Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: February 21, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

Technical Advisory Group (TAG).
The TAG last met on November 14, 2006 to review and discuss the draft *Horse Creek Stewardship Program 2004 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 - December 2006. December 2006 water quality results show an increasing trend in those parameters that result from a ground water influence in the southern basin. This is reasonability expected since rainfall levels have diminished and resulting agriculture irrigation may have increased in late 2006.

Macroinvertebrate and Fish Sampling.
The first set of samples for 2006 were collected on April 6, 2006. The second set was sampled on July 27, 2006. The third set was collected on November 28, 2006.

Clay Settling Ponds Real Time Monitoring.
Monitoring of these ponds continues with no reported releases. The last false alarm received was in October 2006.

Water Quality Continuous Recorder.
This monitoring effort is on going. A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The dry Fall period resulted in no reported results due to low creek flows.

Reports.
The draft QA/QC Report has temporarily been deferred while other more important reports are being completed.

The final *Horse Creek Stewardship Program 2004 Annual Report* has been revised and received by the Authority January 12, 2007. The draft *Horse Creek Stewardship Program 2005 Annual Report* should also be submitted for Authority review in late February 2007.

Recent Impact Assessments.
No recent assessments have been required.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: February 21, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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. Bernard Milosky (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 2004 Annual Report* on November 14, 2006, which has been recently finalized.

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 / August) and Fall (October / November). 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 - Aug)	Fall (Oct - Nov)
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			

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 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 will be 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				
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 progra

Horse Creek Stewardship Program
Exceeded Trigger Levels
Summary Table III

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 - December 2006	1	Dissolved Oxygen	3/45
(45 months)	1	Color	1/45
	2	Dissolved Oxygen	36/45
	2	pH	2/45
	2	Chlorophyll	9/45
	2	Radium 226 + 228	1/45
	2	Iron	1/45
	2	Fatty Acid	4/45
	3	Dissolved Oxygen	10/45
	3	Total Nitrogen	1/45
	3	Color	2/45
	3	Total Dissolved Solids	2/45
	3	Dissolved Calcium	2/45
	3	Chlorophyll	1/45
	3	Fatty Acid	1/45
	3	pH	1/45
	3	Sulfate	3/45
	4	Iron	24/45
	4	Dissolved Oxygen	5/45
	4	Sulfate	5/45
	4	Total Dissolved Solids	5/45
	4	Conductivity	1/45
	4	Dissolved Calcium	3/45
	4	Total Alkalinity	1/45
	4	Fluoride	2/45

All impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent significant event was in November 2004 where Station 2 exceeded the trigger level for total fatty acids. An impact assessment dated 2/28/05 was submitted and found that mining activities did not cause the higher levels of fatty acids. As a consequence of these preliminary impact assessment results, monitoring for these parameters and trend analysis of the data over time will continue.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: March 9, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

Technical Advisory Group (TAG).
The TAG last met on November 14, 2006 to review and discuss the draft *Horse Creek Stewardship Program 2004 Annual Report.*

Monthly Water Quality Monitoring.
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Macroinvertebrate and Fish Sampling.
The first set of samples for 2006 were collected on April 6, 2006. The second set was sampled on July 27, 2006. The third set was collected on November 28, 2006.

Clay Settling Ponds Real Time Monitoring.
Monitoring of these ponds continues with no reported releases. The last false alarm received was in October 2006.

Water Quality Continuous Recorder.
This monitoring effort is on going. A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low rainfall levels during the winter months have resulted in no reported data due to low creek flows.

Reports.
The draft QA/QC Report has temporarily been deferred while other more important reports are being completed.

The final *Horse Creek Stewardship Program 2004 Annual Report* has been revised and received by the Authority January 12, 2007. The draft *Horse Creek Stewardship Program 2005 Annual Report* should also be submitted for Authority review in early March 2007.

Recent Impact Assessments.
No recent assessments have been required.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: March 9, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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.

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Monthly Water Quality Monitoring.

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Macroinvertebrate and Fish Sampling.

This sampling effort is required three times per year in Spring (March / April), Summer (July / August) and Fall (October / November). 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

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Calendar Year 2007			

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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 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 will be 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
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2005 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 - December 2006	1	Dissolved Oxygen	3/45
(45 months)	1	Color	1/45
	2	Dissolved Oxygen	36/45
	2	pH	2/45
	2	Chlorophyll	9/45
	2	Radium 226 + 228	1/45
	2	Iron	1/45
	2	Fatty Acid	4/45
	3	Dissolved Oxygen	10/45
	3	Total Nitrogen	1/45
	3	Color	2/45
	3	Total Dissolved Solids	2/45
	3	Dissolved Calcium	2/45
	3	Chlorophyll	1/45
	3	Fatty Acid	1/45
	3	pH	1/45
	3	Sulfate	3/45
	4	Iron	24/45
	4	Dissolved Oxygen	5/45
	4	Sulfate	5/45
	4	Total Dissolved Solids	5/45
	4	Conductivity	1/45
	4	Dissolved Calcium	3/45
	4	Total Alkalinity	1/45
	4	Fluoride	2/45

All impact assessments have shown that the trigger levels were exceeded due to other causes not related to mining activities. The most recent significant event was in November 2004 where Station 2 exceeded the trigger level for total fatty acids. An impact assessment dated 2/28/05 was submitted and found that mining activities did not cause the higher levels of fatty acids. As a consequence of these preliminary impact assessment results, monitoring for these parameters and trend analysis of the data over time will continue.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: April 4, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

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The TAG last met on November 14, 2006 to review and discuss the draft *Horse Creek Stewardship Program 2004 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 - January 2007. January 2007 water quality results show a continuing trend resulting from a ground water influence in the southern basin. This is expected to continue until the wet season begins.

Macroinvertebrate and Fish Sampling.
The required three sampling events for 2006 is complete. The first event for 2007 is expected in April.

Clay Settling Ponds Real Time Monitoring.
Monitoring of these ponds continues with no reported releases. The last false alarm received was in October 2006.

Water Quality Continuous Recorder.
This monitoring effort is on going. A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows have caused difficultly in collecting this data on a consistent basis. Expected wet season and higher creek flows will correct this condition.

Reports.
The draft *Horse Creek Stewardship Program 2005 Annual Report* was received by the Authority March 9, 2007 and is under review.

Recent Impact Assessments.
January 2007 data showed high pH values at all stations with 2 out of 4 stations exceeding the trigger level. An impact assessment is now under way to determine the cause for the high pH.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: April 4, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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Calendar Year 2007			

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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 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 will be 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.

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Summary Table II

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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			
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 - January 2007	1	Dissolved Oxygen	3/46
(46 months)	1	Color	1/46
	1	pH	1/46
	2	Dissolved Oxygen	37/46
	2	pH	2/46
	2	Chlorophyll	9/46
	2	Radium 226 + 228	1/46
	2	Iron	1/46
	2	Fatty Acid	4/46
	3	Dissolved Oxygen	10/46
	3	Total Nitrogen	1/46
	3	Color	2/46
	3	Total Dissolved Solids	2/46
	3	Dissolved Calcium	2/46
	3	Chlorophyll	1/46
	3	Fatty Acid	1/46
	3	pH	1/46
	3	Sulfate	3/46
	4	pH	1/46
	4	Iron	24/46
	4	Dissolved Oxygen	5/46
	4	Sulfate	5/46
	4	Total Dissolved Solids	5/46
	4	Conductivity	1/46
	4	Dissolved Calcium	3/46
	4	Total Alkalinity	1/46
	4	Fluoride	3/46

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 January 2007 where Station 1 and 4 exceeded the trigger level for pH. An impact assessment is currently under way and the results are not expected for a few weeks.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: May 2, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

Technical Advisory Group (TAG).
The TAG last met on November 14, 2006. During April 2007 the TAG received a copy of the final *Horse Creek Stewardship Program 2004 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 - January 2007. January 2007 water quality results show a continuing trend resulting from a ground water influence in the southern basin. This is expected to continue until the wet season begins.

Macroinvertebrate and Fish Sampling.
The required three sampling events for 2006 are complete. The first event for 2007 was collected March 28th during the specified time period.

Clay Settling Ponds Real Time Monitoring.
Monitoring of these ponds continues with no reported releases. The last false alarm received was in October 2006.

Water Quality Continuous Recorder.
This monitoring effort is on going. A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows have caused difficultly in collecting this data on a consistent basis. Expected wet season and higher creek flows will correct this condition.

Reports.
The *Horse Creek Stewardship Program 2004 Annual Report* was accepted by the Authority Board of Directors during their April meeting. Copies of the final report have been distributed to interested parties. The draft *Horse Creek Stewardship Program 2005 Annual Report* was received by the Authority March 9, 2007 and is still under review.

Recent Impact Assessments.
January 2007 data showed high pH values at all stations with 2 out of 4 stations exceeding the trigger level. An impact assessment was completed April 4, 2007 by Mosaic and found that field instruments used to generate the data had malfunctioned.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: May 2, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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 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 will be 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			
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 - January 2007	1	Dissolved Oxygen	3/46
(46 months)	1	Color	1/46
	1	pH	1/46
	2	Dissolved Oxygen	37/46
	2	pH	2/46
	2	Chlorophyll	9/46
	2	Radium 226 + 228	1/46
	2	Iron	1/46
	2	Fatty Acid	4/46
	3	Dissolved Oxygen	10/46
	3	Total Nitrogen	1/46
	3	Color	2/46
	3	Total Dissolved Solids	2/46
	3	Dissolved Calcium	2/46
	3	Chlorophyll	1/46
	3	Fatty Acid	1/46
	3	pH	1/46
	3	Sulfate	3/46
	4	pH	1/46
	4	Iron	24/46
	4	Dissolved Oxygen	5/46
	4	Sulfate	5/46
	4	Total Dissolved Solids	5/46
	4	Conductivity	1/46
	4	Dissolved Calcium	3/46
	4	Total Alkalinity	1/46
	4	Fluoride	3/46

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 January 2007 where Station 1 and 4 exceeded the trigger level for pH. An impact assessment was completed in April 2007 and found that field instruments used to measure pH had malfunctioned.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: June 6, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

Technical Advisory Group (TAG).
The TAG last met on November 14, 2006. During April 2007 the TAG received a copy of the final *Horse Creek Stewardship Program 2004 Annual Report.* The TAG should be receiving the draft 2005 annual report in the next few weeks.

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 - March 2007. March 2007 water quality results show a minor ground water influence in the southern basin. This is expected to continue until the wet season begins.

Macroinvertebrate and Fish Sampling.
The required three sampling events for 2006 are complete. The first event for 2007 was collected March 28th during the specified time period.

Clay Settling Ponds Real Time Monitoring.
Monitoring of these ponds continues with no reported releases. The last false alarm received was in October 2006.

Water Quality Continuous Recorder.
This monitoring effort is on going. A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows have caused difficultly in collecting this data on a consistent basis. Expected wet season creek flows will correct this condition.

Reports.
The *Horse Creek Stewardship Program 2004 Annual Report* was accepted by the Authority Board of Directors during their April meeting. Copies of the final report have been distributed to interested parties. The revised draft *Horse Creek Stewardship Program 2005 Annual Report* is expected from Mosaic in early June 2007.

Recent Impact Assessments.
January 2007 data showed high pH values at all stations with 2 out of 4 stations exceeding the trigger level. An impact assessment was completed April 4, 2007 by Mosaic and found that field instruments used to generate the data had malfunctioned.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: June 6, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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. Bernard Milosky (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 2004 Annual Report* on November 14, 2006, which was accepted by the Board of Directors in April 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 / August) and Fall (October / November). 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		

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 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 will be 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
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2004 Annual Report	3/10/06	8/30/06	11/14/06	1/12/07
2005 Annual Report	3/9/07			
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 - March 2007	1	Dissolved Oxygen	3/48
(48 months)	1	Color	1/48
	1	pH	1/48
	2	Dissolved Oxygen	38/48
	2	pH	2/48
	2	Chlorophyll	9/48
	2	Radium 226 + 228	1/48
	2	Iron	1/48
	2	Fatty Acid	4/48
	3	Dissolved Oxygen	10/48
	3	Total Nitrogen	1/48
	3	Color	2/48
	3	Total Dissolved Solids	2/48
	3	Dissolved Calcium	2/48
	3	Chlorophyll	1/48
	3	Fatty Acid	1/48
	3	pH	1/48
	3	Sulfate	3/48
	4	pH	1/48
	4	Iron	24/48
	4	Dissolved Oxygen	5/48
	4	Sulfate	5/48
	4	Total Dissolved Solids	5/48
	4	Conductivity	1/48
	4	Dissolved Calcium	3/48
	4	Total Alkalinity	1/48
	4	Fluoride	5/48

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 January 2007 where Station 1 and 4 exceeded the trigger level for pH. An impact assessment was completed in April 2007 and found that field instruments used to measure pH had malfunctioned.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: July 4, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

Technical Advisory Group (TAG).
During April 2007 the TAG received the final *Horse Creek Stewardship Program 2004 Annual Report.* The TAG received the draft 2005 annual report in June and will meet July 27 to discuss the 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 - April 2007. April 2007 water quality results continue to show a minor ground water influence in the southern basin. This is expected to continue until the wet season begins.

Macroinvertebrate and Fish Sampling.
The first event for 2007 was collected March 28th and the second set is scheduled for July – August.

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.
This monitoring effort is on going. A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows have caused difficultly in collecting this data on a consistent basis over the last few months. Expected wet season creek flows will correct this condition.

Reports.
The *Horse Creek Stewardship Program 2004 Annual Report* was accepted by the Authority Board of Directors during their April meeting. Copies of the final report have been distributed to interested parties. The revised draft *Horse Creek Stewardship Program 2005 Annual Report* was received from Mosaic June 20, 2007.

Recent Impact Assessments.
April 2007 data showed high alkalinity values at Station 1. An impact assessment has been requested of Mosaic and the Authority is currently waiting for completion of the report.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: July 4, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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.

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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 / August) and Fall (October / November). 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		

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 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 will be 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		
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 – April 2007	1	Dissolved Oxygen	3/49
(49 months)	1	Color	1/49
	1	pH	1/49
	1	Alkalinity	1/49
	2	Dissolved Oxygen	39/49
	2	pH	2/49
	2	Chlorophyll	9/49
	2	Radium 226 + 228	1/49
	2	Iron	1/49
	2	Fatty Acid	4/49
	3	Dissolved Oxygen	10/49
	3	Total Nitrogen	1/49
	3	Color	2/49
	3	Total Dissolved Solids	3/49
	3	Dissolved Calcium	3/49
	3	Chlorophyll	1/49
	3	Fatty Acid	1/49
	3	pH	1/49
	3	Sulfate	3/49
	4	pH	1/49
	4	Iron	24/49
	4	Dissolved Oxygen	5/49
	4	Sulfate	5/49
	4	Total Dissolved Solids	5/49
	4	Conductivity	1/49
	4	Dissolved Calcium	3/49
	4	Total Alkalinity	1/49
	4	Fluoride	5/49

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 April 2007 where we found high alkalinity at Station 1. The assessment is currently on going.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: July 25, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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

Technical Advisory Group (TAG).

The TAG received the draft *Horse Creek Stewardship Program 2005 Annual Report* in June and will meet July 27 to discuss the 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 - April 2007. May water quality data is expected from Mosaic any day. Water quality results continue to show a minor ground water influence in the southern basin. This is expected to continue until the wet season begins.

Macroinvertebrate and Fish Sampling.

The first event for 2007 was collected March 28th and the second set is scheduled for July – August.

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 have caused difficultly in collecting this data on a consistent basis over the last few months. Expected wet season creek flows will correct this condition.

Reports.

The *Horse Creek Stewardship Program 2004 Annual Report* was accepted by the Authority Board of Directors during their April meeting. Copies of the final report have been distributed to interested parties. The revised draft *Horse Creek Stewardship Program 2005 Annual Report* was received from Mosaic June 20, 2007.

Recent Impact Assessments.

April 2007 data showed high alkalinity values at Station 1. An impact assessment was received from Mosaic July 16 and the report concluded that the high alkalinity was not caused by up stream mining activities.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: July 25, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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QA/QC Plan				

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Horse Creek Stewardship Program
Exceeded Trigger Levels
Summary Table III

Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
Apr 2003 – April 2007	1	Dissolved Oxygen	3/49
(49 months)	1	Color	1/49
	1	pH	1/49
	1	Alkalinity	1/49
	2	Dissolved Oxygen	39/49
	2	pH	2/49
	2	Chlorophyll	9/49
	2	Radium 226 + 228	1/49
	2	Iron	1/49
	2	Fatty Acid	4/49
	3	Dissolved Oxygen	10/49
	3	Total Nitrogen	1/49
	3	Color	2/49
	3	Total Dissolved Solids	3/49
	3	Dissolved Calcium	3/49
	3	Chlorophyll	1/49
	3	Fatty Acid	1/49
	3	pH	1/49
	3	Sulfate	3/49
	4	pH	1/49
	4	Iron	24/49
	4	Dissolved Oxygen	5/49
	4	Sulfate	5/49
	4	Total Dissolved Solids	5/49
	4	Conductivity	1/49
	4	Dissolved Calcium	3/49
	4	Total Alkalinity	1/49
	4	Fluoride	5/49

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 April 2007 where we found high alkalinity at Station 1. The assessment concluded that the high alkalinity was not due to mining activities.

Project Status Report

PROJECT: Horse Creek Stewardship Program

DATE: September 5, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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 - May 2007. June and July water quality samples were collected as scheduled but submittal of data to the Authority was delayed due to lab re-testing. Water quality results continue to show a minor ground water influence in the southern basin and is expected to continue until the wet season begins.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule on March 28th and August 9th.

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 have caused difficultly in collecting this data on a consistent basis over the last few months. Expected wet season creek flows will correct this condition.

Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* is expected to be completed in a few weeks and will then be scheduled for acceptance by the Authority Board .

Recent Impact Assessments.

April 2007 data showed high alkalinity values at Station 1. An impact assessment was received from Mosaic July 16 and the report concluded that the high alkalinity was not caused by up stream mining activities.

Project Historical Briefing

PROJECT: Horse Creek Stewardship Program

DATE: September 5, 2007

DEVELOPED BY: Samuel Stone, Environmental Affairs Coordinator

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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.

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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.

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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 / August) and Fall (October / November). 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	

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 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 will be 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
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Historical Report	8/16/05	12/5/05	2/23/06	4/28/06
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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 – May 2007	1	Dissolved Oxygen	3/50
(50 months)	1	Color	1/50
	1	pH	1/50
	1	Alkalinity	2/50
	2	Dissolved Oxygen	39/50
	2	pH	2/50
	2	Chlorophyll	10/50
	2	Radium 226 + 228	1/50
	2	Iron	1/50
	2	Fatty Acid	4/50
	3	Dissolved Oxygen	11/50
	3	Total Nitrogen	1/50
	3	Color	2/50
	3	Total Dissolved Solids	3/50
	3	Dissolved Calcium	4/50
	3	Chlorophyll	1/50
	3	Fatty Acid	1/50
	3	pH	1/50
	3	Sulfate	4/50
	4	pH	1/50
	4	Iron	24/50
	4	Dissolved Oxygen	5/50
	4	Sulfate	5/50
	4	Total Dissolved Solids	5/50
	4	Conductivity	1/50
	4	Dissolved Calcium	3/50
	4	Total Alkalinity	1/50
	4	Fluoride	5/50

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 April 2007 where we found high alkalinity at Station 1. The assessment concluded that the high alkalinity was not due to mining activities.

Project Status Report

Project: **Horse Creek Stewardship Program**

Date: **October 3, 2007**

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).

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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 - July 2007. Water quality results continue to show a minor ground water influence in the southern basin and is expected to continue until rainfall levels increase.

Macroinvertebrate and Fish Sampling.

These biological samples were collected on schedule March 28th and August 9th.

Clay Settling Ponds Real Time Monitoring.

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

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A summary of this data is being supplied by Mosaic monthly along with the routine water quality data. The low creek flows have caused difficultly in collecting this data on a consistent basis over the last few months. Expected higher creek flows will correct this condition.

Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* was received September 18, 2007 and is scheduled for acceptance by the Authority Board October 3, 2007.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at station 3. An impact assessment has been requested from Mosaic on August 30. Results of this work are expected in a few weeks.

Project Historical Briefing

Project: **Horse Creek Stewardship Program**

Date: **October 3, 2007**

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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 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 will be supplied as part of the Annual Report and summarized monthly along with other routine water quality data

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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.

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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 – July 2007	1	Dissolved Oxygen	3/52
(52 months)	1	Color	1/52
	1	pH	1/52
	1	Alkalinity	3/52
	1	Fatty Acid	1/52
	2	Dissolved Oxygen	39/52
	2	pH	2/52
	2	Chlorophyll	12/52
	2	Radium 226 + 228	1/52
	2	Iron	1/52
	2	Fatty Acid	6/52
	3	Dissolved Oxygen	11/52
	3	Total Nitrogen	2/52
	3	Color	2/52
	3	Total Dissolved Solids	5/52
	3	Dissolved Calcium	5/52
	3	Chlorophyll	1/52
	3	Fatty Acid	1/52
	3	pH	1/52
	3	Sulfate	5/52
	4	pH	1/52
	4	Iron	25/52
	4	Dissolved Oxygen	5/52
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	4	Conductivity	1/52
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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 April 2007 where we found high alkalinity at Station 1. The assessment concluded that the high alkalinity was not due to mining activities.

Project Status Report

Project: **Horse Creek Stewardship Program**

Date: **November 7, 2007**

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).

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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 - August 2007. Recent increases in rainfall 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 and August 9th. Next event is scheduled for late November.

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Reports.

The final *Horse Creek Stewardship Program 2005 Annual Report* was received September 18, 2007 and was accepted by the Authority Board October 3, 2007. The Report will be distributed to DEP, SWFWMD and other interested parties in early November.

Recent Impact Assessments.

June 2007 data showed high fatty acid values at Station 1 and high total nitrogen at station 3. An impact assessment has been requested from Mosaic on August 30. Results of this work are expected next week.

Project Historical Briefing

Project: **Horse Creek Stewardship Program**

Date: **November 7, 2007**

Prepared by: **Samuel Stone, Environmental Affairs Coordinator**

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Project Period	Station Number	Chemical Parameter	Frequency of Exceeded Trigger Levels (months)
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	1	pH	1/53
	1	Alkalinity	3/53
	1	Fatty Acid	1/53
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	2	pH	2/53
	2	Chlorophyll	12/53
	2	Radium 226 + 228	1/53
	2	Iron	1/53
	2	Fatty Acid	6/53
	3	Dissolved Oxygen	12/53
	3	Total Nitrogen	2/53
	3	Color	2/53
	3	Total Dissolved Solids	5/53
	3	Dissolved Calcium	5/53
	3	Chlorophyll	1/53
	3	Fatty Acid	1/53
	3	pH	1/53
	3	Sulfate	5/53
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Project Status Report

Project: **Horse Creek Stewardship Program**

Date: **December 5, 2007**

Prepared by: **Samuel Stone, Environmental Affairs Coordinator**

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These biological samples were collected on schedule on March 28th and August 9th. Next event is scheduled for the last week of November.

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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 high fatty acids. In both cases exceeding the trigger values was most likely not caused by phosphate mining since no discharges had occurred since June 2006.

Project Historical Briefing

Project: **Horse Creek Stewardship Program**

Date: **December 5, 2007**

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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 – September 2007	1	Dissolved Oxygen	3/54
(54 months)	1	Color	1/54
	1	pH	1/54
	1	Alkalinity	3/54
	1	Fatty Acid	1/54
	2	Dissolved Oxygen	41/54
	2	pH	2/54
	2	Chlorophyll	12/54
	2	Radium 226 + 228	1/54
	2	Iron	1/54
	2	Fatty Acid	6/54
	3	Dissolved Oxygen	13/54
	3	Total Nitrogen	2/54
	3	Color	2/54
	3	Total Dissolved Solids	5/54
	3	Dissolved Calcium	5/54
	3	Chlorophyll	1/54
	3	Fatty Acid	1/54
	3	pH	1/54
	3	Sulfate	5/54
	4	pH	1/54
	4	Iron	25/54
	4	Dissolved Oxygen	5/54
	4	Sulfate	6/54
	4	Total Dissolved Solids	7/54
	4	Conductivity	1/54
	4	Dissolved Calcium	4/54
	4	Total Alkalinity	1/54
	4	Fluoride	5/54

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.