

AGENDA
SUSTAINABILITY COMMISSION
July 21, 2022
7:00 P.M.
Village Hall
850 Waukegan Road
Conference Room 206

1. Call to Order
2. Roll Call
3. Consideration and Approval of January 20, 2022 Meeting Minutes
4. Public Comment
5. Green Region Compact 2
 - Self-Assessment Framework: WATER (Potable, Waste, Storm)
 - i. Review of possible water related programs and initiatives
6. GHG Working Group Update
 - Recap – Climate Action Report
7. Other Items for Discussion:
 - Farmer’s Market - August 20
8. Next Meeting Date – Thursday, August 25

**MEETING MINUTES
SUSTAINABLE COMMISSION
JANUARY 20, 2022**

A meeting of the Sustainability Commission was held on Thursday, January 20, 2022 at 7:00 p.m. via Zoom. The meeting was called to order at 7:00 p.m.

In attendance were:

Present:

Maria Albulescu
Don Anderson, Chairman
Amy Call
Dick Heller
Bill Mertes
Michael Shalen
Deborah Tometz
Brian Wolkenberg

Absent:

Karrah Krakoviak

Also present:

Andrew Lichterman, Assistant Village Manager (at Village Hall)

Consideration of Minutes

Commissioner Mertes moved, seconded by Commissioner Heller to approve the minutes from the November 4, 2021 Sustainability Commission. The motion passed by the following vote:

AYES: Albulescu, Call, Heller, Mertes, Shalen, Tometz, Wolkenberg, Anderson (7)

NAYS: None (0)

Public Comment

There was no public comment received by email. There was no one present at Village Hall or on Zoom wishing to make a public comment.

Commissioner Albulescu noted she has enjoyed the Commission over the past three years, but is very busy as she is pursuing her MBA. She suggested filling her spot with a Deerfield resident that works at Walgreens.

Business:

1. Green Region Compact 2

- **Self-Assessment Framework – Water (Potable, Waste, Storm)**
 - **Q & A with Director of Public Works and Engineering, Robert Phillips**

Mr. Phillips provided an overview of the Public Works and Engineering departments. He explained 90% of what the public works department does is underground. The Village has two pumping stations that just pump storm water. The water reclamation facility is unique, as most municipalities feed into regional facilities. There are seven satellite pumping stations which flow via gravity to a wastewater treatment plant.

When the Village repairs or builds a roadway, they look at a number of factors including the material, the thickness of the various layers of pavement, whether the Village can just grind off the top layer, the traffic load, etc. The Village also looks at the infrastructure, how many water main breaks there have been, and the condition of the roads, sewers and utilities to determine whether they can resurface the road or if they have to reconstruct the road. The Village hires an infrastructure management service every three years to provide a surface rating on every road in the Village, so there is documented scientific data on the condition of each road. Mr. Phillips noted most streets in Deerfield have to be reconstructed after 20 years before they need to be resurfaced. Aside from the resurfacing or reconstruction costs, the Village has to consider the roadwork utility costs as well.

Commissioner Call asked whether the Village is using any permeable surfaces. Mr. Phillips explained permeable surfaces are cost prohibitive at this time due to the amount of excavation required. The Village is testing one permeable pavement parking lot on East River Road. Over the past 15 years, the Village has revised some of the reconstruction methodology to be more sustainable and less disruptive to the neighborhoods. They have used recycled materials, installed energy efficient lighting and have reduced the amount of fluoride and salt used for snow and ice control.

Mr. Phillips discussed the water reservoirs in the Village. The water from the Richfield reservoir pushes water directly into the distribution system and boosts pressure for the North Trail subdivision. The Hawthorn reservoir is used to fill the pumping station as well as provides additional storage. In 2020 and 2021, the Village completed the water system model based on where the pipes are located as well as the size and condition of the pipes. The Village also gathers information from fire flow analysis and uses all of the information for capital project planning.

All of the water comes in from Highland Park. If Highland Park were to have an issue with their pumping station or treatment plant, the Village still has plenty of storage. Mr. Phillips explained his department also analyzes water and sewer rates to ensure the rates are appropriate. They also look at system wide risk and resiliency as well as cyber terrorism. The Village is also in process of planning an emergency water connection from Northbrook.

Mr. Phillips noted the major things that cause the Village to replace a water main or install a new water main is the age of the pipe. The life cycle is about 100 years. Sometimes, the Village has a pipe that wasn't made with the best material or the materials are too small, which causes more frequent main breaks. The Village replaces about 1 percent of the water mains each year. The

EPA will require the Village to have a plan to replace all 900 lead services at a cost of \$9 – 10 million within the next 15 years.

The Village has a storm water master plan which helps determine the frequency of flooding to help with questions from residents as well as provides solutions to some of the front and backyard flooding issues, based on a 10-year storm. The storm water master plan studied 42 areas and the Village developed a capital plan. They encourage residents to reduce clutter risks which could help alleviate flooding.

Commissioner Call asked about outreach and public education. Mr. Phillips explained people need to understand more about storm water. He noted backyards are not intended to be dry after a storm. Mr. Phillips indicated people are no longer drinking tap water and bottled water is not good for the environment. Ch. Anderson noted the Commission held a Pepsi challenge in the past and could consider it for the future as well. The Village also has buckthorn removal programs.

Ch. Anderson suggested the Commission spend time at the next meeting prioritizing the various topics discussed and developing programming around them. Mr. Wolkenberg suggested forming sub-committees to take advantage in member's strengths and interests. Commissioner Tometz suggested creating a brochure about the GRC2 for distribution at the Farmer's Market.

2. Other Items for Discussion

- **WRF Reclamation Facility Tour – Spring Date?**

The commissioners discussed a spring tour of the facility. The Commission decided that late morning on June 11 is the preferred date.

Public Comment

There were no Public Comments in person, on Zoom or via email.

Adjournment

There being no further business or discussion, Commissioner Heller moved to adjourn the meeting. Commissioner Mertes seconded the motion. The motion passed by the following vote:

AYES: Albulesco, Call, Heller, Mertes, Shalen, Wolkenberg, Anderson (7)

NAYS: None (0)

The next scheduled Sustainability Commission meeting will take place on Thursday, February 24, 2022 at 7:00 p.m.

The meeting was adjourned at 8:32 pm.

Sustainability Commission


January 20, 2022

Page 4 of 4


Respectfully submitted,

Jeri Cotton

Secretary

| Category |  GOAL | OBJECTIVE | | Already achieved | In Progress | Planned for next 6 months | Planned for next 12-18 months | Interested in pursuing | Not planned | Not relevant | Contact Initials | Notes | Link to resource | |
|-------------|---|--|---|---|-------------|---------------------------|-------------------------------|------------------------|-------------|--------------|-------------------|-------------------|-------------------|-------------------|
| | | > STRATEGY | | | | | | | | | | | | |
| | | + ADVANCED STRATEGY | | | | | | | | | | | | |
| WATER | Water Conservation | Use and distribute water efficiently | W1 | Reduce community water consumption per capita | | | | | X | | | | | |
| | | | W1a | >Implement water efficiency measures at all municipal facilities | | | | X | | | | | | |
| | | | W1b | >Encourage residents and businesses to identify and mitigate water loss | | X | | | | | | | | Y |
| | | | W2 | Become a US EPA WaterSense Partner | | | | X | | | | | | Y |
| | | | W3 | Designate a staff Water Conservation Coordinator to manage water conservation programs | | | | | | X | | | | |
| | | | W4 | Participate in regional efforts and programs to conserve water | | | | | | X | | | | |
| | | | W+5 | Provide customer incentives to retrofit using high efficiency, Water Sense appliances and fixtures | | | | | | X | | | | Y |
| | | | W+6 | Provide water use audits to customers | | | | | X | | | | | |
| | W+7 | Collaborate with energy utilities to integrate water conservation into energy audits for residential customers | | X | | | | | | | | | | |
| | W+8 | Collaborate to encourage commercial, industrial and institutional customers to conserve water | | | | | X | | | | | Y | | |
| | Water Quality | Protect and improve water quality | W9 | Protect surface and groundwater from runoff and contamination | | X | | | | | | | ILLICIT DISCHARGE | |
| | | | W9a | >Avoid the use of coal tar sealants on municipal property | X | | | | | | | | BANNED VILLAG | Y |
| | | | W9b | >Resolve to eliminate unnecessary landscape pesticides and fertilizer use on municipal property | X | | | | | | | | | Y |
| | | | W9c | >Use sensible salting strategies to reduce chloride contamination | | X | | | | | | | | Y |
| W10 | | | Collaborate to identify sensitive aquifer recharge areas | | | | | X | | | | | Y | |
| W11 | | | Support post-development runoff reduction and mitigation | | X | | | | | | | | | |
| W12 | | | Inventory and inspect septic systems | | | | | | X | | | | | |
| W13 | | | Collaborate with regional initiatives to protect Lake Michigan and the Mississippi River | | X | | | | | | | | NBWS GROUP | |
| WATER | Water Infrastructure | Manage water system assets sustainably | W14 | Label storm drains indicating the destination of discharge | | X | | | | | | SOME | | |
| | | | W15 | Operate an efficient water utility that delivers clean, healthful, water | X | | | | | | | | | |
| | | | W15a | >Control water loss by auditing water supply system using AWWA protocols | X | | | | | | | | | Y |
| | | | W15b | >Periodically detect system leaks and develop a strategic plan for repair | X | | | | | | | | | Y |
| | | | W16 | Comprehensively and sustainably manage water infrastructure | X | | | | | | | | | |
| | | | W16a | >Develop a water infrastructure asset management plan to sustain the system | X | | | | | | | | | Y |
| | | | W16b | >Implement the water infrastructure asset management plan to sustain the system | | X | | | | | | | | |
| | | | W16c | >Meter 100% of customers with automated reading technology | | X | | | | | | | | |
| | | | W16d | >Implement sub-metering for multi-family housing customers | | | | | | X | | | | |
| | | | W16e | >Detect and repair water system leaks | | X | | | | | | | | |
| | | | W16f | >Repair and replace inefficient water supply infrastructure | | X | | | | | | | | |
| | | | W16g | >Support property owners in timely repair of service lines through third-party warranty program | | | | | | X | | | | Y |
| | | | W17 | Invest water revenues into sustaining water infrastructure | X | | | | | | | | | |
| W18 | Coordinate street, utility and water infrastructure projects | X | | | | | | | | | | | | |
| W19 | Seek both public and private financing partnerships for infrastructure improvements | | X | | | | | | | | | | | |
| W20 | Riparian communities: Collaborate with other agencies to assess dam performance and support removal when | | | | | | | X | | | Y | | | |
| rastructure | | | W21 | Participate in the Community Rating System for flood mitigation and planning | X | | | | | | | Y | | |
| | | | W22 | Participate in the National Flood Insurance Program allowing residents to access flood insurance | X | | | | | | | | | |
| | | | W23 | Implement green infrastructure best management practices on municipal properties | | | | | X | | | | | |
| | | | W23a | >Build or retrofit paved surfaces with permeable materials | | | | | | X | | | | |
| | | | W23b | >Install and maintain bioswales, filter strips, trees, rain gardens, and other functional landscapes | | X | | | | | | | | |

| WATER | Category | GOAL | OBJECTIVE | Already achieved | In Progress | Planned for next 6 months | Planned for next 12-18 months | Interested in pursuing | Not planned | Not relevant | Contact Initials | Notes | Link to resource | | |
|-------|--|--|-----------|--|-------------|---------------------------|-------------------------------|------------------------|-------------|--------------|------------------|----------|-------------------|-------------------|-------------------|
| | | | | > STRATEGY | | | | | | | | | | Notes | Link to resource |
| | | | | + ADVANCED STRATEGY | | | | | | | | | | | |
| WATEI | Stormwater Management and Green Infr | Optimize the use of natural and built systems to manage stormwater | W24 | Encourage residents and businesses to adopt green infrastructure practices | | | | X | | | | | | | |
| | | | W24a | >Collaborate to provide rain barrels, plants and other resources to allow resident to capture and store rainwater | X | | | | | | | | | | |
| | | | W25 | Encourage residents and businesses to reduce flood risks on their property | X | | | | | | | | | | |
| | | | W25a | >Incentive overhead basement sewer conversion | | | | | X | | | | | | |
| | | | W25b | >Encourage property owners to disconnect downspouts from sewers and direct flow to landscaping | | | | | X | | | | | | |
| | | | W26 | Enhance natural features of stormwater detention and retention systems | X | | | | | | | | | | |
| | | | W27 | Collaborate to enhance wetlands for improved ecosystem services | X | | | | | | | | | DETENTION BASINS | |
| | | | W28 | Collaborate with regional and state agencies to sustainably manage stormwater | X | | | | | | | | | | |
| | | | W+29 | + Use USEPA Water Quality Scorecard to develop a systems approach to optimize stormwater | X | | | | | | | | | | Y |
| | | | W+30 | + Establish a stormwater utility funding mechanism | X | | | | | | | | | | Y |
| WATE | Policy | Enact policies to protect water resources | W31 | Conduct a water rate study to determine sustainable rate structure | X | | | | | | | 2021 | | | |
| | | | W32 | Adopt full-cost pricing policies for water service | | | | | X | | | | | Y | |
| | | | W33 | Amend code to require water efficiency and conservation in commercial and residential development | | | | X | | | | 2018 IRC | | Y | |
| | | | W34 | Incorporate conservation practices into new development guidelines and incentives | | | | X | | | | | | | |
| | | | W35 | Adopt a water conservation policy and/or plan inclusive of all customers and municipal operations | X | | | | | | | | | | Y |
| | | | W35a | >Enact and enforce regulation to control of wasteful water practices | X | | | | | | | | | | |
| | | | W35b | >Enact and enforce outdoor watering regulations responsive to drought conditions | X | | | | | | | | | | Y |
| | | | W35c | >Regulate or incentive water efficiency for customers managing large landscapes | | | | | | X | | | | | |
| | | | W36 | Update stormwater ordinance to integrate Illinois State Model Local Stormwater Ordinance | X | | | | | | | | | | Y |
| | | | W37 | Adopt codes that enable rainwater harvesting for non-potable uses | | | | | X | | | | | | |
| | | | W38 | Adopt a resolution supporting the Great Lakes and St. Lawrence River Basin Water Resources Compact | | | | | X | | | | | | |
| | | | W39 | Review and adopt codes to eliminate barriers to green infrastructure BMPs including cisterns, green roofs, bioswales, permeable paving | | | | | X | | | | | | |
| | | | W40 | Allow flexibility (off-site management, payment-in-lieu) to allow developments to meet stormwater management requirements sustainably | | | | | | X | | | | | |
| W41 | Enact codes that protect surface and groundwater from runoff and contamination | X | | | | | | | | | | | | | |
| WATER | Stewardship | Practice stewardship of water resources | W42 | Sustain supply of high-quality public water | X | | | | | | | | | | |
| | | | W43 | Ensure drinking and wastewater systems are operating efficiently | X | | | | | | | | | | |
| | | | W44 | Utilize treated effluent as a valuable water resource | | | | | X | | | | | | |
| | | | W45 | Participate in watershed planning and stewardship efforts | X | | | | | | | | | Y | |
| | | | W46 | Implement municipal recommendations from watershed plan | | | | | X | | | | | | |
| | | | W46 | Allow public access and encourage stewardship of community waterways | | | | | X | | | | | | |
| | | | W48 | Support regional and statewide water supply planning and stewardship | | | | | X | | | | | Y | |
| | | | W49 | Contribute local data on water supply, quality and operations to support state and regional stewardship | X | | | | | | | | | Y | |
| | | | W+50 | + Enact a water offset policy for water neutral community growth | | | | | X | | | | | Y | |
| WATER | Outreach | Engage the | W51 | Educate and support the community to conserve water | X | | | | | | | | Y | | |
| | | | W52 | Educate the community on the value of clean and safe drinking water | X | | | | | | | | | | |
| | | | W53 | Promote tap water over bottled water | X | | | | | | | | | Y | |
| | | | W54 | Educate the community on practices that reduce contamination of water resources | X | | | | | | | | | Y | |
| | | | W55 | Support private well-owners in water quality monitoring and stewardship | | | | | | | X | | | Y | |

| Category |  GOAL | OBJECTIVE | | Already achieved | In Progress | Planned for next 6 months | Planned for next 12-18 months | Interested in pursuing | Not planned | Not relevant | Contact Initials | Notes | Link to resource | |
|-------------------------|--|---------------------|--|------------------|-------------|---------------------------|-------------------------------|------------------------|-------------|--------------|------------------|-------|------------------|-------------------|
| | | > STRATEGY | | | | | | | | | | | | |
| | | + ADVANCED STRATEGY | | | | | | | | | | | | |
| Education and Community | Engage the community in water stewardship | W56 | Educate customers about public water supply and wastewater operations through media and events | | X | | | | | | | | | |
| | | W57 | Educate the community on benefits and practices of green infrastructure | | | | | X | | | | | | Y |
| | | W58 | Educate and support the community in preparing for and managing floods | | X | | | | | | | | | Y |
| | | W59 | Collaborate to teach water conservation and stewardship in schools | | | | | X | | | | | | |
| | | W60 | Collaborate to raise watershed awareness and foster stewardship | | | | | X | | | | | | |