Killearn Lakes Restoration, Leon County, Florida

Ecological Restoration

Start / End Dates: 2006 – 2008

Key Project Personnel Involved in this Project:

S. McGlynn, PhD A. Kubes
S. Rupp, BS M. Jones
K. McGlynn, BA N. Curtis
J. Stanley, BS B. McGlynn

Brief Description of Work Performed:

Phase 1: <u>Muck removal</u>. The unconsolidated accumulated sediments in Lake Blue Heron were removed. Four in-lake sediment sumps were constructed to catch future erosion and runoff. Temporary haul road were constructed in the dry lakebed. Pre and post excavation bathymetries showed that 50,000 cubic yards of sediment were removed.





Phase II: <u>BMP Implementation</u>. The inflows leading to the Lake and the constructed sumps were reconstructed with the lime rock; a long unpaved access road to the dam on Lake Blue Heron was paved with granitic gravel to decrease erosion and dust. Berms and swales were built along the sides of the road to stop erosion; an educational outreach program was implemented to

decrease pointless personal pollution and promote best management practices that won the American Waterworks Associations The 2007 Water Conservation Award for Excellence in Public Education; storm drain plaques were installed, designed by local schoolchildren,



throughout the community; diseased and beaver damaged shoreline trees were removing. Exotic vegetation was eradicated,



this included: Primrose, Alligator Week and Chinese Tallow. We also performed stream restoration, artificial marsh creation and rain garden installations.

Phase II: <u>Restoration</u>. Herbaceous emergent aquatic vegetation, was planted on the shoreline of lake Blue Heron and Arrowhead to enhance nutrient uptake from sheet flow runoff: 300 Lizard's Tail; 1,000 Sand Cordgrass; 2,000 Blue Flag Iris and 1,000 Soft Rush. The re-vegetation of Lake Blue Heron included artificial marsh construction and Raingarden construction. Shoreline trees were also planted: 150 Pond Cypress; 50 Water Tupelo; 30 Chestnut Oaks; 50 Red Cedar; 45 Dogwoods and 45 Red Buds.