



Meeting Notes

Meeting Date: April 26, 2017 **Time:** 9:00-11:00 am
Meeting Location: Johnson County Transit Facility, 1701 W Old Hwy 56, Olathe, KS 66061

Attendees:

System Management Sub-Committee	JC SMP	Consultant Team
Neil Meredith – City of Olathe	Lee Kellenberger	Patti Banks – Vireo
Mike Gregory – City of Shawnee	Sarah Smith	Triveece Penelton – Vireo
Tom Jacobs – City of Lenexa	Heather Schmidt	Andrew Smith – B&V
John Sullivan – City of Westwood		Jeff Henson – B&V
Lorraine Basalo – City of Overland Park		Justina Gonzalez – B&V
Patrick Beane – JC Wastewater		
Jason Hrabe – JC AIMS		
Brent Johnson – Olsson Associates		
Mike Beezhold – HDR		
Stacy Gallick – TREKK		

Agenda Objectives

Finalize parameters to include as assets in system management
Presentation of Johnson County Wastewater Collection System Asset Management Program
Discuss case studies in System Management White Paper

Handouts: Agenda

Notes

Introduction / Update of Implementation Status / 3rd Meeting Goals

- Andrew of B&V welcomed attendees to the second meeting of the system management sub-committee. He provided a quick update of SMP strategic plan implementation to date.
 - **Strategic Plan Implementation Progress:** The watershed-based organization sub-committee is drafting the structural framework for the County watershed-based organizations. The sub-committee has looked at what entities should be represented and what authority they should have, particularly in regards to voting. Next discussions will involve a look at organizational governance and potential considerations for Bylaws. Later in the process, a pilot watershed organization will begin implementing the structure, goals, and prioritizations prepared by the sub-committees.
 - **System Management Sub-Committee 2nd Meeting Review:** At the previous meeting, Jason Hrabe of JC AIMS provided a brief presentation of the existing AIMS stormwater data for the County. The

sub-committee also continued a discussion outlining the components to include as assets in system management.

- Consultants then outlined the agenda and goals of the third system management meeting.
 - **System Management Sub-Committee 3rd Meeting Goals:** During the third meeting, the sub-committee shall review and finalize the list of parameters to include as assets in system management. Patrick Beane of JC Wastewater prepared a presentation on their asset management program which will highlight the value of an asset management approach. After the presentation, the sub-committee shall discuss the case studies found in the System Management White Paper that was drafted by Bryan Dickerson of B&V, Asset Management Regional Practice Leader.

Finalization of the Parameters to Include as Assets in System Management

- Consultants presented the list of parameters to include as assets in system management which was determined based on feedback from February and March meetings. The parameters are as follows:
 - **Natural Features in the System**
 - Natural wetlands (size threshold)
 - Streams (drainage threshold)
 - Riparian areas (drainage threshold)
 - **Engineered Features in the System**
 - Detention basins (private and public)
 - BMPs (lower priority since regulatory)
 - Pipes (beginning at uppermost inlet)
- On the issue of riparian areas, consultants called for further discussion to confirm that riparian areas would be included since consensus was not clearly indicated during the previous meeting. Participants indicated that riparian areas should be included. Streams and riparian areas would be surveyed at the same time. The extent of a riparian area to assess will still need to be considered along with how to weigh and prioritize riparian areas.
- Consultants confirmed from sub-committee participants that all parameters in the above list should be considered as inventory for the stormwater system. Participants noted the following additional comments:
 - Private features should be considered as part of the stormwater inventory so as to have a comprehensive understanding of the system. Ownership does not define the limits of the stormwater inventory. But the inclusion of private features does not then imply responsibility on a city's part to maintain the feature or provide project funding.
 - It is difficult for city representatives to consider a feature an asset, such as a stream, if there is no city ownership. In the context of the SMP stormwater inventory, an asset is more broadly defined as a community resource and not just a city owned resource.
 - Engineered features should include the whole engineered storm sewer system; meaning structures, check dams, engineered channels, etc., should be included.

Johnson County Wastewater Collection System Asset Management Program

- Patrick of JC Wastewater provided a brief presentation of their asset management program.
 - JC Wastewater began a preventative line cleaning program in the 1980s. At the time, they had 100s of backups per year during dry weather flows. They were then directed to do preventative maintenance and have over time greatly reduced maintenance issues.
 - The 2007 JCW Strategic Business Plan formalized asset management and laid out organizational levels of service along with a focus on a Triple Bottom Line approach.
 - An Asset Management Plan was developed in 2008 that evaluates strategies and processes, minimizes life cycle cost of ownership, optimizes limited resources and budgets, delivers established levels of service, and identifies acceptable risk.

- In 2013, JC Wastewater wanted to take their program further so they went through how to better utilize their data and as a result they developed a decision model. For instance, on any given pipe the model takes inspection inputs and assesses the likelihood and consequences of failure. The automated process then gives an output on what is the next action for the pipe.
 - The program allows JC Wastewater to turn data into decisions. Data inputs include asset condition, consequence of failure, deterioration, and history. The program then gives outputs of decision, cost, and priority. They review the outputs for consistency and accuracy before using for project considerations.
 - JC Wastewater has been able to develop an automated model to focus cleaning efforts. They then did long term projections of how much cleaning per year. Since they understood the risks in their system, they were able to adjust their workload forecast. This enabled them to do the work without increasing staff, outsourcing work, or deferring maintenance.
- Asset management has been a valuable prioritization tool that has allowed JC Wastewater to optimize performance.
- Consultants then called for any questions or comments regarding the JC Wastewater Asset Management Program.
 - The sub-committee noted that many cities have a good estimate of their stormwater system and what areas need work. But the needs of the system are far greater than resources available. Increasing utility fees has given cities some additional money, though a large portion of the increased funding goes to emergency projects.
 - Andrew of B&V noted that the St. Peters, MO, case study in the System Management White Paper highlights the issue of demand and supply. St. Peters struggled with how to communicate their stormwater system demands so that they could in turn raise additional funding. The case study demonstrates that one of the best things you can do with asset management is better communicate within your organization and with people in the city, on governing boards, and regulators.

System Management White Paper

- Consultants led the sub-committee through a brief discussion of the case studies found in the System Management White Paper. Comments from the White Paper discussion are summarized below:
 - The case study for the City of Minneapolis noted that the City initially focused on the engineered components of the system, but they quickly realized the need to include natural components. It's a good demonstration that the sub-committee is on the right track by including natural components in the stormwater inventory.
 - Minneapolis began looking at asset management in 2005 and Grand Rapids started implementing it in 2008. That shows that asset management is not cutting edge anymore but starting to be good practice.
 - The complexity of asset management could be overwhelming. An incumbent would need to keep in mind the management cost associated with undertaking these strategies. Asset management is voluntary so the SMP program will need to keep in mind the level of complexity that is optimal for the County.
 - The asset management case studies are primarily assessing the condition of the system, which is what cities in the County are currently doing. JC Wastewater has expanded their asset management program to include system capacity.
 - Condition assessments within the County will have to be standardized so as to have consistency amongst watersheds. However, cities also do not want to disregard or drastically change work that has already been done. The SMP would like to incorporate to the greatest extent possible existing work.

- County-wide assessment of the stormwater system will take a considerable amount of time to complete (tens of years). But cities that haven't done a large amount of assessment yet, will find that the process has become immensely more efficient. A key component will be organizational efficiency, communication, and collaboration amongst municipalities. Coordinating internal efforts will be a challenge.
- Funding for the stormwater system is such a constraint that it is difficult to get beyond reactive/emergency projects to a more proactive state.
- The case studies highlight the importance of communicating asset management needs and risks so as to bring in additional funding. Cities should assess the "run to failure" cost to justify obtaining additional funding. Asset management will help in achieving greater goals, but overall costs will need to be shown to validate strategies.
- A big benefit to asset management will be the established frameworks for managing all of the many details of the stormwater system. Without good management the cities are reactionary and actions are insufficient.
- In regards to condition assessment, there will be additional difficulties when looking at private property, particularly if a clear risk is not associated.
- The cost component of asset management will also help in justifying the importance of natural systems. It can be demonstrated how the natural features are saving money by reducing engineered systems that may have greater maintenance costs.

Closing / Next Steps:

- Consultants finished the meeting by calling for any final comments or questions.
 - Sub-committee participants requested if there are any asset management case studies in which multiple cities are working together.
 - An example of such a program is occurring in King County, Washington
 - Participants also requested a reference for asset management technical terms and acronyms so as to provide better familiarization.
- The sub-committee will meet again on May 31st at the same time, same place.
 - Questions that will be asked during the next meeting are:
 - What should be the baseline level of service for the watershed-based system management program?
 - What factors are most important for deciding capital project prioritization?
 - What are common minimum requirements to qualify for SMP funding?
 - The discussion will also be about the potential framework for system management emergency projects. The sub-committee will discuss issues of criteria and ownership qualifiers. Lee of JC SMP would like to have input on the framework by July. The nature of emergency funding means that the framework will likely be a first come, first serve basis on projects.
- Consultants noted that the largest surveyed response from cities when drafting the 2016 Strategic Plan was that the cities needed funding for system maintenance. The overall goal of the Strategic Plan Implementation is to prioritize the framework for such funding and make it as equitable as possible so as to provide better benefits to area stakeholders. The County is providing a mechanism to address problems identified by the municipalities, but concerted public engagement lies with the municipalities.
- Participants were encouraged to further review the White Paper and to continue providing meeting updates to their represented entities. JC SMP and the consultants thanked participants for their valuable time and comments.