



Meeting Notes

Meeting Date: August 9, 2017 **Time:** 9:00 - 11:00 am
Meeting Location: Johnson County Transit Facility, 1701 W Old Hwy 56, Olathe, KS 66061

Attendees:

Watershed-Based Organization Sub-Committee	JC SMP	Consultant Team
Paula Schwach – City of Westwood Hills	Lee Kellenberger	Patti Banks – Vireo
Chet Belcher – City of Olathe	Heather Schmidt	Triveece Penelton – Vireo
Lauren Garwood – City of Overland Park	Sarah Smith	Andrew Smith – B&V
Cynthia Moeller-Krass – City of Shawnee		Pablo Gonzalez - Quesada – B&V
Kevin Bruemmer – City of Merriam		Justina Gonzalez – B&V
Tom Jacobs – City of Lenexa		
Matt Kapfer – City of Olathe		
Charles McAcllister – JC Wastewater		
Brian Kelly – USGS		
John Denlinger – HDR		
John Parker – Burns and McDonnell		
Jessica Veach – CDM		
Dan Miller – Lamp Rynearson & Associates		

Agenda Objectives
Discuss flood damage reduction alternative and project prioritization
Highlight potential revisions to JC SMP Flood Problem Rating Table

Handouts: Agenda
 JC SMP Flood Problem Rating Table

Notes

Introduction / Update of Implementation Status / 3rd Meeting Goals

- Andrew of B&V welcomed attendees to the third meeting of the flood damage reduction sub-committee. He provided a quick update of SMP strategic plan implementation to date.
 - **Strategic Plan Implementation Progress:** The flood damage reduction sub-committee is in phase two of the overall implementation process. The specialty sub-committees are working through the details on water quality, system management, and flood damage reduction. Soon the funding sub-committee will convene and the watershed-based organization sub-committee will meet again. Once all sub-committees finalize future strategies, then a pilot watershed organization will be implemented at a later date.

- **Flood Damage Reduction Sub-Committee 2nd Meeting Review:** At the previous meeting, the sub-committee considered the level of service for flood damage reduction and that service may vary per watershed. The sub-committee discussed opportunities to update modeling during the watershed planning process and possible inclusion of the NOAA Atlas 14 updates. Additionally, the sub-committee talked about project prioritization and potential modifications to the existing matrix. The group had an opportunity to highlight the type of impacts that should be important to the SMP.
- Consultants outlined the agenda and goals of the third flood damage reduction meeting.
 - **Flood Damage Reduction Sub-Committee 3rd Meeting Goals:** During the third meeting, the sub-committee will further identify the preferred direction for the flood damage reduction component of the SMP. A majority of time will be spent delving into the details of the Flood Problem Rating Table and proposed modifications.

JC SMP Flood Problem Rating Table – Potential Revisions

- Consultants led a discussion on potential revisions to the JC SMP Flood Problem Rating Table. Andrew noted that the rating table has served the program well and is widely used. Rather than draft new prioritization, the objective of the sub-committee is to consider modifications to the rating table to make the tool even more effective and in alignment with proposed strategies. Once the rating table is updated, then a sensitivity analysis can be done to compare past projects to see if the revised table is giving desired results. The revised table would be considered effective if certain projects that should get funding move higher up in rank. At the same time, though, the sub-committee understands that certain projects may not have been proposed based on the past prioritization structure.
- Lee of JC SMP noted that the direction from the Steering Team and County Commissioners is to follow a watershed based approach. In the past, it was up to the cities to identify projects. The County goal is to develop watershed master plans that identify key projects with there being potential County interest in large scale projects. The master plans may give a list of flooding projects that the County will work towards. Cities that have separate projects may end up pursuing those under the revised rating table. Overall, updating the rating table can provide guidance when developing the master plans and set a standard for uniform prioritization.
- Sub-committee members had the following comments on the JC SMP Flood Problem Rating Table:
 - **Inclusion of Home Buyout Program**
 - The sub-committee could consider adding a multiplier that takes into consideration if a home-owner is amenable to a buy-out. The current system incorporates a buy-out approach but doesn't give a scoring weight to it.
 - Under the current system, some cities don't even propose a project if a homeowner is not interested in a buy-out. With the rating table, cities will truncate projects in segments so as to get the 100 pts needed. Such an approach may not be geared towards effective watershed management.
 - The initial steps of using the rating table are very conceptual. There would be considerable risk in engaging too early with homeowner's about something as significant as buying a person's home.
 - The County is interested in pursuing home buyout as a standalone program. In that sense, cities or the watersheds would not have to wait as long to pursue such solutions. Home buyout, such as if one house out of five wants to sell, could move forward without cities having to proceed on established projects.
 - Single home buyout is a solution that cities would like to pursue, especially if there is flexibility to respond to seller motivations after a flooding event.

- Home buyout should be prioritized for sections that already have buyouts or have vacant land so as to reduce patchwork sections.
 - The watershed approach could prevent patchwork solutions. The County could provide a general framework of the program and then the watershed organizations may be the best entities to further evaluate buyout solutions. Giving the watershed organizations more options for solutions will be a good thing.
 - The SMP shouldn't be structured as a home buying business but there are examples when home buyout provides multiple advantages to a city. In Merriam, for example, multiple homes in a frequently flooded area were bought and the site became a public park. There are trade-offs though that have to be thoroughly evaluated.
 - As for funding, home buyout ought to compete with other projects versus having separate allocated funding. From previous experience, separated funding does not always get used or creates lack of flexibility. The program is evolving and will likely need to continue to shift strategies. A buyout component has to be considered amongst the entire context of the program.
 - Currently, the County will fund the lowest cost solution meaning that if home buyout is the most expensive option then the program can't fund to that level. But a city can go ahead with the highest cost option so long as they are able to come up with the difference in funding.
- **Multiple Buildings Flooded**
 - The number of buildings flooded should be a sliding scale rather than 1-5 buildings receiving a multiplier value of 1 and 6-9 receiving a value of 2, etc.
 - Having a multiplier on a sliding scale would provide more granularity and would certainly help with more projects being proposed.
 - The multiplier should not stop at 10 or more buildings but should rather continue. There does not appear to be a clear rationale for stopping at 10 buildings.
- **Number of Known Deaths**
 - Public safety and saving lives are clearly the top priorities of the program. Historical loss of life is not a desirable topic to discuss but there should be greater emphasis on number of known deaths.
 - The use of water rescue could be given weighting under potential loss of life.
 - Perhaps loss of life should be evaluated on a case by case basis. It does not happen that often and should receive appropriate consideration when it does.
 - Loss of life could automatically receive 100 pts but that does not necessarily affect if a project is funded faster. Some projects have been around for a long time because of political/resident resistance.
 - The multiplier value for loss of life should stay as is. Potential loss of life could be considered under street flooding.
- **Street Flooding**
 - The current rating table really only gives points for one street crossing. The result is that cities are breaking up projects when pursuing funding. The sub-committee should consider approaches to fix that.
 - Each instance of street flooding should be counted.
 - One solution that resolves two problems should receive greater weight.
 - A separate calculation sheet could be used for flooding of roads.
 - The analysis of past projects under the revised rating table should indicate whether increasing street flooding creates too high of scores and distorted prioritization.
- Members also indicated that the sub-committee needs to further consider whether the 100 pts minimum project score should be modified or whether a point threshold is still appropriate under cost-benefit analysis.

Closing / Next Steps

- Meeting concluded with final comments on the flood problem rating table. Consultants will provide a revised rating table and analysis that will be the main focus of discussion for the next meeting.
- The next meeting is scheduled for September 13th at the same time, same place.
- SMP and consultants thanked the participants for their time and valuable input in guiding new paths forward.

**Johnson County Stormwater Management Plan
Flood Problem Rating Table 1999**

City: _____ Basin & Watershed: _____
 Location: _____
 Description of Problem: _____

Flood Problem Rating

Factor #	Factor Description	Eliminates Factor	Rating Points	Frequency Multiplier	Severity Multiplier	Total Points
1	Loss of Life		40			
2	Flooding of habitable building	3	40			
3	Flooding of garages and outbuildings	2	20			
4	Flooding of arterial street of more than 7 inches	5,6,7	30			
5	Flooding of collector street of more than 7 inches	4,6,7	25			
6	Flooding of residential street of more than 7 inches	4,5,7	20			
7	Widespread or long-term ponding in streets	4,5,6,	20			
8	Erosion threatens habitable buildings, utilities, streets, bridges	9	30			
9	Erosion significant in unmaintained areas	8	10			
10	Erosion causes imminent drainage structure collapse	11,12	30			
11	Erosion causes marginal drainage structural collapse	10,12	15			
12	Erosion causes failure of drainage structure	10,11	10			
13	Other cities receiving benefits		20			
14	Other cities contributing to flooding problem		10			
Project Total Points						
Estimated Total Project Cost						
Priority Rating = Total Project Cost/Total Points						

Applies to #	Frequency Multiplier	Multiplier Value
2-7	One time in ten years or by 10- to 100-year design storm	1
2-7	Two times in ten years or by 5- to 10-year design storm	2
2-7	Three or more times in 10 years or less than under 5-year design	3
14	One city receiving benefit	1
13,14	Two cities receiving benefit or second city contributing to flooding problem	2
13,14	Three or more cities receiving benefit or three or more cities contributing to the flooding problem	3

Applies to #	Severity Description	Multiplier Value
1	Number of known deaths * =1 for each death	*
2,3	1-5 buildings flooded historically or by 100-year existing or future design flow	1
2,3	6-9 buildings flooded historically or by 100-year existing or future design flow	2
2,3	10 or more buildings flooded historically or by 100-year existing or future design flow	3
4,5,6	Restricts emergency vehicles	1.5
8	Nuisance erosion creates maintenance problems	1
8	Moderate erosion, failure of structure or facility within next 5 years possible	2
8	Severe erosion, failure of structure or facility imminent	3
10-12	Collapse causes flooding of land by 100-year design storm	1
10-12	Collapse causes flooding of garages/outbuildings by 100-year design storm	1.5
10-12	Collapse causes 1-3 habitable buildings to be flooded	2
10-12	Collapse causes 4-6 habitable buildings to be flooded	3
10-12	Collapse causes more than 6 habitable buildings to be flooded	4