

Civic Innovation Hub Recap

Fall 2023

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Introduction

Flooding occurs when houses, yards, or roadways are overrun by severe rains or melted snow, causing property damage, and making travel difficult. There are several reasons why flooding might happen including:

- The sewer system may be at capacity.
- Stormwater flow cannot be carried far enough along the channel due to a blockage.
- Poor upkeep of the surface drainage and sewage systems.

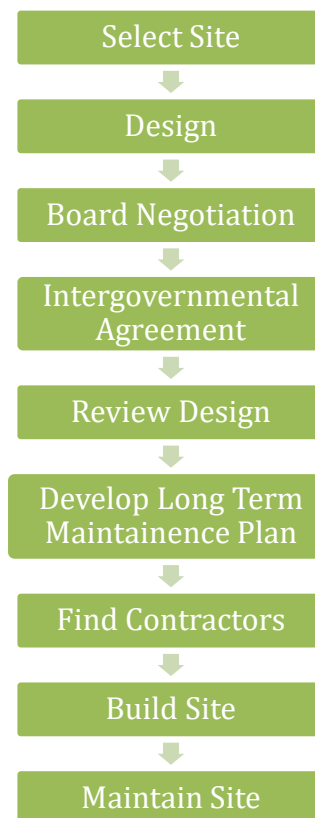
Green Stormwater Infrastructure:

Instead of delivering rainwater directly into the sewer, **green stormwater infrastructure (GSI)** manages stormwater by slowing it down, storing it, and soaking it into the earth. Two examples of GSI include:

- **Permeable Pavement:** allows runoff to soak through pavement and absorb into underground storage, where contaminants are filtered out.
- **Rain Gardens:** plant-covered areas that collect rainfall and let it permeate into the soil. Native plants in them provide stunning flower displays and draw in helpful pollinators.

Implementation Process

MWRD Green Infrastructure Partnership program



Intergovernmental Agreement:
A contract between two government organizations under certain terms and conditions to accomplish a shared objective. Collaboration between municipalities or government agencies allows for shared cost and responsibility.

Ecological Restoration: Mary Schmidt Community Sanctuary



Mary Schmidt Community Sanctuary site before and after construction, courtesy of the Metropolitan Water Reclamation District.

Ecological restoration refers to the process of supporting the recovery of a degraded, damaged, or destroyed ecosystem to its previous state before human construction. The Village of Alsip partnered with [Morton Arboretum](#) & [Metropolitan Water Reclamation District](#) (MWRD) to remove the parking lot an (impermeable surface) and add green stormwater infrastructure to reduce runoff into the Calumet-Saganashkee Channel. October 2021 marked the start of construction. After removing the pavement, a total of 650 cubic yards of imported topsoil were blended with over 1,000 tons of compost and air-dried **biosolids**. This resulted in the creation of a favorable environment for native plant and tree development. The Village of Alsip currently maintains the site with support.

Biosolids: solid organic materials recovered from sewage treatment processes and used as fertilizer for non-edible plants.

May 2022 saw the first tangible results of the efforts as the grass and trees started to grow. The enhanced stormwater management was evident right away. The location hosted workshops for the [Chicago Region Tree Initiative](#) and CNT's [Civic Innovation Hub](#). The program addressed site restoration ideas from the planning stage to plant selection and site upkeep.



Residents at the Mary Schmidt Community Sanctuary for the Civic Innovation Hub informational session.

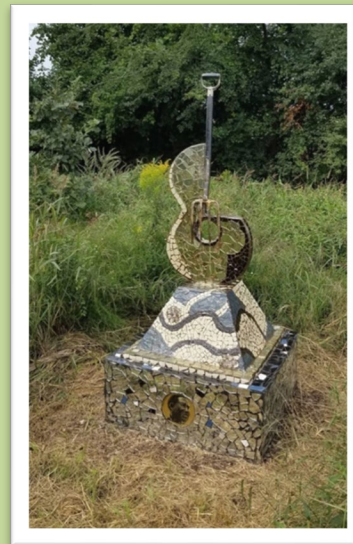
Maintenance



Upkeep is important to ensure the resilience and biodiversity of an ecosystem. To achieve the long-lasting shape and function that green infrastructure may offer, a thorough maintenance strategy is essential. Green infrastructure may need **weeding** and **watering** in the initial phases following installation until native plants take root. Regular weeding and monitoring will continue, but less frequently. Drains, traps, and curb cuts must all be maintained and kept free of trash, debris and sediment. Basins used to collect storm water must be inspected to determine what may be disrupting flow or infiltration of water. Another upkeep method used to restore larger ecosystems is known as **prescribed burns**. This refers to the carefully orchestrated use of fire to rehabilitate ecosystems that depend on fire. This recycles nutrients back to the soil; and promotes the growth of trees, wildflowers, and other plants.

Maintenance can be tricky without consistent funding and training. Many workers are used to “mow and blow” work, which requires less careful observation of the site.

Shared service agreements allow for cooperation between agencies to ensure site maintenance, helping to reduce costs for the landowners.



Public Art Installation at the Mary Schmidt Community Sanctuary

Some examples of organizations in the Chicagoland area that combine the need for green infrastructure maintenance and workforce development include:

- [OAI Inc.](#)
OAI's [High Bridge](#) program helps to train and connect green infrastructure businesses with high quality workers.
- [Greencorps Chicago](#)
They promote environmental stewardship and improve the quality of life in Chicago by creating, preserving, and restoring safe, healthy, and sustainable natural and public areas via on-the-job training for those who face employment challenges.

Notes

- ❖ Metropolitan Water Reclamation District, "Green Infrastructure Partnership Program." <https://mwrđ.org/green-infrastructure-partnership-program>
- ❖ Morton Arboretum, "Home Page." <https://mortonarb.org>
- ❖ Metropolitan Water Reclamation District, "Home Page." <https://mwrđ.org>
- ❖ Chicago Region Tree Initiative, "Home Page." <https://chicagorti.org>
- ❖ Center For Neighborhood Technology, "Civic Innovation Hub."
<https://cnt.org/blog/with-new-civic-innovation-hub-south-suburban-leaders-focus-on-technology-of-getting-things>
- ❖ OAI Inc. "Home Page." <https://oaiinc.org>
- ❖ OAI Inc. "High Bridge." <https://oaiinc.org/high-bridge/>
- ❖ Greencorps Chicago. "Home Page." <https://greencorpschicago.org/>