

# DIRECT ASSISTANCE PROGRAM



## CASE STUDY

## New York State Park Reduces Mower Washwater and Washwater Recovery Usage

### Challenge

Due to the vast grassy areas located within this park, including golf courses, grass-cutting is required during the warmer months. Cleaning of the mowing equipment results in a significant amount of waste washwater that ends up in a nearby lake. In an effort to reduce its environmental footprint, the State Park wanted to better understand opportunities to reduce or eliminate discharge of wastewater to the lake through process water reduction and recovery strategies.

### Solution

The New York State Pollution Prevention Institute (NYSP21) worked with the park to determine cost-effective wastewater management opportunities that include water reduction and recycling approaches. The key tasks included data gathering to establish a baseline for mower washing, evaluation of reduction and recovery options, and an economic analysis that includes a bill of materials of required equipment components.

### Results

The work performed by NYSP21 led to the following key findings that will help the park install a washwater recycling system in the future.

- Source reduction improvement options were identified which included prewash debris removal with air blowers, switching to a thinner hose, and using a low flow hose nozzle when cleaning mowers
- After implementation of the source reduction options, daily washwater use decreased on average 779 gal/day (84% reduction), saving approximately \$6.94/day in water purchase costs or over \$1,200/year (6 month season)
- A process to collect and reuse the washwater was designed based on expected future water use which includes an increase in equipment cleaning due to plans to expand irrigation around the park
- Implementation of the recycling system will result in greater than 95% reductions in water use and wastewater discharge

### CHALLENGE

- The park wanted to better understand opportunities to reduce or eliminate discharge of wastewater to Rockland Lake through process water reduction and recovery strategies

### SOLUTION

- NYSP21 evaluated and identified cost-effective wastewater management opportunities that include water reduction and recycling approaches

### RESULTS

- NYSP21 identified several key findings that will help the park install a washwater recycling system in the future

## NYSP21 PARTNERS



New York Manufacturing Extension Partnership

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