

Stormwater Improvement Plan and Project Efficiencies (Meeting the Consent Decree Obligations)

Environmental Quality Committee

April 19, 2016

Department of Environmental Quality & Public Works
Division of Water Quality

History of the SW Priority List

- The Stormwater Capital Priority List was developed in 1996 at the request of UC Council.
 - Since inception, 95 projects complete @ \$27.8 M
- 2015 update lists active, pending or deferred projects totaling over \$117 M.
 - 29 pending projects @ \$101 M
 - Range of individual project costs
 - \$330,000 to \$19.4 M



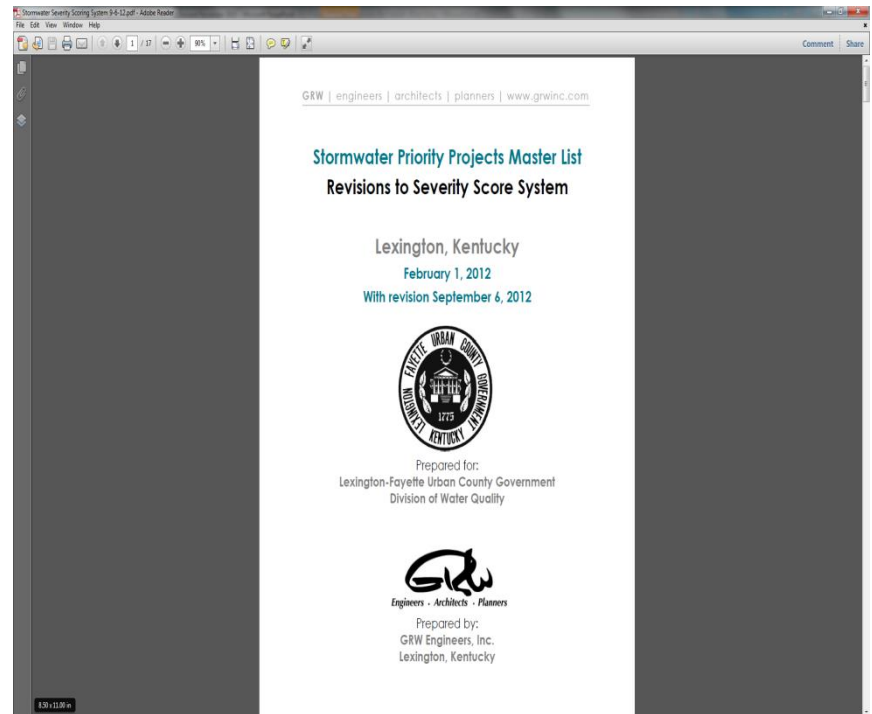
Current Status (SW Priority List)

- Actively working on projects 57.5, 61.2, 66.6, 67, 67.5 and 68.5.
- Typically working on a range of project numbers due to undefined project scopes and changed conditions.



Priority List Impact Related to the Consent Decree

- The priority list methodology was refined in 2012. Purpose of refinement was:
 - To meet Consent Decree commitments made by LFUCG.
 - To implement lessons learned and better document the overall process for managing the list.



Priority List Impact Related to the Consent Decree

- LFUCG commitment to spend \$30 M on Priority Stormwater Capital Projects within a 10 year period – deadline is January 3, 2021.
- Where does DWQ stand in meeting this obligation?



Current Status

(SW Priority List and the Consent Decree Obligation)

- Amount spent to date on completed CD projects - **\$9,900,000**
- Amount budgeted for currently active CD projects - **\$4,970,000**
- Amount needed to meet the 1/3/21 CD obligation - **\$15,130,000**



Issues of Concern

- Following the Stormwater Priority Capital Projects list in numeric order introduces considerable risk in meeting the January 3, 2021 Consent Decree spending deadline.



RISK 1

- Valuable time gets spent on projects that do not meet \$30 M programmatic criteria.
 - Queensway (#68.5) – Estimated \$2.0 M capital project turned out to be a \$400 maintenance solution.
 - Claymont (#69) – PER complete, no home flooding.
 - Glenover East (#70.5) - PER complete, no home flooding.



RISK 2

- Valuable time gets spent on projects that apparently experienced changed conditions.
 - WH-39 (Tates Creek / Wilson Downing) (#70): added to list when Tates Creek was a two lane road.



RISK 3

- Projects are hydraulically “disconnected” which negatively impacts cost efficiency and timeliness of project delivery.
 - Five disconnected projects harder to manage than five interconnected projects.
 - Following the Priority List numerically requires you to jump from one watershed to another.



RISK MANAGEMENT

- All risks can be minimized by focusing on:
 - Specific watersheds;
 - Maximizing the number of viable projects in those specific watersheds;
 - Total estimated construction cost of the most viable projects in context of Consent Decree obligation.



“Pending” Project Summary

(Watershed Totals and Costs)

WATERSHED	NUMBER OF “PENDING” PROJECTS	ESTIMATED VALUE OF THOSE PROJECTS
Town Branch	11	\$70,927,000
Wolf Run	8	\$18,311,000
Cane Run	4	\$4,534,000
West Hickman	3	\$4,548,000
South Elkhorn	2	\$2,151,000
North Elkhorn	1	\$613,000
TOTALS	29	\$101,084,000



DWQ Findings

- All watersheds except Town Branch and Wolf Run believed to have excessive risk in being non-viable project areas for meeting the Consent Decree requirements.
 - Relatively low, per project cost estimates.
 - Spatially spread out which limits efficiencies.



DWQ Findings

- Town Branch and Wolf Run believed to minimize Consent Decree risk:
 - Town Branch
 - Three projects alone have estimated costs in excess of \$10 M each.
 - Five other projects > \$4.0 M each.
 - Wolf Run
 - Five of eight projects remaining in watershed drain to the same floodway.
 - Estimated, combined construction cost is \$10.0 M.



Remaining Projects with Drainage Basin Groups



Focus on Wolf Run Projects Tributary to Allendale Drive

Ranking	Project Name	Watershed	Estimated Cost
66.6	Tucson Drive	WR	\$1,833,000
71	Picadome	WR	\$1,289,000
80.3	Barkley / Southgate	WR	\$2,509,000
80.6	Longview Drive West	WR	\$2,880,000
85.5	Longview Drive East	WR	\$1,506,000

\$10,017,000



MAP OF PROJECT AREAS - WATER COURSE TRIBUTARY TO ALLENDALE DR.



DWQ Recommendation

- Modify past numeric order approach to Stormwater Priority Capital Project List management to ensure compliance with the Consent Decree deadline.
 - Merge projects with a defined common and spatially logical drainage point into a single project, assigning the lowest assigned number.
 - Follow numeric approach for all other projects.



DWQ Recommendation

- Place immediate focus on Wolf Run Watershed projects tributary to Allendale Drive.

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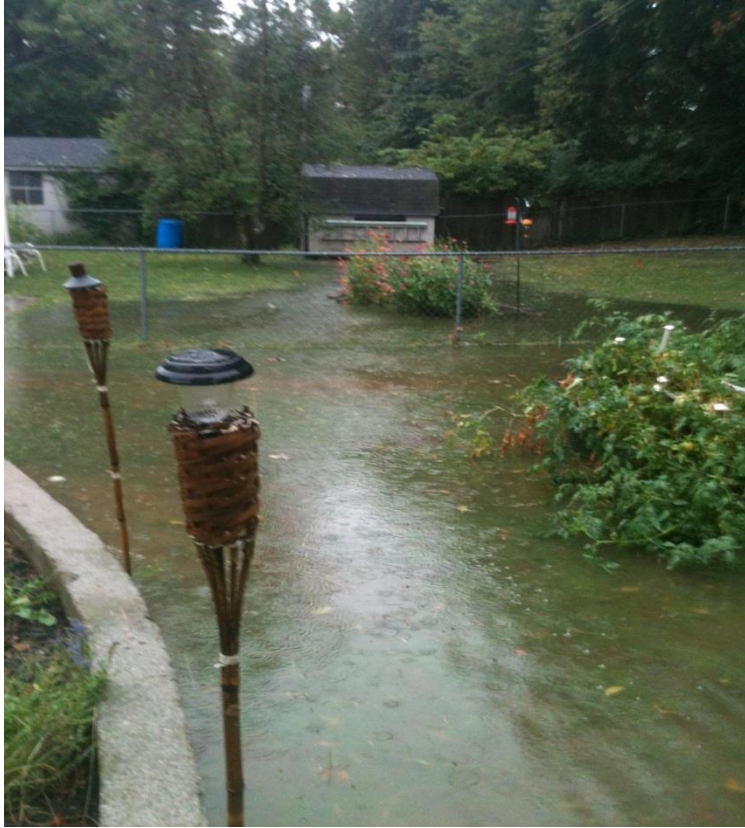
\$10,017,000



SUMMARY

- Over \$101 M in stormwater capital projects remain in the priority list.
- Consent Decree obligations are making past list management practices challenging.
- DWQ is recommending that list management practices be modified to minimize Consent Decree compliance risks while maximizing the overall impact to a common watershed area.





Questions?