

CATAWBA-WATEREE WATER MANAGEMENT GROUP
2011 FIVE-YEAR PROJECTS STRATEGIC PLAN

				Five-Year Projects Strategic Plan								
				2008	2009	2010	2011	2012	2013	2014	2015	
FUND-MANAGED PROJECTS				Assignment								
Drought Monitoring												
1	Groundwater Monitoring Wells (10) (40% installation cost by USGS, 60% by CW-WMG; 100% O&M Cost by CW-WMG)			USGS / CCOG	\$59,042	\$92,561	\$126,411	\$182,896	\$134,691	\$132,200	\$132,200	
Subtotal: Drought Monitoring					\$59,042	\$92,561	\$126,411	\$182,896	\$134,691	\$132,200	\$132,200	
Demand-Side Norms, Trends and Opportunities												
1	Know how Catawba-Wateree Basin water is being used											
	a	a. To the extent feasible and by 2011, organize 2005 data from the relicensing Water Supply Study and annual water system data provided to Duke from 2006 through 2010 to fit the data reporting format and categories/sub-categories identified by the Demand Side Committee in 2010		Duke In Kind / CW-WMG In Kind			X	X				
	b	Provide 5-yr update of the Water Supply Study and water quantity modeling to include updated projections for the term of the New License and show modeled LIP Stage occurrences		Consultant / Duke In Kind					\$150,000	\$100,000		
2	Understand state of practice of demand-side management and water use efficiency											
	a	Conduct benchmarking to identify current demand-side management programs being used in the US and identify programs potentially applicable to the Catawba-Wateree Basin		Jordan Jones & Goulding		\$12,653	\$22,347					
	b	Lakefront Smart Irrigation Study		NCSU / Duke In Kind		\$49,612	\$53,668	\$42,012				
	c	c. Quantify the water use amounts for the golf courses that withdraw water directly from C-W Project reservoirs		Duke In Kind			X					
3-5	Prepare goals and Action Plan and monitor progress. Critique the goals and plan.			Consultant to help facilitate and help draft initial document				\$50,000	\$25,000	\$30,000	\$30,000	
6	Communicate Action Plan and facilitate stakeholder participation			Contract for printing					\$25,000	\$25,000		
7	Evaluate Effectiveness of Action Plan			Consultant							\$50,000	
Subtotal: Demand-Side Norms, Trends and Opportunities					-	\$62,265	\$76,015	\$92,012	\$50,000	\$175,000	\$130,000	\$80,000

**CATAWBA-WATEREE WATER MANAGEMENT GROUP
2011 FIVE-YEAR PROJECTS STRATEGIC PLAN**

			Five-Year Projects Strategic Plan							
			2008	2009	2010	2011	2012	2013	2014	2015
Supply-Side Opportunities										
1	Determine issues relative to the safe yield of the Catawba-Wateree including impacts of climate change and ways the safe yield can be increased									
	a	Safe Yield Research Project			\$150,000					
	b	Sedimentation rate study/monitoring project			\$6,086	\$30,000	\$30,000			
2	Develop a Catawba-Wateree Basinwide Water Supply Master Plan		X	X						
	a	Phase I of the Plan is expected to include: - Develop "big picture" view of served, unserved areas & who the water providers are - Identify upcoming water supply projects in the basin and impacts they may have - Identify basin-wide supply issues and near-term opportunities - Identify stakeholders and how they should be involved in the Plan development - Develop framework and schedule for completion of Plan			McKim & Creed	\$60,000	\$15,000			
	b	Phase II - Scope to be determined in Ph I			Consultant		\$350,000	\$300,000		
	c	Phase III - Scope to be determined in Ph I & II			Consultant			\$250,000		
3	Evaluate and report on contingency opportunities in cases where one or more intakes become inoperable due to reduced storage during a drought (beyond LIP Stage 3) or other water shortage emergency				Consultant		\$75,000	\$75,000	\$75,000	
	a	Identify locations most likely to experience failure due to water level								
	b	Evaluate intake capabilities with reservoirs below current Critical Intake Evaluations that have been used in existing modeling								
	c	Determine how Project could be operated in LIP Stage 4								
	d	Identify off-main stem storage needs and opportunities								
	e	Develop implementation plan for all water withdrawers								
Subtotal: Supply-Side Opportunities			-	-	\$216,086	\$470,000	\$405,000	\$325,000	-	

**CATAWBA-WATEREE WATER MANAGEMENT GROUP
2011 FIVE-YEAR PROJECTS STRATEGIC PLAN**

			Five-Year Projects Strategic Plan							
			2008	2009	2010	2011	2012	2013	2014	2015
System-Wide Drought Preparation and Management										
1	Improve LIP implementation effectiveness and coordination of drought preparation and management									
	a	Create a CW-WMG identity (logo) and develop and maintain technical capability (Web site and ListServ) to support multiple communications vehicles with Members and others. (Note: Maintenance after 2009 accounted for in Admin Consultant contract).	McKim & Creed		\$18,800					
	b	Improve availability and coordination of relevant water management information	CW-WMG in Kind	X	X	X	X	X	X	X
	c 1-2	Drought Management Plans and Ordinances Compliant with Current LIP Requirements, Create Library of Compiled Ordinances and Plans and Enforcement Actions for Reference by Members	CW-WMG In Kind / Consultant	X		\$2,000				
	c 3-4	Evaluate effectiveness of LIP response actions with compiling site-specific reductions and measurements taken and conduct evaluation to determine if Basin met the intended reductions during Drought response. Perform evaluation of past drought to determine if we met LIP goals.	HDR Engineering			\$23,688	\$4,813			
	d 2	Communicate regularly with identified commercial or municipal users explaining the LIP and the need for conservation and drought response measures. Initiate water conservation mailers to large water users. WPCOG and CCOG building Public Education information.	CW-WMG / COGs				\$28,000	\$15,000	\$15,000	\$15,000
2	Provide periodic workshops for government officials including revenue impacts of conservation measures during time of drought		Consultant				\$30,000			
	c	Develop separate presentations for topics; Conservation Track for customers and Governmental track.	CW-WMG / COGs				\$28,000	\$30,000	\$10,000	\$10,000
	d	Compile Loss Water for individual systems in Basin.	CW-WMG / Admin Consultant			X	X	X	X	X
3	a-b	Maintain current Local Water Supply Plan usage information and projections and maintain individual supplier Loss Water calculations for all systems. To be supplied in February of each year.	CW-WMG in Kind			X	X	X	X	X
4	Develop a joint basin-wide communication plan									
	b1	Produce videos to be disseminated and shown across the Basin explaining how water is treated, handled, managed and conserved.	Consultant				\$25,000	\$15,000	\$15,000	\$15,000
	d	Research all grant opportunities to share expense of programs such as Shower Head Replacement Project.	CW-WMG / Admin Consultant			X	X	X	X	X

CATAWBA-WATEREE WATER MANAGEMENT GROUP
2011 FIVE-YEAR PROJECTS STRATEGIC PLAN

		Five-Year Projects Strategic Plan								
		2008	2009	2010	2011	2012	2013	2014	2015	
Subtotal: Drought Preparation and Management			\$18,800	\$25,688	\$115,813	\$60,000	\$40,000	\$40,000	\$40,000	
CW-WMG Administration										
Accountant / Tax Expenses, Attorney Fees, Banking Fees	C. DeWitt Foard; Robinson Bradshaw & Hinson; Wachovia	\$16,513	\$7,500	\$5,250	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	
Insurance Premiums	EON, The Hartford	\$1,651	\$1,622	\$1,622	\$1,622	\$1,622	\$1,622	\$1,622	\$1,622	
Project Management / Outreach / Admin Support	McKim & Creed		\$30,069	\$59,872	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	
5-Year Assessment of CW-WMG	Consultant						\$50,000			
Subtotal: CW-WMG Administration		\$18,164	\$39,191	\$66,744	\$77,622	\$77,622	\$127,622	\$77,622	\$77,622	
Average % that CW-WMG Administration is of Total CW-WMG Budget for 2011 - 2015 =		14%								
CW-WMG Grants to Others										
Rhodhiss Tailrace Nutrient Study	Carolina Land & Lakes Resource Conservation and Development Council				\$10,000					
Subtotal: CW-WMG Grants to Others		-	-	-	\$10,000	-	-	-	-	
Grand Totals										
		\$77,206	\$212,817	\$510,944	\$948,343	\$727,313	\$799,822	\$379,822	\$329,822	
Target Funding Amount (Dues)		\$150,630	\$541,548	\$541,548	\$541,548	\$541,548	\$541,548	\$541,548	\$541,548	
Committed Cost-share Payments to CW-WMG			\$24,806	\$28,668	\$21,006					
Budgeted Spending [Under / (Over)] Budgeted Dues Plus Cost-Share Payments		\$73,424	\$353,537	\$59,272	(\$385,789)	(\$185,765)	(\$258,274)	\$161,726	\$211,726	
Projected Money [To / (From)] Bank Account		\$73,424	\$353,537	\$59,272	(\$385,789)	(\$185,765)	(\$258,274)	\$161,726	\$211,726	
Interest Deposited in Bank Account		\$1,121	\$956	\$1,060	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Actual or Projected Year-End Bank Account Balance		\$404,039	\$697,289	\$998,640	\$613,851	\$429,086	\$171,812	\$334,538	\$547,264	

CATAWBA-WATEREE WATER MANAGEMENT GROUP
 2011 FIVE-YEAR PROJECTS STRATEGIC PLAN

		Five-Year Projects Strategic Plan							
		2008	2009	2010	2011	2012	2013	2014	2015
Committed Reserve Fund (i.e., 25% of Target Funding Amount (Dues))				\$135,387	\$135,387	\$135,387	\$135,387	\$135,387	\$135,387
Projected Year-End Bank Account Balance <i>Above</i> Committed Reserve Fund				\$863,253	\$478,464	\$293,699	\$36,425	\$199,151	\$411,877