

>>> AUGUST NEWSLETTER <<<

STORMWATER INNOVATION CENTER

Monitoring | Training | Community Engagement | Collaboration



Stormwater Innovation Center

WHAT'S NEW?

>>> RAINSNAP AMBASSADORS

We are excited to introduce RainSnap Ambassadors! This new initiative offers a step up from the standard RainSnap volunteer role, as they will help develop and manage the RainSnap community. To learn more, please email Rebecca Reeves at rreeves@asri.org.



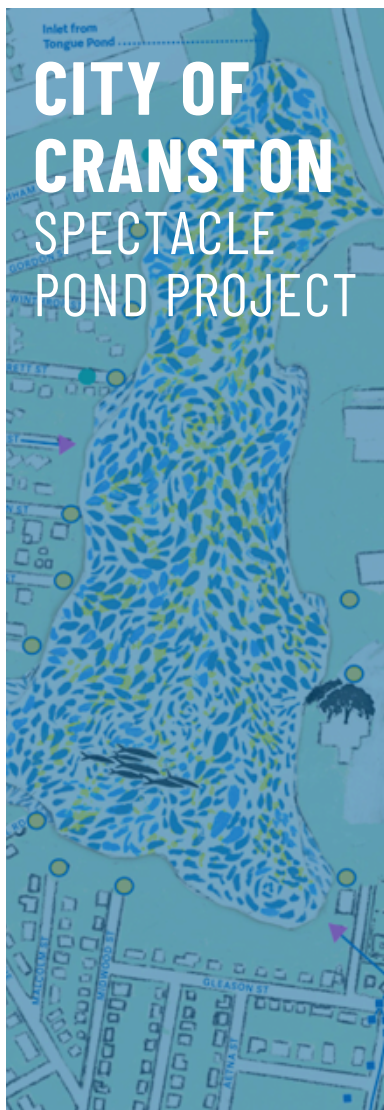
WEBSITE UPDATES & CHANGES <<<

The Stormwater Innovation Center website is getting a fresh new look! If you have any questions or need assistance during this transition, don't hesitate to reach out to us.





PROJECT UPDATES



At the Stormwater Innovation Center, we are committed to supporting water quality improvement in Spectacle Pond through education and outreach in collaboration with the City of Cranston. Our focus is on engaging the neighborhoods around the pond, promoting the City's efforts, and encouraging community involvement.

MAIN OUTREACH OBJECTIVES



Understanding Water Flow: Educating residents on how stormwater runoff from their roofs and driveways negatively affects water quality and eventually flows into Spectacle Pond.



Community Actions: Sharing practical steps residents can take to improve water quality from home. We've also been tabling at local farmer's markets, providing information and resources directly to the community.

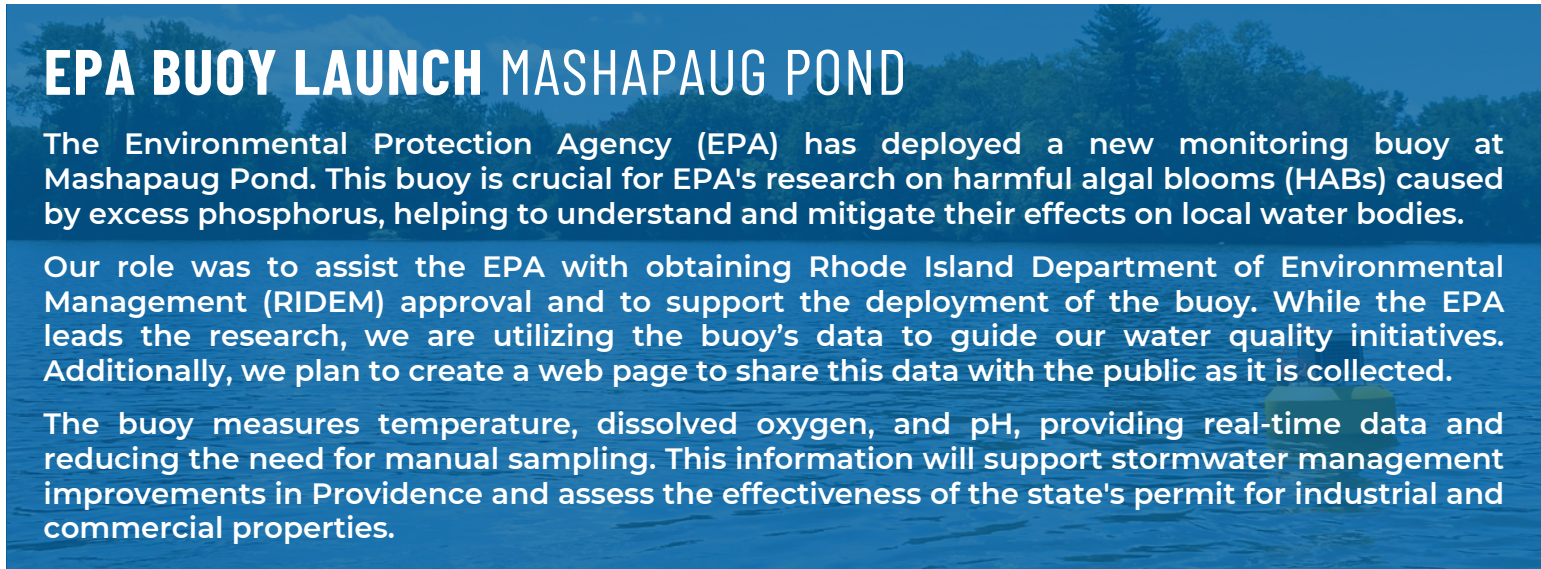


Showcasing the City's Initiatives: Highlighting the structural and non-structural measures implemented by the City of Cranston, including an underground infiltration basin at the easterly end of Pomham Street and leaching/drywell systems.



Phosphorus Concerns: Raising awareness about the issues related to excess phosphorus, which can lead to harmful algal blooms impacting aquatic life and human health.

We are dedicated to keeping the community informed as we work together to preserve and restore Spectacle Pond. For a comprehensive overview of the Spectacle Pond Stormwater Management Project, including detailed maps and expert insights, please visit: <https://www.cranstonri.gov/spectacle-pond-stormwater-management.aspx>



EPA BUOY LAUNCH MASHAPAUG POND

The Environmental Protection Agency (EPA) has deployed a new monitoring buoy at Mashapaug Pond. This buoy is crucial for EPA's research on harmful algal blooms (HABs) caused by excess phosphorus, helping to understand and mitigate their effects on local water bodies.

Our role was to assist the EPA with obtaining Rhode Island Department of Environmental Management (RIDEM) approval and to support the deployment of the buoy. While the EPA leads the research, we are utilizing the buoy's data to guide our water quality initiatives. Additionally, we plan to create a web page to share this data with the public as it is collected.

The buoy measures temperature, dissolved oxygen, and pH, providing real-time data and reducing the need for manual sampling. This information will support stormwater management improvements in Providence and assess the effectiveness of the state's permit for industrial and commercial properties.

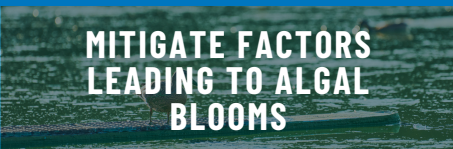
PROJECT UPDATES

ROGER WILLIAMS PARK ZOO STORMWATER MANAGEMENT PLAN

The Stormwater Innovation Center, in collaboration with Horsley Witten, the Parks Department, and the Department of Public Works, is pleased to announce the development of a comprehensive Stormwater Master Plan for the Roger Williams Park Zoo. Aligned with the Zoo's mission of conservation and environmental stewardship, this plan is part of their ongoing efforts to implement green practices that conserve species and habitats. This initiative addresses water quality within the Zoo's wetland and Polo Lake, part of the larger Roger Williams Park Ponds system, ensuring the health of these vital ecosystems.



PROJECT & PLAN GOALS



As the plan progresses, the Stormwater Innovation Center will continue to contribute our area of expertise to support the Roger Williams Park Zoo's goals, including collaborating with education staff to integrate the plan's findings into their excellent education programs. Stay tuned for updates as we work together to create a cleaner, healthier environment for the Roger Williams Park Zoo and the broader community!

POLLINATOR PATHWAY PROJECT

We're partnering with Prickly Ed's Cactus Patch, the Barrington Land Conservation Trust, and students from Barrington's middle and high schools to install native plants at the middle school campus. This effort is part of the "Pollinator Pathway" project, spearheaded by the BLCT and Barrington Farm School. With our backing and Prickly Ed's supplying the plants, we look forward to a successful planting event on Tuesday, September 10. The event is open to the public, and we hope to see you there!



COMMUNITY



FAREWELL FIONA!

We were so grateful to have Fiona Harrington, our intern through the Institute at Brown for Environment and Society, work with us this summer. Fiona played a key role in our research efforts, focusing on soil infiltration rates and volume capacity within green infrastructure, utilizing tools like the infiltrometer at stormwater sites in Roger Williams Park. She also coordinated with Watershed Watch volunteers and contributed to the collaborative cyanobacteria monitoring team. Although her internship has come to a close, we're excited to see where her journey takes her next and wish her all the best!

TOURS, TOURS, TOURS

This month we've taken the students of New Urban Arts, representatives from the Massachusetts Statewide Municipal Stormwater Coalition, and the Nature Conservancy of RI for tours around Roger Williams Park of innovative stormwater infrastructure (also known as Stormwater BMPs!). These tours have inspired students' art and organizations' future projects surrounding stormwater innovation. We look forward to many more tours in the future as we continue to drive our mission forward!



BECOME A RAINSNAP VOLUNTEER

New sites have been added and we are still seeking volunteers!

- ✔ Take Videos During Rain Events
- ✔ Help Monitor Green Infrastructure
- ✔ Inform Decision Makers
- ✔ Help Keep Our Water Clean
- ✔ Quick & Easy Training Process
- ✔ Need An Umbrella And Smartphone

Register today at <https://rainsnap.org/join-rainsnap/>

▶▶▶ HOT TOPICS ◀◀◀

STORMWATER FROM HOME

As part of our ongoing efforts to enhance water quality in collaboration with the City of Cranston, we're pleased to share some practical steps you can take at home to support these initiatives.

REDUCE FERTILIZER USE

Fertilizers high in phosphorus can lead to nutrient runoff that fuels harmful algal blooms. Choose low-phosphorus or phosphorus-free fertilizers, and apply them only as needed to minimize runoff.

SWITCH TO NATIVE PLANTS

Replacing traditional lawns with native plants can enhance local biodiversity and improve water absorption. Consider planting a rain garden with native species to capture and filter stormwater effectively.

INSTALL RAIN BARRELS

Rain barrels capture runoff from downspouts, allowing you to use the water for irrigation while reducing stormwater runoff. This helps ease the burden on local drainage systems and supports water conservation.

MINIMIZE IMPERVIOUS SURFACES

Replace impervious surfaces like concrete with permeable options such as gravel or permeable pavers. These surfaces allow rainwater to seep into the ground, reducing runoff and promoting groundwater recharge.

PROPERLY DISPOSE OF PET WASTE

Pet waste contributes to nutrient pollution. Clean up after your pets and dispose of waste properly to prevent it from washing into storm drains and impacting water quality.

REDIRECT DOWNSPOUTS

Ensure downspouts direct water away from hard surfaces and toward garden areas where it can be absorbed. This reduces the amount of runoff entering storm drains.

EMBRACE THE LEAVES

Instead of raking leaves to the curb, use them as natural mulch in your garden. Decomposing leaves enrich the soil and reduce the need for chemical fertilizers!

By adopting these practices, you play a vital role in supporting our water quality improvement efforts. For more information and resources on stormwater management, visit our website or reach out to us directly.

HOW TO BUILD A RAIN GARDEN 10-STEP GUIDE

1. Step outside during a storm and watch where water flows from downspouts.
2. Choose a flat area near a downspout that sends water away from your house. Keep it at least 10 feet from your home.
3. Measure the part of your roof that drains into the downspout. Multiply length by width to get the area.
4. Decide how much rain to catch. (Aim for 1-2 inches of rainfall)

5. Multiply roof area by rainfall depth to estimate water collection. →

ROOF AREA	RAINFALL
1,250 sq ft	2 in (0.167 ft)
~208 cubic ft of water	

6. Rain garden depth should be between 4-8 inches. [CLICK HERE](#) for help!

7. Test your soil with percolation test.

Dig a 12-inch square hole, fill it with water, and let it sit overnight

Fill it again in the morning, and it should drain within 24 hrs

8. Visit DigSafe.com before you start to avoid underground utilities.

9. Mark & Dig!

Use spray paint to outline your garden area

Remove the grass and soil, and shape the garden as planned

Use stakes, string, and a level to ensure the garden slopes away from your home

Use a mix of soil, sand, and compost

10. Enjoy your new rain garden!

Stormwater runoff can carry pollutants such as oil, pet waste, and fertilizer directly into our rivers and lakes. A rain garden in your yard can capture and filter stormwater from a driveway or roof, improving water quality before it enters our waterways.

UPCOMING EVENTS



RAIN HARVEST FESTIVAL SEPTEMBER 29TH, 11 AM - 2 PM

Mark your calendars for the 2024 Rain Harvest Festival this September in Roger Williams Park featuring live music, environmental activities, free food, and much more!
www.stormwaterinnovation.org/rainharvestfestival

STORMWATER INNOVATION EXPO OCTOBER 16TH, 8:30 AM - 3:30 PM

Join the Rhode Island Green Infrastructure Coalition and the Stormwater Innovation Center for the Sixth Annual Stormwater Innovation Expo. This is a great opportunity to discover new and innovative products and services being used in the construction and maintenance of green stormwater infrastructure across Rhode Island and the industry. General admission tickets include lunch and a light breakfast. Sponsorships and exhibition opportunities are available, contact gerritt@mindspring.com for information. Register [HERE!](#)



STAY IN TOUCH

FOLLOW & VISIT

-  [@stormwaterinnovationcenter](https://www.instagram.com/stormwaterinnovationcenter)
-  [Stormwater Innovation Center](https://www.facebook.com/StormwaterInnovationCenter)
-  stormwaterinnovation.org

INTERESTED IN VOLUNTEERING?

Contact reeves@asri.org for more information!



**Stormwater
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