III. Project History: Myrick Pond Mitigation Site

Winter 2004	Site Planted
September 2005	Stream Construction Completed
December 2006	Site Replanted
July 2007	Vegetation Monitoring (1 Year)
April 2008	Beavers Removed and Areas Replanted
July 2008	Vegetation Monitoring (2 Year)
June 2009	Vegetation Monitoring (3 Year)

3.0 VEGETATION: MYRICK POND MITIGATION SITE (YEAR 3 MONITORING)

3.1 Success Criteria

Success Criteria have been established to verify that the wetland mitigation areas support vegetation necessary for a jurisdictional determination. Specifically for bottomland hardwood areas, a minimum mean density of 320 trees/acre must be surviving for 3 years after initial planting. The required survival criterion will decrease by 10 percent per year after the third year of vegetation monitoring (i.e., for an expected 290 stems per acre for year 4 and 260 stems per acres for year 5).

3.2 Description of Species

The following tree species were planted in the Wetland Restoration Area:

Salix nigra, Black Willow

Cornus amomum, Silky Dogwood

Alnus serrulata, Tag Alder

Liriodendron tulipifera, Yellow Poplar

Platanus occidentalis, Sycamore

Quercus nigra, Water Oak

Fraxinus pennsylvanica, Green Ash

3.3 Results of Vegetation Monitoring

Plot #	Black Willow	Silky Dogwood	Tag Alder	Yellow Poplar	Sycamore	Water Oak	Green Ash	Total (3 year)	Total (at planting)	Density (Trees/Acre
1	3		1	10	8		8	30	37	551
2	1	1			23			25	34	500
3	2	2			25	3	1	33	40	561
Average Density (Trees/Acre)										537

Site Notes: Beaver activity continues to be an ongoing issue at the Myrick Pond Site. NCDOT is continually working with USDA beaver trappers to minimize the beaver activity on site. Prior to the 2009 vegetation monitoring, Vegetation Plot #2 had been inundated with water due to beaver activity. Other species noted: *Juncus* sp., red maple, goldenrod, cattail, tearthumb, cut grass, sedge, and various grasses. All of the vegetation plots were noted as having thick competition from herbaceous species.

3.4 Conclusions

There were 3 vegetation-monitoring plots established throughout the 2.45 acre planting area. The 2009 vegetation monitoring of the site revealed an average tree density of 537 trees per acre, which is, well above the minimum success criteria of 320 trees per acre for year 3. NCDOT will continue to monitor vegetation at the Myrick Pond Mitigation Site.

Myrick Pond

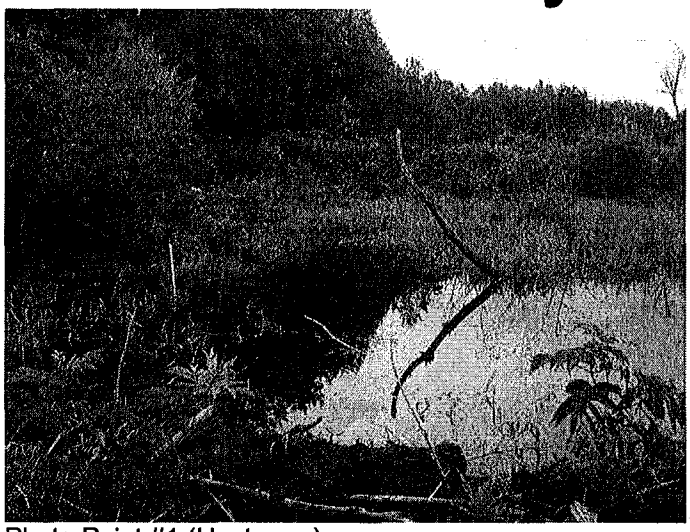


Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

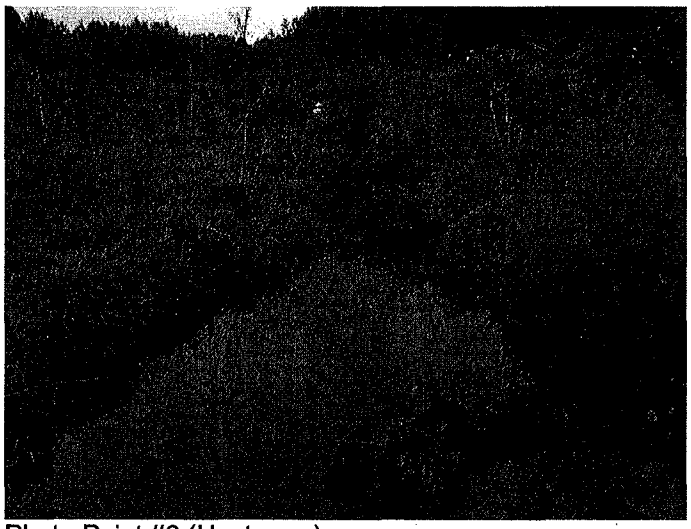


Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

June 2009

Myrick Pond

Photo Point #4 (Upstream)

Photo Point #4 (Downstream)

Photo Point #5 (Upstream)

Photo Point #5 (Downstream)

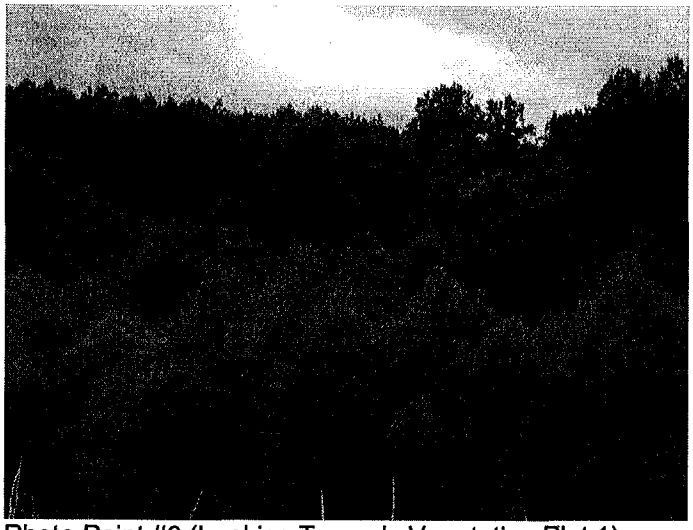


Photo Point #6 (Looking Towards Vegetation Plot 1)
June 2009

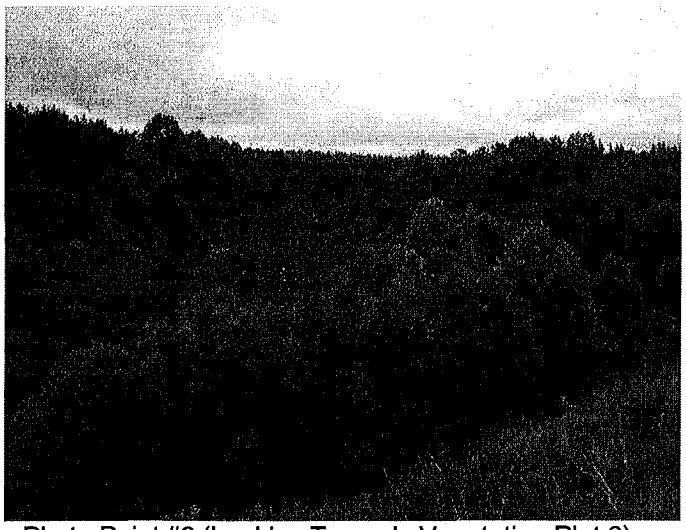
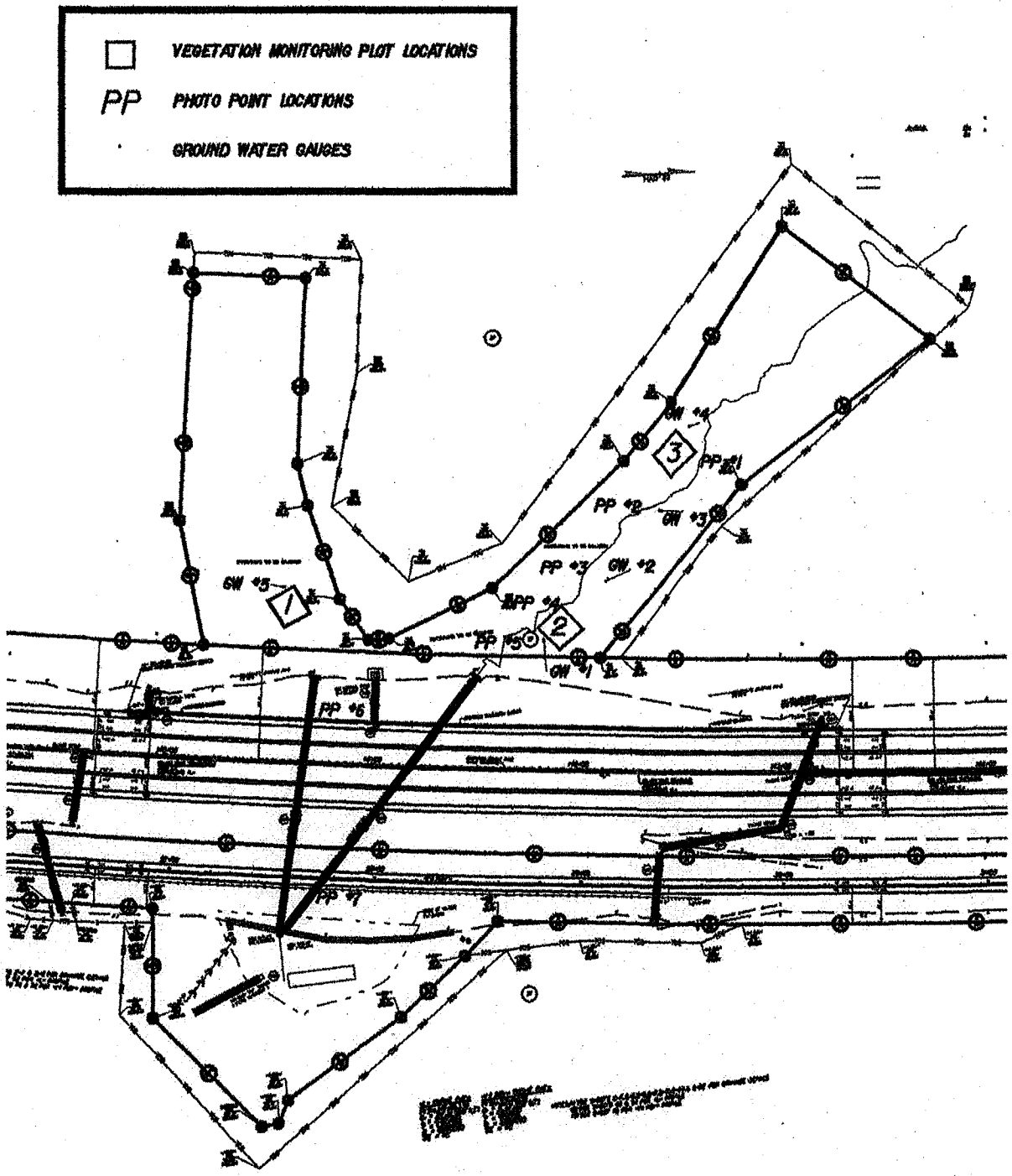


Photo Point #6 (Looking Towards Vegetation Plot 2)

Myrick Pond

Photo Point #7 (Looking Downstream @ the Outlet End of the Pipe)

June 2009

MYRICK POND MITIGATION SITE