

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

Meeting #5 – March 3, 2016



Meeting Attendees	
<b>CSS Stakeholder Group</b>	<b>City of Alexandria</b>
Skip Maginniss	Lalit Sharma
Rich Brune	Erin Bevis-Carver
Lee Hernly ( <i>absent</i> )	
Stacy Langsdale	
Kate Mackenzie ( <i>absent, Joe Canny attended</i> )	<b>Greeley and Hansen LLC (engineering consultant)</b>
Elizabeth McCall	John McGettigan
Stephen Milone ( <i>absent</i> )	Dustin Dvorak
Randy Randol	
Brett Rice	<b>Clyde Wilber LLC</b>
Dixie Sommers	Clyde Wilber
Jack Sullivan	
Tom Walker	<b>Waterford, Inc.</b>
Chuck Weber	Paul Coelus

The meeting convened at 7:00 pm with welcome comments by City staff member, Lalit Sharma.

The Ad Hoc Combined Sewer System Plan Stakeholder Group (Group) members began by reviewing and accepting the meeting notes from the Group meeting held February 4, 2016. The agenda for the meeting was introduced and Mr. Sharma opened the meeting with a technical presentation focusing on the CSO-001 outfall.

Highlights from the meeting are listed below:

- Lalit Sharma provided an introduction to the technical presentation going over the agenda as well as providing the background and introductory information related to the CSO-001 sewershed.
- Mr. Sharma then described the City’s proposed conceptual plan for addressing CSO-001 which is made up of a Phase I and Phase II. Phase I includes:
  - Continue implementation of the Nine Minimum Controls;
  - Continue the Area Reduction Plan (ARP) where separation occurs as areas are redeveloped;
  - Continue stormwater controls with redevelopment; and
  - Implement Green Infrastructure in the CSO-001 sewershed.
- Phase II would begin after the infrastructure related to CSO-003/004 and CSO-002 is constructed. It includes:
  - Reassess the CSO-001 sewershed based on CSO-001 Phase I and CSO-002/003/004 projects; and
  - Implement a plan consistent with future regulatory requirements
- John McGettigan then presented the preliminary concepts for Phase II. These concepts would need to be coordinated with several ongoing and future projects in the area, including the Old Town North Small Area Plan, and would likely consist of store and treat technologies such as storage tanks or deep tunnels. If a storage tank were

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

*Meeting #5 – March 3, 2016*



constructed today it could be expected to cost between \$50M - \$130M to implement the same level of controls as CSO-002/003/004.

- Renderings for potential storage tank locations for CSO-001 and CSO-002 were presented to show how storage tanks could be integrated into the surrounding area.
- Mr. Sharma then presented some background information on sewer rates in Alexandria for the April meeting. There was a description of the sanitary sewer enterprise fund and how that money is used to pay for sewer projects. He also presented the sewer rates that show up on residents' monthly sewer bill and how those rates are calculated. This information will be used to show how sewer rates will be impacted in the April meeting.

Meeting was adjourned at 8:50 pm.

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

*Meeting #5 – March 3, 2016*



The following is a general summary of the questions and discussion from the CSS Stakeholder Group, along with questions from the public, and the response provided by City staff and their consultants. This summary discusses the general concepts and not the individual questions verbatim.

*Why isn't CSO-001 included in the Hunting Creek TMDL?*

The Hunting Creek TMDL looks at the surrounding watershed that feeds into Hunting Creek on the south side of the City. This includes Holmes Run, Cameron Run, Hooffs Run, and Hunting Creek. There is some effect from the tides on the Potomac River that influence Hunting Creek, however the study conducted by the Virginia Department of Environmental Quality (VDEQ) chose to limit the study to the Potomac River boundary. Due to this limitation, CSO-001 is not included in the Hunting Creek TMDL.

*Characterize the average overflows from CSO-001. How much will be removed before Phase II?*

The City has been conducting flow metering off and on at CSO-001 for over 10 years. Additionally, the City has been modeling the combined sewer system's response to rainfall as well. Based on all the information collected and the modeling results, on an annual basis CSO-001 results in approximately 45% of the total volume of overflow for the combined sewer system. This is mainly due to the larger size of the CSO-001 sewershed compared to the rest of the system. The CSO-001 sewershed makes up approximately 43% of the combined sewer system area and therefore produces more overflow volume than the other CSOs.

Due to the various types of redevelopment occurring in the CSO-001 sewershed it is difficult to make an estimate of how much flow will be removed either through green infrastructure or sewer separation due to the rate of redevelopment. This is part of the reason the initial part of Phase II includes reassessing the infrastructure needs, the City needs to evaluate how the overflows have been impacted by the Phase I projects.

*Based on the renderings shown in the presentation (Site Alternative #3), is the CSO-002 tank outside the NPS area?*

Recently the City has investigated the property plats for the area around CSO-002. Based on the information that was found the tanks shown in the renderings (Site Alternative #3) would be located outside of National Park Service property.

*Is there an opportunity to integrate the CSO-001 storage tanks in to the Robinson Terminal North redevelopment project? We recommend the City continue pursue discussions with the development representatives to look for opportunities to mitigate any future impacts to the development due to the construction of the tank.*

The Robinson Terminal North (RTN) redevelopment project is currently in the design phases and is anticipated to be fully constructed before the City is able to complete the CSO-002/003/004 projects. This means that the RTN development will be completed before the City proceeds with designs for controls at CSO-001. However, the City has been reviewing plans for RTN and has made sure that the plans do not preclude future construction of

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

Meeting #5 –March 3, 2016



controls adjacent to the property. Furthermore, this redevelopment project contains conditions that the development site will not preclude the construction of a future combined sewer storage tank in the embayment in the vicinity of the existing outfall and shall be required to provide and allow the City access for maintenance of such a facility. More specifically these conditions are:

- 103. The applicant's proposed design and construction on the development site shall not prevent or preclude frequent access, maintenance or rehabilitation of combined sewer system outfall and related infrastructure at the foot Pendleton Street and adjacent to the north of the development site. (T&ES)
- 104. The applicant's proposed design shall not preclude the construction of future combined sewer infrastructure (including a CSO storage basin with pump station) at the foot of Pendleton Street adjacent to the development site. The applicant shall provide and allow the City access for construction and maintenance of any such facility, as determined by the Director of T&ES. (T&ES)

Staff will continue to work with the applicant with respect to these conditions.

*Who has jurisdiction of the CSO-001 outfall and Oronoco Bay? Does the US Army Corp of Engineers have to sign off on the tank? What are the permitting challenges?*

Similar to the proposed CSO-002 storage tank in the Hunting Creek embayment, constructing a storage tank in Oronoco Bay would require special permits. Oronoco Bay is a waterbody of the Commonwealth of Virginia and therefore is regulated by the Virginia Department of Environmental Quality (VDEQ). In previous meetings, they have indicated that they would be open to the construction of combined sewer overflow controls in the Hunting Creek embayment and we believe that they would also be open to similar controls in Oronoco Bay. Any infrastructure constructed in Oronoco Bay will require close coordination with VDEQ

*How far out until Phase II for CSO-001 is implemented?*

Based on a preliminary schedule developed for the February 4, 2016 Stakeholder Group meeting, construction for CSO-002 would be substantially complete between 2030 and 2035. Following the completion of this project, the effectiveness of the controls would need to be evaluated for a period of time and then design and construction for CSO-001 would begin.

*How many redevelopment projects are implementing Green Infrastructure? Isn't bioretention already a requirement for redevelopment in Old Town?*

Green infrastructure is encouraged for redevelopment projects although it is not mandated. As part of the City's requirements, any redevelopment project must address the stormwater on their site, this can be done through a variety of methods including various types of green infrastructure, and more conventional technologies such as retention basins and storage tanks. Some of the redevelopment projects in Old Town have chosen to install green roofs to meet their stormwater requirements. This has become a growing trend and the City will continue in looking at ways to further encourage or require the use of Green Infrastructure.

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

*Meeting #5 – March 3, 2016*



*What sewershed is the Payne and Fayette sewer separation project located in?*

The Payne and Fayette sewer separation project led by the City is located on Payne and Fayette streets between Oronoco and Cameron St. This project is located in the King and West sewershed serving CSO-003 and CSO-004. Once this project is completed it will remove 92 sanitary sewer laterals from the combined sewer system and send them directly to the Alexandria Renew Enterprises (AlexRenew) Water Resources Recovery Facility (WRRF) for a very high level of treatment.

*What kind of monitoring are you doing? How about after implementation?*

In the early 2000s, the City did long-term flow monitoring at all the outfalls to create a very robust hydrologic and hydraulic model of the combined sewer system. Once this model was developed one outfall was monitored each year, and this cycle continued until the 2013 permit cycle. Currently, samples are collect 4 times each year and tested for a variety of water quality parameters. This amount of data is generally more than many other CSO communities have collected. The flow meter data is used to calibrate the model and helps to ensure the accuracy of the predicted annual overflow volumes.

This model has been and will continue to be used to size the CSO controls. Following implementation of the controls, long term flow metering will be conducted once again to verify the effectiveness of the controls.

*There is a proposed Virginia law that would limit proffers made with developers, how would this impact the Area Reduction Plan or implementation of Green Infrastructure in the CSO-001 sewershed?*

The City has followed up on the proposed legislation and it does not impact the City's ability to require developers to provide for sewer separation or stormwater controls as a condition of redevelopment. These are conditions that are required as part of the developer site plan process and this law does not impact proffers at the DSP/DSUP level.

*How are you documenting our input?*

All of the questions and comments have been captured in the meeting notes. Following acceptance of the final meeting notes, a memo will be developed summarizing the general feelings of the group. This will be presented to the Stakeholder Group for approval. In addition to the memo each member of the group is welcome to draft a statement that will be included as an attachment to the memo. Once the memo has been approved and all statements have been received, the memo and attachments will be presented to the City Council so that they may make informed decisions.

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

Meeting #5 – March 3, 2016



## CSO-001 Proposed Conceptual Plan Discussion:

The Stakeholders were asked for their comments on the following:

*City staff's strategy for CSO-001 is a Two-Phased Approach:*

- *CSO-001 Phase I: Continue sewer separation and implement Green Infrastructure in the Pendleton sewershed to reduce overflows at CSO-001 over time.*
- *CSO-001 Phase II: Reassess the level of control following substantial completion of other CSO projects (002/003/004), performance of CSO-001, and future regulatory requirements.*

*Do you agree with this strategy? Do you have any additional input of concerns? Are there any other considerations the City should address moving forward with CSO-001?*

## CSO-001 Proposed Conceptual Plan Discussion Responses

- Rich Brune: The CSO-001 proposed conceptual plan seems like a good plan.
- Dixie Sommers: The strategy makes sense based on the regulatory drivers, however the City cannot forget about moving forward with CSO-001. It needs to be address even without any regulatory drivers.
- Tom Walker: 100% behind how this strategy is progressing, I like the prioritization of CSO-002/003/004 first, it makes sense. I like how it builds on the Area Reduction Plan and green infrastructure to meet a future goal.
- Jack Sullivan: I agree with Ms. Sommers. I am concerned with the fact that CSO-001 is approximately 50% of the overflow volume. Suggest looking at the entire combined sewer area when submitting a plan to the State.
- Brett Rice: I like the way this strategy has been developed, it helps us become better prepared for the future. We should work with Robinson Terminal North to get them to accommodate a future tank.
- Elizabeth McCall: I don't think the driver will be the future regulations, I think the driver to addressing CSO-001 sooner rather than later will be how efficient we are at completing the infrastructure projects for CSO-002/003/004. What we decide to do with a potential CSO-001 tank will need to be coordinated with the Waterfront Redevelopment Plan, may want to consider design earlier. There could potentially be archaeological remains in the park so the City needs to take that in to account as well.
- Stacy Langsdale: The phased approach to dealing with CSO-001 makes sense, it reduces an immediate burden on tax payers, establishes moving targets, and incorporates redevelopment.
- Chuck Weber: This is a simple strategy that is a no brainer. We don't want to rush to build CSO-001 infrastructure until we evaluate the effectiveness of CSO-002/003/004 infrastructure, Green Infrastructure, and the Area Reduction Plan. It is a logical approach.
- Randy Randol: Redevelopment will have a huge impact on the overflows at CSO-001 and developers need to be held accountable that they do their part. You have provided a best estimate for CSO-001 infrastructure but what we need is the real impacts of the timing and costs.

# Combined Sewer System and the Long Term Control Plan Update Stakeholder Group – Meeting Notes

*Meeting #5 – March 3, 2016*



- Joe Canny from Porto Vecchio: This is a sensible approach as long as Phase I is aggressive. We should strive to get the maximum amount of benefit from Phase I.
- Skip Maginniss: This is a prudent approach. I have some questions about how soon this may be constructed and how the waterfront redevelopment will accelerate thinking about redevelopment in the area. Tunnels seem like a bad idea for this area, it seems like storage tanks would be the better option. You should keep the study open ended until you've had time to address CSO-002/003/004.
- Public Comment (Bill Dickinson): There is a concern of increased water contact on the Potomac River particularly in this area. There is a boat house adjacent to the outfall and even though people are probably told not to come in contact with the water, I'm sure they do. I am concerned about exposure.
- Public Comment (Dino Drudi): There are sanitary sewers in Old Town that flow in to combined sewers, the City should evaluate separating these first before they invest in major infrastructure projects. The combined sewer system has been here for over a hundred years, it should be "grandfathered" in to the regulations and we should not have to do anything. If we do decide to do something we should spend the least amount of money to meet the regulations. At some point in the future people may want their stormwater to meet the same quality as flow through the wastewater treatment plant. If that ever happens, then having combined sewers makes sense. Why are we doing this if we still have a wildlife load reduction that we can't meet, why are we spending any money on this at all?

The next CSS Stakeholder Group meeting will be **Thursday, April 7, 2016 from 7-9 pm** in the City Council Workroom on the 2<sup>nd</sup> Floor of City Hall.