

Hydrology - SCDNR Open-File Report 11

Ditch Pond Carolina Bay Restoration Project: Phase I Progress Report

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INTRODUCTION

Ditch Pond Heritage Preserve, located along the border between Aiken and Barnwell Counties near Williston, S.C., contains a 25-acre Carolina bay. Though relatively undisturbed as compared to most Carolina bays in South Carolina, the hydrology at Ditch Pond Bay has been altered to some degree by a shallow ditch, along the northern section of the bay, which extends from the interior of the bay to a drainage culvert underneath Weeks Road (State Road 215). The length of the ditch is approximately 1,200 feet. Several dams along the ditch that may be of natural or artificial origins may impede surface flow to the culvert. Surface water outflow from the bay through this ditch may only be occurring during periods of high water levels in the bay. A larger ditch, which drains an adjacent Carolina bay (White Pond Bay) on the southwest side of Ditch Pond, may also be impacting the water levels by reducing lateral ground-water seepage to Ditch Pond. This ditch also drains to the culvert underneath Weeks Road and has almost completely drained White Pond Bay.

The degree to which the ditches are influencing the water levels in Ditch Pond is not well understood. These uncertainties, along with the possible impacts on a private tract of land in the northwestern part of Ditch Pond, highlight the need for baseline data prior to developing and implementing a restoration plan. The objectives of this study are (1) to acquire baseline data on the existing hydrologic dynamics of Ditch Pond Bay; and (2) to develop and implement a restoration strategy to return Ditch Pond to its normal water levels. This document serves to summarize the progress made on Phase I of the project and to present preliminary data collected at the site. Phase I consisted of the installation of monitoring equipment used to assess the current hydrologic dynamics at the site.

Copies of this report are available in the SCDNR's Columbia office.