US ERA ARCHIVE DOCUMENT

James Karle:

Worked 27 years at the Metropolitan Sewer District of Greater Cincinnati, assigned to the Office of the Director – Special Projects, worked on the Lower Mill Creek analysis. Currently retired.

COMMENTS ON: The Revised Original Lower Mill Creek Partial Remedy

I recommend implementation of the Tunnel Project, the only regional approach.

The tunnel (Phase I and II) has the lowest cost to achieve 85% overflow control at every Combined Sewer Overflow (CSO). This project will provide more alternative solutions for Carthage and Sanitary Sewer Overflow (SSO) 700, as well as, meet all the requirements of the Consent Decree. The tunnel will provide storage during storm events and a means of conveyance of the flow to the Millcreek Wastewater Treatment Plant (WWTP) as needed for treatment.

In support of my recommendation, I site some of the findings from a SWMM Model run in June 2011:

A 30 foot tunnel from Mill Creek WWTP to Mitchell Avenue had storage capacity to achieve 95% CSO overflow control at every CSO in the Mill Creek Basin.

The planned High Rate Treatment Facility (HRTF) for the Mill Creek WWTP only operated for 25 hours per year in the model. In an attempt to reduce the cost of the Tunnel Project as written I would suggest the removal of the High Rate Treatment Facility planned for the Mill Creek WWTP. It would provide only marginal benefit because of its limited use/need and would result in a savings of \$100 Million.

The Millcreek WWTP at 430 MG/D had adequate capacity to treat the Mill Creek Basin's wet weather flows.

The tunnel has the benefit of controlling/capturing higher percents of overflow throughout the region as compared to the current plan being put forward by MSD. The current plan only services localized overflows while doing nothing to help the greater area.

MSD has already spent millions of dollars on the Revised Original Lower Mill Creek Partial Remedy report to project a "green image" - in order to sell their community of the futures agenda. This is a localized approach of storm water separation (GRAY). This approach will not meet the 85% CSO overflow control or the intent of the Consent Decree to attain clean water. This project is more about volume reduction instead of focusing on 85% control of the overflows as mandated in the Consent Decree. The volume sited by this project is covering a larger land area resulting in a lower percent of actual control. Do not let the total gallons being controlled mislead the reader into believing the percent of control is being met.

The faux-creek and wet lands planned for Lick Run Drainage Basin is a good idea in theory but too small to provide adequate treatment to meet the EPA's Water Quality Standards and Consent Decree. As sited in the EPA Urban Fact Sheet (841-F-03-003), "Urbanization increases the variety and amount of pollutants carried into streams, rivers and lakes. The pollutants include: sediment, oil, grease and toxic chemicals from motor vehicles, pesticides and nutrients from lawns and gardens, viruses, bacteria and nutrients from pet waste and failing septic systems, road salts, heavy metals from roof shingles, motor vehicles and other sources, thermal pollution from dark impervious surfaces such as streets and roof tops." The Sustainable Option will not be able to remove these pollutants based on the design plan. It does not provide a large enough wet land to treat the amount of pollutants that will be present.

The Revised Original Lower Mill Creek Partial Remedy, Report's flow modeling results projects an optimistic CSO overflow removal. It is highly unlikely that the project will be able to reach the projected numbers sited in the areas that are being worked. Per Cleveland, Ohio it takes 7.8 Gallons of storm water capture to remove 1 gallon of CSO overflow.

If the Sustainable Option is selected who will be responsible for treating this highly polluted urban storm water, The City of Cincinnati's Storm Water Management Utility (SMU)? SMU has an annual budget of 5 Million dollars of which 1 Million Dollars is given to the Cincinnati Parks; this does not leave an adequate amount of money to treat this storm water. If this storm water is not treated then what's the point of this project?

The Sustainable Option (Phase 1) is not going to meet the 85% CSO overflow control.

So what's next: 200 one million gallon Storage tanks and multiple high rate treatment facilities or back to the Tunnel Project? Does this not contradict the cost issues of why the Tunnel Project was not chosen in the first place?

As Tony Parrott stated, "solutions can be two fold;" but the obvious solution should benefit the greatest number of sewer rate payers and not just the city residents. Maybe it is time to fix the problem and leave city re-development to the City Manager and City Counsel to be paid for out of their budget and not the pockets of the county sewer rate payers.

The sewer rate payers of Hamilton County especially the low income family's can not afford a \$700 Million dollar mistake. Finally, where does the money come from to pay for all of this if the county leaders decide to invoke the Affordability Limit? Will the County insist on the reclassification of the Mill Creek so they won't have to do anything? The money will dry up and we need to take care of this problem the first time spending the rate payers' money wisely. So, I ask you to make the **RIGHT** choice for the best water quality.