A Healthy Marriage: Community Engagement and Integrated Planning

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What is Blueprint Columbus?

An alternative approach to an age old problem…..

Treat the cause of the problem instead of the symptom

➢Keep the rain water out of the sanitary sewer

➢Clean the rain water with green infrastructure

Why Blueprint Columbus?

City of Columbus is under orders to stop sewer overflows

Two alternatives to reduce overflows

- Traditional approach: Bigger sewers/tunnels

  ➤ Treating the symptom, not the cause

- Blueprint Columbus: Combination of rainwater redirection and green infrastructure

  ➤ Treating the cause – too much water infiltrating the sanitary sewers

- There is no "Do-Nothing" alternative

Gray Infrastructure

➢ Traditional concrete solutions

➢ Includes pipes, tunnels, wastewater treatment plants, storage facilities

Green Infrastructure

➢ Engineered solutions that mimic nature

➢ Includes rain gardens, bioswales, green roofs, porous pavement

Is there a better way?

Current plan based on 2005 Wet Weather Master Plan calls for two large tunnels, with a big price tag.

➢ $2 Billion over the next thirty years

Can the City meet the requirements of the Consent Decree and create an opportunity to engage the Community and rebuild neighborhoods?

➢ Spend money above ground instead of on tunnels

➢ Beautify neighborhoods and create sustainable jobs

Four Pillars of Blueprint Columbus

- ➤ **Sewer lateral lining**

- ➤ **Roof water redirection**

- ➤ **Sump pumps**

- ➤ **Green infrastructure**

Benefits and Challenges of Blueprint Columbus

Benefits

- Neighborhood improvements – Rain gardens, porous sidewalks, trees, mini parks

- Opportunities for local contractor and consultants

  - Permanent local maintenance jobs
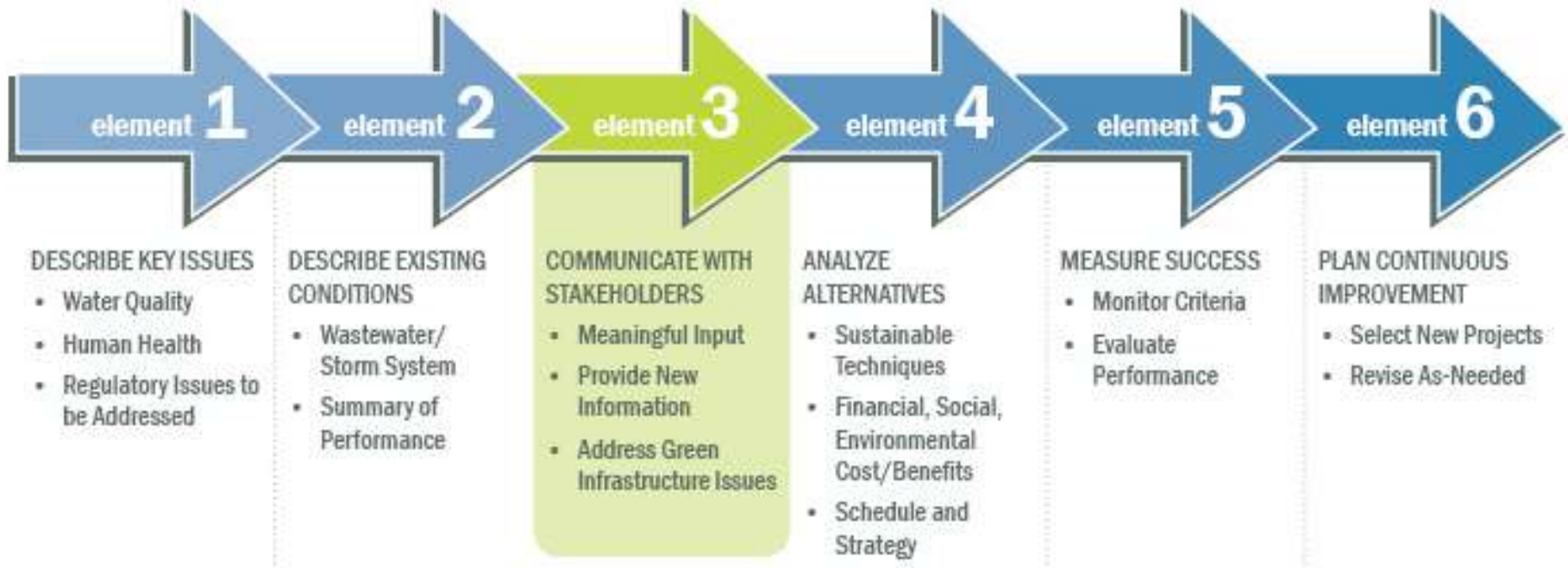
  - Cleaner waterways

Challenges

- Tunnels are out of sight, out of mind

- Downspout redirection, lateral lining and sump pumps are intrusive – going into basements and backyards

- Community acceptance – Understanding community needs and accommodating them
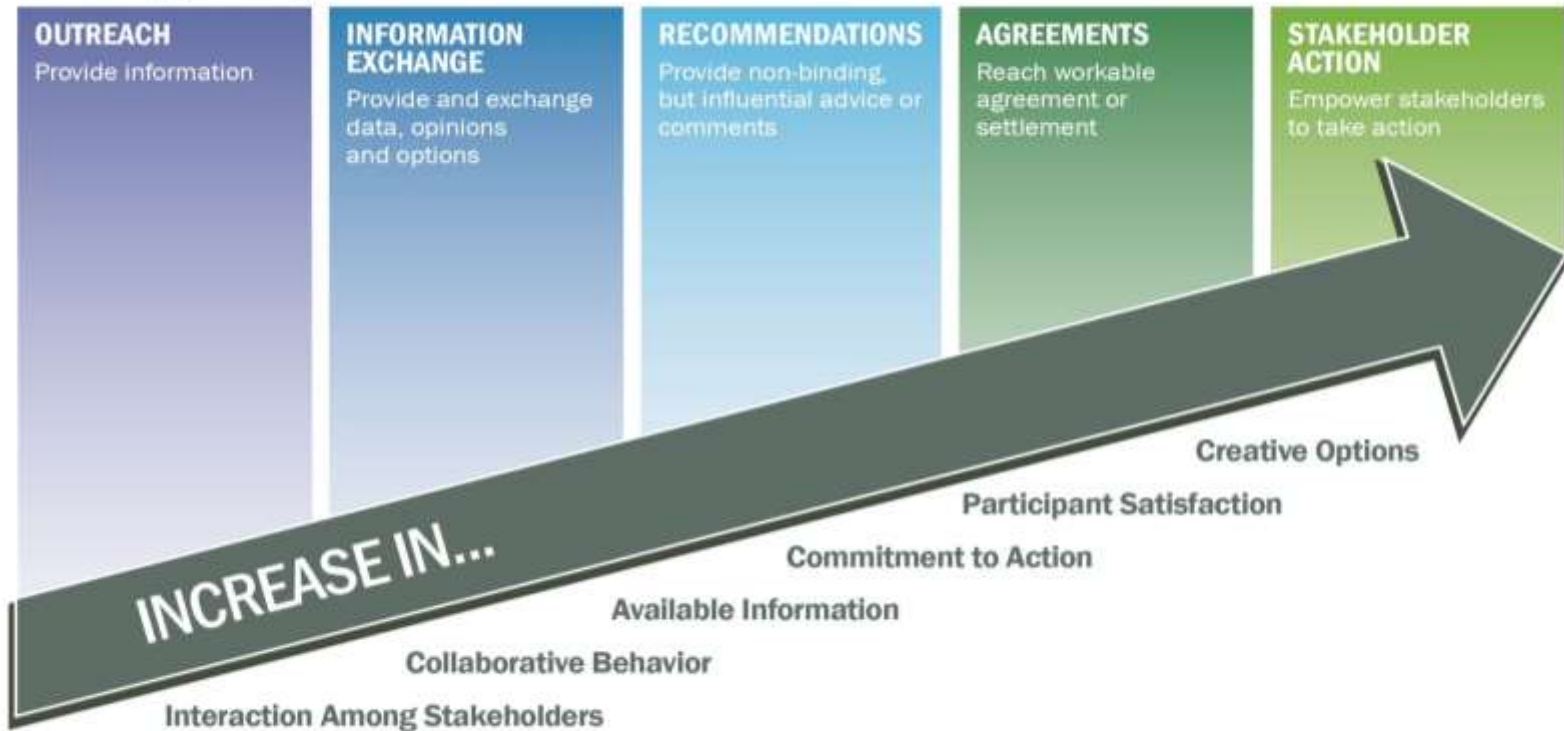
USEPA **INTEGRATED MUNICIPAL STORMWATER AND WASTEWATER PLAN** elements (2012)

element 1

DESCRIBE KEY ISSUES
- Water Quality
- Human Health
- Regulatory Issues to be Addressed

element 2

DESCRIBE EXISTING CONDITIONS
- Wastewater/ Storm System
- Summary of Performance

element 3

COMMUNICATE WITH STAKEHOLDERS
- Meaningful Input
- Provide New Information
- Address Green Infrastructure Issues

element 4

ANALYZE ALTERNATIVES
- Sustainable Techniques
- Financial, Social, Environmental Cost/Benefits
- Schedule and Strategy

element 5

MEASURE SUCCESS
- Monitor Criteria
- Evaluate Performance

element 6

PLAN CONTINUOUS IMPROVEMENT
- Select New Projects
- Revise As-Needed

PUBLIC INVOLVEMENT SPECTRUM
a range of possible processes

OUTREACH	INFORMATION EXCHANGE	RECOMMENDATIONS	AGREEMENTS	STAKEHOLDER ACTION
Provide information	Provide and exchange data, opinions and options	Provide non-binding, but influential advice or comments	Reach workable agreement or settlement	Empower stakeholders to take action

INCREASE IN...

Creative Options

Participant Satisfaction

Commitment to Action

Available Information

Collaborative Behavior

Interaction Among Stakeholders

No public engagement project is without challenges...

Scoping Project

- Collaborative approach
- Level of engagement
- Timeline

Education

- Lack of conceptual understanding
- Regulatory pressures

Measuring Results

- Define quality of data
- Interpretation

WIIFM?

- Create interest
- Neighborhood demographics
- Messaging

Public/Media Pressure

- Challenging political and social environment

1. **Educate and inform** community residents, businesses, and key stakeholders about this exciting new solution for their community.

2. Determine NAP᾽S (**Needs, Attitudes, and Perceptions)** of residents.

3. Inform the City of **Levels of Acceptability** for this new approach and provide recommendations about implementation strategy.

Community Outreach: Education & Engagement Process

July 2013 – May 2015

| High-Level City-Wide Education and Engagement Forums | Community Education and Baseline Research | Data Analysis/Process Evaluation | Measuring Community Perceptions and Attitudes | Phase Data Analysis/Process Evaluation |

Includes a mixture of grassroots strategies including presentations, road shows, and canvassing

Delivered to targeted groups such as civic associations, recreational or professional clubs (i.e. Yay Bikes!, Green Drinks), and faith-based organizations.

Disseminates the message and promotes awareness of the CIP, which is reinforced through subsequent activities (such as Road Shows).

A "traveling Road Show", with **visuals and hands-on demonstrations** (i.e. 3D models) is presented at a variety of venues

- Large-scale community events: Earth Day, city/neighborhood festivals, etc.

- Community Centers, Churches, and Libraries

- Neighborhood Businesses such as hardware stores, greenhouses, etc.

Residential and Business Canvassing

Passive Canvassing: dropping literature at homes and businesses

Active Canvassing: Engaging citizens at their residences to highlight key information and answer questions

Canvassing also **includes polling and surveying**, to quantify needs, attitudes, and perceptions

➢Using **technology** greatly enhances the experience for the team and resident

BLUE PRINT COLUMBUS CLEAN STREAMS. STRONG NEIGHBORHOODS.

THE CITY OF **COLUMBUS**
MICHAEL B. COLEMAN, MAYOR
DEPARTMENT OF
PUBLIC UTILITIES

- A new approach to eliminating sewer overflows
- Creating local jobs
- Strengthening Columbus neighborhoods

THE CITY OF **COLUMBUS**
DEPARTMENT OF
PUBLIC UTILITIES

Help us draft the Blueprint for Columbus.

When it rains, water finds its way into sanitary sewers - which were built to hold sewage, not rain water. The sewers get too full and that causes problems like basement backups and sewer overflows into our rivers and streams.

The traditional solution is to build a bigger sewer. But, this is just treating the symptom and will not solve the problem. What if we stop the rain from getting into the sewers and provide solutions for the rainwater that also enhance neighborhoods?

Blueprint Columbus is a better way to address the problem. It will provide job creation and neighborhood beautification through enhancements such as rain gardens, sidewalks, parks, and trees. Blueprint Columbus is an earth-friendly approach for cleaner water and streams.

It won't happen overnight. The effort is monumental and will be an investment over many years.

To learn more contact:
www.blueprint.columbus.gov

BLUE PRINT COLUMBUS

614.645.8276
blueprint@columbus.gov
Please remember to recycle

Reinforcement Educational Collateral

HOME SEWER LATERAL LINING

The pipe between your home and the City's sanitary system is called the sewer lateral. Over time, the sewer lateral can develop problems: pipes can crack, tree roots can grow in, and joints can become leaky. These defective pipes can allow rain water into the lateral, resulting in too much clean water in the City's sewer system. Blueprint Columbus will line your home sewer lateral with new, waterproof material.

GREEN INFRASTRUCTURE

Storm water picks up pollutants (trash, oil, grease, fertilizers) from yards and streets and carries it through a storm sewer, directly to a nearby stream or river. Green infrastructure such as rain gardens, porous pavement, and trees can be installed to slow down and clean the rain water before it enters the storm sewers. Green solutions (nature based approaches) also have the added value of beautifying neighborhoods.

ROOF WATER REDIRECTION

Without proper drainage rain water can seep into the city's sewer system. When rain falls onto hard surfaces, such as roofs, this storm water can eventually settle around the foundation of your home. As a result, too much rain water runoff from roofs ends up in the City's sanitary sewer. That rain water can be directed away from your house by installing connections from the downspout to the street. This keeps the roof water away from your foundation drain and out of the sanitary sewer.

SUMP PUMPS

Every home needs drainage around the foundation. Homes built after 1963 have separate routes for rain water and sanitary sewage. The older homes without separate routes have underground pipe joints that are not sealed, which means too much rain water gets into the sanitary sewer. Installing sump pumps in older homes can get the rain water to the right place.

BLUE PRINT COLUMBUS

Clean streams.
Strong neighborhoods.

Help the Raindrop find his way to clean streams.

HELP
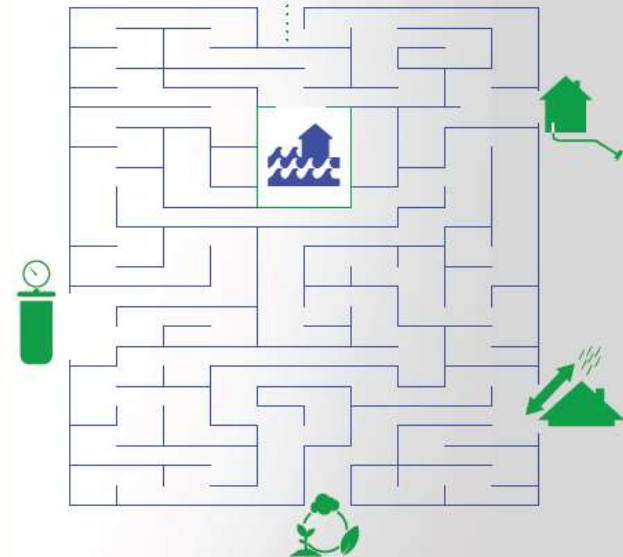
Green Infrastructure
Using Nature to Manage Stormwater

Why Green Infrastructure?

It rains in Columbus about 140 days per year. Managing all that rain water is the function of our storm sewers. This sewer system includes a series of curb inlets and underground pipes, known as gray infrastructure, that drains untreated rain water and any trash or pollutants it picks up along its path directly into our streams and rivers.

Rain gardens and porous pavement, known as green infrastructure, are rapidly becoming an important part of the storm sewer system in Columbus. Rain water is routed through the green infrastructure, filtering through layers of stone, soil and plants before draining into the pipes that empty into our rivers. This natural filtering process slows the release of stormwater and keeps pollutants and trash out of the system, which protects our rivers and streams.

Site Visit:
The City's design team first visits potential sites on City owned property to determine the best locations for green infrastructure. Locations may include parks or right-of-ways, such as curb lawns, on residential streets. The team will especially want to know where existing underground storm sewers are, since the green infrastructure will connect to those sewers.

Survey:
After a general location is selected, the team surveys the site to check for potential obstacles, such as underground utilities, and may need to take soil samples. Once satisfied with the location, the design team prepares detailed construction plans.

Construction:
The rain garden site is excavated and the subsurface is prepared by adding layers of stone and soil designed to filter stormwater. Plants and mulch make up the top layer of rain gardens. For porous pavement, the subsurface is prepared in much the same way, except the top layer is porous concrete. Both allow water to soak into the layers beneath it.

Operation and Maintenance:
The City of Columbus is responsible for maintaining its green infrastructure. This includes periodic inspection, removing litter and weeds on a regular basis and pruning, trimming or replacing plants as needed.

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DEPARTMENT OF PUBLIC UTILITIES

FAQ

Why is the City building green infrastructure in my neighborhood?

In Columbus, there are sanitary sewers and storm sewers. Sanitary sewers take waste water from your house to a waste water treatment facility. Storm sewers take rain water from streets and driveways to a nearby river or stream. When rain gets into sanitary sewers through cracks and joints in the pipes, untreated sewage diluted by the rain water can overflow into our rivers or back up into basements.

Blueprint Columbus will stop the rain water from getting into sanitary sewers and will direct it to the green infrastructure, which will capture stormwater that might otherwise flood roadways. Blueprint Columbus will be implemented in neighborhoods where a large amount of rain water gets into sanitary sewers.

What is a right-of-way?

The right-of-way is the area in your yard along a street or alley that is owned by the City of Columbus. If there is a sidewalk along the street, the right-of-way usually includes the sidewalk and may extend several more feet into the yard.

What is porous pavement?

Porous pavement can be concrete or blacktop designed so that rain water seeps into it instead of just running across the surface. Pollutants carried by rain water runoff are filtered out by layers of gravel beneath the surface and the stormwater slowly releases into the underground drain that connects to the storm sewer.

Where will the green infrastructure be located?

City contractors will install green infrastructure on City property in neighborhoods, including in the right of way. Rain gardens are constructed below street level, allowing rain water to easily flow in and filter slowly to the sewers underneath.

What if I don't want green infrastructure in the right-of-way in front of my house?

There will be public meetings in your area so you can learn the location of the proposed green infrastructure and provide feedback to City staff. The design team will take all concerns into consideration. However, in some instances other locations may not be possible.

Will the rain gardens attract mosquitoes?

No, rain gardens are designed to drain in 48 hours or less. Mosquitoes require a minimum of 72 hours in standing water for larvae to develop.

Will the green infrastructure prevent parking on the street or walking on the sidewalk?

Green infrastructure will not interfere with sidewalks. Design guidelines include a 2 ½ foot buffer area between the curb and the edge of a rain garden. Parking spaces may be replaced by a bump out to assist in traffic calming if it is determined that this benefits the neighborhood.

Who removes litter and maintains the plants in the rain garden?

The City of Columbus is responsible for maintaining all parts of our storm sewer system including the new rain gardens and porous pavement. Litter and weeds will be removed on a regular basis and plants will be pruned, trimmed or replaced as needed.

Will the green infrastructure fix street flooding?

Green infrastructure is designed to manage stormwater and may improve local drainage issues. However, the green infrastructure is not designed to solve all street flooding issues.

HOW CAN I LEARN MORE?
COLUMBUS.GOV/BLUEPRINT

THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

Contains at least 30% post consumer paper products

Additional Engagement Strategies

Citizens Advisory Panel: This panel is made up of diverse community members representing various neighborhood groups and other stakeholders from the proposed project area.

Bill Inserts: Information regarding the project was mailed to residents with their water bill.

Focus Groups: Focus groups on specific Blueprint strategies have been used to identify key messaging and anticipate the needs and perceptions of citizens.

Accomplishments: Community Awareness & Education

Collateral and Residential Canvassing: **44,966**		
Baseline Educational Materials (passive canvassing in the 4 target areas) **28,269**	Reinforcing Educational Materials (active canvassing to a subset in the 4 target areas **9,965**	General ongoing literature distribution (includes Clintonville): **6,732**
"Roadshows" and Events: **85**		
Four Target Blueprint Areas, (Libraries, Community Centers, Civic Groups, etc.) **40**		City-wide Events, (Fairs & Neighborhood Festivals, Community events, etc.) **45**
Business & Civic Outreach		
Active canvassing to local businesses in the 4 target areas: **291**		Civic Associations, Area Commissions and Faith-based: **18**

Overall Accomplishments

Another way of thinking about it:

➢Walked **2,665 miles** – that's like taking a stroll from Columbus to Los Angeles and then heading to Tucson for dinner….

➢Nearly **300 hours talking with residents** at events – or earning the equivalent of a PhD in class hours + dissertation writing….

➢Visited over **28,000 residences**…

An exceptional investment in community engagement….

Key Messages and approaches must be **tailored to the specific and unique audiences** in your community.   -A diverse team helps a lot

Baseline education and **reinforcement** is critical to receive reliable, educated feedback that results in the most accurate research outcome or design solution.

Found residents to be quite **interested** in the proposed Blueprint solutions yet **surprised and delighted** they were informed and asked for input.

Remembering the Core Principles of Public Engagement

1. Careful Planning and Preparation

Through adequate and inclusive planning, ensure that the design, organization, and convening of the process serve both a clearly defined purpose and the needs of the participants.

2. Inclusion and Demographic Diversity

Equitably incorporate diverse people, voices, ideas, and information to lay the groundwork for quality outcomes and democratic legitimacy.

3. Collaboration and Shared Purpose

Support and encourage participants, government and community institutions, and others to work together to advance the common good.

4. Openness and Learning

Help all involved listen to each other, explore new ideas unconstrained by predetermined outcomes, learn and apply information ways that generate new options and rigorously evaluate the process.

5. Transparency and Trust

Be clear and open about the process, and provide a public record of the organizers, sponsors, outcomes, and range of views and ideas expressed.

6. Impact and Action

Ensure each participatory effort has real potential to make a difference, and that participants are aware of that potential.

7. Sustained Engagement and Participatory Culture

Promote a culture of participation with programs and institutions that support ongoing quality public involvement.

~From the National Coalition for Dialogue and Deliberation

Engagement that *inspires!*

June 23, 2015

Blueprint Video

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