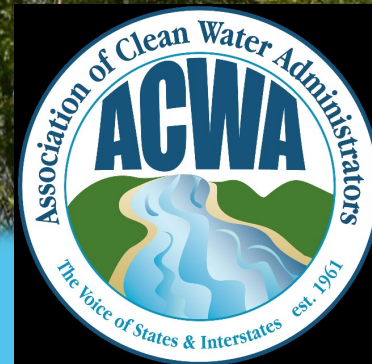


Mashapaug Watershed Residual Designation Authority Petition Update

2024 National Stormwater Roundtable
EPA Headquarters, Washington, D.C.
Thursday, October 24, 2024





RIPDES Municipal and Industrial Stormwater Program

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DEM
RHODE ISLAND

RIDEM's Residual Designation Authority

- The Clean Water Act (CWA) defines the specific construction, industrial, and municipal stormwater sources that must be authorized by a RIPDES Permit.
- The CWA also recognizes that other sources may need to be regulated on a case-by-case basis.
- RIDEM may use its “Residual Designation” authority under 40 CFR 122.26(a)(9)(i)(C) and (D) to require RIPDES Permits for other stormwater discharges or category of discharges on a case-by-case basis when it determines that:
 - the discharges contribute to a violation of water quality standards
 - are a significant contributor of pollutants to state protected surface waters
 - controls are needed based on wasteload allocations that are part of TMDLs that address the pollutants of concern
- Residual Designation can also be requested by petition.

RDA Petitions Submitted:

November 19, 2018 - CLF

January 30, 2024 - RIAG

- Long standing water quality impairments in the Mashapaug Watershed
- Current gaps in RIPDES stormwater permitting
- Address legacy pollution in an Environmental Justice Focus Area
- Implement green infrastructure to reduce the negative affects of climate change and flooding
- Address properties not currently regulated that include ≥ 1 acre of impervious area

Mashapaug Watershed - Impervious Area



10/2/2024

1:23,373
0 0.15 0.3 0.6 mi
0 0.23 0.45 0.9 km
University of Rhode Island, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau.

Mashapaug Watershed Facts

1.8 square miles in size

Includes three (3) Freshwater Ponds (Tongue, Spectacle, and Mashapaug)

Mashapaug Pond is the largest freshwater body in the City of Providence

Residential, commercial, and transportation uses occupy 83% of the watershed

Impervious surfaces cover a total of 61%


TOXIC CYANOBACTERIA ARE PRESENT



WARNING!

ALGAE ON THIS LAKE IS TOXIC.
THE LAKE IS UNSAFE FOR PEOPLE AND ANIMALS.

- DO NOT swim or play in this water.
- DO NOT drink this water.
- Keep pets and livestock away from this water.
- DO NOT eat fish from this water.
- Stay away from algae when boating.

Call your doctor or veterinarian if you or your animals have a sudden, unexplained illness or rash.





Rhode Island Department of Health
 Health Information Line: 401-222-5960 / RI Relay 711

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Mashapaug Pond and Spectacle Pond Impairments		
Use Description	Use Attainment Status	Cause/Impairment
Fish and Wildlife Habitat	Not Supporting	Chlorophyll-A (Excess Algal Growth)
Fish and Wildlife Habitat	Not Supporting	Dissolved Oxygen
Fish and Wildlife Habitat	Not Supporting	Phosphorus, Total
Fish Consumption	Not Supporting	PCBs in Fish Tissue
Primary Contact Recreation	Not Supporting	Fecal Coliform
Secondary Contact Recreation	Not Supporting	Fecal Coliform



Water Pollution
La Contaminación del Agua

Polluting the Environment
Mashapaug Pond's unusually green water is a clear sign of the pond's sickness. Storm water runoff causes algae blooms in urban, fresh water ponds by picking up pet waste and fertilizers from lawns and landscaping and carrying them into storm drains that empty into urban ponds, promoting excessive growth of cyanobacteria.

Contaminación del medio ambiente
El agua inusualmente verde de Mashapaug Pond es una clara señal de la enfermedad del estanque. El escurrimiento de aguas pluviales provoca la proliferación de algas en estanques urbanos de agua dulce por medio de la recolección de los desechos de animales domésticos y fertilizantes de césped, llevándolos a los desagües que se vacían en estanques urbanos, promoviendo el crecimiento excesivo de cianobacterias.

¿Qué es una floración de cianobacterias?
Los cuerpos de agua ricos en nutrientes pueden apoyar el crecimiento rápido de cianobacterias. Un cuerpo de agua "claro" puede volverse espeso con algas verde, azul-verde o marrón rojizo en sólo unos días. Las cianobacterias pueden crear condiciones tóxicas para los seres humanos, los animales y las plantas.

What is a cyanobacteria bloom?
Nutrient-rich bodies of water may support rapid growth of cyanobacteria. A "clear" body of water can become thick with green, blue-green, or reddish-brown algae in just a few days. Cyanobacteria can create toxic conditions for humans, animals, and plants.

WARNING KEEP OUT ENVIRONMENTAL CLEAN UP IN PROGRESS

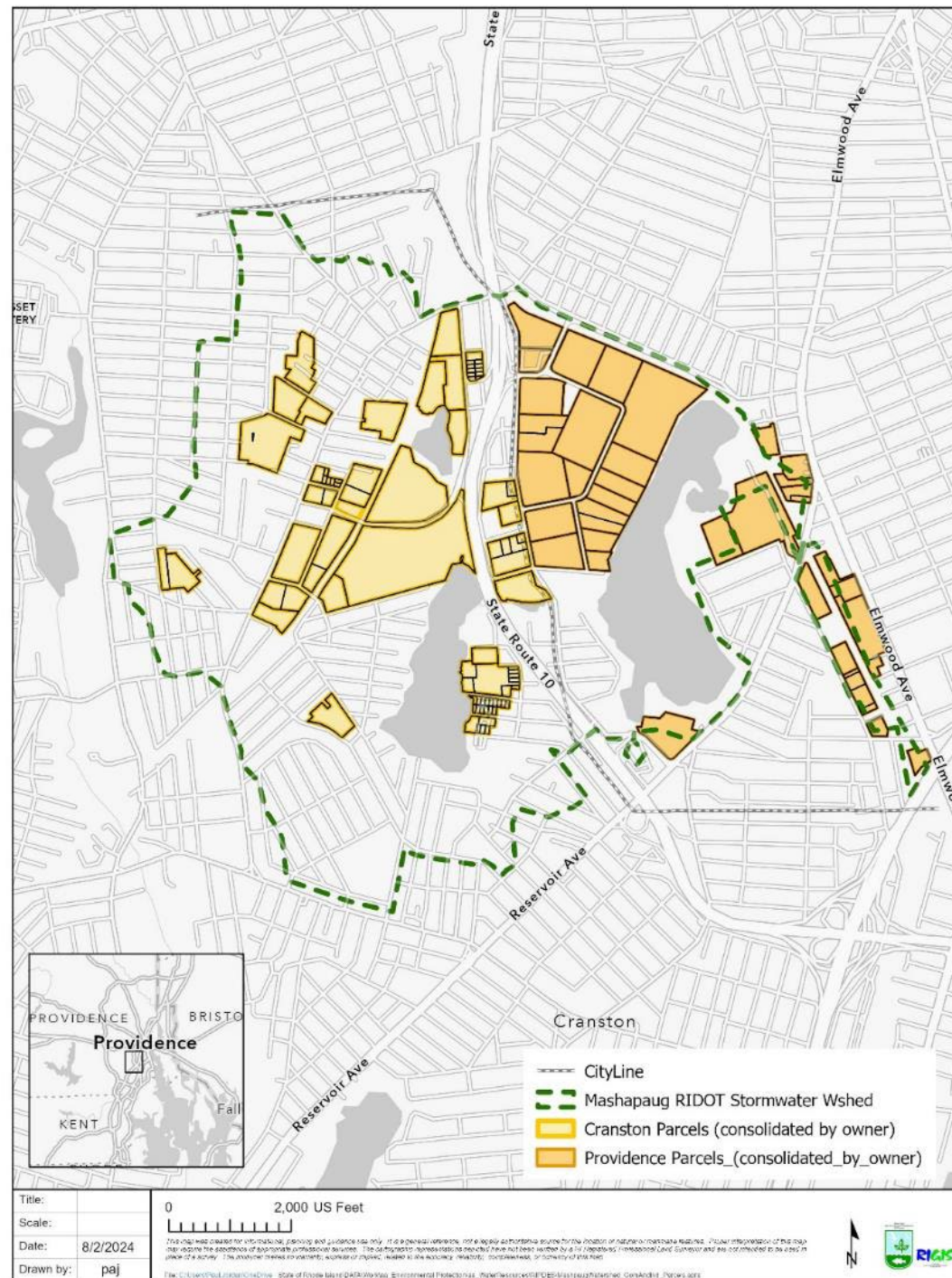
ATENCIÓN PROHIBIDO EL PASO LIMPIEZA AMBIENTAL EN PROCESO

Designed by Alvarez Class of 2018

05.21.2024 14:48

RIDEM formally responded to the Mashapaug Watershed RDA Petition on **April 30, 2024**, by committing to issue a **Mashapaug General Permit** to regulate previously unpermitted stormwater discharges into Mashapaug, Spectacle, and Tongue Ponds in the Cities of Cranston and Providence, RI

Parcels with One or More Acres of Impervious Cover within the Mashapaug Watershed will be required to address stormwater pollution through an adaptive management approach.



Mashapaug General Permit Next Steps

- Develop Dedicated Mashapaug General Permit Website
- Preliminary Stakeholder Engagement Process Planned for Late Fall 2024
- Formal Public Notice Process to Follow Informal Stakeholder Process
- Target Permit Issuance Schedule:
 - Issue Final Permit in the 1st Quarter of 2025
 - Effective mid-2025
 - Property Owners will be required to apply for permit coverage thirty (30) days after the effective date



Property Owner Guide to Managing Stormwater

Property Owner Guide to Managing Stormwater: **Need**

The Guide strives to provide guidance to property owners in plain spoken language to describe good housekeeping practices and site improvements that can make a difference by reducing runoff volume and pollution leaving their site.



Stepping Through the Guide...

SEPTEMBER 2024

Property Owner Guide to Managing Stormwater

What is this guide?
This guide explains how activities on individual properties can impact surrounding water resources and simple steps that can be taken to manage stormwater so as to minimize these off-site impacts.

Who is it for?
This guide is a resource for property owners and managers in New England or any individuals responsible for managing stormwater on larger, developed areas in New England.

Why should you read this?
Readers will learn simple steps to reduce stormwater impacts affecting water quality and flooding. Additionally, your property may have regulatory obligations.

What does it include?

- ~ Background and education on stormwater, its impacts, and land development's influence on stormwater
- ~ Approaches to understand how developments impact stormwater
- ~ Guidance on simple, cost-effective measures that can be taken to address water quality and quantity impacts

DEVELOPED BY
VHB and The SNEP Network

TECHNICAL SUPPORT: The University of New Hampshire Stormwater Center, Rhode Island Stormwater Innovation Center, Southeast New England Program (SNEP), Rhode Island Department of Environmental Management, Elizabeth Scott Consulting

FINANCIAL SUPPORT: The SNEP Network



Bioretention Basin at Providence College
Image: Rhode Island Stormwater Innovation Center

Access the guide
https://snepnetwork.org/wp-content/uploads/2024/09/SNEP_PropertyOwnerGuide_final.pdf

Questions?

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