

GREEN ROOF

The green roof installation at the new, larger elephant barn at the Rosamond Gifford Zoo was one effort to capture stormwater at the zoo. This vegetative roof absorbs stormwater and prevents **114,000 gallons** of runoff from entering the sewer annually.

The elephant exhibit redevelopment included construction of the elephant barn and new spectator pavilion. In addition, the project included refurbishing of an existing four-acre elephant yard with rain gardens and open green space applications in the footprint.



WHAT YOU CAN DO

Save the Rain is Onondaga County's program to improve the environment and help Onondaga Lake by reducing the amount of stormwater runoff that flows directly into our sewer system.

You can Save the Rain at home in a variety of ways, including:

Rain barrels can be used to collect water from rooftops via the gutter and downspout, and can be used for any outdoor needs,

A rain garden is a shallow dug-out area that is landscaped with native plants. Rain gardens are designed to collect stormwater runoff.

Our **Tree Planting Program** has developed a robust tree planting strategy for neighborhoods throughout the City of Syracuse. If you or someone you know is interested in having a tree planted, please contact :

Cornell Cooperative Extension of Onondaga
(315) 424-9485 ext. 228; email yz748@cornell.edu.

Additionally, you can help reduce pollution in stormwater runoff by cleaning up after pets, as well as limiting the amount of pesticides used, and cleaning up any oil leaks from your vehicle.



GREEN INFRASTRUCTURE AT THE ROSAMOND GIFFORD ZOO



WETLAND

This project consisted of the installation of a new stormwater wetland adjacent to the Penguin Exhibit. An open stream bed was constructed to allow flow from the stormwater wetland into the swan and duck ponds. Once the flow reaches the duck pond, it returns to the storm-



water wetland via a pumping system.

This recirculation system greatly reduces the use of potable water at the Zoo, while simplifying and reducing the frequency of maintenance within the duck pond.



Joanne M. Mahoney
County Executive

Save the Rain
www.savetherain.us



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PARKING LOT



The green renovation of the Rosamond Gifford Zoo parking lots contributes significantly to the Combined Sewer Overflow (CSO) reduction efforts of Onondaga County. The parking lots have generated a tremendous amount of runoff in the past, a problem that will be alleviated with the implementation of several new green infrastructure features.

The green technologies incorporated in the design are areas of **porous pavement** within the parking lots, and multiple large subsurface **infiltration beds**. Working in combination with bioretention areas vegetated with native plants, the green infrastructure technologies of this project capture approximately **4.2 million gallons** of stormwater annually, making it one of the largest projects to date in the Save the Rain program.

CISTERN

A stormwater cistern was constructed adjacent to the Bear Exhibit. The cistern receives water from the exhibit itself, along with adjacent pathways.



The water in the cistern is pumped into the exhibit in a newly constructed



stream bed between two existing ponds.

The stormwater flows continuously within the recirculation, reducing the Zoo's use of potable water.

To learn more about the Rosamond Gifford Zoo improvements and other Save the Rain projects and events, check out our website at www.savetherain.us



PRIMATE EXHIBIT

This project consisted of flexible porous pavement in the courtyard area and rain gardens installed along the edge of the primate exhibit.

These technologies not only enhance the physical appearance of the site, but provide significant environmental benefits, capturing approximately **863,000 gallons** of stormwater annually.

Rain barrels and cisterns were also installed in the courtyard to capture runoff from the rooftops, as a part of the Primate Exhibit project.



Rain Barrels and Cisterns to harvest runoff from rooftops
Porous Pavement in Courtyard
Rain Garden along Primate Exhibit



RAIN GARDEN

Three rain gardens were planted with various species of plants to beautify the zoo entrance, promoting further pedestrian traffic in this area. At the same time, these plants allow captured rainwater to be infiltrated and evaporated, preventing it from entering the combined sewer system.

The rain gardens are connected hydraulically, allowing overflows from each



rain garden to be directed to the next before connecting to the combined sewer system for maximum stormwater absorption.

