

# Welcome to the University of Florida's Stormwater Ecological Enhancement Project (SEEP)

## What is SEEP?

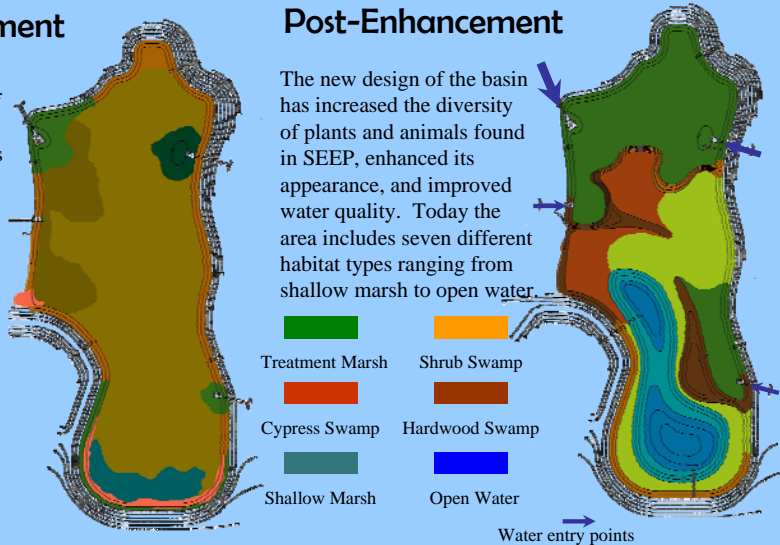
SEEP is the Stormwater Ecological Enhancement Project. SEEP was created in 1998 by enhancing the existing stormwater basin. The goal of SEEP was to develop a stormwater retention basin that improves wildlife habitat, enhances water quality, and provides an area for research and education.

This project has established a variety of fresh water habitats, including a water-treatment marsh, a hardwood swamp, a shrub swamp, a cypress swamp, a tree island, herbaceous marshes, and pools of open water.

## Life in the SEEP... a man-made wetland.

### Pre-Enhancement

The original design of the basin was a flat pool with small slopes on three sides. The original basin was dominated by cattails (the light brown color), had little diversity in wildlife habitat, and was aesthetically unappealing.



### Post-Enhancement

The new design of the basin has increased the diversity of plants and animals found in SEEP, enhanced its appearance, and improved water quality. Today the area includes seven different habitat types ranging from shallow marsh to open water.



Water entry points

## Shrub Swamp

After water has been filtered in the treatment marsh, it is slowly released into this area. The goal of the shrub swamp is to slow the flow of water. The more time water has to go through treatment, the better the water quality will be.



## Cypress Swamp

Water flows into this area after it has received initial treatment. This area of SEEP is dominated by a stand of cypress trees. These long lived trees are native to the swamps of Florida and provide valuable habitat for many animals. While on the boardwalk, see how many cypress trees you can identify.

## Hardwood Swamp

The hardwood swamp contains a mix of trees, including bald cypress, red maple and loblolly pine. This habitat is important area to a variety of small birds including woodpeckers. Listen carefully, what kinds of birds can you hear?



## Shallow Marsh

Prior to the reshaping of SEEP, the pond was dominated by this habitat. As a result, vegetative diversity was limited, and most of the basin was covered in cattails. The redesign created new habitats, and SEEP became suitable for many more species of wetland plants. The remaining shallow marsh is the last stop for water before it collects as a large open water area in the deepest part of the basin.



## Open Water

To create this habitat, two depressions were dug at the southeastern end of the basin. This deep water is home to a variety of plants and animals. As the pools expand and contract during wet and dry periods, the birds are sometimes ducks swimming in the open water, sometimes masses of wading birds feeding in the shallows, and sometimes both!



## Treatment Marsh

The first stop for water inside SEEP is the large treatment marsh on the northern side of the wetland. Of the water that enters SEEP, 80% flows into this area. The marsh here provides the first phase of treatment for stormwater. Its vegetation helps to remove contaminants and pollution and to improve water quality.

