



Meeting Notes

Meeting Date: June 19, 2017 **Time:** 1:30 – 3:30 pm
Meeting Location: Johnson County Transit Facility, 1701 W Old Hwy 56, Olathe, KS 66061

Attendees:

Water Quality Focus Sub-Committee	JC SMP	Consultant Team
Ian Fannin-Hughes – City of Overland Park	Heather Schmidt	Patti Banks – Vireo
Patty Ogle – City of Overland Park	Sarah Smith	Triveece Penelton – Vireo
Pam Fortun – City of Overland Park	Lee Kellenberger	Andrew Smith – B&V
Bryan Dyer – City of Merriam		James Schlaman – B&V
Rob Beilfuss- City of Olathe		Beth Quinlan – B&V
Matt Just – City of Lenexa		Justina Gonzalez – B&V
David Roberts – City of Leawood		
Todd Rogers – JC Department of Health and Environment		
Teresa Rasmussen – U.S. Geological Survey		
Lauren Grubbs – Burns and McDonnell		
Katie Handley – GBA		
David Dods - AECOM		
Jamie Cole – HDR		
Rachelle Lowe – Burns and McDonnell		

Agenda Objectives

Review feedback from May meeting and respond to additional case studies requested
Discuss factors to include and avoid in the conceptual water quality prioritization matrix

Handouts: Agenda
 JC SMP Water Quality Prioritization Matrix - DRAFT

Notes

Introduction / Update of Implementation Status / 3rd Meeting Goals

- Andrew of B&V welcomed attendees to the third meeting of the water quality sub-committee. He provided a quick update of SMP strategic plan implementation to date.
 - **SMP Strategic Plan Implementation Status:** The watershed-based organization sub-committee has outlined the structural framework of the future organizations and is now currently on hiatus while the other sub-committees (water quality, flooding, system management, and funding) work to fill in details. When the watershed-based organization sub-committee reconvenes they will use the

input from the other sub-committees to finalize a future framework. A pilot watershed will then enact the framework which is likely to occur in 2018.

- Andrew outlined the agenda and goals of the third water quality sub-committee meeting.
 - **Water Quality Sub-Committee 3rd Meeting Goals:** A Draft JC SMP Water Quality Prioritization Matrix has been given to the sub-committee as an example of a prioritization structure. The main goal of the third meeting is to discuss the factors to include and avoid in the conceptual matrix. Beth Quinlan of B&V will lead the discussion on water quality prioritization.
- Consultants called for possible comments or questions on the strategic plan implementation.
 - Consultants highlighted an updated slide of the list of the cities in each watershed grouping along with their corresponding percentage of land area. Modified watershed names and values are provided below.

Cities in the 6 Watershed Groupings

NE Johnson County		Indian Creek		Upper Blue River		Marais Des Cygnes River		Captain/Kill Creek		Cedar/Mill Creek	
Fairway	4%	Johnson County Uninc.	0.0%	Leawood	7%	Edgerton	8%	Gardner	7%	Bonner Springs	0.3%
Lenexa	4%	Leawood	14%	Johnson County Uninc.	50%	Gardner	5%	De Soto	7%	De Soto	4%
Merriam	15%	Lenexa	4%	Olathe	6%	Johnson County Uninc.	79%	Johnson County Uninc.	86%	Gardner	0.1%
Mission	9%	Olathe	21%	Overland Park	36%	Olathe	0.3%			Johnson County Uninc.	15%
Mission Hills	7%	Overland Park	57%	Spring Hill	0.8%	Spring Hill	8%			Lake Quivira	0.9%
Mission Woods	0.3%	Prairie Village	4%							Lenexa	22%
Overland Park	26%									Olathe	31%
Prairie Village	11%									Shawnee	27%
Roeland Park	6%										
Shawnee	17%										
Westwood	1.4%										
Westwood Hills	0.2%										

Review of Feedback from 2nd Water Quality Sub-Committee Meeting

- Consultants quickly highlighted the feedback received from participants during the May meeting. During the second meeting, participants discussed the case studies provided in the Water Quality White Paper. General key points from the case studies that participants considered applicable to the JC SMP were:
 - The importance of public education/involvement standards
 - Demonstrated pro-activeness including preservation of high quality areas
 - The understanding that water quality is broader than just compliance

Additional Case Study Information Requested

- At the end of the May meeting, participants requested additional case study information for particular areas. Beth Quinlan of B&V provided a brief summary of the water quality initiatives in the following areas:
 - **Springfield – Branson:** The Ozarks Water Watch group is very active in the area and works to preserve water quality of the upper White River watershed. The group focuses on three main priorities: 1) coordinating a volunteer monitoring network for streams and lakes throughout the Upper White River watershed 2) promoting better decentralized wastewater treatment 3) and coordinating public education activities and action projects.
 - **Charlotte, NC:** The City of Charlotte has done initiatives connecting water quality with flood control. The City has had to increase their stormwater management due to heavy urbanization and storm changes such as from hurricane activity. But a key group in the area is the Catawba Wateree Water Management Group that has worked with regional partners to create a basin-wide Water Supply Master Plan for the Catawba-Wateree River Basin. The group is comprised of 18 public water utilities in North and South Carolina along with Duke Energy. They are primarily concerned with regionally coordinated efforts to manage water consumption but have also looked at how changes in water quality will affect uses for either water supply or power production.
 - **Chesapeake Bay:** The Chesapeake Bay cleanup is a great resource for a diverse set of water quality strategies and has become a prototype for other programs around the country. The Maryland counties of Prince Georges and Montgomery have taken very active measures to improve water quality of the bay. The program has also looked at nitrogen/phosphorus reduction credits for projects that reduce sediment loading. A K-State study has looked at replicating the same approach for the Midwest area.

Water Quality Prioritization Discussion

- Consultants noted that as the SMP incorporates water quality projects that the program will need a clear and consistent way to prioritize projects. Sub-committee members had the following initial questions and comments regarding prioritization:
 - ***Q: Can the SMP explain the current flood damage reduction prioritization process along with what works well and doesn't?***
 - The prioritization utilizes a scoring sheet to evaluate projects that a city proposes. For instance, an area may have issues during the 100 yr event with a road overtopping and 3 houses flooding. The city would then look at their set of solutions and use the scoring sheet to calculate a set of points per solution. Points are then weighted against the estimate cost. In order for projects to be eligible for funding, they must have a minimum of 100 points. The more points, the better the project is related to cost. Generally, lower cost projects that solve the most problems get paid for first. But now that much of the “low hanging fruit” has been addressed, the program is looking to shift focus on the next level of challenges. (Sarah, JC SMP)
 - ***Q: In regards to funding, will there be separate pools of funds for water quality, system management, and flood control? Or are water quality projects to compete with or be added on to flooding and system management initiatives? The funding structure will affect how the sub-committee looks at prioritization.***
 - How funds will be allocated is still under consideration. Strategic plan implementation will be looking at two issues: 1) how to drive alternative funding into the program, and 2) how will funding move within the program, such as will there be a set amount of funding per watershed organization or per water quality, flooding, etc. The funding sub-committee will

be looking at those issues when they convene in the fall. At present, the water quality sub-committee should consider prioritization based solely on water quality factors and then implementation will later look at prioritization across the program. (Andrew, B&V)

- ***Q: From a public involvement standpoint, would it be beneficial to have a better understanding of what JC residents desire as a water quality goal and if there is a way to quantify that? Particularly since there is not a strong regulatory push for additional water quality improvements, it would be good to see what residents want and if we can try to meet that with SMP projects. Including resident concerns would also be helpful when pursuing alternative funding.***
 - MARC does a resident survey every two years with water quality consistently ranking as a high priority, but that is not clearly defined from a resident standpoint. Common complaints that cities receive is that they don't want their ponds turning green and they want to make sure their kids can interact safely with the water. (Heather, JC SMP)
 - The sub-committee may need to focus primarily on regulatory requirements. Additional water quality concerns may be beyond the scope of the sub-committee, though a future watershed-board would be able to pursue further water quality projects if constituents have an active interest. (Lee, JC SMP)
- Beth Quinlan of B&V presented the JC SMP Water Quality Prioritization Matrix – DRAFT with the following key points. A copy of the matrix is attached.
 - **Summary of JC SMP Water Quality Prioritization Matrix – DRAFT:** Given that each watershed will have different objectives that are not yet identified, the draft matrix has very broad initial categories that can be easily changed. The future watershed plans will better define the goals of the watersheds so for now goals are generically noted as primary or secondary. The draft matrix not only assesses the positive impacts of meeting watershed goals and preservation, but also looks at feasibility and the affects of potential negative impacts that have to be considered as well. Auxiliary additional benefits such as public education and suitability for alternative funding are included. For now, the discussion on prioritization shouldn't look at the numbers and assigned ranking, but rather the criteria for the degree of water quality improvement/preservation. A water quality prioritization does not necessarily have to have all of the factors listed under the degree of water quality improvement. Also, the sub-committee should consider if improvements and preservation should be separate for prioritization weighting. Overall, the draft prioritization makes two key assumptions of the future watershed plans: 1) that water quality goals will be clearly identified and ranked, and 2) that the baseline conditions from existing data will be defined.
- In response to the draft prioritization matrix, sub-committee members had the following summarized comments:
 - Since the watershed plans will not be ready till likely 2019 to 2021 at the earliest, the SMP should consider an interim matrix. The top water quality criteria across the County should be to get TMDL waters de-listed. In the interim, that could be the primary focus of the program because the TMDL criteria are already defined.
 - It should be noted, though, that building a program around TMDLs alone would not be a robust enough water quality program.
 - The categories laid out in the draft matrix consider a variety of aspects of a project and it is good that it considers negative impacts as well. Having a scale for primary and secondary goals is especially important.
 - The program will need to consider how to fairly prioritize projects in natural vs. developed areas. For the watershed plans, it will be tricky to establish realistic goals, particularly in urban areas.

- Preservation of existing streams that already meet attainment should be high priority. The matrix should more clearly provide weighting to that.
 - Preservation should also include the preservation of natural vegetation and soils. The standard for what is considered a “nice” stream should be defined, such as if looking at an agricultural standard or standards better than that.
 - From a resident standpoint, water quality projects should also improve the potential for secondary contact. Residents want to know if it is safe for their children and pets to interact with a stream or pond.
 - In regards to secondary contact, USGS does have one base-flow sample per year for County monitored sites.
- Lee of JC SMP asked the sub-committee if **hydromodification** criteria could be used to simplify the assessment of proposed water quality projects. The program could look at the degree of hydromodification from development and then look at levels of flow modification as a goal for water quality improvement. The benefits of the hydromodification approach are that flow can be readily measured and it is also easier to communicate with public works officials in relation to flow. Sub-committee participants comments are summarized below:
 - For the hydromodification approach, there should be caution in that there could be un-intended consequences from a limited approach. Without the science of what is really going on in a stream causing impairments, communities could end up making significant capital investments that don’t really address the issue. That would call into question whether projects really provide the benefit that was intended at the beginning.
 - Hydromodification may be a better approach for undeveloped areas. The program would likely want a reference stream, which would then bring up permutation issues when applying the reference across differing areas.
 - There is an existing reference stream for JC which is Captain Creek. Some level of generalization should be expected for the program since water quality initiatives will be beyond what is required in permits.
 - The program should recognize existing limitations and what tools are realistically readily available. A hydromodification approach would follow that.
 - Hydromodification would allow for more infiltration BMPs versus filtration which in most cases would be preferable because of reducing the hydrograph and corresponding consequences such as streambank erosion, etc.
 - If generalizations are done then it still needs to be shown that such generalizations do end up reaching the objectives established. From evaluating projects across the nation, there are instances in which project solutions have been so broad brushed that they do not provide the intended outcome.
 - Lee asked the sub-committee if the program should have **two separate categories** for water quality projects. The first category would be for **retrofit of developed areas** and the second category would be for **preservation in undeveloped areas**. The sub-committee noted which type of projects would fit under such categories.
 - **Examples of Retrofit Projects:**
 - Detention pond retrofits
 - Disconnect impervious surface
 - Streambank stabilization
 - Daylighting streams
 - Street Sweeping

- Lake dredging
- Infiltration
- Green streets
- Septic system removal
- Sanitary connection removal
- **Examples of Projects for Undeveloped Areas:**
 - Regional wetlands
 - BMPs
 - Stream setbacks
 - Riparian corridor restoration
 - Purchase development rights
 - Conservation easement / stream buffer conservation funding

Closing / Next Steps

- Meeting closed with consultants calling for any final comments or questions.
 - **Q: Will monitoring be a part of the water quality program?**
 - The goal is for the program to continue the monitoring on behalf of the cities. A proposed future strategy is to do skeletal sampling countywide and then localized intensive sampling so that we are getting more informed decisions. The program wants to start making investments in water quality and will need to demonstrate improvements over time. (Lee, JC SMP)
- **The dates of the next sub-committee meetings have changed.** The sub-committee will meet again on **July 24th** and **August 28th** at the same place from 1:30-3:30 pm. If you are unable to attend either meeting, please send Heather an email to let her know.
- JC SMP and consultants thanked the participants for their time and valuable discussion.

Johnson County Stormwater Program

Water Quality Projects

Prioritization Matrix -DRAFT

Category	Factors	Points	Maximum Possible Score	Score	Weight (%)	Category points	
<u>Alignment with Watershed Goals</u>			10		25%		
	addresses 2 or more primary goals	10		10			
	addresses primary and secondary goals	7					
	addresses secondary goals	4					
Score for category (points x weight)						25	
<u>Degree of Water Quality improvement/Preservation</u>			10		50%		
	Attain WQ Criteria						
	remove from TMDL list			10			
	partial attainment						
	increase days of attainment						
	NPS load reduction (lbs/yr, %)						
	Increase Water Quality Index score						
	Habitat Improvements						
	Streambank stabilization						
	Shift to pollutant sensitive organisms						
	Preservation						
	Addresses priority water bodies						
	Addresses other water bodies						
Score for category (points x weight)						50	
<u>Logistical Feasibility</u>			10		10%		
	Public Acceptance						
	high	5		5			
	moderate	3					
	low	1					
	Permitting Issues						
	low	5					
	moderate	3		3			
	high	1					
Score for category (points x weight)						8	
<u>Potential Negative Impacts</u>			10		5%		
	negligible	10					
	minor	5		5			
	short term	3					
Score for category (points x weight)						2.5	
<u>Additional Benefits</u>			10		10%		
	public information/education	5		5			
	Suitable for alternative funding						
	funding secured	5					
	application made	3					
	meets criteria	2		2			
Score for category (points x weight)						7	
Totals	(maximum points = 100)			50	40	100%	92.5