

Blues, Chair
Stinnett, Vice Chair
Gorton
Farmer
Crosbie
Myers
McChord
Martin
Henson
Lane

A G E N D A

Environmental Quality Committee

March 13, 2012

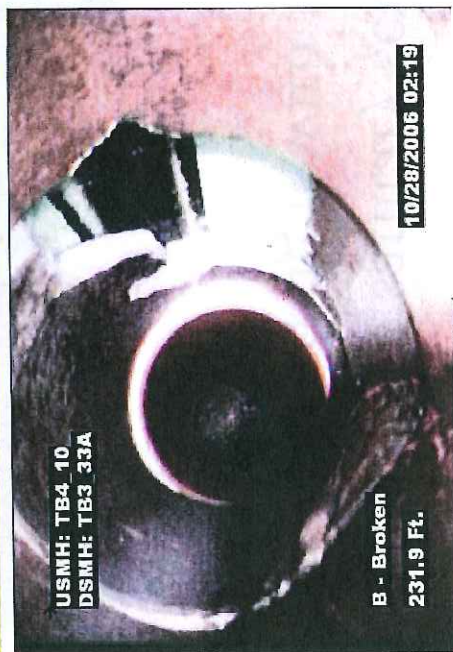
11:00 A.M.

1. **Sanitary Sewer Capacity Assurance Program** (1-15)
2. **Empower Lexington Plan Resolution** (16-17)
3. **Division of Water Quality Projects** (18-20)
4. **Public Comment**
5. **Items Referred** (21)

“Environmental Quality Committee, to which shall be referred matters relating to the Department of Environmental Quality and its divisions, and any related partner agencies.”

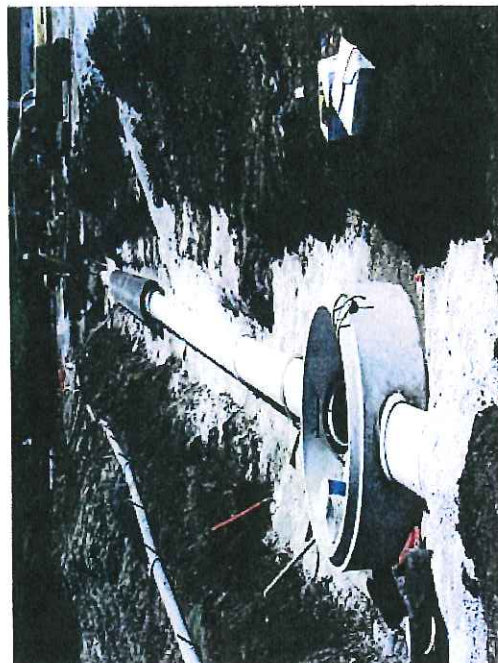
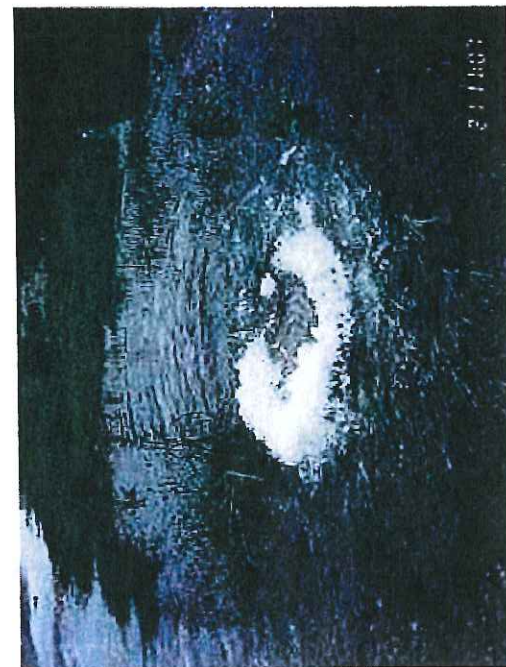
-Council Rules & Procedures, Section 2.102(1)

Sanitary Sewer Capacity Assurance Program (CAP)



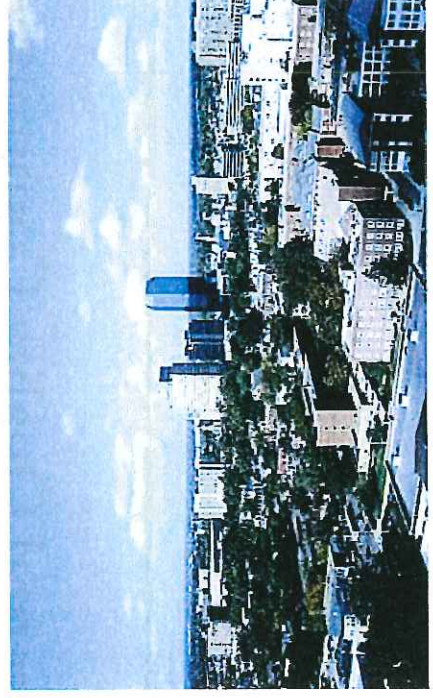
Environmental Quality Committee
March 13, 2012

livegreenlexington



CAP - What and Why

- WHAT – a Consent Decree required sanitary sewer program.
- WHY – EPA wants assurances that Lexington isn't fixing its sanitary sewer system while at the same time overloading it with new customers.



Critical CAP Components

- ❑ How we determine sanitary sewer capacity.
- ❑ How we ensure sanitary sewer capacity is available before we authorize extensions or tap-ons.
- ❑ How we keep track of increases and decreases in sanitary sewer capacity.
- ❑ A database to manage the program.
- ❑ Details and assumptions associated with hydraulic calculations.



CAP Outcome

- *The CAP will enable LFUCG to authorize new sewer service connections, or increases in flow from existing sewer service connections ... only after LFUCG has determined (based on CAP procedures), that there is Adequate Treatment Capacity, Adequate Transmission Capacity and Adequate Collection Capacity.*

Adequate Treatment Capacity (defined)

Prior to authorizing connection, LFUCG must certify that new flow combined with existing flow will not:

- *Result in unpermitted bypasses or diversions, or*
- *Result in “noncompliance”.*

Must consider “future / proposed” connections when certifying.

Adequate Transmission Capacity (defined)

Prior to authorizing connection, LFUCG must certify that a pumping station receiving new flow has *the capacity to transmit One-Hour Peak Flow* for:

- Existing flow, and
- The proposed new flow, and
- Any future flow previously certified but not yet received.

Adequate Collection Capacity (defined)

Prior to authorizing connection, LFUCG must certify that gravity sewers receiving new flow has the capacity to transmit One-Hour Peak Flow for:

- *Existing flow, and*
- *The proposed new flow, and*
- *Any future flow previously certified but not yet received.*

!!! Without causing surcharge conditions !!!

Key Certification Definitions

- ❑ One Hour Peak Flow
- ❑ Surcharged Conditions

Key Certification Definitions

Surcharged Conditions

Under One Hour Peak Flow conditions, water in the gravity sewer manhole cannot be more than 24 inches above the top of the pipe or within 3 feet of the manhole rim.



How a CAP Works

(General Terms)

- LFUCG must certify capacity.
- If capacity does not exist, “capacity recovery” credits can be used as a means to authorize additional sewer flows in lieu of capacity certification.
- “Capacity recovery” credits must be obtained from work associated with the sanitary sewer infrastructure unable to meet capacity certification criteria.

Credits (In General Terms)

□ Capacity Enhancing Projects – Off-line Storage or Removal of Connections:

- 1.5:1 in West Hickman
- 1:1 for all other sewersheds

WH Example – Tear down a 150 gallon per minute building ... you get 100 gallons per minute of credits.

Credits (In General Terms)

□ Capacity Enhancing Projects that are **not** Off-line Storage or Removal of Connections and I/I Projects:

- 4:1 in West Hickman (related to a Recurring SSO)
- 3:1 for all other sewersheds (related to a Recurring SSO)
- 2:1 for all sewersheds (not related to a Recurring SSO)

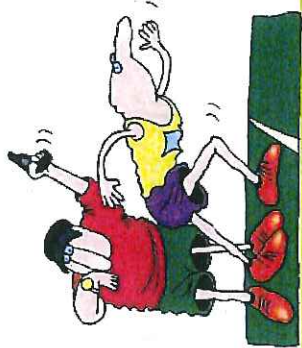
WH Example – Eliminate four 10 gallon per minute sump pumps, you get between 5 and 10 gallons per minute in credits, depending on the location relative to a Recurring SSO.

Essential Services Provision*

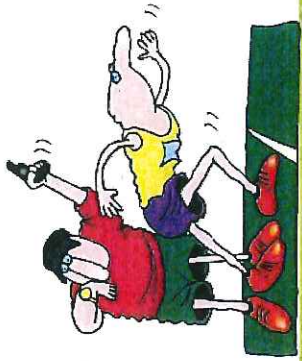
Exceptions to Certification Criteria

- ☐ Health Care Facilities
- ☐ Public Safety Facilities
- ☐ Public Schools
- ☐ Other facilities as agreed upon in writing by EPA and EEC.

*Could result in a negative bank of credits

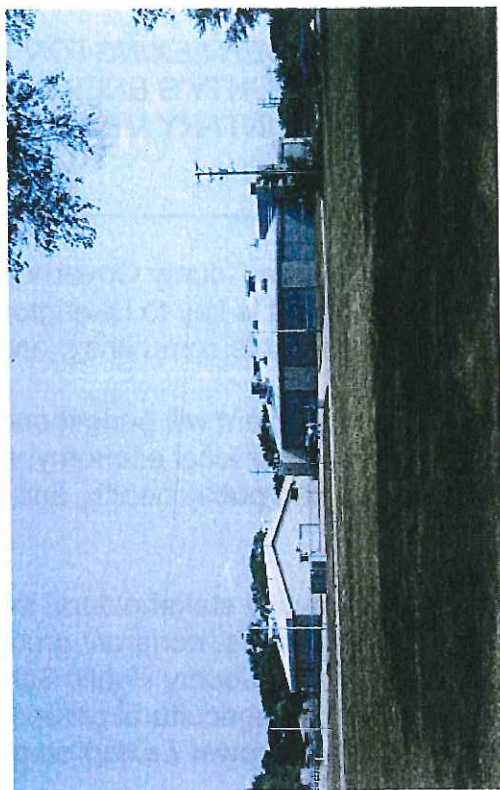
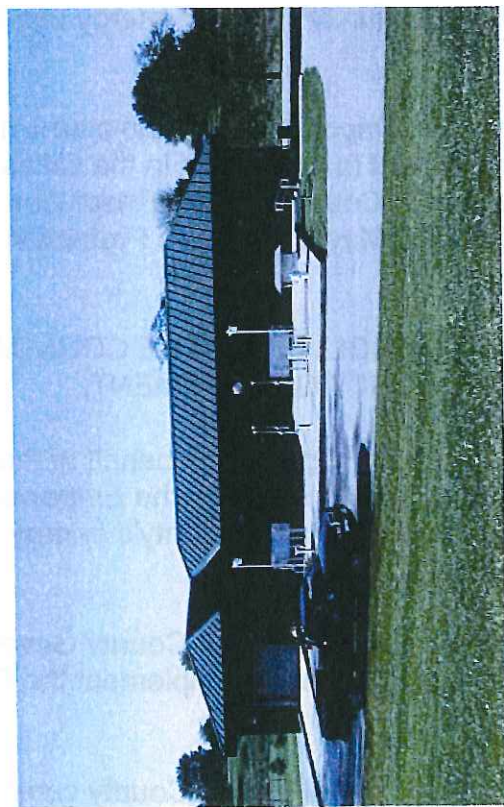


Schedule



- CAP Scope of Service documents advertised on March 6, 2012.
- Proposals due by 2:00 pm March 19, 2012.
- Consent Decree deadline – regulatory submission of plan by January 3, 2013.
- LFUCG must begin to implement the CAP no later than thirty days after EPA approval.

Questions and Answers



Resolution No. _____ -2012

A RESOLUTION SUPPORTING THE "EMPOWER LEXINGTON" ENERGY PLAN DESIGNED TO REDUCE FAYETTE COUNTY'S ENERGY USE BY ONE PERCENT (1%) ANNUALLY THROUGH VOLUNTARY MEASURES AND SUPPORTING ITS IMPLEMENTATION.

WHEREAS, the Lexington-Fayette Urban County Government ("LFUCG") recognizes that becoming more energy efficient is key to Lexington/Fayette County becoming a more resilient and sustainable community; and

WHEREAS, becoming more energy efficient will benefit our community by saving our citizens money, keeping money in our local economy, creating jobs, reducing emissions and air pollution, improving public health, and protecting the environment; and

WHEREAS, a diverse group of community stakeholders, including business groups, environmental groups, educators, nonprofit groups, institutions such as the University of Kentucky and Fayette County Public Schools, planning groups, transportation groups, utility providers, agricultural groups, consultants, LFUCG staff and others has developed the *Empower Lexington* plan; and

WHEREAS, the *Empower Lexington* plan is a community-wide energy plan whose goal is to reduce our community's overall energy use by 1% per year through voluntary actions; and

WHEREAS, implementing the *Empower Lexington* plan will help fulfill Lexington's February 2008 commitment to participate in the Cities for Climate Protection Program pursuant to Urban County Council Resolution 49-2008 as well as its commitment under the U.S. Mayor's Climate Protection Agreement which LFUCG signed in 2005.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT:

Section 1 - That the Urban County Council, on behalf of the Lexington-Fayette Urban County Government, hereby supports the *Empower Lexington* plan which includes the goal of reducing Fayette County's energy use by 1% per year through voluntary measures.

Section 2 - That the Lexington-Fayette Urban County Government will work with community stakeholders and citizens to implement the *Empower Lexington* plan as resources allow.

Section 3 – That the entire Lexington/Fayette County community be and

hereby is encouraged to embrace the *Empower Lexington* plan and work together to voluntarily reduce energy use.

Section 4 – That this resolution shall become effective on the date of its passage.

PASSED URBAN COUNTY COUNCIL:

MAYOR

ATTEST:

CLERK OF URBAN COUNTY COUNCIL

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Current Division of Water Quality Project Information				ENCUMBRANCES	CONTRACTOR	Status	Est. Completion
1	SANITARY SEWER PROJECTS (includes studies/design/construction)						
2	Remedial Measures Plans			\$3,500,000.00	Hazen & Sawyer	Group 1 RMP completed and submitted to EPA	Group 2 RMP due 4/16/12 & Group 3 RMP due 10/15/12 to EPA
3	SSA Group 2 & 3 Engineering Services			\$599,200.00	Stanlec	Field work for Group 2 complete	SSA Group 3 Report due to EPA 3/14/12
4	SSA Group 2 & 3 Flow Monitoring			\$536,734.00	ADS	Field work complete	SSA Group 3 Report due to EPA 3/14/12
5	SSA Group 2 & 3 Field Activities			\$2,934,316.00	Hydronax	Group 2 SSA report completed and submitted to EPA	SSA Group 3 Report due to EPA 3/14/12
6	SSA Group 2 & 3 Manhole Raising			\$1,381,531.00	Tobacco Rose	Field work for Group 2 complete	SSA Group 3 Report due to EPA 3/14/12
7	Asset Management Program/Software			\$1,594,360.94	Arcela	Continue implementation/trouble shooting.	Went Live in July
8	Lexington Mill Sanitary Sewer Replacement			\$555,431.65	ABR Construction, Inc.	Under construction	Winter 2012
9	Deep Springs Pump Station Design & Property Acquisition			\$2,237,757.00	CDP/Property Acquisition/W. Rogers	New pump station operational	Apr-12
10	Dixie Pump Station Design & Construction			\$508,109.00	Kemvions Design/Goeth Construct	Punch list/CO #1 for \$5,105	New pump station operational as of February 3, 2012
11	Griffin Gate Pumps Station			\$184,450.00	Grant Excavating	Construction bid posted 2-29-12	Apr-12
12	Wolf Run Pump Station Engineering Services			\$698,715.00	HDR	Pump station property purchased/leasehold acquisition	Pump station construction Spring 2012
13	Expansion Area 2A Design and Easements			\$965,945.00	GRW	Pump station property purchased/leasehold acquisition	Construction should start Spring 2012
14	SCADA Electrical and Computer Operations for WWTP's Design			\$2,859,500.00	Strand Associates	Currently evaluating RFP/expect to advertise 03/12	Expect 18 month construction after bid complete
15	Town Branch WWTP Screw Pump Construction			\$1,622,069.85	Triplet Striping Inc.	Substantially complete/working on punch list	
16	West Hickman WWTP Solids Building Odor Control Study			\$22,500.00	Hazen & Sawyer	Odor/HVAC design is complete	Next is purchase of the odor control unit/advertise March 2012
17	West Hickman WWTP Solids Building Odor/HVAC Improvements			\$699,000.00	VanHook, Inc.	Demolition/construction	Spring 2012
18	I & I Sanitary Sewer Rehabilitation (Citywide)			\$1,500,000.00	Annually-Various Unit Price Vendors	On-going	
19	Sanitary Sewer Projects Underway			\$22,399,679.44			
20	Sanitary Sewer Projects Completed Prior Six Months						
21	SSA/CAP/Hydraulic Models			\$2,827,319.00	CDM	Contract Complete Fall 2011	
22	STORM SEWER PROJECTS (includes studies/design/construction)						
23	Stormwater Priority List/ Master Plan SEP			\$436,585.00	GRW	Ongoing	Jun-12
24	FEWA Grant - 7 houses - Shandon/Cabot/Ft. Sumter/Gayle - Fed/State/Local			\$1,034,625.00	In House	Acquisition/demolition	Mar-12
25	FEWA Grant - 9 houses - Lafayette/South Bend/Lone Oak - Fed/State/Local			\$1,699,945.00	In House	Acquisition/demolition	Jun-12
26	Green Acres/Hollow Creek Stormwater Improvements - CQW Survey & Design			\$1,223,589.00	CDP Engineers	6 properties purchased/demolition starts January	Mar-12
27	Green Acres/Hollow Creek Stormwater Improvements - CQW Survey & Design			\$120,000.00	In House	On-going	Survey and design complete
28	Green Acres/Hollow Creek Stormwater Improvements - CQW Survey & Design			\$184,000.00	Claunch Const. was low bid	Bids received, budget and bid info to KIA for approval	Apr-12
29	Rain Garden Maintenance Program			\$9,080.00	Henkel-Denmark	On-going	Fall 2012
30	Litter & Debris Removal for Stormwater Infrastructure (yearly)			\$107,920.00	Swartz Mowing, Inc.	Started in September 2011	Winter 2012
31	Litter & Debris Removal for Stormwater Infrastructure (yearly)			\$107,920.00	Leak Eliminators, Inc.	Started in September 2011	Mar-12
32	Dumping Fees for Litter & Debris Removal program			\$9,000.00	Bluegrass Waste Alliance Transfer Facility	Ongoing	Mar-12
33	McConnell Springs Wetland Pond - Steel Sculptures Eco-Art			\$2,580.19	Millennium Steel Works LLC	Construction to begin March 2012	Jun-12
34	Gainsway Water Quality Facility Access Road			\$93,088.00	Sensabaugh Design and Construction	Construction to begin March 2012	Aug-12
35	Antislip/Wickland Phase 1 Construction and Right of Way			\$873,000.00	TBD	Apr-12	Jul-12
36	Cardinell/Larantle Stormwater Improvement Design			\$48,300.00	Integrated Engineering	May-12	Aug-12
37	Goldstream SEP Design			\$250,000.00	CDP Engineers	Mar-12	Jan-14
38	McConnell Trace Greenway Restoration			\$128,255.00	ECO GRO	Feb-12	Mar-12
39	Asbury Lane Stormwater Study and Preliminary Engineering Report			\$20,000.00	CDP Engineers	Begin March 2012	Jun-12
40	Idle Hour Stormwater Improvements Design			\$60,000.00	TBD	Jul-12	Fall 2012
41	Walhampton Drive Stormwater Improvements Design			\$100,000.00	TBD	Jul-12	Fall 2012
42	Roland Avenue Streambank Stabilization Design			\$140,000.00	CDP Engineers	Underway	Jun-12
43	Fleet Services Oil/Water Separator			\$90,000.00	TBD	May-12	Jun-12
44	Halls Lane Sinkhole Remediation			\$20,000.00	TBD	Apr-12	Jun-12
45	Saxon Drive Storm Sewer Rehabilitation			\$30,000.00	TBD	Apr-12	Jun-12
46	Squires Road Sidewalk Repair			\$34,500.00	TBD	May-12	Jun-12
47	Park Ridge Storm Sewer Repair			\$10,000.00	TBD	May-12	Jun-12
48	Shady Lane Storm Sewer Rehabilitation			\$5,000.00	TBD	May-12	Jun-12
49	Henry Clay Blvd Storm Sewer Rehabilitation			\$20,000.00	TBD	May-12	Jun-12
50	Bold Bidder Storm Sewer Rehabilitation			\$15,000.00	TBD	May-12	Jun-12
51	Carlsbad Ct. Storm Sewer Rehabilitation			\$25,000.00	TBD	May-12	Jun-12
52	Rain Garden Maintenance Program			\$20,000.00	TBD	May-12	Jun-12
53	FY 2012 Class B Bluegrass Stockyards LLC Water Quality Incentive Grant			\$150,000.00	Installation detention and water quality treatment facilities	Awarded December	
54	FY 2012 Class A N. Limestone Neighborhood Association Water Quality Incentive Grant			\$50,000.00	Development of stormwater BMP Loudoun, Limestone	Awarded December	
55	FY 2012 Class A Group C, LLC Water Quality Incentive Grant			\$34,650.00	Production of water quality vignettes with WKYT	Awarded December	

58	FY 2012 Class A Friends of Wolf Run, Inc. #1 Water Quality Incentive Grant	\$11,770.00	Enhancement of streamside buffers	Awarded December	
59	FY 2012 Class A Lansdowne Neighborhood Association, Inc. Water Quality Incentive Grant	\$10,000.00	Conceptual Planning for stream improvements	Awarded December	
60	FY 2012 Class A Spindale Community Association Water Quality Incentive Grant	\$4,615.00	Stream cleaning, pond aeration, etc.	Awarded December	
61	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$11,183.75	Autumn Ridge Home Owners Association, Inc.	Ongoing	Mar-12
62	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$10,255.00	Gainesway Neighborhood Association, Inc.	Ongoing	Jun-12
63	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$7,408.00	Eastland Parkway Neighborhood Association, Inc.	Ongoing	Mar-12
64	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$35,248.10	The Colony Unit Four Community Association, Inc.	Ongoing	Mar-12
65	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$1,800.00	Kentucky River Watershed Watch, Inc.	Ongoing	Mar-12
66	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$7,700.00	WGPA Neighborhood Association, Inc.	Ongoing	Mar-12
67	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$19,200.00	Bluegrass PRIDE, Inc. (Town Branch video)	Ongoing	May-12
68	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$5,470.00	Neighbors United for South Elkhorn, Inc.	Ongoing	Mar-12
69	FY 2011 Class A Stormwater Quality Project Incentive Grant	\$4,878.75	Transylvania University	Ongoing	Apr-12
70	FY 2011 Class B Education Stormwater Quality Incentive Grant	\$2,500.00	Fayette County Public Schools - Henry Clay High School	Ongoing	Mar-12
71	FY 2011 Class B Education Stormwater Quality Incentive Grant	\$4,677.19	The Trane Company	Ongoing	Mar-12
72	FY 2011 Class B Education Stormwater Quality Incentive Grant	\$115,669.06	WLEX Communications, LLC	Ongoing	Mar-12
73	FY 2011 Class B Education Stormwater Quality Incentive Grant	\$113,375.00	The University of Kentucky Research Foundation	Ongoing	Jun-12
74	FY 2011 Class B Education Stormwater Quality Incentive Grant	\$109,000.00	AIE Properties LLC (Ross Tarrant Architects)	Ongoing	Jun-12
75	FY 2011 Class B Infrastructure Stormwater Quality Incentive Grant	\$189,090.00	Coca-Cola Refreshments USA, Inc.	Ongoing	Dec-12
76	FY 2011 Class B Infrastructure Stormwater Quality Incentive Grant	\$107,866.00	Community Montessori School, Inc.	Ongoing	Jun-12
77	FY 2011 Class B Infrastructure Stormwater Quality Incentive Grant	\$57,800.00	Fayette County Public Schools: Clays Mill Elementary	Ongoing	Mar-12
78	FY 2011 Class B Infrastructure Stormwater Quality Incentive Grant	\$321,576.48	Klausung Group, Inc.	Ongoing	Dec-12
79	FY 2011 Class B Infrastructure Stormwater Quality Incentive Grant	\$201,285.00	Ronald McDonald House Charities of the Bluegrass, Inc.	Ongoing	Dec-12
80	Stormwater Projects Underway	\$6,533,886.52			
81	Consent Decree Projects	* Indicates grant funding			
82					
83	STORM SEWER PROJECTS (Completed Prior Six Months)	ENCUMBRANCES	CONTRACTOR/GRAantee	Status	Est. Completion
84	FY2011 Class A Stormwater Quality Project Incentive Grant	\$5,000.00	Friends of Wolf Run, Inc. #1 (streamside buffers)	Complete	
85	FY2011 Class A Stormwater Quality Project Incentive Grant	\$5,000.00	Friends of Wolf Run, Inc. #2 (waterborne disease)	Complete	
86	FY2011 Class A Stormwater Quality Project Incentive Grant	\$36,565.31	The Gardens of Hardland Homeowners Association, Inc.	Complete	
87	FY2011 Class A Stormwater Quality Project Incentive Grant	\$5,886.00	Living Arts & Science Center, Inc.	Complete	
88	FY2011 Class A Stormwater Quality Project Incentive Grant	\$29,794.00	Meadowthorpe Neighborhood Association, Inc.	Complete	
89	FY2011 Class A Stormwater Quality Project Incentive Grant	\$50,000.00	Southern Heights Neighborhood Association, Inc.	Complete	
90	FY2011 Class B Education Stormwater Quality Incentive Grant	\$6,700.00	Fayette County Public Schools - Rosa Parks Elementary	Complete	
91	Amistad/Wickland Flooding Mitigation Phase 2 Construction	\$653,826.50	Lagoo, Inc.	Complete	
92	Loch Lomond Drive Flooding Mitigation Construction	\$26,770.00	Randle-Davies	Complete	
93	Loch Lomond Drive Flooding Mitigation Floodproofing Design	\$4,800.00	Integrated Engineering	Complete	
94	Plainview Drive Flood Mitigation Property Acquisition	\$209,901.00	In House	Complete	
95	Green Acres/Hollow Creek Easement Maint*	\$16,342.66	Task, Inc	Complete	
96	Stormwater Projects Completed Prior Six Months	\$1,051,585.47			Updated February 2012

Projects Completed in FY 2009							
	Fund/4003/PROJECT NAME	CONTRACT AMT	CONTRACTOR	P.O. NO.	ACCOUNTING	PROJECT	ACTIVITY
1	1 & 1 Sanitary Sewer Rehabilitation	\$300,000.00	Leak Eliminators	LF00061399	4003-303408-3462-92811	REHABILITA	CONSTRUCTION
2	2 & 1 Sanitary Sewer Rehabilitation	\$250,000.00	Leak Eliminators	LF00055829	4003-303408-3462-92811	REHABILITA	CONSTRUCTION
3	3 & 1 Sanitary Sewer Rehabilitation	\$250,000.00	Insituform Technologies	LF00049062	4003-303408-3462-92811	REHABILITA	CONSTRUCTION
4	4 & 1 Sanitary Sewer Rehabilitation	\$250,000.00	Leak Eliminators	LF00045740	4003-303408-3462-92811	REHABILITA	CONSTRUCTION
5	5 & 1 Sanitary Sewer Rehabilitation	\$250,000.00	Insituform Technologies	LF00050127	4003-303408-3462-92811	REHABILITA	CONSTRUCTION
6	West Hickman WWTP ASH Tank Improvements	\$590,000.00	Arnold, Dugan & Meyers	LF00037399	4003 303401 3421 92711	UPGRADE_WHWWTP	CONSTRUCTION
7	Town Branch WWTP Primary Effluent Pump Station Emergency Generator	\$360,656.00	Dixon Electric	LF00042377	4003 303401 3421 92711	UPGRADE_TBWWTP	CONSTRUCTION
8	Town Branch WWTP Screw Pump Design	\$64,000.00	Strand Engineers	LF00042428	4003-303401-3421-71205	UPGRADE_WHWWTP	GENERAL
9	West Hickman Screw Pumps Phase II	\$1,298,047.00	Arnold, Dugan & Meyers	LF00018969	4003-303401-3421-92711	UPGRADE_WHWWTP	CONSTRUCTION
10	West Hickman WWTP Fiber Project	\$58,000.00	CR Cable	LF00042379	4003-303401-3421-92711	UPGRADE_WHWWTP	CONSTRUCTION
11	North Elkhorn Pump Station	\$2,366,210.00	W.Rogers	LF00002988	4003-303401-3422-82812	PUMP STATI	CONSTRUCTION
12	North Elkhorn Pump Station Grant Funds	\$1,691,500.00	W.Rogers	LF00002988	3400-303401-3401-92811	PUMP STATI	CONSTRUCTION
13	West Hickman Bar Rack/Gravity Thickner/VFC Replacement	\$750,000.00	RE BID	Need Bud Amend.			
14	Projects Completed in FY 2009	\$8,488,413.00					

Committee Referrals

Environmental Quality Committee

Item	Referred By	Date	Status
Capacity Analysis	Blues		Part of RMP
Solid Waste Operations Effectiveness	Stinnett	4-13-11	Waste Management Task Force
Review LFUCG Property Use Policy: re Model Airplane Association Usage of Haley Pike Property	EQ Link	6-19-11	
Consolidate Greenway Responsibilities	EQ Link	6-19-11	September 20
UK Game Day Solid Waste Collection: Revenue Source	EQ Link	6-19-11	Waste Management Task Force
Bulky Item Collection: Revenue Source	EQ Link	6-19-11	Waste Management Task Force

