





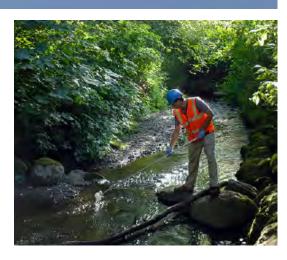


# SUSTAINABLE WATER MANAGEMENT PLAN

2013-2020 City of Urbana, Illinois







#### **Urbana Sustainability Advisory Commission**

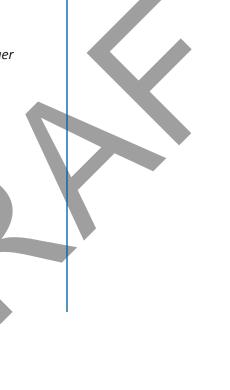
Marya Ryan, *Chair*Stephen Wald, *Vice-Chair*Gary Cziko
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#### Comments on the Sustainable Water Management Plan can be made via:

Mail: Scott R. Tess

706 S. Glover Ave. Urbana, Illinois 61802

Website: www.urbanaillinois.us/forms/sustainability-public-input-survey

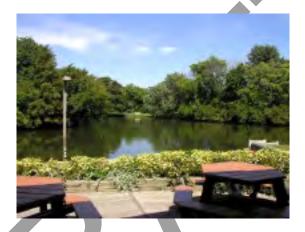
**Discuss Sustainability in Urbana at:** 

Facebook: www.facebook.com/sustainableurbana

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#### **CONTENTS**

| 1. SUMMARY         |   | 4  |
|--------------------|---|----|
| 2. BACKGROUND      |   | 6  |
| 2.1                | Aspect 1: Potable Water Supply and Demand | 7  |
| 2.2                | Aspect 2: Potable Water Quality           | 9  |
| 2.3                | Aspect 3: Surface Water & Stormwater      | 11 |
| 2.4                | Aspect 4: Flood Management                | 13 |
| 2.5                | Aspect 5: Recreational Waters             | 14 |
| 3. ASPECTS, GOALS, | , & ACTIONS                               | 15 |
| 3.1                | Aspect 1: Potable Water Supply and Demand | 16 |
| 3.2                | Aspect 2: Potable Water Quality           | 18 |
| 3.3                | Aspect 3: Surface Water & Stormwater      | 19 |
| 3.4                | Aspect 4: Flood Management                | 20 |
| 3.5                | Aspect 5: Recreational Waters             | 20 |
| 3.6                | Implementation Table                      | 21 |



#### **Impetus**

The impetus for this plan comes from a recognition of continued drawdown of our potable water supply, new risks to our potable water supply, impending state stormwater quality regulations, uncertainty created by climate change, and the value of restored high quality waterfronts.

#### **Purpose**

This Sustainable Water Management Plan has been composed to review the current state of five Aspects of water management and to lay out Goals to manage these Aspects more sustainably by implementing specific, achievable Actions.

#### Scope

The scope of this Sustainable Water Management Plan includes ambitious, but achievable Goals for water conservation within City-owned buildings, region-wide coordination, consideration of conservation rules for new private developments, and public engagement in conservation activities addressing businesses and residents.

#### **Timeframe**

All Actions in this Sustainable Water Management Plan are intended to be completed between January 1, 2013 and January 1, 2020 with the exception of certain Actions that shall be ongoing. All Actions are listed in condensed form in the Implementation Table on page 21.

# 5 ASPECTS: 8 GOALS: 26 ACTIONS

# **ASPECT 1: POTABLE WATER SUPPLY & DEMAND**

**GOAL** 

#### CONTINUE A DECREASING TREND OF PER CAPITA POTABLE WATER USE

**Action 1** Track potable water use for community and for City of Urbana facilities.

Action 2 Demonstrate, promote, and/or incentivize practices to reduce potable water used for commercial, residential, and/or irrigation purposes.

Action 3 Consider adoption of the Champaign County Regional Planning Commission's forthcoming model emergency water conservation ordinance.

Action 4 Assess feasibility of a rain sensor and/or soil moisture sensor ordinance for new landscape irrigation systems.

**Action 5** Assess feasibility of a topsoil retention ordinance.

Action 6 Collaborate with Mahomet Aquifer stakeholders in coordinated messaging and policies.

**GOAL** 

#### REDUCE POTALBE WATER USE IN CITY-OWNED BUILDINGS BY 24%

Action 1 Retrofit water-saving faucet aerators where appropriate.

Action 2 Upgrade computer server room cooling system.

Action 3 Reduce water used for landscape irrigation.

**Action 4** Retrofit water-saving toilets where appropriate.

Action 5 Assess opportunities for reuse of water treated by the Urbana- Champaign-Sanitary District.

Action 6 Establish a policy of choosing EPA WaterSense labeled products for City procurement.

# **ASPECT 2: POTABLE WATER QUALITY**

**GOAL** 

#### PROTECT POTABLE WATER QUALITY IN THE MAHOMET AQUIFER

**Action 1** Continue to pursue Sole Source Aquifer status to protect the Mahomet Aquifer.

**Action 2** Continue to pursue appropriate legal action to protect the Mahomet Aquifer.

Action 3 Collaborate with Mahomet Aquifer stakeholders in coordinated messaging and policies.

GOAL

#### INVESTIGATE ADDITIONAL ACTIVITIES TO PROTECT POTABLE WATER QUALITY

Action 1 Assess legal, funding, and staffing needs for brownfields cleanup and redevelopment.

**Action 2** Assess feasibility of household hazardous waste collection events.

# 1. SUMMARY

# **ASPECT 3: SURFACE WATER & STORMWATER**

GOAL

PROTECT SURFACE WATER AND STORMWATER QUALITY

**Action 1** Continue to implement Stormwater Utility Credit and Incentive Program. **Action 2** Demonstrate & promote environmentally friendly landscaping techniques.

**GOAL** 

INVESTIGATE ACTIVITIES TO PROTECT SURFACE WATER AND STORMWATER

**Action 1** Assess best practices for inspections, maintenance, and regulation of private and municipal stormwater storage and/or stormwater treatment facilities.

**Action 2** Assess feasibility of maintaining a pharmaceutical waste collection drop box at the police station. **Action 3** Report EPA TMDL testing to the Sustainability Advisory Commission.

# ASPECT 4: FLOOD MANAGEMENT

GOAL

PLAN FOR CLIMATE IMPA Action 1 Ensure that the foc Climate Action Plan addresse

PLAN FOR CLIMATE IMPACTS ON FLOOD MANAGEMENT

**Action 1** Ensure that the focus group called to address climate change adaptation in Goal 4 of the *Urbana Climate Action Plan* addresses management and mitigation of potential flood impacts.

# **ASPECT 5: RECREATIONAL WATERS**

**GOAL** 

SUPPORT THE ACCESS TO AND USE OF RECREATIONAL WATERS Action 1 Assess current amount of public access to recreational waters.

**Action 2** Assess a long term public access goal for recreational waters in Urbana.

**Action 3** Promote an appreciation for the ecological, aesthetic, and economic values of recreational waters as green infrastructure.

# 2. BACKGROUND

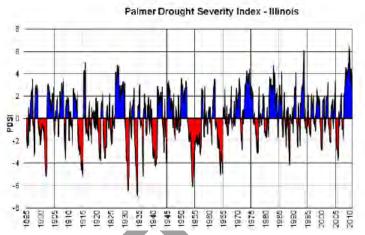


Crystal Lake

#### **Potable Water Supply & Demand**

The Mahomet Aquifer supplies potable water to much of Central Illinois, including the City of Urbana. Potable water is water that is safe for drinking. East-Central Illinois uses over 200 million gallons of water per day. Current models show little if any aquifer recharge within the City of Urbana.

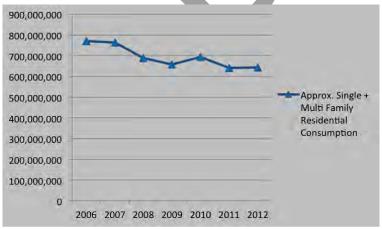
Per capita residential potable water consumption has been declining for years in Urbana and in the U.S. generally. Additionally, municipal water consumption has been declining. Commercial and industrial water use has fluctuated.

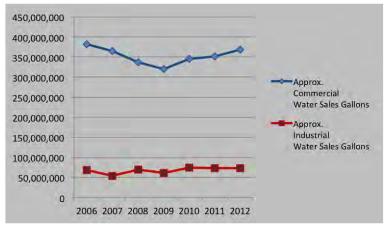


State of Illinois Drought Preparedness and Response Plan Adopted by the State Water Plan Task Force October 12, 2011

| Approx. Single + Multi-Family Residential Consumption |             |                    | Approx. Commercial Consumption |             | Approx. Industrial Water Consumption |            |          |
|---|-------------|--------------------|--------------------------------|-------------|--------------------------------------|------------|----------|
|   | Gallons     | Per Capita Per Day |                                | Gallons     | % Change                             | Gallons    | % change |
| 2006  | 770,659,750 | 54                 | 2006                           | 382,116,750 |                                      | 68,244,000 |          |
| 2007  | 764,572,900 | 53                 | 2007                           | 364,697,460 | -5%                                  | 54,172,500 | -21%     |
| 2008  | 688,741,000 | 48                 | 2008                           | 336,732,750 | -8%                                  | 68,990,250 | 27%      |
| 2009  | 658,198,750 | 45                 | 2009                           | 319,500,000 | -5%                                  | 60,453,000 | -12%     |
| 2010  | 693,059,750 | 46                 | 2010                           | 345,158,250 | 8%                                   | 74,970,000 | 24%      |
| 2011  | 639,700,500 | 42                 | 2011                           | 351,974,250 | 2%                                   | 72,640,500 | -3%      |
| 2012  | 642,242,370 | 42                 | 2012                           | 368,193,750 | 5%                                   | 73,554,000 | 1%       |

Data from Illinois American Water

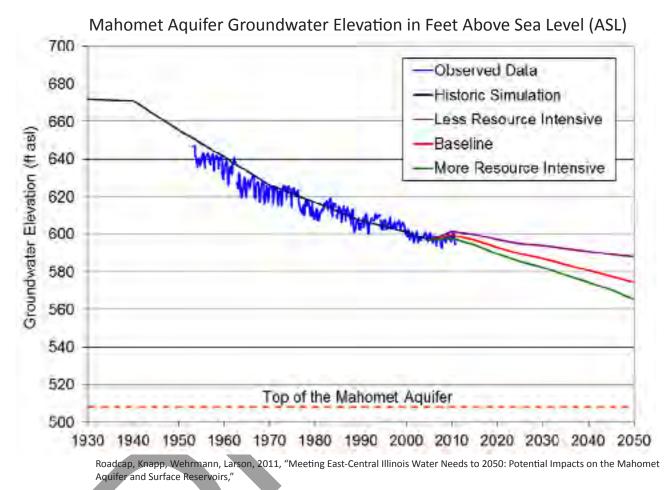




Data from Illinois American Water

## 1 BACKGROUND

Despite improvements in efficient water use, groundwater elevations are predicted to fall slowly over the coming decades. The expected declines are not predicted to interrupt municipal potable water service due to the large capacity of the Mahomet Aquifer. Furthermore, the Drought Subcommittee of the Regional Water Supply Planning Committee have published a document titled *East-Central Illinois Water Supplies Vulnerable to Droughts of Record* where the committee stated no water supplies in Champaign County are to be listed as vulnerable.



On January 24, 2007, Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management, was issued. This order mandates that Federal agencies reduce water intensity (gallons per square foot) by 2% each year through FY 2015 for a total of 16% based on water consumption in FY 2007. This 2% annual reduction offers a good example for local governments to strive for.

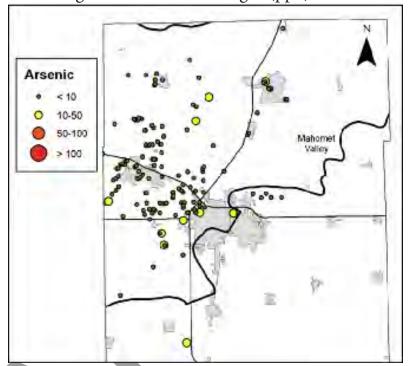
#### Potable Water Supply & Demand Summary

- Additional water conservation measures are necessary to ensure long term sustainable resource use.
- Per capita residential and municipal potable water consumption has been falling.
- There may be some interaction between the deep Mahomet Aquifer and shallower aquifers creating the potential for localized dewatering of wells.
- Modeled predictions could change due to unforeseen growth and development.

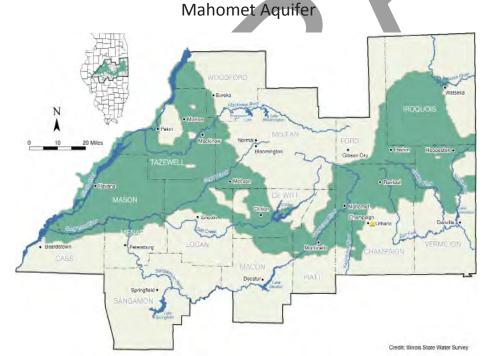
#### **Potable Water Quality**

The water quality in the Mahomet Aquifer is very good. There is a very small amount of naturally occurring Arsenic in the shallower aguifers as well as the deeper Mahomet Aquifer. Public water supplies come from the Mahomet Aquifer while some potable wells and some irrigation wells draw water from the shallower aguifers. Public water supplies are tested and treated for a range of potential contaminants and meet stringent drinking water quality standards including standards for Arsenic. No pollutants are found in the Mahomet Aguifer in quantities significant for human health.

#### Drinking water must be <10 ug/L (ppb) of Arsenic

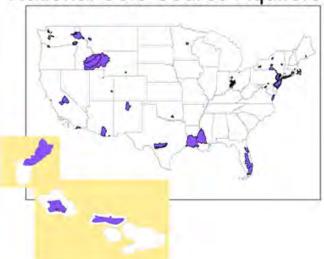


Walt Kelly. Personal communication. October 10, 2012.



The Mahomet Aquifer is a 'confined' aquifer, as it is overlaid with impermeable geologic layers that pressurize the aquifer. It is this pressure that forces the groundwater elevation higher than the top of the aquifer (as seen on the previous page). These impermeable layers make it difficult for pollutants to percolate into the aquifer. However, there may be areas where different, more permeable geologic layers allow interaction between the shallower aquifers and the Mahomet Aquifer. These areas are not well documented.

## National Sole Source Aquifers



**US Environmental Protection Agency** 

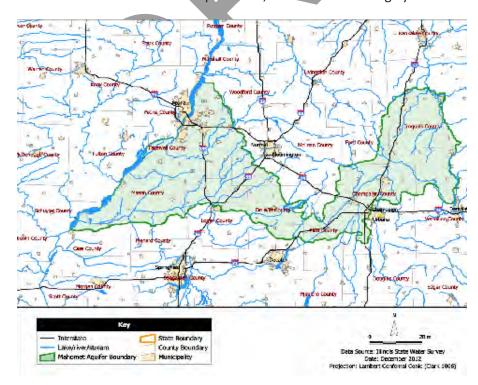
Superfund sites, brownfields, undeclared soil contamination, and siting of new high-risk activities such as hazardous waste landfills above the Mahomet Aquifer can pose a threat to the quality of our potable water supply. However, Champaign County has only one Superfund site located at the former Chanute Air Force base. Superfund refers to hazardous waste cleanup processes that fall under the authority of the federal *Comprehensive Response*, *Compensation, and Liability Act*. Site cleanup progress can be monitored at Superfund sites http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm. At present, the Chanute site is currently in the "Study and Remedy Selection" phase.

There are no declared brownfields in Champaign County although there are likely sites with contaminated soils yet to be discovered dating back to industrial operations that occurred before the advent of environmental regulations.

The City of Urbana, in collaboration with many other municipalities, submitted an application to the U.S. EPA on December 12, 2012 to have the Mahomet Aquifer designated a Sole Source Aquifer (SSA). This designation would require additional environmental scrutiny on new federally funded projects and new landfills to ensure our drinking water is protected from contamination. If the application is successful, the Mahomet Aquifer will be the first Sole Source Aquifer designation in Illinois.

#### Potable Water Quality Summary

- Potable water quality is very good.
- Permitting/Siting of new facilities can pose risks, but the risks are known.
- Undeclared brownfields can pose risks, but the risks are largely unknown.



#### **Stormwater and Surface Water Quality**

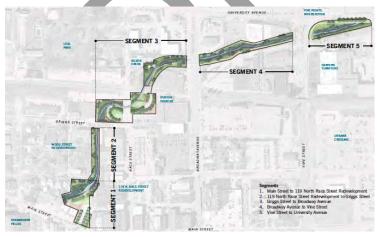
Urbana is fortunate that the Illinois EPA conducts water quality testing of several surface waters in the City as part of federal Clean Water Act requirements. The results of this testing are known as the '303(d) List' available at http://www.epa.state.il.us/water/water-quality/. This testing determines whether surface waters are meeting water quality criteria specified for their designated uses. The current testing regime does not include regular testing for pharmaceutical wastes that may enter the environment through improper disposal and excretion. Wastewater treatment plants are not designed to treat pharmaceutical waste, therefore, flushed pharmaceuticals as well as excreted pharmaceuticals may persist through treatment and be discharged to surface waters. Aside from pharmaceuticals, approximately 15% of surface waters statewide have been assessed, though not all waters are assessed for all designated uses every year. Officially recognized designated uses include:

- Aesthetic Quality
- Aquatic Life
- Fish Consumption
- Indigenous Aquatic Life
- Primary Contact Recreation
- Public and Food Processing Water Supply
- Secondary Contact Recreation

#### 2012 Illinois 303(d) List Results

| Surface Water  | Designated Use   | Impairment                                   |
|----------------|------------------|--|
| Boneyard Creek | Aquatic Life     | Copper, Dissolved Oxygen, Phosphorus (Total) |
| Crystal Lake   | Fish Consumption | Mercury                                      |

#### **Boneyard Creek Improvements Project**



The City of Urbana's Boneyard Creek Improvements Project will transform what is primarily a drainage channel into a valuable public amenity. The project will improve beauty, public access, safety, and ecological conditions of the creek, stimulating private sector redevelopment of the area. Green infrastructure investments that improve environmental performance while providing urban green space have stimulated nearby private sector investment in many places across the U.S.



**Boneyard Creek** 

To improve surface water quality, Urbana performs leaf collection services and street sweeping to remove pollutants that can be picked up by stormwater. Additionally, Urbana is implementing a Stormwater Utility Credit and Incentive Program. To account for the impact that on-site stormwater management can have on the City's stormwater management program costs, the City is implementing a stormwater utility fee.

Ratepayers can reduce their stormwater utility fee by applying for incentives and credits that are outlined in the program. These incentives and credits are available to ratepayers who reduce the impact of the runoff from their properties by implementing sustainable stormwater practices that allow stormwater to infiltrate into the ground. These practices can reduce the rate and volume of runoff, and remove pollutants that would otherwise be carried to streams and lakes.

| Cradit Tura             | Credit Amount          |                       |  |  |
|-------------------------|------------------------|-----------------------|--|--|
| Credit Type             | Single Family / Duplex | Other Properties      |  |  |
| Runoff Rate Reduction   | NA                     | 20% max.              |  |  |
| Runoff Volume Reduction | NA                     | 20% max.              |  |  |
| Runoff Water Quality    | NA                     | 10% max.              |  |  |
| Direct Discharge        | NA                     | 50% max.              |  |  |
| Education               | NA                     | \$5/student, 50% max. |  |  |

#### **Surface and Stormwater Quality Summary**

- Surface water quality data is intermittent.
- Surface water quality is good, but has room for improvement.
- Restoring channelization impacts can provide community development benefits.

| Incentive Type                         | Maximum Amount |
|--|----------------|
| Rain Barrel <sup>1</sup>               | \$50           |
| Rain Garden <sup>2</sup>               | \$250          |
| Runoff Rate Reduction <sup>2,3</sup>   | \$250          |
| Runoff Volume Reduction <sup>2,3</sup> | \$250          |
| Runoff Water Quality <sup>2,3</sup>    | \$250          |
| Total Incentive Available              | \$300          |

#### **Flood Management**

Flood management is primarily provided by the City of Urbana's stormwater sewer system as well as public and private stormwater detention ponds. This infrastructure drains stormwater from streets and properties, reducing the frequency and severity of flooding.

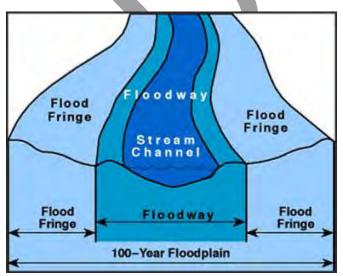
The credits and incentives in the City's forthcoming Stormwater Utility Program aim to decrease the rate and volume of stormwater entering the stormwater sewer system by detaining and infiltrating more water on the property which it falls upon. However, many soil types prevalent in Urbana allow low stormwater infiltration rates. Therefore, stormwater detention will remain a primary flood management strategy.

Many cities are removing parking lots and derelict buildings along waterfronts and replacing them with green infrastructure that provides flood management as well as park space. While this strategy is effective, it is also very expensive to purchase land and demolish structures.

#### Flood Zones



#### Flood Cross Section



City of Ann Arbor, MI

#### **Flood Management Summary**

- Low soil infiltration rates mean that stormwater detention will remain a primary flood control strategy.
- Replacing impervious surfaces and structures with green infrastructure can address flood management, but is expensive.
- Goal 4 of the Urbana Climate Action Plan calls for a task force to study adaptation to local climate change impacts.

#### **Recreational Waters**

The quality and accessibility of recreational waters are increasingly recognized as critical green infrastructure that add value to nearby property. High quality, publicly accessible waters also enhance the livability and hence the desirability of a community.

The federal Clean Water Act establishes a "goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." The Act goes on to describe water quality criteria for Primary Contact and Secondary Contact Recreation. Primary Contact is recreation in the water. Secondary Contact is recreation near the water. No Urbana waters have been assessed for Primary or Secondary Contact Recreation by the Illinois EPA.

The same Act includes narrative criteria for Aesthetic Quality of surface waters. No waters in Urbana have

been assessed for Aesthetic Quality either. The narrative standards include the following impairments:



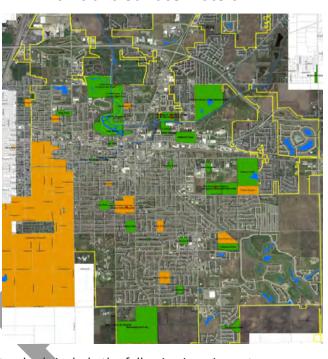
- Bottom deposits
- Floating debris
- Visible oil
- Odor
- Plant growth
- Algal growth
- Color
- Turbidity

## **Boneyard Creek**



M Dorothy, Wikimedia Commons

#### Parks and Surface Waters



#### **Recreational Waters**

- No waters in Urbana have been assessed for Recreation or Aesthetic Quality metrics by Illinois EPA.
- Public Access to recreational waters has never been assessed in Urbana.

# 3. ASPECTS, GOALS, & ACTIONS

Crystal Lake



# 3.1 ASPECT 1: POTABLE WATER SUPPLY AND DEMAND

# GOAL 1: <u>CONTINUE A DECREASING TREND OF PER CAPITA POTABLE WATER</u> <u>USE</u>

#### **IMPLEMENTATION PARTNERS**

**ACTION 1** Track potable water use for community and for City of Urbana facilities

- Work with the water company to ensure annual water consumption reporting showing monthly consumption.
- Seek similar cities to share and compare data with.

• Illinois American Water

**ACTION 2** Demonstrate, promote, and/or incentivize practices to reduce potable water used for commercial, residential, and/or irrigation purposes.

- Promote water-saving showerheads, faucet aerators, toilets, pre-rinse spray nozzles, micro-irrigation/drip irrigation, rain barrels, and irrigation controls.
- Organize a rain barrel truck sale to encourage stormwater reuse.
- Promote appropriate lawn irrigation practices, e.g. 'Brown is the New Green' or 'Better Homes and Gutters.'

(IGBA), Urbana Business Association (UBA), IL American Water

Illinois Green Business Association

**ACTION 3** Consider adoption of the Champaign County Regional Planning Commission's forthcoming model emergency water conservation ordinance.

**ACTION 4** Assess feasibility of a rain sensor and/or soil moisture sensor ordinance for new landscape irrigation systems.

**ACTION 5** Assess feasibility of a topsoil retention ordinance.

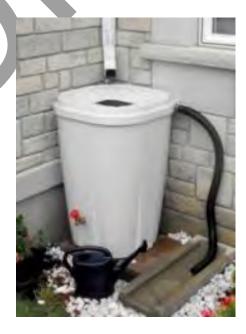
**ACTION 6** Collaborate with Mahomet Aquifer stakeholders in coordinated messaging and policies.

- Consider common messaging encouraging water conservation and proper disposal of household hazardous wastes.
- Consider policies or ordinances to protect Mahomet Aquifer recharge areas

Mahomet Aquifer Consortium,
 Prairie Research Institute, et al

• Champaign County Regional

**Planning Commission** 



#### **GOAL 2: REDUCE POTABLE WATER USE IN CITY-OWNED BUILDINGS BY 24%**

#### **IMPLEMENTATION PARTNERS**

**ACTION 1** Retrofit water-saving faucet aerators where appropriate.

 Change (32) 2.2 Gallons Per Minute (GPM) faucet aerators to 1.5 GPM aerators. At 10 minutes per day for 255 days of use, the City saves 57,120 gallons per year, reducing water usage by 2% and saving \$260 annualy.

#### **ACTION 2** Upgrade computer-server room cooling system.

 Replace aging water cooled system with ductless mini-split electric-cooled system, saving 100% of an estimated 525,000 gallons per year or 18% annual use and \$2,452 in annual savings.

#### **ACTION 3** Reduce water used for landscape irrigation.

- Install rain sensors, soil moisture sensors, or other irrigation controls achieving 15% reduction in total irrigation or 5,600 gallons per year or 2% of total annual use and \$115 in savings.
- Consider resilient landscapes that minimize use of labor, water, and energy through plant selection and limited or no irrigation for all new landscape plans for city-owned properties.

#### **ACTION 4** Retrofit water-saving toilets where appropriate.

Change (9) 1 Gallon Per Flush (GPF) Urinals to .125 GPF Urinals. At 30 flushes per day for 255 days, the city would save 60,244 gallons per year or 2.1% of annual use and \$273 in annual savings.

**ACTION 5** Assess opportunities for reuse of water treated by the Urbana-Champaign-Sanitary District.

**Action 6** Establish a policy of choosing EPA WaterSense labeled products for City procurement.

- Urbana-Champaign Sanitary District
- EPA WaterSense Program



# 3.2 ASPECT 2: POTABLE WATER QUALITY

#### **GOAL 1: PROTECT POTABLE WATER QUALITY IN THE MAHOMET AQUIFER**

#### **IMPLEMENTATION PARTNERS**

**ACTION 1** Continue to pursue Sole Source Aguifer status to protect the Mahomet Aquifer.

• Cities, Mahomet Aquifer Consortium

ACTION 2 Continue to pursue appropriate legal action to protect the Mahomet Aquifer.

• Cities, Mahomet Aquifer Consortium

ACTION 3 Collaborate with Mahomet Aguifer stakeholders in coordinated messaging and policies.

- Cities, Mahomet Aquifer Consortium, Prairie Research Institute
- Consider common messaging which encourages water conservation and proper disposal of household hazardous wastes.
- Consider policies or ordinances to protect Mahomet Aquifer recharge areas in need of protection.

#### **GOAL 2: INVESTIGATE ACTIVITIES TO PROTECT POTABLE WATER QUALITY**

#### **IMPLEMENTATION PARTNERS**

ACTION 1 Assess legal, funding, and staffing needs for brownfields cleanup and redevelopment.

• Illinois EPA Office of Brownfields Assistance

**ACTION 2** Assess feasibility of household hazardous waste collection events.

- Determine costs and funding sources.
- Assess proposed state legislation to establish architectural paint product stewardship.
- Champaign County Regional **Planning Commission**



Alex Anlicker - Wikimedia Commons

# 3.3 ASPECT 3: SURFACE WATER & STORMWATER QUALITY

#### **GOAL 1: PROTECT SURFACE WATER AND STORMWATER QUALITY**

#### **IMPLEMENTATION PARTNERS**

**ACTION 1** Continue to implement Stormwater Utility Credit and Incentive Program.

• Incentivize activities including rain barrels, rain gardens, permeable pavement, cisterns, green roofs, bioswales, and detention basins.

**ACTION 2** Demonstrate & promote environmentally friendly landscaping techniques.

- Promote judicious application of fertilizers and pesticides as well as onsite stormwater management including tree planting, bioswales and raingardens.
- Create 'Better Homes and Gutters' information and tour.

University of Illinois Extension
 Service

# GOAL 2: <u>INVESTIGATE ACTIVITIES TO PROTECT SURFACE WATER AND STORMWATER</u>

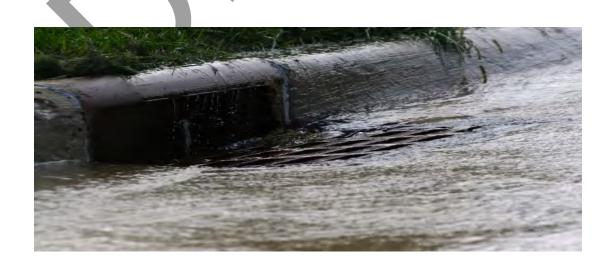
#### **IMPLEMENTATION PARTNERS**

**ACTION 1** Assess best practices for inspections, maintenance, and regulation of private and municipal stormwater storage and/or stormwater treatment facilities.

**ACTION 2** Assess feasibility of maintaining a pharmaceutical waste collection drop box at the police station.

**ACTION 3** Report EPA TMDL testing to the Sustainability Advisory Commission.

- Illinois EPA Bureau of Water
- Urbana Police, Champaign Police, Champaign County Sheriff, U of I Police, U of I SEA Grant
- Illinois EPA Bureau of Water



# 3.4 ASPECT 4: FLOOD MANAGEMENT

#### **GOAL 1: PLAN FOR CLIMATE IMPACTS ON FLOOD MANAGEMENT**

#### **IMPLEMENTATION PARTNERS**

**ACTION 1** Ensure that the focus group called to address climate change adaptation in Goal 4 of the *Urbana Climate Action Plan* addresses management and mitigation of potential flood impacts.

# 3.5 ASPECT 5: RECREATIONAL WATERS

#### **GOAL 2: SUPPORT ACCESS TO AND USE OF RECREATIONAL WATERS**

#### **IMPLEMENTATION PARTNERS**

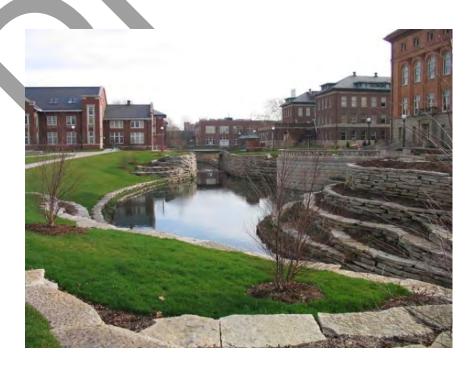
**ACTION 1** Assess current amount of public access to recreational waters.

- Create a metric that distinguishes recreational waters from stormwater treatment facilities.
- Create a metric that distinguishes publicly accessible waters from inaccessible waters.

**ACTION 2** Assess a long term public access goal for recreational waters in Urbana.

**ACTION 3** Promote an appreciation for the ecological, aesthetic, and economic values of recreational waters as green infrastructure.

- Champaign County Regional Planning Commission
- Champaign County Regional Planning Commission
- Urbana Park District



| COMPLETE               | ASPECT     | GOAL ACTION  |
|------------------------|------------|--|
| Indeterminate Aspect 2 | e Aspect 2 | Goal 1 Action 1 Continue to pursue Sole Source Aquifer status to protect the Mahomet Aquifer.                  |
| Indeterminate Aspect 2 | e Aspect 2 | Goal 1 Action 2 Continue to pursue appropriate legal action to protect the Mahomet Aquifer.                    |
| Indefinite             | Aspect 3   | Goal 1 Action 1 Continue to implement Stormwater Utility Credit and Incentive Program.                         |
| Indefinite             | Aspect 3   | Goal 2 Action 3 Report EPA TMDL testing to the Sustainability Advisory Commission.                             |
| 2013                   | Aspect 1   | Goal 1 Action 1 Track potable water use for community and for City of Urbana facilities.                       |
| 2013                   | Aspect 1   | Goal 1 Action 2 Demonstrate, promote, and/or incentivize practices to reduce potable water used for            |
|                        |            | commercial, residential, and/or irrigation purposes.   |
| 2013                   | Aspect 1   | Goal 2 Action 1 Retrofit water-saving faucet aerators where appropriate.                                       |
| 2013                   | Aspect 1   | Goal 2 Action 5 Assess opportunities for reuse of water treated by the Urbana- Champaign-Sanitary District.    |
| 2013                   | Aspect 2   | Goal 2 Action 2 Assess feasibility of household hazardous waste collection events.                             |
| 2013                   | Aspect 3   | Goal 2 Action 1 Assess best practices for inspections, maintenance, and regulation of private and municipal    |
|                        |            | stormwater storage and/or stormwater treatment facilities.   |
| 2013                   | Aspect 3   | Goal 2 Action 2 Assess feasibility of maintaining a pharmaceutical waste collection drop box at the police     |
|                        |            | station.   |
| 2013                   | Aspect 5   | Goal 1 Action 1 Assess current amount of public access to recreational waters.                                 |
| 2014                   | Aspect 1   | Goal 1 Action 3 Consider adoption of the forthcoming Champaign County Regional Planning Commission's           |
|                        |            | model emergency water conservation ordinance.  |
| 2014                   | Aspect 1   | Goal 2 Action 2 Upgrade server room cooling system.  |
| 2014                   | Aspect 1   | Goal 2 Action 6 Establish a policy of choosing EPA WaterSense labeled products for City procurement.           |
| 2014                   | Aspect 3   | Goal 1 Action 2 Demonstrate & promote environmentally friendly landscaping techniques.                         |
| 2014                   | Aspect 4   | Goal $1$ Action $1$ Ensure that the focus group called to address climate change adaptation in Goal $4$ of the |
|                        |            | Urbana Climate Action Plan addresses management and mitigation of potential flood impacts.                     |
| 2014                   | Aspect 5   | Goal 1 Action 2 Assess a long term public access goal for recreational waters in Urbana.                       |
| 2014                   | Aspect 5   | Goal 1 Action 3 Promote an appreciation for the ecological, aesthetic, and economic values of recreational     |
|                        |            | waters as green infrastructure.  |
| 2015                   | Aspect 1   | Goal 1 Action 4 Assess feasibility of a rain sensor and/or soil moisture sensor ordinance for new landscape    |
|                        |            |  |

Aspect 2

Aspect 2 Aspect 1

2017 2018 2019

2017

Aspect 1

Goal 1 Action 3 Collaborate with Mahomet Aquifer stakeholders in coordinated messaging and policies. Goal 1 Action 6 Collaborate with Mahomet Aquifer stakeholders in coordinated messaging and policies.

Goal 1 Action 5 Assess feasibility of a topsoil retention ordinance.

irrigation systems.

Aspect 1

2016

Goal 2 Action 1 Assess legal, funding, and staffing needs for brownfields cleanup and redevelopment.

Goal 2 Action 4 Retrofit water-saving toilets where appropriate.

Goal 2 Action 3 Reduce water used for landscape irrigation.