## Collaboration is an Antidote for Uncertainty

Stewarding the Future of Water, Together







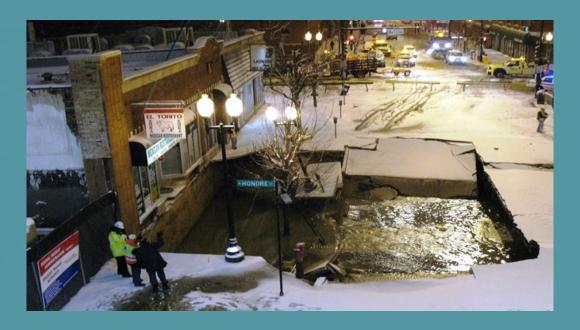
# Existing & Emerging Contaminants

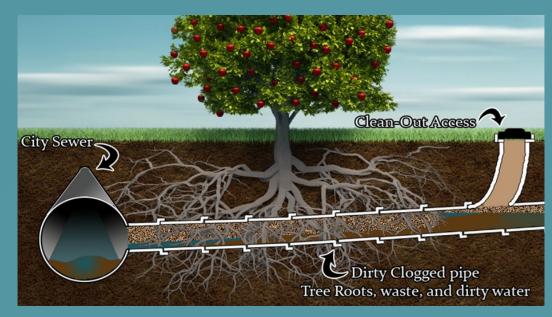




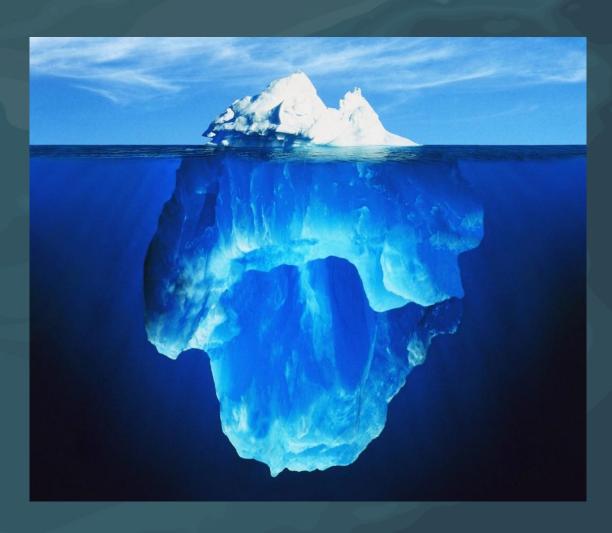
## Poor Infrastructure Conditions



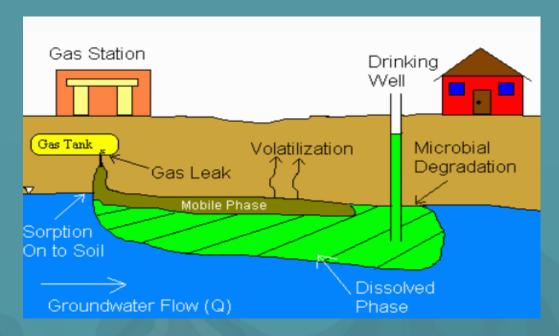




### Lack of Data & Asset Mgmt. Systems









# Incompatible Land & Water Uses



## Fragmentation & Uncertain Regulatory Environment







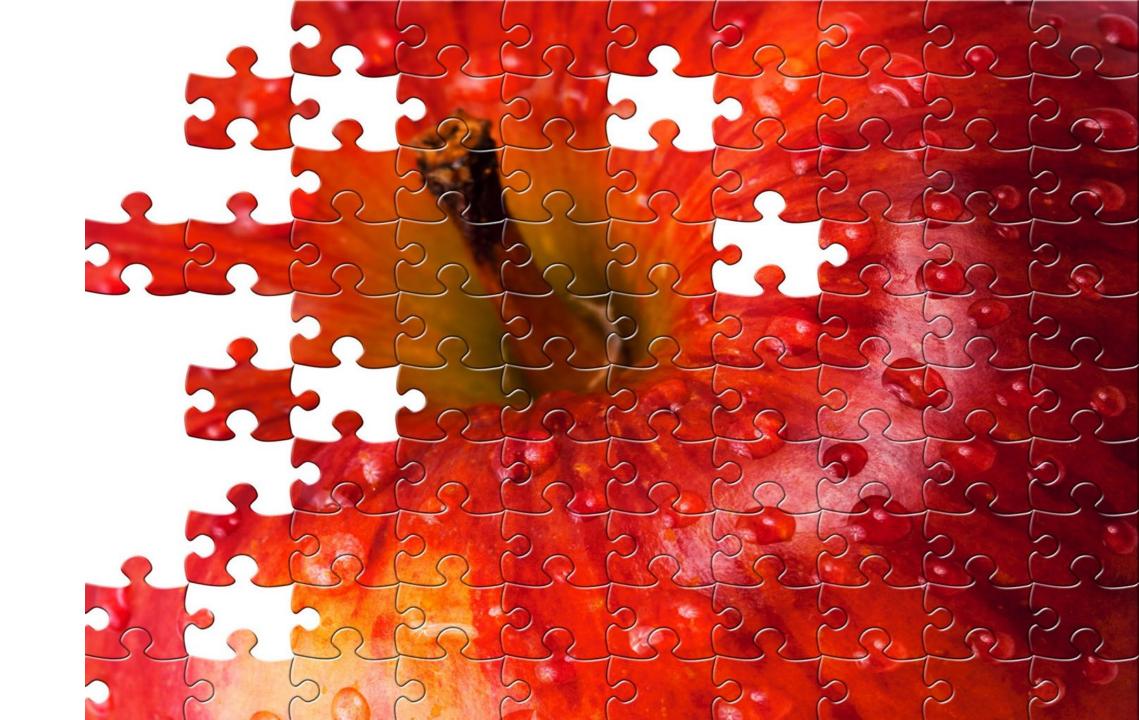
## Climate Change



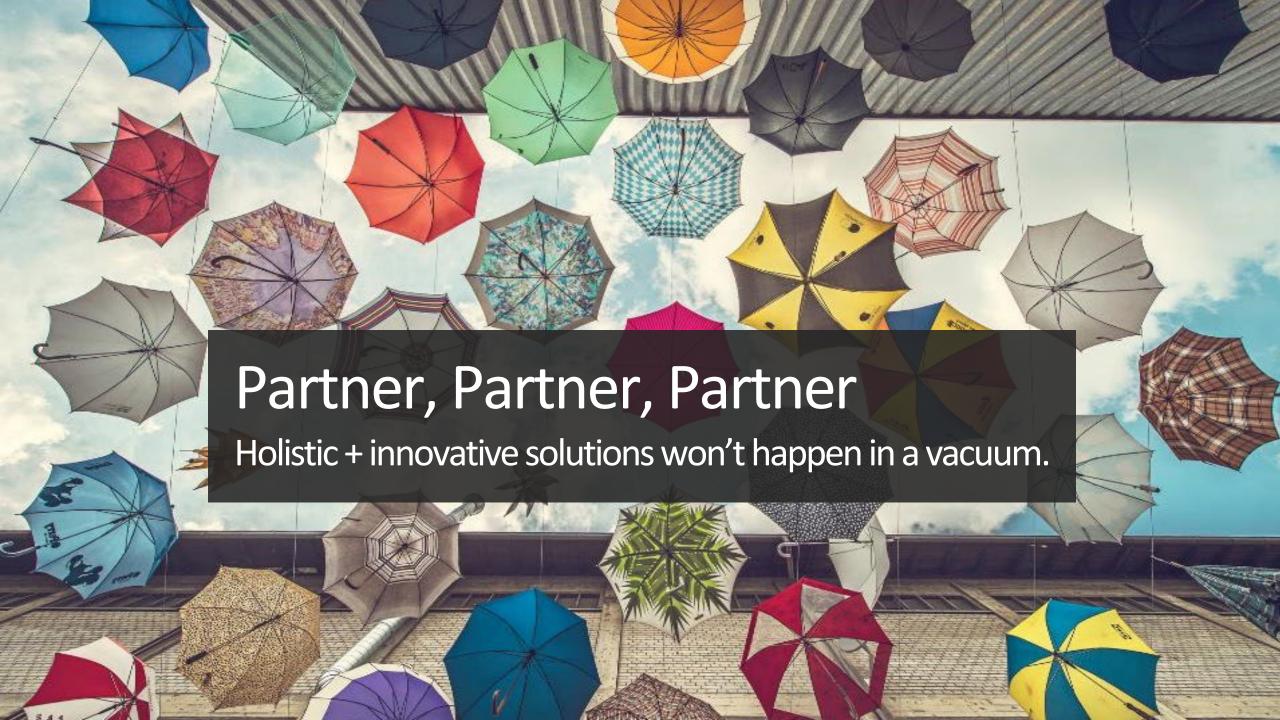




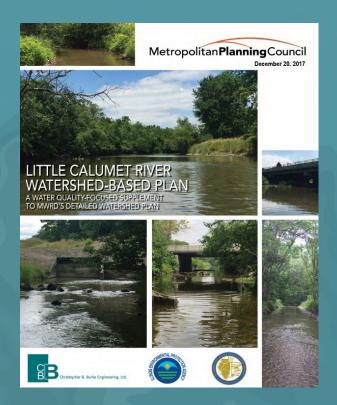


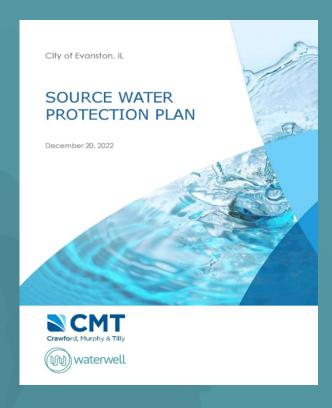


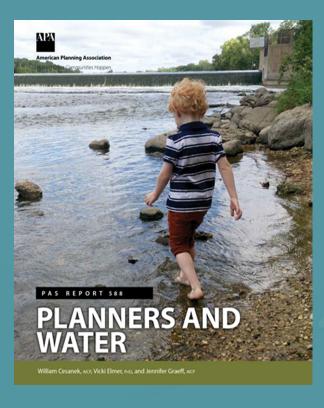




- Source water protection and watershed protection = two different sides of the same coin
- Pull in local Soil and Water Conservation Districts (SWCDs), agricultural groups, municipal & county planners, etc.
- Ensure local and regional water resource information and needs are included in community comprehensive plans (climate plans, sustainability plans, etc.)









https://drinkingwater123.metroplanning.org

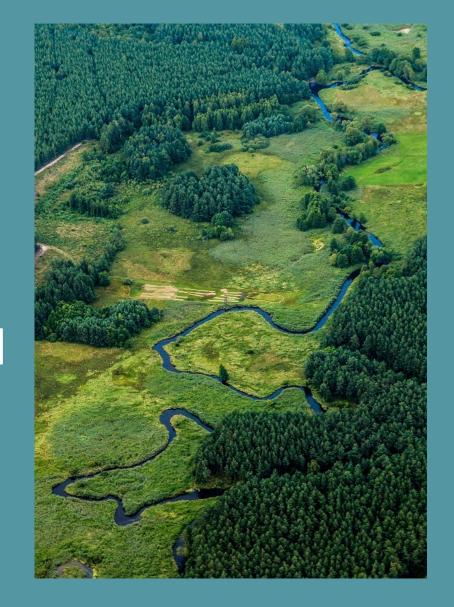
### Drinking Water 1-2-3

A guide for local officials and community leaders.



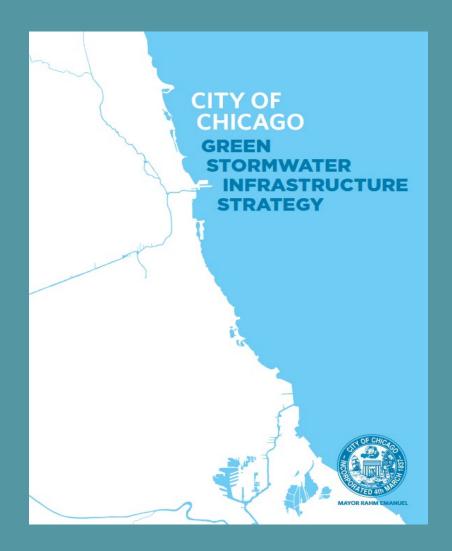


Attached Vs. Committed





## A multi-department effort to create a long-term maintenance program for green infrastructure (GI) on public property in Chicago





#### Committee Participants:

- Chicago Department of Environment (DOE)
- Chicago Department of Fleet + Facility Management (2FM)
- Chicago Department of Transportation (CDOT)
- Chicago Department of Water Management (DWM)
- Chicago Department of Streets + Sanitation
   (DSS) Dept. of Forestry
- Chicago Department of Planning + Development (DPD)
- Chicago Department of Buildings (DOB)









Build intergovernmental and cross-sector partnerships to increase the effectiveness of stormwater management initiatives in the Calumet Region

#### **Government Agencies**

**Cook County** 

Cook County Land Bank Authority

Illinois Department of Natural Resources

Illinois-Indiana Sea Grant

Metropolitan Mayors Caucus

Metropolitan Water Reclamation District of Greater Chicago

South Suburban Mayors and Managers Association

U.S. Army Corps of Engineers

Illinois & U.S. Environmental Protection Agency

#### Planning, Land Managers + Academics

Chicago Metropolitan Agency for Planning

Chicago Park District

Forest Preserves of Cook County

#### **Private Companies**

Baxter & Woodman

CH2M/Stantec

Christopher B. Burke Engineering

**Environmental Design International** 

**Geosyntec Consultants** 

Robinson Engineering

#### NGOs

Center for Neighborhood Technology

Chicago Wilderness

Delta Institute

Elevate

Faith in Place

Foresight Design Initiative

Friends of the Chicago River

Historic Chicago Bungalow Association

Metropolitan Planning Council

Morton Arboretum

OAI Chicago Southland/Highbridge

Openlands

#### **Communities**

**Calumet City** 

City of Blue Island

City of Chicago

Village of Homewood

Village of Midlothian

Village of Park Forest

Village of Steger

#### Accomplishments:

- Urban flooding baseline data
- Inventory of existing GI sites
- Regional mapping viewer + data extents layers
- Gl design guidelines
- Four Section 319 Watershed Plans completed
- Creation of a regional program that funds GI sites
- Expert review of member projects











**ECOLOGY AND** 

THE ENVIRONMENT

Increase regional and statewide

HABITAT planning and

Reduce pollution from

OUTFALL PIPES - storm

drains and agricultural tiles

Balance water use and LOW FLOW conditions with

ecological and recreational needs

Plan for rivers and streams to

move and MAKE ROOM for

investment

Develop broad awareness of CLIMATE TRENDS and

Invest in WATER MODELING to inform local ordinances

Support investment in RENEWABLE ENERGY

Remove more

drinking water

upgrades and repair

WATER protections

CONTAMINANTS from

Adopt regional SOURCE

Invest in INFRASTRUCTURE

Establish a CONSERVATION ETHIC about water use and irrigation

Study water SUPPLY and DEMAND

Create COOPERATION PATHWAYS among neighboring communities Increase home and business WATER REUSE practices



DROUGHT

Provide incentives to upgrade SEPTIC SYSTEMS or connect to sewer systems

Promote widespread vegetated STORMWATER INFILTRATION practices

Establish a CONSERVATION ETHIC about water use and



HOME / BUSINESS



AGRICULTURE



INDUSTRY / ENERGY

#### DRINKING WATER / TREATMENT PLANT

Establish widespread adoption of SOIL HEALTH practices

Improve agricultural DRAINAGE MANAGEMENT practices

Ensure widespread MANURE and NUTRIENT management practices

Increase education and **TECHNICAL ASSISTANCE** for agricultural producers



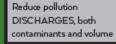
WASTEWATER TREATMENT PLANT

Invest in INFRASTRUCTURE upgrades and repair

Increase REUSE or RESALE

Eliminate combined and sanitary SEWER OVERFLOWS

Promote the production of biosolid PRODUCTS and capture methane



Invest in new TECHNOLOGIES to reduce water use and increase internal reuse

Promote widespread vegetated STORMWATER INFILTRATION practices



**FLOODING** 

Implement strict protections on WETLANDS and FLOODPLAINS

Promote widespread vegetated STORMWATER INFILTRATION practices

Invest in WATER MODELING to inform local ordinances

Ensure safe and healthy RECREATIONAL CONDITIONS

ACTIVATE waterways through programming

Invest in QUALITY SPACES for health and well-being



QUALITY OF LIFE



NEW **JOBS** 



Increase home and business WATER REUSE practices

Promote widespread vegetated STORMWATER INFILTRATION

Implement strict protections on WETLANDS and FLOODPLAINS

Implement cooperative and complementary DEVELOPMENT **ORDINANCES** 

> ATTRACT BUSINESSES and industries that bring new water technologies and talent

Increase ECOTOURISM

Study water SUPPLY and DEMAND to inform economic development opportunities



INDIANA'S WATER ROADMAP





Collaborations
are
transformational,
not
transactional



## Thank you!

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waterwell