Horse Creek Stewardship Program Technical Advisory Group Meeting Summary for June 16, 2008

Draft 2006 Annual Report

TAG Panel

Victor Dotson DeSoto County Jon Perry Sarasota County **Presenters**

Roberta Starks District Kris Robbins BRA

Attendees

Sam Stone PRMRWSA Ralph Montgomery PBS&J Mike Coates PRMRWSA Santino Provenzano Mosaic Jeff Clark EarthBalance Doug Durbin BRA

Presentation by Roberta Starks

The Horse Creek TAG at their meeting of July 2007 requested that the Authority enlist support from the District to investigate the source of ground water run off into the lower Horse Creek basin. The Authority met with District staff to discuss our Horse Creek concerns in September 2007. Roberta Starks was asked to attend the June 16 TAG meeting and provide information to the TAG describing the progress made by the District thus far.

Roberta described how the District reviewed existing WUP files to determine who had permits in the area of concern. From this data the District plotted the types of wells and water quality from those wells on area maps. The District then compared that information with the well quantities pumped. This effort was followed by a detailed field reconnaissance investigation collecting water quality samples to determine the sources of sulfate enrichment in the lower parts of the Horse Creek basin. Over the next 12 months the District plans to contact potential well owners to see whether some type of FARMS program alternative can be used to help landowners reduce poor water quality run off to Horse Creek. Their primary focus is back plugging wells that are currently yielding water with high conductivity and sulfate. The District also plans to deploy data sondes in the Fall of 2008 to collect water quality data. This process is similar to the SPJC program and is intended to progressively reduce the volume of poor quality run off and improve water quality downstream in Horse Creek.

Overview

Kris Robbins of BRA provided a technical summary and overview of Program data presented in the 2006 HCSP Annual Report.

<u>Discussion.</u> The minimum detection limit (MDL) for Fluoride and Nitrate – Nitrite increased recently due to changes in laboratory practices. This is likely to confound future trend analyses, because it is common that these parameters are not detected in the samples.

<u>Action.</u> It was decided for the statistical analyses in 2006 report that analyses that were affected by the change in MDL (i.e. trend analysis) would be removed for affected parameters and that as a part of the 2007 report various methodologies would be evaluated on how best to handle this changing MDL and not loose the previous data collected.

<u>Discussion.</u> During 2006 the continuous recorder was missing data primarily due to low flows, silt accumulation changing the stream channel and equipment problems. <u>Action</u>. It was decided that BRA should include in the 2006 report more discussion about the efforts attempted by Mosaic in 2006 to improve these conditions.

<u>Discussion.</u> The use of historical Horse Creek data for trend analysis is required by the agreement. Currently BRA is using a moving 10 years of data but eventually this will result in no historical data being used in the analysis.

Action. It was agreed that a period of historical data of about ten years collected prior to the Program would be identified and always used in the trend analysis as each new year of program data is added. This action would be added to the recommendations section of the 2006 report and implemented in the 2007 report.

<u>Discussion.</u> Deleting some chemical parameters or possibly reducing the frequency of analysis for some parameters was discussed. There was also a concern that mining operations would continue and expand in the basin and as such careful consideration would be needed before deletion could be approved.

<u>Action.</u> BRA will add this item to the 2006 report recommendations. BRA will also provide an analysis of the existing data and recommendation in the 2007 report on this matter.