

Collaboration and Consultation

Throughout this study, OKI has gained data and guidance from a health district, a conservation district, a sewer district, a storm water district, two county departments, three local governments, three non-profit organizations, three state agencies and a university interested in Taylor Creek watershed. Cooperative project partners have enabled OKI to build productive collaborative relationships. These relationships constitute a working watershed coalition to help stakeholders make informed choices about wastewater and other water quality issues in the watershed.

The *Taylor Creek Watershed Study* has benefitted from the assistance of:

- Hamilton County Public Health (formerly Hamilton County Public Health District)
- Hamilton County Soil & Water Conservation District
- Metropolitan Sewer District of Greater Cincinnati
- Hamilton County Stormwater District
- Hamilton County Planning and Development
- Green Township
- Colerain Township
- Miami Township
- Friends of the Great Miami
- Rivers Unlimited
- Greenacres Foundation
- Ohio EPA, Division of Surface Water (which also provided funding)
- Ohio Department of Natural Resources, Earth Resources Information Network
- Ohio Department of Transportation, District 8
- University of Cincinnati

All of these entities provided data. By the very nature of their work, Hamilton County Public Health, Metropolitan Sewer District, Ohio EPA and the Ohio Department of Natural Resources proved to be prolific information sources. Hamilton County Soil & Water Conservation District and the University of Cincinnati also helped OKI study stream conditions in Taylor Creek watershed through stream monitoring analyses and Qualitative Habitat Evaluation Index (QHEI) assessments. The three townships – Colerain, Green and Miami – provided local insights during face-to-face interviews with an OKI planner. Interview summaries follow.

Colerain Township Consultations

Colerain Township's administrative, planning and service departments said commercial and health care development will generate most of the need for more public sanitary sewer lines in their portion of the Taylor Creek watershed. Residential population growth will generate some need for centralized sewage service, but the demand is more acute from:

- office complexes
- day care centers

- strip shopping centers
- a scrap metal processor
- a landscaping firm
- a new hospital and health care facilities

Most of the commercial and health care development is occurring along the Harrison Avenue corridor, between Springdale Road in Colerain Township and Rybolt Road in Green Township. This 1¼-mile stretch of Harrison Avenue is also bracketed by I-275 and I-74.

Colerain Township's latest growth area has been the Stone Creek mall, which lies outside the natural bounds of Taylor Creek watershed but can be considered part of Taylor Creek watershed by means of a pump station that carries Stone Creek area sewage to Taylor Creek Regional Wastewater Treatment Plant. Colerain Township officials said expectations of the Stone Creek mall delayed the replacement of home sewage treatment systems with centralized sewage service because the removal of houses for the mall took pollution pressure off the receiving stream for septic tank discharges.

Home sewage treatment is not an issue for most homebuyers because they are not fully informed about the risks of inadequate sewage treatment, Colerain Township officials said.

Having experienced a variety of public reaction to the replacement of home sewage treatment systems, the officials suggested that more be done to sensitize residents to centralized sewage service in neighborhoods where sanitary sewers will eventually be extended.

Colerain Township officials also recommended more public notice about stream contaminants. When excessive levels of fecal bacteria are detected in Taylor Creek or its tributaries, nearby homeowners should be advised of the potential health threat. Township officials also recommended more public notice about potential bacteria exposure at public sites, such as streamside parks or ballfields.

The practice of volunteer stream monitoring interests Colerain Township officials. They advised more consistent monitoring in the Forfeit Run and Mullen Run subwatersheds because of the many home sewage treatment systems along Springdale Road and Mullen Road. Not all stream bacteria originate from home sewage treatment systems, the township officials advised. Other potential bacteria sources in Colerain Township's part of the watershed likely include:

- a small cattle farm
- horse boarding facilities with manure piles
- dog kennels
- neighborhood pet wastes
- roaming populations of wild deer and Canada geese

Colerain Township officials have also received complaints about alleged septic dumping and suspected straight-pipe discharges of untreated household wastes.

Though Colerain Township exercises local zoning authority and enforcement, it recognizes the jurisdiction of Hamilton County Public Health, Metropolitan Sewer District and Hamilton County Commissioners over sewage service issues. The township also recognizes county

jurisdiction over stormwater detention and runoff, which influence pollutant loading to the streams of Taylor Creek watershed. Colerain Township is a member of the Hamilton County Storm Water District, to which the township delegates stormwater quality matters. Green Township and Miami Township also are member jurisdictions of the Hamilton County Storm Water District. Colerain Township's local zoning authority has created a township zoning code that limits the amount of impervious cover that can be installed by a new development, depending on the type of land use.

Colerain Township government has discussed the possibility of encouraging more pervious pavement but realizes that other planning initiatives will probably take precedence for the next year or two. Currently, Colerain Township allows pervious pavement for overflow parking areas. A variance is necessary to use pervious pavement on daily parking spaces.

The many private driveway bridges of Taylor Creek watershed can have an impact on the quality of stream habitat, township officials acknowledged, but Colerain Township does not get involved in driveway upgrades or replacements because they are a civil issue and a private responsibility.

Green Township Consultations

Green Township's planning and public works departments said the growing township has not received a subdivision with home sewage treatment systems for at least 20 years. Nevertheless, Green Township maintains a neutral position on sanitary sewer line extensions. The township defers centralized sewage service matters to the judgment of Hamilton County Public Health, Hamilton County Planning and Development, Hamilton County Soil & Water Conservation District, Metropolitan Sewer District, Ohio EPA and the Hamilton County Storm Water District through the Hamilton County Engineer's Office.

If the township were to promote centralized sewer service, it would be obliged to help manage the complex conversion process, a township official said. The township also refrains from prioritizing which neighborhoods need sanitary sewer lines the most. Township trustees, however, do favor the elimination of a sewage pump station on Virginia Court, which currently has no backup generator to prevent sewage spills during power failures.

Most sanitary sewer line extensions in Green Township are funded by county assessments on the owners of properties next to the sewer line, township officials noted. This is difficult in a neighborhood where a minority of property owners do not favor the sewer line extension; they still must pay. Green Township officials recommended that Metropolitan Sewer District give property owners up to 10 years of advance notice of assessment sewers to encourage saving for the expense. On the other hand, replacement of a malfunctioning home sewage treatment system is costly. A household on Ebenezer Road recently spent \$22,000 installing a new onsite system. Either way, affordability and alternate financing deserve consideration, township officials said.

In some places, the sewer line extensions occur by customer demand. Such was the case at the eastern edge of Taylor Creek watershed, where Mercy Health Partners financed more than a mile of sanitary sewer line extension for a 250-bed Mercy Hospital to open in late 2013 off North Bend Road near I-74, township officials said. (Although surface drainage from nearly all of the

Mercy Hospital site will flow to Mill Creek watershed, its sewage will be sent by force main to Taylor Creek Regional Wastewater Treatment Plant.)

Christ Hospital and Children's Hospital also paid for sewer line extensions to facilities they built along Filview Circle, next to the Harrison Avenue corridor. A fourth hospital chain, Tri-Health Associates, opened a facility along Harrison Avenue between Mullen Road and Pinnacle Drive. Township officials projected that Harrison Avenue will continue to attract commercial and service development.

Residential development in Green Township's part of Taylor Creek watershed has slowed. From the late 1980s until 2005, the township was either first or second among the political jurisdictions of Hamilton County for number of building permits issued. But no new subdivisions have arisen for about two years, township officials said. The township has about 150 vacant lots in subdivision settings. This discourages new subdivisions, which the township expects to see in fewer numbers for the next five to ten years. Green Township has stopped getting new houses "built on speculation." Now, the buyer must be contracted before the house is built.

Lot splits are another counterweight to new large subdivisions. Township officials explained that owners of large parcels can serve a niche market by dividing those parcels into sites for large, higher-priced, single-family homes accessible by private drives.

Green Township officials believe that costs have become prohibitive for new houses with home sewage treatment systems. A home sewage site must cover at least two acres. The higher cost of land in Green Township and the higher cost of onsite systems in general have reduced the number of new home sewage treatment systems to about one per year.

Overall, Green Township is approaching 75 percent built-out status. If current development patterns continue, said township officials, the last 25 percent "will not ruin the township" but have less impact per acre. The township recognizes the benefits of cluster developments that allow higher densities in the construction areas provided the environmentally sensitive areas remain relatively natural.

"Greenfield development," meaning construction on previously undeveloped land, has become uncommon in Green Township. Most building permits are now for in-fill development and redevelopment. A township planner said public sewer line extensions "won't make a drastic change in the built environment; they won't be the catalyst." Township officials identified three areas where multiple houses could be developed:

- about 50 acres on the west side of North Bend Road, between Boomer Road and Edgewood Drive. Sewer lines extended to the new Mercy Hospital can serve the area.
- 75 to 80 acres at Legacy Place in the unincorporated Dent area, provided a Virginia Court pump station is eliminated
- about 80 acres behind Western Hills Cinema near Harrison Avenue. The area already has nearby sewer lines.

Although Green Township is getting a new sewer line along Harrison Avenue from Blue Sky Drive to Valley Ridge Road (in the Dent area), township officials do not expect the improvement

to attract much new development. They said the overall real estate market and the particulars of the physical location are more important factors than sewer line proximity.

Green Township officials are monitoring the development impact of sanitary sewer line extensions along Wesselman Road in the Upper Wesselman Creek subwatershed. Metropolitan Sewer District (MSD) has already extended the line eastward from Taylor Road to Rybolt Road, and from Rybolt Road to Ebenezer Road. Recently, MSD requested Ohio EPA permission to turn the sewer line southward toward Nathaniel Glen Drive and Hutchinson Road. This would allow the elimination of the Virginia Court sewage pump station.

The township officials showed interest in bacteria levels of Taylor Creek watershed streams. Like the planning and service officials in Colerain Township, they indicated that not all of the fecal contamination originates from home sewage treatment systems. They said other potential bacteria sources in Green Township's part of the watershed include:

- a small cattle operation
- a farm with ponies and large horses
- a vocational school stable
- a relatively new dog kennel, that is well regulated and closely watched by neighbors
- neighborhood pet wastes, though the problem seems less prevalent in Green Township than elsewhere with similar population densities
- small wastewater treatment plants for a shopping center and four residential complexes
- roaming populations of wild deer and Canada geese

Green Township officials also said that Hamilton County Public Health has identified illicit discharges as a source of bacteria to the township's streams.

Having earned the 2011 Urban Conservation Award for innovative stormwater management installations at Bicentennial Park on Diehl Road in the Mill Creek watershed, Green Township officials said they are receptive to similar measures in Taylor Creek watershed. The township encourages private developers to use best management practices (BMPs) and pursues joint ventures that will achieve BMPs in tax-increment-financing districts. Township officials worked with property owners to encourage a buffer zone and vegetated wall rather than a typical retaining wall behind the Lowe's Home Improvement store on Harrison Avenue in the Dent area.

Miami Township Consultations

Two trustees spoke individually on behalf of Miami Township, which is less populous than Colerain or Green townships and therefore operates with less staff. The trustees said all new subdivisions in Miami Township's part of Taylor Creek watershed used centralized sewage service from Metropolitan Sewer District. The township encourages sanitary sewer lines in a new subdivision unless it is a large-lot development with parcels covering four or more acres.

Like Colerain and Green townships, Miami Township defers to the judgment of Hamilton County Public Health for prioritizing neighborhood need of sanitary sewer line extensions. A Miami Township trustee said he is sensitive to the fact that some home values have declined

while centralized sewer service connection fees have risen upwards to \$25,000 per household. He suggested it would be helpful if the Metropolitan Sewer District clarified what portion of a sewer tap-in fee is applied to the construction of new sewage infrastructure and what portion is applied to the maintenance and repairs of existing sewage facilities.

As an alternative to centralized sewage service, some Miami Township homeowners are improving environmental conditions by replacing malfunctioning home sewage treatment systems with more advanced mound systems. The trustees described this as a positive trend over the past five years.

In Miami Township's part of Taylor Creek watershed, the Whispering Farms subdivision in the Lower Wesselman Creek subwatershed has perhaps the highest growth potential. About 40 to 45 of the subdivision's lots have yet to be developed. Several other subdivisions are also partially completed or planned in phases, awaiting revival of the real estate market to resume home construction.

The trustees said the township cares about development impacts but limits its role to public education and ensuring that a site is properly zoned for the construction that is proposed. The township gets few requests for zoning changes. Building and subdivision regulations are enforced in Miami Township by Hamilton County Planning and Development. Township officials also rely on the guidance of the Hamilton County Storm Water District, of which Miami Township is automatically a member.

Although recreational use is minimal along Miami Township's streams in Taylor Creek watershed, the trustees said they would appreciate notification whenever monitoring programs detect high bacteria levels in the township's waterways. Like officials in Colerain and Green townships, the Miami Township officials indicated that not all of the fecal contamination originates from home sewage treatment systems. They said other potential bacteria sources in Miami Township's part of the watershed include:

- one or two horse farms
- remnants of a former dog kennel
- roaming populations of Canada geese
- a well-established population of deer, which are numerous in that part of Mitchell Memorial Forest located in the Lower Wessleman Creek subwatershed.

The trustees said they have received no complaints of malfunctioning sewage treatment package plants, leaking sewer lines or overflowing pump stations. They encourage Miami Township residents to report such problems to the Metropolitan Sewer District of Greater Cincinnati. A unified waste collection service by the Rumpke company helps prevent dumping in Miami Township's share of Taylor Creek watershed, they said.

Hamilton County Soil & Water Conservation District

With a stream specialist, urban conservationist and water quality responsibilities, the Hamilton County Soil & Water Conservation District is well informed about Taylor Creek watershed. The stream specialist provided the observations that follow in this section.

If sanitary sewer lines are to be extended into areas without public sewers, the stream specialist said that raises the question of how stakeholders in the Taylor Creek watershed will manage the stormwater runoff induced by development associated with centralized sewer service. This question does not apply as strongly to areas that are already developed.

When a sanitary sewer trench is excavated relatively close to a stream, the trench is more permeable than surrounding soils. This may cause a drawdown in the localized water table as groundwater seeps into the sewer trench and flows away rather than reaching the stream channel. Such a drawdown may reduce the stream's base flow and degrade the function of stream channel habitat for aquatic plants, insects and fish, the stream specialist said. Metropolitan Sewer District takes the precaution of installing anti-seep collars parallel to sewer line trench walls but groundwater can still seep into the trench from above.

Stream monitoring data is a helpful analytical tool for managing septic tank impacts in Taylor Creek watershed. Of the six parameters tested by volunteer stream monitoring programs, bacteria levels (fecal coliform and E. coli) constitute the parameter that is most indicative of problems with home sewage treatment systems. It must be remembered, however, that some of the bacteria may originate from livestock, wildlife and pet wastes, especially when flooding sends the stream flow into areas where animal wastes have accumulated.

The second most useful indicator of septic tank problems is conductivity, which measures the capacity of an aqueous solution to carry an electrical current. High conductivity can indicate the presence of dissolved solids discharged by poorly functioning home sewage treatment systems. High conductivity, however, could also be an indicator of road salt leaching into the stream, especially during early spring.

High levels of nitrates and total phosphorus can also indicate septic tank problems. The two parameters are commonly referred to as a single class of pollutants called nutrients. It is important to note that high nutrient levels can also result from agricultural land uses or the abundant fertilization of suburban lawns.

The measurement of stream water's acidity or alkalinity, commonly known as pH, can also indicate onsite system problems. Acidic water (low pH) may result from the disposal of acidic fluids into a home sewage treatment system. Household acidic fluids include soda pop, milk, orange juice, vinegar and some cleaning agents. Excessive acidity can compromise an onsite system's sewage treatment effectiveness and allow more pollutants to reach a stream.

Turbidity, a measure of stream water's relative clarity, can indirectly indicate home sewage problems. Most turbidity results from high stream flows that mix more soil particles into the stream water, but it may also result from excessive concentrations of free-floating algae species that decrease water clarity. When the algae growth is induced by nutrients from home sewage treatment systems, turbidity indirectly indicates septic problems. Turbidity can also result from slow water flows, which allow algae growth in nutrient-rich waters exposed to sunlight.

In addition to centralized sewage service, the Hamilton County stream specialist proposed a variety of other best management practices to help the streams attain water quality standards for their designated beneficial uses. He recommended that stakeholders in Taylor Creek watershed consider:

- leaving a wooded corridor along each side of a stream, at least 100 feet wide. When tree and large shrubs overhang a stream channel, they shade the water from sunlight and reduce harmful algae blooms. The streamside vegetation also stabilizes streambanks while absorbing nutrients and other pollutants draining to the stream.
- protecting the overall width of undeveloped stream corridors to allow the gradual downstream migration of stream meanders without costly road and building damage
- preserving natural areas along the watershed's headwater streams, which can serve as biotic refuges for native plant and animal species desired for re-colonization of the rest of the watershed
- promoting easement sharing among Duke Energy, Greater Cincinnati Water Works, Metropolitan Sewer District, pipeline installers and other companies that feel compelled to clear cut streamside wooded areas near their utilities
- setting a stormwater discharge pipe back from a stream to prevent erosion while allowing more of a buffer to absorb stormwater pollutants
- installing bio-retention and bio-filtration practices between a development and the storm sewer discharging to a stream or water quality basin
- trying to limit the amount of impervious surface introduced to a subwatershed by development in recognition of the Center for Watershed Protection warning that watersheds begin to lose sensitive elements and show negative impacts with as little as 10 percent impervious cover
- considering pervious pavement for large parking lots that typically remain empty until a big event relies on overflow parking spaces
- limiting the release of anti-bacterial triclosans, pharmaceutical products, pesticides, plastic compounds and other endocrine disruptors (hormonally active agents) that degrade the reproductive capabilities of fish
- managing stormwater detention basins to limit the flow of pollutants and rapid high water volumes, which induce erosion, sedimentation, siltation and turbidity.

The stream specialist added that even when stormwater is detained to slow runoff and mimic natural hydrology, the detention ponds can allow the water to become unnaturally warm and somewhat loaded with the pollutants carried by stormwater runoff.

Hamilton County Storm Water District

By virtue of federal and state regulatory requirements and by local government efforts to improve water quality, the Hamilton County Storm Water District is intrinsically involved with the issues of Taylor Creek watershed. The district's program director provided the comments that follow in this section.

In Taylor Creek watershed, as well as other watersheds, Hamilton County Storm Water District is complying with the federal mandate to create detailed digital maps of the municipal separate storm sewer system (MS4). The regulatory definition of an MS4 (40 CFR 122.26(b)(8)) is "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created to or pursuant to state law) including special districts under state law such as a sewer district,

flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges into waters of the United States. (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2."

Federal guidance on the definition of an MS4 is helpful, the program director said, but not entirely conclusive. Hamilton County Storm Water District is still settling the details of MS4 identification as it works through an array of public, private, neglected or forgotten stormwater conveyances that intermingle freely and often have unclear origins. In the process of mapping the MS4 network, the Storm Water District must answer questions such as: Which stormwater outfalls belong to Hamilton County? Which storm sewer pipes belong to Hamilton County? Which private outfalls or pipes should be mapped because they are linked with the public storm sewer network?

From inlet to outlet, it is not unusual for a stormwater conveyance to start out as private property, then tap into a public conveyance only to ultimately return to a private conveyance and discharge to a creek on private property or to a water of the state, the program director said. Because many stormwater conveyances start at private developments but intermingle with the public roads network, the storm sewer infrastructure can switch back and forth between private and public ownership along several segments before the conveyance ultimately makes its way to a receiving stream. The lack of knowledge of the private infrastructure presents a challenge to the Storm Water District when the District is ultimately required to map the MS4.

The uncertainties of MS4 designation are widespread. National guidance says the regulatory designation of a municipal separate storm sewer system can be supplemented by other factors, including population growth and documentation of water quality impairments. With help from Hamilton County Public Health and the Hamilton County Soil & Water Conservation District, the Hamilton County Storm Water District is taking an inclusive approach to MS4 identification. For example, the Storm Water District keeps track of discharge lines and collector lines from home sewage treatment systems, even though they are private. Some of those collector lines discharge to storm sewers because they are the nearest gravity flow conveyance for treated home sewage effluents. Another example of the inclusive approach is the Storm Water District's willingness to map a wide variety of stormwater inlet structures, regardless of public or private ownership. Many inlets are catch basins, which are mostly public, but inlets can also consist of privately built headwalls, open pipes, culverts, drainage grates, ditches, yard basins and more.

One of the most challenging aspects of the MS4 program is the state and federal expectation for local government to identify what is publicly owned, and then track down and mitigate illicit discharges, which experience has indicated are mostly privately owned, the program director said. Nevertheless, the Storm Water District is working on the possible origins of illicit discharges by mapping stormwater inlets. Maps of stormwater outlets and dry weather screening of these outlets have proved less useful than expected for locating illicit discharges.

Like other watersheds throughout the nation, Taylor Creek watershed is subject to the increasingly prescriptive guidelines of the U.S. EPA's phase II stormwater management regulations. This comes at a difficult time for Hamilton County, because the county government

and local ratepayers must simultaneously deal with the 2004 consent decree to eliminate sewer overflows from the combined and sanitary sewer systems operated by the Metropolitan Sewer District. Regulatory compliance challenges are compounded by the fact that the Cincinnati region was exempted from phase I stormwater management regulations by its reliance on a combined sewer system. According to the program director, the three main hurdles to local compliance are funding, willingness and land use.

Where the landscape is already urbanized, the technical and financial feasibilities of stormwater management solutions are significantly limited. Urban stormwater retrofits can be costly in land-locked situations. When confronted by retrofit demands, the public may react with the comment, “It was permitted before, so what’s the problem now?”

Population declines, employer relocations and development slowdowns have made Hamilton County government more sensitive to the cost pressures of regulatory compliance. Accordingly, the program director said the county is being careful not to price itself out of the market for new homes, businesses and industries.

Although aware of the upcoming total maximum daily load (TMDL) report for the lower Great Miami River watershed, including Taylor Creek watershed, the program director expressed a preference for “mass water balance approach targeted on a watershed level.” A mass water balance approach, he said, puts more of a focus on:

- working towards energy equilibrium and conservation in the hydrological network
- addressing pollutants at their widespread sources throughout a watershed rather than applying standard guidelines based on pollutant concentrations near a watershed’s mouth
- attempting to mimic the natural hydrologic cycle by:
 - slowing stormwater
 - increasing percolation
 - decreasing runoff
 - limiting impervious surfaces or soil compaction where possible
 - disturbing less vegetation, especially in the riparian corridor
 - employing smart design for developments
 - leaving streams belt width room to meander
 - preserving or constructing wetlands
 - converting traditional stormwater detention basins into bio-retention ponds
 - installing rain gardens, stormwater wetlands, and other stormwater best management practices

Out of fear for mosquitoes carrying the West Nile virus infection, many citizens still exhibit a high degree of skepticism toward stormwater best management practices (BMPs) that allow standing water, the program director said. Because properly designed and constructed BMPs address such hazards, he recommended public education to help the media and residents keep that risk in perspective.

Out of fear of added expenses, developers have often been reluctant to implement smart design principles, the program director said. That attitude seems poised for a shift as more developers inform themselves about the long-term benefits of best management practices. Now that large

development projects are giving way to smaller developments or redevelopments, there is a greater willingness to avoid, reduce or mitigate the environmental impacts of construction work.

Hamilton County Storm Water District hopes that state and federal implementers of the phase II stormwater management regulations realize the challenges of TMDL requirements. The program director said he realizes the complications that U.S. EPA faces in state by state differences in addressing phase II stormwater management rules. He believes that nutrients will be among the primary pollutants of concern for the lower Great Miami watershed's TMDL, making nutrients an issue for the Taylor Creek watershed.

As for Taylor Creek watershed's impairment of recreational uses due to high bacteria levels in some streams, the program director said more information is needed on all bacteria sources. He agreed that stream bacteria not only has the potential to originate from poorly functioning home sewage treatment systems, but could also to come from livestock operations, horse stables and farms, manure spreading, manure or compost piles, dog kennels, neighborhood pet wastes, discharges from poorly functioning semi-public sewage treatment systems, leaking sewer lines, overflowing lift stations, illicit discharges, illegal septage dumping or wildlife. In addition to considering fecal bacteria from wildlife such as deer and Canada geese, the program director recommended that watershed planners should also consider raccoons and other small animals, which have nested in storm sewers. The Storm Water District experience has indicated that non-human sources of fecal bacteria are sources of impairment to streams.

Looking ahead, the Storm Water District's program director said the Harrison Avenue corridor will continue to attract change and further development in Taylor Creek watershed.

Metropolitan Sewer District of Greater Cincinnati

Like Hamilton County Public Health, the Metropolitan Sewer District of Greater Cincinnati (MSD) shared much of the geographic information system data in this study. Beyond that, MSD also provided an update on its sanitary sewer extension efforts in Taylor Creek watershed.

An MSD engineer said Ohio EPA has asked MSD to withdraw its request to extend a sewer line southeast more than 6,000 feet in Green Township from the Wesselman Road corridor to Virginia Court. The engineer said Ohio EPA listened to residents who expressed concerns at a public hearing that the proposed project would degrade the upper reaches of Wesselman Creek, which flows parallel to the proposed extension. Ohio EPA approval would have allowed MSD to eliminate the Glenview Pump Station and provide centralized sewage service to about 200 households that now rely on home sewage treatment systems, the engineer said. The proposed sewer line extension also would have encouraged more development in the southern portion of Taylor Creek watershed, the engineer said.

