

DEPARTMENT OF PUBLIC UTILITIES



AGENDA

COMMUNITY ADVISORY PANEL

MEETING 7

Goodale Park Shelter House 120 W. Goodale Street Columbus, OH 43215

June 2, 2015

6:00 PM - 8:00 PM

The members of the Community Advisory Panel (CAP), a group convened by the City of Columbus (the City) to advise the City on the development of Blueprint Columbus, held their seventh meeting June 2, 2015 at the Goodale Park shelter house in Columbus, Ohio. The CAP is composed of representatives from Columbus neighborhoods, businesses, environmental interests, construction and homebuilding firms, ratepayer groups, and others. More information is available at www.blueprint.columbus.gov or by emailing blueprint@columbus.gov. The next CAP meeting is scheduled for July 22, 2015.

Welcome and Introductions

Maria Mone, facilitator from the Ohio State University John Glenn College of Public Affairs, welcomed the group and invited brief introductions from everyone in attendance. She then reviewed the agenda.

The Blueprint and Gray Plans

Susan Ashbrook and Dax Blake, City of Columbus, presented on the Blueprint and Gray plans. Key points from their presentation are summarized below:

To address sanitary sewer overflows (SSOs), the City will submit two options to the Ohio EPA in September 2015 – a Blueprint plan and a Gray plan. The Blueprint plan uses four strategies to address sanitary sewer overflows: home sewer lateral lining; roof water redirection; sump pumps; and green infrastructure. To address the specific needs of each neighborhood, in some locations the Blueprint plan includes a combination of the four strategies and some gray infrastructure.

The Gray plan also known as the 2015 Wet Weather Management Plan, is similar to the City's 2005 Wet Weather Management Plan (WWMP) in that it only uses gray infrastructure to eliminate SSOs. However, the Gray plan uses fewer pipes and tunnels than the 2005 WWMP. Both the Blueprint plan and the Gray plan will achieve the EPA requirements outlined in the consent order. The City is recommending the Blueprint plan as the preferred option.

Changes in both plans resulted from updates to the collection system model, which is used to identify overflows, back-ups, or treatment plant bypasses and to predict how population increases or the addition of

proposed remedies will impact the system. Updates also enabled the city to estimate Water In Basement (WIB) events.

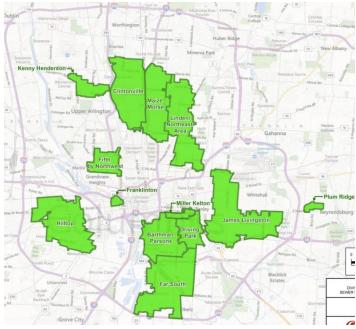


Figure 1: Original Blueprint Areas covering 29,739 acres.



Figure 2: Final Blueprint Areas covering 18,400 acres.

The updated model revised the footprints of the Blueprint areas. The original Blueprint areas covered approximately 29,700 acres (see Figure 1). Results from the updated model eliminated five of the original areas (Maize/Morse, Far South, Kenny/Henderson, Franklinton, and Driving Park), reduced or modified the size of other areas (Fifth by Northwest, Plum Ridge, Hilltop, and Barthman Parsons/Near South), and added new areas of West Franklinton, Linden, and Near East. The final Blueprint Priority Area map covers approximately 18,400 acres (see Figure 2).

The updated model identified improvements that will be required in both the Blueprint and the Gray plans. For example, the Lower Olentangy Tunnel (LOT), which will be approximately 9 to 10 feet in diameter, is required in both plans to complete the Combined Sewer Overflows (CSOs) program and to provide relief from Sanitary Sewer Overflows (SSOs). The LOT will be constructed in two phases and the first section must be operational by July 1, 2025 to comply with the consent order.

The presenters explained the assumptions included in the model and compared and contrasted the anticipated infrastructure requirements in each of the final Blueprint areas.

Blueprint – The Blueprint plan is designed to address the cause of the problem--excess water entering the sewer system—by eliminating the opportunities for excess water

to enter the sewer system. The City assumed the following participation rates for each of the four components: 50% participation in roof water redirection, 90% participation in home sewer lateral lining, 100% participation in mainline sewer lining, and 25% participation in sump pump technology. Applying these assumptions, the City looked at all areas to identify whether or not any WIB events or DSRs would occur when modeling the Blueprint plan. If the model showed that all WIBs and Design Sanitary Relief (DSR) locations were eliminated, then it was concluded that the four Blueprint strategies solved the issues in the area. If WIBs and DSRs still occurred after modeling the Blueprint strategies, additional gray infrastructure was added.

The City is collaborating with suburban communities if they want to participate in the City's proposed plans. Cost sharing proposals are still available. The City is not, however, relying on participation of the suburbs to successfully implement the Blueprint plan. The City will be briefing the suburbs on the final plans. **Table 1:** Table 1 shows preliminary results of the analysis with the updated model. It compares the number of Water in Basement (WIB) events and DSRs that the model estimates will occur over a 20-year period under the Base plan (the existing sewer system) and the Blueprint plan.

	Event	Base Plan	Blueprint Plan
Fifth by Northwest	Water in Basement	103	1
	DSR	10	0
Clintonville	Water in Basement	1547	2
	DSR	12	0
Linden	Water in Basement	1260	2
	DSR	4	0
Near East	Water in Basement	473	3
	DSR	0	0
lamos Livingston	Water in Basement	1849	0
James Livingston	DSR	0	0
Dhum Bidgo	Water in Basement	152	0
Plum Ridge	DSR	1	0
NAillon Kolton	Water in Basement	59	0
Miller Kelton	DSR	5	0
Near South	Water in Basement	392	0
	DSR	6	0
West Franklinton	Water in Basement	TBD	TBD
	DSR	TBD	TBD
Hilltop	Water in Basement	1819	1
	DSR	3	0

Gray /2015 WWMP – The Gray plan addresses the symptoms of the problem—basement backups and sanitary sewer overflows—by adding or modifying pipes and tunnels to manage the excess water entering the sewer system. The City used the updated model to re-examine the 2005 WWMP and determined that fewer tunnels would be needed than anticipated in 2005. The 2005 WWMP required 28 miles of tunnels; the Gray plan requires 14 miles of tunnels. The re-modeling effort also showed that the LOT would require an extension beyond the two phases needed in the Blueprint plan and that the Alum Creek Relief Tunnel (ART) could be shortened. Neither the LOT extension nor the ART are required in the Blueprint plan.

In some areas, the Gray plan is expected to perform as well as the Blueprint Plan; however overall the Blueprint plan does a better job of eliminating basement back-ups.

Table 2: Table 2 shows preliminary results of the analysis with the updated model. It compares the number of Water in Basement (WIB) events and DSRs the model estimates will occur over a 20-year period under the Base plan (the existing sewer system) and the Gray plan.

	Event	Base Plan	Gray Plan
Fifth by Northwest	Water in Basement	103	0
	DSR	10	0
Clintonville	Water in Basement	1547	9
	DSR	12	0
Linden	Water in Basement	1260	4
	DSR	4	0
Near East	Water in Basement	473	1

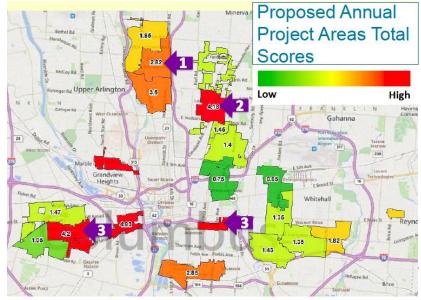
	DSR	0	0
James Livingston	Water in Basement	1849	1
	DSR	0	0
Plum Ridge	Water in Basement	152	0
	DSR	1	0
Miller Kelton	Water in Basement	59	43
	DSR	5	3
Near South	Water in Basement	392	0
	DSR	6	0
West Franklinton	Water in Basement	TBD	TBD
	DSR	TBD	TBD
Hilltop	Water in Basement	1819	193
	DSR	3	0

CAP members had the following questions and comments. *City responses are italicized*.

- The issues in the Northland area will be relieved by the Blueprint plan or is this area still being studied? The model shows there will not be any basement backups or overflows in that area, so it was removed from the list of Final Blueprint Areas.
- What would construction of the LOT look like above ground? Some above ground areas would be needed to access the tunnel, but those areas are not yet determined.
- What is the difference between a tunnel and a relief pipe? Both are essentially pipes, but depth is the primary difference. Pipes would be constructed on the surface and installed in the ground whereas the tunnels are much deeper and would be constructed below ground.
- Will the document submitted to the EPA show each individual area and how both the Blueprint and Gray plans impact the area? *Yes, the report will show that and will identify big system wide solutions and individual solutions in each area for each plan.*
- If there is greater participation in the four Blueprint components, does that mean you could eliminate the need for tunnels in the Blueprint plan? Yes, but not completely. Even in the Blueprint plan, there are some areas that will require gray infrastructure.
- What is the sequence of operations and will you collect participation rates to determine what will be needed? We have talked about not front loading the construction of gray infrastructure so that we can gauge participation rates and determine which gray infrastructure solutions would be needed.
- Has the City made assumptions about participation rates of different demographic groups? What if you don't get the participation rates you expect? *RAMA's work shows there is no difference based on demographics, so we've used the same assumptions in all areas. The participation rates are somewhat flexible; if we get more participation in one component, we could reduce participation in another. If we do not achieve the assumed participation rates, then we will ask EPA for an opportunity to design another solution.*
- Will either of the plans prevent flooding like what has occurred in Texas? The Blueprint plan may fare slightly better, but neither of the plans is designed to respond to the size of storm seen in Texas or to correct all localized flooding.
- When you say more pipes are required for the Gray plan, would it be more invasive and disruptive? For the Gray plan we would be working in the streets instead of in yards, which might cause some disruption getting to and from homes. But we would phase the work to keep traffic flowing as smoothly as possible.
- Will the Ohio EPA choose the plan? We will submit two plans and propose a preferred plan. The Ohio EPA seems supportive of the Blueprint plan, and ultimately we will need their approval before we can construct anything.

Updates on Prioritization, Green Infrastructure, and Ordinance Development, and Next Steps

Susan Ashbrook described the process used to prioritize the Blueprint areas. Each of the final Blueprint areas was divided into 1,000 acre projects following the sewer system. The criteria were then applied using the same weighting suggested by the CAP members during the October 2013 meeting. Figure 3 illustrates the prioritized areas. The top three priority areas in rank order include 1) Clintonville, 2) Linden, 3) Miller Kelton/Fifth by Northwest/West Franklinton/Hilltop.



Susan provided a brief update on the use of green infrastructure. The City initially anticipated that the Blueprint plan would include the

Figure 3: Prioritized final Blueprint Plan Areas. Red and orange areas are highest priority.

construction of green infrastructure on 1-2% of the project land area. However, the City learned that construction of that amount of green infrastructure would be more expensive than anticipated. Green infrastructure will still be included in select areas and sized to receive redirected flow to ensure street flooding will not get worse. The use of green infrastructure will meet the required 20% reduction in Total Suspended Solids.

Susan also provided an update on the ordinance development. A draft ordinance has been drafted and is ready to be decided upon by the City Council pending Ohio EPA approval of the Blueprint plan.

The City's next steps are to finalize the costs for both the Blueprint and Gray plans and to perform the affordability analysis. The City will then draft the plan and submit it to the Ohio EPA on September 15, 2015. The City will continue to work on project design while the Ohio EPA reviews the plan and, pending approval, begin construction in 2016.

Community Engagement Update

Margie Hiermer, RAMA Consulting, provided a brief wrap up of community engagement efforts. Between July 2013 and May 2015, RAMA used a variety of engagement activities to educate the public about Blueprint Columbus and assess community perceptions and attitudes about Blueprint. RAMA distributed approximately 45,000 informational pieces, attended 85 events, and actively canvassed 291 local businesses and 18 civic associations or faith-based groups to raise community awareness. Targeted engagement to raise awareness in Clintonville included door to door canvassing at 3,000 homes. Educational open houses and neighborhood meetings will be convened in Clintonville in June and July. Community perceptions were gauged through door to door polling, engagement at 19 community and civic events, and distribution of a mail back survey flier. Results of the engagement efforts show that over 70% of all survey participants support the Blueprint Columbus approach; fewer than 3% did not support it. Over 60% of the survey respondents were particularly supportive of the use of green infrastructure. Sixty-two percent of homeowners supported lateral lining. Thirty-nine percent of homeowners indicated that sump pumps were their favorite aspect of Blueprint Columbus. Roof water redirection was considered favorable by over half of the survey respondents. RAMA

CAP Guidance and Support for the Integrated Plan

Maria Mone noted that community advisory groups in other cities have expressed support for particular plans or options by submitting resolutions to city councils. For example, in Kansas City a community advisory group submitted a resolution to the City Council to show their support for a specific approach. Another option would be to submit a letter of support to the Mayor. Support could be provided in the form of general approval or approval for specific aspects of the plan. When asked what they thought about providing support for a plan, CAP members generally expressed support for submitting a letter to both the Mayor and City Council. CAP members noted they will need to review the affordability and cost information and will need time to discuss support with their constituencies.

CAP members asked the following questions. *Responses from the City representatives are italicized*.

- What if the Ohio EPA refuses to fund the project? The Ohio EPA will not be funding the project; it is funded by the ratepayers. The Ohio EPA could provide a loan, but the Ohio EPA's primary role is to approve or not approve of the plan.
- Do you know how much the Blueprint and Gray plans will cost? We think they will cost about the same; but both plans have changed dramatically. We will have this information for the next meeting.
- How is the Sewer and Water Advisory Board interfacing with this process? The City will discuss the capital program with them next week and another meeting will be scheduled with them to discuss the affordability announcement. The City will seek approval of the plan from them like they sought in 2005.

Next Steps

During the next CAP meeting on July 22, 2015, the CAP will review and discuss the results of the cost and affordability analysis and further discuss how to frame CAP support of a plan. It is anticipated that the final CAP meeting will be scheduled for August, 2015.

The meeting adjourned at approximately 8:00 pm.