Casey-King Wetland Mitigation Project
Lenoir County, North Carolina

Year 5 Monitoring Report

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

APPENDICES

1.0 SUMMARY

In March 2002, construction was completed to restore a wetland ecosystem throughout the Casey-King Mitigation Site. The targeted wetland system for the restored site was a "non-riverine, wet hardwood forest" with a small component of "Coastal Plain, small stream swamp", as described by Schafale and Weakley, 1990. Though the site's restoration plan anticipated wetland hydrology would be restored to 28 acres, the post construction survey showed up to 37.3 acres of wetland hydrology were restored (an increase of 9.3-acres in wetland area). Monitoring of this restoration project has taken place during the five growing seasons subsequent to completion. This Annual Report summarizes the groundwater and vegetation monitoring activities performed on the Casey-King Wetland Mitigation Site during the fifth year following construction completion. All data included in this report correspond to results obtained from monitoring during the year 2006 growing season.

This Annual Report presents data from five wetland hydrology monitoring stations. Each station is equipped with a manual groundwater gauge. Four of these stations are also equipped with automated groundwater gauges. The location of each station coincides with the location of one of the five 0.1 acre vegetation-monitoring plots on site (gauge stations are located just outside one of the corners of the vegetation plot). Each groundwater gauge location also serves as a base point from which photographs are taken and referenced. Hydrologically, the fifth post-construction growing season at the Casey-King Wetland Mitigation Site was a successful one. Data collected from the on-site, groundwater monitoring wells showed all five wetland hydrology monitoring stations met the hydrologic success criteria established in the monitoring plan for the fifth consecutive year.

Part of the monitoring effort for this project includes observation of the relationship between local climatic conditions and site groundwater levels. Weather data from the Kingston Weather Station are used in conjunction with data collected from an on-site, manual rain gauge to document precipitation.

The Casey-King site is overall in its fifth growing season but based on US Army Corps of Engineers (USACE) correspondence dated September 13, 2005 the site is considered to be in the fourth growing season for purposes of determining achievement of vegetative success criteria. This report documents vegetation survival, during the fourth growing season, based on five vegetation-monitoring plots. Five monitoring plots 0.1 acre in size were used to document survival of the woody vegetation planted on the 37.3-acre mitigation site. The vegetation monitoring, for the fourth growing season, indicated a range of survival between 320 and 590 stems per acre, which is on track for meeting the final vegetation survival criteria of 260 live stems per acre after the fifth growing season at the end of 2007.

2.0 INTRODUCTION

2.1 Project Description

Located in Lenoir County, North Carolina, the Casey-King Wetland Mitigation Site encompasses a total restored area of 37.3 acres. It is situated off of British Road (State Road 1803) several miles east of Kinston (Figures 1 and 2). It was constructed between December 2001 and February 2002, with 37.3 acres of planting completed on March 19, 2002. Groundwater and rain gauges became functional on March 20, 2002. The site is now in its fifth year of hydrologic monitoring and its fourth year of vegetation monitoring. Appendix A contains the As-Built survey

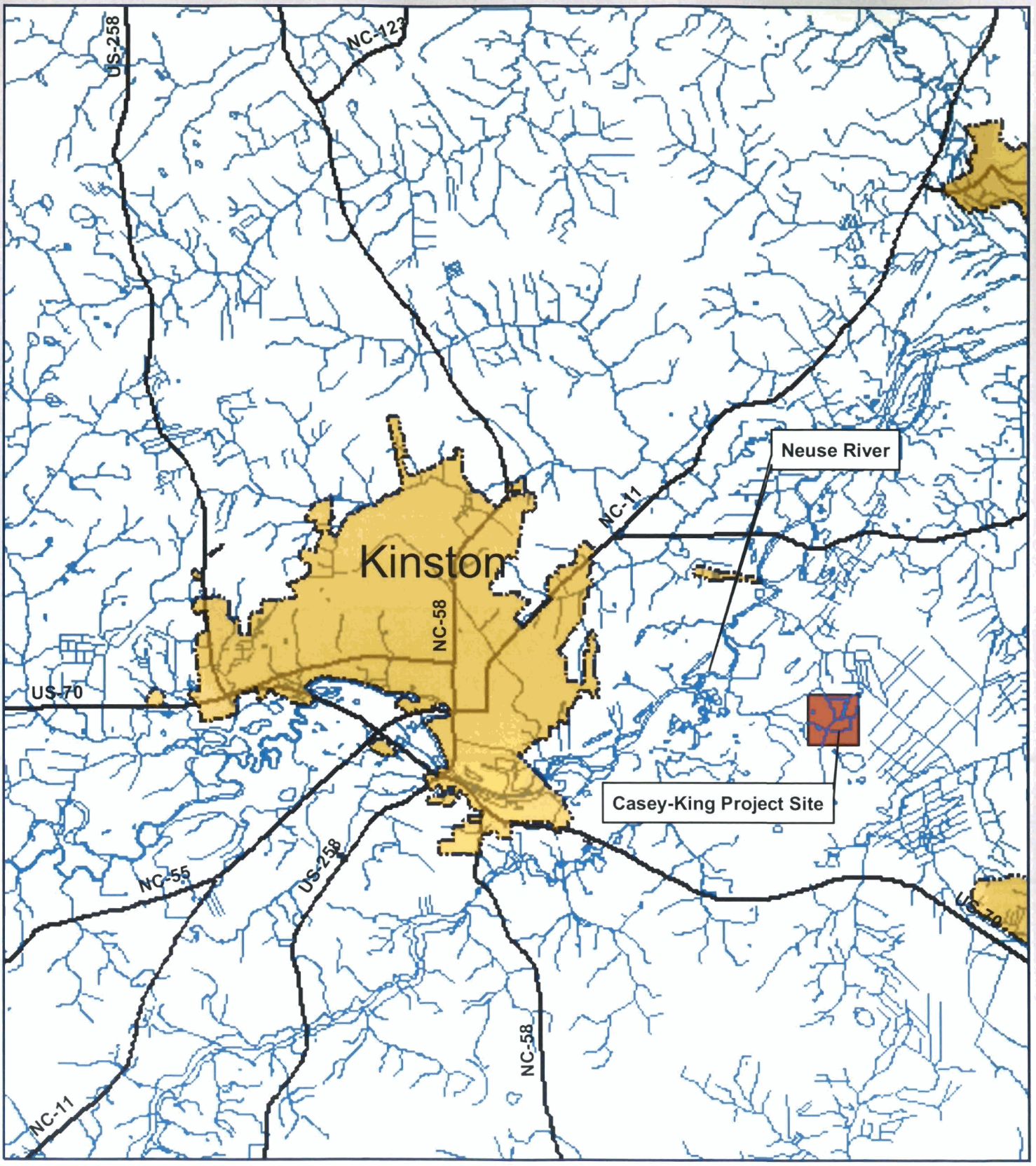
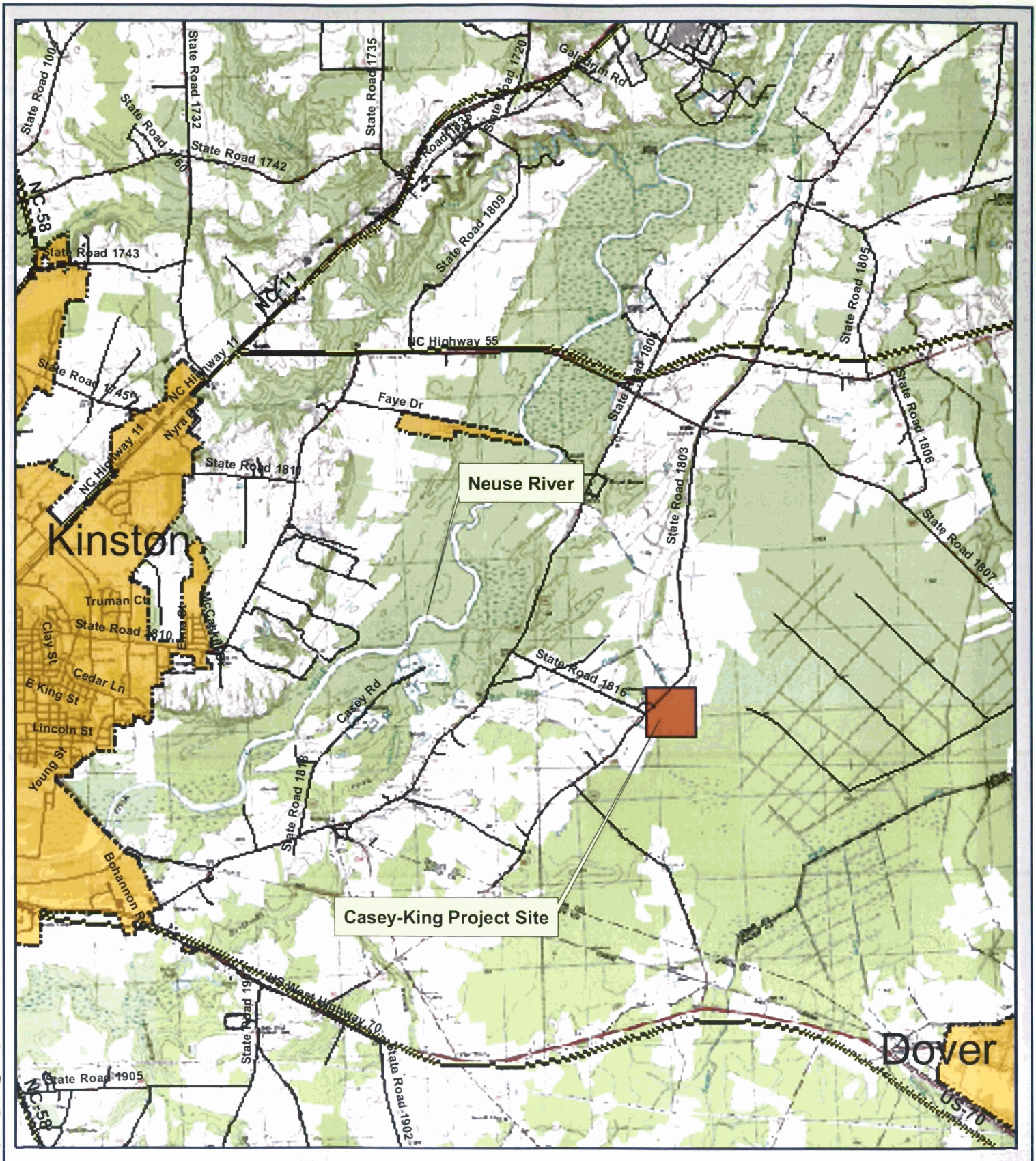


Figure 1.
Casey-King Wetland Mitigation Site
Project Location Map
Lenior County, NC

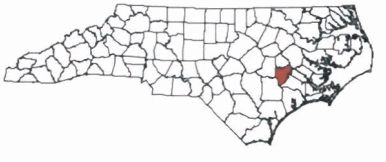
1 inch equals 2.006155 miles



EBX

Figure 2.
Casey-King Wetland Mitigation Site
USGS Topographic Map
Lenior County, NC

1 inch equals 1 miles



2.2 Purpose

This project provides compensatory mitigation for wetland impacts associated with North Carolina Department of Transportation (NCDOT) projects within the resident hydrologic unit. The Casey-King Site was designed to restore a non-riverine, wet hardwood forest ecosystem and a Coastal Plain, small stream swamp ecosystem. Monitoring of the Casey-King Site is required to demonstrate successful mitigation based on the criteria described in both the Site Specific Mitigation Plan and the Neu-Con Umbrella Stream and Wetland Mitigation Bank Instrument, as well as through comparison to conditions at a selected reference site. Both hydrologic and vegetation monitoring are conducted throughout the growing season. Success criteria must be met for five consecutive years. This Annual Report details the results of the hydrologic and vegetation monitoring for 2006 at the Casey-King Wetland Mitigation Site. Table 1 details the project history and schedule.

Table 1. Project History and Schedule

May 2000	Pre-restoration Monitoring Gauges Installed
Fall 2001	Approved Mitigation Plan
December 17, 2001	Construction Began
March 7, 2002	Construction Completed
March 19, 2002	Planting Completed
March 19, 2002	Post Construction Monitoring Gauges Installed
April 2002	As-Built Report Submitted
October / November 2002	Supplemental Vegetative Monitoring
November 30, 2002	1st Annual Monitoring Report
November 2003	2nd Annual Monitoring Report
November 2004	3rd Annual Monitoring Report
November 2005	4th Annual Monitoring Report
November 2006	5th Annual Monitoring Report

3.0 HYDROLOGY

3.1 Success Criteria

The hydrologic success criteria for this site requires the groundwater table remain within 12 inches of the soil surface for at least 5 percent of the growing season continuously, or for at least 12.5 percent of the growing season cumulatively. The National Weather Service Wetlands Determination Tables (WETS) for the for Kinston NNE, NC4689 weather station defines the growing season for Lenoir County as that 238-day long period extending from March 20 to November 12 of each year. Therefore, the time period for which the hydrologic success criteria must be met is 12 consecutive days or 30 cumulative days.

The Mitigation Plan specifies that groundwater data is to be collected from manual groundwater gauges. This Plan further specifies that successful hydrologic data must demonstrate wetland conditions are present in normal or dryer than normal conditions. Monitoring data collected from the reference wetland system identified in the Mitigation Plan (Webb reference site) is included here to demonstrate the correlation existing between the site's restored hydrology and the natural hydrology of the target system. 3.2

3.2 Description of Hydrology Monitoring

Monitoring stations were established across the site to document the restoration of wetland hydrology. Five manual groundwater gauges, four automated groundwater gauges (Remote

Data Systems model WL 40 and Infinities), and one manual rain gauge were installed on-site during the first growing season (Figure 3). Both manual and automated groundwater gauges were installed to a minimum depth of at least 32 inches below the ground surface. Each monitoring station is located within a particular wetness zone at the restoration site. Plots AW1, AW3, AW4 and AW5 contain both manual and automated groundwater gauges and are positioned to determine the success of restoring a non-riverine, wet hardwood forest on the site. Plot MW2 is located to determine the success of the small stream swamp ecosystem.

The monitoring protocol for the site specifies that automated monitoring stations must be downloaded and checked for malfunctions on a monthly basis. During monthly site visits, manual groundwater gauges are read and rainfall totals are collected from the on-site rain gauge. Prior to the start of the 2004 growing season, one of the RDS loggers (AW1) failed and was replaced by a logger manufactured by Infinities USA, Inc. The Infinities loggers have proven reliable and provide the same level of accuracy as those manufactured by RDS. Automated gauge CK5 was damaged in early June 2006; automated gauge AW4 was damaged in July 2006; and Webb reference automated gauge was damaged in June 2006. Because the Casey-King site had already achieved the hydrology success criteria and no further hydrology monitoring is planned these gauges were not replaced. Raw hydrograph data from the monitoring gauges are presented in Appendix B.

Automatic groundwater gauges record water table elevations twice daily at 08:00 and 20:00 (8:00 AM and 8:00PM). Infinities gauges employ pressure sensors that record water elevation above the bottom of the sensor (with atmospheric pressure compensation). Remote Data Systems gauges use a capacitive probe to directly measure depth of the water from a "zero" point (ground surface). Immediately adjacent to each automatic gauge is a manual calibration gauge. The calibration water table depth is recorded at monthly downloads. To determine wetland hydroperiods the automatically recorded data are compared to the calibration data to determine a standard correction factor between the calibration gauge and the automatic gauge for each location. The standard correction factor is applied to correct daily readings. The corrected daily readings are used to determine wetland hydroperiods for the automatic gauges.

Water table depths are recorded monthly in manual groundwater gauges. Each manual gauge is correlated to an automatic gauge based on proximity, landscape position, and the relationship of their groundwater depth readings (i.e. if their readings are separated by a consistent value). To calculate wetland hydroperiods interpolations are made between monthly readings by correlating twice daily readings from an automated gauge. Once the appropriate automatic gauge has been selected a correction factor is calculated for each monthly gauge reading. A daily rate of change between monthly correction factors is calculated to determine the daily correction factor. The daily correction factor is then applied to the automatic gauge readings to calculate an estimated daily water table depth for the manual gauge. These daily readings are used to determine wetland hydroperiods for the manual gauges.

Wetland hydroperiods are calculated from twice daily water table depth elevations. A hydroperiod is calculated if the water table is equal to or less than 12 inches below ground

CAUSEY ROAD
SR 1815

SR 1803 BRITISH ROAD 60 PUBLIC RIGHT-OF-WAY

WETLAND HYDROPERIOD

○ > 5 %
● < 5 %

SPOIL AREA

ACCESS ROAD

SPOIL AREA

SPOIL AREA

ACCESS ROAD

DITCH PLUG

NAD 83

Figure 3
Casey King

50 25 0 50 100
SCALE (FT)

surface for at least 24 hours. If a gauge falls below -12 inches for two consecutive readings (24 hours) then the hydroperiod ends at the last reading within 12 inches. If a gauge falls below -12 inches for only one reading then maintains a reading above -12 inches for a minimum of 24 hours then the hydroperiod is calculated continuously. This methodology accounts for minor technical malfunctions experienced by the automatic gauges.

3.3 Results of Hydrologic Monitoring

Site Data
The following hydroperiod statistics were calculated for each monitoring station during the growing season: 1) most consecutive days that the water table was within twelve inches of the soil surface; 2) cumulative number of days that the water table was within twelve inches of the soil surface; and 3) number of times that the water table rose to within twelve inches of the soil surface. The results of these calculations are presented in Table 2. Figure 4 provides a chart of the water depth for each of the on-site, groundwater monitoring gauges. The locations of each gauge are shown in Figure 3.

Table 2. Hydrologic Monitoring Results for 2006 (Year 4)

2006 Max Hydroperiod (Growing Season 20-Mar through 12-Nov, 238 days)					
Monitoring Gauge	Consecutive		Cumulative		Occurrences
	Days	Percent of Growing Season	Days	Percent of Growing Season	
AW1	13	5	50	21	9
MW2	74	31			6
AW3	74	31	176	74	7
AW4	24	10	54	23	7
AW5	33	14	54	23	4

The site was designed to function with rainfall as its primary hydrologic influence. Groundwater levels are closely related to local climatic conditions and monitoring shows the influence of rainfall on site hydrology. More detailed information on precipitation data is included in discussed below.

Reference Data
The approved Mitigation Plan states that if the rainfall data for any given year during the monitoring period substantially differs from the historic average for the area, the reference wetland data can be accessed to determine if there is a positive correlation between the performance of the restoration site and the natural hydrology of the reference site.

Data from the Webb reference wetland groundwater gauge failed to exhibit a wetland hydroperiod during the 2006 growing season (Figure 4). Appendix C contains the groundwater gauge data.

Climate Data
Table 3 and Figure 5 are comparisons of the local 2006 monthly rainfall to historical precipitation data collected between 1971 and 2000 for the Lenoir County area. This local data is provided by the National Weather Service (NWS) Cooperative Observer Program (COOP), a national weather and climate observing network. Observed data presented were collected from an automated weather station in Kinston (Station: 314689- Kinston Ag

Figure 4A 2006 Casey-King
Groundwater Gauge Hydrograph.

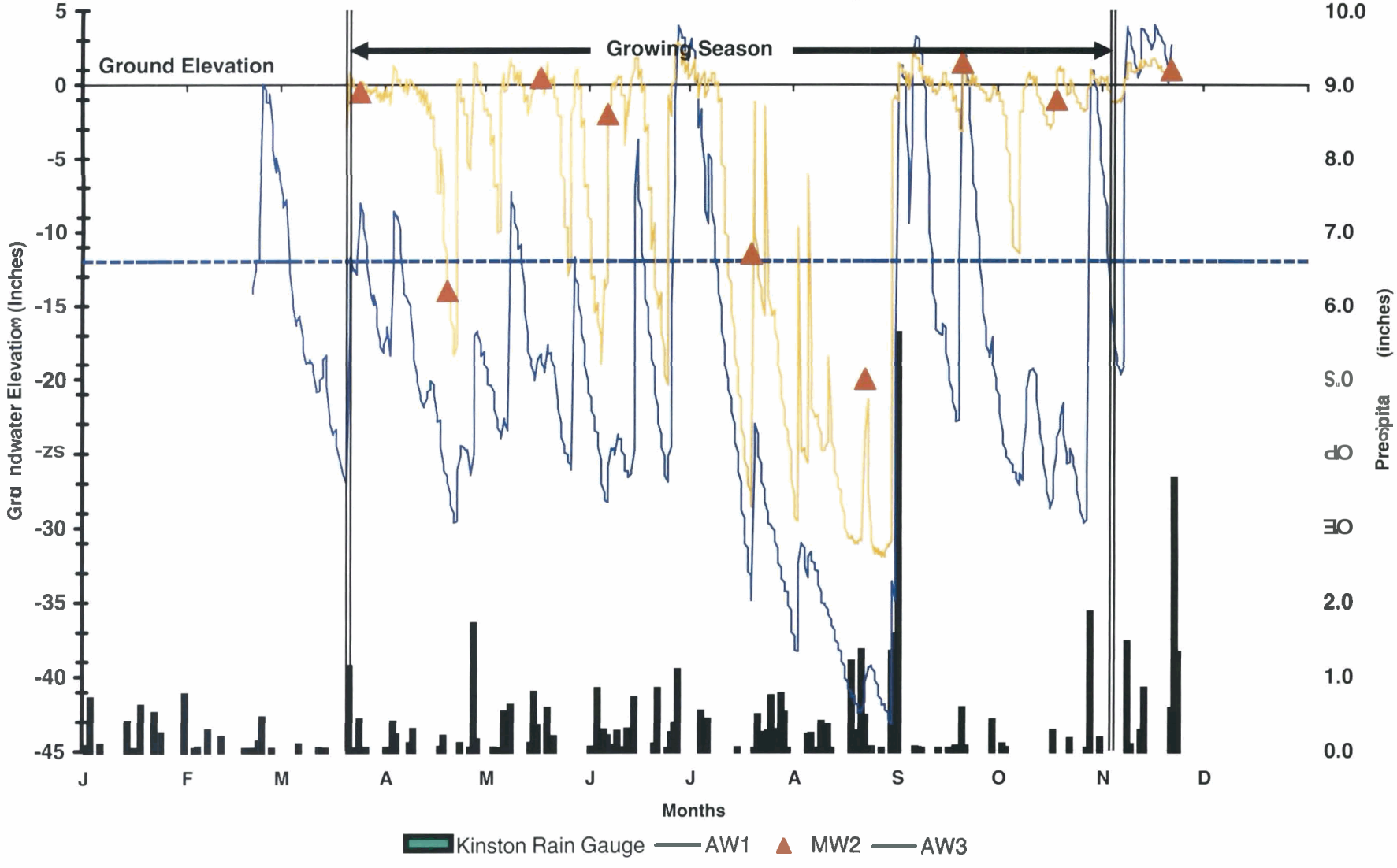


Figure 4B 2006 Casey-King Groundwater Gauge Hydrograph.

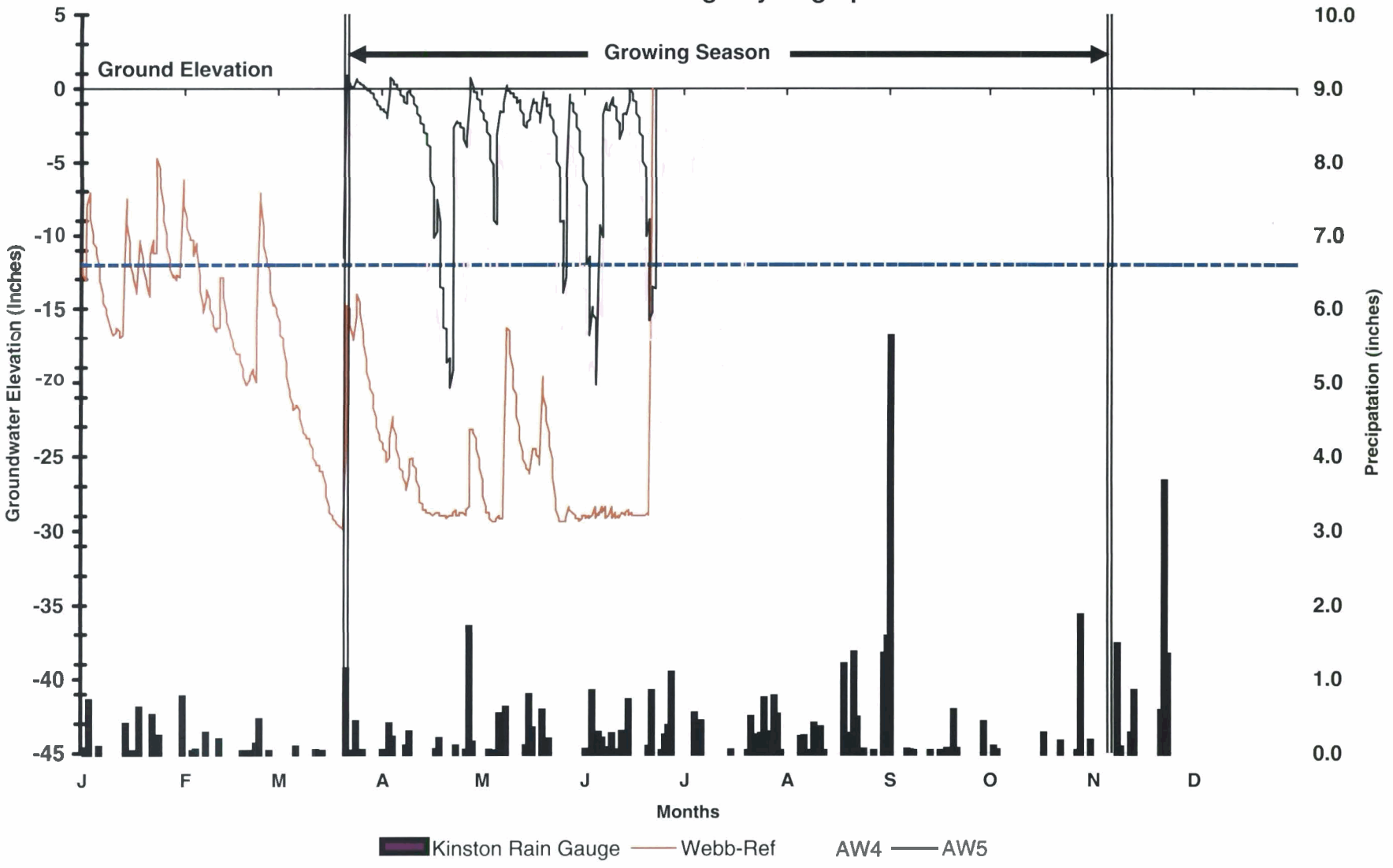
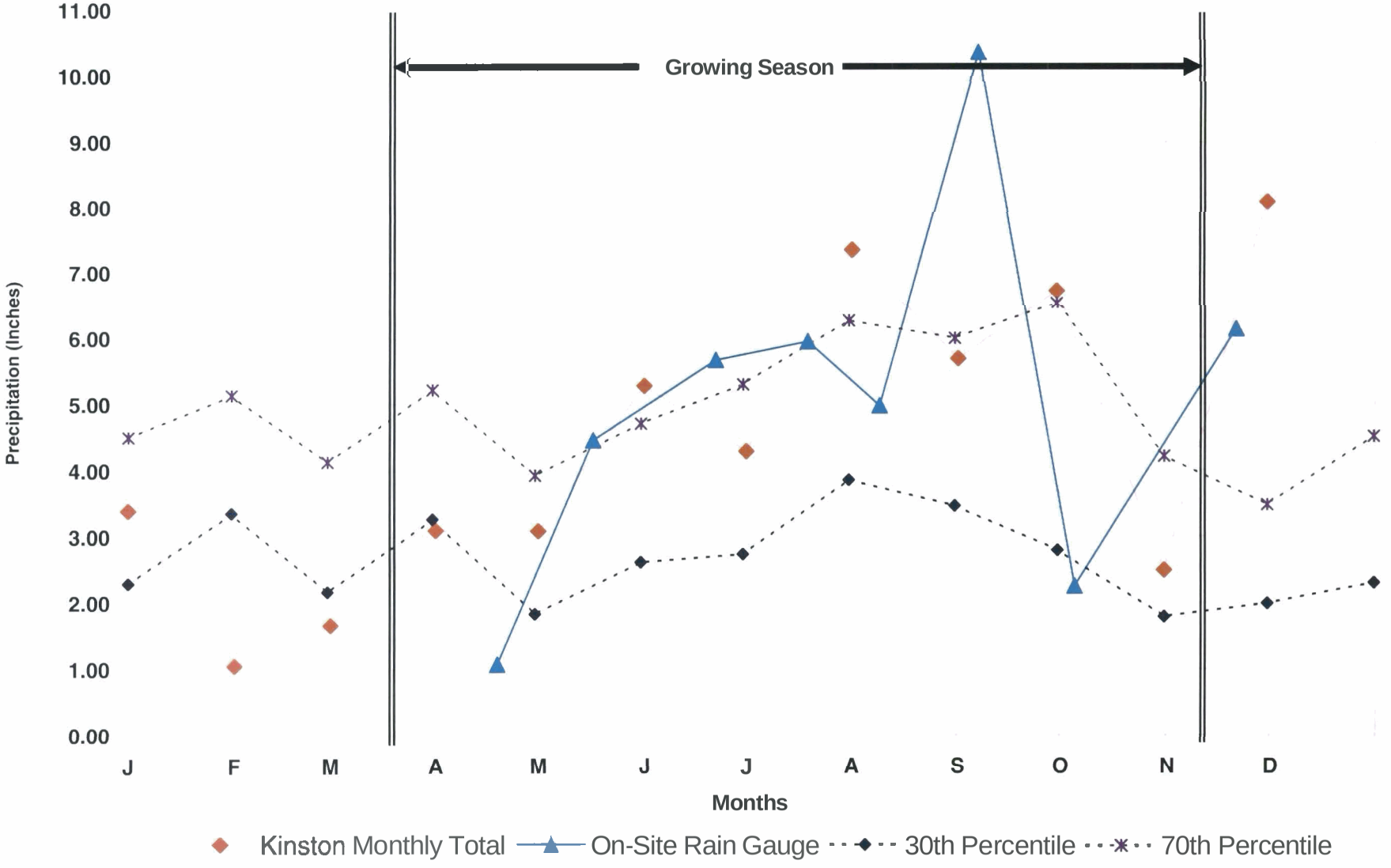


Figure 5
2006 Casey-King Precipitation.



Research). Monthly rainfall data for the month of December 2006 were not available at the time this report was compiled.

Data from the manual on-site rain gauge was used to determine how on-site rain data correlates with the Kinston automated weather station. For the period when rainfall measurements from on-site rainfall and the automated data are available, the two rainfall totals are similar. This comparison shows that on-site rainfall 2006 approximates rain data from the Kinston gauge. Rainfall was below normal limits in February and March; within normal limits in January, April through July, and October; and exceeded normal limits in August, September, and November.

Table 3. Comparison of Normal Rainfall to Observed Rainfall

Month	Average	Normal Limits		Kinston Precipitation
		30 Percent	70 Percent	
January	4.34	3.36	5.14	3.40
February	3.48	2.17	4.13	1.05
March	4.31	3.26	5.21	1.66
April	3.12	1.83	3.92	3.09
May	3.83	2.61	4.70	3.08
June	4.49	2.73	5.29	5.27
July	5.34	3.85	6.26	4.28
August	5.36	3.46	5.99	7.35
September	5.30	2.79	6.54	6.73
October	3.23	1.79	4.21	2.49
November	2.93	1.99	3.48	8.09
December	3.34	2.30	4.51	---
Annual Sum	49.07	32.14	59.38	48.77

3.4 Hydrologic Conclusions

Data collected from all the groundwater monitoring gauges on the Casey-King Wetland Mitigation Site document that hydrologic success criteria have been met during the 2006 growing season. All gauges show consecutive saturated conditions within the 12 inches below soil surface for at least 5 percent of the growing season (12 consecutive days), and cumulative soil saturation within 12 inches of the ground surface for over 12.5 percent of the growing season (30 days of the entire season).

This data together with the corresponding climatic data for the area demonstrate the site meets the hydrologic success criteria for the 2006 growing season. Rainfall is considered within the normal yearly range for rainfall totals.

4.0 VEGETATION

4.1 Vegetation Success Criteria

The interim measure of vegetative success identified in the Casey-King Mitigation Plan has been met (survival of at least 320 three-year old trees per acre at the end of Year 3 of the monitoring period). The final vegetative success criteria will be the survival of 260 five-year old trees per acre at the end of the five-year monitoring period. In addition, at the end of the five-year monitoring period, the presence of volunteer facultative softwood species such as red maple, sweet gum, and loblolly pine must be limited to less than 10 percent each of

the total number of trees utilized to determine success. These trees may contribute more than 10 percent of the total trees on the site, but will not constitute more than 10 percent each of the 260 trees per acre required to meet vegetation success criteria.

4.2 Description of Species and Vegetation Monitoring Protocol

Table 4 shows the tree species recorded in the Wetland Restoration Area. Planted tree species are numbered 1-12 and volunteer species are labeled A-F.

Table 4. Vegetation Tree Counts for 2006 (Year 5)

ID	Scientific Name	Common Name	FAC Status
1	*Celtis laevigata*	Sugarberry	FACW
2	*Nyssa biflora*	Swamp Tupelo	OBL
3	*Nyssa sylvatica* (4)	Blackgum	FAC
4	*Platanus occidentalis*	Sycamore	FACW-
5	*Quercus laurifolia (3)*	Laurel Oak	FACW
6	*Quercus lyrata*	Overcup Oak	OBL
7	*Quercus michauxii*	Swamp Chestnut Oak	FACW-
8	*Quercus nigra*	Water Oak	FACW-
9	*Quercus pagoda*	Cherrybark Oak	FAC
10	*Quercus phellos*	Coastal Willow Oak	FACW-
11	*Quercus shumardii*	Shumard Oak	FACW-
12	*Taxodium distichum* (4)	Bald Cypress	OBL
A	*Acer rubrum*	Red Maple	FAC
B	*Liquidambar styraciflua*	Sweetgum	FAC+
C	*Platanus occidentalis*	Sycamore	FACW-
D	*Salix nigra*	Black Willow	OBL
E	*Carya* sp. (1)	Hickory	(2)
F	*Fraxinus* sp. (1)	Ash	(2)
	(1) Sapling; positive ID not possible (2) Unknown (3) Inadvertently omitted from original plan (4) Bald Cypress and Blackgum were previously noted as a volunteer species but did not survive the 2005 growing season.		

4.3 Results of Vegetation Monitoring

Stem counts for each of the monitoring plots are presented in Table 5. Numbers identify planted tree species and letters identify volunteer tree species across the top row, and each plot is identified down the left column. The numbers and letters on the top row correlate to the ID column in Table 4 above. Trees are flagged in the field as needed before the flags marking them degrade. Flags are utilized because they will not interfere with the growth of the tree. Volunteers are also flagged during this process.

Table 5. Vegetation Monitoring Plot Stem Counts

Plot	1	2	3	4	5	6	7	8	9	10	11	12	A	B	C	D	E	F	2006 Stem/ac	2005 Stem/ac
CK1	0	5	2	3	5	0	3	7	0	16	8	5	4	0	0	4	0	0	620	590
CK2	0	1	0	2	0	2	1	3	0	13	4	6	0	0	0	0	0	0	320	320
CK3	0	10	2	3	2	0	5	1	0	0	10	1	0	0	0	3	0	0	370	370
CK4	0	2	0	3	1	12	3	0	0	0	8	0	1	4	10	5	1	0	500	500
CK5	0	0	0	18	4	0	2	0	0	3	1	1	0	0	0	3	1	4	370	370

Range of Stems/Acre: 320-620
Average Stems/Acre: 436

Variability in the past statistics resulted from an inability to locate trees from one year to the next, but the overwhelming factor is that tree counts are performed after planting or near leaf drop when identification of leafless sapling oaks and gums is near impossible. In order increase consistency, PVC stakes have been erected adjacent to trees within the plots since the lack of forest cover allows the flags to photo-degrade. Changes in data also results because some saplings appear dead in one year when they may in fact be dormant or have a dead terminal bud and will re-sprout in the following spring.

4.4 General Vegetation Observations

Hydrophytic herbaceous vegetation including rush (*Juncus effusus*), spike-rush (*Eleocharis obtusa*), boxseed (*Ludwigia* sp.), and sedge (*Carex* sp.) are frequently observed across the site, particularly in areas of inundation. Cat-tail (*Typha latifolia*) and knotweed (*Polygonum persicaria*) are also found on site. The presence of these herbaceous wetland plants helps to confirm the presence of wetland hydrology on the site.

Weedy vegetation is also present on the site in some localized areas. The majority of these weedy species are annuals and pose little threat to survivability of planted trees. There is a quickly growing population of Lespedeza in an area previously devoid of ground cover. It does not seem to be affecting the overall success of the planted tree survival. Thickets of partridge pea (*Cassia fasciculata*) are no longer present on the site and the fennel (*Foeniculum vulgare*) has become even more localized; these don't seem to be affecting the survivability of the planted vegetation. Other weedy vegetation including ragweed (*Ambrosia artemisiifolia*) is present on site. Some patches of Johnson grass (Sorghum halepense), which were previously noted in scattered portions of the site, are noted along the entrance road to the site. Control measures could be deemed necessary to prevent reinvasion of this species should it be noted in future evaluations.

4.5 Vegetation Conclusions

Approximately 37.3 acres of this site was planted in nonriverine hardwoods and coastal plain swamp species. There are five 0.1 acre vegetation monitoring plots established throughout the planting areas. The 2006 vegetation monitoring shows the range of tree density to be between 320 and 620 stems per acre. This puts the site on trajectory to meet the final success criteria of 260 trees per acre by year five.

5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

- Fifth year hydrologic monitoring has shown that wetland hydrologic success criteria have been met and that the site is performing as designed.

- No further hydrology monitoring is necessary.

- Vegetation monitoring efforts have calculated the range of stems per acre on site to between 320 and 620.

- This site should easily meet the 260 stems per acre criteria necessary at the end of the five-year monitoring period.

APPENDIX A

As-Built Survey

CAUSEY ROAD
SR 1818

SR 1803 BRITISH ROAD 60 PUBLIC RIGHT-OF-WAY

WATER TABLE ELEVATIONS APRIL 16, 2002	
WELL #1	501.7' (0.8' BELOW GROUND ELEVATION)
WELL #2	499.6' (0.6' BELOW GROUND ELEVATION)
WELL #3	504.1' (0.1' BELOW GROUND ELEVATION)
WELL #4	504.8' (0.1' BELOW GROUND ELEVATION)
WELL #5	504.3' (0.2' BELOW GROUND ELEVATION)

ACCESS ROAD

SPOIL AREA

DITCH PLUG

NAD 83

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- RIGHT-OF-WAY
- TOP OF DITCH BANK
- APPROXIMATE TOP OF DITCH BANK
- PROPERTY LINE
- TREELINE
- EDGE OF PAVEMENT
- CROSS VANE
- PROPERTY CORNER
- POWER POLE
- MITIGATION PLAN PROPOSED RESTORATION AREA
- ACTUAL PROPOSED RESTORATION AREA
- CONSERVATION EASEMENT BOUNDARY
- VEGETATION ZONE PLANTING BOUNDRY

SUMMARY OF WETLAND MITIGATION ACREAGE	
WETLAND RESTORATION AREA AS PROPOSED IN MITIGATION PLAN:	28 ACRES
PROPOSED ACTUAL RESTORATION AREA	37.28 ACRES

VEGETATION SELECTION	
ZONE A	ZONE B
BARE ROOT PLANTINGS	BARE ROOT PLANTINGS
WATER OAK (*QUERCUS NIGRA*) SWAMP CHESTNUT OAK (*QUERCUS MICHAUXII*) LAUREL OAK (*QUERCUS LAURIFOLIA*) BLACKGUM (*NYSSA SYLVATICA*) SYCAMORE (*PLATANUS OCCIDENTALIS*)	BALD CYPRESS (*TAXODIUM DISTICHUM*) SWAMP CHESTNUT OAK (*QUERCUS MICHAUXII*) LAUREL OAK (*QUERCUS LAURIFOLIA*) OVERCUP OAK (*QUERCUS LYRATA*) SWAMP BLACKGUM (*NYSSA BIFLORA*)

NO	SUBMITTALS / REVISIONS	DES	DRN	CHK	DATE
1	DRAFT AS-BUILT DRAWING	PST	DCW	ATT	04/23/02
2	FINAL AS-BUILT MAPS	PST	DCW	ATT	05/30/02
3	REVISED FINAL PLANS	PST	DCW	ATT	06/27/02

BUCK ENGINEERING
8000 Regency Parkway, Suite 280
Cary, North Carolina 27511
Phone: 919-463-5488
Fax: 919-463-5490

AS-BUILT DRAWING

WETLAND RESTORATION PROJECT
EBX CASEY / KING
LENOIR COUNTY

DATE: 6-6-2002
PROJECT NO: 324
FILENAME:
SCALE: FULL SIZE 1"=100' HALF 1"=200'
SHEET NO: 2

Figure 2. Casey/King As-Built Drawing.

APPENDIX B

2006 Gauge Data

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
1-Jan-06	08:00:00					
1-Jan-06	20:00:00					
2-Jan-06	08:00:00					
2-Jan-06	20:00:00					
3-Jan-06	08:00:00					
3-Jan-06	20:00:00					
4-Jan-06	08:00:00					
4-Jan-06	20:00:00					
5-Jan-06	08:00:00					
5-Jan-06	20:00:00					
6-Jan-06	08:00:00					
6-Jan-06	20:00:00					
7-Jan-06	08:00:00					
7-Jan-06	20:00:00					
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8-Jan-06	20:00:00					
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21-Jan-06	20:00:00					
22-Jan-06	08:00:00					
22-Jan-06	20:00:00					
23-Jan-06	08:00:00					
23-Jan-06	20:00:00					
24-Jan-06	08:00:00					
24-Jan-06	20:00:00					

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
25-Jan-06	08:00:00					
25-Jan-06	20:00:00					
26-Jan-06	08:00:00					
26-Jan-06	20:00:00					
27-Jan-06	08:00:00					
27-Jan-06	20:00:00					
28-Jan-06	08:00:00					
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7-Feb-06	08:00:00					
7-Feb-06	20:00:00					
8-Feb-06	08:00:00					
8-Feb-06	20:00:00					
9-Feb-06	08:00:00					
9-Feb-06	20:00:00					
10-Feb-06	08:00:00					
10-Feb-06	20:00:00					
11-Feb-06	08:00:00					
11-Feb-06	20:00:00					
12-Feb-06	08:00:00					
12-Feb-06	20:00:00					
13-Feb-06	08:00:00					
13-Feb-06	20:00:00					
14-Feb-06	08:00:00					
14-Feb-06	20:00:00					
15-Feb-06	08:00:00					
15-Feb-06	20:00:00					
16-Feb-06	08:00:00					
16-Feb-06	20:00:00					
17-Feb-06	08:00:00					
17-Feb-06	20:00:00					

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
18-Feb-06	08:00:00					
18-Feb-06	20:00:00					
19-Feb-06	08:00:00					
19-Feb-06	20:00:00					
20-Feb-06	08:00:00	-14.16				
20-Feb-06	20:00:00	-13.81				
21-Feb-06	08:00:00	-12.58				
21-Feb-06	20:00:00	-11.91				
22-Feb-06	08:00:00	-11.93				
22-Feb-06	20:00:00	-9.74				
23-Feb-06	08:00:00	-1.20				
23-Feb-06	20:00:00	0.02				
24-Feb-06	08:00:00	-0.36				
24-Feb-06	20:00:00	-1.18				
25-Feb-06	08:00:00	-1.22				
25-Feb-06	20:00:00	-0.62				
26-Feb-06	08:00:00	-2.67				
26-Feb-06	20:00:00	-4.42				
27-Feb-06	08:00:00	-5.95				
27-Feb-06	20:00:00	-4.95				
28-Feb-06	08:00:00	-5.99				
28-Feb-06	20:00:00	-6.40				
1-Mar-06	08:00:00	-7.60				
1-Mar-06	20:00:00	-8.36				
2-Mar-06	08:00:00	-7.85				
2-Mar-06	20:00:00	-7.88				
3-Mar-06	08:00:00	-11.86				
3-Mar-06	20:00:00	-12.71				
4-Mar-06	08:00:00	-14.53				
4-Mar-06	20:00:00	-15.01				
5-Mar-06	08:00:00	-16.34				
5-Mar-06	20:00:00	-16.11				
6-Mar-06	08:00:00	-15.67				
6-Mar-06	20:00:00	-15.83				
7-Mar-06	08:00:00	-17.14				
7-Mar-06	20:00:00	-18.04				
8-Mar-06	08:00:00	-18.96				
8-Mar-06	20:00:00	-18.81				
9-Mar-06	08:00:00	-18.89				
9-Mar-06	20:00:00	-18.63				
10-Mar-06	08:00:00	-19.03				
10-Mar-06	20:00:00	-19.48				
11-Mar-06	08:00:00	-20.73				
11-Mar-06	20:00:00	-20.89				
12-Mar-06	08:00:00	-20.81				
12-Mar-06	20:00:00	-20.06				
13-Mar-06	08:00:00	-19.90				
13-Mar-06	20:00:00	-18.63				

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
14-Mar-06	08:00:00	-18.32				
14-Mar-06	20:00:00	-20.49				
15-Mar-06	08:00:00	-22.59				
15-Mar-06	20:00:00	-22.98				
16-Mar-06	08:00:00	-23.79				
16-Mar-06	20:00:00	-23.59				
17-Mar-06	08:00:00	-23.39				
17-Mar-06	20:00:00	-24.50				
18-Mar-06	08:00:00	-25.42				
18-Mar-06	20:00:00	-25.41				
19-Mar-06	08:00:00	-26.39				
19-Mar-06	20:00:00	-26.38				
20-Mar-06	08:00:00	-27.02		-7.42	-18.47	-11.51
20-Mar-06	20:00:00	-27.11		-3.62	-17.23	-8.60
21-Mar-06	08:00:00	-16.62		0.78	-2.15	0.90
21-Mar-06	20:00:00	-11.74		0.58	-2.51	0.54
22-Mar-06	08:00:00	-12.63		0.38	-2.96	0.33
22-Mar-06	20:00:00	-12.50		-0.12	-3.05	0.17
23-Mar-06	08:00:00	-12.92		-0.32	-3.30	0.07
23-Mar-06	20:00:00	-12.12		-0.32	-3.08	0.06
24-Mar-06	08:00:00	-8.87	-0.50	-0.02	-2.23	0.65
24-Mar-06	20:00:00	-8.07		0.18	-2.53	0.48
25-Mar-06	08:00:00	-8.84		0.18	-2.77	0.38
25-Mar-06	20:00:00	-9.75		-0.02	-2.89	0.30
26-Mar-06	08:00:00	-10.97		-0.02	-3.03	0.22
26-Mar-06	20:00:00	-12.33		-0.52	-3.20	0.14
27-Mar-06	08:00:00	-13.90		-0.32	-3.42	0.01
27-Mar-06	20:00:00	-14.07		-0.72	-3.48	-0.10
28-Mar-06	08:00:00	-14.97		-0.32	-3.75	-0.17
28-Mar-06	20:00:00	-14.26		-0.52	-3.76	-0.27
29-Mar-06	08:00:00	-15.18		-0.12	-3.97	-0.34
29-Mar-06	20:00:00	-16.37		-0.92	-4.45	-0.64
30-Mar-06	08:00:00	-17.41		-0.52	-4.89	-0.83
30-Mar-06	20:00:00	-17.77		-1.22	-5.42	-1.09
31-Mar-06	08:00:00	-18.18		-0.52	-5.82	-1.22
31-Mar-06	20:00:00	-17.66		-1.12	-6.12	-1.41
1-Apr-06	08:00:00	-17.02		-0.12	-5.72	-1.39
1-Apr-06	20:00:00	-16.43		-0.92	-6.38	-1.54
2-Apr-06	08:00:00	-18.27		-0.52	-7.20	-1.66
2-Apr-06	20:00:00	-18.37		-1.42	-8.40	-2.00
3-Apr-06	08:00:00	-11.94		0.78	-3.71	0.05
3-Apr-06	20:00:00	-8.61		1.28	-2.38	0.75
4-Apr-06	08:00:00	-9.10		0.88	-2.83	0.51
4-Apr-06	20:00:00	-8.92		0.18	-3.04	0.28
5-Apr-06	08:00:00	-9.84		0.38	-3.19	0.27
5-Apr-06	20:00:00	-11.32		-0.12	-3.57	-0.02
6-Apr-06	08:00:00	-13.59		-0.12	-3.88	-0.10
6-Apr-06	20:00:00	-14.21		-0.52	-4.29	-0.42

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
7-Apr-06	08:00:00	-14.45		0.38	-4.33	-0.54
7-Apr-06	20:00:00	-14.57		-0.72	-4.92	-0.91
8-Apr-06	08:00:00	-15.02		0.18	-4.96	-1.01
8-Apr-06	20:00:00	-15.46		0.38	-3.27	-0.27
9-Apr-06	08:00:00	-17.56		-0.02	-3.60	-0.12
9-Apr-06	20:00:00	-18.60		-0.32	-4.25	-0.39
10-Apr-06	08:00:00	-19.75		-0.12	-4.82	-0.58
10-Apr-06	20:00:00	-20.18		-0.72	-5.85	-1.02
11-Apr-06	08:00:00	-21.10		-0.32	-6.70	-1.24
11-Apr-06	20:00:00	-21.36		-1.22	-8.53	-1.69
12-Apr-06	08:00:00	-21.92		-0.32	-9.10	-1.89
12-Apr-06	20:00:00	-21.76		-1.42	-10.38	-2.33
13-Apr-06	08:00:00	-21.32		-0.52	-10.14	-2.43
13-Apr-06	20:00:00	-20.86		-2.02	-11.58	-2.97
14-Apr-06	08:00:00	-20.72		-1.22	-11.09	-3.05
14-Apr-06	20:00:00	-20.13		-2.32	-12.76	-3.80
15-Apr-06	08:00:00	-20.36		-2.12	-12.13	-3.93
15-Apr-06	20:00:00	-21.05		-4.12	-15.11	-6.22
16-Apr-06	08:00:00	-22.45		-4.52	-15.48	-6.73
16-Apr-06	20:00:00	-22.89		-7.42	-17.08	-10.17
17-Apr-06	08:00:00	-22.76		-7.42	-17.16	-9.75
17-Apr-06	20:00:00	-24.59		-4.32	-14.84	-7.60
18-Apr-06	08:00:00	-25.80		-6.82	-16.30	-9.10
18-Apr-06	20:00:00	-26.17		-10.62	-19.18	-13.56
19-Apr-06	08:00:00	-26.51	-14.00	-11.52	-19.91	-13.62
19-Apr-06	20:00:00	-26.93		-13.22	-21.22	-16.29
20-Apr-06	08:00:00	-27.72		-14.32	-22.13	-16.36
20-Apr-06	20:00:00	-28.49		-15.92	-23.43	-18.67
21-Apr-06	08:00:00	-29.01		-16.62	-24.12	-18.39
21-Apr-06	20:00:00	-29.68		-18.42	-25.12	-20.36
22-Apr-06	08:00:00	-29.58		-17.72	-25.24	-19.18
22-Apr-06	20:00:00	-26.12		0.18	-4.66	-2.64
23-Apr-06	08:00:00	-25.18		0.38	-4.78	-2.22
23-Apr-06	20:00:00	-24.47		-1.22	-7.07	-2.33
24-Apr-06	08:00:00	-24.58		-0.92	-8.63	-2.33
24-Apr-06	20:00:00	-24.62		-2.02	-10.38	-2.60
25-Apr-06	08:00:00	-24.92		-2.02	-11.04	-2.67
25-Apr-06	20:00:00	-24.74		-5.22	-13.51	-3.43
26-Apr-06	08:00:00	-26.36		-5.82	-15.19	-3.96
26-Apr-06	20:00:00	-26.47		-4.52	-14.46	-3.35
27-Apr-06	08:00:00	-25.03		0.18	-3.63	-0.47
27-Apr-06	20:00:00	-17.05		1.48	-2.64	0.73
28-Apr-06	08:00:00	-16.72		1.28	-3.16	0.05
28-Apr-06	20:00:00	-16.89		0.18	-3.65	-0.23
29-Apr-06	08:00:00	-17.58		0.18	-3.80	-0.24
29-Apr-06	20:00:00	-18.41		-0.52	-4.64	-0.69
30-Apr-06	08:00:00	-18.11		-0.72	-4.66	-0.81
30-Apr-06	20:00:00	-18.99		-1.82	-6.55	-1.41

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
1-May-06	08:00:00	-19.33		-1.62	-6.82	-1.67
1-May-06	20:00:00	-20.38		-2.12	-8.59	-2.09
2-May-06	08:00:00	-20.44		-2.02	-8.64	-2.27
2-May-06	20:00:00	-20.43		-4.12	-11.00	-2.95
3-May-06	08:00:00	-20.89		-3.42	-10.73	-3.18
3-May-06	20:00:00	-22.02		-7.02	-14.11	-4.78
4-May-06	08:00:00	-22.75		-6.82	-14.13	-5.16
4-May-06	20:00:00	-23.30		-10.12	-16.59	-8.99
5-May-06	08:00:00	-23.63		-9.92	-16.30	-9.24
5-May-06	20:00:00	-23.99		-0.52	-8.03	-3.17
6-May-06	08:00:00	-22.66		0.78	-3.74	-1.53
6-May-06	20:00:00	-22.85		-0.52	-4.68	-1.58
7-May-06	08:00:00	-23.47		-0.32	-5.59	-1.59
7-May-06	20:00:00	-22.95		-0.12	-3.79	-1.01
8-May-06	08:00:00	-7.32		1.68	-2.89	0.22
8-May-06	20:00:00	-7.95		1.28	-3.11	-0.11
9-May-06	08:00:00	-8.45		1.28	-3.16	-0.20
9-May-06	20:00:00	-9.36		0.18	-3.35	-0.32
10-May-06	08:00:00	-9.96		0.88	-3.45	-0.32
10-May-06	20:00:00	-11.20		-0.02	-3.70	-0.58
11-May-06	08:00:00	-10.88		0.88	-3.57	-0.61
11-May-06	20:00:00	-12.00		-0.12	-4.11	-0.97
12-May-06	08:00:00	-13.66		-0.12	-3.84	-0.78
12-May-06	20:00:00	-15.36		-1.22	-5.20	-1.45
13-May-06	08:00:00	-16.83		-0.72	-5.71	-1.74
13-May-06	20:00:00	-18.08		-2.12	-8.22	-2.46
14-May-06	08:00:00	-18.65		-1.22	-7.90	-2.65
14-May-06	20:00:00	-19.09		-0.92	-4.79	-2.28
15-May-06	08:00:00	-19.73		-0.12	-4.58	-2.10
15-May-06	20:00:00	-20.12		-0.32	-3.83	-1.76
16-May-06	08:00:00	-18.67		0.88	-3.40	-0.71
16-May-06	20:00:00	-18.61		0.18	-3.80	-0.99
17-May-06	08:00:00	-18.25	0.47	0.78	-3.96	-0.94
17-May-06	20:00:00	-18.81		-0.32	-4.97	-1.54
18-May-06	08:00:00	-19.30		0.18	-5.20	-1.73
18-May-06	20:00:00	-19.59		-0.72	-6.80	-2.31
19-May-06	08:00:00	-17.66		1.48	-3.17	-0.23
19-May-06	20:00:00	-18.28		0.18	-3.66	-0.66
20-May-06	08:00:00	-18.18		0.38	-3.76	-0.66
20-May-06	20:00:00	-18.64		-0.02	-4.60	-1.20
21-May-06	08:00:00	-19.21		0.58	-4.35	-1.07
21-May-06	20:00:00	-19.45		-0.92	-5.98	-1.79
22-May-06	08:00:00	-21.46		-0.92	-7.21	-2.17
22-May-06	20:00:00	-21.98		-2.12	-9.78	-2.92
23-May-06	08:00:00	-22.95		-2.12	-10.57	-3.27
23-May-06	20:00:00	-23.92		-6.12	-14.04	-4.94
24-May-06	08:00:00	-24.47		-6.52	-14.35	-5.34
24-May-06	20:00:00	-24.97		-9.72	-16.55	-9.08

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
25-May-06	08:00:00	-25.08		-9.72	-16.18	-9.02
25-May-06	20:00:00	-25.58		-13.02	-18.57	-13.94
26-May-06	08:00:00	-25.75		-12.12	-18.08	-12.87
26-May-06	20:00:00	-26.13		-2.02	-10.72	-5.95
27-May-06	08:00:00	-11.73		-1.42	-3.22	-0.40
27-May-06	20:00:00	-13.12		0.58	-3.82	-0.93
28-May-06	08:00:00	-13.53		1.08	-4.06	-1.00
28-May-06	20:00:00	-14.84		-0.32	-5.05	-1.56
29-May-06	08:00:00	-15.76		-0.12	-5.21	-1.76
29-May-06	20:00:00	-16.87		-2.92	-8.14	-2.60
30-May-06	08:00:00	-17.61		-2.32	-7.86	-2.86
30-May-06	20:00:00	-19.12		-7.02	-12.12	-4.31
31-May-06	08:00:00	-20.12		-6.82	-12.07	-4.68
31-May-06	20:00:00	-20.92		-9.02	-13.72	-6.24
1-Jun-06	08:00:00	-21.25		-9.22	-13.65	-6.65
1-Jun-06	20:00:00	-22.13		-13.22	-16.88	-11.94
2-Jun-06	08:00:00	-22.55		-13.02	-16.46	-11.44
2-Jun-06	20:00:00	-23.48		-15.52	-19.37	-16.80
3-Jun-06	08:00:00	-23.62		-14.82	-18.54	-14.89
3-Jun-06	20:00:00	-24.53		-16.12	-18.74	-15.41
4-Jun-06	08:00:00	-25.42		-17.02	-19.92	-15.69
4-Jun-06	20:00:00	-27.02		-19.02	-22.59	-20.15
5-Jun-06	08:00:00	-27.62		-13.22	-15.45	-9.67
5-Jun-06	20:00:00	-28.15		-13.92	-14.25	-9.32
6-Jun-06	08:00:00	-28.31	-2.00	-13.42	-15.63	-10.12
6-Jun-06	20:00:00	-25.91		-1.62	-3.30	-1.76
7-Jun-06	08:00:00	-24.66		-1.42	-3.55	-0.97
7-Jun-06	20:00:00	-24.81		-0.12	-4.42	-1.43
8-Jun-06	08:00:00	-24.62		0.18	-4.69	-1.49
8-Jun-06	20:00:00	-25.11		-0.32	-4.09	-1.21
9-Jun-06	08:00:00	-23.72		0.58	-3.58	-0.60
9-Jun-06	20:00:00	-24.05		0.38	-4.48	-1.13
10-Jun-06	08:00:00	-24.02		0.58	-4.81	-1.26
10-Jun-06	20:00:00	-24.84		-0.72	-7.58	-2.10
11-Jun-06	08:00:00	-25.13		-0.72	-7.91	-2.34
11-Jun-06	20:00:00	-26.19		-4.12	-11.46	-3.43
12-Jun-06	08:00:00	-26.20		-1.12	-6.39	-2.77
12-Jun-06	20:00:00	-26.61		-2.12	-3.71	-1.74
13-Jun-06	08:00:00	-26.38		0.38	-3.91	-1.65
13-Jun-06	20:00:00	-26.16		0.38	-4.28	-1.76
14-Jun-06	08:00:00	-24.78		1.08	-3.27	-0.88
14-Jun-06	20:00:00	-7.06		1.78	-2.96	
15-Jun-06	08:00:00	-3.71		1.78	-3.09	-0.32
15-Jun-06	20:00:00	-7.80		0.38	-3.63	-0.80
16-Jun-06	08:00:00	-8.57		1.08	-3.81	-0.89
16-Jun-06	20:00:00	-11.46		-0.52	-4.76	-1.69
17-Jun-06	08:00:00	-12.42		-0.02	-5.02	-1.98
17-Jun-06	20:00:00	-14.56		-3.22	-7.62	-3.00

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
18-Jun-06	08:00:00	-15.11		-2.72	-7.40	-3.24
18-Jun-06	20:00:00	-16.63		-7.22	-11.11	-4.96
19-Jun-06	08:00:00	-17.27		-7.02	-10.81	-5.35
19-Jun-06	20:00:00	-18.59		-11.22	-14.63	-10.06
20-Jun-06	08:00:00	-19.21		-9.42	-12.00	-8.92
20-Jun-06	20:00:00	-20.96		-13.72	-17.19	-15.80
21-Jun-06	08:00:00	-21.87		-14.42	-17.17	-15.24
21-Jun-06	20:00:00	-22.96		-15.22	-14.99	-13.54
22-Jun-06	08:00:00	-23.73		-14.12	-15.81	-13.66
22-Jun-06	20:00:00	-24.62		-16.82	-19.68	damaged
23-Jun-06	08:00:00	-25.15		-17.92	-20.01	
23-Jun-06	20:00:00	-26.48		-19.72	-22.63	
24-Jun-06	08:00:00	-26.93		-20.42	-22.97	
24-Jun-06	20:00:00	-25.24		-0.72	-4.89	
25-Jun-06	08:00:00	-24.57		-2.12	-6.07	
25-Jun-06	20:00:00	-14.82		-0.02	-2.62	
26-Jun-06	08:00:00	-6.85		0.18	-3.13	
26-Jun-06	20:00:00	-1.02		2.38	-2.55	
27-Jun-06	08:00:00	3.45		2.88	-2.83	
27-Jun-06	20:00:00	3.99		2.68	-2.76	
28-Jun-06	08:00:00	3.41		2.68	-3.15	
28-Jun-06	20:00:00	3.17		1.28	-3.36	
29-Jun-06	08:00:00	3.18		2.18	-3.42	
29-Jun-06	20:00:00	2.20		0.78	-4.01	
30-Jun-06	08:00:00	1.62		1.48	-4.15	
30-Jun-06	20:00:00	2.20		0.38	-2.56	
1-Jul-06	08:00:00	3.13		0.78	-3.13	
1-Jul-06	20:00:00	2.48		0.88	-3.63	
2-Jul-06	08:00:00	2.25		1.68	-3.83	
2-Jul-06	20:00:00	0.50		0.18	-4.84	
3-Jul-06	08:00:00	0.07		0.78	-4.76	
3-Jul-06	20:00:00	-2.92		-0.92	-6.86	
4-Jul-06	08:00:00	-1.64		0.38	-3.48	
4-Jul-06	20:00:00	-3.47		0.38	-4.38	
5-Jul-06	08:00:00	-5.62		0.88	-4.53	
5-Jul-06	20:00:00	-8.52		-0.92	-7.23	
6-Jul-06	08:00:00	-9.48		-0.32	-6.75	
6-Jul-06	20:00:00	-4.69		0.38	-3.36	
7-Jul-06	08:00:00	-5.10		0.18	-3.57	
7-Jul-06	20:00:00	-8.65		0.78	-4.14	
8-Jul-06	08:00:00	-9.70		0.78	-4.25	
8-Jul-06	20:00:00	-11.79		-0.12	-5.70	
9-Jul-06	08:00:00	-12.79		0.18	-5.90	
9-Jul-06	20:00:00	-14.13		-1.22	-8.92	
10-Jul-06	08:00:00	-15.08		-0.92	-8.85	
10-Jul-06	20:00:00	-16.70		-5.42	-13.20	
11-Jul-06	08:00:00	-17.72		-5.62	-13.12	
11-Jul-06	20:00:00	-19.06		-10.12	-16.57	

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
12-Jul-06	08:00:00	-20.03		-10.32	-16.38	
12-Jul-06	20:00:00	-20.73		-13.02	-19.13	
13-Jul-06	08:00:00	-21.33		-13.52	-18.74	
13-Jul-06	20:00:00	-22.26		-15.52	-21.57	
14-Jul-06	08:00:00	-23.04		-16.62	-21.73	
14-Jul-06	20:00:00	-24.26		-18.42	-24.04	
15-Jul-06	08:00:00	-24.96		-19.32	-24.16	
15-Jul-06	20:00:00	-26.22		-21.02	-25.82	
16-Jul-06	08:00:00	-26.93		-21.32	-26.20	
16-Jul-06	20:00:00	-28.84		-23.32	-27.72	
17-Jul-06	08:00:00	-29.40		-24.02	-28.11	
17-Jul-06	20:00:00	-31.09		-25.52	-29.10	
18-Jul-06	08:00:00	-31.36		-26.02	-29.21	
18-Jul-06	20:00:00	-32.97		-27.12	-30.21	
19-Jul-06	08:00:00	-33.18	-11.50	-27.62	-30.33	
19-Jul-06	20:00:00	-34.88		-28.62	damaged	
20-Jul-06	08:00:00	-25.02		-1.12		
20-Jul-06	20:00:00	-23.01		-10.12		
21-Jul-06	08:00:00	-23.75		-11.52		
21-Jul-06	20:00:00	-25.17		-13.02		
22-Jul-06	08:00:00	-25.70		-13.92		
22-Jul-06	20:00:00	-26.91		-14.62		
23-Jul-06	08:00:00	-27.38		-15.72		
23-Jul-06	20:00:00	-28.25		-1.42		
24-Jul-06	08:00:00	-28.99		-12.12		
24-Jul-06	20:00:00	-29.72		-14.42		
25-Jul-06	08:00:00	-29.83		-15.32		
25-Jul-06	20:00:00	-29.94		-15.72		
26-Jul-06	08:00:00	-30.20		-15.32		
26-Jul-06	20:00:00	-30.93		-16.62		
27-Jul-06	08:00:00	-31.39		-17.52		
27-Jul-06	20:00:00	-32.39		-19.12		
28-Jul-06	08:00:00	-32.69		-20.02		
28-Jul-06	20:00:00	-33.44		-21.32		
29-Jul-06	08:00:00	-33.65		-22.02		
29-Jul-06	20:00:00	-34.26		-23.12		
30-Jul-06	08:00:00	-34.29		-23.52		
30-Jul-06	20:00:00	-35.22		-24.22		
31-Jul-06	08:00:00	-35.51		-24.92		
31-Jul-06	20:00:00	-37.01		-26.72		
1-Aug-06	08:00:00	-37.25		-27.82		
1-Aug-06	20:00:00	-38.22		-29.32		
2-Aug-06	08:00:00	-38.29		-29.62		
2-Aug-06	20:00:00	-32.42		-9.72		
3-Aug-06	08:00:00	-31.02		-24.02		
3-Aug-06	20:00:00	-31.09		-24.92		
4-Aug-06	08:00:00	-31.35		-24.62		
4-Aug-06	20:00:00	-32.58		-25.12		

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
5-Aug-06	08:00:00	-33.35		-25.72		
5-Aug-06	20:00:00	-31.96		-6.12		
6-Aug-06	08:00:00	-31.60		-17.72		
6-Aug-06	20:00:00	-32.25		-22.02		
7-Aug-06	08:00:00	-32.37		-22.42		
7-Aug-06	20:00:00	-32.84		-22.62		
8-Aug-06	08:00:00	-32.92		-22.42		
8-Aug-06	20:00:00	-33.84		-23.12		
9-Aug-06	08:00:00	-34.28		-23.72		
9-Aug-06	20:00:00	-35.05		-24.82		
10-Aug-06	08:00:00	-35.08		-24.82		
10-Aug-06	20:00:00	-35.21		-24.62		
11-Aug-06	08:00:00	-35.49		-24.22		
11-Aug-06	20:00:00	-35.81		-18.42		
12-Aug-06	08:00:00	-36.15		-22.82		
12-Aug-06	20:00:00	-36.56		-24.22		
13-Aug-06	08:00:00	-36.85		-24.82		
13-Aug-06	20:00:00	-37.53		-26.22		
14-Aug-06	08:00:00	-37.72		-26.72		
14-Aug-06	20:00:00	-38.18		-27.32		
15-Aug-06	08:00:00	-38.29		-27.52		
15-Aug-06	20:00:00	-39.02		-28.42		
16-Aug-06	08:00:00	-39.31		-29.12		
16-Aug-06	20:00:00	-40.13		-30.02		
17-Aug-06	08:00:00	-40.38		-30.52		
17-Aug-06	20:00:00	-40.87		-30.72		
18-Aug-06	08:00:00	-41.01		-30.72		
18-Aug-06	20:00:00	-41.38		-30.52		
19-Aug-06	08:00:00	-41.27		-31.12		
19-Aug-06	20:00:00	-41.81		-30.92		
20-Aug-06	08:00:00	-41.87		-31.12		
20-Aug-06	20:00:00	-42.46		-30.92		
21-Aug-06	08:00:00	-42.26		-30.72		
21-Aug-06	20:00:00	-42.38		-30.92		
22-Aug-06	08:00:00	-41.67	-20.00	-23.82		
22-Aug-06	20:00:00	-40.40		-23.72		
23-Aug-06	08:00:00	-39.55		-21.32		
23-Aug-06	20:00:00	-39.42		-27.62		
24-Aug-06	08:00:00	-39.27		-30.02		
24-Aug-06	20:00:00	-39.44		-30.92		
25-Aug-06	08:00:00	-39.71		-31.82		
25-Aug-06	20:00:00	-40.28		-31.32		
26-Aug-06	08:00:00	-40.60		-31.82		
26-Aug-06	20:00:00	-41.31		-31.42		
27-Aug-06	08:00:00	-41.54		-32.02		
27-Aug-06	20:00:00	-41.89		-31.62		
28-Aug-06	08:00:00	-41.86		-32.02		
28-Aug-06	20:00:00	-42.26		-31.62		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
29-Aug-06	08:00:00	-42.38		-31.12		
29-Aug-06	20:00:00	-42.90		-31.32		
30-Aug-06	08:00:00	-43.24		-30.92		
30-Aug-06	20:00:00	-33.59		-1.12		
31-Aug-06	08:00:00	-34.93		-0.72		
31-Aug-06	20:00:00	-17.43		-0.92		
1-Sep-06	08:00:00	0.22		-1.12		
1-Sep-06	20:00:00	1.25		1.48		
2-Sep-06	08:00:00	1.32		1.08		
2-Sep-06	20:00:00	0.56		0.78		
3-Sep-06	08:00:00	0.32		0.88		
3-Sep-06	20:00:00	-2.56		-0.02		
4-Sep-06	08:00:00	-5.21		0.78		
4-Sep-06	20:00:00	-9.46		-0.32		
5-Sep-06	08:00:00	-3.99		0.78		
5-Sep-06	20:00:00	1.74		2.18		
6-Sep-06	08:00:00	3.22		1.98		
6-Sep-06	20:00:00	3.28		1.78		
7-Sep-06	08:00:00	3.09		1.78		
7-Sep-06	20:00:00	2.30		0.88		
8-Sep-06	08:00:00	2.01		1.28		
8-Sep-06	20:00:00	0.46		0.38		
9-Sep-06	08:00:00	-0.33		0.58		
9-Sep-06	20:00:00	-3.47		-0.02		
10-Sep-06	08:00:00	-6.14		0.58		
10-Sep-06	20:00:00	-10.01		-0.12		
11-Sep-06	08:00:00	-11.53		0.38		
11-Sep-06	20:00:00	-14.00		-0.52		
12-Sep-06	08:00:00	-14.91		-0.32		
12-Sep-06	20:00:00	-16.62		-0.72		
13-Sep-06	08:00:00	-16.81		-0.32		
13-Sep-06	20:00:00	-16.87		-0.02		
14-Sep-06	08:00:00	-16.98		0.18		
14-Sep-06	20:00:00	-16.23		0.78		
15-Sep-06	08:00:00	-16.48		0.78		
15-Sep-06	20:00:00	-18.19		-0.12		
16-Sep-06	08:00:00	-18.99		0.18		
16-Sep-06	20:00:00	-20.09		-0.32		
17-Sep-06	08:00:00	-20.77		-0.02		
17-Sep-06	20:00:00	-21.55		-1.12		
18-Sep-06	08:00:00	-22.19		-0.72		
18-Sep-06	20:00:00	-22.87		-1.82		
19-Sep-06	08:00:00	-22.79		-1.62		
19-Sep-06	20:00:00	-11.50		-3.02		
20-Sep-06	08:00:00	1.90	1.50	-3.22		
20-Sep-06	20:00:00	2.03		0.88		
21-Sep-06	08:00:00	1.96		0.78		
21-Sep-06	20:00:00	0.83		0.18		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
22-Sep-06	08:00:00	-0.10		0.18		
22-Sep-06	20:00:00	-2.27		-0.12		
23-Sep-06	08:00:00	-4.37		0.88		
23-Sep-06	20:00:00	-6.67		-0.02		
24-Sep-06	08:00:00	-7.33		0.58		
24-Sep-06	20:00:00	-9.04		-0.12		
25-Sep-06	08:00:00	-10.43		-0.02		
25-Sep-06	20:00:00	-12.12		-0.32		
26-Sep-06	08:00:00	-13.86		-0.32		
26-Sep-06	20:00:00	-15.44		-0.52		
27-Sep-06	08:00:00	-16.44		-0.52		
27-Sep-06	20:00:00	-17.67		-1.12		
28-Sep-06	08:00:00	-18.21		-0.92		
28-Sep-06	20:00:00	-18.49		-1.22		
29-Sep-06	08:00:00	-17.10		-0.52		
29-Sep-06	20:00:00	-18.99		-0.12		
30-Sep-06	08:00:00	-20.00		-0.32		
30-Sep-06	20:00:00	-20.69		-0.72		
1-Oct-06	08:00:00	-21.13		-0.52		
1-Oct-06	20:00:00	-22.30		-1.12		
2-Oct-06	08:00:00	-23.56		-1.12		
2-Oct-06	20:00:00	-24.32		-2.02		
3-Oct-06	08:00:00	-24.81		-2.12		
3-Oct-06	20:00:00	-25.23		-4.32		
4-Oct-06	08:00:00	-25.45		-4.72		
4-Oct-06	20:00:00	-25.57		-7.92		
5-Oct-06	08:00:00	-25.75		-8.32		
5-Oct-06	20:00:00	-26.26		-11.02		
6-Oct-06	08:00:00	-26.29		-11.22		
6-Oct-06	20:00:00	-26.69		-11.22		
7-Oct-06	08:00:00	-27.15		-11.52		
7-Oct-06	20:00:00	-26.33		-1.82		
8-Oct-06	08:00:00	-26.84		-1.82		
8-Oct-06	20:00:00	-25.05		-0.32		
9-Oct-06	08:00:00	-22.82		-0.12		
9-Oct-06	20:00:00	-20.67		0.38		
10-Oct-06	08:00:00	-19.46		0.88		
10-Oct-06	20:00:00	-19.50		0.38		
11-Oct-06	08:00:00	-19.29		0.58		
11-Oct-06	20:00:00	-19.37		-0.02		
12-Oct-06	08:00:00	-19.74		0.58		
12-Oct-06	20:00:00	-21.35		-0.72		
13-Oct-06	08:00:00	-22.90		-0.92		
13-Oct-06	20:00:00	-23.61		-1.22		
14-Oct-06	08:00:00	-24.66		-1.42		
14-Oct-06	20:00:00	-25.60		-2.02		
15-Oct-06	08:00:00	-26.79		-2.12		
15-Oct-06	20:00:00	-27.53		-2.72		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
16-Oct-06	08:00:00	-28.36		-2.72		
16-Oct-06	20:00:00	-28.72		-3.02		
17-Oct-06	08:00:00	-28.04		-2.52		
17-Oct-06	20:00:00	-26.39		-0.52		
18-Oct-06	08:00:00	-24.98	-1.00	-0.72		
18-Oct-06	20:00:00	-23.97		0.88		
19-Oct-06	08:00:00	-23.33		1.28		
19-Oct-06	20:00:00	-22.58		0.88		
20-Oct-06	08:00:00	-21.61		1.08		
20-Oct-06	20:00:00	-23.68		0.18		
21-Oct-06	08:00:00	-24.99		-0.12		
21-Oct-06	20:00:00	-25.69		-0.72		
22-Oct-06	08:00:00	-25.61		-0.52		
22-Oct-06	20:00:00	-24.69		0.38		
23-Oct-06	08:00:00	-25.31		-0.12		
23-Oct-06	20:00:00	-25.78		-0.52		
24-Oct-06	08:00:00	-26.58		-0.92		
24-Oct-06	20:00:00	-27.53		-1.22		
25-Oct-06	08:00:00	-28.45		-1.22		
25-Oct-06	20:00:00	-28.84		-1.62		
26-Oct-06	08:00:00	-29.50		-1.62		
26-Oct-06	20:00:00	-29.69		-1.82		
27-Oct-06	08:00:00	-29.48		-1.62		
27-Oct-06	20:00:00	-25.96		-0.32		
28-Oct-06	08:00:00	0.34		-0.02		
28-Oct-06	20:00:00	0.96		1.08		
29-Oct-06	08:00:00	0.97		0.58		
29-Oct-06	20:00:00	0.32		0.38		
30-Oct-06	08:00:00	-0.46		0.38		
30-Oct-06	20:00:00	-1.80		-0.02		
31-Oct-06	08:00:00	-2.93		0.18		
31-Oct-06	20:00:00	-5.07		0.58		
1-Nov-06	08:00:00	-6.29		0.38		
1-Nov-06	20:00:00	-7.49		0.18		
2-Nov-06	08:00:00	-8.29		0.58		
2-Nov-06	20:00:00	-11.30		-0.32		
3-Nov-06	08:00:00	-13.55		-0.52		
3-Nov-06	20:00:00	-14.96		-1.12		
4-Nov-06	08:00:00	-16.56		-1.12		
4-Nov-06	20:00:00	-17.35		-1.22		
5-Nov-06	08:00:00	-18.49		-1.22		
5-Nov-06	20:00:00	-18.96		-1.12		
6-Nov-06	08:00:00	-19.59		-0.92		
6-Nov-06	20:00:00	-19.71		-1.22		
7-Nov-06	08:00:00	-19.15		-0.32		
7-Nov-06	20:00:00			0.38		
8-Nov-06	08:00:00	3.96		0.38		
8-Nov-06	20:00:00	3.75		1.48		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time	Water Level (inches)				
dd-mmm-yyyy	hh:mm:ss	AW1	MW2	AW3	AW4	AW5
9-Nov-06	08:00:00	3.22		1.48		
9-Nov-06	20:00:00	2.69		0.88		
10-Nov-06	08:00:00	2.07		0.88		
10-Nov-06	20:00:00	1.49		0.78		
11-Nov-06	08:00:00	0.92		1.08		
11-Nov-06	20:00:00	0.50		0.88		
12-Nov-06	08:00:00	1.10		1.68		
12-Nov-06	20:00:00	3.84		1.08		
13-Nov-06	08:00:00	3.74		1.28		
13-Nov-06	20:00:00	3.61		1.68		
14-Nov-06	08:00:00	3.30		1.28		
14-Nov-06	20:00:00	3.07		1.28		
15-Nov-06	08:00:00	2.67		1.28		
15-Nov-06	20:00:00	2.39		1.68		
16-Nov-06	08:00:00	3.03		1.78		
16-Nov-06	20:00:00	4.08		1.78		
17-Nov-06	08:00:00	3.67		1.28		
17-Nov-06	20:00:00	3.48		1.08		
18-Nov-06	08:00:00	3.24		1.28		
18-Nov-06	20:00:00	3.06		0.88		
19-Nov-06	08:00:00	2.71		0.88		
19-Nov-06	20:00:00	2.12		0.88		
20-Nov-06	08:00:00	1.19		1.08		
20-Nov-06	20:00:00	0.13		1.08		
21-Nov-06	08:00:00	2.70	1.00	1.08		
21-Nov-06	20:00:00					
22-Nov-06	08:00:00					
22-Nov-06	20:00:00					
23-Nov-06	08:00:00					
23-Nov-06	20:00:00					
24-Nov-06	08:00:00					
24-Nov-06	20:00:00					
25-Nov-06	08:00:00					
25-Nov-06	20:00:00					
26-Nov-06	08:00:00					
26-Nov-06	20:00:00					
27-Nov-06	08:00:00					
27-Nov-06	20:00:00					
28-Nov-06	08:00:00					
28-Nov-06	20:00:00					
29-Nov-06	08:00:00					
29-Nov-06	20:00:00					
30-Nov-06	08:00:00					
30-Nov-06	20:00:00					

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
1-Jan-06	08:00:00	-11.8		
1-Jan-06	20:00:00	-12.7		
2-Jan-06	08:00:00	-13.1		
2-Jan-06	20:00:00	-8		0.05
3-Jan-06	08:00:00	-7.1		
3-Jan-06	20:00:00	-8.8		0.7
4-Jan-06	08:00:00	-9.9		
4-Jan-06	20:00:00	-10.5		
5-Jan-06	08:00:00	-10.8		
5-Jan-06	20:00:00	-11.2		
6-Jan-06	08:00:00	-12.2		
6-Jan-06	20:00:00	-13.1		0.07
7-Jan-06	08:00:00	-14		
7-Jan-06	20:00:00	-14.6		
8-Jan-06	08:00:00	-15		
8-Jan-06	20:00:00	-15.3		
9-Jan-06	08:00:00	-16.1		
9-Jan-06	20:00:00	-16.1		
10-Jan-06	08:00:00	-16.8		
10-Jan-06	20:00:00	-16.8		
11-Jan-06	08:00:00	-16.6		
11-Jan-06	20:00:00	-16.3		
12-Jan-06	08:00:00	-16.5		
12-Jan-06	20:00:00	-17		
13-Jan-06	08:00:00	-16.8		
13-Jan-06	20:00:00	-16.1		
14-Jan-06	08:00:00	-7.5		
14-Jan-06	20:00:00	-9.2		0.38
15-Jan-06	08:00:00	-10.5		
15-Jan-06	20:00:00	-12		0.01
16-Jan-06	08:00:00	-12.7		
16-Jan-06	20:00:00	-12.9		
17-Jan-06	08:00:00	-13.8		
17-Jan-06	20:00:00	-14		0.01
18-Jan-06	08:00:00	-10.3		
18-Jan-06	20:00:00	-10.5		0.6
19-Jan-06	08:00:00	-11.6		
19-Jan-06	20:00:00	-12.3		
20-Jan-06	08:00:00	-13.1		
20-Jan-06	20:00:00	-13.3		
21-Jan-06	08:00:00	-14.2		
21-Jan-06	20:00:00	-11.4		
22-Jan-06	08:00:00	-10.3		
22-Jan-06	20:00:00	-11.2		0.5
23-Jan-06	08:00:00	-11.2		
23-Jan-06	20:00:00	-4.7		0.11
24-Jan-06	08:00:00	-5.4		
24-Jan-06	20:00:00	-6.7		0.22

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
25-Jan-06	08:00:00	-8		
25-Jan-06	20:00:00	-9		
26-Jan-06	08:00:00	-9.9		
26-Jan-06	20:00:00	-10.8		
27-Jan-06	08:00:00	-11.6		
27-Jan-06	20:00:00	-12.3		
28-Jan-06	08:00:00	-12.9		
28-Jan-06	20:00:00	-12.7		
29-Jan-06	08:00:00	-13.1		
29-Jan-06	20:00:00	-12.7		
30-Jan-06	08:00:00	-12.9		
30-Jan-06	20:00:00	-12.7		
31-Jan-06	08:00:00	-6.2		
31-Jan-06	20:00:00	-8		0.75
1-Feb-06	08:00:00	-8.8		
1-Feb-06	20:00:00	-9.5		
2-Feb-06	08:00:00	-10.1		
2-Feb-06	20:00:00	-10.3		
3-Feb-06	08:00:00	-10.3		
3-Feb-06	20:00:00	-11.4		0.01
4-Feb-06	08:00:00	-10.5		
4-Feb-06	20:00:00	-11		0.03
5-Feb-06	08:00:00	-12.7		
5-Feb-06	20:00:00	-13.8		
6-Feb-06	08:00:00	-14.8		
6-Feb-06	20:00:00	-15.3		
7-Feb-06	08:00:00	-14.2		
7-Feb-06	20:00:00	-13.7		0.26
8-Feb-06	08:00:00	-14.4		
8-Feb-06	20:00:00	-15		
9-Feb-06	08:00:00	-15.5		
9-Feb-06	20:00:00	-16.1		
10-Feb-06	08:00:00	-16.6		
10-Feb-06	20:00:00	-16.3		
11-Feb-06	08:00:00	-16.3		
11-Feb-06	20:00:00	-12.9		0.17
12-Feb-06	08:00:00	-12.9		
12-Feb-06	20:00:00	-14.2		
13-Feb-06	08:00:00	-15.3		
13-Feb-06	20:00:00	-15.9		
14-Feb-06	08:00:00	-16.5		
14-Feb-06	20:00:00	-16.6		
15-Feb-06	08:00:00	-17.4		
15-Feb-06	20:00:00	-17.6		
16-Feb-06	08:00:00	-18.1		
16-Feb-06	20:00:00	-18.1		
17-Feb-06	08:00:00	-18.1		
17-Feb-06	20:00:00	-18.5		

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
18-Feb-06	08:00:00	-19.1		
18-Feb-06	20:00:00	-19.6		0.01
19-Feb-06	08:00:00	-20.2		
19-Feb-06	20:00:00	-20.2		
20-Feb-06	08:00:00	-19.8		
20-Feb-06	20:00:00	-19.6		0.01
21-Feb-06	08:00:00	-19.1		
21-Feb-06	20:00:00	-19.4		
22-Feb-06	08:00:00	-20		
22-Feb-06	20:00:00	-15.9		0.11
23-Feb-06	08:00:00	-7.1		
23-Feb-06	20:00:00	-7.7		0.44
24-Feb-06	08:00:00	-9.4		
24-Feb-06	20:00:00	-10.7		
25-Feb-06	08:00:00	-11.6		
25-Feb-06	20:00:00	-11.8		
26-Feb-06	08:00:00	-12.5		
26-Feb-06	20:00:00	-13.8		0.01
27-Feb-06	08:00:00	-14.8		
27-Feb-06	20:00:00	-14.6		
28-Feb-06	08:00:00	-15		
28-Feb-06	20:00:00	-15.3		
1-Mar-06	08:00:00	-15.9		
1-Mar-06	20:00:00	-16.8		
2-Mar-06	08:00:00	-17		
2-Mar-06	20:00:00	-17.6		
3-Mar-06	08:00:00	-18.7		
3-Mar-06	20:00:00	-19.6		
4-Mar-06	08:00:00	-20.6		
4-Mar-06	20:00:00	-20.9		
5-Mar-06	08:00:00	-21.5		
5-Mar-06	20:00:00	-21.9		
6-Mar-06	08:00:00	-21.7		
6-Mar-06	20:00:00	-21.5		0.07
7-Mar-06	08:00:00	-21.9		
7-Mar-06	20:00:00	-22.4		
8-Mar-06	08:00:00	-23.2		
8-Mar-06	20:00:00	-23.4		
9-Mar-06	08:00:00	-23.6		
9-Mar-06	20:00:00	-23.8		
10-Mar-06	08:00:00	-23.8		
10-Mar-06	20:00:00	-24.1		
11-Mar-06	08:00:00	-24.5		
11-Mar-06	20:00:00	-25.1		
12-Mar-06	08:00:00	-25.4		
12-Mar-06	20:00:00	-25.6		0.02
13-Mar-06	08:00:00	-25.6		
13-Mar-06	20:00:00	-26		

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
14-Mar-06	08:00:00	-26		
14-Mar-06	20:00:00	-26.2		0.01
15-Mar-06	08:00:00	-26.9		
15-Mar-06	20:00:00	-27.7		
16-Mar-06	08:00:00	-28.4		
16-Mar-06	20:00:00	-28.8		
17-Mar-06	08:00:00	-29		
17-Mar-06	20:00:00	-29.2		
18-Mar-06	08:00:00	-29.4		
18-Mar-06	20:00:00	-29.5		
19-Mar-06	08:00:00	-29.7		
19-Mar-06	20:00:00	-29.7		
20-Mar-06	08:00:00	-29.9		
20-Mar-06	20:00:00	-29.7		
21-Mar-06	08:00:00	-24.1		
21-Mar-06	20:00:00	-14.8		1.12
22-Mar-06	08:00:00	-15		
22-Mar-06	20:00:00	-16.1		0.01
23-Mar-06	08:00:00	-17		
23-Mar-06	20:00:00	-17.2		
24-Mar-06	08:00:00	-15.5		
24-Mar-06	20:00:00	-14		0.41
25-Mar-06	08:00:00	-14.6		
25-Mar-06	20:00:00	-15.3		
26-Mar-06	08:00:00	-16.6		
26-Mar-06	20:00:00	-17.4		0.02
27-Mar-06	08:00:00	-18.5		
27-Mar-06	20:00:00	-19.3		
28-Mar-06	08:00:00	-20		
28-Mar-06	20:00:00	-20.4		
29-Mar-06	08:00:00	-20.8		
29-Mar-06	20:00:00	-21.7		
30-Mar-06	08:00:00	-22.4		
30-Mar-06	20:00:00	-23		
31-Mar-06	08:00:00	-23.6		
31-Mar-06	20:00:00	-23.9		
1-Apr-06	08:00:00	-24.1		
1-Apr-06	20:00:00	-24.5		0.02
2-Apr-06	08:00:00	-24.7		
2-Apr-06	20:00:00	-25.4		
3-Apr-06	08:00:00	-25.1		
3-Apr-06	20:00:00	-23.8		0.38
4-Apr-06	08:00:00	-22.3		
4-Apr-06	20:00:00	-23		0.2
5-Apr-06	08:00:00	-23.6		
5-Apr-06	20:00:00	-24.5		
6-Apr-06	08:00:00	-25.2		
6-Apr-06	20:00:00	-25.8		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
7-Apr-06	08:00:00	-26		
7-Apr-06	20:00:00	-26.4		
8-Apr-06	08:00:00	-26.9		
8-Apr-06	20:00:00	-27.3		0.08
9-Apr-06	08:00:00	-26.2		
9-Apr-06	20:00:00	-25.2		0.27
10-Apr-06	08:00:00	-25.1		
10-Apr-06	20:00:00	-25.6		
11-Apr-06	08:00:00	-25.8		
11-Apr-06	20:00:00	-26.6		
12-Apr-06	08:00:00	-27.1		
12-Apr-06	20:00:00	-28.1		
13-Apr-06	08:00:00	-28.2		
13-Apr-06	20:00:00	-28.6		
14-Apr-06	08:00:00	-28.6		
14-Apr-06	20:00:00	-28.8		
15-Apr-06	08:00:00	-28.8		
15-Apr-06	20:00:00	-28.8		
16-Apr-06	08:00:00	-29		
16-Apr-06	20:00:00	-29		
17-Apr-06	08:00:00	-28.8		
17-Apr-06	20:00:00	-28.8		0.03
18-Apr-06	08:00:00	-28.8		
18-Apr-06	20:00:00	-29		0.18
19-Apr-06	08:00:00	-29	1.07	
19-Apr-06	20:00:00	-29		
20-Apr-06	08:00:00	-29		
20-Apr-06	20:00:00	-29.2		
21-Apr-06	08:00:00	-29		
21-Apr-06	20:00:00	-29		
22-Apr-06	08:00:00	-29		
22-Apr-06	20:00:00	-28.8		
23-Apr-06	08:00:00	-28.6		
23-Apr-06	20:00:00	-29		0.08
24-Apr-06	08:00:00	-29		
24-Apr-06	20:00:00	-28.8		
25-Apr-06	08:00:00	-28.8		
25-Apr-06	20:00:00	-28.8		
26-Apr-06	08:00:00	-29		
26-Apr-06	20:00:00	-28.6		0.02
27-Apr-06	08:00:00	-28.4		
27-Apr-06	20:00:00	-23.2		1.7
28-Apr-06	08:00:00	-23.2		
28-Apr-06	20:00:00	-23.4		0.13
29-Apr-06	08:00:00	-23.8		
29-Apr-06	20:00:00	-24.5		
30-Apr-06	08:00:00	-25.2		
30-Apr-06	20:00:00	-25.8		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
1-May-06	08:00:00	-26.6		
1-May-06	20:00:00	-27.7		
2-May-06	08:00:00	-28.4		
2-May-06	20:00:00	-28.8		
3-May-06	08:00:00	-28.8		
3-May-06	20:00:00	-29.2		0.02
4-May-06	08:00:00	-29.4		
4-May-06	20:00:00	-29.4		
5-May-06	08:00:00	-29.4		
5-May-06	20:00:00	-29.2		0.01
6-May-06	08:00:00	-29		
6-May-06	20:00:00	-29.2		0.51
7-May-06	08:00:00	-29.2		
7-May-06	20:00:00	-29		0.04
8-May-06	08:00:00	-16.5		
8-May-06	20:00:00	-16.3		0.6
9-May-06	08:00:00	-16.5		
9-May-06	20:00:00	-18.1		
10-May-06	08:00:00	-19.1		
10-May-06	20:00:00	-20.4		
11-May-06	08:00:00	-20.8		
11-May-06	20:00:00	-22.3		
12-May-06	08:00:00	-23		
12-May-06	20:00:00	-23.9		
13-May-06	08:00:00	-24.7		
13-May-06	20:00:00	-25.2		
14-May-06	08:00:00	-25.6		
14-May-06	20:00:00	-25.8		0.08
15-May-06	08:00:00	-26		
15-May-06	20:00:00	-26.2		0.77
16-May-06	08:00:00	-24.5		
16-May-06	20:00:00	-24.5		0.32
17-May-06	08:00:00	-24.5	4.45	
17-May-06	20:00:00	-24.9		
18-May-06	08:00:00	-25.1		
18-May-06	20:00:00	-25.6		
19-May-06	08:00:00	-19.6		
19-May-06	20:00:00	-20.9		0.56
20-May-06	08:00:00	-21.7		
20-May-06	20:00:00	-22.6		
21-May-06	08:00:00	-23.4		
21-May-06	20:00:00	-24.3		0.17
22-May-06	08:00:00	-25.2		
22-May-06	20:00:00	-26.4		
23-May-06	08:00:00	-27.9		
23-May-06	20:00:00	-28.6		
24-May-06	08:00:00	-29.2		
24-May-06	20:00:00	-29.4		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
25-May-06	08:00:00	-29.4		
25-May-06	20:00:00	-29.4		
26-May-06	08:00:00	-29.4		
26-May-06	20:00:00	-29.2		
27-May-06	08:00:00	-28.4		
27-May-06	20:00:00	-28.6		
28-May-06	08:00:00	-28.8		
28-May-06	20:00:00	-28.8		
29-May-06	08:00:00	-29		
29-May-06	20:00:00	-29.2		
30-May-06	08:00:00	-29.2		
30-May-06	20:00:00	-29.4		
31-May-06	08:00:00	-29.2		
31-May-06	20:00:00	-29		
1-Jun-06	08:00:00	-29		
1-Jun-06	20:00:00	-29.2		0.03
2-Jun-06	08:00:00	-29		
2-Jun-06	20:00:00	-29.2		
3-Jun-06	08:00:00	-29		
3-Jun-06	20:00:00	-29		0.82
4-Jun-06	08:00:00	-28.4		
4-Jun-06	20:00:00	-29.2		
5-Jun-06	08:00:00	-28.8		
5-Jun-06	20:00:00	-29		0.26
6-Jun-06	08:00:00	-28.4		
6-Jun-06	20:00:00	-28.8		0.18
7-Jun-06	08:00:00	-28.4		
7-Jun-06	20:00:00	-29.2		0.05
8-Jun-06	08:00:00	-29		
8-Jun-06	20:00:00	-29		
9-Jun-06	08:00:00	-28.4		
9-Jun-06	20:00:00	-29.2		0.24
10-Jun-06	08:00:00	-28.8		
10-Jun-06	20:00:00	-29.2		
11-Jun-06	08:00:00	-29		
11-Jun-06	20:00:00	-29.2		0.02
12-Jun-06	08:00:00	-28.8		
12-Jun-06	20:00:00	-28.8		0.27
13-Jun-06	08:00:00	-29		
13-Jun-06	20:00:00	-28.8		0.16
14-Jun-06	08:00:00	-28.6		
14-Jun-06	20:00:00	-29		0.7
15-Jun-06	08:00:00	-28.8		
15-Jun-06	20:00:00	-29		
16-Jun-06	08:00:00	-29		
16-Jun-06	20:00:00	-29		
17-Jun-06	08:00:00	-29		
17-Jun-06	20:00:00	-29		

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
18-Jun-06	08:00:00	-29		
18-Jun-06	20:00:00	-29		
19-Jun-06	08:00:00	-29		
19-Jun-06	20:00:00	-29		
20-Jun-06	08:00:00	-28.8		
20-Jun-06	20:00:00	-29		0.07
21-Jun-06	08:00:00	damaged		
21-Jun-06	20:00:00			0.82
22-Jun-06	08:00:00			
22-Jun-06	20:00:00		5.66	
23-Jun-06	08:00:00			
23-Jun-06	20:00:00			
24-Jun-06	08:00:00			
24-Jun-06	20:00:00			0.01
25-Jun-06	08:00:00			
25-Jun-06	20:00:00			0.22
26-Jun-06	08:00:00			
26-Jun-06	20:00:00			0.35
27-Jun-06	08:00:00			
27-Jun-06	20:00:00			1.07
28-Jun-06	08:00:00			
28-Jun-06	20:00:00			
29-Jun-06	08:00:00			
29-Jun-06	20:00:00			
30-Jun-06	08:00:00			
30-Jun-06	20:00:00			
1-Jul-06	08:00:00			
1-Jul-06	20:00:00			
2-Jul-06	08:00:00			
2-Jul-06	20:00:00			
3-Jul-06	08:00:00			
3-Jul-06	20:00:00			
4-Jul-06	08:00:00			
4-Jul-06	20:00:00			0.52
5-Jul-06	08:00:00			
5-Jul-06	20:00:00			
6-Jul-06	08:00:00			
6-Jul-06	20:00:00			0.41
7-Jul-06	08:00:00			
7-Jul-06	20:00:00			
8-Jul-06	08:00:00			
8-Jul-06	20:00:00			
9-Jul-06	08:00:00			
9-Jul-06	20:00:00			
10-Jul-06	08:00:00			
10-Jul-06	20:00:00			
11-Jul-06	08:00:00			
11-Jul-06	20:00:00			

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
12-Jul-06	08:00:00			
12-Jul-06	20:00:00			
13-Jul-06	08:00:00			
13-Jul-06	20:00:00			
14-Jul-06	08:00:00			
14-Jul-06	20:00:00			
15-Jul-06	08:00:00			
15-Jul-06	20:00:00			0.02
16-Jul-06	08:00:00			
16-Jul-06	20:00:00			
17-Jul-06	08:00:00			
17-Jul-06	20:00:00			
18-Jul-06	08:00:00			
18-Jul-06	20:00:00			
19-Jul-06	08:00:00		5.94	
19-Jul-06	20:00:00			
20-Jul-06	08:00:00			
20-Jul-06	20:00:00			0.01
21-Jul-06	08:00:00			
21-Jul-06	20:00:00			0.47
22-Jul-06	08:00:00			
22-Jul-06	20:00:00			
23-Jul-06	08:00:00			
23-Jul-06	20:00:00			0.22
24-Jul-06	08:00:00			
24-Jul-06	20:00:00			0.24
25-Jul-06	08:00:00			
25-Jul-06	20:00:00			0.72
26-Jul-06	08:00:00			
26-Jul-06	20:00:00			0.15
27-Jul-06	08:00:00			
27-Jul-06	20:00:00			0.26
28-Jul-06	08:00:00			
28-Jul-06	20:00:00			0.75
29-Jul-06	08:00:00			
29-Jul-06	20:00:00			0.5
30-Jul-06	08:00:00			
30-Jul-06	20:00:00			0.01
31-Jul-06	08:00:00			
31-Jul-06	20:00:00			
1-Aug-06	08:00:00			
1-Aug-06	20:00:00			
2-Aug-06	08:00:00			
2-Aug-06	20:00:00			
3-Aug-06	08:00:00			
3-Aug-06	20:00:00			
4-Aug-06	08:00:00			
4-Aug-06	20:00:00			

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
5-Aug-06	08:00:00			
5-Aug-06	20:00:00			0.2
6-Aug-06	08:00:00			
6-Aug-06	20:00:00			0.21
7-Aug-06	08:00:00			
7-Aug-06	20:00:00			
8-Aug-06	08:00:00			
8-Aug-06	20:00:00			0.01
9-Aug-06	08:00:00			
9-Aug-06	20:00:00		4.97	0.38
10-Aug-06	08:00:00			
10-Aug-06	20:00:00			0.05
11-Aug-06	08:00:00			
11-Aug-06	20:00:00			0.33
12-Aug-06	08:00:00			
12-Aug-06	20:00:00			0.01
13-Aug-06	08:00:00			
13-Aug-06	20:00:00			
14-Aug-06	08:00:00			
14-Aug-06	20:00:00			
15-Aug-06	08:00:00			
15-Aug-06	20:00:00			
16-Aug-06	08:00:00			
16-Aug-06	20:00:00			
17-Aug-06	08:00:00			
17-Aug-06	20:00:00			
18-Aug-06	08:00:00			
18-Aug-06	20:00:00			1.18
19-Aug-06	08:00:00			
19-Aug-06	20:00:00			0.24
20-Aug-06	08:00:00			
20-Aug-06	20:00:00			
21-Aug-06	08:00:00			
21-Aug-06	20:00:00			1.34
22-Aug-06	08:00:00			
22-Aug-06	20:00:00			0.46
23-Aug-06	08:00:00			
23-Aug-06	20:00:00			0.03
24-Aug-06	08:00:00			
24-Aug-06	20:00:00			0.03
25-Aug-06	08:00:00			
25-Aug-06	20:00:00			
26-Aug-06	08:00:00			
26-Aug-06	20:00:00			
27-Aug-06	08:00:00			
27-Aug-06	20:00:00			0.01
28-Aug-06	08:00:00			
28-Aug-06	20:00:00			

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
29-Aug-06	08:00:00			
29-Aug-06	20:00:00			
30-Aug-06	08:00:00			
30-Aug-06	20:00:00			1.32
31-Aug-06	08:00:00			
31-Aug-06	20:00:00			1.55
1-Sep-06	08:00:00			
1-Sep-06	20:00:00			5.61
2-Sep-06	08:00:00			
2-Sep-06	20:00:00			
3-Sep-06	08:00:00			
3-Sep-06	20:00:00			
4-Sep-06	08:00:00			
4-Sep-06	20:00:00			
5-Sep-06	08:00:00			
5-Sep-06	20:00:00			
6-Sep-06	08:00:00			
6-Sep-06	20:00:00			0.03
7-Sep-06	08:00:00			
7-Sep-06	20:00:00		10.36	0.02
8-Sep-06	08:00:00			
8-Sep-06	20:00:00			0.01
9-Sep-06	08:00:00			
9-Sep-06	20:00:00			
10-Sep-06	08:00:00			
10-Sep-06	20:00:00			
11-Sep-06	08:00:00			
11-Sep-06	20:00:00			
12-Sep-06	08:00:00			
12-Sep-06	20:00:00			
13-Sep-06	08:00:00			
13-Sep-06	20:00:00			0.01
14-Sep-06	08:00:00			
14-Sep-06	20:00:00			
15-Sep-06	08:00:00			
15-Sep-06	20:00:00			
16-Sep-06	08:00:00			
16-Sep-06	20:00:00			0.01
17-Sep-06	08:00:00			
17-Sep-06	20:00:00			
18-Sep-06	08:00:00			
18-Sep-06	20:00:00			0.04
19-Sep-06	08:00:00			
19-Sep-06	20:00:00			
20-Sep-06	08:00:00			
20-Sep-06	20:00:00			0.56
21-Sep-06	08:00:00			
21-Sep-06	20:00:00			0.04

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
22-Sep-06	08:00:00			
22-Sep-06	20:00:00			
23-Sep-06	08:00:00			
23-Sep-06	20:00:00			
24-Sep-06	08:00:00			
24-Sep-06	20:00:00			
25-Sep-06	08:00:00			
25-Sep-06	20:00:00			
26-Sep-06	08:00:00			
26-Sep-06	20:00:00			
27-Sep-06	08:00:00			
27-Sep-06	20:00:00			
28-Sep-06	08:00:00			
28-Sep-06	20:00:00			
29-Sep-06	08:00:00			
29-Sep-06	20:00:00			0.4
30-Sep-06	08:00:00			
30-Sep-06	20:00:00			
1-Oct-06	08:00:00			
1-Oct-06	20:00:00			
2-Oct-06	08:00:00			
2-Oct-06	20:00:00			0.07
3-Oct-06	08:00:00			
3-Oct-06	20:00:00			0.02
4-Oct-06	08:00:00			
4-Oct-06	20:00:00			
5-Oct-06	08:00:00			
5-Oct-06	20:00:00			
6-Oct-06	08:00:00			
6-Oct-06	20:00:00			
7-Oct-06	08:00:00			
7-Oct-06	20:00:00			
8-Oct-06	08:00:00			
8-Oct-06	20:00:00			
9-Oct-06	08:00:00			
9-Oct-06	20:00:00			
10-Oct-06	08:00:00			
10-Oct-06	20:00:00			
11-Oct-06	08:00:00			
11-Oct-06	20:00:00			
12-Oct-06	08:00:00			
12-Oct-06	20:00:00			
13-Oct-06	08:00:00			
13-Oct-06	20:00:00			
14-Oct-06	08:00:00			
14-Oct-06	20:00:00			
15-Oct-06	08:00:00			
15-Oct-06	20:00:00			

CASEY-KING - Groundwater and Rain Gauge Data

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
16-Oct-06	08:00:00			
16-Oct-06	20:00:00			
17-Oct-06	08:00:00			
17-Oct-06	20:00:00			0.25
18-Oct-06	08:00:00		2.25	
18-Oct-06	20:00:00			
19-Oct-06	08:00:00			
19-Oct-06	20:00:00			
20-Oct-06	08:00:00			
20-Oct-06	20:00:00			
21-Oct-06	08:00:00			
21-Oct-06	20:00:00			
22-Oct-06	08:00:00			
22-Oct-06	20:00:00			0.14
23-Oct-06	08:00:00			
23-Oct-06	20:00:00			
24-Oct-06	08:00:00			
24-Oct-06	20:00:00			
25-Oct-06	08:00:00			
25-Oct-06	20:00:00			
26-Oct-06	08:00:00			
26-Oct-06	20:00:00			
27-Oct-06	08:00:00			
27-Oct-06	20:00:00			0.01
28-Oct-06	08:00:00			
28-Oct-06	20:00:00			1.85
29-Oct-06	08:00:00			
29-Oct-06	20:00:00			
30-Oct-06	08:00:00			
30-Oct-06	20:00:00			
31-Oct-06	08:00:00			
31-Oct-06	20:00:00			0.15
1-Nov-06	08:00:00			
1-Nov-06	20:00:00			
2-Nov-06	08:00:00			
2-Nov-06	20:00:00			
3-Nov-06	08:00:00			
3-Nov-06	20:00:00			
4-Nov-06	08:00:00			
4-Nov-06	20:00:00			
5-Nov-06	08:00:00			
5-Nov-06	20:00:00			
6-Nov-06	08:00:00			
6-Nov-06	20:00:00			
7-Nov-06	08:00:00			
7-Nov-06	20:00:00			
8-Nov-06	08:00:00			
8-Nov-06	20:00:00			1.45

Date	Time			
dd-mmm-yyyy	hh:mm:ss	Webb-Ref	On-Site Rain Gauge	Kinston Rain Gauge
9-Nov-06	08:00:00			
9-Nov-06	20:00:00			0.06
10-Nov-06	08:00:00			
10-Nov-06	20:00:00			
11-Nov-06	08:00:00			
11-Nov-06	20:00:00			
12-Nov-06	08:00:00			
12-Nov-06	20:00:00			0.25
13-Nov-06	08:00:00			
13-Nov-06	20:00:00			0.82
14-Nov-06	08:00:00			
14-Nov-06	20:00:00			
15-Nov-06	08:00:00			
15-Nov-06	20:00:00			
16-Nov-06	08:00:00			
16-Nov-06	20:00:00			
17-Nov-06	08:00:00			
17-Nov-06	20:00:00			
18-Nov-06	08:00:00			
18-Nov-06	20:00:00			
19-Nov-06	08:00:00			
19-Nov-06	20:00:00			
20-Nov-06	08:00:00			
20-Nov-06	20:00:00			
21-Nov-06	08:00:00		6.14	
21-Nov-06	20:00:00			0.55
22-Nov-06	08:00:00			
22-Nov-06	20:00:00			3.65
23-Nov-06	08:00:00			
23-Nov-06	20:00:00			1.31
24-Nov-06	08:00:00			
24-Nov-06	20:00:00			
25-Nov-06	08:00:00			
25-Nov-06	20:00:00			
26-Nov-06	08:00:00			
26-Nov-06	20:00:00			
27-Nov-06	08:00:00			
27-Nov-06	20:00:00			
28-Nov-06	08:00:00			
28-Nov-06	20:00:00			
29-Nov-06	08:00:00			
29-Nov-06	20:00:00			
30-Nov-06	08:00:00			
30-Nov-06	20:00:00			

APPENDIX C

2006 Site Photos

Bare spot at Casey-King

Casey-King Veg Plot #1

Casey-King Veg Plot #3

Casey-King Veg Plot #5

Tall planted trees at Casey-King

Casey-King Veg Plot #2

Casey-King Veg Plot #4