

An aerial photograph of a residential neighborhood. In the foreground, a river flows through a landscaped area with a stone-lined bank and a paved walkway. The middle ground shows a park-like area with trees and a building. The background features a residential street with houses and trees. The title text is overlaid on a blue horizontal band across the middle of the image.

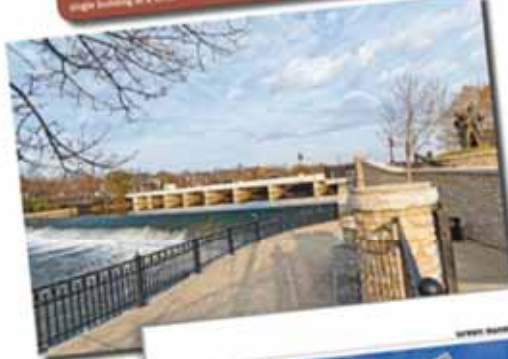
Communicating the Value of Green Infrastructure

*Presented by Aaron Cosentino, City of Elgin
Sustainability Coordinator*

City of Elgin Draft Sustainability Action Plan

Developed and written by Elgin Citizens participating in Elgin's sustainability working groups.

Alternative Energy Goal II Develop clean and renewable energy alternatives unique to Elgin



Objective 1 Pursue the renewable energy

The power of the Fox River generation unit generated to be a viable option. It is a part of the updated Elgin Renewable Energy Plan. There are several benefits to the project including:



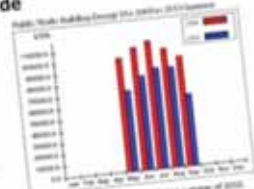
The National Bank, Elgin, LEED Gold Certified (DLA Architects)



Grand Victoria Foundation, LEED Silver Certified (DLA Architects)

Public Works Building Upgrade

In 2009-2010 the Public Works Facility underwent a energy efficiency lighting project which, in the end, cost the City no money and reduced the City's energy usage by 45%. The project was a large area involving changing out the lighting in the public outdoor Public Works Facility.

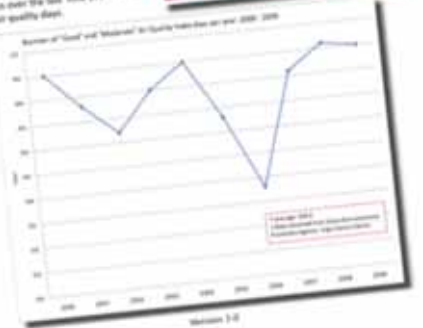


Air Quality

Everyday we breathe air. However the air we breathe varies from day to day regarding the amount of pollutants and irritants. To monitor this the US EPA has developed the Air Quality Index or AQI. The AQI is a rating system that lets the public know how healthy the air is on any given day. According to the EPA, "the higher the AQI value, the greater the level of air pollution and the greater the health concern. For example, an AQI value of 30 represents good air quality with little potential to affect public health, while an AQI value over 300 represents hazardous air quality."

AQI values of 300 "generally corresponds to the national air quality standard for the pollutant, which is the level EPA has set to protect public health. AQI values below 300 are generally thought of as satisfactory. When AQI values are above 300, air quality is considered to be unhealthy at first for certain sensitive groups of people, then for everyone as AQI values get higher" (EPA, 2014).

AQI Range	Air Quality Index (AQI) Category	Health Concern
0-50	Good	Little or no health concern.
51-100	Moderate	Unusually sensitive people may experience minor respiratory irritation.
101-150	Unhealthy for Sensitive Groups	Members of sensitive groups may experience more serious respiratory symptoms.
151-200	Unhealthy	Everyone may begin to experience respiratory symptoms.
201-300	Very Unhealthy	Respiratory symptoms may be aggravated.
301-400	Hazardous	Health warnings of emergency conditions. The entire population is more likely to be affected.

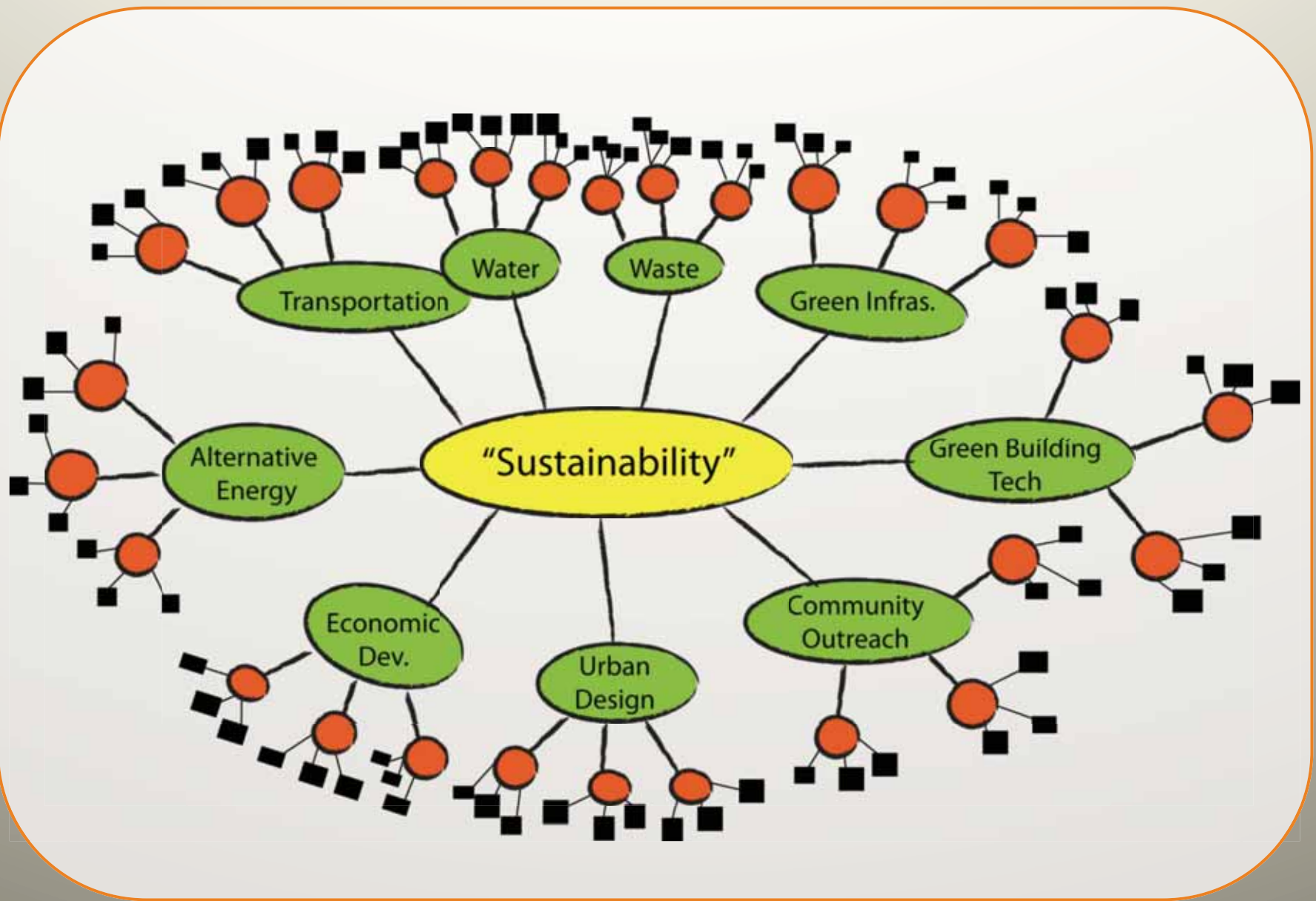


Acknowledgements

The city of Elgin is proud to join the many communities working to reduce their environmental impact and build an environment.

Special Acknowledgments:
Mayor and Member of Sustainability
KCEI Local Government
ACEE
Bruce R. Doherty, MA, LEED
Amen Coatings, Sun
Citizens





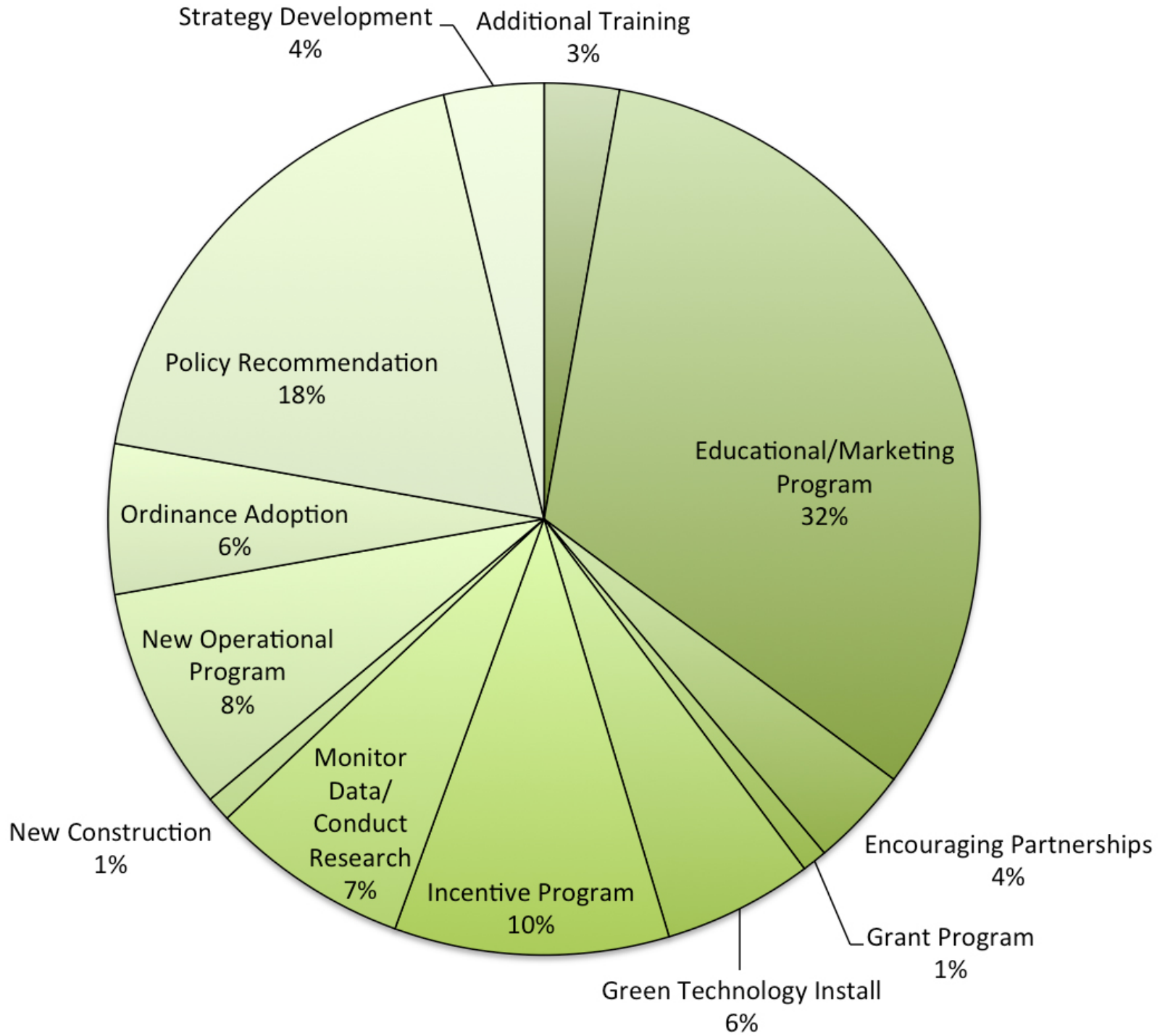
Creating a Green City

The City of Elgin
Draft Sustainability Action Plan

Elgin citizens and the City of Elgin have been working diligently on creating a sustainability action plan.
 Now it's your chance to hear what they are recommending!
 Join us for any (or all) of our outreach meetings:

Thursday, January 13 Gail Borden Library 6:30 - 8:00 PM	Hear a general overview of the plan
Tuesday, January 18 Elgin Alive Series Gail Borden Library 6:30 - 8:30 PM	Hear Recommendations from Healthy Living and Green Education Recycling and Waste Management Transportation and Mobility
Thursday, February 10 Hawthorne Hill Nature Center 6:00 - 8:00 PM	Hear Recommendations from Alternative Energy Green Infrastructure Water Resources
Tuesday, February 22 Unitarian Universalist Church 29W830 Highland Avenue (1 mile west of Randall Road) 6:00 - 8:00 PM	Hear Recommendations from Economic Development Green Building Technology Urban Design



Green Infrastructure

Establish an Urban Forestry Master Plan

Reduce runoff.



Most of the public,
elected officials,
municipal managers

Some of the
public, elected
officials, some
municipal
managers

Fewer
municipal
managers

Aesthetics

Economic/
Environmental
Benefits

Management

- Risk Reduction
- Maintenance



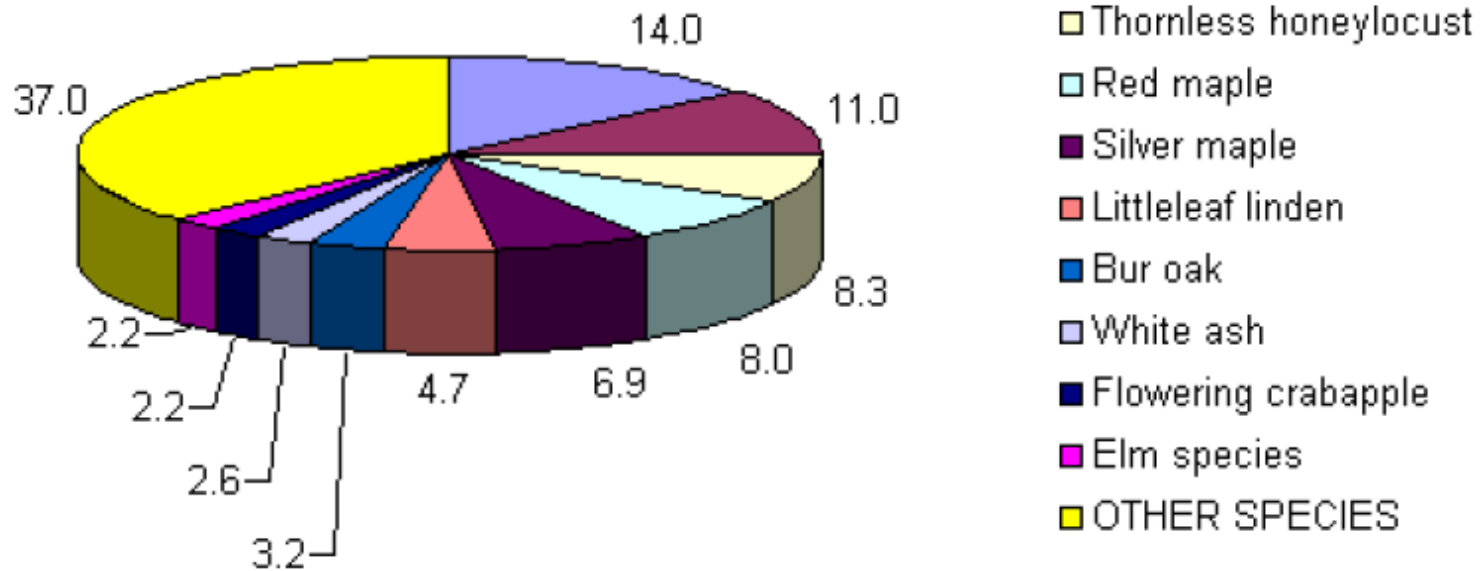






Tree Assessment

49,583 Public Trees



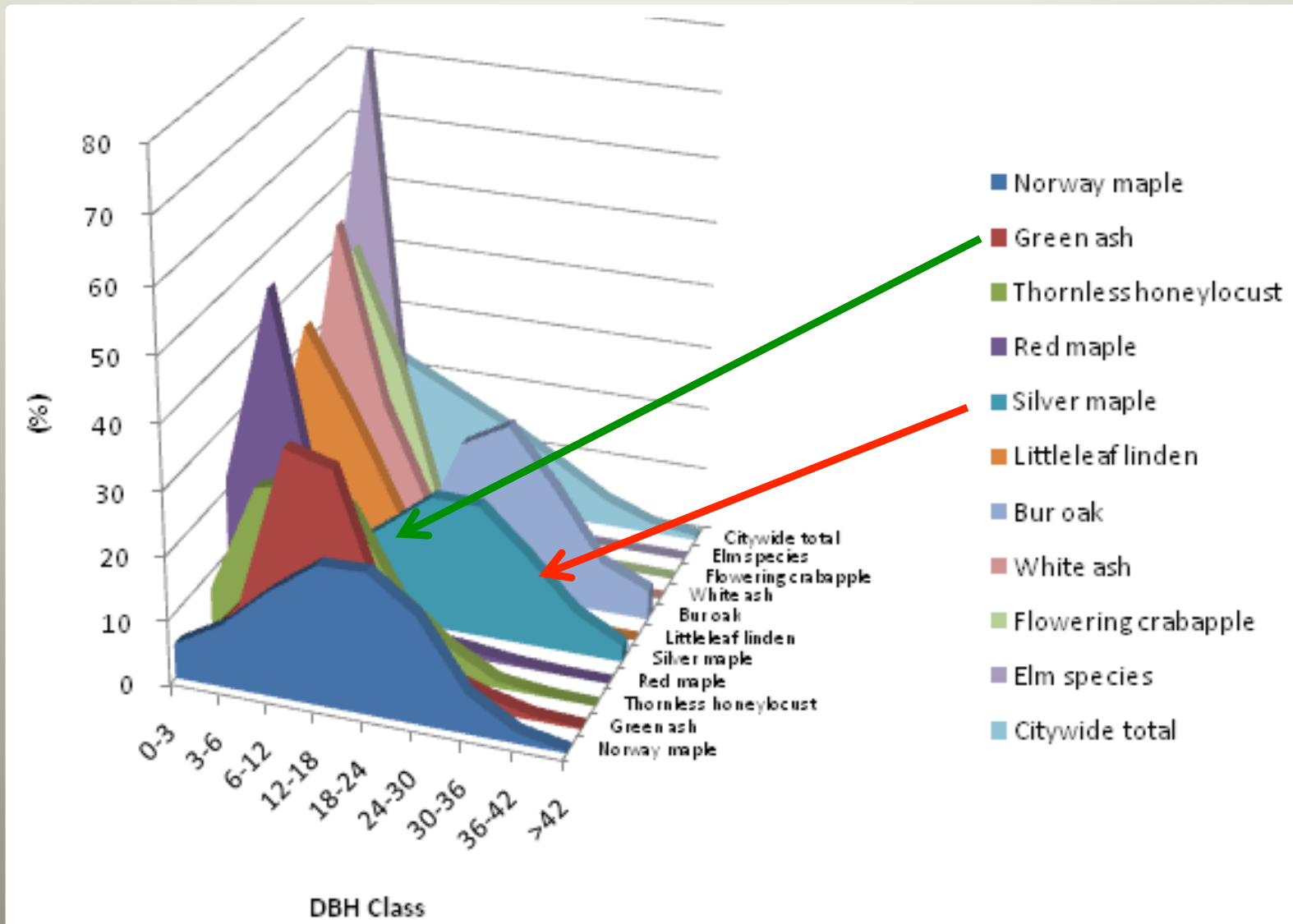
Appraised Value = \$72,000,000





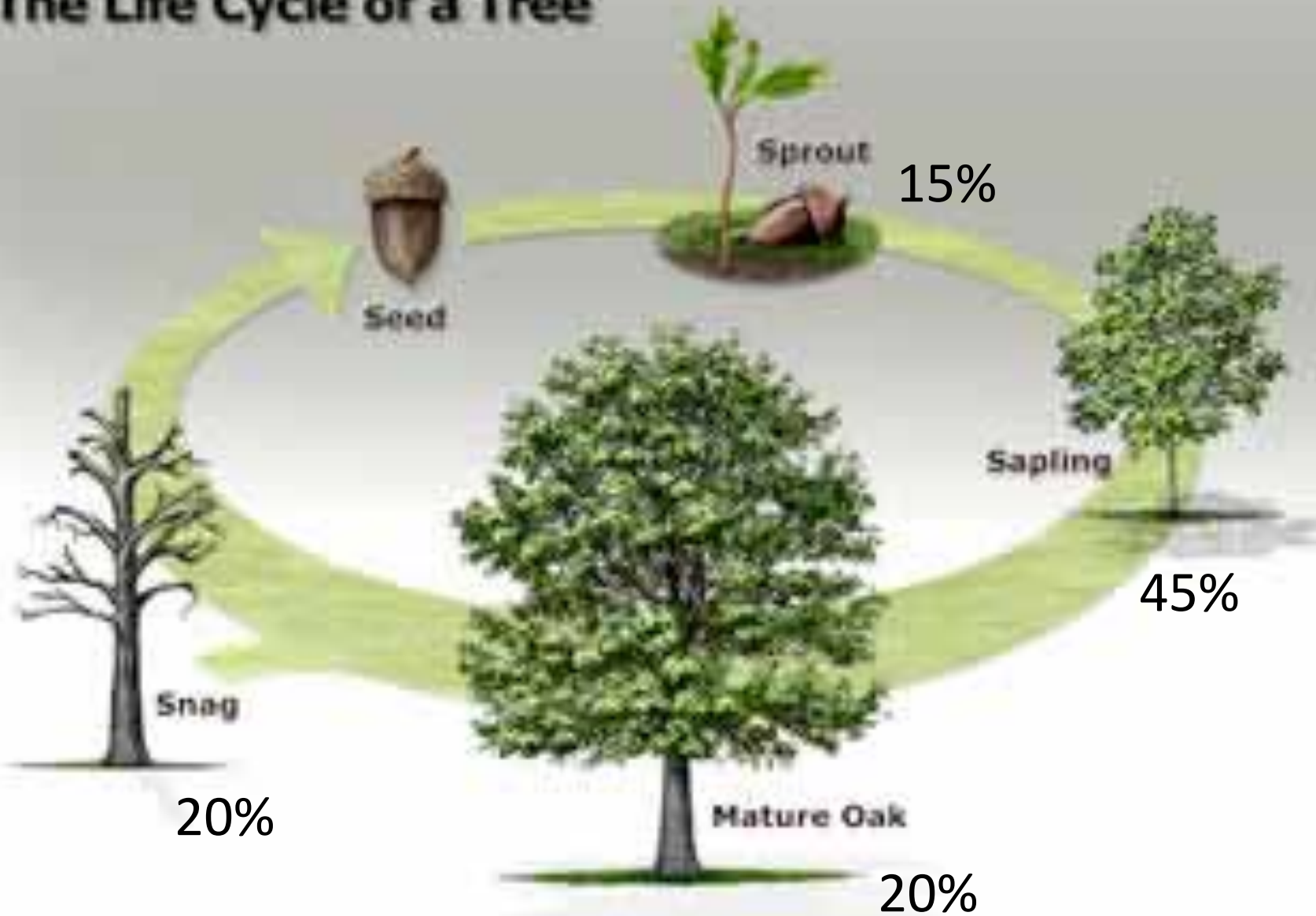


Tree Relative Age Distribution





The Life Cycle of a Tree



Most of the public,
elected officials,
municipal managers

Some of the
public, elected
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municipal
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Fewer
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Elgin's Community Tree Benefits

\$1.13 million/yr
in energy
savings

26.24 million
net lbs. of CO2
sequestered/yr
- \$196,840/yr

67.7 million
gallons of
rainfall
intercepted/yr
- \$1.83 million/
yr

\$253,681 /yr in
air quality
improvement



CONCOLOR FIR
DIAMETER - 21 INCHES
Annual Benefits

\$169



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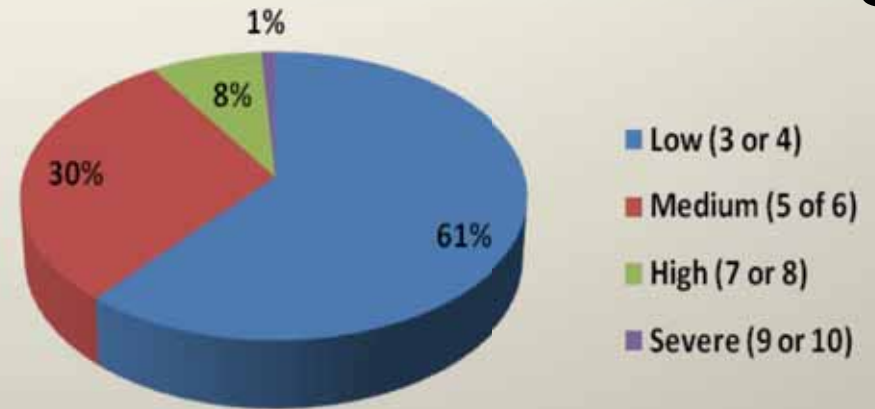
Aesthetics

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- Risk Reduction
- Maintenance

Tree Risk Rating



Tree Maintenance

Suggested Maintenance	Low-Risk		Moderate-Risk		High-Risk		Severe-Risk		Totals
	3	4	5	6	7	8	9	10	
Removal	172	368	392	761	792	575	311	70	3,441
Large Tree Clean	2,575	11,093	6,170	5,203	1,957	494	64	1	24,982
Small Tree Clean	898	676	310	111	13	4	1	0	2,013
Young Tree Train	3,748	9,801	1,066	66	5	0	0	0	14,686
Natural Area Maintenance	265	340	486	480	237	73	5	0	1,886
Totals	5,083	22,278	8,424	6,621	3,004	1,146	381	71	47,008





Green Infrastructure

Establish an Urban Forestry Master Plan

Reduce runoff.



















Agency Links
Air
Land
Water
Offices & Projects »
About the IEPA »
Site Fact Sheets
Calendar of Events
Statutes & Rules
Forms & Publications »
Vehicle Testing
Internships »
Kids & Education
USEPA's TRI
FOIA Requests
Right-to-Know

Financial Assistance

Illinois Green Infrastructure Grant Program for Stormwater Management (IGIG)

Grants are available to local units of government and other organizations to implement green infrastructure best management practices to control stormwater runoff for water quality protection in Illinois. Projects must be located within a Municipal Separate Storm Sewer System (MS4) or Combined Sewer Overflow (CSO) area. Funds are limited to the implementation of projects to install best management practices (BMPs).

The total amount of funding available under IGIG is approximately 5 million dollars annually. This is a reimbursement program. Grant recipients must perform the work, pay project costs, and submit invoice(s) (periodically throughout the project period) with supporting documentation before Illinois EPA will reimburse recipients for any approved costs.

City of Elgin's Awarded Project:

24-38 Bio-retention basins

3 or more modular Bio-retention basins

1-2 permeable paver alleyways



**Lord Street Basin CSO
Green Infrastructure Retrofit Project**
City of Elgin



Help give Elgin **Green Streets**

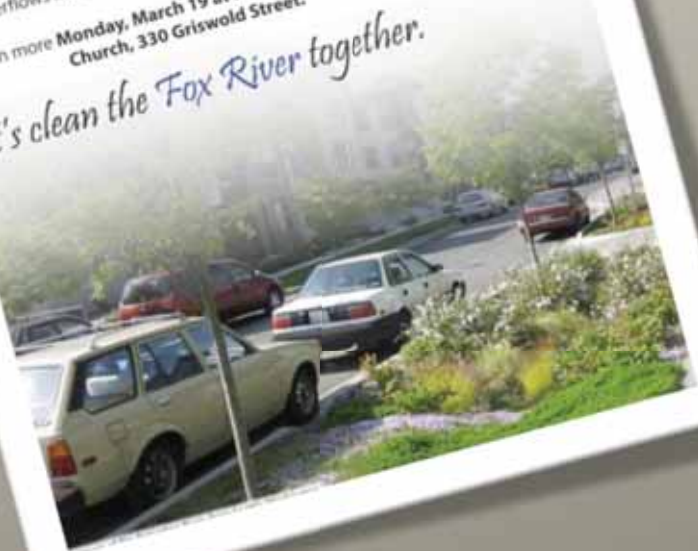
The Illinois Environmental Protection Agency awarded Elgin more than \$634,000 to install green infrastructure in the Southwest and Northwest Area Neighborhoods.

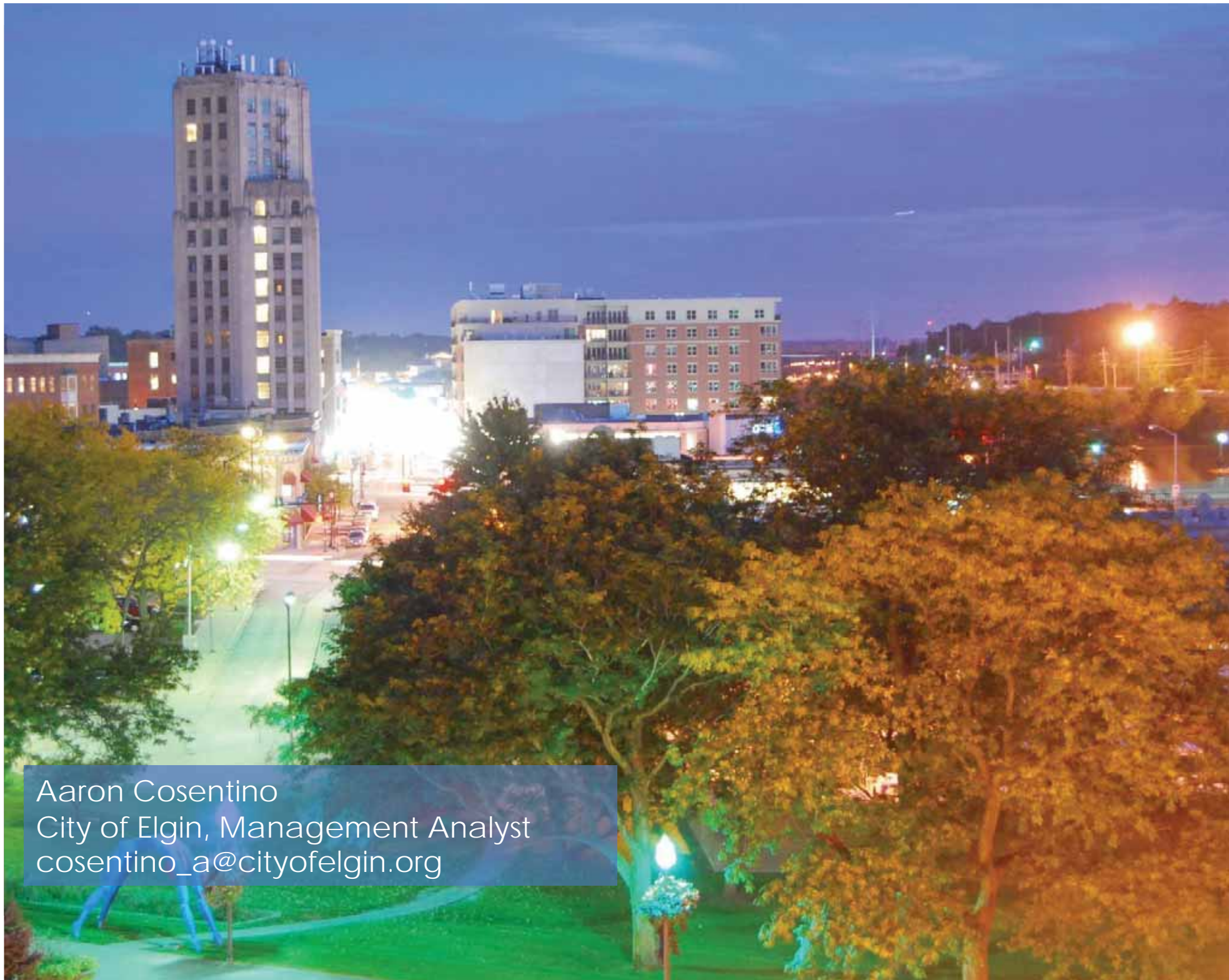
- Using:
- Bio-retention Basins
 - Modular 'pre-cast' basins
 - Permeable Paver Alleyways

We can reduce stormwater runoff and harmful combined sewer overflows into the Fox River.

Learn more **Monday, March 19 at 7 PM, Zion Lutheran Church, 330 Griswold Street.**

Let's clean the Fox River together.





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- <http://mygardentips.wordpress.com/>
- <http://blogs.middlebury.edu/middland/2010/11/28/norway-maple/>
- <http://gerrystreenursery.com/pics/Norway-Maple.jpg>
- <http://texastreeid.tamu.edu/images/life-circle.jpg>
- <http://us.cdn3.123rf.com/168nwm/gruml/gruml1010/gruml101000009/8090313-an-abstract-illustration-of-human-aging.jpg>
- http://www.weeklytimesnow.com.au/images/uploadedfiles/editorial/pictures/2009/04/16/TREE1_FEATURE__FF445009_63334.JPG