

From: Sam Stone [sspeariv@hughes.net]
Sent: Friday, March 20, 2009 2:21 PM
To: Rob Brown; John M. Ryan; Byle, William
Cc: Barbara Carlton; Mike Coates; Jeffrey Clark; Kristan Robbins; Provenzano, Santino - Riverview; Ralph Montgomery
Subject: District Investigation of Horse Creek Sulfate Levels
Attachments: TAG Update 3-12-2009.pdf

Members of the Horse Creek TAG

at your meeting of 3/12/09 I briefly talked about the Southwest Florida Water Management District's progress on the investigation of sulfate levels in Horse Creek.

Attached is a brief status report that I pass along to you from District staff. Additional information is expected in a few weeks.

Please note the difference in sulfate levels in the dry season (June 2008) versus the wet season in September 2008.

No action is required on this item at this time.

Samuel S. Stone
Environmental Affairs Coordinator
Peace River / Manasota Regional Water Supply Authority
8998 SW County Road 769
Arcadia, FL 34269
Phone - 863-993-4565
Fax - 863-993-4568

Horse Creek Update

Five properties were sampled for sulfate concentration between May - September 2008 in three general areas:

- a) Hardee Co. – Horse Creek
- b) DeSoto Co. – Buzzard Roost Branch & Brandy Branch, above SR 70
- c) DeSoto Co. – Buzzard Roost Branch, below SR 70

Water samples from representative irrigation wells were taken at each property, as well as surface streams adjacent to each property. In general, the farm wells tested higher than the nearby streams at each farm location and both ground and surface water sulfate levels declined from north to south. Lab results also show much lower sulfate levels from samples collected at the same location after the summer rainy season in September compared to those taken in May.

Examples:

<u>Location</u>	<u>Source</u>	<u>Date</u>	<u>Sulfate</u>
SR 70	Horse Creek	06/06/08	222 ppm
SR 70	Horse Creek	09/17/08	45 ppm
SR 70	Brandy Branch	06/06/08	726 ppm
SR 70	Brandy Branch	09/17/08	115 ppm
Hardee Co.	Irrigation Well	06/06/08	1510 ppm
Hardee Co.	Irrigation Well	07/22/08	1427 ppm
CR 663	Horse Creek	06/06/08	133 ppm
DeSoto Co.	Irrigation Well	05/27/08	1350 ppm
DeSoto Co.	Irrigation Well	09/17/08	683 ppm
DeSoto Co.	Irrigation Well	06/06/08	812 ppm
DeSoto Co.	Irrigation Well	09/17/08	222 ppm
Pine Level Rd.	Buzzard Roost	09/17/08	54 ppm
Pine Level Rd.	Horse Creek	09/17/08	51 ppm
SR 72	Horse Creek	09/17/08	58 ppm

A FARMS project was Board approved in February 2009 on one of the sampled properties in DeSoto Co. The goal of the project is to reduce groundwater withdrawals on the farm through the installation of wireless sensor instrumentation used to monitor crop growing conditions and aid in the management of water resources. Reduced sulfates entering Horse Creek is the anticipated secondary benefit of the project.