City of Hobart Sanitary/Storm Water District

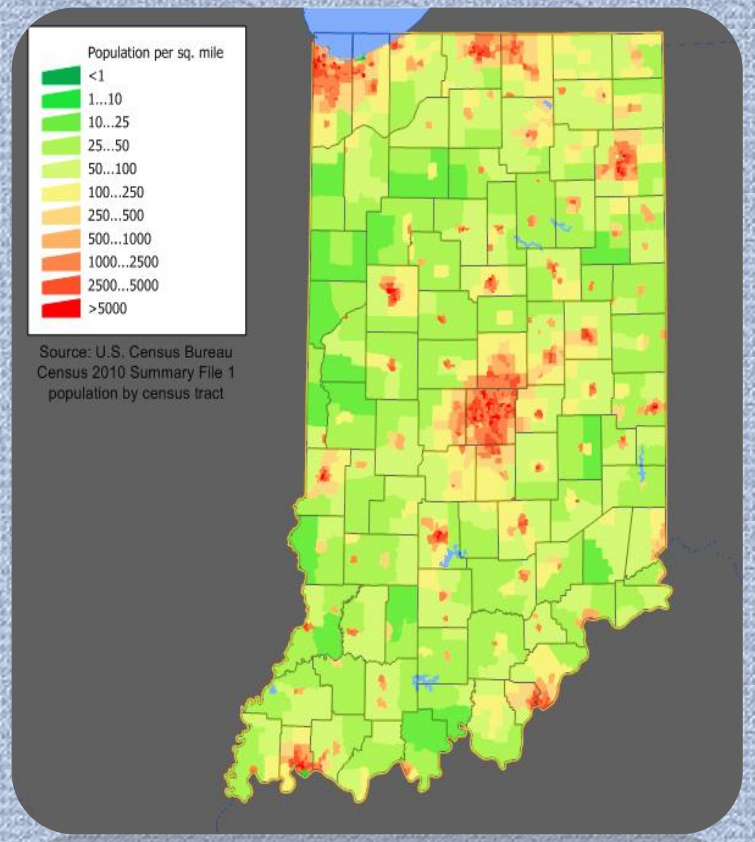
The following presentation will address MS4 Partnerships (Importance), Deep River Watershed (Environmental Sustainability) and Municipal Budgeting during the COVID-19 (Challenges).

- MS4 Partnerships – NISWAG (Mission Statement and General Information)
- Deep River Watershed – How the City of Hobart addresses concerns regarding the importance of environment sustainability within a watershed
- Municipal Budgeting during the COVID-19 – The economic challenges that the District is facing during this pandemic

MS4 PARTNERSHIPS

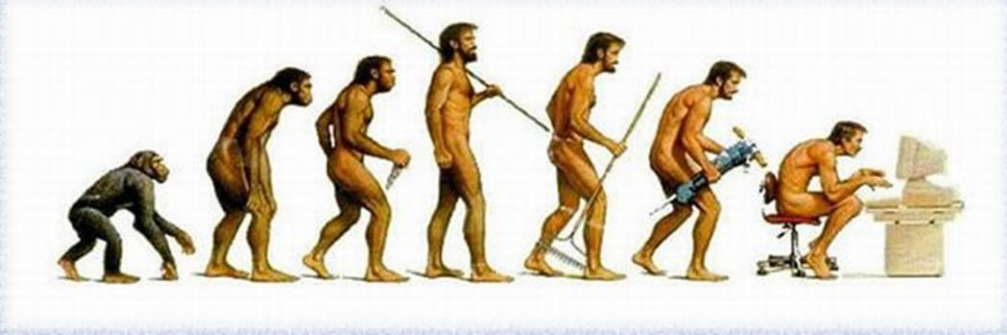
* MS4 Entities in Lake & Porter Counties

Lake	Lakes of the Four Seasons POA	INR040007
Lake	Munster, Town of	INR040017
Lake	New Chicago, Town of	INR040031
Lake	Lowell, Town of	INR040046
Lake	St. John, Town of	INR040047
Lake	Merrillville, Town of	INR040049
Lake	Crown Point, City of	INR040054
Lake	Dyer, Town of	INR040074
Lake	Cedar Lake, Town of	INR040075
Lake	Lake Station, City of	INR040087
Lake	Gary, City of; Ivy Tech State College-Northwest	INR040101 Co-Permittees
Lake	Griffith, Town of	INR040108
Lake	Schererville, Town of	INR040112
Lake	Lake County	INR040124
Lake	Hobart, City of	INR040130
Lake	Highland, Town of	INR040135
Lake	East Chicago, City of	INR040141
Lake	IU -Northwest (Gary)	INR040145
Lake	Hammond, City of	INR040018
Porter	Chesterton, Town of	INR040036
Porter	Twin Creeks Conservancy District	INR040079
Porter	Portage, City of	INR040090
Porter	Valparaiso Lakes Conservancy District	INR040103
Porter	Porter, Town of	INR040115
Porter	Porter County	INR040140
Porter	(Abderdeen) Nature Works CD	INR040149
Porter	Valparaiso, City of; Valparaiso University	INR040073 Co-Permittees



BACKGROUND

- *MS4's collectively determined they needed to evolve*
- *Identified a need to build networking & sharing capabilities amongst MS4s in order to improve permit compliance across all northwest Indiana MS4s*
- *NISWAG (Northwest Indiana Storm Water Advisory Group) was founded by a local MS4 coordinators IN 2012*
- *Group is Completely Voluntary*
- *All members represent NISWAG equally*
- *Includes MS4's in Lake, Porter AND LA PORTE Counties*



Mission Statement

The Northwest Indiana Storm Water Advisory Group is a coalition of municipal separate storm water system (MS4) entities providing leadership in the protection and enhancement of storm water resources within Lake and Porter Counties.

As a volunteer group, all participants will network and share strategies to implement storm water quality practices to reduce storm water pollution and work collectively to meet state and federal regulations.

Group Objectives

- Evaluate and define governing regulations.
- Disseminate information to GROUP members.
- Promote efficient training for GROUP members.
- Assist local municipalities and other interested parties to implement best management. Practices (BMPs) that are consistent with their individual MS4 program needs and available resources.
- Provide technical and value-based input on storm water issues.
- Serve as a sounding board on matters relating to current MS4 implementation issues and policies.
- Serve as leaders within the community for their storm water (MS4) program.
- Seek potential sources of funding, grants and shared resources to supplement program implementation budgets.

Overall Objectives

- Disseminate information to participating members.
- Promote efficient training for participating members.
- Assist local municipalities and other interested parties to implement practices that are consistent with their individual MS4 program needs and available resources.
- Provide technical and value-based input on storm water issues.
- Serve as a sounding board on matters relating to current MS4 implementation issues and policies.
- Serve as leaders within the community for the storm water (MS4) program.
- Seek potential sources of funding, grants and shared resources to supplement program implementation budgets.

Marketing

Establishment of identity to promote NISWAG through…

- Logo
- News Articles
- Flyers for workshops
  - Brochure's
  - Webpage

PAGE A6 | SUNDAY, MARCH 24, 2013 | RD

THE TIMES

Stormwater group finds common ground

Officials from about 20 communities in Lake, Porter counties take part in meetings

CHAS REILLY
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Involvement in the Northwest Indiana Stormwater Advisory Group hasn't tapered off since the group was formed about eight months ago, members said.

"I think we're doing a very good job," said Tim Kingsland, Hobart Sanitary District coordinator, who helped create the group.

The panel meets monthly to develop common goals, discuss stormwater issues in communities and determine ways to share resources.

"We're just trying to do what residents expect of us," Kingsland said.

Stormwater officials from about 20 communities in Lake and Porter counties have been involved so far in meetings, he said.

Kingsland said it's beneficial for the officials to coordinate because water that drains out of one community will enter a different municipality.

"Water doesn't know political boundaries," said Matt Lake, executive director of Merrillville's Stormwater Utility.

Lake said each member of the volunteer group has different areas of expertise. Training sessions are provided at regular meetings so members can learn from each other, he said.

Kingsland said many municipalities have developed publications explaining stormwater issues. The group shares the layouts and information so members don't have to recreate brochures for their communities.

The group also is looking at the possibility of sharing equipment.

Lake described members as free consultants because of the information they share about experiences with stormwater issues.

Greg White, who became Lowell's stormwater operator in November, said the group has been beneficial for him and Lowell.

White said he has received "a lot of advice" since joining the group and he has enjoyed finding out about stormwater projects happening in other communities.

Lake said he expects stormwater regulations could become stricter for local municipalities. Group members can help each other prepare for those regulations.

He said another way the group can provide assistance is when stormwater departments seek grants for projects. Lake said group members can write letters of support for the grants.

Kingsland said he welcomes other communities that haven't joined, and it's possible the group could expand its membership into LaPorte County.

"The door is open," Kingsland said.

Lake believes the region has had a hard time getting together on a common theme, and he hopes the group can set an example of how municipal entities can work together to share ideas, experiences and resources to assist each other.

Workshops

- Began sponsoring local workshops in 2013
- The group goal is to coordinate workshops with MS4s and non-MS4 entities

Goals

- Consolidate Part C – SWQMPs
- Develop and share STW Master Plans
- Develop contractor training for workshops
- Coordinate local & regional education opportunities
- Facilitate continued training opportunities
- Develop strategy to share resources among the members

General Information-Deep River Watershed

The Deep River-Portage Burns Waterway watershed (HUC 0404000105) drains approximately 180 mi2 (115,138 ac.) of north central Lake and Porter Counties to Lake Michigan through Burns Ditch. The watershed is comprised of nine smaller HUC-12 sub-watersheds ranging in size from 15.8 to 26.3 mi^2.

Several municipalities are located within the watershed including the entirety of Hobart and Merrillville and portions of Cedar Lake, Crown Point, Gary, Griffith, Lake Station, New Chicago, St. John, Schererville, Winfield, Portage, Lakes of the Four Seasons, and Ogden Dunes.

Deep River-Portage Burns Waterway Watershed

Watershed Community Initiative and Importance

A watershed is the land area that drains to a common point such a location on a stream or even a lake. Within this watershed, human land use practices and activities can dramatically influence the health of its waterbodies. As rain or snowmelt moves over and through the ground it can pick up harmful pollutants from the watershed's various land uses and deliver them to nearby lakes and streams. This type of pollution is known as nonpoint source pollution and it is one of the greatest threats to water quality in Northwest Indiana. The City of Hobart lies in the Deep River-Portage Burns Waterway Watershed. Deep River-Portage Burns Waterway is the largest of six watersheds located within the Little Calumet-Galien sub-basin, draining an area of approximately 180 mi^2 in north central Lake and Porter Counties. Some its major tributaries include portions of the West Branch Little Calumet River, Deep River, Main Beaver Dam Ditch and Turkey Creek. The Deep River-Portage Burns Waterway watershed is a critical component to the economic vitality for the City of Hobart!

Deep River-Portage Burns Waterway Watershed – Environmental Sustainability

Environmental sustainability is a critical component regarding the “Health” of a watershed.

The city believes that increased awareness of the broad dimensions of environmental sustainability as applied to water management should encourage integration of existing approaches into a unified assessment framework appropriate for watersheds.

Overall, developed land is the dominant land cover type within the watershed. In 2006 approximately 44,685 acres or 39% of the watershed was classified as developed. Between 1996 and 2006 developed land area in the watershed increased by 9%. Much of this occurred at the loss of agricultural lands and to a lesser extent natural areas.

To address “Environmental Sustainability”, the City of Hobart utilizes several types of green infrastructure BMP’s to address water quantity and quality within the Deep River Watershed.

Deep River-Portage Burns Waterway Watershed – MS4

MS4 conveyances within urbanized areas have one of the greatest potentials for polluted storm water runoff. The Federal Register Final Rule explains the reason as: “urbanization alters the natural infiltration capacity of the land and generates...pollutants...causing an increase in storm water runoff volumes and pollutant loadings.” Urbanization results “in a greater concentration of pollutants that can be mobilized by, or disposed into, storm water discharges.”

The identification of problems areas and determination of where improvements need to be made and BMPs utilized is particular importance for the watershed management process.

Deep River-Portage Burns Waterway Watershed – Hydrology

Hydrology in the Little Calumet-Galien sub-basin and its watersheds is markedly different than what once existed prior to urbanization and industrialization of the region during the 1800's and 1900's. Historically the Little Calumet River and the Grand Calumet River were part of a single river called the Calumet. Its headwaters were located in LaPorte County in what is present-day Red Mill County Park. From here the river flowed sluggishly to the west through the Calumet Lacustrine Plain before making a hairpin back east near present-day Blue Island in Illinois and Deep River-Portage Burns Waterway Watershed 2012 20 eventually emptying into Lake Michigan near the Marquette Park Lagoon in Gary. Sometime around 1926 Burns Ditch was constructed between Deep River in Lake County and Salt Creek in Porter County to improve local drainage. Around this same time period, Burns Waterway was excavated connecting Burns Ditch to Lake Michigan thereby diverting the eastern part of the Little Calumet River directly into Lake Michigan

Deep River-Portage Burns Waterway Watershed – Hydrology

Following the construction of harbors and canals, industries moved lakeward filling nearshore areas with slag and marshes and swamps with sand from nearby dunes and beaches. A series of levees and flood control projects were completed to protect low lying, flood prone urban areas along the mainstem of the Little Calumet River and its tributaries in northern Lake County. Drainage improvement projects have altered surface hydrology to such an extent that land areas that once drained to Lake Michigan now empty into the Gulf of Mexico.

Lake George in Hobart is the largest lake in the watershed at approximately 175 acres in size. Lake George was created by the damming of Deep River sometime around 1840 by George Earle to power a gristmill and provide a community water supply.

Deep River-Turkey Creek Watershed (2002 Report)

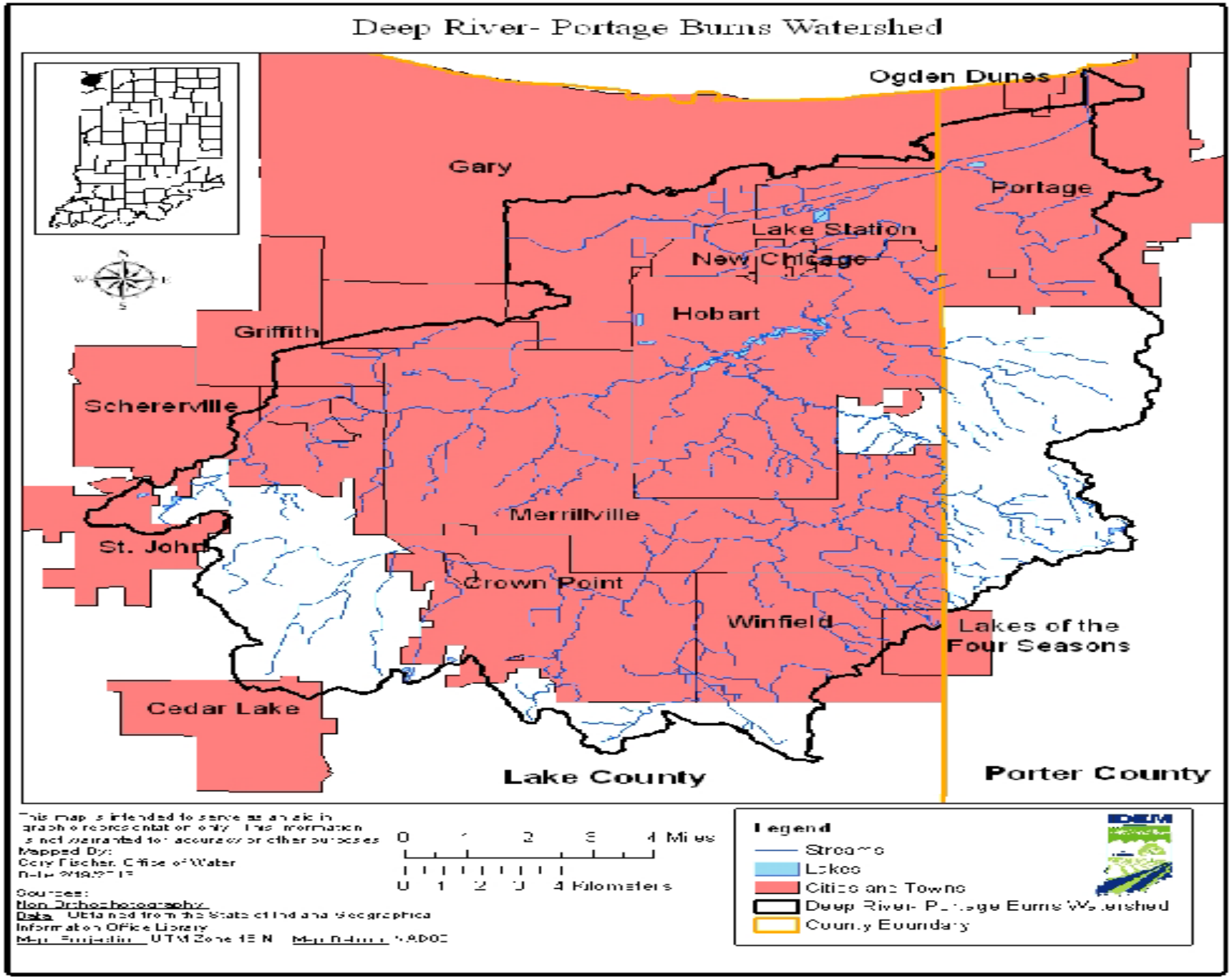
The 2002 study area for this project was originally focused on the Deep River-Lake George (HU 04040001030060) watershed in Hobart, Indiana, participants in this planning effort recognized from the beginning that the water quality issues discussed impacting Lake George could not be adequately addressed without significant actions to manage pollutant loads from the larger Deep River/ Turkey Creek watershed. Rather than limiting the focus and scope of this planning effort to developing specific recommendations for water quality improvements within the Deep River-Lake George watershed and the City of Hobart, this plan also provides additional recommendations for improving water quality throughout the larger Deep River/ Turkey Creek watershed and encourages the development of sub-watershed specific planning efforts.

Deep River-Portage Burns Waterway Watershed (2016 Report)

The Deep River-Portage Burns Waterway Watershed is identified as a priority area in the Northwest Indiana Watershed Management Frame. The purpose of 2016 watershed report was to provide stakeholders with a "jump start" in the watershed management planning process. To the greatest extent possible it follows the format of the most current IDEM Watershed Management Planning Checklist. The report focused on the resource intensive watershed inventory elements that provide a snapshot of current watershed conditions.

Parameters Addressed

IDEM completed a comprehensive sampling program (TMDL) in the watershed that was based on the current impairments. A total of 35 sites were assessed for general chemistry, nutrients, habitat, fish and macroinvertebrate communities, and stream flow.


Deep River- Portage Burns Watershed
Ogden Dunes
Gary
Portage
Lake Station
New Chicago
Hobart
Griffith
Schererville
Merrillville
St. John
Crown Point
Winfield
Lakes of the Four Seasons
Cedar Lake
Lake County
Porter County
Legend
Streams
Lakes
Cities and Towns
Deep River- Portage Burns Watershed
County Boundary
0 2 4 Miles
0 1 2 3 4 Kilometers

Regional Land Use Planning - NIRPC

NIRPC completed the Northwest Indiana 2040 Comprehensive Regional Plan (CRP). It was developed as a comprehensive, citizen-based regional vision to guide the development of land use and transportation programming in Northwest Indiana. It is a policy program with strong coordination and implementation elements. The CRP deals largely with multijurisdictional needs and opportunities that no single entity can manage or effect on its own. Deep River-Portage Burns Watershed offer the means of enhancing the region's prosperity and quality of life, improving mobility, supporting communities and realizing environmental justice were among the key considerations during the CRP's development. While the CRP's vision, goals and objectives provide a critical policy framework for the CRP, the Growth and Revitalization Vision presents a physical expression of the vision and goals combined. The Growth and Revitalization Vision was developed through the CRP's scenario planning process.

Regional Land Use Planning - NIRPC

Using a watershed approach has been recognized as an effective way to deal with often complex water quality and quantity issues. Therefore development and implementation of local watershed management plans was identified as a key strategy to help the region meet a number of the CRP goals and objectives. Additionally the CRP called for the need to invest in green infrastructure as a means of protecting and connecting environmentally sensitive natural areas, managing stormwater and attenuating flood impacts, and increasing passive recreational opportunities. The resulting Green Infrastructure Network was used to help frame where and how future development might occur in the region to protect and restore its environmental assets.

Goals!

The rational behind the development of the Growth and Revitalization Vision and, by extension, the growth of Northwest Indiana through 2040, is based on the following principles:

- Support urban reinvestment
- Ensure environmental justice/social equity
- Protect natural resources and minimize impact to environmental features and watersheds
- Integrate transportation and land use

Water Quality Improvement and Protection Goals- City of Hobart

- Minimize deposition of new sediments into Lake George
  - Reduce erosion
- Improve water quality in Deep River/Turkey Creek Watersheds
  - Reduce sediment, nutrient, and E. coli loads
- Develop stormwater/water quality projects through the use
- Apply for Grants from IDEM,NIRPC and Federal Agencies

The following BMP restoration strategies were utilized throughout the City of Hobart section of the Deep River Watershed:

- Wetland and tree conservation
- Minimizing impervious surfaces
- Installation of Green Infrastructure BMP's
- Shoreline and streambank stabilization
- Native plantings

GI PROJECTS – Completed and Funding Source (2016 to Present)

1. **City of Hobart City Hall:** Rain Garden & Native Landscape-EPA GLRI Grant, IDEM 319 Grant and COH Storm Water District
2. **Deep River Access:** Rain Garden, Bio Swale, Native Landscape and Riparian Shoreline-LMCP Grant and COH Storm Water District
3. **Hillman Park:** Bio Swale and Native Landscape- EPA GLRI Grant
4. **4th Place:** (2) Ravines-IDEM 319 Grant and COH Storm Water District
5. **North Lake Park:** Swale- IDEM 319 Grant and COH Storm Water District
6. **Old Ridge Road:** Rain Garden Beds-COH Storm Water District

Tree Conservation - City of Hobart

- Inventory of city owned trees in easements and right of ways-Data collected was inputted into the COH GIS for use by city staff and the public
- Installation of Trees at COH Gun Range
- Installation of Trees along the rear frontage road of Strack's and Van Til
- Installation of Trees at Robinson Park

PROJECTS – Planned (Partially Grant Funded and/or Seeking Additional Financial Funding: Year 2021

1. **Duck Creek Stream Restoration:** Chi-Cal Grant and seeking additional grants to assist in funding implementation
2. **Construction of New Wetland-Guyer Street:** Seeking numerous grants to finance project

City OF Hobart City Hall – GI Installation (Example)

RAIN GARDEN PLANT IDENTIFICATION

What is a Rain Garden?

A rain garden is designed to capture and filter rain water that flows off hard surfaces like roadways, driveways, parking lots and rooftops. A shallow basin is planted with deep-rooted native wildflowers, grasses and shrubs that filter and absorb storm water runoff and the pollutants it carries. Native plant extensive root systems filter storm water runoff by removing nutrients, sediments and pollutants before it enters our ground water and nearby waterways.


Prairie Blazing Star

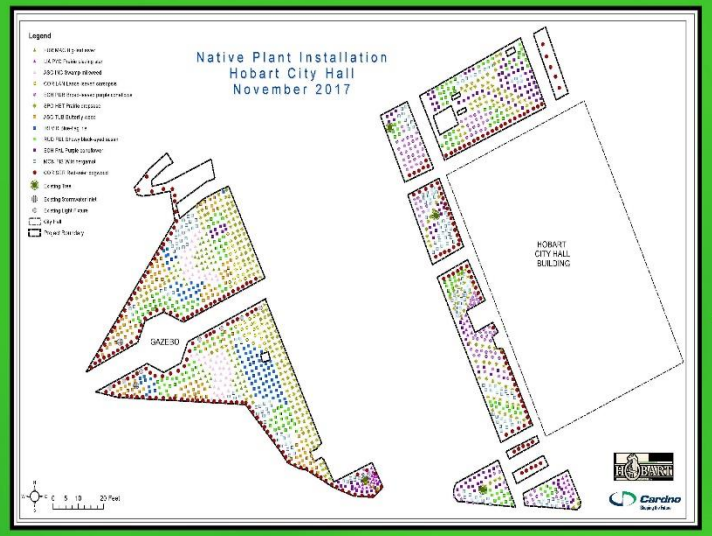
Purple Coneflower


Prairie Dropseed


Lance-leaved Coreopsis


Blue Flag Iris


Swamp Milkweed




Wild Bergamot (bee balm)


Showy Black-eyed Susan


Red-ozier Dogwood


Butterfly Weed


Red-ozier Dogwood


Big-leaf Aster

Goal:

To treat the storm water runoff as close as possible to where it falls.

NATIVE PLANT IDENTIFICATION

What is a Rain Garden?

A rain garden is designed to capture and filter rain water that flows off hard surfaces like roadways, driveways, parking lots and rooftops. A shallow basin is planted with deep-rooted native wildflowers, grasses and shrubs that filter and absorb storm water runoff and the pollutants it carries. Native plant extensive root systems filter storm water runoff by removing nutrients, sediments and pollutants before it enters our ground water and nearby waterways.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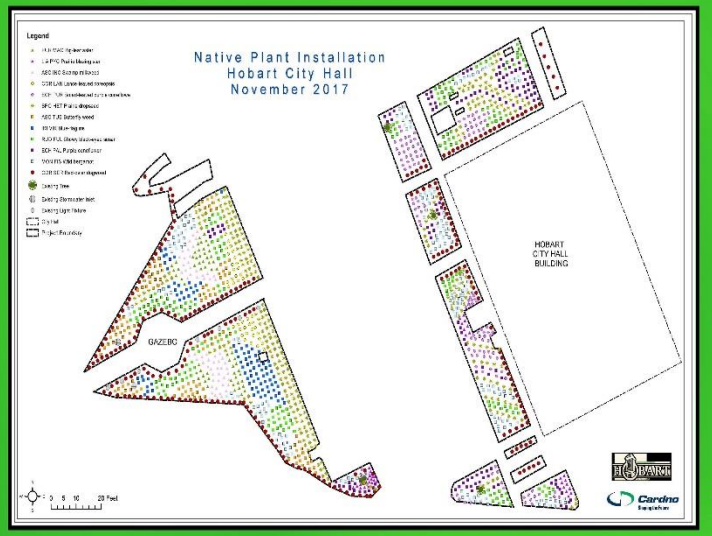


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Hobart Sanitary/Storm Water District-Budgeting During a Pandemic

Financial Impacts

Among the uncertainty surrounding the impact of the COVID-19 pandemic, one thing is nearly certain: Local governments are likely to face a changing financial picture due to decreased sales tax, income tax, and other revenues. As a result, municipalities will need to make difficult decisions about how to prioritize spending and cuts to balance their budgets.

The COVID-19 pandemic has created a financial strain on local government budgets. As a result, local governments have experienced a decline in revenue. There is also the uncertainty of property tax collection, state aid revenues, and property tax appeals, in particular commercial property tax appeals.

Unlike previous emergencies, COVID-19 is a major revenue loss event. In many cases this loss will not be recaptured for several years, if ever.

Hobart Sanitary/Storm Water District-Budgeting During a Pandemic

EXPENDITURES ON THE RISE

Overall, city expenditures and investments in their communities are a significant driver of economic resilience and activity. In particular, cities support a large public workforce, with payroll, retirement, and workers compensation accounting for nearly half of their budgets.

Cities spend a good portion of their budget on infrastructure, at 18 percent, and more than half of cities consider infrastructure expenditures among the top three burdens on city budgets.26 Half of all infrastructure expenditures go toward electric, gas, transit and water utilities, followed by sewerage and solid waste management at 23 percent.

In total, nearly 20 percent of cities indicate public works functions could be significantly affected by revenue shortfalls.

Hobart Sanitary/Storm Water District-Budgeting During a Pandemic

COVID 19 Challenges

- Compliance with Federal and State Environmental Mandates
- Strain on existing financial resources to address ever increasing demand to maintain existing infrastructure assets
- Increase cost of Capital Improvement Projects
- Age of and type of Infrastructure
- Increasing demands on available workforce (Hiring Freeze for the foreseeable future)
- COVID 19 (Employee safety and health)
- Public opposition to establishment and/or or increasing fees for utility services

Hobart Sanitary/Storm Water District-Budgeting During a Pandemic

To address the financial challenges of the COVID 19, the **Hobart Sanitary/Storm Water District** proposes to reduce expenditures and employee workload by:

- **Installation of a Asset Management System (AMP)** - This will reduce administrative/employee processing time, streamline work order processes and provide analytics of current assets in determining life cycle costs.
- **Utilizing GIS** – Utilizing GIS will assist in improved decision by government officials. Instantaneous collaboration through the cloud. Layer complex data to drive improve decision making. Improved transparency for citizen engagement. Improved allocation of resources and planning.
- **Use of Mobile Devices (AMP and GIS)** - Offer workers greater flexibility, enhance workflows, improve communications, and help to make users more efficient. Mobile devices also enhance workflow by extending business processes and making them more efficient. They simplify processes, eliminating duplicate efforts, so workers can complete tasks more quickly.