

Project Status Report

Project: Horse Creek Stewardship Program

Date: January 17, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – November 2007. Rainfall from the wet season has resulted in an improvement in water quality in the southern basin.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule on March 28th, August 9th and November 27th completing this effort for 2007. Next sample event is scheduled for April 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in June 2007.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis in recent months. Higher creek flows is expected to correct this condition.

Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* was received September 18, 2007 and was accepted by the Authority Board of Directors October 3, 2007. The Report was subsequently distributed to DEP, SWFWMD and other interested parties on November 9, 2007. The draft 2006 annual report is expected from Mosaic in February 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and background conditions caused high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: January 17, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River / Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Chris Rogers (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

Mosaic will collect surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March / April), Summer (July / September) and Fall (October / December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Horse Creek Stewardship Program
Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report will be an accumulation of existing historical data on Horse Creek. This data will then be analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Horse Creek Stewardship Program
Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report				
QA/QC Plan				

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Horse Creek Stewardship Program
Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – November 2007 (56 months)	1	Dissolved Oxygen	3/56
	1	Color	1/56
	1	pH	1/56
	1	Alkalinity	3/56
	1	Fatty Acid	1/56
	2	Dissolved Oxygen	43/56
	2	pH	2/56
	2	Chlorophyll	12/56
	2	Radium 226 + 228	1/56
	2	Iron	1/56
	2	Fatty Acid	6/56
	3	Dissolved Oxygen	15/56
	3	Total Nitrogen	2/56
	3	Color	2/56
	3	Total Dissolved Solids	5/56
	3	Dissolved Calcium	5/56
	3	Chlorophyll	1/56
	3	Fatty Acid	1/56
	3	pH	1/56
	3	Sulfate	5/56
	4	pH	1/56
	4	Iron	25/56
	4	Dissolved Oxygen	5/56
	4	Sulfate	6/56
	4	Total Dissolved Solids	7/56
	4	Conductivity	1/56
	4	Dissolved Calcium	4/56
	4	Total Alkalinity	1/56
	4	Fluoride	5/56

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: February 6, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – November 2007. Rainfall from the wet season has resulted in an improvement in water quality in the southern basin.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule on March 28th, August 9th and November 27th completing this effort for 2007. Next sample event is scheduled for April 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in June 2007.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis in recent months. Higher creek flows is expected to correct this condition.

Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* was received September 18, 2007 and was accepted by the Authority Board of Directors October 3, 2007. The Report was subsequently distributed to DEP, SWFWMD and other interested parties on November 9, 2007. The draft 2006 annual report is expected from Mosaic in February 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and background conditions caused high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: February 6, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River / Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

Mosaic will collect surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March / April), Summer (July / September) and Fall (October / December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Horse Creek Stewardship Program
Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008			

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the

HCSP methods used are the standard methods accepted by scientific and regulatory communities as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report will be an accumulation of existing historical data on Horse Creek. This data will then be analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Horse Creek Stewardship Program
Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report				
QA/QC Plan				

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Horse Creek Stewardship Program
Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – November 2007 (56 months)	1	Dissolved Oxygen	3/56
	1	Color	1/56
	1	pH	1/56
	1	Alkalinity	3/56
	1	Fatty Acid	1/56
	2	Dissolved Oxygen	43/56
	2	pH	2/56
	2	Chlorophyll	12/56
	2	Radium 226 + 228	1/56
	2	Iron	1/56
	2	Fatty Acid	6/56
	3	Dissolved Oxygen	15/56
	3	Total Nitrogen	2/56
	3	Color	2/56
	3	Total Dissolved Solids	5/56
	3	Dissolved Calcium	5/56
	3	Chlorophyll	1/56
	3	Fatty Acid	1/56
	3	pH	1/56
	3	Sulfate	5/56
	4	pH	1/56
	4	Iron	25/56
	4	Dissolved Oxygen	5/56
	4	Sulfate	6/56
	4	Total Dissolved Solids	7/56
	4	Conductivity	1/56
	4	Dissolved Calcium	4/56
	4	Total Alkalinity	1/56
	4	Fluoride	5/56

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: March 7, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – December 2007. Rainfall from the wet season has resulted in an improvement in water quality in the southern basin.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule on March 28th, August 9th and November 27th completing this effort for 2007. Next sample event is scheduled for April 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in June 2007.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis in recent months. Higher creek flows is expected to correct this condition.

Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* was distributed to DEP, SWFWMD and other interested parties on November 9, 2007. The draft 2006 annual report is expected from Mosaic in March 2008. The draft QAQC Plan is expected in April 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and back ground conditions caused the high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: March 7, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River / Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

Mosaic will collect surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March / April), Summer (July / September) and Fall (October / December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008			

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report will be an accumulation of existing historical data on Horse Creek. This data will then be analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	March			
QA/QC Plan	April			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – December 2007 (57 months)	1	Dissolved Oxygen	3/57
	1	Color	1/57
	1	pH	1/57
	1	Alkalinity	3/57
	1	Fatty Acid	1/57
	2	Dissolved Oxygen	44/57
	2	pH	2/57
	2	Chlorophyll	12/57
	2	Radium 226 + 228	1/57
	2	Iron	1/57
	2	Fatty Acid	7/57
	3	Dissolved Oxygen	15/57
	3	Total Nitrogen	2/57
	3	Color	2/57
	3	Total Dissolved Solids	5/57
	3	Dissolved Calcium	5/57
	3	Chlorophyll	1/57
	3	Fatty Acid	1/57
	3	pH	1/57
	3	Sulfate	5/57
	4	pH	1/57
	4	Iron	25/57
	4	Dissolved Oxygen	5/57
	4	Sulfate	6/57
	4	Total Dissolved Solids	7/57
	4	Conductivity	1/57
	4	Dissolved Calcium	4/57
	4	Total Alkalinity	1/57
	4	Fluoride	5/57
	4	Fatty Acid	1/57

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: April 2, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – January 2008. Rainfall from the wet season has resulted in an improvement in water quality in the southern basin.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule on March 28th, August 9th and November 27th completing this effort for 2007. Next sample event is scheduled for April 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis in recent months. Higher creek flows is expected to correct this condition.

Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* was distributed to DEP, SWFWMD and other interested parties on November 9, 2007. The draft 2006 annual report is expected from Mosaic in April 2008. The draft QAQC Plan is expected in May 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and back ground conditions caused the high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: April 2, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River / Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

Mosaic will collect surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008			

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report will be an accumulation of existing historical data on Horse Creek. This data will then be analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	April			
QA/QC Plan	May			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – January 2008 (58 months)	1	Dissolved Oxygen	3/58
	1	Color	1/58
	1	pH	1/58
	1	Alkalinity	3/58
	1	Fatty Acid	1/58
	2	Dissolved Oxygen	45/58
	2	pH	2/58
	2	Chlorophyll	12/58
	2	Radium 226 + 228	1/58
	2	Iron	1/58
	2	Total Nitrogen	1/58
	2	Fatty Acid	7/58
	3	Dissolved Oxygen	15/58
	3	Total Nitrogen	2/58
	3	Color	2/58
	3	Total Dissolved Solids	5/58
	3	Dissolved Calcium	5/58
	3	Chlorophyll	1/58
	3	Fatty Acid	1/58
	3	pH	1/58
	3	Sulfate	5/58
	4	pH	1/58
	4	Iron	25/58
	4	Dissolved Oxygen	5/58
	4	Sulfate	6/58
	4	Total Dissolved Solids	8/58
	4	Conductivity	1/58
	4	Dissolved Calcium	4/58
	4	Total Alkalinity	1/58
	4	Fluoride	5/58
	4	Fatty Acid	1/58

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: May 7, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG is expected to meet in the next 4-8 weeks to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – February 2008.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The next sample event occurred on schedule April 24, 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis. Higher creek flows have improved this condition.

Reports.

The draft *Horse Creek Stewardship Program 2006 Annual Report* was received from Mosaic April 8, 2008 and was transmitted to the TAG for their review the week of April 14. The draft QAQC Plan is expected in June 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and back ground conditions caused the high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: May 7, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River / Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

Mosaic will collect surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008		

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities

as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report will be an accumulation of existing historical data on Horse Creek. This data will then be analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08			
QA/QC Plan	June			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – February 2008 (59 months)	1	Dissolved Oxygen	3/59
	1	Color	1/59
	1	pH	1/59
	1	Alkalinity	3/59
	1	Fatty Acid	1/59
	2	Dissolved Oxygen	46/59
	2	pH	2/59
	2	Chlorophyll	12/59
	2	Radium 226 + 228	1/59
	2	Iron	1/59
	2	Total Nitrogen	1/59
	2	Fatty Acid	7/59
	3	Dissolved Oxygen	16/59
	3	Total Nitrogen	2/59
	3	Color	2/59
	3	Total Dissolved Solids	5/59
	3	Dissolved Calcium	5/59
	3	Chlorophyll	1/59
	3	Fatty Acid	1/59
	3	pH	1/59
	3	Sulfate	5/59
	4	pH	1/59
	4	Iron	25/59
	4	Dissolved Oxygen	5/59
	4	Sulfate	6/59
	4	Total Dissolved Solids	8/59
	4	Conductivity	1/59
	4	Dissolved Calcium	4/59
	4	Total Alkalinity	1/59
	4	Fluoride	5/59
	4	Fatty Acid	1/59

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: June 4, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG is scheduled to meet on June 16, 2008 to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – February 2008.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The first sample event occurred on schedule April 24, 2008. The next sample is scheduled for July 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis. Higher creek flows have improved this condition.

Reports.

The draft *Horse Creek Stewardship Program 2006 Annual Report* was received from Mosaic April 8, 2008 and was transmitted to the TAG for their review the week of April 14. The draft QAQC Plan is expected in July 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and back ground conditions caused the high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: June 4, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2005 Annual Report* on July 27, 2007.

Monthly Water Quality Monitoring.

Mosaic will collect surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008		

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities

as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report will be an accumulation of existing historical data on Horse Creek. This data will then be analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08	4/8/08		
QA/QC Plan	July 2008			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – February 2008 (59 months)	1	Dissolved Oxygen	3/59
	1	Color	1/59
	1	pH	1/59
	1	Alkalinity	3/59
	1	Fatty Acid	1/59
	2	Dissolved Oxygen	46/59
	2	pH	2/59
	2	Chlorophyll	12/59
	2	Radium 226 + 228	1/59
	2	Iron	1/59
	2	Total Nitrogen	1/59
	2	Fatty Acid	7/59
	3	Dissolved Oxygen	16/59
	3	Total Nitrogen	2/59
	3	Color	2/59
	3	Total Dissolved Solids	5/59
	3	Dissolved Calcium	5/59
	3	Chlorophyll	1/59
	3	Fatty Acid	1/59
	3	pH	1/59
	3	Sulfate	5/59
	4	pH	1/59
	4	Iron	25/59
	4	Dissolved Oxygen	5/59
	4	Sulfate	6/59
	4	Total Dissolved Solids	8/59
	4	Conductivity	1/59
	4	Dissolved Calcium	4/59
	4	Total Alkalinity	1/59
	4	Fluoride	5/59
	4	Fatty Acid	1/59

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: July 30, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met on June 16, 2008 to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – May 2008.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The first sample event occurred on schedule April 24, 2008. The next sample is scheduled for August / September 2008.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows continue to cause difficulty in collecting this data on a consistent basis. Higher creek flows will improve this condition.

Reports.

The draft *Horse Creek Stewardship Program 2006 Annual Report* is currently being finalized by Mosaic. Completion is expected in early August 2008. The draft QAQC Plan is also expected in September 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and back ground conditions caused the high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: July 30, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2006 Annual Report* on June 16, 2008.

Monthly Water Quality Monitoring.

Mosaic collects surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008		

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities

as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report is an accumulation of existing historical data on Horse Creek. This data was analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08	4/8/08	6/16/08	
QA/QC Plan	September 2008			
2007 Annual Report				

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – May 2008 (62 months)	1	Dissolved Oxygen	3/62
	1	Color	1/62
	1	pH	1/62
	1	Alkalinity	3/62
	1	Fatty Acid	1/62
	2	Dissolved Oxygen	49/62
	2	pH	2/62
	2	Chlorophyll	12/62
	2	Radium 226 + 228	1/62
	2	Iron	1/62
	2	Total Nitrogen	1/62
	2	Fatty Acid	7/62
	3	Dissolved Oxygen	19/62
	3	Total Nitrogen	2/62
	3	Color	2/62
	3	Total Dissolved Solids	5/62
	3	Dissolved Calcium	5/62
	3	Chlorophyll	1/62
	3	Fatty Acid	1/62
	3	pH	1/62
	3	Sulfate	5/62
	4	pH	1/62
	4	Iron	25/62
	4	Dissolved Oxygen	5/62
	4	Sulfate	8/62
	4	Total Dissolved Solids	10/62
	4	Conductivity	1/62
	4	Dissolved Calcium	6/62
	4	Total Alkalinity	1/62
	4	Fluoride	5/62
	4	Fatty Acid	1/62

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: September 3, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met on June 16, 2008 to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – June 2008.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The first sample event occurred on schedule April 24, 2008. The next sample is scheduled for September 2008 when creek flows are expected to return to normal levels.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows have caused difficulty in collecting this data on a consistent basis. Higher creek flows will improve this condition.

Reports.

The draft *Horse Creek Stewardship Program 2006 Annual Report* is currently being finalized by Mosaic. Completion is expected in September 2008. The draft QAQC Plan is also expected in September 2008.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at Station 3. An impact assessment was received from Mosaic on October 31, 2007. Results of this work show that lab error caused high nitrogen levels and back ground conditions caused the high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no mining discharges have occurred since June 2006.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: September 3, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2006 Annual Report* on June 16, 2008.

Monthly Water Quality Monitoring.

Mosaic collects surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008		

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the

HCSP methods used are the standard methods accepted by scientific and regulatory communities as well as, ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report is an accumulation of existing historical data on Horse Creek. This data was analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08	4/8/08	6/16/08	
QA/QC Plan	September 2008			
2007 Annual Report				

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – June 2008 (63 months)	1	Dissolved Oxygen	3/63
	1	Color	1/63
	1	pH	1/63
	1	Alkalinity	3/63
	1	Fatty Acid	1/63
	2	Dissolved Oxygen	50/63
	2	pH	2/63
	2	Chlorophyll	12/63
	2	Radium 226 + 228	1/63
	2	Iron	1/63
	2	Total Nitrogen	1/63
	2	Fatty Acid	7/63
	3	Dissolved Oxygen	20/63
	3	Total Nitrogen	2/63
	3	Color	2/63
	3	Total Dissolved Solids	6/63
	3	Dissolved Calcium	5/63
	3	Chlorophyll	1/63
	3	Fatty Acid	1/63
	3	pH	1/63
	3	Sulfate	6/63
	4	pH	1/63
	4	Iron	25/63
	4	Dissolved Oxygen	5/63
	4	Sulfate	9/63
	4	Total Dissolved Solids	11/63
	4	Conductivity	1/63
	4	Dissolved Calcium	6/63
	4	Total Alkalinity	1/63
	4	Fluoride	5/63
	4	Fatty Acid	1/63

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event is June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

Project Status Report

Project: Horse Creek Stewardship Program

Date: October 1, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met on June 16, 2008 to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – July 2008.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The first sample event occurred on schedule April 24, 2008. The next sample event occurred on September 12, 2008 when creek flows returned to normal levels.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. Recent higher creek flows have allowed the consistent collection of this data.

Reports.

The draft *Horse Creek Stewardship Program 2006 Annual Report* was revised by Mosaic and transmitted to the Authority on 9/12/08. Upon Board acceptance of this report copies will be finalized and transmitted to regulatory agencies and other interested parties. The draft QAQC Plan will be delayed due to Mosaic's recent change in labs. This plan is estimated to be completed in early 2009.

Recent Impact Assessments.

July 2008 data showed an exceedance of the trigger level for ammonia and an impact assessment was requested. Transmittal of this assessment from Mosaic is expected the week of September 22, 2008.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: October 1, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2006 Annual Report* on June 16, 2008.

Monthly Water Quality Monitoring.

Mosaic collects surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008	September 2008	

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities,

as well as ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report is an accumulation of existing historical data on Horse Creek. This data was analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08	4/8/08	6/16/08	9/12/08
QA/QC Plan	2009			
2007 Annual Report	2009			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event was in June 2007 where we found high fatty acids at Station 1 and a high total nitrogen at Station 3. The assessment concluded that these high levels were not due to mining activities but were due to lab error and natural background levels.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – July 2008 (64 months)	1	Dissolved Oxygen	3/64
	1	Color	1/64
	1	pH	1/64
	1	Alkalinity	3/64
	1	Fatty Acid	1/64
	2	Dissolved Oxygen	51/64
	2	pH	2/64
	2	Chlorophyll	13/64
	2	Total Nitrogen	1/64
	2	Radium 226 + 228	1/64
	2	Iron	1/64
	2	Total Ammonia	1/64
	2	Fatty Acid	7/64
	3	Dissolved Oxygen	21/64
	3	Total Nitrogen	2/64
	3	Color	2/64
	3	Total Dissolved Solids	6/64
	3	Dissolved Calcium	5/64
	3	Chlorophyll	1/64
	3	Fatty Acid	1/64
	3	pH	1/64
	3	Total Ammonia	1/64
	3	Sulfate	6/64
	4	pH	1/64
	4	Iron	26/64
	4	Dissolved Oxygen	6/64
	4	Sulfate	9/64
	4	Total Dissolved Solids	11/64
	4	Conductivity	1/64
	4	Dissolved Calcium	6/64
	4	Total Alkalinity	1/64
	4	Total Ammonia	1/64
	4	Fluoride	5/64
	4	Fatty Acid	1/64

Project Status Report

Project: Horse Creek Stewardship Program

Date: November 5, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met on June 16, 2008 to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – August 2008.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The 2008 sample events occurred April 24 and September 12 with the final sample expected in November.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. Recent higher creek flows have allowed the consistent collection of this data.

Reports.

The *Horse Creek Stewardship Program 2006 Annual Report* was received and filed by the Board at their October 1, 2008 Board meeting. This report was subsequently finalized and transmitted to regulatory agencies and other interested parties. The draft QAQC Plan will be delayed due to Mosaic's recent change in labs. This plan is estimated to be completed in early 2009.

Recent Impact Assessments.

July 2008 data showed an exceedance of the trigger level for ammonia and an impact assessment was requested. Transmittal of this assessment from Mosaic was received October 3, 2008. The Authority reviewed the information provided and requested additional information which is expected the week of October 28.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: November 5, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2006 Annual Report* on June 16, 2008.

Monthly Water Quality Monitoring.

Mosaic collects surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008	September 2008	

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities, as well as ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report is an accumulation of existing historical data on Horse Creek. This data was analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08	4/8/08	6/16/08	9/12/08
QA/QC Plan	2009			
2007 Annual Report	2009			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event was in July 2008 where stations 2, 3 & 4 were found to have high total ammonia levels. The impact assessment for this event is still under investigation at this time.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – Aug 2008 (65 months)	1	Dissolved Oxygen	3/65
	1	Color	1/65
	1	pH	1/65
	1	Alkalinity	3/65
	1	Fatty Acid	1/65
	2	Dissolved Oxygen	52/65
	2	pH	2/65
	2	Chlorophyll	13/65
	2	Total Nitrogen	1/65
	2	Radium 226 + 228	1/65
	2	Iron	1/65
	2	Total Ammonia	1/65
	2	Fatty Acid	7/65
	3	Dissolved Oxygen	22/65
	3	Total Nitrogen	2/65
	3	Color	2/65
	3	Total Dissolved Solids	6/65
	3	Dissolved Calcium	5/65
	3	Chlorophyll	1/65
	3	Fatty Acid	1/65
	3	pH	1/65
	3	Total Ammonia	1/65
	3	Sulfate	6/65
	4	pH	1/65
	4	Iron	27/65
	4	Dissolved Oxygen	7/65
	4	Sulfate	9/65
	4	Total Dissolved Solids	11/65
	4	Conductivity	1/65
	4	Dissolved Calcium	6/65
	4	Total Alkalinity	1/65
	4	Total Ammonia	1/65
	4	Fluoride	5/65
	4	Fatty Acid	1/65

Project Status Report

Project: Horse Creek Stewardship Program

Date: December 3, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The following information is a brief summary of recent activities occurring with the Horse Creek Stewardship Program (HCSP).

Technical Advisory Group (TAG).

The TAG met on June 16, 2008 to review and discuss the draft *Horse Creek Stewardship Program 2006 Annual Report*.

Monthly Water Quality Monitoring.

This sampling effort by Mosaic has continued monthly without any interruption of collected data. Mosaic has transmitted data to the Authority covering the period April 2003 – October 2008. September and October data is now under review.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule in 2007. The 2008 sample events occurred April 24 and September 12 with the final sample was collected November 19th.

Clay Settling Ponds Real Time Monitoring.

Monitoring of these ponds continues with no reported releases. The last false alarm received was in March 2008.

Water Quality Continuous Recorder.

A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. Recent higher creek flows have allowed the consistent collection of this data.

Reports.

The *Horse Creek Stewardship Program 2006 Annual Report* was finalized and transmitted to regulatory agencies and other interested parties in November 2008. The draft QAQC Plan will be delayed due to Mosaic's recent change in labs. This plan is estimated to be completed in early 2009.

Recent Impact Assessments.

July 2008 data showed an exceedance of the trigger level for ammonia and an impact assessment was requested. The assessment was received from Mosaic October 3, 2008. After further review the Authority requested additional information which was received November 11, 2008. This assessment has found that the higher ammonia was due to the lab change and different lab methods.

Project Historical Briefing

Project: Horse Creek Stewardship Program

Date: December 3, 2008

Prepared by: Samuel Stone, Environmental Affairs Coordinator

The Settlement Agreement between the Peace River Manasota Regional Water Supply Authority (Authority) and Mosaic Fertilizer Company (Mosaic) became effective on March 5, 2003. Contained within the agreement is the required implementation of the Horse Creek Stewardship Program (HCSP) by Mosaic and included program oversight by the Authority.

The HCSP consists of multiple tasks occurring on different schedules. Below is a list of the major tasks, a brief description of the tasks and historical progress on those tasks.

Technical Advisory Group (TAG).

The TAG as required by the HCSP consists of one representative from each member government. The TAG is to review the progress and findings of the program and provide technical input to the Authority. Members of the TAG consist of the following people. William Byle (Charlotte County), Victor Dotson (DeSoto County), Robert Brown (Manatee County) and John Ryan (Sarasota County). Members of the TAG continue to receive copies of the Board Package Project Status Reports monthly. The TAG last met and discussed the draft *Horse Creek Stewardship Program 2006 Annual Report* on June 16, 2008.

Monthly Water Quality Monitoring.

Mosaic collects surface water samples from Horse Creek at four fixed stations once per month. These samples will be analyzed for 21 different chemical parameters and the results reported to the Authority monthly.

This sampling effort by Mosaic was started in April 2003 and has continued monthly without any interruption of collected data. In December 2003 EarthBalance visited the monitoring sites with Mosaic and collected duplicate samples at the 4 surface water sites. Every other month (Feb, Apr, June, Aug, Oct, & Dec) EarthBalance is scheduled to visit the sites to collect samples at random to spot check water quality or collect duplicate samples with Mosaic at the designated four sample stations.

Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March - April), Summer (July - September) and Fall (October - December). The sample locations are the same four fixed stations used for water quality monitoring. Below is a summary table showing when the benthic and fish samples have been collected during the stewardship program.

**Macroinvertebrate and Fish Samples
Summary Table I**

Sample Event	Spring (Mar - Apr)	Summer (Jul - Sep)	Fall (Oct - Dec)
Calendar Year 2003	April 2003	July 2003	November 2003
Calendar Year 2004	April 2004	November 2004	February 2005
Calendar Year 2005	April 2005	September 2005	December 2005
Calendar Year 2006	April 2006	July 2006	November 2006
Calendar Year 2007	March 2007	August 2007	November 2007
Calendar Year 2008	April 2008	September 2008	November 2008

Clay Settling Ponds Real Time Monitoring.

This component requires that the Authority have the ability to monitor in real time the fluid levels of various clay settling ponds. This system could act as an early warning device for the Peace River Facility staff should an embankment fail, releasing clay material into Horse Creek. This equipment was fully operational as of December 12, 2003.

At the Authority's request Mosaic provided a report on the possible affects of a dam failure at these ponds and the resulting flow rate scenarios down Horse Creek. The report concluded that under a worse case scenario a dam breach would have a travel time of 2 - 2.5 days before the water from the ponds would reach the Peace River Facility.

Horse Creek Flow Data.

Flow and stage data is collected and monitored at the four fixed water quality sample stations. Stations 1 & 4 have existing USGS stations with data available on the USGS web site. Stations 2 & 3 required the installation of stage level gages and monthly monitoring / reporting by Mosaic.

Water Quality Continuous Recorder.

The continuous water quality monitoring equipment became operational in July 2003 and is located at the fixed water quality station number 1, closest to mining operations. Monthly this data is down loaded in the field, and placed into a data base. This monitoring effort is on going. This data is supplied as part of the Annual Report and summarized monthly along with other routine water quality data

Reports.

The QA/QC project report will describe the field methods, lab methods, standards and procedures used by Mosaic when implementing the monitoring program. The QA/QC plan will ensure that the HCSP methods used are the standard methods accepted by scientific and regulatory communities,

as well as ensure that the results are reliable, reproducible and consistent with other programs.

The Historical Report is an accumulation of existing historical data on Horse Creek. This data was analyzed to determine historical back ground conditions of Horse Creek, determine if any trends are evident and be the basis for comparing with current data collected as part of the HCSP.

The Annual Reports will provide all the data collected as part of the HCSP and will compare these results with the historical data. The intent is to determine if current water quality is different from the past and if a trend can be determined. Below is a summary table showing the progress of the various reports required by the stewardship program.

**Project Reports
Summary Table II**

Report Title	Receive First Draft Report	Receive Final Draft Report	TAG Review	Receive Final Report
2003 Annual Report	10/08/04	2/7/05	3/24/05	7/14/05
Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07	6/20/07	7/27/07	9/18/07
2006 Annual Report	4/8/08	4/8/08	6/16/08	9/12/08
QA/QC Plan	2009			
2007 Annual Report	2009			

Impact Assessments.

As required by the HCSP, if a water quality parameter exceeds a specified trigger value or a significant trend in the data is found, then Mosaic will initiate an impact assessment for the cause of the exceedance. The assessment can consist of further monitoring, and evaluations within the basin and may result in scientific assistance from Mosaic (if not at fault) or corrective mining actions (if at fault). If the assessment finds Mosaic at fault for the trigger exceedance or trend then the impact assessment is followed by corrective actions evaluation and implementation. Below is a summary table showing the frequency of exceeded trigger levels for the stewardship program.

All previous impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent event was in July 2008 where stations 2, 3 & 4 were found to have high total ammonia levels. The impact assessment for this event found that the change in labs and lab methods was the cause for the high ammonia.

**Exceeded Trigger Levels
Summary Table III**

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – Aug 2008 (65 months)	1	Dissolved Oxygen	3/65
	1	Color	1/65
	1	pH	1/65
	1	Alkalinity	3/65
	1	Fatty Acid	1/65
	2	Dissolved Oxygen	52/65
	2	pH	2/65
	2	Chlorophyll	13/65
	2	Total Nitrogen	1/65
	2	Radium 226 + 228	1/65
	2	Iron	1/65
	2	Total Ammonia	1/65
	2	Fatty Acid	7/65
	3	Dissolved Oxygen	22/65
	3	Total Nitrogen	2/65
	3	Color	2/65
	3	Total Dissolved Solids	6/65
	3	Dissolved Calcium	5/65
	3	Chlorophyll	1/65
	3	Fatty Acid	1/65
	3	pH	1/65
	3	Total Ammonia	1/65
	3	Sulfate	6/65
	4	pH	1/65
	4	Iron	27/65
	4	Dissolved Oxygen	7/65
	4	Sulfate	9/65
	4	Total Dissolved Solids	11/65
	4	Conductivity	1/65
	4	Dissolved Calcium	6/65
	4	Total Alkalinity	1/65
	4	Total Ammonia	1/65
	4	Fluoride	5/65
	4	Fatty Acid	1/65