989	UNC-WRRI-243	Proceedings of Workshop on Management of Aquatic Weeds and
	Kay, Stratford H.	NCSU		March 1989	UNC-WRRI-247	Movement of Water and Chemical Pollutants from Wastewater Disposal
70043	Amoozegar, Aziz	NCSU		November 1989	UNC-WRRI-249	Managing Public Water Supplies during Droughts (Experiences in the
unknown number	Moreau, David H.	UNC-CH		September 1989	UNC-WRRI-250	
1988						
70057	DiGiano, Francis A.	UNC-CH		1988	UNC-WRRI-242	Methodology for Assessment of Contamination of the Unsaturated
70058	Medina Jr., Miguel A.	Duke		February 1988	UNC-WRRI-236	An Advisory System for North Carolina Groundwater Quality Modeling and
70027	Singer, Philip C.	UNC-CH		November 1988	UNC-WRRI-239	Formation of Halogenated Organics During Wastewater Disinfection
70059	Langeland, K. A.	NCSU		November 1988	UNC-WRRI-240	Potential for Hydrilla Dispersal by Sexual Means in North Carolina
70063	Richardson, Curtis J.	Duke		November 1988	UNC-WRRI-241	Soil Chemistry and Phosphorus Retention Capacity of North Carolina
unknown number	Moreau, David H.			March 1988	UNC-WRRI-SRS-3	Watershed Protection in Western North Carolina with Special Attention
50129	Francisco, Donald E., Lamb, James C.	UNC-CH		June 1988	UNC-WRRI-SRS-5	Pilot Plant Investigations of Various Processes to Accomplish Biological
1987						
70034	Durell, Gregory S.	UNC-CH		1987	UNC-WRRI-234	Development and Evaluation of Analytical Procedures for Broad

70025	Paerl, Hans W.	UNC-CH		April 1987	UNC-WRRI-229	Dynamics of Blue-Green Algal (Microcystis aeruginosa) Blooms in
70028						The Hydrology and Pollutant Removal Effectiveness of Wetland Buffer Areas
70029	Chescheir, G. M.	NCSU		August 1987	UNC-WRRI-231	
70068	Loomis, Dana P.	UNC-CH		May 1987	UNC-WRRI-230	Predicting the Occurrence of Radon-
70076	Smith, Val H.	UNC-CH		May 1987	UNC-WRRI-233	Prediction of Nuisance Blue-Algal
	Burby, Roymond J.	UNC-CH		September 1987	UNC-WRRI-232	Financing Water and Sewer Extensions in Urban Growth Areas:
70072	Kuenzler, Edward J.	UNC-CH		September 1987	UNC-WRRI-235	Impacts of Sewage Effluent on Tree Survival, Water Quality and Nutrient
				August 1987	UNC-WRRI-SRS-004A	Reduction in Nutrient Discharges into Designated Nutrient-Sensitive Waters:
				October 1987	UNC-WRRI-SRS-004B	Reduction in Nutrient Discharges into Designated Nutrient-Sensitive Waters:
50152	Lamb, James C.	UNC-CH		January 1988	UNC-WRRI-SRS-004C	Reduction in Nutrient Discharges into Designated Nutrient-Sensitive Waters:
1986						
70039	Langeland, K. A.	NCSU		1986	UNC-WRRI-224	Management Program for
70039	Langeland, K. A.	NCSU		1986	UNC-WRRI-225	Management Program for Hydrilla (A
70048	Malcom, H. Rooney	NCSU		June 1986	UNC-WRRI-226	Stormwater Management in Urban
70032						Considerations for Using Herbicides for Aquatic Weed Control in Domestic
70033	Langeland, K. A.	NCSU		June 1986	UNC-WRRI-227	
70024	Kuenzler, Edward J.	UNC-CH		June 1986	UNC-WRRI-228	Nutrient Cycling and Productivity of a
70037	Christian, Robert R.	ECU		March 1986	UNC-WRRI-223	The Relationship Between River Flow and Microcystis Aeruginosa Blooms in
1985						
unknown number	Howells, David H.	UNC		1985	UNC-WRRI-003	Water resources research interests in the colleges and universities of North
unknown number	Moreau, David H.	UNC-CH		April 1985	UNC-WRRI-221	An Analysis of the Water Balance of B. Everett Jordan Lake Including
70036	Burby, Roymond J.	UNC-CH		December 1985	UNC-WRRI-222	Future Drinking Water: State and Local Policies for Future Drinking
1984						
70011	Moreau, David H.	UNC-CH		1984	UNC-WRRI-212	Financing Water Supply and
70022						Mercury in Peat and its Drainage Waters in Eastern North Carolina
70023	Evans, David W.	Duke		1984	UNC-WRRI-218	
unknown number	Barker, J. C.	NCSU		1984	UNC-WRRI-219	Evaluation of a Vegetative Filter for Dairy Wastewater Treatment in
50070						Hydrologic and Water Quality Impacts of Peat Mining in North Carolina
50071	Gregory, J. D.	NCSU		August 1984	UNC-WRRI-214	
70012						Hydrilla Management in North

70013	Hodson, Ronald G.	NCSU		August 1984	UNC-WRRI-217	Carolina
unknown number	Snyder, Thomas	UNC-CH		August 1984	UNC-WRRI-220	Financing Water Projects in North Carolina: The State Role
70018	Turner, Alvis G.	UNC-CH		January 1984	UNC-WRRI-213	A Survey of Potential Population Exposures to Chemical Contaminants
B-144-NC	Albert, Daniel B.	UNC-CH		March 1984	UNC-WRRI-215	Benthic Nutrient Cycling in the
B-145-NC	Mitsch, Barry F.	UNC-CH		March 1984	UNC-WRRI-216	A Study of Radium-226 and Radon-222 Concentrations in Ground Water Near a Phosphate Mining and
1983						
unknown number	Menetrez, Marc Y.	NCSU		1983	UNC-WRRI-208	Natural Radioactivity in North Carolina Ground Water Supplies
A-122-NC	Paerl, Hans W.	UNC-CH		1983	UNC-WRRI-188	Factors regulating nuisance blue-green algal bloom potentials in the
B-132-NC	Reed, James P.	NCSU		1983	UNC-WRRI-190	The effects of low level turbidity on fish
A-124-NC	Lauritsen, Diane D.	NCSU		1983	UNC-WRRI-192	The freshwater Asian clam <i>Corbicula fluminea</i> as a factor affecting nutrient
A-125-NC	Khorram, Siamak	NCSU		1983	UNC-WRRI-193	The use of Landsat MSS digital data in water quality mapping of the Neuse
A-128-NC	Benninger, Larry K.	UNC-CH		1983	UNC-WRRI-194	Sources and fates of sedimentary organic matter in the White Oak and
B-116-NC	Malcom, H. Rooney	NCSU		1983	UNC-WRRI-199	Urban stormwater management needs
A-112-NC	Shuman, Mark S.	UNC-CH		1983	UNC-WRRI-200	Metal loading of the B. Everett Jordan
unknown number	Howells, David H.	UNC		1983	UNC-WRRI-003	Water resources research interests in the colleges and universities of North
84-07-50113	Joyce, T. W.	NCSU		August 1983	UNC-WRRI-202	Effluent Decolorization Technologies
50096	Stanley, Donald W.	ECU		August 1983	UNC-WRRI-204	Nitrogen Cycling and Phytoplankton
B-127-NC	Craig, Nancy J.	UNC-CH		August 1983	UNC-WRRI-205	Land Use, Nutrient Yield, and
A-127-NC	Dietrich, Andrea M.	UNC-CH		August 1983	UNC-WRRI-206	Specific Identification of Organic Pollutants in Haw River Water Using
A-113-NC	Wilson, Michael P.	TX A&M		February 1983	UNC-WRRI-189	Erosion of banks along Piedmont urban streams
50091	Eder, B. K.	NCSU		January 1983	UNC-WRRI-185	Variations in monthly precipitation
B-140-NC	Royer, Jack P.	Duke		June 1983	UNC-WRRI-196	State options for nonstructural flood
70019	Huishigh, Donald	NCSU		June 1983	UNC-WRRI-198	Present and potential impacts of toxic substances on municipal ground water
B-143-NC	Matson, Ernest A.	ECU		May 1983	UNC-WRRI-191	Biogeochemistry of the sediments of
50107	Imhoff, Martin W.	NCSU		May 1983	UNC-WRRI-195	Precipitation probabilities based on
A-123-NC	Campbell, J. C.	NCSU		May 1983	UNC-WRRI-197	Enzymatic pretreatment of pulp mill
	Wiser, Edward H.	NCSU		September 1983	UNC-WRRI-201	Hydrologic Information Storage and Retrieval System (HISARS) User's

B-135-NC	Edgmon, Terry D.	NCSU		September 1983	UNC-WRRI-203	Water Resources Management in a Federal System: A Comparative
A-133-NC	Ayres, J. Lewis	NCSU		September 1983	UNC-WRRI-207	Abatement of Heavy Metals in Industrial Effluents by a Catalized,
B-129-NC	Jacobs, T. C.	NCSU		September 1983	UNC-WRRI-209	Nitrate Loss From Agricultural Drainage Waters: Implications for
A-130-NC	Medina Jr., Miguel A.	Duke		September 1983	UNC-WRRI-210	An Integrated Methodology for Instream Flow Strategies
A-110-NC	Humenik, Frank J.	NCSU		September 1983	UNC-WRRI-211	Investigation of Strategies for Reducing Agricultural Nonpoint
1982						
B-122-NC	Overcash, Michael R.	NCSU		1982	UNC-WRRI-171	Behavior of organic priority pollutants in the terrestrial system: Di-n-butyl
B-127-NC (B)	Paerl, Hans W.	UNC-CH		1982	UNC-WRRI-176	Environmental factors promoting and regulating N2 fixing blue-green algal
A-119-NC	Nunnally, Nelson R.	UNC-C		1982	UNC-WRRI-180	A rapid, low-cost technique for
B-120-NC	Wright, Joan	NCSU		1982	UNC-WRRI-181	Evaluation of public participation in the
B-126-NC	Singer, Philip C.	UNC-CH		April 1982	UNC-WRRI-179	Trihalomethane formation in water
A-120-NC	Welby, Charles W.	NCSU		August 1982	UNC-WRRI-184	Use of geologic and water yield data from groundwater-based community
A-117-NC	Medina Jr., Miguel A.	Duke		December 1982	UNC-WRRI-183	Hydrologic and water quality modeling for instream flow strategies
B-127-NC (C)	Witherspoon, A. M. (Gus)	NCSU		December 1982	UNC-WRRI-187	Nutrient and multi-species criteria standard for the Chowan River, North
B-121-NC	Smith, Frank J.	NCSU		July 1982	UNC-WRRI-177	Water resource management and
A-089-NC	Singer, Philip C.	UNC-CH		July 1982	UNC-WRRI-182	Treatability analysis of digester supernatant and other return flows to
A-104-NC	Tobiason, John E.			March 1982	UNC-WRRI-172	Filtration performance in water and
unknown number		UNC		March 1982	UNC-WRRI-178	Albemarle Sound-Trends and Management Needs (Proceedings for
B-127-NC (A)	Kuenzler, Edward J.	UNC-CH		September 1982	UNC-WRRI-186	Phytoplankton uptake and sediment release of nitrogen and phosphorus in
1981						
A-105-NC	Gayle, Godfrey A.	NC-A&T		1981	UNC-WRRI-160	Factors to be considered in disposing domestic waste on problem sites and
A-114-NC	Edgmon, Terry D.	NCSU		1981	UNC-WRRI-166	Municipal intergovernmental relations and water resources decision making
A-090-NC	Sobsey, Mark D.	UNC-CH		1981	UNC-WRRI-168	Survival and fate of enteric viruses in
A-109-NC	Speitel Jr., Gerald	UNC-CH		1981	UNC-WRRI-169	Application of advanced technology
A-084-NC	Pfaender, Frederic K.	UNC-CH		1981	UNC-WRRI-174	Development of immunoenzymatic methods for detection and quantitation

B-127-NC (A)	Sauer, Mary M.	UNC-CH		April 1981	UNC-WRRI-161	Algal assay studies of the Chowan River, North Carolina
A-115-NC	Welby, Charles W.	NCSU		April 1981	UNC-WRRI-164	A technique for evaluating the
A-093-NC	Wiser, Edward H.	NCSU		December 1981	UNC-WRRI-170	Simulated streamflow data for North Carolina
A-095-NC	Weiss, Charles M.	UNC-CH		January 1981	UNC-WRRI-162	Stream monitoring for heavy metals by
50058	Berkowitz, Steven	WCU		June 1981	UNC-WRRI-163	On-site wastewater treatment
B-114-NC	Brinson, Mark M.	ECU		May 1981	UNC-WRRI-167	Nitrogen cycling and assimilative capacity of nitrogen and phosphorus
A-116-NC	Belt, P. B.	NCSU		November 1981	UNC-WRRI-175	Environmental aspects of some alternative pulp bleaching techniques
A-098-NC	Drynan, Ross G.	NCSU		September 1981	UNC-WRRI-173	Economic and technical evaluations of swine manure management systems
1980						
B-112-NC	Esch, Gerald W.	Wake		1980	UNC-WRRI-153	The ecology of Aeromonas hydrophilia
B-093-NC	Malcom, H. Rooney	NCSU		1980	UNC-WRRI-156	A study of detention in urban
A-082-NC	Sherwani, Jabbar	UNC-CH		1980	UNC-WRRI-158	Public policy for the management of
B-102-NC	Skaggs, R. W.	NCSU		1980	UNC-WRRI-159	Effect of agricultural land development
B-092-NC	Lauria, Donald T.	UNC-CH		1980	UNC-WRRI-146	Nutrient models for engineering
B-094-NC	Maki, T. Ewald	NCSU		1980	UNC-WRRI-147	Effects of stream channelization on
B-100-NC	Overcash, Michael R.	NCSU		April 1980	UNC-WRRI-142	Characterization and land application of seafood processing wastes
50020	Nierstedt, Raymond J.	UNC-CH		December 1980	UNC-WRRI-165	Wastewater management in coastal North Carolina
B-103-NC	Hugschmidt, Maynard M.	UNC-CH		February 1980	UNC-WRRI-143	State water resource planning and policy in North Carolina
A-102-NC	Kuenzler, Edward J.	UNC-CH		January 1980	UNC-WRRI-154	Phosphorus dynamics in a North
B-100-NC	Pal, Dhiraj	NCSU		July 1980	UNC-WRRI-141	Application of land treatment
A-096-NC	Godschalk, David	UNC-CH		May 1980	UNC-WRRI-155	Public participation in statewide 208
B-110-NC	Kuenzler, Edward J.	UNC-CH		May 1980	UNC-WRRI-157	Distributions and budgets of carbon, phosphorus, iron and manganese in a
B-104-NC	Reist, Parker C.	UNC-CH		November 1980	UNC-WRRI-152	Wastewater spray transport in land application
1979						
unknown number	Hargett, David	NCSU		1979	UNC-WRRI-135	Benefits and cost of seasonal effluent permits in North Carolina
A-103-NC	Mauch Knopf, Bruce J.	UNC-CH		1979	UNC-WRRI-151	Economic and environmental impacts of rural water systems in NC
A-087-NC	Schnare, David W.	UNC-CH		1979	UNC-WRRI-145	Methods for the assessment of
A-091-NC	Kirby-Smith, William W.	Duke		1979	UNC-WRRI-148	The water quality ramifications in estuaries of converting forest to

unknown number	Hargett, David	NCSU		1979	UNC-WRRI-149	Guidelines for socioeconomic impact analyses of environmental regulations
A-092-NC	Burby, Raymond J.	UNC-CH		1979	UNC-WRRI-150	Water resource consequences of
B-091-NC	Witherspoon, A. M. (Gus)	NCSU		April 1979	UNC-WRRI-129	Phytoplankton response to water quality in the Chowan River Estuary
B-081-NC	Amein, Michael	NCSU		April 1979	UNC-WRRI-130	Water quality management model for
50019	Moreau, David H.	UNC-CH		August 1979	UNC-WRRI-138	An evaluation of small scale dispersed
B-109-NC	Campbell, William A.	UNC-CH		February 1979	UNC-WRRI-137	Legal aspects of floodplain management
	Nunnally, Nelson R.	UNC-C		July 1979	UNC-WRRI-144	Use of fluvial processes to minimize
B-100-NC	Pal, Dhiraj	NCSU		June 1979	UNC-WRRI-140	Assessment of land treatment
B-092-NC	Kuenzler, Edward J.	UNC-CH		May 1979	UNC-WRRI-139	Nutrient kinetics of phytoplankton in
1978						
A-086-NC	Skaggs, R. W.	NCSU		1978	UNC-WRRI-134	A water management model for
A-083-NC	Gilliam, J. W.	NCSU		1978	UNC-WRRI-128	An evaluation of the potential for using drainage control to reduce nitrate loss
unknown number	Howells, David H.	UNC		1978	UNC-WRRI-133	Legal and administrative aspects of water allocation and management in
unknown number	Galloway Jr., G. E.	USMA		December 1978	UNC-WRRI-136	Assessing man's impact on wetlands
A-088-NC	Davis, Graham J.	ECU		January 1978	UNC-WRRI-131	Organic carbon and deoxygenation in
unknown number	Grigg, Neil S.	UNC		July 1978	UNC-WRRI-132	Transfer of water resources knowledge: An assessment
1977						
A-070-NC	Shuman, Mark S.	UNC-CH		1977	UNC-WRRI-124	Metals in the water sediments and
unknown number	Stewart, James M.	UNC		May 1977	UNC-WRRI-125	Proceedings, N.C. 208 Problems Assessment Workshop
A-073-NC	Pfaender, Frederic K.	UNC-CH		October 1977	UNC-WRRI-126	Monitoring heavy metals and pesticides in the Cape Fear River
B-084-NC	Kuenzler, Edward J.	UNC-CH		October 1977	UNC-WRRI-127	Water quality in North Carolina coastal
1976						
B-074-NC	Shuman, Mark S.	UNC-CH		1976	UNC-WRRI-113	Sensors for continuous monitoring of
B-068-NC	Sowell, Robert S.	NCSU		1976	UNC-WRRI-114	Agricultural water demands in North
A-076-NC	Welby, Charles W.	NCSU		1976	UNC-WRRI-115	Use of multispectral photography in water resources planning and
B-077-NC	Stanley, Donald W.	NCSU		December 1976	UNC-WRRI-121	Recycling of nitrogen in the Chowan River
B-086-NC	Elfers, Karl	UNC-CH		December 1976	UNC-WRRI-122	Open space and urban water management, Phase II, North Carolina

B-071-NC	Whaling, Patrick J.	Duke		December 1976	UNC-WRRI-123	The distribution of toxic metals in marine ecosystems as a result of
A-078-NC	Weiss, Charles M.	UNC-CH		July 1976	UNC-WRRI-119	The trophic state of North Carolina
B-067-NC	Overcash, Michael R.	NCSU		June 1976	UNC-WRRI-117	Overland flow poultry waste system
A-071-NC	Carlile, B. L.	NCSU		June 1976	UNC-WRRI-118	Evaluation of soil systems for land
A-077-NC	Davis, Graham J.	ECU		March 1976	UNC-WRRI-112	The submersed macrophytes of the
A-075-NC	Francisco, Donald	UNC-CH		May 1976	UNC-WRRI-111	Availability of aluminum phosphate
B-064-NC	Wiser, Edward H.	NCSU		May 1976	UNC-WRRI-116	Regional simulation of streamflow
A-079-NC	Little, Linda W.	UNC-CH		May 1976	UNC-WRRI-099	Characterization and treatment of
B-079-NC	Brinson, Mark M.	ECU		September 1976	UNC-WRRI-120	Primary productivity & mineral cycling in aquatic macrophyte communities of
1975						
B-049-NC	Pardue, Garland B.	NCSU		1975	UNC-WRRI-105	Ecological studies of two swamp watersheds in northeastern N.C.: A
A-080-NC	O'Rear Jr., Charles W.	ECU		August 1975	UNC-WRRI-108	Effects of stream channelization on the modification of nutrient and metal
B-073-NC	Elfers, Karl	UNC-CH		January 1975	UNC-WRRI-104	Open space and urban water
B-054-NC	Airan, Lalita D.	NCSU		July 1975	UNC-WRRI-109	A bargaining approach for least-cost
A-065-NC	Sherwani, Jabbar	UNC-CH		June 1975	UNC-WRRI-107	Strategies for water quality monitoring
B-075-NC	Davis, Adam C.	NCSU		March 1975	UNC-WRRI-106	Alternative information and interaction approaches to public participation in
B-060-NC	Lauria, Donald T.	UNC-CH		November 1975	UNC-WRRI-110	Models for municipal and industrial water demand forecasting in N.C.
1974						
unknown number	Hawley, Arthur J.	UNC-CH		1974	UNC-WRRI-087	The present and future status of Eastern North Carolina wetlands
B-013-NC	Hammon, Grodon A.	NCSU		1974	UNC-WRRI-090	Capacity of water-based recreation systems. Part I, State of the art: A literature review. Part II, A systems
B-013-NC	Cordell, Harold K.	NCSU		1974	UNC-WRRI-090	Capacity of water-based recreation systems. Part III, Methods for
unknown number	Howells, David H.	UNC		1974	UNC-WRRI-002	Water resources problems and research needs of North Carolina: A
unknown number	Howells, David H.	UNC		1974	UNC-WRRI-003	Water resources research interests in the colleges and universities of North
B-057-NC	LaSalle, Rachard N.	NCSU		April 1974	UNC-WRRI-092	Effects of salt marsh impoundments
A-060-NC	Skaggs, R. W.	NCSU		August 1974	UNC-WRRI-103	An evaluation of the use of waste heat
B-039-NC	Gambrell, R. P.	NCSU		August 1974	UNC-WRRI-093	The fate of fertilizer nutrients as related to water quality in the North Carolina coastal plain
B-056-NC						
B-063-NC						

B-041-NC						
B-052-NC	Hobbie, John E.	NCSU		August 1974	UNC-WRRI-100	Nutrients and phytoplankton in the Pamlico Estuary, 1971-73
B-057-NC	Dukes, James C.	NCSU		December 1974	UNC-WRRI-102	Additional studies of the effects of salt marsh impoundments on mosquito
A-074-NC	O'Melia, Charles R.	UNC-CH		December 1974	UNC-WRRI-097	Phosphorus cycling in lakes
B-052-NC	Harrison, William G.	NCSU		January 1974	UNC-WRRI-086	Nitrogen budget of a North Carolina
A-063-NC	Hufschmidt, Maynard M.	UNC-CH		June 1974	UNC-WRRI-094	Environmental statements and water resource planning in North Carolina
	Stewart, James M.	UNC		June 1974	UNC-WRRI-095	Proceedings, Conference on Public Participation in Water Resources
A-006-NC	Lamb, James C.	UNC-CH		June 1974	UNC-WRRI-096	Methods for transferring water
B-007-NC	Weiss, Charles M.	UNC-CH		October 1974	UNC-WRRI-101	Long term trends in water quality, Haw
A-072-NC	Young, C. Edwin	NCSU		October 1974	UNC-WRRI-098	Economic analysis of land treatment
1973						
unknown number	Stewart, James M.	UNC		1973	UNC-WRRI-091	Proceedings, Workshop on Land Disposal of Wastewaters
B-005-NC	Sherwani, Jabbar	UNC-CH		April 1973	UNC-WRRI-075	Computer simulation of ground water
A-061-NC	Saucier, W. J.	NCSU		August 1973	UNC-WRRI-084	Precipitation variability over North
A-052-NC	Hanck, Kenneth W.	NCSU		December 1973	UNC-WRRI-085	Determination of the complexing capacity of natural waters
A-049-NC	Davis, Adam C.	NCSU		December 1973	UNC-WRRI-088	Public participation in water pollution control policy and decision making
A-062-NC	Wuenschel, James E.	Duke		December 1973	UNC-WRRI-089	Landscape compartmentalization: An ecological approach to land use
B-026-NC	Kuenzler, Edward J.	UNC-CH		February 1973	UNC-WRRI-081	Effects of mosquito control ditching on estuarine ecosystems
B-025-NC						
B-047-NC						
B-061-NC	Burby, Raymond J.	UNC-CH		June 1973	UNC-WRRI-079	The effects of authorization for water impoundments on shoreland transition
B-027-NC	LaSalle, Rachard N.	NCSU		June 1973	UNC-WRRI-082	The effects of ditching on the mosquito populations in some
B-021-NC					UNC-WRRI-077	Regional water resources planning for
B-045-NC	Moreau, David H.	UNC-CH		March 1973	UNC-WRRI-078	Regional water resources planning for
A-057-NC	Sneed, Ronald E.	NCSU		September 1973	UNC-WRRI-083	Agricultural water demands in N.C.: Phases I & II
1972						
A-031-NC	Gilliam, J. W.	NCSU		1972	UNC-WRRI-055	Loss of fertilizer nutrients from soils to
unknown number	Stewart, James M.	UNC		1972	UNC-WRRI-063	Proceedings, Workshop on Sediment Control
B-010-NC	Maki, T. E.	NCSU		1972	UNC-WRRI-071	Effects of land use on municipal

unknown number	Howells, David H.	UNC		1972	UNC-WRRI-003	Water resources research interests in the colleges and universities of North
unknown number	Howells, David H.	UNC		1972	UNC-WRRI-004	Inventory of active water resources research projects in North Carolina
A-040-NC	Sheets, T. J.	NCSU		April 1972	UNC-WRRI-060	Contamination of surface and ground
B-006-NC	Kriz, George J.	NCSU		April 1972	UNC-WRRI-064	Analog modeling to determine the fresh water availability on the Outer
B-032-NC	Elliott, Ralph D.	Clem		August 1972	UNC-WRRI-070	The effects of sewer surcharges on the level of industrial wastes and the
A-054-NC	Brown, James C.	UNC-CH		December 1972	UNC-WRRI-074	An investigation of curricula, materials and methodology for training
B-020-NC	Hobbie, John E.	NCSU		December 1972	UNC-WRRI-076	Nutrients in the Pamlico Estuary, N.C., 1969-1971
A-058-NC	Caravan, Roy E.	NCSU		December 1972	UNC-WRRI-080	Water and wastewater management in dairy processing
A-004-NC	Heath Jr., Milton S.	UNC-CH		January 1972	UNC-WRRI-042	A comparison of state water pollution
A-048-NC	Humenik, F. J.	NCSU		June 1972	UNC-WRRI-061	Animal waste characterization and
A-045-NC	Wiser, Edward H.	NCSU		June 1972	UNC-WRRI-066	Hydrologic Information Storage and
A-041-NC	Copeland, B. J.	NCSU		June 1972	UNC-WRRI-068	Estuarine ecosystems and high
A-061-NC	Saucier, W. J.	NCSU		June 1972	UNC-WRRI-069	Some features in the diurnal variations
B-004-NC	Copeland, B. J.	NCSU		March 1972	UNC-WRRI-065	Phosphorus and eutrophication in the
A-046-NC	Stewart, James M.	NCSU		May 1972	UNC-WRRI-058	Perception of water resources
A-051-NC	Wilkinson, Richard R.	NCSU		May 1972	UNC-WRRI-062	Integration of multiple objectives in urbanizing watersheds through
A-033-NC	Skaggs, R. Wayne	NCSU		May 1972	UNC-WRRI-067	Water table control and subsurface
A-056-NC	Weiss, Charles M.	UNC-CH		November 1972	UNC-WRRI-073	Further characteristics of the water quality of the New Hope and Lower
A-055-NC	Higgins, John M.	UNC-CH		September 1972	UNC-WRRI-072	Regional development of public water supply systems
1971						
unknown number	Howells, David H.	UNC		1971	UNC-WRRI-003	Water resources research interests in the colleges and universities of North
unknown number	Howells, David H.	UNC		1971	UNC-WRRI-004	Inventory of active water resources research projects in North Carolina
A-043-NC	Moreau, David H.	UNC-CH		1971	UNC-WRRI-050	The synthesis of flows in North
A-050-NC	Ito, Takeru	ECU		August 1971	UNC-WRRI-054	Chromatographic concentration of
unknown number		UNC		August 1971	UNC-WRRI-057	Proceedings, Workshop on Toxic Metals in Water
B-007-NC	Hall, Charles A. S.	UNC-CH		February 1971	UNC-WRRI-049	Migration and metabolism in a stream ecosystem
unknown number	Heath Jr., Milton S.	UNC-CH		January 1971	UNC-WRRI-053	Review of small watershed and drainage laws in North Carolina

unknown number	Bridges, David W.	NCSU		January 1971	UNC-WRRI-043	The critical thermal maximum of juvenile Spot. <i>Leisotomus xanthurus</i> ,
A-044-NC	Bellis, Vincent J.	ECU		January 1971	UNC-WRRI-046	A computer based floristic analysis of
A-046-NC	Stewart, James M.	NCSU		January 1971	UNC-WRRI-047	Perception of water resource information sources and educational
B-007-NC	Weiss, Charles M.	UNC-CH		January 1971	UNC-WRRI-048	Water quality characteristics of the New Hope and Lower Haw Rivers,
B-012-NC	Burby, Raymond J.	UNC-CH		March 1971	UNC-WRRI-051	Household decision processes in the
A-010-NC	Sherwani, Jabbar	UNC-CH		March 1971	UNC-WRRI-026	The effect of different low-flow
B-012-NC	Burby, Raymond J.	UNC-CH		May 1971	UNC-WRRI-052	A model for simulating residential
unknown number	Carawan, Roy E.	NCSU		September 1971	UNC-WRRI-059	Proceedings, Workshop on Poultry Processing Plant Water Utilization and
B-004-NC	Hobbie, John E.	NCSU		Septemer 1971	UNC-WRRI-056	Phytoplankton species and populations in the Pamlico River
1970						
unknown number	Howells, David H.	UNC		1970	UNC-WRRI-003	Water resources research interests in the colleges and universities of North
unknown number	Howells, David H.	UNC		1970	UNC-WRRI-004	Inventory of active water resources research projects in North Carolina
unknown number	Howells, David H.	UNC		1970	UNC-WRRI-036	Proceedings, Workshop on Mosquito Control in North Carolina
unknown number	Howells, David H.	UNC		1970	UNC-WRRI-045	Proceedings, Workshop on Stream Channelization and Wetland Drainage
B-004-NC	Hobbie, John E.	NCSU		August 1970	UNC-WRRI-039	Hydrography of the Pamlico River
B-012-NC	Burby, Raymond J.	UNC-CH		December 1970	UNC-WRRI-044	Factors influencing the residential utilization of reservoir shorelands in
A-004-NC	Gramley, Dale I.	UNC-CH		January 1970	UNC-WRRI-021	A study of water pollution control in the
A-021-NC	Sheets, T. J.	NCSU		January 1970	UNC-WRRI-019	Water monitoring system for
A-032-NC	Phillips, R. B.	NCSU		January 1970	UNC-WRRI-025	Abatement of pollution from pulp and paper wastes by modification and
B-012-NC	Burby, Raymond J.	UNC-CH		July 1970	UNC-WRRI-038	Public policy and shoreline landowner
B-003-NC	Weiss, Charles M.	UNC-CH		June 1970	UNC-WRRI-034	The relative significance of
A-036-NC	Rogers, Charles N.	NCSU		June 1970	UNC-WRRI-035	Survey of water utilization and waste control practices in the Southern pulp
A-034-NC	Bryan, Edward N.	Duke		June 1970	UNC-WRRI-037	Quality of stormwater drainage for
B-004-NC	Hobbie, John E.	NCSU		March 1970	UNC-WRRI-033	Phosphate concentration in the
A-047-NC	Ethridge, Don E.	UM at Rolla		November 1970	UNC-WRRI-041	An economic study of the effect of municipal sewer surcharges on
B-004-NC	Tenore, Kenneth R.	NCSU		September 1970	UNC-WRRI-040	The macrobenthos of the Pamlico Estuary
1969						

unknown number	Howells, David H.	UNC		1969	UNC-WRRI-003	Water resources research interests in the senior colleges and universities of
unknown number	Howells, David H.	UNC		1969	UNC-WRRI-004	Inventory of active water resources research projects in North Carolina
A-020-NC	Woods, William J.	UNC-CH		1969	UNC-WRRI-013	Current study in the Neuse River and
A-003-NC	Stroud, Linda M.	NCSU		1969	UNC-WRRI-014	Color-infrared aerial photographic interpretation and net primary
A-024-NC	Meadows, John C.	ISU		1969	UNC-WRRI-016	Simulation of regional economic impacts of water resources
unknown number	Livengood, Charles D.	NCSU		1969	UNC-WRRI-018	Textile wastes: Bibliography
A-030-NC	Moore, David J.	NCSU		1969	UNC-WRRI-020	A field and laboratory study of fluoride
A-022-NC	O'Melia, Charles R.	UNC-CH		1969	UNC-WRRI-023	Oxygenation of iron (II) in continuous
unknown number	Howells, David H.	UNC		1969	UNC-WRRI-027	Proceedings, Workshop on Water Resource Problems and Research
unknown number	Howells, David H.	UNC		1969	UNC-WRRI-028	Proceedings, Workshop on Flood Plain Management
unknown number	Howells, David H.	UNC		1969	UNC-WRRI-030	Proceedings, Workshop on Water and Sewer Charges as Related to Water
A-039-NC	Bohannon Jr. James, R.	NCSU		1969	UNC-WRRI-031	Neutron activation analysis in water resources management in North
	Gill, Douglas	UNC-CH		December 1969	UNC-WRRI-032	The use of stream channels to deliver stored water: The possibility of
A-001-NC	Amein, Michael	NCSU		January 1969	UNC-WRRI-017	Streamflow routing: With application to
A-008-NC	Lutz, J. Fulton	NCSU		June 1969	UNC-WRRI-024	Movement and storage of water in
B-012-NC	Burby, Raymond J.	UNC-CH		November 1969	UNC-WRRI-029	The role of reservoir owner policies in guiding reservoir land development
1968						
unknown number	Howells, David H.	UNC		1968	UNC-WRRI-003	Water resources research interests in the senior colleges and universities of
unknown number	Howells, David H.	UNC		1968	UNC-WRRI-004	Inventory of active water resources research projects in North Carolina
A-009-NC	Welby, Charles W.	NCSU		1968	UNC-WRRI-008	Solubility equilibria involving metal
A-007-NC	Kashef, Abdel-Aziz	NCSU		1968	UNC-WRRI-011	Diffusion and dispersion in porous
A-025-NC	Kelly, Robert A.	UNC-CH		1968	UNC-WRRI-012	Pigment indices and environment
unknown number	Howells, David H.	UNC		1968	UNC-WRRI-015	Proceedings, Symposium on Better Water and Sewer Services for Small
A-018-NC	McJunkin, Frederick E.	UNC-CH		1968	UNC-WRRI-022	Water resources of North Carolina: An inventory of information and data
A-023-NC	Andrus, Newton W.	UNC-CH		April 1968	UNC-WRRI-010	Lake oriented subdivisions in North Carolina: Decision factors and policy

1967						
A-001-NC	Stott, Charles C.	NCSU		1967	UNC-WRRI-001	Criteria for evaluating the quality of
	Howells, David H.	UNC		1967	UNC-WRRI-002	Water resources problems and
	Howells, David H.	UNC		1967	UNC-WRRI-003	Water resources research interests in
	Howells, David H.	UNC		1967	UNC-WRRI-004	Inventory of active water resources
	Howells, David H.	UNC		1967	UNC-WRRI-005	Proceedings of symposium on
A-014-NC	Kuenzler, Edward J.	UNC-CH		1967	UNC-WRRI-006	Current studies in Pamlico River and
A-005-NC	Hentz Jr., Forrest	NCSU		1967	UNC-WRRI-007	Solubility equilibria involving metal
A-023-NC	Burby, Raymond J.	UNC-CH		November 1967	UNC-WRRI-009	Lake oriented subdivisions in North Carolina: Decision factors and policy
1966						
unknown number	Howells, David H.	UNC		1966	UNC-WRRI-003	Water resources research interests in the senior colleges and universities of
A-016-NC	Jennings, Harley	NCSU	Recovery of Warp Sizes	June 1966	WRRI-SRS-1	Recovery of Warp Sizes
A-015-NC	Hobbie, John E.	NCSU	Plankton Heterotrophy in a North Carolina Estuary	November 1966	WRRI-SRS-2	Plankton Heterotrophy in a North Carolina Estuary