Wet Weather Team Solution Ideas
Working Draft – July 7, 2008

The following is a list of potential "solution ideas" identified by Wet Weather Team (WWT) members that will be considered in the design of MSD's Integrated Overflow Abatement Plan (IOAP). The list will act as a resource for the technical team as they consider project and program alternatives. These ideas were identified both at WWT meetings and through individual communications with WWT members (e.g., via e-mail). This list will remain "live" throughout the remainder of the WWT effort to capture ideas as they are shared. WWT members are encouraged to send additional ideas to the facilitation team for this list.

New ideas will be listed under a "What's New" section at the beginning of the document for easy reference, as well as under the appropriate section later in the document. After the "What's New" list, this document is organized into three sections:

- Section I, "Project Alternatives," is organized into five sub-categories: Stormwater Best Management Practices (Non-Structural), Stormwater Best Management Practices (Structural), CSO and SSO Point Source Controls, General/Other Solutions, and Site-Specific Solutions.
- Section II, "Funding Ideas and Incentives," is organized into three sub-categories: Cost Allocation Strategies, Financial Incentives, and Funding Sources/Options.
- Section III, "Ideas Partly or Completely Outside the Scope of MSD's Wet Weather Consent Decree," includes municipal government actions that are only partly within MSD's control, MSD actions that are not related to sewer overflow issues, and green infrastructure ideas that are not directly related to sewer overflow issues.

What's New (July 2008)

1. (I-E-1 Downtown Louisville) - Consider taking advantage of planned construction on Main Street in downtown Louisville to construct the CSO solutions at a lower cost.
2. (II-C-11) – Consider revising the potential financial incentive for vegetated roofs; $4 per square foot might not be sufficient.

I. Project Alternatives

A. Stormwater Best Management Practices (Non-Structural)

1. Influence behavior of residential and commercial landowners through education. [Note: See the Education and Outreach Idea List for more ideas about educational efforts to influence behaviors.]
    a. Promote water conservation practices: rain gardens, rain barrels, and responsible alternatives for sump pumps and downspout connections.
    b. Encourage stewardship: removing invasive vegetation from riparian zones, planting wetlands, litter cleanups, etc.
    c. Conduct education on environmentally sustainable ways of using fertilizer and weed killer, and other stormwater best management practices to neighborhood groups.
    d. Discourage chemical treatment of and mowing near waterways to help keep debris from waterways.
2. Regularly distribute billing inserts (like LG&E's) to MSD customers with facts and tips to encourage certain behaviors (e.g., lawn chemical management, pet waste management, landscaping practices).

3. Conduct a baseline survey and follow-up surveys of residents to determine whether education and outreach efforts are effective in changing behavior and perceptions on issues related to the IOAP.
4. Hold "CSO Action Days" during or right after a hard rain to promote behavior change (e.g., don't use your dishwasher, wait to do your laundry, etc.). [Note: More details on this idea are in the Education and Outreach Ideas List.]
5. Encourage the use of best management practices for chemical use in lawn management practices.
    a. Inform greens keepers about best management practices (BMPs), since non-point source runoff is made worse by golf course chemicals.
6. Develop a pledge for customers that clearly lays out behaviors that will help MSD meet Consent Decree requirements. For an example, see http://www.watershedpledge.org (see also II-B-4).
7. Invite people to "join" Project WIN by installing rain gardens, rain barrels, reducing their use of lawn chemicals, etc.
    a. Add a page to MSD's website where people can submit notes or pictures of their efforts.
    b. Give out plaques or other awards to those who "join."

B. Stormwater Best Management Practices (Structural, including Green Infrastructure Solutions)

1. Use landscaped areas to control stormwater runoff.
2. Encourage homeowners to construct rain gardens and use rain barrels.
3. Install French drains along roads to accept stormwater runoff (see also detailed suggestions listed for Beechwood Village below).
4. Develop specific design parameters or standards for stormwater best management practices and low impact development techniques and include these in an MSD Design Manual. The Design Manual should provide guidance for approaches including, but not limited to, the following:
    a. Pervious pavement
    b. Level spreaders
    c. Riparian buffers
    d. Vegetated swales
    e. Wet ponds
    f. Wet ponds with forebays (small basins that settle out incoming sediment before it is delivered to a stormwater BMP)
    g. Wetlands
5. Consider incorporating aspects of the LEED green building standards into MSD design manuals for structural BMPs.
6. Increase tree canopy.
    a. Ensure that urban CSO areas have at least a 30 percent tree canopy.
    b. Initiate a tree-planting program with a goal to increase tree canopy in neighborhoods.
7. Work with the community group "Women of Vision" to create a meditation garden in the West End that could also act as a rain garden or roof runoff demonstration.
8. Conduct demonstration projects. [Note: Overlaps with demonstration projects in Education and Outreach Ideas List.] Specific ideas for projects include:
    a. Create a demonstration area in each Jefferson County watershed to demonstrate and interpret healthy stream habitats and what MSD is doing to study and protect them.
    b. Create some sustainable lawns as pilot projects
    c. Develop a green infrastructure best management practice site similar to SD1 (Sanitation District Number 1 of Northern Kentucky).

d. Add green demonstration/education facilities to old urban schools.
e. Use the Butchertown Greenway Pump Station that is offline for an education and demonstration facility.

9. Plant native plants with deep root systems.
10. Maintain existing detention/retention basins – many may not function properly due to lack of maintenance.
11. Design structural stormwater best management practices to be multiple use and eco-friendly.
    a. Design detention ponds and stream buffers for recreational use.
    b. Make use of detention facilities as sports fields
    c. Incorporate trails along streams to provide recreational opportunities.
12. Convert alley stormwater systems into infiltration systems using pervious pavement.
    a. Potential areas could include the central business district and the west end.

C. CSO and SSO Point Source Controls

1. Disconnect downspouts and/or sump pumps (e.g., by developing educational initiatives aimed at landowners).
    a. One potential target for a downspout disconnection program could be school buildings.
    b. Yard signs similar to those used in Portland's residential Downspout Disconnection Program could be useful for education and outreach about MSD's IOAP. [Note: This idea overlaps with the Education Ideas List.] Specific ideas for signs include:
        i. Messages such as "I disconnected my downspout" and/or "I have a rain barrel."
        ii. The bottom of the sign could invite readers to "ask me" for more information.
2. Increase enforcement and inspections of downspout and sump pump connections.
    a. Incorporate inspections into the property-transfer process (e.g., as another inspection with the sale of existing homes). For example, MSD could deputize the state plumbing inspector, which has the authority to go into private property, to conduct inspections of downspouts. MSD could pay on a per building basis for those inspections.
3. Look at large parking lots as potential sites for wastewater storage facilities. Organizations might be willing to have a covered storage facility built below a ground-level parking lot. In addition, there could be opportunities to add value for the property owner, by building a parking garage as a replacement and/or by providing credit for any non-point source pollution reduction associated with the project.
4. Repair and seal all building laterals.
5. Act on any sump pump or other illegal connection issues uncovered during the course of MSD's regular operations and maintenance work on the sanitary and combined sewer systems.

D. General/Other Solutions

1. Leverage and coordinate the IOAP efforts with MSD's MS4 stormwater management permitting responsibilities.
2. Conduct green infrastructure demonstration projects with monitoring components built in, to help demonstrate the overall effectiveness of green infrastructure solutions.
    a. Start with small, visible projects ("quick wins" – e.g., in a particular neighborhood, near a Rubbertown plant).
3. Preserve rural character where possible.

4. Create a localized resource database to support green infrastructure development efforts (e.g., provide information on contractors that install pervious pavements). Specific ideas include:
    a. Develop a list of environmentally approved chemicals for use in lawn/landscape management.
    b. Landscape architects could provide green options for projects and developments.
5. Do not rule out flow-reduction techniques to address SSOs for any watershed.
6. Look at combining different types of control options, including opportunities to reduce flows of water into the sewer system (e.g., from housing units) in tandem with other types of solutions. For example, combining storage and flow-reduction approaches could make it possible to use a smaller-sized storage facility.
7. Involve community members in addressing the root causes of SSOs (e.g., by working with the Metro Council, community organizers, and neighborhood groups).
8. Challenge preconceived notions of what U.S. EPA will accept in terms of the role of source control in an SSO elimination plan.
    a. Use technical feasibility and cost effectiveness as the primary basis for deciding the level of source control to meet regulatory compliance obligations, and work with relevant regulatory bodies to justify the basis for this approach.
9. Consider wet weather sewer overflow control strategies that reduce future maintenance issues.
10. When choosing initial green infrastructure projects, consider avoiding areas where there were problems with seepage and backups during the 1997 storm, as it may be useful to avoid known problem areas.

E. Site-Specific Solutions (Considered in Addition to the Solutions Listed Above)

Beechwood Village

1. Construct a park-like wet detention area in the wooded area of St. Matthews Park.
2. Install new sanitary lines and laterals to homes, and pumps for basement facilities when requested by the homeowner.
3. Install French drains on either side of roadways to accept stormwater runoff. The drains would be continuous trenches filled with gravel and covered by turf. The drains could also accept discharges from sump pumps and downspouts.
4. Install perforated pipe in the French drains so they can discharge more freely when they flood. The piped drain system would need to be a combination of gravity and pump depending on the topography and discharge point(s).
5. If a solid pipe system is used, the system could discharge to constructed wetlands designed to treat stormwater. Possible sites for constructed wetlands are the forest north of the Community Park and the detention pond for the bank on Shelbyville Road at the Beechwood Village entrance.
6. Restore natural stream banks for the Sinking Fork north of Shelbyville Road where the big pump now sits.

Beargrass Creek – Middle Fork

1. Restore the Middle Fork between Grinstead crossing and confluence.
    a. Restore wetlands and improve aquatic health in the following areas:
        i. The isolated quarry areas to the north of the interstate between Grinstead and Payne (which receives a small CSO discharge). One specific idea is to remove sediments from these areas.

ii. The old meander into which CSO 127 discharges and the wet meadow in its bend.

b. Work with the City of Louisville, the Parks, and the private sector to turn this area into a greenway that connects the waterfront with Cherokee and Seneca Parks, and eventually with parks in Saint Matthews, with a bikeway from Saint Matthews to downtown.

c. Close CSOs in this area using projects that reduce flooding and improve water quality.

2. CSOs 125, 126, 127, 144, and 166; and CSOs 86 and 140 could potentially be treated at one facility (some pumping would be required). This could be a visible project that could help link areas in the community.
3. Potentially develop the River Metals property (a brownfield near the Girl Scouts Building) as a storage or wetlands treatment area.
4. Establish wetlands at Seneca Park and Old Cannons Lane.
5. Consider locations/sites for storage solutions that are closer to the SSOs in the Anchor Estates Pump Station watershed than the potential location presented at the 9/20/07 WWT meeting.
6. Utilize parks property orphaned by I-64 as a detention basin for the Beals Branch sewershed CSO. Restore the sediment-filled wetland at the confluence of Beals Branch and the Middle Fork as a treatment wetland for the basin's discharge.

Beargrass Creek – South Fork

1. Restore the South Fork between I-264 and Eastern Parkway.
    a. Restore the stream channel, along with the wet meadows and woods in the floodplain.
    b. Coordinate with landowners (e.g., the City of Louisville and Bellarmine College) on the restoration of the stream segment, which is part of a "nature education" corridor and is subject to MSD conservation easements.
    c. Potentially make this area into a bikeway as part of the solution.
2. Create a rain garden in the Germantown area to intercept stormwater flowing to a variety of minor CSOs at the old trolley turnaround.

Beargrass Creek – Muddy Fork

1. Restore Eva Bandman Park.
    a. Convert the park into restored wetlands with a boardwalk for visitors.
    b. Include the park as part of the solution for the CSOs that discharge at the confluence by having it receive their stormwater.
2. Tie the impaired section of Beargrass Creek to newly created wetlands, near Eva Bandman Park.
3. Incorporate green infrastructure into the Arts Center.
4. Turn the MSD pump station into an interpretive center.
5. For CSOs 132, 154, and 167:
    a. Conduct a concentrated effort to disconnect downspouts in this area.
    b. Use incentives to get people to help solve the problem in this area. In particular, educate people about ways to reduce non-point source pollution.
    c. Acquire properties in flood-prone areas by paying more than fair market value for the homes (as compensation to homeowners for having to move). These areas could then be used to create detention or retention basins, or other facilities/structures to reduce wet-weather sewer overflows. [Note: Purchasing properties in flood-prone areas is also listed in Section III.]

Downtown Louisville/Central Business District

1. Consider taking advantage of planned construction on Main Street in downtown Louisville to construct the CSO solutions at a lower cost.

Floyds Fork Watershed

1. Look for opportunities for green infrastructure in the Floyds Fork watershed, as it is the last undeveloped area in Jefferson County.
2. Protect Floyds Fork with riparian buffers and other preservation efforts.

Other Watershed and Site-Specific Solutions

1. Create an 800-acre lake in the southwest portion of Jefferson County. Use a dam/flood wall to build it and include marshes around it.
2. Examine other sites for green infrastructure opportunities, such as:
    a. Pond Creek Lake and the southwest pump stations (this area has been studied already by the Corp of Engineers)
    b. The Bradley Property

II. Funding Ideas and Incentives

A. Cost Allocation Strategies

1. Equitably assign costs (focus areas for the financial equity value):
    a. Consider the burden on fixed income and low-income populations.
        i. Spread payments over a longer time period if this would reduce the burden on lower income residents.
    b. Rates and fees that are linked to the cost to serve (i.e., the level of impact).
    c. Consider how the community develops to make sure that everyone pays into the solution.
2. Charge residences differently depending on the area of impervious surfaces on properties (and therefore the amount of stormwater runoff that would be generated).
3. Require lower development fees for areas that already have sewer capacity (e.g., urban areas in need of re-investment).
4. Bill based on increased water usage—the more you use, the higher the rate.
5. Develop an equitable plan for joint funding for permeable pavement efforts.
6. Extend MSD's senior citizen's discount program to ensure that it helps people who face financial hardship. Ideas include:
    a. Consider people's ability to pay, not simply their age, and provide assistance and/or discounts to low-income populations.
    b. Evaluate whether the square footage of people's homes could be used as an indicator of the need for financial assistance.
    c. Examine the verification and process and criteria that LG&E uses for its Winterhelp program.
7. General principles for funding and cost allocation:
    a. Have higher rates in the near term to avoid future balloon payments.
    b. Create balance between what the community pays now and what the community will pay later.

c. Do not increase rates so much that they drive companies or residents to move elsewhere.
d. Use the community's resources wisely. This will involved dealing with issues such as the Big 4 SSOs, but also working on long-term strategies to improve water quality such as promoting behavior change through education.

8. Charge higher rates for people with the ability to pay in order to provide resources to offer incentives to people who "do the right thing" and discounts to people who need financial assistance.
9. Consider charging residences that have septic tanks more on their drainage bills than other residences.

B. Funding Sources/Options

1. Consider using volunteers to reduce costs.
2. Consider solutions that could meet the objectives of multiple agencies (e.g., water quality and flood control improvements) and therefore could potentially receive funding from multiple sources.
3. Consider additional user charges that could be used as a result of adopting a different rate schedule.
4. Maintaining a certain level of bond rating could be a way of setting limits on how much money MSD borrows versus how much it generates in internal revenues.
5. Consider not borrowing any money.
6. Balance the impact of potential financial packages on MSD's bond rating, rates, and cash flow/liquidity.

C. Incentives *[Note: Incentives related to a potential ordinance to address private sources of infiltration and inflow are located in Section III-A-Regulatory Requirements/Policies]*

1. Provide incentives for "preferred" behaviors, such as:
    a. Installing/using green roofs and permeable pavement.
    b. Increasing tree canopy, changing plantings, and other activities to reduce runoff from people's yards.
    c. Reducing use of lawn chemicals.
    d. Controlling the spread of invasive species.
2. Offer incentives for developers to use cost-effective, eco-friendly solutions (e.g., low impact development techniques, stormwater best management practices).
    a. One idea for an incentive is to offer drainage credits.
        i. Offer drainage credits to companies that put money into water education for the community. For example, give companies a one dollar discount for every five dollars spent on community education.
    b. Develop incentives for developers to use the greenest and simplest solutions for new development (e.g., moving permit applications to the front of the review line).
3. Charge reduced wastewater rates to property owners that use eco-friendly techniques to reduce stormwater runoff.
4. Reduce fees for families or businesses who sign a pledge that clearly lays out behaviors that will help MSD meet Consent Decree requirements (see also I-A-5).
    a. In critical CSO neighborhoods, provide free rain barrels to people who sign the pledge.
5. Develop compensation credits to help alleviate financial burden to developers and property owners.
6. Reduce rates for houses that are certified (i.e., through inspections) as eliminating inflow from their properties into the sewer systems.

7. Develop and administer a "forgivable loan" program that would cover the replacement of a private lateral line when an inspection reveals that it contributes to an SSO.
    a. The loan would be up to a maximum amount set by MSD for the private contracting work and would be forgiven at the end of, for example, 20 years, if the homeowner made no illicit connections. If illicit connections were made, the loan would be due in its full amount, civil penalties would apply, and water would be disconnected after a grace period if the illicit connections weren't removed.
    b. The loan program would require regular inspections.
    c. The loan would come due via lien if the homeowner sold the property, but the new homeowner could negotiate with MSD for a new loan but with a new twenty year term.
8. Consider not charging based on winter water usage, as this could potentially remove an incentive to conserve water, since water usage varies more in the summer.
9. Consider incentives for development in areas where there is less impact on the sewer system (i.e., encouraging lower impact development).
    a. There could be a role for impact fees in encouraging development in areas where there is less impact on the sewer system.
10. Consider using requirements when needed in addition to incentives to ensure that solutions are maintained.
11. Consider revising the potential financial incentive for vegetated roofs; $4 per square foot might not be sufficient.

III. Ideas Partly or Completely Outside the Scope of MSD's Wet Weather Consent Decree

A. Municipal Government Actions (Only Partly within MSD's Control)

Regulatory Requirements/Policies

1. Improve the development review process for new subdivisions. Deny permits for subdivisions or any new homes if the plant in the area is above capacity.
2. Require that regional detention ponds in post-developed areas provide filtration for storms that occur every two years or less.
3. Require post-development runoff to be equal to pre-development runoff.
4. Develop mandatory or alternative green solutions for development projects (e.g., by changing development codes).
5. Determine impervious surface limits for individual watersheds.
6. Deny permits for sites within CSO or SSO sewersheds that have any incidents of illegal connections to the sewer system to limit impacts on already overloaded systems.
7. Use wet weather capacity (instead of dry weather capacity) of the sewer system as the baseline for approving new development.
8. Develop an ordinance to address private sources of infiltration and inflow. Ideas related to a potential ordinance include:

    Authority and Responsibility for Inspections and Enforcement

    a. Develop an ordinance that would allow MSD or a plumbing inspector to enter homes to identify sources of infiltration and inflow (e.g., broken foundation drains). MSD could subsidize or help pay for the costs of the inspections.
    b. Require contractors and plumbers working on private property to check for sources infiltration and inflow.

c. Adopt a requirement for inspections of private properties for sources of infiltration and inflow any time a building permit is issued (e.g., for an addition to an existing home).
d. The ordinance should have the flexibility to allow people other than plumbing inspectors to conduct inspections of private properties.
    i. Allow other types of inspectors to do the inspections.
    ii. Allow property owners to make repairs themselves and then have certified inspectors inspect the repairs.
    iii. It may be better from an accountability perspective to not have MSD do the inspections, repair work, and enforcement.

Trigger for Inspections

e. Use a proactive approach to inspecting properties (such as the approach used in Johnson County, KS) that would allow MSD to target high-priority areas.
f. Use two approaches for triggering property inspections: require inspections during the property transfer process, and also proactively target certain neighborhoods/areas for inspections.

Scope

g. Have the ordinance address issues with the combined sewer system as well as the sanitary sewer system (e.g., look at ways to reduce runoff and limit impervious cover in the CSO area).
h. Expand the scope of the ordinance to include:
    i. An outright ban on downspouts, sump pumps, and basement drains.
    ii. A requirement that new parking lots and parking lots that are going to be repaved have more stormwater controls.

Financial Assistance

i. MSD should provide financial assistance to the community related to the ordinance.
j. The ordinance should include a cost-sharing component.

Other

k. Develop legislation related to private sources of infiltration and inflow that would:
    i. Prohibit clear water connections to the sanitary system.
    ii. Require homeowners to maintain the lateral line.
    iii. Provide for civil penalties for homeowners and plumbers for illicit connections or failure to repair the lateral line.
    iv. Disconnect water supply after a brief grace period if the problems aren't corrected.
    v. Give MSD the authority to inspect when an SSO occurs downstream of any sanitary connection.
    vi. Describe a process MSD would use when it must inspect sanitary connections upstream from an SSO, including notice and information about the program.
    vii. This new inspection process should begin immediately with the "Big 4" SSOs, but could be implemented when MSD detects others.
l. A draft ordinance should be reviewed by a county/city attorney.

<u>Opportunities to Encourage/Use Green Infrastructure in Development Projects</u>

1. Utilize very large basins or lakes in new development areas and in rural areas. For new developments, create larger detention/retention basins.

2. Preserve existing natural systems, vegetation, and trees during development, rather than removing and rebuilding them. Take advantage of existing assets in development opportunities.
3. Look at green parking opportunities along business corridors.
4. Look at opportunities to develop more upward and infill already developed areas (i.e., increase density).
5. Develop a "complete streets" program policy to encourage "parkway-like" streets and reduce stormwater run-off.
6. Form partnerships with housing developers to minimize impervious surfaces.
7. The parking lot on Frankfort Avenue could utilize porous pavement for public parking.
8. Develop a recognition program for those who use green infrastructure.
9. Opportunities in schools:
    a. Incorporate green elements into the three new research facilities being planned at the University of Louisville.
    b. Turn school grounds into "ecological playgrounds" for neighborhoods.
10. Look at opportunities to incorporate green infrastructure into brownfield development (e.g., in Park Hill Corridor).
11. Prepare a draft best management practice for developers on using green infrastructure.

<u>Opportunities to Link MSD Efforts to Existing Partnerships and Programs</u>

1. Develop a "comprehensive solution" for local environmental improvement and education efforts.
    a. Fund and staff a collaborative planning effort to link the environmental education programs of multiple local agencies (MSD, Louisville Water Company, Metro government departments, Mayor's Office, TARC, etc.) together, develop specific goals and assessment systems, and then hold agencies accountable to those goals.'
2. Encourage local government agencies (e.g., Jefferson County Public Schools, Metro Parks) to adopt preventative practices to decrease stormwater runoff and wastewater volumes (e.g., low-flow toilets, pervious pavement, additional tree coverage, etc.).
3. Integrate green projects into planning efforts underway.
4. Work with the Green City Partnership (an initiative involving the Louisville Metro Government, Jefferson County Public Schools, and the University of Louisville) on green infrastructure efforts. The Metro Green Initiative should be a leader for the community's Green City Partnership.
5. Consider green infrastructure in the context of healthy activity improvement projects and projects that promote greater walk-ability in neighborhoods.
6. Make use of neighborhood plans. There could be opportunities to incorporate green infrastructure into the 14 neighborhood plans and 6 neighborhood assessments that are being developed, as well as in neighborhood plans that well be developed in the future.
7. Convene a group of local authority figures (e.g., the mayor, the president of the University of Louisville, and others) to coordinate and work collaboratively on community environmental improvement initiatives. (WWT members suggested that an appropriate time for a meeting like this might be summer 2008, when more of the details of MSD's draft IOAP are known.)

<u>Opportunities for MSD to Collaborate with Other Entities</u>

1. Coordinate with planning and zoning departments and other governmental entities around the value of green infrastructure.
2. Partner with schools to relate students' community service efforts with green projects.
3. Coordinate with other regional entities to build a major treatment plant near the Salt River.

4. Consider linking IOAP construction projects to road construction efforts.
    a. One potential place for such a linkage is the road construction occurring in the Goose Creek Pump Station area.
5. Work with governmental entities to "lead by example" by eliminating infiltration and inflow entering the sewer systems from government-owned properties.
6. Consider where development will occur in the future, in order to avoid having similar wet weather problems related to private sources of infiltration and inflow in the future.
7. Partner with other cities and states that have wet weather consent decrees to collectively ask federal representatives to seek additional government funds for wastewater and stormwater management improvement efforts.
8. Coordinate with other agencies to examine the total impacts of all utility costs (water, wastewater, energy, gas) on customers.
9. Help the community implement a watershed approach to improving water quality that includes addressing stormwater and non-point source pollution in addition to CSOs and SSOs.
10. Form partnerships with people and agencies who work on climate change issues (e.g., the new committee in the Green City Partnership).
11. Network with partners on education activities.
12. Work with the Green City Partnership to develop potential incentives.
13. Develop a collaborative agreement on green infrastructure with other entities (e.g., schools, city and county government) such as the Memorandum of Understanding between Cincinnati Public Schools, the City of Cincinnati, and the County of Hamilton, Ohio regarding sustainable design "green" guidelines.
14. At the intersection of Grinstead and Lexington Road, work with the Kentucky Department of Transportation to redirect stormwater flows from the interchange into a wetland.
15. Work with Metro Parks to collect stormwater into a cistern at Beringer Spring.

B. MSD Actions Not Related to Sewer Overflow Issues

1. Purchase properties within the floodplain.
    a. Buy land that is flooded on a regular basis and turn it into parks.
    b. When building a detention basin, buy properties in the floodplain that are most impacted.
2. Improve implementation and enforcement of the Sediment Control Act.
3. Partner with local lawn care companies to promote Louisville Green (MSD's organic fertilizer).
4. Do not give rebates during droughts and do not give special rates for irrigation meters for residential or commercial entities for lawn care, as this could be seen as encouraging lawns, which can contribute to water quality problems (e.g., runoff containing fertilizers and pesticides).

C. Green Infrastructure Ideas Not Related to Wet Weather Issues

1. Heine Brothers Coffee is looking for five acres for an urban farm to grow produce and sell to local restaurants.
2. The "86-64" community effort to remove portions of I-64 could be an opportunity to reclaim the waterfront and promote public transportation such as light rail.
3. Utilitize the open space in parks for green infrastructure.
4. Develop and educate residents about urban farming opportunities.
5. Teach and promote sensible/responsible development.
6. Require parking lots to provide shaded areas.

7. Establish a tree ordinance to protect specific trees (identified based on species, age, etc.) and require mitigation if the protect trees are damaged or removed.
8. Protect or improve water quality and flood control for developments.