



## Bloomington Sustainability Action Plan Environmental Quality and Natural Systems Working Group Meeting Four Notes (Part 1)

1 May 2018

City Hall

6 pm – 8:30 pm

**Topic:** Identify challenges regarding urban sprawl and climate change adaptation and propose solutions.

**Facilitator:** Stephanie Richards

**Computer notes:** Steven Chybowski

**Number of participants:** 12 (Kriste Lindberg, Elizabeth Tompkins, Kathy Gutowsky, Steve Cotter, Jana McGee, Phil Peden, Jane St. John, Autumn Salamack, Stephanie Richards, Daphney Richemond, Farhana Khan, Steven Chybowski)

### Summary of Topics discussed

- Review goals and actions discussed in meetings two and three
- Background presentation of the current situation of Bloomington storm water management
- Identify challenges and solutions with storm water management
- Vote on the most important goals and actions discussed in the working group meetings

### Detailed Notes

#### Introduction

- We will have remarks from Kriste and Phil from the Utilities Department for additional information
- We will conduct dot voting at the end of the meeting today to identify priorities

#### Review of Sustainable Community Definition and Vision Statement

- We like the new sustainable community definition much more than the original statement
- Wording at the end “to do the same” may not be necessary – cut some wording from the end
- Make the vision statement shorter would be better
- Maybe “inspiring other leaders” is already implied by being a “leader”
- “Stable” or “thriving” may be a better term than “growing economy”
- Should “with the community” be rephrased as “within the community?” puts the City and the community as equal partners

#### Review of Recommendations from Meetings Two and Three

- The animal shelter does accept fish, so people do not need to dump aquarium fish
- We could still use an appropriate place to dump the water from aquariums
- We should check with Planning regarding allowed fence heights as they may have already adjusted it
- Hunting groups would also be a partner for deer management
- Hoosier Hills Food Bank would also be a partner for deer management
- Monarch butterfly way stations (not weigh stations)
- Change create a way of “reporting residents” to “create a way to report illicit discharges”

- Some grocery stores already do incentives for bringing your own bags
- We could also discuss the topic of reuse such as of local reuse of glass and plastic
- For example, using glass locally without going through an entire recycling process – waste reuse

### **Presentation on Storm Water and Wastewater Management**

- What are storm water planters? – information from Green Building Alliance <https://www.goba.org/resources/green-building-methods/stormwater-planters/>
- We have an adopt-a-stream program for people to volunteer to monitor streams which could be promoted more. The information is reported to Hoosier River Watch as well as local departments

### **Presentation from Kriste Lindberg and City of Bloomington Utilities**

- The City maintains storm water along the streets
- The City does not maintain infrastructure outside the public right-of-way along the street such as storm water in back and side yards
- 17 miles of ditches
- 4 miles of large box culverts
- 84 miles of storm water pipe
- Post-construction water quality if the construction site is over an acre
- 60/40 regulation from Planning – new developments have to be 40% pervious surfaces – only applies to specific overlays such as downtown
- Utilities and Cascades Park both have pervious surfaces demonstration sites
- Miller-Showers Park is another example of a demonstration site of water management
- Green Spots
- We have a storm water credit, but the financing is designed for commercial properties only
- Easiest place to collect water is at the low point
- City is not allowed to dam up streams by state regulations
- Miller-Showers provides huge benefits for storm water management
- Each spot that you can reduce the speed of water, it reduces flooding
- Planning already requires storm water and pollution prevention plans with construction
- Storm water quantity and storm water quality are two separate topics
- Environmental Resilience Institute is working to develop models of how climate change will impact Indiana communities and would be a good opportunity for Utilities to be involved
- Consultant hired by the County, Christopher Burke Engineering, gave an excellent presentation and report regarding Monroe County storm water

### **Challenges Related to Storm Water Management**

- Climate change and increased incidences of heavy rain
- *Possible Solution: More detention throughout the city*
- Understanding what private owners should do to manage storm water
- *Possible Solution: COB Utilities to explain the responsibilities to residents*
- *Possible Solution: Hands-on demonstrations*
- *Possible Solution: Swimming pool and hot tub training*
- *Possible Solution: UReport*
- Understanding final destination of storm water and the lack of storm water treatment
- *Possible Solution: Public education (focus on schools when kids are young and get excited)*
- *Possible Solution: Expand the adopt-a-stream program*
- *Possible Solution: Exhibit tables at all possible festivals and events*
- *Possible Solution: Expand City ambassador programs*
- *Possible Solution: More education timed with construction when underground infrastructure is visible*
- *Possible Solution: Sewer walks*
- *Possible Solution: More COB Utilities storm water plan education about the bigger impact for the public*

- Aging infrastructure
- Funding is an issue in particular with the Jordan River culvert
- *Possible Solution:* Bond and increase in storm water rate
- Number of pervious surfaces and the speed of water
- *Possible Solution:* Increase detention requirements
- *Possible Solution:* Pervious paving and surfaces
- *Possible Solution:* Incentive for “no mow” lawns
- *Possible Solution:* Storm water collection for domestic use
- *Possible Solution:* Curb-less streets – water drains off into trench drains and into depressed flowerbeds (Was proposed for the Trades District)
- *Possible Solution:* Group installations of pervious paving
- *Possible Solution:* Rain garden tours (Green Spots)
- *Possible Solution:* Combine tours with home show
- *Possible Solution:* Plant large trees that are good at absorbing water (Bald Cypress)
- *Possible Solution:* Speed of water slowed with daylight streams and educational signage
- Restrictions on detention which comes from the state level
- Storm water credit for pervious paving is only effective for commercial properties
- *Possible Solution:* Revise storm water credit to be applicable for residents as well
- Complacency
- *Possible Solution:* Creating incentives for green development
- *Possible Solution:* Green building requirements or incentives (LEED is often a motivating factor for green roofs)
- Residential affordability
- *Possible Solution:* Fee for storm water towards grants
- *Possible Solution:* Nonprofit financing for low-income individuals
- Emergency management – concerns of quantity of storm water
- *Possible Solution:* Emergency action plan for flooding
- *Possible Solution:* Vulnerability assessment and climate adaptation plan

# Challenges w/ Storm Water Mgt

- \* Climate Change (heavier rains)
  - More Detention throughout city
  - Predict future needs for Stormwater Mgt
- \* Understanding what private owner should do to manage Stormwater
  - U Report
  - Enforcement through aerial photos
  - Brochure to City
  - Responsibility for Storm Water
  - Hands-on demos
  - Swimming Pool + Hot tub training
- \* Understanding final destination of Stormwater + treatment
  - Public education (focus on schools)
  - Expand Adopt-a-Stream program
  - Exhibit tables
  - Facebook
  - Ambassador program
  - Timed w/ construction
- \* Aging infrastructure
  - Sewer walks
  - Time w/ Stormwater Plan Release
- \* Funding
  - Bond
  - Increase in Stormwater Rate

## Stormwater Pollution Prevention Plans

- \* Number of Pervious Surfaces
  - + Speed of Water
  - Planting large trees (e.g. Bald Cypress)
  - Increase Detention Requirements (e.g. Caswell Park)
  - Pervious Paving + Surfaces (e.g. Zoning Change)
- \* Restrictions on Detention (e.g. Can't Dam Stream)
  - Go Upstream to Influence Detention
  - New Development Retention Requirements
  - Roof-top - Green Roofs - Rainbarrels
  - Rain garden tours (e.g. Green Spots) + Bike Tour brochure
  - Combine w/ Home Show
  - Group installation of pervious paving
  - Stormwater credit for pervious paving (need to revamp program) to make accessible for residents
  - Incentive for "No Mow" lawns
  - Stormwater collection for domestic use
  - Curbless streets (e.g. Trades District)

## Complacency

- Creating incentives for green development
- Green building requirements
- Combine w/ Green Building Certification

## Residential Affordability

- Fee for Stormwater towards Grants
- Nonprofit financing for low-income individuals (e.g. CSL)

## \* Speed of Water

- Speed of water slowed w/ daylight streams + educational signage

## \* Emergency Mgt - Concerns w/ Quantity of Stormwater

- Emergency Action Plan for Flooding
- Vulnerability Assessment + Climate Adaptation Plan

## **Storm Water Management**

### Goals:

- Increase number of intolerant species present in streams
- Improve storm water quality
- Reduce number of illicit discharges
- Reduce number of UReport complaints
- Reduce SSO events
- Reduce number of illegal connections to SSO

### Partners:

- IU
- MCCSC and other school districts
- Monroe County Soil and Water
- Monroe County Solid Waste Management District
- Neighborhood associations
- IDEM
- SWEET – storm water environmental education team
- Monroe County
- Habitat for Humanity

### Metrics:

- Hoosier River Watch data
- Number of intolerant species
- Number of illicit discharges
- Number of UReport complaints
- SSO events
- Number of illegal connections to SSO

# Stormwater Management

Goals: <sup>Improve stormwater quality</sup>  
~~Decrease~~ number of intolerant species present in streams

Metrics: Hoosier River Watch data

- Amount Green Infrastructure
- Reduced no. illicit discharges
- Reduced no. UReport complaints
- Reduced SSO events
- Reduced # illegal connections to SSO

Partners:

- IU
- MCCSC
- MCS+WD
- CSL
- MCSWMD
- IDEM
- Developers
- Neighborhood Assoc.
- Monroe Co.
- Stormwater En'rtal Educ. Team (City, IU, Indy, Ellettsville, County)
- Habitat for Humanity