

December 22, 2006

Ms. Coleen Sullins, Deputy Director
North Carolina Department of Environment and Natural Resources
Division of Water Quality
512 North Salisbury Street
Raleigh, NC 27604

Subject: Response to Guidance Letters: July 27, 2006 and October 2, 2006
Western Wake Regional Wastewater Management Facilities Project

Dear Ms. Sullins:

The purpose of this letter is to provide the information requested by NC DENR in the letter of October 2, 2006. That letter requested three items: (a) additional environmental justice analyses according to a specified methodology, (b) 20-year present-worth cost estimates, and (c) the proposed public participation plan for engaging the affected community to discuss the proposed Project. These three additional information and data items are presented in this letter. Further, as we have discussed with you, we will continue to prepare additional WRF site evaluation data related to impacts of the entire Western Wake Regional Wastewater Management Facilities Project that are necessary to finalize the site selection discussion for the Draft EIS.

Environmental Justice Analysis

Table 1 presents the environmental justice (EJ) technical factors calculated as prescribed by NC DENR staff in the guidance letters of July 27, 2006 and October 2, 2006. As further prescribed by NC DENR, the EJ technical factor scores have been combined with physical feature scores to generate a composite score for each of the 13 WRF sites. The results of this calculation are presented in Table 2. Items 1 through 8 in Table 2 are reprinted from Table 5-6 of PER TM 05 of the preliminary Draft EIS (April 2006).

The information in Tables 1 and 2 is presented as prescribed by NC DENR, and as we have already discussed with you, the Partners believe that these tables are not an appropriate format nor do they provide sufficient information to fully evaluate potential WRF sites. Given the nature and source of the different data sets, the Partners do not believe that it is appropriate to combine physical feature scores with EJ demographic scores to generate a composite score. Physical features relate to size, location and natural conditions (slope, wetlands, streams, etc.), while EJ demographics relate to economic, societal and cultural conditions. In addition, the methodology prescribed by NC DENR for scoring the EJ technical factor assumes that the

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resultant score is a negative factor without consideration of public input from the affected community. As discussed with NC DENR staff on December 4, 2006, the Partners are implementing a focused public participation program for the affected community to assess which, if any, impacts are of concern and to determine if mitigation measures can be implemented to address the concerns. Finally, and of critical importance, the site selection process should also take into account the total project impacts (financial and environmental) associated with the pump stations and pipelines required to serve each potential site.

20-Year Present-Worth Cost Estimates

At our meeting on October 5, 2006, NC DENR concurred with preparation of cost estimates for all 13 sites. To prepare 20-year present worth cost estimates, the Partners identified preliminary alignment routes and conducted a hydraulic analysis for the raw wastewater pipelines and treated effluent pipelines required to serve each of the potential WRF sites. Raw wastewater pipeline alignments were developed based on raw wastewater entering the regional wastewater system at the West Cary Pump Station and treated effluent being discharged at the main stem of the Cape Fear River downstream of Buckhorn Dam. For sites 20, 21, 22, 25, 26 and 28, two alternative effluent transmission routes were identified: one routed around the north and western perimeter of Harris Lake, and one routed around the south and eastern perimeter of Harris Lake. The preliminary hydraulic profile analyses were based on topographic data along the pipeline routes, and served as the basis for sizing pump stations and pipelines and estimating power consumption,

Once facility sizes and power consumption requirements were determined, construction costs, annual operation and maintenance (O&M) costs and salvage values were estimated and then converted to 20-year present worth values. The summary of construction costs, O&M costs, salvage values and 20-year present worth costs for each of the 13 sites is presented in Table 3.

Public Participation Plan

Appendix I of the April 2006 edition of the preliminary draft EIS documents the various public participation forums that individuals and groups have used during the course of the EIS process to provide comments for the proposed Project. However, most of the residents located within the ½ mile radius of the current proposed WRF site have not participated in these forums. The proposed plan is directed at getting input from residents located within the ½ mile radius, as well as those within the larger 1-mile radius, of the current proposed WRF site. As discussed in a conference call with CG&L staff on December 7, 2006, the public participation plan will be conducted to receive input from residents around all of three sites with potential EJ issues.

The Partners have retained the services of Planners for Environmental Quality (PEQ) to develop a supplemental public participation program. Ms. Inga Kennedy, the owner and president of PEQ, will direct the planning, development and implementation of the public participation program. The recommended public participation program, along with the qualifications and

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experience of Ms. Kennedy, is included as Attachment A to this letter.

WRF Site Selection Process

As discussed with NC DENR staff on December 4 and December 7, 2006, the individual components (pump stations, pipelines, treatment facilities, etc.) of the proposed Project are functionally interdependent – thereby constituting a single and connected action, so the evaluation of potential WRF sites must consider the costs, environmental impacts, and other factors for the entire Project. Therefore, as we have discussed with you, we will continue working as quickly as possible to assemble the following data for each of 13 WRF sites:

- 1) Physical features and environmental impacts associated with each of the individual WRF sites (supporting data for Table 2)
- 2) Environmental justice demographics (Table 1, along with other demographic data) and public input (ongoing)
- 3) 20-year present-worth cost estimates (Table 3)
- 4) Environmental impacts for the total project including the WRF site, pump stations, and pipelines (ongoing)
- 5) Ability to implement use of each site in a timely manner and other non-monetary considerations

We look forward to continuing to work with you to develop information needed to finalize the Draft EIS so that it is suitable for submittal to the State Clearinghouse. If you have any questions, or require additional information, please contact me at 919-469-4092 or Leila Goodwin at 919-462-3846.

Sincerely,

Robert K. (Kim) Fisher, P.E.
Project Director, Western Wake Partners

Cc: Tim Donnelly, Town of Apex
Leila Goodwin, Town of Cary
Stephanie Sudano, Town of Holly Springs
Tim Gauss, Town of Morrisville
Daniel M. Blaisdell, Construction Grants & Loans
Western Wake Consultants

TABLE 1
Environmental Justice Demographic Comparisons
Western Wake Regional Wastewater Management Facilities

WRF Site	0.5-Mile Radius Analysis		1.0-Mile Radius Analysis		Score to be Used in Evaluation Table ⁽²⁾
	Estimated Minority Population / Estimated Total Population ⁽¹⁾	Percent Minority	Estimated Minority Population / Estimated Total Population ⁽¹⁾	Percent Minority	
Site 3	16 / 152	11%	61 / 595	10%	1
Site 6	3 / 66	5%	10 / 257	4%	1
Site 9	76 / 162	47%	267 / 1,015	26%	1
Site 11/12	1 / 36	3%	5 / 159	3%	1
Site 14	84 / 102	82%	157 / 297	53%	5
Site 16	15 / 92	16%	43 / 330	13%	1
Site 20	3 / 13	23%	39 / 74	53%	5
Site 21	3 / 12	25%	18 / 47	38%	1
Site 22	2 / 9	22%	7 / 30	23%	1
Site 25	3 / 21	14%	3 / 39	8%	1
Site 26	2 / 17	12%	14 / 64	22%	1
Site 28	8 / 12	67%	22 / 55	40%	5
Site 30	6 / 27	22%	48 / 147	33%	1

Environmental Justice Data for Other Areas

	Minority Population / Total Population	Percent Minority
Wake County	188,686 / 627,846	30.1%
Project Service Area ⁽¹⁾	30,120 / 149,748	20.1%

Notes:

- (1) Population within each area of interest is estimated from census block data assuming population density is the same throughout each census block
- (2) Sites were assigned a score of "1" if population within the 0.5-mile and 1.0-mile radius was less than 50% minority. Sites were assigned a score of "5" if population within the 0.5-mile or 1.0-mile radius was greater than 50% minority.

TABLE 2
Combined WRF Site Data - Physical Features and Social Demographics
Western Wake Regional Wastewater Management Facilities Project

EVALUATION CRITERIA	POTENTIAL WRF SITES												
	3	6	9	11 & 12	14	30	16	20	21	22	25	26	28
1 PROPERTY OWNERS	7.50	5.10	6.30	3.50	2.30	2.10	3.50	1.50	1.90	1.90	2.50	2.10	2.90
2 EXISTING LAND USE	7.50	6.36	3.79	4.07	1.50	1.50	3.50	1.50	1.50	1.79	1.50	1.79	2.64
3 ADJACENT LAND USE	5.00	3.25	3.10	2.29	3.75	1.00	3.00	1.51	1.64	1.73	2.00	2.04	2.31
4 COUNTY LOCATION	1.00	3.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
5 IMPACT ON PROJ. COSTS	1.86	1.22	1.21	0.81	1.28	2.50	1.57	1.76	1.24	1.12	0.50	2.50	1.04
6 ENVIRONMENTAL	5.00	3.56	1.34	2.27	3.61	4.39	1.78	1.00	1.00	3.45	1.00	2.70	1.00
7 OTHER/MISC.	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00
8 AREA RATIO	1.50	1.50	7.50	1.50	1.50	1.50	4.95	5.21	4.44	1.50	4.56	4.44	1.50
SUBTOTAL WEIGHTED SCORE	34.4	25.0	25.2	20.4	15.9	15.0	20.3	14.5	17.7	13.5	14.1	17.6	13.4
9 ENVIRONMENTAL JUSTICE ⁽²⁾	1.00	1.00	1.00	1.00	5.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	5.00
TOTAL WEIGHTED SCORE (with EJ)	35.4	26.0	26.2	21.4	20.9	16.0	21.3	19.5	18.7	14.5	15.1	18.6	18.4

Notes:

(1) The scores presented in this table include the scores for environmental justice demographic data (Item 9) and physical feature data (Items 1 through 8) for each of 13 possible WRF sites. The table has been prepared in its current form as directed by the North Carolina Department of Environment and Natural Resources (NC DENR). Given the nature and source of each data set, the Project Partners recommend that EJ demographic data and physical feature data be evaluated separately for each potential WRF site. Table 2 is presented in this TM in its current form as directed by NC DENR in the guidance letter of October 2, 2006.

(2) Sites were assigned a score of "1" if population within the 0.5-mile and 1.0-mile radius was less than 50% minority. Sites were assigned a score of "5" if population within the 0.5-mile or 1.0-mile radius was greater than 50% minority.

TABLE 3
Construction, O&M, and 20-Year Present Worth Cost Comparisons
Western Wake Regional Wastewater Management Facilities

WRF Site	Capital Costs ⁽¹⁾	O&M Costs ⁽¹⁾	Salvage Value ⁽¹⁾	20-Year PW Costs
Site 3	\$ 280,617,000	\$ 68,207,000	\$ (44,497,000)	\$ 304,327,000
Site 6	\$ 298,160,000	\$ 68,620,000	\$ (48,922,000)	\$ 317,858,000
Site 9	\$ 265,406,000	\$ 70,855,000	\$ (39,603,000)	\$ 296,658,000
Site 11/12	\$ 281,781,000	\$ 70,489,000	\$ (44,422,000)	\$ 307,848,000
Site 14	\$ 260,253,500	\$ 68,090,000	\$ (38,665,000)	\$ 289,678,500
Site 16	\$ 259,679,000	\$ 69,672,000	\$ (38,304,000)	\$ 291,047,000
Site 20 (NW Route)	\$ 278,723,000	\$ 70,294,000	\$ (42,592,000)	\$ 306,425,000
Site 20 (SE Route)	\$ 273,224,000	\$ 72,680,000	\$ (41,594,000)	\$ 304,310,000
Site 21 (NW Route)	\$ 278,285,000	\$ 69,487,000	\$ (42,614,000)	\$ 305,158,000
Site 21 (SE Route)	\$ 277,271,000	\$ 72,068,000	\$ (42,173,000)	\$ 307,166,000
Site 22 (NW Route)	\$ 284,179,000	\$ 71,335,000	\$ (44,023,000)	\$ 311,491,000
Site 22 (SE Route)	\$ 281,676,000	\$ 73,921,000	\$ (43,173,000)	\$ 312,424,000
Site 25 (NW Route)	\$ 272,265,000	\$ 69,806,000	\$ (41,382,000)	\$ 300,689,000
Site 25 (SE Route)	\$ 275,481,000	\$ 72,578,000	\$ (41,776,000)	\$ 306,283,000
Site 26 (NW Route)	\$ 276,556,000	\$ 71,383,000	\$ (41,984,000)	\$ 305,955,000
Site 26 (SE Route)	\$ 278,671,000	\$ 74,040,000	\$ (42,294,000)	\$ 310,417,000
Site 28 (NW Route)	\$ 290,146,000	\$ 71,361,000	\$ (45,516,000)	\$ 315,991,000
Site 28 (SE Route)	\$ 274,154,000	\$ 73,131,000	\$ (41,611,000)	\$ 305,674,000
Site 30	\$ 266,532,000	\$ 69,369,000	\$ (40,272,000)	\$ 295,629,000

Note:
 (1) All costs are present worth costs, 2006 dollars

ATTACHMENT A

Recommended Public Participation Program
Western Wake Regional Wastewater Management Facilities Project

Recommended by:

Ms. Inga Kennedy, President



Planners for Environmental Quality
6067 Roosevelt Highway
Union City, GA 30291
TEL: 770-306-0100
FAX: 770-306-7754

PLANNERS FOR ENVIRONMENTAL QUALITY, Inc.

Urban Planning Consultants

INTRODUCTION

As requested by NC DENR in the guidance letters of July 27, 2006 and October 2, 2006, prior to submitting a revised EIS the Partners should conduct a public participation program for potential WRF sites that exhibit social demographic characteristics as defined by NC DENR staff. NC DENR staff has indicated that the Partners should conduct a public participation program for potential WRF sites where the affected community is reported to have a minority population in excess of 50% (based on US Census Data).

This proposed work plan has been prepared for the Western Wake Partners (Partners) by Planners for Environmental Quality (PEQ) to describe the recommended public participation program that should be implemented by the Partners to receive input and comments from individuals located within the affected communities of potential WRF sites that have minority populations in excess of 50%. The list of potential WRF sites that exhibit these social demographic characteristics are presented in Table 1 of the attached letter.

OBJECTIVE

PEQ recommends that the primary objectives of the public participation program be (a) to provide individuals located in the affected community with factual information and data regarding the scope, scale and schedule for the proposed Project, and (b) to identify issues of concern for the community relative to the proposed Project.

RECOMMENDED APPROACH

In Appendix I of the April 2006 edition of the preliminary draft EIS, the Partners have documented the various public participation forums that individuals and groups have used during the course of the EIS process to provide comments for the proposed Project. The forms of public participation documented in Appendix I include, but are not limited to, governing board meetings at which the project is discussed and the public is afforded an opportunity to speak about the project; public meetings at which information is presented about the project; public hearings at which NC DENR presents information and receives formal written and verbal comments about the project, and websites that allow for submission of questions by and answers for the public about the project.

However, while there are a number of public participation forums that have been available and have been used during the course of the EIS process, information and data reviewed by PEQ suggests that some minority populations have not actively participated in the traditional forums that have been available for the Project. Accordingly, PEQ recommends that the public participation program consider the use of an additional form of public participation: door-to-door,

one-on-one interviews. PEQ's experience from similar projects with similar community characteristics indicates that door-to-door, one-on-one interviews may be an effective method for engaging the affected communities in a meaningful dialogue about the proposed Project.

PEQ recommends that two rounds of meetings be considered for each WRF site exhibiting the social demographic characteristics defined by NC DENR. Depending upon the characteristics of the communities surrounding each WRF site, the first round of meetings may be conducted as one-on-one meetings, small-group focus meetings, or possibly a larger-scale open house meeting. Once the first rounds of meetings are complete, PEQ will prepare a preliminary findings report based on the discussions resulting from the meetings. The preliminary findings report will include information on common themes observed during the meetings and guidance to the Partners regarding information, data and other materials that should be prepared in order to respond to issues, concerns and questions raised by meeting participants.

Based on the recommendations of the preliminary findings report, a second round of meetings may be conducted for the affected communities. The second round of meetings may be conducted as one-on-one meetings, small-group focus meetings, or possibly a larger-scale open house meeting. PEQ's recommendation regarding the most appropriate forum for the second round of meetings will have to be deferred until completion of the first round of meetings and review of the preliminary findings report.

Upon completion of the second round of meetings, PEQ will prepare a final public participation report for the Partners. PEQ recommends that the Partners present the findings of the public participation program to NC DENR and include the findings and recommendations in the Final EIS as agreed upon by NC DENR.

RECOMMENDED WORK PLAN

- 1) Identify parcels, parcel owners and residents located within the affected areas of each WRF site
- 2) Prepare the public input data collection plan, which will include the data collection methodology, the proposed community participants to be contacted, and the approach for documenting the results of the data collection effort.
- 3) Prepare a fact sheet with information and graphics regarding the proposed project. The fact sheet will be provided to the community participants during the meetings.
- 4) Conduct a first round of meetings using door-to-door, one-on-one interviews, small-group focus meetings, or possibly a larger-scale open house meeting for the affected areas.
- 5) Prepare preliminary findings report based on the discussions results from the first round of

meetings.

- 6) Respond to any issues/questions raised during the first-round of meetings.
- 7) Based on the findings of the first-round of meetings, conduct a second round of meetings (as may, or may not, be necessary).
- 8) Prepare report on findings of public participation program.
- 9) Meet with NC DENR to review the report on the public input data collection process.



PLANNERS FOR ENVIRONMENTAL QUALITY, Inc. *Urban Planning Consultants*

PEQ (Planners for Environmental Quality) is a multi-disciplinary urban planning consulting firm located in the metropolitan Atlanta area. The firm was established in 1992 by Inga Kennedy and provides consultant services in land use, environmental and transportation planning, and citizen participation and awareness.

PEQ has been involved in a variety of planning related projects throughout the State of Georgia and the southeast including transportation and aviation studies, neighborhood and county-wide master plans and regulatory ordinance updates, military planning and projects with strong stakeholder participation and environmental justice elements. Approximately 60% of the firm's business involves the exclusive conduct of stakeholder participation programs where responsibilities include program development, implementation and meeting facilitation. **PEQ** has conducted and facilitated more than 600 public meetings in a variety of public settings and diverse communities.

PEQ's clients include Fulton, DeKalb, Cobb and Athens-Clark Counties; City of Atlanta's Planning Bureau, Departments of Aviation and Public Works; the Atlanta Regional Commission; Georgia Regional Transportation Authority; MARTA; Georgia Department of Transportation; Georgia Rail Passenger Authority; Metropolitan North Georgia Water Planning District; City of Newnan; City of Albany; City of Macon; Cities of Raleigh and Durham, N.C.; City of Prichard, AL; The Committee for Olympic Development for the 1996 Olympic games and many others.

PEQ is 100% minority female owned and operated, and is a certified DBE by many state and local governments and public agencies.

PEQ offers professional services in Comprehensive, Land Use, Transportation Planning, Environmental Planning; Noise Abatement Studies; Environmental Assessments and Impact Analysis; and Citizen and Public Involvement Programs, Environmental Justice and GIS data analysis and mapping.

AREAS OF EXPERTISE

URBAN PLANNING
(COMPREHENSIVE, LAND
USE, TRANSPORTATION
AND ENVIRONMENTAL)

PUBLIC INVOLVEMENT AND
CITIZEN AWARENESS

ENVIRONMENTAL JUSTICE
OUTREACH AND IMPACT
ANALYSIS

MEETING AND WORKSHOP
FACILITATION

EDUCATION

B.A. in Urban Studies, 1979
Spelman College

M.A., City Planning, 1982,
Georgia Institute of Technology

PROFESSIONAL HISTORY

Planners for Environmental
Quality (PEQ), President, 1992 to
Present

The Mercer Group, Project
Manager, 1989 to 1992

Georgia Institute of Technology,
Research Planner, 1982 to 1989

AFFILIATIONS

Water Environment Federation

American Planning Assoc.

Conference of Minority
Transportation Officials

American Public Transit
Association

REFERENCES

Carlton Hailey, Fulton County
Public Works Water
Protection 404-730-7541

Marilyn Johnson, City of

RELATED EXPERIENCE

Ms. Kennedy received a Bachelor of Arts degree in Urban Studies and English from Spelman College and a Master's degree in City Planning from Georgia Institute of Technology, both in Atlanta, Georgia. She has more than 25 years of national experience in the field of urban planning with primary emphasis on environmental, land use, transportation, and citizen participation and awareness.

She has been involved in the conduct of a variety of planning projects throughout the State of Georgia. She has advised more than 100 jurisdictions and trained over 200 military and civilian personnel on environmental planning. Ms. Kennedy has also conducted and facilitated more than 600 public meetings. She has worked closely with public agencies, elected officials, citizens groups and military personnel on various environmental issues.

Examples of Ms. Kennedy's experience are listed below:

- Consultant to the Fulton County Construction Management and Engineering Services Contract to conduct construction services related to the Water Services Division's Capital Improvement Program for water, wastewater, reuse and other related projects. Responsibilities include coordination of public information and equal business opportunity (EBO) outreach program.
- Consultant to the City of Atlanta's Annual Architectural and Engineering Contract with the Arcadis/BPA Joint Venture for five City departments. Services include public involvement and outreach coordination, GIS support and staff training for various City projects on an as-needed basis.
- Consultant to the City of Atlanta's Watershed Master Plan. The purpose of the Plan is to prepare a comprehensive, long-term plan for the development, maintenance, and replacement of the City's watershed systems and facilities. Responsibilities include the development and implementation of a project public involvement plan and education **program including environmental justice impact and identification.**
- Consultant for the Fulton County Surface Water Utility Program. The purpose of the study is to consider the initiation of a Surface Water Utility Structure for the County. Responsibilities include coordination of the

Atlanta Watershed Mgt. 404-330-6255

Pat Stevens, Metro. North GA.
Water Planning Dist. 404-463-3100

PEQ OFFICE LOCATION

6067 Roosevelt Highway
Union City, GA 30291

Surface Water Advisory Committee including committee membership development, meeting coordination, review of materials and information, and meeting facilitation.

- Consultant to the Fulton County Public Works Department on the Camp Creek Design/Build/Operate project. The purpose of this fifteen-year project is to expand the existing Camp Creek Water Treatment Plant with state-of-the art equipment to accommodate the projected growth in south Fulton County. Responsibilities include the coordination of all communication and outreach with the public **including environmental justice coordination with surrounding communities.**
- Consultant to Fulton County on the Nancy Creek Water Resources and Restoration Study. The purpose of the Study was to identify and implement improvements to that portion of Nancy Creek contained in Fulton County. Responsibilities involve assisting the client with public outreach and education including meeting logistics and community involvement (festivals, fairs, etc.).
- Consultant to the DeKalb County South River Watershed Plan Implementation. The purpose of the project was to develop a Plan that would implement the recommendations of the South River Watershed Assessment. Responsibilities include assisting the client with the development of a public information plan designed to be used by the County to inform and educate the public about watershed activities.
- Consultant to the City of Decatur's Storm Drainage Master Plan. The purpose of the project was to develop a Plan that would identify needed improvement to the overall Storm Drainage System in the City of Decatur. Responsibilities include developing the project public involvement plan, coordinating outreach activities to insure the City's residents are aware of the project's purpose and how they may provide input, and capturing public concerns through comments and surveys conducted throughout the study process.
- Consultant to the Metropolitan North Georgia Water Planning District's Short-term Wastewater Study. The purpose of the Study was to identify short-term solutions (3-5 years) in the District's 16-County Region to improve upon the delivery of current wastewater

systems. Responsibilities include providing assistance in developing and implementing an effective public involvement and communications plan for the six river basins in the district. Activities include a series of public forums at major milestones, website development, presentations to the technical committee and basin advisory committees.

- Consultant to the South River Watershed Assessment for DeKalb County. The purpose of the project was to develop a Plan that would identify improvements to that portion of the South River that lies in DeKalb County. Responsibilities included providing assistance in developing the public involvement program and implementation of stakeholder and public meetings, Board of Commissioner presentations, coordinating information for study website. The final Plan was adopted by the County Commissioners in June 2001.
- Consultant to the City of Durham, North Carolina on the Water and Sewer Utility Strategic Plan. The purpose of the project was to develop a Plan that would implement a Utility Fee Structure for the City of Durham. Responsibilities included the development and implementation of a public participation and involvement process that allows the City to interactively determine customer understanding and expectations of the water and sewer utility. Other responsibilities included reviewing the existing public education program, assessing customer service, identifying further public education needs and areas for improvement, and the preparation of a media relations plan.
- Consultant to Fulton County, Georgia's Department of Public Works on the 2020 Water and Sewer Master Plan. The purpose of the project was to develop a Plan that would identify the water and sewer needs for Fulton County over a 25-year period. Responsibilities included analyzing existing and future land use in the four geographic planning areas of the County, and implementing a county-wide citizen participation program.
- Consultant to the City of Atlanta's Department of Water Pollution Control on the Atlanta Urban Watershed Initiative Study. The purpose of the Study was to identify solutions to water pollution in and around the City of Atlanta's watersheds. Responsibilities included

the facilitation of all monthly Steering Committee meetings, and preparation and distribution of meeting minutes.

- Consultant to the City of Albany's Flood Recovery Plan. The purpose of the project was to develop a Plan of recovery for those neighborhoods impacted by the Flood of 1994 in the City of Albany. Responsibilities included the conduct and facilitation of a series of meetings in flood impacted neighborhoods designed to receive critical input on redevelopment issues such as housing, schools, community facilities and infrastructure **in a predominantly environmental justice community**.
- Consultant to the Exxon Company USA's Doraville, Georgia distribution terminal on an environmental vulnerability analysis. The purpose of the project was to analyze the existing environmental conditions in and around the distribution site for vulnerability. Responsibilities included analyses of groundwater, stormwater runoff, soils, vegetation and surrounding land uses. The format and material used to develop the final report were adopted by Exxon Company USA's Georgia division as a model document for future environmental analysis of distribution sites.
- Project Manager for an environmental audit of the Hillsborough County, Florida Environmental Protection Commission. The purpose of the project was to determine the effectiveness of the various services being delivered by the County to the public. . The purpose of the study was to analyze the effectiveness of the agency in protecting the environment of Hillsborough County through a complete systems analysis.