

STUARY ENHANCEMENT PROGRAM

ALLOWAY CREEK WATERSHED SITE

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Overview

The EEP began restoration efforts in 1996 at the Alloway Creek Watershed Phragmitesdominated Restoration Wetland located in Elsinboro and Lower Alloways Creek Townships, Salem County, New Jersey. The restoration area encompasses 1,601 acres of the 3,096-acre site. The site is subject to tidal influence from the Delaware Alloway River and Creek. Wetland enhancement and restoration efforts were completed in 1999. Restoration has transformed more than 800 acres from Phragmites vegetation to desirable plant species.



Goals

The goal of enhancement and restoration efforts for the site were to:

- Control / eliminate the invasive plant, Phragmites
- Allow Spartina spp. and other desirable marsh plants to re-vegetate
- Preserve wetlands and upland buffer
- Expand spawning and nursery habitat for aquatic species

Actions Taken

The EEP took the following actions to achieve the enhancement and restoration goals for the site:

- Utilized targeted aerial, ground and boat glyphosate-based herbicide treatments to control *Phragmites* and allow for *Spartina* spp. re-vegetation
- Graded remnant perimeter dikes



August 2017



Studied 111 test areas to determine relative effectiveness of various treatments for *Phragmites* control / elimination

Accomplishments

As a result of actions taken by the EEP, the following has been accomplished:

- 1,601 acres of aquatic habitat has been restored in the Delaware Estuary
- More than 800 acres of *Phragmites*-dominated wetland has been replaced with desirable native vegetation



Other Enhancements

The EEP also completed a number of additional enhancements to improve and enhance environmental education, public access and long-term use of the site, including:

- Observation platform and tower
- Wildlife viewing blind
- Boardwalk to beach
- Two nature trails
- Four parking areas

Continuing Activities

As part of the long-term commitment to the restoration of this site, the EEP continues to:

- Monitor biological communities
- Monitor vegetation
- Control Phragmites

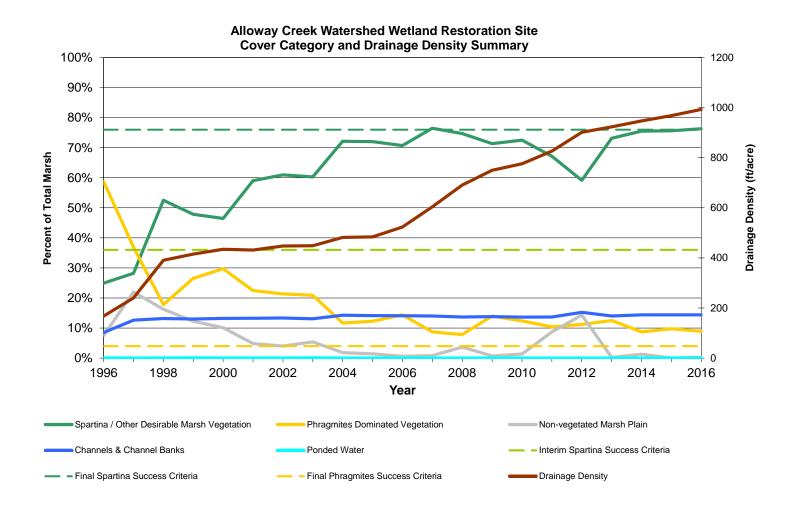


2 August 2017



Alloway Creek Watershed Wetland Restoration Site Vegetative Cover Summary Chart

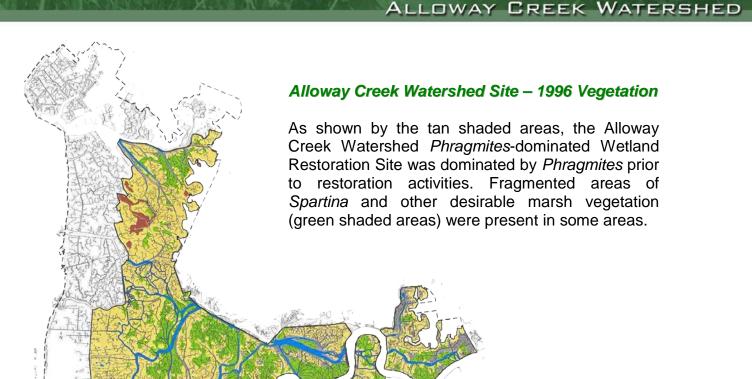
Prior to restoration activities, *Phragmites* (yellow line) dominated nearly 60% of the Alloway Creek Watershed *Phragmites*-dominated Wetland Restoration Site. Herbicide applications and removal of dead culms resulted in a rapid decline in *Phragmites*. As the *Phragmites* declines and the drainage improved, *Spartina* (green line) re-vegetated the area. The red line (linear feet of channel per acre) indicates the increased aquatic habitat at this site.





3 August 2017





Alloway Creek Watershed Site – 2016 Vegetation

After implementation of *Phragmites* controls, *Phragmites* coverage (tan shaded areas) substantially declined, drainage improved and *Spartina* (green shaded areas) re-vegetated the site.

