CSO Long Term Control Plan Development
Citizen Advisory Committee Meeting 6
Tuesday, May 10, 2011
10:00am

In Attendance: Rocky Ferraro, CDRPC; Deb Shannon, CDRPC; Mike Miller, CHA; Dan Loewenstein, MPI; Greg Daviero, MPI; John Mastracchio, MPI; Gary Mercer, CDM; Bob Albright, CDM; Garry Nathan, City of Cohoes; Justin Schievelbein, City of Albany; Sean Ward, Village of Green Island; Gerry Moscinski, RCSD; Andrea Dzierwa, NYSDEC; Paul Kolakowski, NYSDEC; Shayne Mitchell, NYSDEC; Linda Von der Heide, Rensselaer County; Bob Campano, Rensselaer Planning; Nancy Heinzen, Stormwater Coalition of Albany County; Matt Mastin, Town of East Greenbush; Cretien Voerg, Town of Colonie; John Lipscomb, Riverkeeper; Tracy Brown, Riverkeeper; Phil Hansen, Albany Rowing Club; Mike Ellrott, NY Bass Federation; Josephine Ashworth, Town of North Greenbush; Joe Moloughney, City of Cohoes; Mark Kestner, Town of Brunswick; Paul Penman, Town of Bethlehem.

1. Welcome and Introduction

Rocky welcomed everyone and thanked them for coming to the meeting.

Everyone introduced themselves to the group.

2. Recap of Water Quality Model Findings

Gary Mercer: the Receiving Water Quality Model was run, using 5 years of average rainfall data to simulate what we could expect to see as a result of CSOs. On average, before we do anything to control the systems, we would expect to see 1236 million gallons of Combined Sewer Overflow per year. Each year 2827 million gallons of wet weather flow is treated by the Waste Water Treatment Plants, with 69.5% of wet weather flows captured pool wide. The flow is currently not disinfected at the Treatment Plants.

We ran several model scenarios to see what effects would occur. The first scenario, we called the baseline, and this was what is currently happening in the system, with no disinfection, the headwaters (water coming in to the Pool area from the Mohawk and Hudson above the dam) are unchanged from the sampling in 2008, the tributaries were as sampled in 2008, and CSOs are unchanged. In this scenario, we would not meet water quality standards for bacteria in 30 months out of a possible 30 months of recreation seasons in the 5 year period.

In scenario 1, everything remained the same as the baseline scenario, except that we disinfected at the Treatment Plants during the recreational season. This has a huge impact on water quality in the River. 30 months of non-compliance drops to 2 months of non compliance. Disinfection has the single biggest impact on water quality and disinfection plans are underway at the three Treatment Plants.

In scenario 2, Treatment Plants are disinfecting, the headwaters are improved – which we think is possible because there are Waste Water Treatment Plants upstream which are in the process of making improvements to their systems, or have already made improvements. The tributaries are improved, but CSOs remain the same. Here the River meets the bacteria standards every month

– without any CSO controls. This shows that intermittent CSOs, while of fairly significant size, do not preclude attaining the water quality standard. The continuous sources of bacteria: the treatment plants and tributaries that flow 24/7 have the greatest impact on water quality in the River.

NYSDEC was concerned that we might not be able to clean up the tributaries to this level as it is often very difficult to clean up non-point source pollution. So we ran scenario 2A, where the tributaries were improved to the level that we found in our 2009 sampling. Here, we still found that we were able to reduce bacterial exceedances to zero.

Scenario 3 looked at what would happen if disinfection occurred and 85% of CSO was captured but the headwaters and tributaries remained as they were in 2008. Even with the CSO capture, we were unable to reduce the number of months of exceedances below what could be accomplished with disinfection alone.

Lastly, scenario 4 looked only at the effect of CSOs on the River. If there was no disinfection, no changes to the headwaters or the tributaries and we just captured 85% of CSOs, we would still have 30 months of non-compliance with the bacteria standard.

What these scenarios show is that CSOs do not preclude the Hudson River attaining water quality standards. The bacteria standard is expected to be met once the Waste Water Treatment Plants' seasonal disinfection and improvements to the headwaters and Patroon Creek have been implemented. Improvements to the continuous bacteria loads provide more effective bacteria based water quality improvements than improvements to intermittent, wet weather CSO discharges.

3. Proposed CSO Controls

Gary Mercer: The results of the modeling scenarios led to the choice of the Demonstrative Approach for CSO control. This method allows the communities to achieve compliance by performing on-going monitoring to see if the changes that are being made meet the water quality standards. Our plan is to push more flow to the Treatment Plants by optimizing the existing infrastructure. We want to rehab the existing system because we have a lot of aging pipes and systems that we need to ensure continue to work so that we don't have to undertake emergency repairs. We also want to minimize adding additional infrastructure that will increase the costs of operations and maintenance.

A slide was shown summarizing project costs by category. The total cost of the Long Term Control Plan is estimated to be $109.6 million.

Once these proposed projects have been implemented, we expect that the annual CSO volume will be reduced to 925 million gallons, the number of overflow events will remain the same, but the amount of discharge will be less. The Treatment Plants will increase the amount of wet weather flow that they treat to 3031 million gallons. The amount of CSO receiving floatables control will increase to 454 million gallons (and there will be less floatables to treat because more flow will be going to the Treatment Plants). Disinfection will be taking place seasonally and bacteria standard exceedances will drop to zero.

4 Proposed Implementation Timeline

Gary Mercer: provided a handout showing the proposed projects with their respective estimated costs. The implementation schedule broke down projects over a 15 year period. (A copy of the handout is included in the PowerPoint presentation slides.)

When proposing an implementation schedule, we want to see the water quality benefits early and meet existing permit compliance dates. But we also need to preserve capital for the repair and replacement of existing sewer infrastructure. 40-50 years is the typical life expectancy of a pipe and many here are older. It is more affordable to do scheduled repair and replacement than to do emergency repairs. We also need to make the implementation affordable, within the EPA's definition.

5. Proposed Program Costs

John Mastracchio: A financial capability assessment was performed using EPA guidelines. There are two phases the EPA affordability assessment: Residential Costs by Median Household Income and the Community's ability to fund. A score is derived from the assessment which fits within a low, medium or high burden range. The EPA guidance also allows us to provide any other information that we believe is relevant. The financial capability assessment is used to negotiate the implementation schedule.

The EPA sets a 10 year schedule as a starting point for a medium burden projects and a 15 year schedule for high burden projects. These are starting points for negotiation. According to the analysis, the communities will face a medium financial burden. Depending on the availability of grant funding, there could be a drop in the score.

When we look at the costs on an annual basis, there were a number of assumptions that we had to make. We had to distribute the costs among the communities but at this time there is no agreement among the communities on how to distribute the costs, so we allocated based upon the formula that was used to pay for the LTCP study. This formula will likely change. We also included other sewer related capital improvement plan costs so that we could determine the full effect of sewer costs.

Projecting forward, we see significant rate impacts. By extending the implementation schedule to 15 years, we tried to minimize these impacts, but we still see years with rate increases of 10% or more. And Census Tract data shows that some areas will have a higher burden.

6. Questions and Answers

A committee member asked about whether Green Infrastructure projects were included and how the public notification plan would work. The APJVT responded that the LTCP proposes creating a document on green design for each community to promote green infrastructure, but this project is not funding any green infrastructure per se. There are separation projects in the LTCP, primarily in Troy and Cohoes. There are pump station projects which are energy related green infrastructure. And there are some green infrastructure projects underway already within the communities.

The committee member asked whether the Green Infrastructure document be generic or more specific for the communities. The APJVT responded that the documents will look at how communities may need to adjust their laws. It will also give guidance on sidewalks, roads and the coordination of efforts regarding right of ways.

A committee member commented that NYC did a study with Riverkeeper which looked at the costs per gallon to mitigate CSO problems with swales and it found that it was cheaper than end of pipe solutions; so this would be worth investigating.

A committee member asked how the public notification system would work. The APJVT responded that it will be a predictive model and we'll have on-going monitoring to compare with the predictions to ensure that the model is working correctly. The public will be able to go to a website to see if the water is safe. A rainfall event of a certain size will trigger an unsafe warning.

A committee member commented that the public notification system is a good idea and that the Albany Pool Area will be the first to have it. The committee member noted that it was listed as a project in year 5 but that there will still be CSOs making the River bad, so the sooner this is in place the better. The committee member urged the Team to get the notification system up early. The APJVT responded that until WWTP disinfection is done, the model will just be saying that the water is not safe. The committee member thought that this would still be okay; that it would be good PR, to show how the water quality is bad but is improving. It should be implemented immediately.

A committee member asked if NYSDEC would be having a public meeting or hearing on the LTCP. NYSDEC responded that they could not. There will be the HVCC public meeting on June 1. Also, the permitting process is open to public comment.

A committee member noted that there is a broad concern about funding. We have two permits (CSO and MS4), how are the two permits to be implemented? She also had a parallel interest in green infrastructure because of the stormwater design manual requirements. And how do we implement improvements on the tributaries, shouldn't there be a holistic watershed approach to water quality? The APJVT responded that this is correct; the APCs are both CSOs and MS4s and if we separate areas the APJVT will want to meet any MS4 needs. Both permits try to improve water quality but we have no answers on how to coordinate the two programs.

The committee member said that elsewhere in the country there are funding sources (Utility Districts) but we don't have that option available here. Funding these programs is proving to be very difficult. The APJVT said that the programs can share information on green infrastructure. It was also noted that we met with the Mayors regarding the implementation phase. We have to look at the details on cost sharing. We expect that part of the discussion will be on the MS4 program and integration. NYSDEC responded that they hoped this CSO study would get the MS4 people involved in looking at the tributaries. A Technical Committee member agreed with the committee member that these programs, from an administrative standpoint, are very difficult. 60% of my job is now CSO and MS4 oversight instead of economic development. Anything we

can do to merge permits or cooperate is good. These communities have paved the way, now I'd like to see DEC cooperate and see if we can merge these programs to make them less costly.

A committee member asked what the plans are for non-CSO contamination in the tributaries. The APJVT responded that we will be monitoring the water and attempting to trace bacteria back to the source. The plan is proposing looking at Sewers parallel to, or crossing, the tributaries. As sewers age they could leak; we found this in Albany. There could also be illicit connections. We will develop projects as we find the issues. Placeholder funding is in the budget, but this may need to change based on the findings. The committee member asked if we would be following the tributaries outside the zone. The APJVT said that the plan is for the APCs for now but we need to discuss findings with neighboring communities so they can monitor and find issues.

A committee member asked for clarification on which of the modeled scenarios the LTCP would be following. The APJVT responded that the Plan will be following scenario 2A. We are focusing on repair and rehabilitation, so by focusing on areas close to the tributaries we should be able to have a greater effect on water quality. The committee member noted that the APJVT had previously stated that disinfection and tributary control was better than to focus on CSOs. Now she felt that the APJVT seem to not be improving the tributaries, just doing more sampling and education. The APJVT responded that the tributaries are important but it is very difficult for tributaries to meet standards all the time. We are going to spend money to try to remove all sewage from the tributaries within the Pool communities. And we are using the Demonstrative Approach, so we will be monitoring and if we don't meet standards additional controls may be required.

A committee member asked a question about costs for the public meeting on June 1. You had a chart showing the costs in Troy. I would like to know about the costs for the whole of the study area. I also want to know how the sewer tax is applied. We just had a $55 million bond for the area where I live in Orange County, that doesn't have a city. The sewer tax was based on the value of the property, not on water use. Tax went up 20% but that was only $56. You need to show the dollar costs and find ways to make it more equitable. I applaud the work that you have done, this has been a very thorough study, but you have operated within the constraints of the geomean and this is not the way to look at CSO discharge. CDRPC responded that all the communities in the study are economically distressed; these are the lowest economic areas of the Capital District. We also have the highest property taxes of the states. We are also trying to prevent sprawl and attract people back to the cities to prevent greater environmental degradation. If taxes are higher here, people will leave and go to the suburbs.

A committee member asked how we fund the repairs in North Greenbush. Wynantskill is not all sewered. How do we pay for it and get agreement to pay for it? CDRPC responded that the sewer district area will pay part of it. Green Infrastructure can reduce flows.

A committee member asked how the amount that each community will pay for the sewer district costs will be allocated. The APJVT said to take a look at the sewer district cost allocation agreements.

7. Public Meeting, HVCC 6/1/11, 7pm

Deb Shannon: The next public meeting will be on June 1 at 7pm in the Bulmer Telecommunications Center. I sent out an e-mail this afternoon, to all CAC members that included a PDF version of the Public Meeting flier. Please post the flier in your communities.

Meeting adjourned.