

**HAW RIVER SWAMP WETLAND RESTORATION SITE
ANNUAL WETLAND MONITORING REPORT
YEAR 3 (YEAR 2007)
GUILFORD AND ROCKINGHAM COUNTIES, NORTH CAROLINA**



Natural Resources
Restoration & Conservation

**RESTORATION SYSTEMS, LLC
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October 2007

EXECUTIVE SUMMARY

Restoration Systems, LLC, a private environmental restoration company, has completed the restoration of wetlands at the Haw River Swamp Wetland Restoration Site (hereinafter referred to as the "Site") to assist the North Carolina Ecosystem Enhancement Program (EEP) in fulfilling restoration goals in the region. The Site is located in the Cape Fear River basin (United States Geological Survey Hydrologic Unit 03030002), approximately 8 miles north of the Greensboro city limits on the Guilford and Rockingham county line. The Site encompasses 60 acres within the Haw River floodplain and as constructed offers riverine wetland restoration, enhancement, and preservation, with benefits to water quality and wildlife in a rapidly developing watershed.

A Detailed Wetland Restoration Plan outlined methods to restore prior-converted (PC) agricultural fields that had been ditched, drained, and cleared for row crop production to pristine riverine wetlands. The plan outlined restoration procedures including (1) the excavation of a floodplain adjacent to the southern bank of Midway Creek in order to reestablish over-bank flooding, (2) plugging and filling sections of an existing canal/ditch system, and (3) diverting a secondary tributary to force discharge down the Haw River floodplain.

The objectives of the Site include the following:

1. Remove agricultural activities from the floodplain and banks of the Haw River.
2. Remove the Site from potential land uses associated with encroaching urbanization.
3. Increase flood storage potential within the Cape Fear Basin.
4. Provide floodplain surfaces to the Haw River for natural redevelopment of geomorphological processes.
5. Re-establish anastomosed stream channels and Piedmont swamp and bottomland forest communities within the floodplain ecosystem.
6. Intercept and assimilate nutrient and sediment-laden runoff from adjacent and upstream watersheds.
7. Assist in establishing a continuous wetland bio-reserve (corridor) between Cone and Benaja Swamps and the adjacent bottomland ecosystems.

The monitoring protocol for the Site consists of an analysis of two primary parameters: hydrology and vegetation. Monitoring of restoration efforts will be performed for a minimum of 5 years or until success criteria are fulfilled. Eight groundwater monitoring gauges and eight 0.11-acre vegetation plots were installed in wetland restoration areas to provide representative coverage across the Site.

In summary, the Site achieved defined (or targeted) success criteria for hydrology at 7 of the 8 restoration area groundwater gauges in the Third Monitoring Year (Year 2007), with greater than 28 consecutive days (12.5 percent) of saturation during the growing season. Gauge 7 was saturated within 1 foot of the soil surface for 20 days. In a year with normal precipitation, it is expected that this gauge would have met the hydrologic success criteria.

As a whole, vegetation plots across the Site were well above the required 320 stems/acre with an average of 855 stems per acre in the Third Monitoring Year (Year 2007).

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1.0 INTRODUCTION

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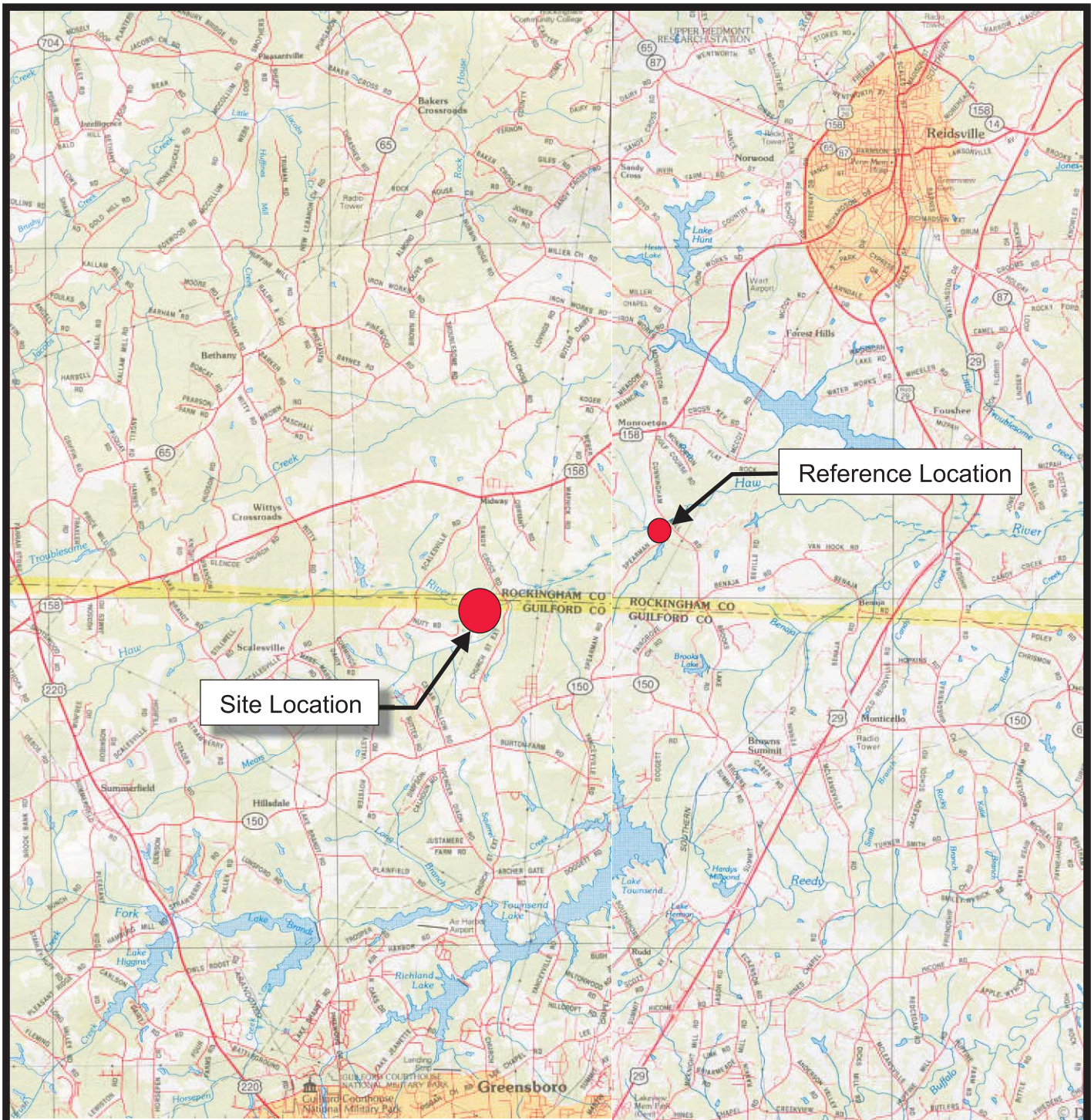
Table 1. Site Acreage as Constructed

Type	Acreage
Riverine Wetland Restoration	26.7
Riverine Wetland Enhancement	2.5
Riverine Wetland Preservation	18.0
Forested Upland Buffer	12.8
TOTAL	60.0

The Detailed Wetland Restoration Plan outlined methods designed to restore prior-converted (PC) agricultural fields that had been ditched, drained, and cleared for row crop production to pristine riverine wetlands. The plan outlined restoration procedures including (1) the excavation of a floodplain adjacent to the southern bank of Midway Creek in order to reestablish over-bank flooding, (2) plugging and filling sections of an existing canal/ditch system, and (3) diverting a secondary tributary to force discharge down the Haw River floodplain.

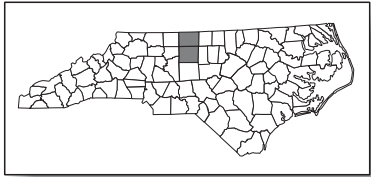
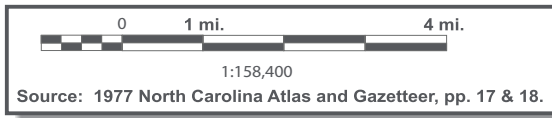
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5. Re-establish anastomosed stream channels and Piedmont swamp and bottomland forest communities within the floodplain ecosystem.
6. Intercept and assimilate nutrient and sediment-laden runoff from adjacent and upstream watersheds.
7. Assist in establishing a continuous wetland bio-reserve (corridor) between Cone and Benaja Swamps and the adjacent bottomland ecosystems.



Site Location

Reference Location




801 Corporate Center Dr
Suite 300
Raleigh, NC 27607
Tel. 919.854.1282
Fax. 919.854.5448

SITE LOCATION MAP
HAW RIVER WETLAND RESTORATION SITE
 Guilford and Rockingham Counties, North Carolina

FIGURE 1

In February 2003, EEP contracted with Restoration Systems, LLC to complete Phase I (northern half) of the Site. Subsequently, in August 2004, EEP contracted Restoration Systems to complete Phase II (southern half), the remainder of the Site. A combined Detailed Wetland Restoration Plan was completed for both phases of the project with final permits issued in September 2004. Upon completion of the detailed plan and issuance of permits, construction plans were developed and construction was initiated in February 2005. Backwater Environmental, a subsidiary of Osborne Co. Inc., completed earthwork and grading at the Site and as-built construction drawings in late winter/early spring of 2005. Carolina Silvics completed planting of the Site in April 2005. Axiom Environmental, Inc. completed an as-built mitigation plan in June 2005.

Information on project managers, owners, and contractors follows:

Owner Information

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Third Year Monitoring Firm Information

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Monitoring Performer Information

Axiom Environmental, Inc.
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Willow Spring, North Carolina 27529
(919)215-1693

Designer Information

EcoScience Corporation
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Earthwork Contractor Information

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Pittsboro, North Carolina 27312
(919) 523-4375

Planting Contractor Information

Carolina Silvics
Dwight McKinney
908 Indian Trail Road
Edenton, North Carolina 27932
(252) 482-8491

As outlined in the Detailed Wetland Restoration Plan, this project was designed and constructed based upon reference (relatively undisturbed) wetlands downstream of the Site (Figure 1). As-Built construction drawings dated May 2005 include Site alterations designed to restore groundwater, surface flow dynamics, and wetland hydrology as follows: (1) installation of ditch plugs, (2) ditch and canal backfilling, (3) wetland depression excavation, (4) installation of log weir outfall structures at outfall points, (5) river levee removal, (6) Midway Creek alterations, (7) unnamed tributary diversion, and (8) planting of 24,950 seedlings.

This report represents the Third Year Annual Monitoring Report. Monitoring activities were performed throughout Year 2007, including recording groundwater table elevations and plant species densities.

2.0 MONITORING PROGRAM

The Site monitoring protocol consists of a comparison between reference and restoration areas along with evaluation of jurisdictional wetland criteria (Environmental Laboratory 1987). Monitoring will entail analysis of two primary parameters: hydrology and vegetation. Monitoring of restoration efforts will be performed for a minimum of 5 years or until success criteria are fulfilled. The monitoring program is described below.

The restoration area has been subdivided into swamp forest, bottomland hardwood forest, and mesic forest based on Site construction as depicted in Figure 2. Community patterns continue to develop, with a variety of tree seedlings surviving in local niches along the hydrology gradient. The initial plan was to classify Site vegetation into three broad plant community assemblages based on hydroperiod, primarily as a function of floodplain location. Community classifications included: (1) bottomland hardwood forest on floodplain flats, (2) swamp forest in floodplain depressions, and (3) mesic forest on upper floodplain slopes. However, the landscape diversity suggests that the bottomland hardwood forest and swamp forest will be well intermixed across the Site in the future. Therefore, these communities may need to be combined into one group: bottomland hardwood/swamp forest. In addition, several emergent areas may remain permanently inundated and may need to be reclassified. However, this annual monitoring report continues to differentiate between the three community classifications stated above.

2.1 Wetland Hydrology

2.1.1 Hydrology Monitoring Procedure

After hydrological modifications were completed at the Site, continuous recording, groundwater monitoring gauges were installed in accordance with specifications in *Installing Monitoring Wells/Piezometers in Wetlands* (NCWRP 1993). Monitoring gauges were set to a depth of approximately 24 inches below the soil surface. Screened portions of each gauge were surrounded by filter fabric, buried in a sand screen, and sealed with a bentonite cap to prevent siltation and surface flow infiltration during floods.

Eight monitoring gauges were installed in wetland restoration areas to provide representative coverage within each community (Figure 2). Hydrologic sampling will be carried out in restoration areas during the growing season (March 26 to November 6) at daily intervals necessary to satisfy the hydrology success criteria.

2.1.2 Hydrologic Success Criteria

Target hydrological goals have been developed using regulatory wetland hydrology criteria and reference wetland sites.

Regulatory Wetland Hydrology Criteria

The regulatory wetland hydrology criteria require saturation (free water) within 1 foot of the soil surface for 5 percent of the growing season under normal climatic conditions. In some instances, the regulatory wetland hydroperiod may range from 5 and 12.5 percent of the growing season.

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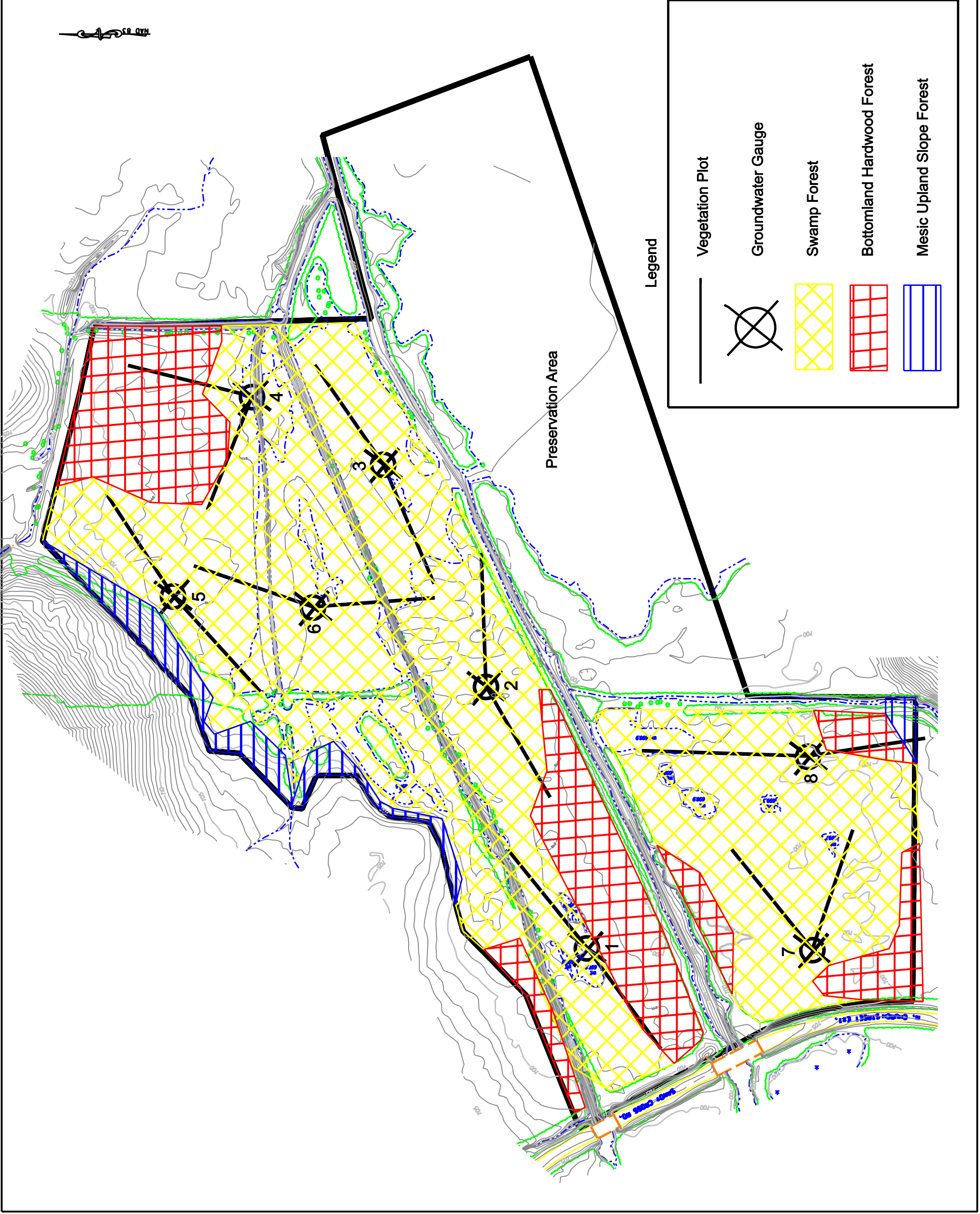
NOTES/REVISIONS

Project:
**Haw River Swamp
Wetland Restoration
Site**
Guilford and Rockingham
Counties
North Carolina

Title:
**Monitoring
Plan**

Scale:
1 inch = 220 feet

FIGURE 2



Based on the Detailed Wetland Restoration Plan, under normal climatic conditions, the hydrologic success criterion requires saturation (free water) within 1 foot of the soil surface for a minimum of 5 percent of the growing season for the floodplain flats (bottomland hardwood forest) areas depicted in Figure 2. The floodplain depressions (swamp forest) must support saturation (free water) within 1 foot of the soil surface for a minimum of 12.5 percent of the growing season. This hydroperiod translates to saturation for a minimum 28-day (12.5 percent) consecutive period during the growing season, which extends from March 26 to November 6 (USDA 1977).

2.1.3 Hydrological Monitoring Results and Comparison with Success Criteria

Hydrographs for each monitoring location are provided in Appendix A along with daily rainfall totals for 2007 collected at the Piedmont Triad International Airport, located approximately 12 miles southwest of the Site. All but one gauge achieved hydrology success criteria for the Third Year (Year 2007) of annual monitoring with greater than 28 consecutive days (12.5 percent) of saturation during the growing season, as required for swamp forest hydrology (Table 2). Gauge 7 was the only gauge that did not meet the hydrologic success criteria. It is expected that if the area received the yearly average rainfall, this gauge would have met the hydrologic success criteria. The two longest consecutive periods that groundwater was within 1 foot of the soil surface at Gauge 7 was 14 days and 20 days. There were only two days between these two periods.

Table 2. 2007 (Year 3) Groundwater Gauge Results

Gauge	Community	Max Consecutive Days Saturated During Growing Season (Percent)	Defined (or Targeted) Success Criteria Achieved
1	swamp forest	50 days (22.2 %)	Yes
2	swamp forest	34 days (15.1 %)	Yes
3	swamp forest	90 days (40.0 %)	Yes
4	swamp forest	68 days (30.2 %)	Yes
5	swamp forest	35 days (15.6 %)	Yes
6	swamp forest	90 days (40.0 %)	Yes
7	swamp forest	20 days (8.8 %)	No
8	swamp forest	64 days (28.4 %)	Yes
BH Ref	bottomland hardwoods	19 days (8.4%)	Yes
SF Ref	swamp forest	120 days (53.3 %)	Yes

2.2 Vegetation

2.2.1 Vegetation Monitoring Procedure

Restoration monitoring procedures for vegetation are designed in accordance with guidelines presented in *Mitigation Site Classification* (MiST) documentation (USEPA 1990) and *Compensatory Hardwood Mitigation Guidelines* (USDOA 1993). The following presents a general discussion of the monitoring protocol.

Vegetation will receive visual evaluations during the periodic reading of monitoring gauges to ascertain the general conditions and degree of overtopping of planted elements by weeds. Subsequently, quantitative

sampling of vegetation will be performed once annually during the fall for a minimum of 5 years or until vegetation success criteria are achieved. Sampling dates may be modified to accommodate river flood events and plot inundation, if needed.

Sixteen sample transects (8 plots) were installed within planted areas of the Site to represent the various hydrologic regimes and plant communities (Figure 2). Each transect is 300 feet long and 8 feet wide (0.055 acre). Two transects were set up on each of the eight groundwater monitoring gauges for a total of eight, 0.11-acre plots. In each sample plot, monitored vegetation parameters include species composition and density. Visual observations of the percent cover of shrub and herbaceous species will be recorded but not used for vegetative success criteria. Photographs of the eight vegetation plots are included in Appendix B.

2.2.2 Vegetation Success Criteria

Success criteria have been established to verify that the vegetation component supports community elements necessary for floodplain forest development. Success criteria are dependent upon the density and growth of characteristic forest species. Additional success criteria are dependent upon density and growth of “Character Tree Species,” which include planted species, species listed by Schafale and Weakley (1990) as occurring in Piedmont bottomland and swamp forests, and species identified in the reference forest ecosystems (RFE’s). Planted tree species and those identified in the reference forest ecosystem will be used to define “Character Tree Species” as termed in the success criteria (Tables 3 and 4).

Table 3. Reference Forest Plot Summary

Species	Number of Individuals*	Relative Density (Percent)	Relative Basal Area (Percent)	Importance Value
<i>Acer rubrum</i> (red maple)	10	31.3	35.4	0.21
<i>Fraxinus pennsylvanica</i> (green ash)	10	31.3	28.0	0.20
<i>Platanus occidentalis</i> (American sycamore)	2	6.3	11.0	0.07
<i>Quercus lyrata</i> (overcup oak)	2	6.3	7.3	0.06
<i>Quercus rubra</i> (northern red oak)	1	3.1	6.9	0.04
<i>Salix nigra</i> (black willow)	1	3.1	6.0	0.04
<i>Acer negundo</i> (box elder)	2	6.3	0.5	0.03
<i>Carya ovata</i> (pignut hickory)	1	3.1	2.4	0.03
<i>Celtis laevigata</i> (hackberry)	1	3.1	1.5	0.03
<i>Fagus grandifolia</i> (American beech)	1	3.1	0.7	0.02
<i>Ulmus americana</i> (American elm)	1	3.1	0.3	0.02
Total	32	100	100	1

* Summary of four 0.1-acre plots.

An average density of 320 stems per acre over all sampling transects of Character Tree Species must be surviving at the end of three monitoring years. Subsequently, 290 character tree stems per acre must be surviving in year 4, and 260 character tree stems per acre must be surviving in year 5. Planted species must represent a minimum of 30 percent of the required stem per acre total (96 stems per acre). A total of 24,950 bare root seedlings of 17 species were planted on the Site at a density of 680 trees per acre (Table 4). Each naturally recruited character species may represent up to 10 percent of the required stem per acre total. In essence, seven naturally recruited character species may represent a maximum of 70 percent of the

required stem/acre total. Additional stems of naturally recruited species above the 70 percent threshold are discarded from the statistical analysis. The remaining 30 percent are not necessarily removed from the Site, but will be left as a reserve and future seed source for species maintenance during mid-succession phases of forest development.

Table 4. Planted Species and Densities

Species	Number Planted
<i>Ulmus americana</i> (American elm)	2300
<i>Nyssa sylvatica</i> (black gum)	150
<i>Salix nigra</i> (black willow)	1000
<i>Quercus pagoda</i> (cherrybark oak)	3500
<i>Fraxinus pennsylvanica</i> (green ash)	1500
<i>Pinus taeda</i> (loblolly pine)	1200
<i>Carya tomentosa</i> (mockernut hickory)	300
<i>Quercus rubra</i> (northern red oak)	300
<i>Quercus lyrata</i> (overcup oak)	3000
<i>Betula nigra</i> (river birch)	100
<i>Quercus falcata</i> (southern red oak)	400
<i>Celtis laevigata</i> (sugarberry)	1200
<i>Quercus michauxii</i> (swamp chestnut oak)	4800
<i>Platanus occidentalis</i> (American sycamore)	200
<i>Quercus alba</i> (white oak)	400
<i>Quercus phellos</i> (willow oak)	2500
<i>Liriodendron tulipifera</i> (yellow poplar)	2100
Total	24,950

2.2.3 Vegetation Sampling Results and Comparison to Success Criteria

Quantitative sampling of vegetation was conducted in September 2007. Results are provided in Table 5. Vegetation success criteria for year 3 (320 tree stems per acre) were exceeded for the 2007 annual monitoring year with 855 stems per acre across the Site. In addition, each individual vegetation plot met success criteria with the exception of plot numbers 3 and 6. Plot number 3 occurs in one of the wettest locations of the Site that is inundated for much of the growing season, as evidenced by groundwater gauge data (Appendix A). This plot is primarily characterized by herbaceous freshwater emergent vegetation including swamp rosemallow (*Hibiscus moscheutos*), arrowhead (*Sagittaria* sp.), toothcup (*Rotala ramosior*), Pennsylvania smartweed (*Polygonum pennsylvanicum*), and various other smartweeds (*Polygonum* spp.). Community boundaries may need to be adjusted or redefined during the 5-year monitoring period due to the intermixing of herbaceous freshwater emergent communities with the bottomland and swamp forest communities. Plot 6 was only one stem short of meeting success criteria for the third monitoring year (Year 2007), with 319 stems per acre. Plot 6 should meet success criteria in monitoring years 4 and 5.

TABLE 5.
2007 VEGETATION MONITORING DATA AND RESULTS

Note: Each plot totals 0.11 acre in size.

Community	Swamp Forest								Total Stems for Plots 1-8	Total Stems/Acre	Total Stems/Acre Counting Towards Success Criteria**
Species*	Plot 1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8			
Character Tree Species (count toward success)											
<i>Acer negundo</i> (box-elder)	20					1	8	9	38	43	32
<i>Acer rubrum</i> (red maple)	151	248		64	49	41	12	8	573	651	32
<i>Alnus serrulata</i> (tag alder)							12		12	14	14
<i>Betula nigra</i> (river birch)		1	2				1		4	5	5
<i>Cornus amomum</i> (silky dogwood)					1				1	1	1
<i>Diospyros virginiana</i> (persimmon)					2				2	2	2
<i>Fraxinus pennsylvanica</i> (green ash)	49	107	4	75	46	14	80	31	406	461	461
<i>Liquidambar styraciflua</i> (sweetgum)	28	13			1		53	19	114	130	32
<i>Liriodendron tulipifera</i> (tulip poplar)				7	1			1	9	10	10
<i>Platanus occidentalis</i> (sycamore)	18	3					8	41	70	80	80
<i>Quercus lyrata</i> (overcup oak)	2	7	4	11	6	4			34	39	39
<i>Quercus michauxii</i> (swamp chestnut oak)	11	9		8	7	1	2	1	39	44	44
<i>Quercus pagoda</i> (cherrybark oak)	4	10			1				15	17	17
<i>Quercus phellos</i> (willow oak)	4	7			2		2	1	16	18	18
<i>Quercus rubra</i> (northern red oak)							1		1	1	1
<i>Quercus velutina</i> (black oak)		2		2		1	1		6	7	7
<i>Salix nigra</i> (black willow)					4	7			11	12	12
<i>Ulmus alata</i> (winged elm)	10	2			1				13	15	15
<i>Ulmus americana</i> (American elm)		1							1	1	1
<i>Ulmus rubra</i> (slippery elm)	41	86	3	42	68	36		5	281	319	32
Species that Don't Count Toward Success											
<i>Rosa</i> sp. (rose)		2		3	9				14	16	0
TOTAL STEMS/PLOT	338	498	13	212	198	105	180	116	1622	1843	855
TOTAL STEMS/PLOT COUNTING TOWARDS SUCCESS CRITERIA	106	160	13	110	79	35	109	89			
TOTAL STEMS/ACRE COUNTING TOWARDS SUCCESS CRITERIA	965	1456	118	1001	719	319	992	810			

* Planted species are in bold.

3.0 CONCLUSIONS

In summary, the Site achieved defined (or targeted) success criteria for hydrology at 7 of the 8 restoration area groundwater gauges in the Third Monitoring Year (Year 2007), with greater than 28 consecutive days (12.5 percent) of saturation during the growing season. Gauge 7 was saturated within 1 foot of the soil surface for 20 days. In a year with normal precipitation, it is expected that this gauge would have met the hydrologic success criteria.

As a whole, vegetation plots across the Site were well above the required 320 stems/acre with an average of 855 stems per acre in the Third Monitoring Year (Year 2007).

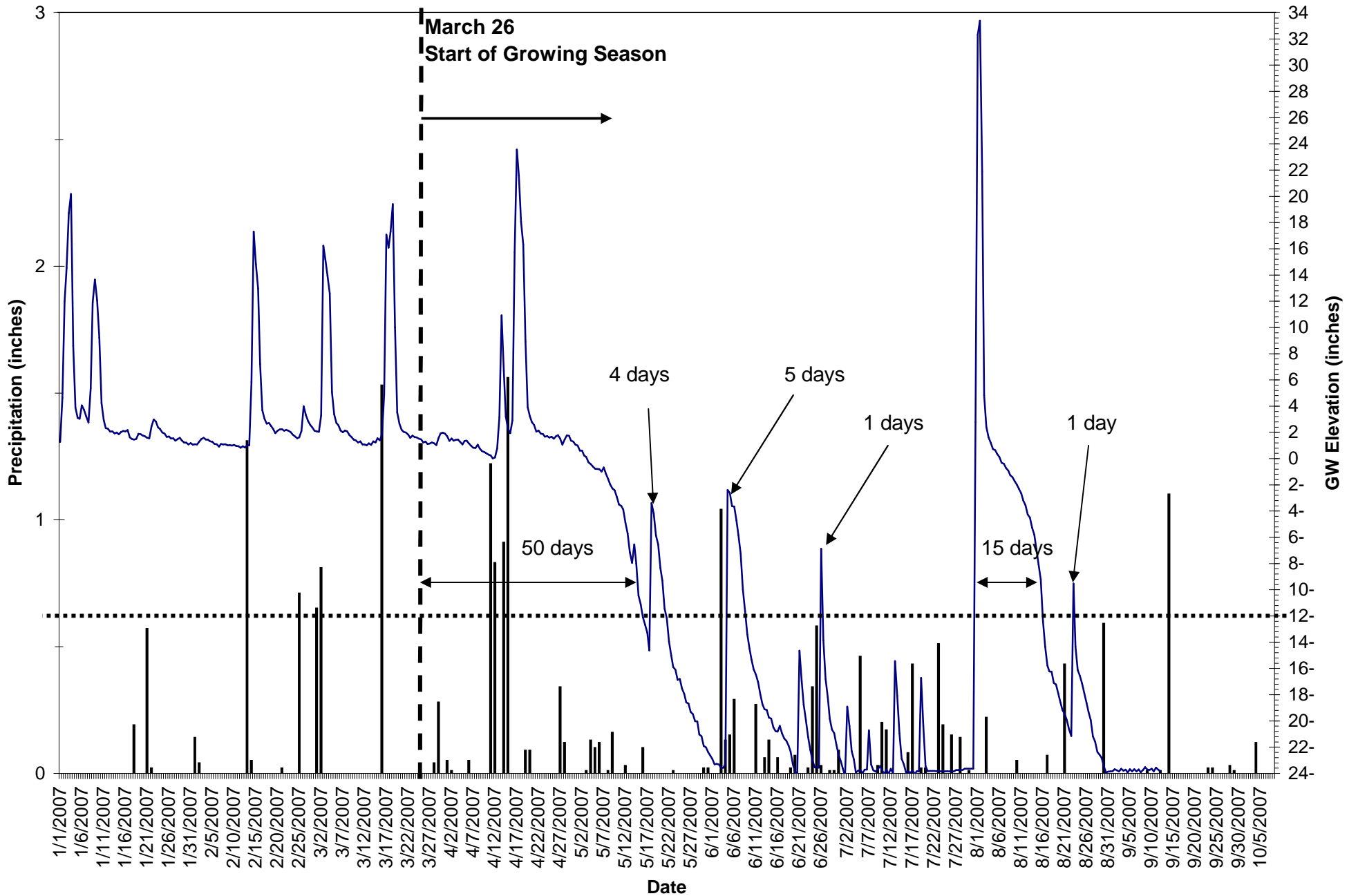
Community boundaries may need to be redefined or combined during the 5-year monitoring period due to the intermixing of bottomland hardwoods forest with swamp forest across the Site. In addition, an herbaceous freshwater emergent community may need to be separated from the bottomland and swamp forest communities.

4.0 REFERENCES

- Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. Technical Report Y-87-1. United States Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS.
- North Carolina Wetlands Restoration Program (NCWRP). 1993. Installing Monitoring Wells/Piezometers in Wetlands (WRP Technical Note HY-IA-3.1). North Carolina Department of Environment, Health, and Natural Resources, Raleigh, North Carolina.
- Schafale, M.P., and A.S. Weakley. 1990. Classification of the Natural Communities of North Carolina: Third Approximation, NC Natural Heritage Program, Division of Parks and Recreation, North Carolina Department of Environment, Health, and Natural Resources, Raleigh, North Carolina.
- United States. Department of Agriculture (USDA). 1977. Soil Survey of Guilford County, North Carolina. United States Department of Agriculture.
- United States Department of the Army (USDOA). 1993 (unpublished). Compensatory Hardwood Mitigation Guidelines. United States Army Corps of Engineers, Wilmington District.
- United States Environmental Protection Agency (USEPA). 1990. Mitigation Site Classification (MiST). A Methodology to Classify Pre-Project Mitigation Sites and Develop Performance Standards for Construction and Restoration of Forested Wetlands. USEPA Workshop, August 13-15, 1989. USEPA Region IV and Hardwood Research Cooperative, North Carolina State University, Raleigh, NC.

**APPENDIX A
GAUGE DATA**

Haw Gauge 1



■ Precipitation — GW Elevation

HAW 1

Data Acquired : September 11, 2007

Serial Number: N43D73F7

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	1.27			27-Jan-2007	00:00:00	1.56			22-Feb-2007	00:00:00	2.2		
01-Jan-2007	12:00:00	4.64			27-Jan-2007	12:00:00	1.36			22-Feb-2007	12:00:00	2.13		
02-Jan-2007	00:00:00	11.98			28-Jan-2007	00:00:00	1.49			23-Feb-2007	00:00:00	2.02		
02-Jan-2007	12:00:00	14.53			28-Jan-2007	12:00:00	1.58			23-Feb-2007	12:00:00	1.83		
03-Jan-2007	00:00:00	18.72			29-Jan-2007	00:00:00	1.39			24-Feb-2007	00:00:00	1.69		
03-Jan-2007	12:00:00	20.18			29-Jan-2007	12:00:00	1.23			24-Feb-2007	12:00:00	1.55		
04-Jan-2007	00:00:00	8.6			30-Jan-2007	00:00:00	1.22			25-Feb-2007	00:00:00	1.62		
04-Jan-2007	12:00:00	3.89			30-Jan-2007	12:00:00	1.08			25-Feb-2007	12:00:00	2.11		
05-Jan-2007	00:00:00	3.1			31-Jan-2007	00:00:00	1.19			26-Feb-2007	00:00:00	4		
05-Jan-2007	12:00:00	3.03			31-Jan-2007	12:00:00	1.07			26-Feb-2007	12:00:00	3.32		
06-Jan-2007	00:00:00	4.07			01-Feb-2007	00:00:00	1.09			27-Feb-2007	00:00:00	2.87		
06-Jan-2007	12:00:00	3.71			01-Feb-2007	12:00:00	1.08			27-Feb-2007	12:00:00	2.57		
07-Jan-2007	00:00:00	3.21			02-Feb-2007	00:00:00	1.3			28-Feb-2007	00:00:00	2.38		
07-Jan-2007	12:00:00	2.75			02-Feb-2007	12:00:00	1.5			28-Feb-2007	12:00:00	2.12		
08-Jan-2007	00:00:00	5.37			03-Feb-2007	00:00:00	1.58			01-Mar-2007	00:00:00	2.08		
08-Jan-2007	12:00:00	11.92			03-Feb-2007	12:00:00	1.45			01-Mar-2007	12:00:00	2.05		
09-Jan-2007	00:00:00	13.66			04-Feb-2007	00:00:00	1.45			02-Mar-2007	00:00:00	3.29		
09-Jan-2007	12:00:00	12.07			04-Feb-2007	12:00:00	1.32			02-Mar-2007	12:00:00	16.24		
10-Jan-2007	00:00:00	9.23			05-Feb-2007	00:00:00	1.29			03-Mar-2007	00:00:00	15.21		
10-Jan-2007	12:00:00	4.23			05-Feb-2007	12:00:00	1.11			03-Mar-2007	12:00:00	13.92		
11-Jan-2007	00:00:00	2.94			06-Feb-2007	00:00:00	1.1			04-Mar-2007	00:00:00	12.58		
11-Jan-2007	12:00:00	2.32			06-Feb-2007	12:00:00	0.92			04-Mar-2007	12:00:00	5.06		
12-Jan-2007	00:00:00	2.27			07-Feb-2007	00:00:00	1.12			05-Mar-2007	00:00:00	3.37		
12-Jan-2007	12:00:00	2.06			07-Feb-2007	12:00:00	1.08			05-Mar-2007	12:00:00	2.72		
13-Jan-2007	00:00:00	2.07			08-Feb-2007	00:00:00	1.09			06-Mar-2007	00:00:00	2.54		
13-Jan-2007	12:00:00	1.92			08-Feb-2007	12:00:00	1.01			06-Mar-2007	12:00:00	2.14		
14-Jan-2007	00:00:00	1.99			09-Feb-2007	00:00:00	1.03			07-Mar-2007	00:00:00	2.01		
14-Jan-2007	12:00:00	1.85			09-Feb-2007	12:00:00	1			07-Mar-2007	12:00:00	2.14		
15-Jan-2007	00:00:00	2.02			10-Feb-2007	00:00:00	1.05			08-Mar-2007	00:00:00	2.08		
15-Jan-2007	12:00:00	2.11			10-Feb-2007	12:00:00	0.96			08-Mar-2007	12:00:00	1.79		
16-Jan-2007	00:00:00	2.07			11-Feb-2007	00:00:00	0.95			09-Mar-2007	00:00:00	1.65		
16-Jan-2007	12:00:00	2.18			11-Feb-2007	12:00:00	0.82			09-Mar-2007	12:00:00	1.45		
17-Jan-2007	00:00:00	1.62			12-Feb-2007	00:00:00	0.94			10-Mar-2007	00:00:00	1.38		
17-Jan-2007	12:00:00	1.51			12-Feb-2007	12:00:00	0.84			10-Mar-2007	12:00:00	1.24		
18-Jan-2007	00:00:00	1.45			13-Feb-2007	00:00:00	1.01			11-Mar-2007	00:00:00	1.32		
18-Jan-2007	12:00:00	1.51			13-Feb-2007	12:00:00	1.01			11-Mar-2007	12:00:00	1.08		
19-Jan-2007	00:00:00	1.89			14-Feb-2007	00:00:00	5.84			12-Mar-2007	00:00:00	1.08		
19-Jan-2007	12:00:00	1.85			14-Feb-2007	12:00:00	17.31			12-Mar-2007	12:00:00	1.02		
20-Jan-2007	00:00:00	1.75			15-Feb-2007	00:00:00	14.82			13-Mar-2007	00:00:00	1.16		
20-Jan-2007	12:00:00	1.7			15-Feb-2007	12:00:00	12.97			13-Mar-2007	12:00:00	1.05		
21-Jan-2007	00:00:00	1.58			16-Feb-2007	00:00:00	7.22			14-Mar-2007	00:00:00	1.31		
21-Jan-2007	12:00:00	1.55			16-Feb-2007	12:00:00	3.69			14-Mar-2007	12:00:00	1.23		
22-Jan-2007	00:00:00	2.47			17-Feb-2007	00:00:00	3.04			15-Mar-2007	00:00:00	1.56		
22-Jan-2007	12:00:00	2.99			17-Feb-2007	12:00:00	2.66			15-Mar-2007	12:00:00	1.4		
23-Jan-2007	00:00:00	2.82			18-Feb-2007	00:00:00	2.71			16-Mar-2007	00:00:00	1.8		
23-Jan-2007	12:00:00	2.39			18-Feb-2007	12:00:00	2.48			16-Mar-2007	12:00:00	4.87		
24-Jan-2007	00:00:00	2.25			19-Feb-2007	00:00:00	2.26			17-Mar-2007	00:00:00	17.08		
24-Jan-2007	12:00:00	1.99			19-Feb-2007	12:00:00	1.94			17-Mar-2007	12:00:00	16.08		
25-Jan-2007	00:00:00	1.9			20-Feb-2007	00:00:00	2.12			18-Mar-2007	00:00:00	17.31		
25-Jan-2007	12:00:00	1.65			20-Feb-2007	12:00:00	2.22			18-Mar-2007	12:00:00	19.41		
26-Jan-2007	00:00:00	1.68			21-Feb-2007	00:00:00	2.24			19-Mar-2007	00:00:00	10.02		
26-Jan-2007	12:00:00	1.54			21-Feb-2007	12:00:00	2.12			19-Mar-2007	12:00:00	3.52		

HAW 1

Data Acquired : September 11, 2007

Serial Number: N43D73F7

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	2.66			16-Apr-2007	00:00:00	23.56	22	22	13-May-2007	00:00:00	-6.53	49	49
20-Mar-2007	12:00:00	2.2			16-Apr-2007	12:00:00	21.59	22	22	13-May-2007	12:00:00	-8.01	49	49
21-Mar-2007	00:00:00	2.05			17-Apr-2007	00:00:00	18.05	23	23	14-May-2007	00:00:00	-10.43	50	50
21-Mar-2007	12:00:00	1.99			17-Apr-2007	12:00:00	16.32	23	23	14-May-2007	12:00:00	-11.11	50	50
22-Mar-2007	00:00:00	1.84			18-Apr-2007	00:00:00	8.94	24	24	15-May-2007	00:00:00	-12.1		51
22-Mar-2007	12:00:00	1.58			18-Apr-2007	12:00:00	3.92	24	24	15-May-2007	12:00:00	-12.68		51
23-Mar-2007	00:00:00	1.75			19-Apr-2007	00:00:00	3.22	25	25	16-May-2007	00:00:00	-13.28		52
23-Mar-2007	12:00:00	1.64			19-Apr-2007	12:00:00	2.78	25	25	16-May-2007	12:00:00	-14.62		52
24-Mar-2007	00:00:00	1.62			20-Apr-2007	00:00:00	2.56	26	26	17-May-2007	00:00:00	-3.39	1	53
24-Mar-2007	12:00:00	1.52			20-Apr-2007	12:00:00	2.06	26	26	17-May-2007	12:00:00	-4.19	1	53
25-Mar-2007	00:00:00	1.47			21-Apr-2007	00:00:00	2.15	27	27	18-May-2007	00:00:00	-5.86	2	54
25-Mar-2007	12:00:00	1.24			21-Apr-2007	12:00:00	1.91	27	27	18-May-2007	12:00:00	-6.54	2	54
26-Mar-2007	00:00:00	1.3	1	1	22-Apr-2007	00:00:00	1.88	28	28	19-May-2007	00:00:00	-8.34	3	55
26-Mar-2007	12:00:00	1.11	1	1	22-Apr-2007	12:00:00	1.67	28	28	19-May-2007	12:00:00	-9.3	3	55
27-Mar-2007	00:00:00	1.15	2	2	23-Apr-2007	00:00:00	1.72	29	29	20-May-2007	00:00:00	-11.45	4	56
27-Mar-2007	12:00:00	1.23	2	2	23-Apr-2007	12:00:00	1.6	29	29	20-May-2007	12:00:00	-12.16		56
28-Mar-2007	00:00:00	1.16	3	3	24-Apr-2007	00:00:00	1.67	30	30	21-May-2007	00:00:00	-13.96		57
28-Mar-2007	12:00:00	1.03	3	3	24-Apr-2007	12:00:00	1.52	30	30	21-May-2007	12:00:00	-15		57
29-Mar-2007	00:00:00	1.57	4	4	25-Apr-2007	00:00:00	1.7	31	31	22-May-2007	00:00:00	-15.89		58
29-Mar-2007	12:00:00	1.93	4	4	25-Apr-2007	12:00:00	1.79	31	31	22-May-2007	12:00:00	-16.1		58
30-Mar-2007	00:00:00	1.98	5	5	26-Apr-2007	00:00:00	1.52	32	32	23-May-2007	00:00:00	-16.87		59
30-Mar-2007	12:00:00	1.9	5	5	26-Apr-2007	12:00:00	1.06	32	32	23-May-2007	12:00:00	-16.81		59
31-Mar-2007	00:00:00	1.71	6	6	27-Apr-2007	00:00:00	1.45	33	33	24-May-2007	00:00:00	-17.54		60
31-Mar-2007	12:00:00	1.35	6	6	27-Apr-2007	12:00:00	1.78	33	33	24-May-2007	12:00:00	-17.95		60
01-Apr-2007	00:00:00	1.54	7	7	28-Apr-2007	00:00:00	1.74	34	34	25-May-2007	00:00:00	-18.59		61
01-Apr-2007	12:00:00	1.36	7	7	28-Apr-2007	12:00:00	1.37	34	34	25-May-2007	12:00:00	-18.68		61
02-Apr-2007	00:00:00	1.43	8	8	29-Apr-2007	00:00:00	1.3	35	35	26-May-2007	00:00:00	-19.31		62
02-Apr-2007	12:00:00	1.46	8	8	29-Apr-2007	12:00:00	1.07	35	35	26-May-2007	12:00:00	-19.49		62
03-Apr-2007	00:00:00	1.27	9	9	30-Apr-2007	00:00:00	0.99	36	36	27-May-2007	00:00:00	-20.03		63
03-Apr-2007	12:00:00	1.08	9	9	30-Apr-2007	12:00:00	0.61	36	36	27-May-2007	12:00:00	-20.04		63
04-Apr-2007	00:00:00	1.35	10	10	01-May-2007	00:00:00	0.61	37	37	28-May-2007	00:00:00	-21.04		64
04-Apr-2007	12:00:00	1.37	10	10	01-May-2007	12:00:00	0.23	37	37	28-May-2007	12:00:00	-21.17		64
05-Apr-2007	00:00:00	1.17	11	11	02-May-2007	00:00:00	0.12	38	38	29-May-2007	00:00:00	-21.91		65
05-Apr-2007	12:00:00	0.98	11	11	02-May-2007	12:00:00	-0.29	38	38	29-May-2007	12:00:00	-22.01		65
06-Apr-2007	00:00:00	0.82	12	12	03-May-2007	00:00:00	-0.42	39	39	30-May-2007	00:00:00	-22.38		66
06-Apr-2007	12:00:00	0.81	12	12	03-May-2007	12:00:00	-0.61	39	39	30-May-2007	12:00:00	-22.65		66
07-Apr-2007	00:00:00	1.07	13	13	04-May-2007	00:00:00	-0.77	40	40	31-May-2007	00:00:00	-22.91		67
07-Apr-2007	12:00:00	0.77	13	13	04-May-2007	12:00:00	-0.79	40	40	31-May-2007	12:00:00	-23.31		67
08-Apr-2007	00:00:00	0.58	14	14	05-May-2007	00:00:00	-0.81	41	41	01-Jun-2007	00:00:00	-23.27		68
08-Apr-2007	12:00:00	0.5	14	14	05-May-2007	12:00:00	-1	41	41	01-Jun-2007	12:00:00	-23.33		68
09-Apr-2007	00:00:00	0.4	15	15	06-May-2007	00:00:00	-0.68	42	42	02-Jun-2007	00:00:00	-23.6		69
09-Apr-2007	12:00:00	0.31	15	15	06-May-2007	12:00:00	-1.16	42	42	02-Jun-2007	12:00:00	-23.57		69
10-Apr-2007	00:00:00	0.24	16	16	07-May-2007	00:00:00	-1.56	43	43	03-Jun-2007	00:00:00	-23.28		70
10-Apr-2007	12:00:00	0.02	16	16	07-May-2007	12:00:00	-1.97	43	43	03-Jun-2007	12:00:00	-2.39	1	70
11-Apr-2007	00:00:00	0.09	17	17	08-May-2007	00:00:00	-2.28	44	44	04-Jun-2007	00:00:00	-2.61	1	71
11-Apr-2007	12:00:00	0.77	17	17	08-May-2007	12:00:00	-2.41	44	44	04-Jun-2007	12:00:00	-3.63	2	71
12-Apr-2007	00:00:00	3.16	18	18	09-May-2007	00:00:00	-2.92	45	45	05-Jun-2007	00:00:00	-3.65	2	72
12-Apr-2007	12:00:00	10.92	18	18	09-May-2007	12:00:00	-3.5	45	45	05-Jun-2007	12:00:00	-4.72	3	72
13-Apr-2007	00:00:00	6.71	19	19	10-May-2007	00:00:00	-3.6	46	46	06-Jun-2007	00:00:00	-5.84	3	73
13-Apr-2007	12:00:00	3.2	19	19	10-May-2007	12:00:00	-3.87	46	46	06-Jun-2007	12:00:00	-7.24	4	73
14-Apr-2007	00:00:00	2.29	20	20	11-May-2007	00:00:00	-4.89	47	47	07-Jun-2007	00:00:00	-9.98	4	74
14-Apr-2007	12:00:00	1.94	20	20	11-May-2007	12:00:00	-5.71	47	47	07-Jun-2007	12:00:00	-11.62	5	74
15-Apr-2007	00:00:00	2.91	21	21	12-May-2007	00:00:00	-7.15	48	48	08-Jun-2007	00:00:00	-13.39		75
15-Apr-2007	12:00:00	15.73	21	21	12-May-2007	12:00:00	-7.96	48	48	08-Jun-2007	12:00:00	-14.48		75

HAW 1

Data Acquired : September 11, 2007

Serial Number: N43D73F7

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-15.32		76	06-Jul-2007	00:00:00	-20.72		103	02-Aug-2007	00:00:00	2.42	3	130
09-Jun-2007	12:00:00	-16.07		76	06-Jul-2007	12:00:00	-23.32		103	02-Aug-2007	12:00:00	1.62	4	130
10-Jun-2007	00:00:00	-16.47		77	07-Jul-2007	00:00:00	-23.76		104	03-Aug-2007	00:00:00	1.2	4	131
10-Jun-2007	12:00:00	-17.05		77	07-Jul-2007	12:00:00	-23.86		104	03-Aug-2007	12:00:00	0.73	5	131
11-Jun-2007	00:00:00	-17.99		78	08-Jul-2007	00:00:00	-23.7		105	04-Aug-2007	00:00:00	0.64	5	132
11-Jun-2007	12:00:00	-18.75		78	08-Jul-2007	12:00:00	-23.44		105	04-Aug-2007	12:00:00	0.35	6	132
12-Jun-2007	00:00:00	-19.11		79	09-Jul-2007	00:00:00	-23.75		106	05-Aug-2007	00:00:00	0.12	6	133
12-Jun-2007	12:00:00	-19.17		79	09-Jul-2007	12:00:00	-24.03		106	05-Aug-2007	12:00:00	-0.32	7	133
13-Jun-2007	00:00:00	-19.75		80	10-Jul-2007	00:00:00	-23.71		107	06-Aug-2007	00:00:00	-0.39	7	134
13-Jun-2007	12:00:00	-19.82		80	10-Jul-2007	12:00:00	-24.03		107	06-Aug-2007	12:00:00	-0.73	8	134
14-Jun-2007	00:00:00	-20.49		81	11-Jul-2007	00:00:00	-23.64		108	07-Aug-2007	00:00:00	-0.91	8	135
14-Jun-2007	12:00:00	-20.78		81	11-Jul-2007	12:00:00	-24		108	07-Aug-2007	12:00:00	-1.27	9	135
15-Jun-2007	00:00:00	-20.82		82	12-Jul-2007	00:00:00	-15.44		109	08-Aug-2007	00:00:00	-1.42	9	136
15-Jun-2007	12:00:00	-20.38		82	12-Jul-2007	12:00:00	-18.09		109	08-Aug-2007	12:00:00	-1.71	10	136
16-Jun-2007	00:00:00	-20.95		83	13-Jul-2007	00:00:00	-20.95		110	09-Aug-2007	00:00:00	-1.99	10	137
16-Jun-2007	12:00:00	-21.34		83	13-Jul-2007	12:00:00	-22.88		110	09-Aug-2007	12:00:00	-2.32	11	137
17-Jun-2007	00:00:00	-21.53		84	14-Jul-2007	00:00:00	-23.31		111	10-Aug-2007	00:00:00	-2.66	11	138
17-Jun-2007	12:00:00	-21.89		84	14-Jul-2007	12:00:00	-23.95		111	10-Aug-2007	12:00:00	-3.2	12	138
18-Jun-2007	00:00:00	-22.34		85	15-Jul-2007	00:00:00	-23.82		112	11-Aug-2007	00:00:00	-3.56	12	139
18-Jun-2007	12:00:00	-23.31		85	15-Jul-2007	12:00:00	-23.96		112	11-Aug-2007	12:00:00	-4.26	13	139
19-Jun-2007	00:00:00	-23.89		86	16-Jul-2007	00:00:00	-23.76		113	12-Aug-2007	00:00:00	-4.49	13	140
19-Jun-2007	12:00:00	-23.98		86	16-Jul-2007	12:00:00	-24.03		113	12-Aug-2007	12:00:00	-5.28	14	140
20-Jun-2007	00:00:00	-14.64		87	17-Jul-2007	00:00:00	-23.83		114	13-Aug-2007	00:00:00	-5.81	14	141
20-Jun-2007	12:00:00	-16.97		87	17-Jul-2007	12:00:00	-23.84		114	13-Aug-2007	12:00:00	-6.88	15	141
21-Jun-2007	00:00:00	-18.75		88	18-Jul-2007	00:00:00	-16.72		115	14-Aug-2007	00:00:00	-8.06	15	142
21-Jun-2007	12:00:00	-19.93		88	18-Jul-2007	12:00:00	-20.4		115	14-Aug-2007	12:00:00	-9.21	16	142
22-Jun-2007	00:00:00	-21.22		89	19-Jul-2007	00:00:00	-23.44		116	15-Aug-2007	00:00:00	-12.38		143
22-Jun-2007	12:00:00	-22.21		89	19-Jul-2007	12:00:00	-23.83		116	15-Aug-2007	12:00:00	-14.35		143
23-Jun-2007	00:00:00	-23.03		90	20-Jul-2007	00:00:00	-23.82		117	16-Aug-2007	00:00:00	-15.77		144
23-Jun-2007	12:00:00	-23.54		90	20-Jul-2007	12:00:00	-23.81		117	16-Aug-2007	12:00:00	-16.23		144
24-Jun-2007	00:00:00	-23.55		91	21-Jul-2007	00:00:00	-23.82		118	17-Aug-2007	00:00:00	-16.25		145
24-Jun-2007	12:00:00	-23.56		91	21-Jul-2007	12:00:00	-23.83		118	17-Aug-2007	12:00:00	-17.1		145
25-Jun-2007	00:00:00	-6.87	1	92	22-Jul-2007	00:00:00	-23.83		119	18-Aug-2007	00:00:00	-17.22		146
25-Jun-2007	12:00:00	-13.86		92	22-Jul-2007	12:00:00	-23.84		119	18-Aug-2007	12:00:00	-17.9		146
26-Jun-2007	00:00:00	-16.8		93	23-Jul-2007	00:00:00	-23.84		120	19-Aug-2007	00:00:00	-18.59		147
26-Jun-2007	12:00:00	-18.21		93	23-Jul-2007	12:00:00	-23.84		120	19-Aug-2007	12:00:00	-19.17		147
27-Jun-2007	00:00:00	-19.83		94	24-Jul-2007	00:00:00	-23.83		121	20-Aug-2007	00:00:00	-19.47		148
27-Jun-2007	12:00:00	-20.66		94	24-Jul-2007	12:00:00	-23.85		121	20-Aug-2007	12:00:00	-19.94		148
28-Jun-2007	00:00:00	-20.94		95	25-Jul-2007	00:00:00	-23.84		122	21-Aug-2007	00:00:00	-20.64		149
28-Jun-2007	12:00:00	-21.83		95	25-Jul-2007	12:00:00	-23.85		122	21-Aug-2007	12:00:00	-21.15		149
29-Jun-2007	00:00:00	-22.59		96	26-Jul-2007	00:00:00	-23.75		123	22-Aug-2007	00:00:00	-9.52		150
29-Jun-2007	12:00:00	-23.07		96	26-Jul-2007	12:00:00	-23.75		123	22-Aug-2007	12:00:00	-14.33		150
30-Jun-2007	00:00:00	-23.63		97	27-Jul-2007	00:00:00	-23.75		124	23-Aug-2007	00:00:00	-16.11		151
30-Jun-2007	12:00:00	-24.19		97	27-Jul-2007	12:00:00	-23.74		124	23-Aug-2007	12:00:00	-16.57		151
01-Jul-2007	00:00:00	-18.91		98	28-Jul-2007	00:00:00	-23.64		125	24-Aug-2007	00:00:00	-17.16		152
01-Jul-2007	12:00:00	-20.39		98	28-Jul-2007	12:00:00	-23.65		125	24-Aug-2007	12:00:00	-17.89		152
02-Jul-2007	00:00:00	-22.29		99	29-Jul-2007	00:00:00	-23.65		126	25-Aug-2007	00:00:00	-18.62		153
02-Jul-2007	12:00:00	-22.94		99	29-Jul-2007	12:00:00	-23.65		126	25-Aug-2007	12:00:00	-19.32		153
03-Jul-2007	00:00:00	-23.94		100	30-Jul-2007	00:00:00	-23.65		127	26-Aug-2007	00:00:00	-19.93		154
03-Jul-2007	12:00:00	-23.8		100	30-Jul-2007	12:00:00	2.78	1	127	26-Aug-2007	12:00:00	-21.18		154
04-Jul-2007	00:00:00	-23.74		101	31-Jul-2007	00:00:00	32.31	1	128	27-Aug-2007	00:00:00	-21.59		155
04-Jul-2007	12:00:00	-23.99		101	31-Jul-2007	12:00:00	33.39	2	128	27-Aug-2007	12:00:00	-22.37		155
05-Jul-2007	00:00:00	-23.72		102	01-Aug-2007	00:00:00	21.9	2	129	28-Aug-2007	00:00:00	-22.58		156
05-Jul-2007	12:00:00	-23.71		102	01-Aug-2007	12:00:00	4.82	3	129	28-Aug-2007	12:00:00	-22.8		156

HAW 1

Data Acquired : September 11, 2007

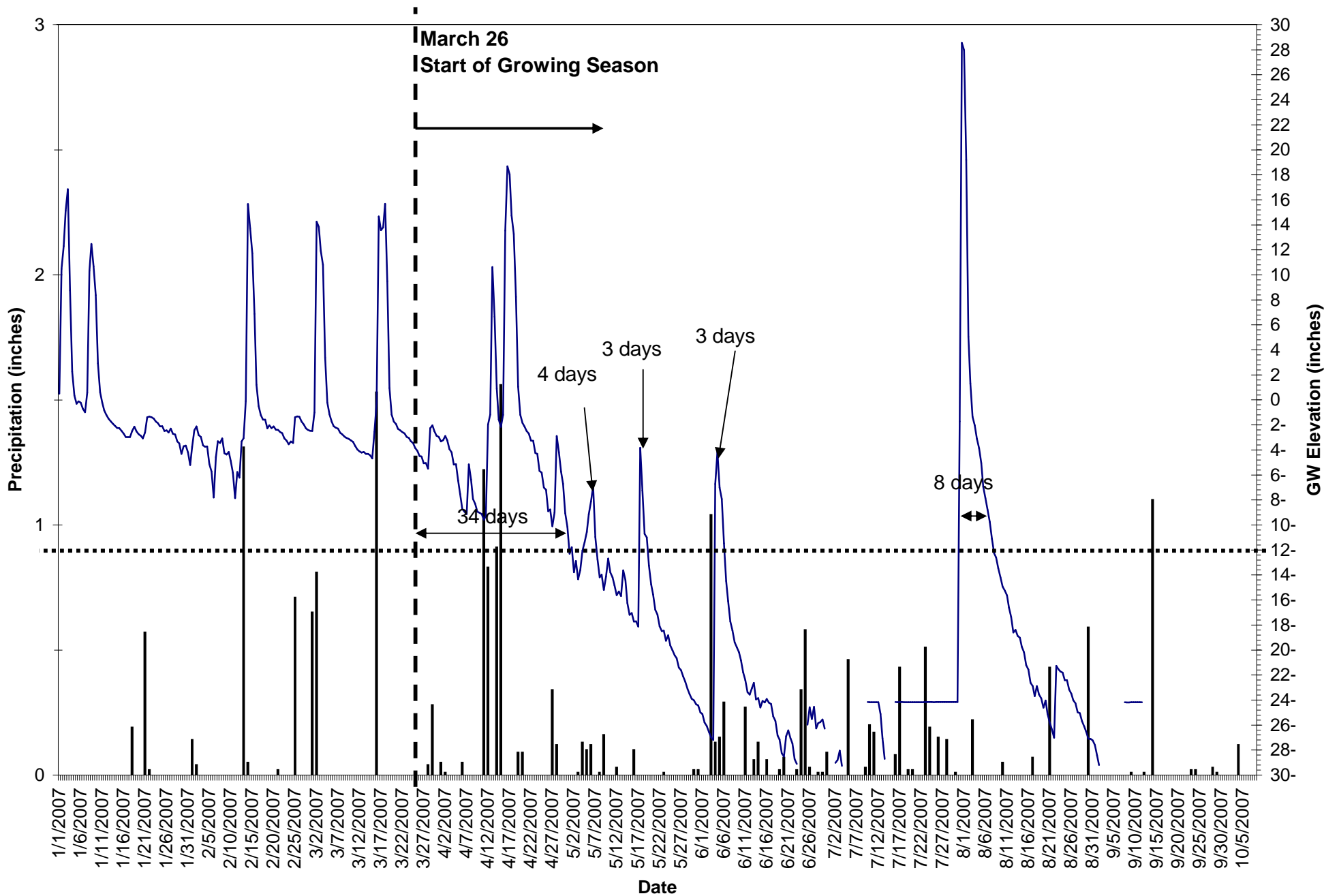
Serial Number: N43D73F7

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

29-Aug-2007	00:00:00	-23.45	157											
29-Aug-2007	12:00:00	-23.94	157											
30-Aug-2007	00:00:00	-23.87	158											
30-Aug-2007	12:00:00	-23.84	158											
31-Aug-2007	00:00:00	-23.83	159											
31-Aug-2007	12:00:00	-23.68	159											
01-Sep-2007	00:00:00	-23.76	160											
01-Sep-2007	12:00:00	-23.84	160											
02-Sep-2007	00:00:00	-23.65	161											
02-Sep-2007	12:00:00	-23.8	161											
03-Sep-2007	00:00:00	-23.71	162											
03-Sep-2007	12:00:00	-23.93	162											
04-Sep-2007	00:00:00	-23.68	163											
04-Sep-2007	12:00:00	-23.84	163											
05-Sep-2007	00:00:00	-23.68	164											
05-Sep-2007	12:00:00	-23.85	164											
06-Sep-2007	00:00:00	-23.69	165											
06-Sep-2007	12:00:00	-23.92	165											
07-Sep-2007	00:00:00	-23.74	166											
07-Sep-2007	12:00:00	-23.52	166											
08-Sep-2007	00:00:00	-23.71	167											
08-Sep-2007	12:00:00	-23.73	167											
09-Sep-2007	00:00:00	-23.64	168											
09-Sep-2007	12:00:00	-23.84	168											
10-Sep-2007	00:00:00	-23.57	169											
10-Sep-2007	12:00:00	-23.72	169											
11-Sep-2007	00:00:00	-23.83	170											

Haw Gauge 2



■ Precipitation — GW Elevation

HAW 2

Data Acquired : September 11, 2007

Serial Number: N3ECD220

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	0.5			27-Jan-2007	00:00:00	-2.3			22-Feb-2007	00:00:00	-2.66		
01-Jan-2007	12:00:00	10.47			27-Jan-2007	12:00:00	-2.72			22-Feb-2007	12:00:00	-3.07		
02-Jan-2007	00:00:00	12.31			28-Jan-2007	00:00:00	-2.77			23-Feb-2007	00:00:00	-3.26		
02-Jan-2007	12:00:00	15.12			28-Jan-2007	12:00:00	-3.33			23-Feb-2007	12:00:00	-3.55		
03-Jan-2007	00:00:00	16.85			29-Jan-2007	00:00:00	-3.48			24-Feb-2007	00:00:00	-3.32		
03-Jan-2007	12:00:00	8.74			29-Jan-2007	12:00:00	-4.32			24-Feb-2007	12:00:00	-3.44		
04-Jan-2007	00:00:00	2.25			30-Jan-2007	00:00:00	-3.7			25-Feb-2007	00:00:00	-1.39		
04-Jan-2007	12:00:00	0.35			30-Jan-2007	12:00:00	-3.66			25-Feb-2007	12:00:00	-1.32		
05-Jan-2007	00:00:00	-0.3			31-Jan-2007	00:00:00	-4.2			26-Feb-2007	00:00:00	-1.36		
05-Jan-2007	12:00:00	-0.12			31-Jan-2007	12:00:00	-5.21			26-Feb-2007	12:00:00	-1.74		
06-Jan-2007	00:00:00	-0.21			01-Feb-2007	00:00:00	-3.76			27-Feb-2007	00:00:00	-1.97		
06-Jan-2007	12:00:00	-0.71			01-Feb-2007	12:00:00	-2.43			27-Feb-2007	12:00:00	-2.28		
07-Jan-2007	00:00:00	-0.98			02-Feb-2007	00:00:00	-2.12			28-Feb-2007	00:00:00	-2.4		
07-Jan-2007	12:00:00	0.58			02-Feb-2007	12:00:00	-2.82			28-Feb-2007	12:00:00	-2.46		
08-Jan-2007	00:00:00	10.33			03-Feb-2007	00:00:00	-2.95			01-Mar-2007	00:00:00	-2.48		
08-Jan-2007	12:00:00	12.48			03-Feb-2007	12:00:00	-3.64			01-Mar-2007	12:00:00	-1		
09-Jan-2007	00:00:00	10.68			04-Feb-2007	00:00:00	-3.74			02-Mar-2007	00:00:00	14.26		
09-Jan-2007	12:00:00	8.37			04-Feb-2007	12:00:00	-3.73			02-Mar-2007	12:00:00	13.83		
10-Jan-2007	00:00:00	2.92			05-Feb-2007	00:00:00	-5.14			03-Mar-2007	00:00:00	11.92		
10-Jan-2007	12:00:00	0.62			05-Feb-2007	12:00:00	-5.72			03-Mar-2007	12:00:00	10.8		
11-Jan-2007	00:00:00	-0.24			06-Feb-2007	00:00:00	-7.81			04-Mar-2007	00:00:00	3.37		
11-Jan-2007	12:00:00	-0.84			06-Feb-2007	12:00:00	-4.57			04-Mar-2007	12:00:00	-0.21		
12-Jan-2007	00:00:00	-1.22			07-Feb-2007	00:00:00	-3.31			05-Mar-2007	00:00:00	-1.16		
12-Jan-2007	12:00:00	-1.51			07-Feb-2007	12:00:00	-3.44			05-Mar-2007	12:00:00	-1.73		
13-Jan-2007	00:00:00	-1.71			08-Feb-2007	00:00:00	-3.08			06-Mar-2007	00:00:00	-2.1		
13-Jan-2007	12:00:00	-1.91			08-Feb-2007	12:00:00	-4.26			06-Mar-2007	12:00:00	-2.22		
14-Jan-2007	00:00:00	-2.08			09-Feb-2007	00:00:00	-4.37			07-Mar-2007	00:00:00	-2.3		
14-Jan-2007	12:00:00	-2.24			09-Feb-2007	12:00:00	-4.15			07-Mar-2007	12:00:00	-2.62		
15-Jan-2007	00:00:00	-2.26			10-Feb-2007	00:00:00	-4.88			08-Mar-2007	00:00:00	-2.77		
15-Jan-2007	12:00:00	-2.46			10-Feb-2007	12:00:00	-5.83			08-Mar-2007	12:00:00	-2.93		
16-Jan-2007	00:00:00	-2.7			11-Feb-2007	00:00:00	-7.85			09-Mar-2007	00:00:00	-3.04		
16-Jan-2007	12:00:00	-2.97			11-Feb-2007	12:00:00	-5.77			09-Mar-2007	12:00:00	-3.12		
17-Jan-2007	00:00:00	-2.97			12-Feb-2007	00:00:00	-6.22			10-Mar-2007	00:00:00	-3.23		
17-Jan-2007	12:00:00	-2.98			12-Feb-2007	12:00:00	-3.32			10-Mar-2007	12:00:00	-3.36		
18-Jan-2007	00:00:00	-2.48			13-Feb-2007	00:00:00	-3.06			11-Mar-2007	00:00:00	-3.68		
18-Jan-2007	12:00:00	-2.14			13-Feb-2007	12:00:00	-0.09			11-Mar-2007	12:00:00	-3.97		
19-Jan-2007	00:00:00	-2.52			14-Feb-2007	00:00:00	15.66			12-Mar-2007	00:00:00	-4.11		
19-Jan-2007	12:00:00	-2.74			14-Feb-2007	12:00:00	13.73			12-Mar-2007	12:00:00	-4.21		
20-Jan-2007	00:00:00	-2.87			15-Feb-2007	00:00:00	11.72			13-Mar-2007	00:00:00	-4.16		
20-Jan-2007	12:00:00	-3.08			15-Feb-2007	12:00:00	6.88			13-Mar-2007	12:00:00	-4.32		
21-Jan-2007	00:00:00	-2.6			16-Feb-2007	00:00:00	1.22			14-Mar-2007	00:00:00	-4.32		
21-Jan-2007	12:00:00	-1.38			16-Feb-2007	12:00:00	-0.49			14-Mar-2007	12:00:00	-4.43		
22-Jan-2007	00:00:00	-1.33			17-Feb-2007	00:00:00	-1.22			15-Mar-2007	00:00:00	-4.68		
22-Jan-2007	12:00:00	-1.38			17-Feb-2007	12:00:00	-1.58			15-Mar-2007	12:00:00	-2.56		
23-Jan-2007	00:00:00	-1.49			18-Feb-2007	00:00:00	-1.57			16-Mar-2007	00:00:00	-0.24		
23-Jan-2007	12:00:00	-1.72			18-Feb-2007	12:00:00	-2.27			16-Mar-2007	12:00:00	14.67		
24-Jan-2007	00:00:00	-1.86			19-Feb-2007	00:00:00	-2.04			17-Mar-2007	00:00:00	13.58		
24-Jan-2007	12:00:00	-2.12			19-Feb-2007	12:00:00	-2.25			17-Mar-2007	12:00:00	13.8		
25-Jan-2007	00:00:00	-2.1			20-Feb-2007	00:00:00	-2.12			18-Mar-2007	00:00:00	15.69		
25-Jan-2007	12:00:00	-2.48			20-Feb-2007	12:00:00	-2.38			18-Mar-2007	12:00:00	9.49		
26-Jan-2007	00:00:00	-2.43			21-Feb-2007	00:00:00	-2.4			19-Mar-2007	00:00:00	0.95		
26-Jan-2007	12:00:00	-2.6			21-Feb-2007	12:00:00	-2.58			19-Mar-2007	12:00:00	-1.17		

HAW 2

Data Acquired : September 11, 2007

Serial Number: N3ECD220

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	-1.74			16-Apr-2007	00:00:00	18.03	22	22	13-May-2007	00:00:00	-14.4		49
20-Mar-2007	12:00:00	-1.93			16-Apr-2007	12:00:00	14.74	22	22	13-May-2007	12:00:00	-16.24		49
21-Mar-2007	00:00:00	-2.31			17-Apr-2007	00:00:00	13.28	23	23	14-May-2007	00:00:00	-17.19		50
21-Mar-2007	12:00:00	-2.44			17-Apr-2007	12:00:00	8.24	23	23	14-May-2007	12:00:00	-17.05		50
22-Mar-2007	00:00:00	-2.58			18-Apr-2007	00:00:00	1.06	24	24	15-May-2007	00:00:00	-17.73		51
22-Mar-2007	12:00:00	-2.67			18-Apr-2007	12:00:00	-1.2	24	24	15-May-2007	12:00:00	-17.7		51
23-Mar-2007	00:00:00	-2.96			19-Apr-2007	00:00:00	-1.84	25	25	16-May-2007	00:00:00	-18.12		52
23-Mar-2007	12:00:00	-3.04			19-Apr-2007	12:00:00	-2.11	25	25	16-May-2007	12:00:00	-3.82	1	52
24-Mar-2007	00:00:00	-3.31			20-Apr-2007	00:00:00	-2.48	26	26	17-May-2007	00:00:00	-7.25	1	53
24-Mar-2007	12:00:00	-3.45			20-Apr-2007	12:00:00	-2.69	26	26	17-May-2007	12:00:00	-10.71	2	53
25-Mar-2007	00:00:00	-3.85			21-Apr-2007	00:00:00	-3.26	27	27	18-May-2007	00:00:00	-10.99	2	54
25-Mar-2007	12:00:00	-4.08			21-Apr-2007	12:00:00	-3.27	27	27	18-May-2007	12:00:00	-13.26		54
26-Mar-2007	00:00:00	-4.49	1	1	22-Apr-2007	00:00:00	-4.24	28	28	19-May-2007	00:00:00	-14.75		55
26-Mar-2007	12:00:00	-4.53	1	1	22-Apr-2007	12:00:00	-4.32	28	28	19-May-2007	12:00:00	-15.56		55
27-Mar-2007	00:00:00	-5.07	2	2	23-Apr-2007	00:00:00	-5.67	29	29	20-May-2007	00:00:00	-16.78		56
27-Mar-2007	12:00:00	-5.04	2	2	23-Apr-2007	12:00:00	-5.82	29	29	20-May-2007	12:00:00	-17.17		56
28-Mar-2007	00:00:00	-5.5	3	3	24-Apr-2007	00:00:00	-7	30	30	21-May-2007	00:00:00	-18.11		57
28-Mar-2007	12:00:00	-2.25	3	3	24-Apr-2007	12:00:00	-7.2	30	30	21-May-2007	12:00:00	-18.49		57
29-Mar-2007	00:00:00	-2.04	4	4	25-Apr-2007	00:00:00	-8.91	31	31	22-May-2007	00:00:00	-18.46		58
29-Mar-2007	12:00:00	-2.51	4	4	25-Apr-2007	12:00:00	-8.77	31	31	22-May-2007	12:00:00	-19.26		58
30-Mar-2007	00:00:00	-2.87	5	5	26-Apr-2007	00:00:00	-10.1	32	32	23-May-2007	00:00:00	-18.82		59
30-Mar-2007	12:00:00	-2.95	5	5	26-Apr-2007	12:00:00	-9.01	32	32	23-May-2007	12:00:00	-19.64		59
31-Mar-2007	00:00:00	-3.33	6	6	27-Apr-2007	00:00:00	-2.89	33	33	24-May-2007	00:00:00	-20.02		60
31-Mar-2007	12:00:00	-3.21	6	6	27-Apr-2007	12:00:00	-4.17	33	33	24-May-2007	12:00:00	-20.42		60
01-Apr-2007	00:00:00	-2.88	7	7	28-Apr-2007	00:00:00	-5.74	34	34	25-May-2007	00:00:00	-20.66		61
01-Apr-2007	12:00:00	-3.24	7	7	28-Apr-2007	12:00:00	-6.71	34	34	25-May-2007	12:00:00	-21.41		61
02-Apr-2007	00:00:00	-3.94	8	8	29-Apr-2007	00:00:00	-9.06	35	35	26-May-2007	00:00:00	-21.61		62
02-Apr-2007	12:00:00	-4.2	8	8	29-Apr-2007	12:00:00	-10.15	35	35	26-May-2007	12:00:00	-22.11		62
03-Apr-2007	00:00:00	-5.17	9	9	30-Apr-2007	00:00:00	-12.3		36	27-May-2007	00:00:00	-22.56		63
03-Apr-2007	12:00:00	-5.14	9	9	30-Apr-2007	12:00:00	-11.78	1	36	27-May-2007	12:00:00	-23.12		63
04-Apr-2007	00:00:00	-6.46	10	10	01-May-2007	00:00:00	-13.79		37	28-May-2007	00:00:00	-23.51		64
04-Apr-2007	12:00:00	-7.52	10	10	01-May-2007	12:00:00	-12.87		37	28-May-2007	12:00:00	-23.89		64
05-Apr-2007	00:00:00	-8.73	11	11	02-May-2007	00:00:00	-14.34		38	29-May-2007	00:00:00	-24.02		65
05-Apr-2007	12:00:00	-8.94	11	11	02-May-2007	12:00:00	-13.61		38	29-May-2007	12:00:00	-24.34		65
06-Apr-2007	00:00:00	-9.12	12	12	03-May-2007	00:00:00	-12.06		39	30-May-2007	00:00:00	-24.43		66
06-Apr-2007	12:00:00	-5.16	12	12	03-May-2007	12:00:00	-11.37	1	39	30-May-2007	12:00:00	-25		66
07-Apr-2007	00:00:00	-6.35	13	13	04-May-2007	00:00:00	-10.56	1	40	31-May-2007	00:00:00	-25.12		67
07-Apr-2007	12:00:00	-7.92	13	13	04-May-2007	12:00:00	-9.15	2	40	31-May-2007	12:00:00	-25.79		67
08-Apr-2007	00:00:00	-8.31	14	14	05-May-2007	00:00:00	-8.14	2	41	01-Jun-2007	00:00:00	-26.07		68
08-Apr-2007	12:00:00	-8.94	14	14	05-May-2007	12:00:00	-6.92	3	41	01-Jun-2007	12:00:00	-26.54		68
09-Apr-2007	00:00:00	-9.02	15	15	06-May-2007	00:00:00	-10.96	3	42	02-Jun-2007	00:00:00	-26.99		69
09-Apr-2007	12:00:00	-9.12	15	15	06-May-2007	12:00:00	-12.73		42	02-Jun-2007	12:00:00	-27.2		69
10-Apr-2007	00:00:00	-9.59	16	16	07-May-2007	00:00:00	-14.18		43	03-Jun-2007	00:00:00	-6.72	1	70
10-Apr-2007	12:00:00	-9.28	16	16	07-May-2007	12:00:00	-13.98		43	03-Jun-2007	12:00:00	-4.15	1	70
11-Apr-2007	00:00:00	-1.97	17	17	08-May-2007	00:00:00	-15.2		44	04-Jun-2007	00:00:00	-7.01	2	71
11-Apr-2007	12:00:00	-1.17	17	17	08-May-2007	12:00:00	-14.14		44	04-Jun-2007	12:00:00	-7.92	2	71
12-Apr-2007	00:00:00	10.62	18	18	09-May-2007	00:00:00	-12.69		45	05-Jun-2007	00:00:00	-11.46	3	72
12-Apr-2007	12:00:00	6.66	18	18	09-May-2007	12:00:00	-13.8		45	05-Jun-2007	12:00:00	-14.48		72
13-Apr-2007	00:00:00	0.91	19	19	10-May-2007	00:00:00	-14.19		46	06-Jun-2007	00:00:00	-16.09		73
13-Apr-2007	12:00:00	-1.56	19	19	10-May-2007	12:00:00	-14.83		46	06-Jun-2007	12:00:00	-17.71		73
14-Apr-2007	00:00:00	-2.15	20	20	11-May-2007	00:00:00	-15.61		47	07-Jun-2007	00:00:00	-18.44		74
14-Apr-2007	12:00:00	-1.19	20	20	11-May-2007	12:00:00	-15.32		47	07-Jun-2007	12:00:00	-19.38		74
15-Apr-2007	00:00:00	13.54	21	21	12-May-2007	00:00:00	-15.68		48	08-Jun-2007	00:00:00	-19.79		75
15-Apr-2007	12:00:00	18.68	21	21	12-May-2007	12:00:00	-13.63		48	08-Jun-2007	12:00:00	-20.19		75

HAW 2

Data Acquired : September 11, 2007

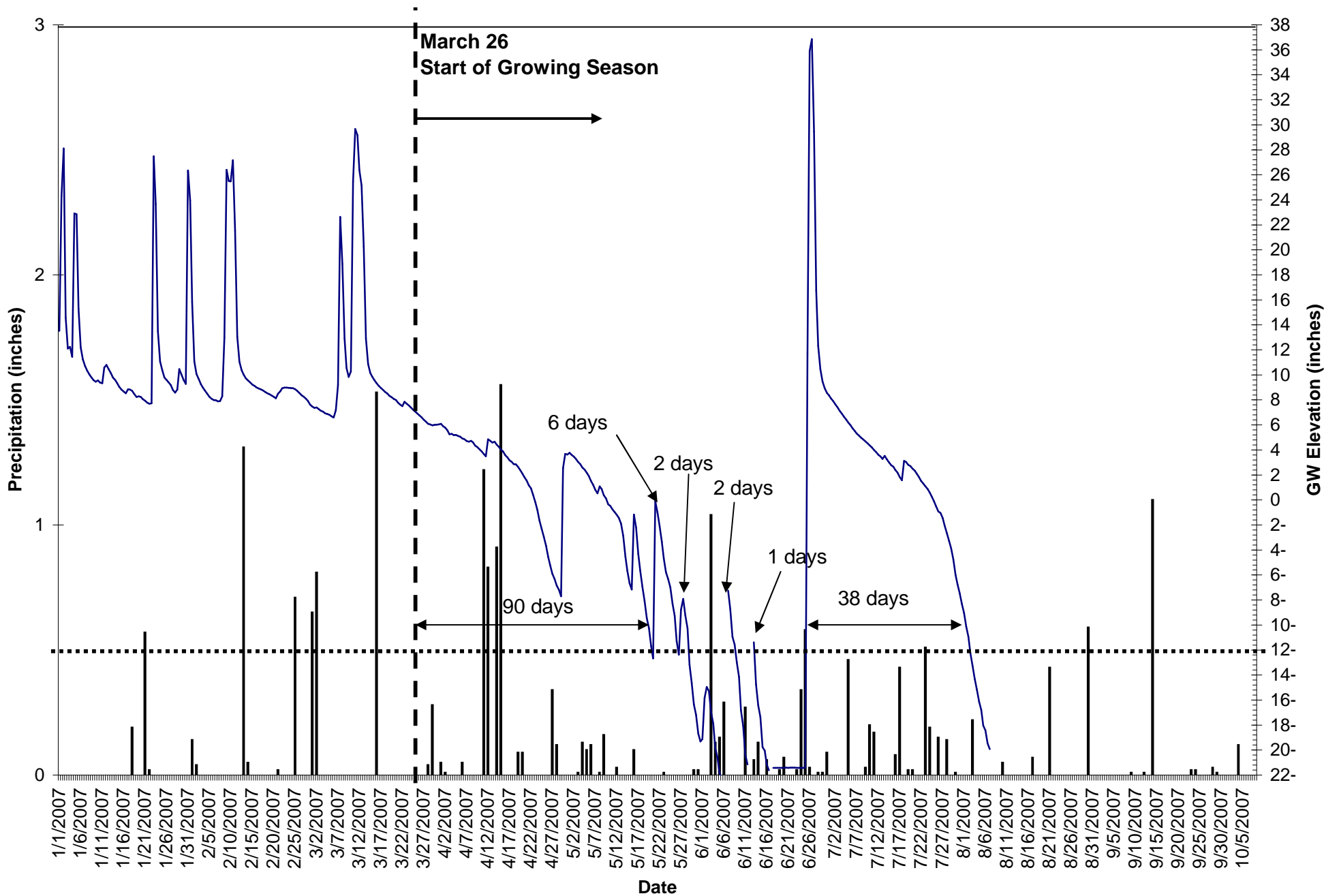
Serial Number: N3ECD220

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-20.82		76	06-Jul-2007	00:00:00			103	02-Aug-2007	00:00:00	-1.36	4	130
09-Jun-2007	12:00:00	-21.78		76	06-Jul-2007	12:00:00			103	02-Aug-2007	12:00:00	-2.03	4	130
10-Jun-2007	00:00:00	-22.42		77	07-Jul-2007	00:00:00			104	03-Aug-2007	00:00:00	-3.11	5	131
10-Jun-2007	12:00:00	-23.38		77	07-Jul-2007	12:00:00			104	03-Aug-2007	12:00:00	-3.86	5	131
11-Jun-2007	00:00:00	-23.56		78	08-Jul-2007	00:00:00			105	04-Aug-2007	00:00:00	-5.05	6	132
11-Jun-2007	12:00:00	-23.06		78	08-Jul-2007	12:00:00	-24.15		105	04-Aug-2007	12:00:00	-6.94	6	132
12-Jun-2007	00:00:00	-22.62		79	09-Jul-2007	00:00:00	-24.17		106	05-Aug-2007	00:00:00	-7.85	7	133
12-Jun-2007	12:00:00	-23.95		79	09-Jul-2007	12:00:00	-24.17		106	05-Aug-2007	12:00:00	-8.79	7	133
13-Jun-2007	00:00:00	-23.84		80	10-Jul-2007	00:00:00	-24.17		107	06-Aug-2007	00:00:00	-9.75	8	134
13-Jun-2007	12:00:00	-24.6		80	10-Jul-2007	12:00:00	-24.17		107	06-Aug-2007	12:00:00	-11.12	8	134
14-Jun-2007	00:00:00	-24.07		81	11-Jul-2007	00:00:00	-24.18		108	07-Aug-2007	00:00:00	-12.26		135
14-Jun-2007	12:00:00	-24.2		81	11-Jul-2007	12:00:00	-25.11		108	07-Aug-2007	12:00:00	-12.6		135
15-Jun-2007	00:00:00	-23.92		82	12-Jul-2007	00:00:00	-27.06		109	08-Aug-2007	00:00:00	-13.47		136
15-Jun-2007	12:00:00	-24.21		82	12-Jul-2007	12:00:00	-28.71		109	08-Aug-2007	12:00:00	-14.18		136
16-Jun-2007	00:00:00	-24.31		83	13-Jul-2007	00:00:00			110	09-Aug-2007	00:00:00	-14.94		137
16-Jun-2007	12:00:00	-25.31		83	13-Jul-2007	12:00:00			110	09-Aug-2007	12:00:00	-15.25		137
17-Jun-2007	00:00:00	-25.68		84	14-Jul-2007	00:00:00			111	10-Aug-2007	00:00:00	-15.63		138
17-Jun-2007	12:00:00	-26.85		84	14-Jul-2007	12:00:00			111	10-Aug-2007	12:00:00	-16.61		138
18-Jun-2007	00:00:00	-27.16		85	15-Jul-2007	00:00:00	-24.16		112	11-Aug-2007	00:00:00	-17.35		139
18-Jun-2007	12:00:00	-28.25		85	15-Jul-2007	12:00:00	-24.17		112	11-Aug-2007	12:00:00	-18.59		139
19-Jun-2007	00:00:00	-28.52		86	16-Jul-2007	00:00:00	-24.15		113	12-Aug-2007	00:00:00	-18.39		140
19-Jun-2007	12:00:00	-26.9		86	16-Jul-2007	12:00:00	-24.16		113	12-Aug-2007	12:00:00	-18.87		140
20-Jun-2007	00:00:00	-26.42		87	17-Jul-2007	00:00:00	-24.17		114	13-Aug-2007	00:00:00	-19.01		141
20-Jun-2007	12:00:00	-27.05		87	17-Jul-2007	12:00:00	-24.17		114	13-Aug-2007	12:00:00	-19.75		141
21-Jun-2007	00:00:00	-27.47		88	18-Jul-2007	00:00:00	-24.17		115	14-Aug-2007	00:00:00	-20.18		142
21-Jun-2007	12:00:00	-28.72		88	18-Jul-2007	12:00:00	-24.18		115	14-Aug-2007	12:00:00	-21.21		142
22-Jun-2007	00:00:00	-29.11		89	19-Jul-2007	00:00:00	-24.18		116	15-Aug-2007	00:00:00	-21.56		143
22-Jun-2007	12:00:00			89	19-Jul-2007	12:00:00	-24.18		116	15-Aug-2007	12:00:00	-22.63		143
23-Jun-2007	00:00:00			90	20-Jul-2007	00:00:00	-24.18		117	16-Aug-2007	00:00:00	-22.88		144
23-Jun-2007	12:00:00			90	20-Jul-2007	12:00:00	-24.18		117	16-Aug-2007	12:00:00	-23.69		144
24-Jun-2007	00:00:00			91	21-Jul-2007	00:00:00	-24.18		118	17-Aug-2007	00:00:00	-22.89		145
24-Jun-2007	12:00:00	-25.97		91	21-Jul-2007	12:00:00	-24.17		118	17-Aug-2007	12:00:00	-23.56		145
25-Jun-2007	00:00:00	-24.58		92	22-Jul-2007	00:00:00	-24.16		119	18-Aug-2007	00:00:00	-23.86		146
25-Jun-2007	12:00:00	-25.52		92	22-Jul-2007	12:00:00	-24.16		119	18-Aug-2007	12:00:00	-24.61		146
26-Jun-2007	00:00:00	-24.54		93	23-Jul-2007	00:00:00	-24.15		120	19-Aug-2007	00:00:00	-24.04		147
26-Jun-2007	12:00:00	-26.27		93	23-Jul-2007	12:00:00	-24.15		120	19-Aug-2007	12:00:00	-25.12		147
27-Jun-2007	00:00:00	-25.85		94	24-Jul-2007	00:00:00	-24.17		121	20-Aug-2007	00:00:00	-25.8		148
27-Jun-2007	12:00:00	-25.77		94	24-Jul-2007	12:00:00	-24.15		121	20-Aug-2007	12:00:00	-26.36		148
28-Jun-2007	00:00:00	-25.56		95	25-Jul-2007	00:00:00	-24.15		122	21-Aug-2007	00:00:00	-27.02		149
28-Jun-2007	12:00:00	-26.29		95	25-Jul-2007	12:00:00	-24.16		122	21-Aug-2007	12:00:00	-21.27		149
29-Jun-2007	00:00:00			96	26-Jul-2007	00:00:00	-24.16		123	22-Aug-2007	00:00:00	-21.54		150
29-Jun-2007	12:00:00			96	26-Jul-2007	12:00:00	-24.15		123	22-Aug-2007	12:00:00	-21.71		150
30-Jun-2007	00:00:00			97	27-Jul-2007	00:00:00	-24.16		124	23-Aug-2007	00:00:00	-21.8		151
30-Jun-2007	12:00:00			97	27-Jul-2007	12:00:00	-24.16		124	23-Aug-2007	12:00:00	-22.41		151
01-Jul-2007	00:00:00	-29.03		98	28-Jul-2007	00:00:00	-24.16		125	24-Aug-2007	00:00:00	-22.42		152
01-Jul-2007	12:00:00	-28.79		98	28-Jul-2007	12:00:00	-24.15		125	24-Aug-2007	12:00:00	-23.17		152
02-Jul-2007	00:00:00	-28.05		99	29-Jul-2007	00:00:00	-24.15		126	25-Aug-2007	00:00:00	-23.49		153
02-Jul-2007	12:00:00	-29.27		99	29-Jul-2007	12:00:00	-24.16		126	25-Aug-2007	12:00:00	-24.02		153
03-Jul-2007	00:00:00			100	30-Jul-2007	00:00:00	-1.72	1	127	26-Aug-2007	00:00:00	-24.27		154
03-Jul-2007	12:00:00			100	30-Jul-2007	12:00:00	28.56	1	127	26-Aug-2007	12:00:00	-24.98		154
04-Jul-2007	00:00:00			101	31-Jul-2007	00:00:00	27.98	2	128	27-Aug-2007	00:00:00	-25.04		155
04-Jul-2007	12:00:00			101	31-Jul-2007	12:00:00	19.19	2	128	27-Aug-2007	12:00:00	-25.69		155
05-Jul-2007	00:00:00			102	01-Aug-2007	00:00:00	5.05	3	129	28-Aug-2007	00:00:00	-26.11		156
05-Jul-2007	12:00:00			102	01-Aug-2007	12:00:00	1.31	3	129	28-Aug-2007	12:00:00	-26.53		156

Haw Gauge 3



■ Precipitation — GW Elevation

HAW 3

Data Acquired : September 11, 2007

Serial Number: N3ECCEC5

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	12:00:00	13.52			22-Feb-2007	12:00:00	9.19			30-Mar-2007	00:00:00	8.93	6	6
02-Jan-2007	12:00:00	24.31			23-Feb-2007	12:00:00	8.8			30-Mar-2007	12:00:00	8.99	6	6
03-Jan-2007	12:00:00	28.11			24-Feb-2007	12:00:00	8.58			31-Mar-2007	00:00:00	8.99	7	7
04-Jan-2007	12:00:00	14.6			25-Feb-2007	12:00:00	8.83			31-Mar-2007	12:00:00	8.97	7	7
05-Jan-2007	12:00:00	12.11			26-Feb-2007	12:00:00	10.46			01-Apr-2007	00:00:00	8.95	8	8
06-Jan-2007	12:00:00	12.24			27-Feb-2007	12:00:00	10.04			01-Apr-2007	12:00:00	8.94	8	8
07-Jan-2007	12:00:00	11.45			28-Feb-2007	12:00:00	9.59			02-Apr-2007	00:00:00	8.87	9	9
08-Jan-2007	12:00:00	22.92			01-Mar-2007	12:00:00	9.28			02-Apr-2007	12:00:00	8.72	9	9
09-Jan-2007	12:00:00	22.84			02-Mar-2007	12:00:00	26.35			03-Apr-2007	00:00:00	8.55	10	10
10-Jan-2007	12:00:00	15.3			03-Mar-2007	12:00:00	23.95			03-Apr-2007	12:00:00	8.37	10	10
11-Jan-2007	12:00:00	12.2			04-Mar-2007	12:00:00	15.82			04-Apr-2007	00:00:00	8.25	11	11
12-Jan-2007	12:00:00	11.24			05-Mar-2007	12:00:00	11.07			04-Apr-2007	12:00:00	8.09	11	11
13-Jan-2007	12:00:00	10.71			06-Mar-2007	12:00:00	10.06			05-Apr-2007	00:00:00	7.92	12	12
14-Jan-2007	12:00:00	10.33			07-Mar-2007	12:00:00	9.68			05-Apr-2007	12:00:00	7.62	12	12
15-Jan-2007	12:00:00	10.04			08-Mar-2007	12:00:00	9.27			06-Apr-2007	00:00:00	7.47	13	13
16-Jan-2007	12:00:00	9.81			09-Mar-2007	12:00:00	8.97			06-Apr-2007	12:00:00	7.36	13	13
17-Jan-2007	12:00:00	9.57			10-Mar-2007	12:00:00	8.74			07-Apr-2007	00:00:00	7.4	14	14
18-Jan-2007	12:00:00	9.45			11-Mar-2007	12:00:00	8.49			07-Apr-2007	12:00:00	7.26	14	14
19-Jan-2007	12:00:00	9.56			12-Mar-2007	12:00:00	8.25			08-Apr-2007	00:00:00	7.14	15	15
20-Jan-2007	12:00:00	9.39			13-Mar-2007	12:00:00	8.1			08-Apr-2007	12:00:00	7.06	15	15
21-Jan-2007	12:00:00	9.34			14-Mar-2007	00:00:00	8			09-Apr-2007	00:00:00	6.92	16	16
22-Jan-2007	12:00:00	10.59			14-Mar-2007	12:00:00	7.97			09-Apr-2007	12:00:00	6.87	16	16
23-Jan-2007	12:00:00	10.8			15-Mar-2007	00:00:00	7.89			10-Apr-2007	00:00:00	6.8	17	17
24-Jan-2007	12:00:00	10.46			15-Mar-2007	12:00:00	7.9			10-Apr-2007	12:00:00	6.68	17	17
25-Jan-2007	12:00:00	10.16			16-Mar-2007	00:00:00	8.28			11-Apr-2007	00:00:00	6.6	18	18
26-Jan-2007	12:00:00	9.78			16-Mar-2007	12:00:00	12.99			11-Apr-2007	12:00:00	7.17	18	18
27-Jan-2007	12:00:00	9.6			17-Mar-2007	00:00:00	26.4			12-Apr-2007	00:00:00	9.2	19	19
28-Jan-2007	12:00:00	9.36			17-Mar-2007	12:00:00	25.5			12-Apr-2007	12:00:00	22.64	19	19
29-Jan-2007	12:00:00	9.03			18-Mar-2007	00:00:00	25.48			13-Apr-2007	00:00:00	18.87	20	20
30-Jan-2007	12:00:00	8.83			18-Mar-2007	12:00:00	27.17			13-Apr-2007	12:00:00	12.91	20	20
31-Jan-2007	12:00:00	8.67			19-Mar-2007	00:00:00	21.53			14-Apr-2007	00:00:00	10.56	21	21
01-Feb-2007	12:00:00	8.54			19-Mar-2007	12:00:00	13.05			14-Apr-2007	12:00:00	9.84	21	21
02-Feb-2007	12:00:00	8.85			20-Mar-2007	00:00:00	11.05			15-Apr-2007	00:00:00	10.27	22	22
03-Feb-2007	12:00:00	8.82			20-Mar-2007	12:00:00	10.38			15-Apr-2007	12:00:00	25.46	22	22
04-Feb-2007	12:00:00	8.72			21-Mar-2007	00:00:00	10.03			16-Apr-2007	00:00:00	29.66	23	23
05-Feb-2007	12:00:00	8.47			21-Mar-2007	12:00:00	9.74			16-Apr-2007	12:00:00	29.18	23	23
06-Feb-2007	12:00:00	8.23			22-Mar-2007	00:00:00	9.56			17-Apr-2007	00:00:00	26.37	24	24
07-Feb-2007	12:00:00	8.28			22-Mar-2007	12:00:00	9.41			17-Apr-2007	12:00:00	25.16	24	24
08-Feb-2007	12:00:00	8.23			23-Mar-2007	00:00:00	9.23			18-Apr-2007	00:00:00	20.26	25	25
09-Feb-2007	12:00:00	8.06			23-Mar-2007	12:00:00	9.13			18-Apr-2007	12:00:00	12.92	25	25
10-Feb-2007	12:00:00	7.94			24-Mar-2007	00:00:00	9			19-Apr-2007	00:00:00	10.86	26	26
11-Feb-2007	12:00:00	7.78			24-Mar-2007	12:00:00	8.92			19-Apr-2007	12:00:00	10.15	26	26
12-Feb-2007	12:00:00	7.7			25-Mar-2007	00:00:00	8.84			20-Apr-2007	00:00:00	9.85	27	27
13-Feb-2007	12:00:00	7.73			25-Mar-2007	12:00:00	8.75			20-Apr-2007	12:00:00	9.58	27	27
14-Feb-2007	12:00:00	27.48			26-Mar-2007	00:00:00	8.64	1	1	21-Apr-2007	00:00:00	9.34	28	28
15-Feb-2007	12:00:00	23.66			26-Mar-2007	12:00:00	8.54	1	1	21-Apr-2007	12:00:00	9.13	28	28
16-Feb-2007	12:00:00	13.48			27-Mar-2007	00:00:00	8.47	2	2	22-Apr-2007	00:00:00	8.95	29	29
17-Feb-2007	12:00:00	11.08			27-Mar-2007	12:00:00	8.35	2	2	22-Apr-2007	12:00:00	8.8	29	29
18-Feb-2007	12:00:00	10.38			28-Mar-2007	00:00:00	8.25	3	3	23-Apr-2007	00:00:00	8.64	30	30
19-Feb-2007	12:00:00	9.78			28-Mar-2007	12:00:00	8.13	3	3	23-Apr-2007	12:00:00	8.51	30	30
20-Feb-2007	12:00:00	9.6			29-Mar-2007	00:00:00	8.5	4	4	24-Apr-2007	00:00:00	8.33	31	31
21-Feb-2007	12:00:00	9.41			29-Mar-2007	12:00:00	8.69	4	4	24-Apr-2007	12:00:00	8.22	31	31

HAW 3

Data Acquired : September 11, 2007

Serial Number: N3ECCEC5

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

25-Apr-2007	00:00:00	8.08	32	32	22-May-2007	00:00:00	3.17	59	59	18-Jun-2007	00:00:00	-4.52	86	86
25-Apr-2007	12:00:00	7.99	32	32	22-May-2007	12:00:00	3.06	59	59	18-Jun-2007	12:00:00	-5.68	86	86
26-Apr-2007	00:00:00	7.78	33	33	23-May-2007	00:00:00	2.87	60	60	19-Jun-2007	00:00:00	-6.65	87	87
26-Apr-2007	12:00:00	7.63	33	33	23-May-2007	12:00:00	2.85	60	60	19-Jun-2007	12:00:00	-7.17	87	87
27-Apr-2007	00:00:00	7.5	34	34	24-May-2007	00:00:00	2.63	61	61	20-Jun-2007	00:00:00	-1.17	88	88
27-Apr-2007	12:00:00	7.86	34	34	24-May-2007	12:00:00	2.37	61	61	20-Jun-2007	12:00:00	-2.21	88	88
28-Apr-2007	00:00:00	7.7	35	35	25-May-2007	00:00:00	2.09	62	62	21-Jun-2007	00:00:00	-4.32	89	89
28-Apr-2007	12:00:00	7.55	35	35	25-May-2007	12:00:00	1.81	62	62	21-Jun-2007	12:00:00	-5.66	89	89
29-Apr-2007	00:00:00	7.39	36	36	26-May-2007	00:00:00	1.56	63	63	22-Jun-2007	00:00:00	-6.96	90	90
29-Apr-2007	12:00:00	7.22	36	36	26-May-2007	12:00:00	1.17	63	63	22-Jun-2007	12:00:00	-8.09	90	90
30-Apr-2007	00:00:00	7.06	37	37	27-May-2007	00:00:00	0.93	64	64	23-Jun-2007	00:00:00	-9.44	91	91
30-Apr-2007	12:00:00	6.91	37	37	27-May-2007	12:00:00	0.39	64	64	23-Jun-2007	12:00:00	-10.25	91	91
01-May-2007	00:00:00	6.75	38	38	28-May-2007	00:00:00	-0.18	65	65	24-Jun-2007	00:00:00	-11.69	92	92
01-May-2007	12:00:00	6.61	38	38	28-May-2007	12:00:00	-0.78	65	65	24-Jun-2007	12:00:00	-12.67		92
02-May-2007	00:00:00	6.43	39	39	29-May-2007	00:00:00	-1.65	66	66	25-Jun-2007	00:00:00	-0.1	1	93
02-May-2007	12:00:00	6.27	39	39	29-May-2007	12:00:00	-2.31	66	66	25-Jun-2007	12:00:00	-0.99	1	93
03-May-2007	00:00:00	6.09	40	40	30-May-2007	00:00:00	-2.96	67	67	26-Jun-2007	00:00:00	-2.1	2	94
03-May-2007	12:00:00	6.04	40	40	30-May-2007	12:00:00	-3.66	67	67	26-Jun-2007	12:00:00	-3.35	2	94
04-May-2007	00:00:00	5.96	41	41	31-May-2007	00:00:00	-4.56	68	68	27-Jun-2007	00:00:00	-4.68	3	95
04-May-2007	12:00:00	6	41	41	31-May-2007	12:00:00	-5.23	68	68	27-Jun-2007	12:00:00	-5.79	3	95
05-May-2007	00:00:00	6.02	42	42	01-Jun-2007	00:00:00	-5.91	69	69	28-Jun-2007	00:00:00	-6.33	4	96
05-May-2007	12:00:00	6.04	42	42	01-Jun-2007	12:00:00	-6.31	69	69	28-Jun-2007	12:00:00	-6.99	4	96
06-May-2007	00:00:00	6.09	43	43	02-Jun-2007	00:00:00	-6.84	70	70	29-Jun-2007	00:00:00	-8.27	5	97
06-May-2007	12:00:00	5.9	43	43	02-Jun-2007	12:00:00	-7.18	70	70	29-Jun-2007	12:00:00	-9.27	5	97
07-May-2007	00:00:00	5.77	44	44	03-Jun-2007	00:00:00	-7.71	71	71	30-Jun-2007	00:00:00	-11.3	6	98
07-May-2007	12:00:00	5.58	44	44	03-Jun-2007	12:00:00	2.55	71	71	30-Jun-2007	12:00:00	-12.38		98
08-May-2007	00:00:00	5.26	45	45	04-Jun-2007	00:00:00	3.68	72	72	01-Jul-2007	00:00:00	-8.77	1	99
08-May-2007	12:00:00	5.29	45	45	04-Jun-2007	12:00:00	3.63	72	72	01-Jul-2007	12:00:00	-7.91	1	99
09-May-2007	00:00:00	5.19	46	46	05-Jun-2007	00:00:00	3.77	73	73	02-Jul-2007	00:00:00	-9.26	2	100
09-May-2007	12:00:00	5.21	46	46	05-Jun-2007	12:00:00	3.6	73	73	02-Jul-2007	12:00:00	-10.28	2	100
10-May-2007	00:00:00	5.11	47	47	06-Jun-2007	00:00:00	3.46	74	74	03-Jul-2007	00:00:00	-13.16		101
10-May-2007	12:00:00	5.06	47	47	06-Jun-2007	12:00:00	3.29	74	74	03-Jul-2007	12:00:00	-14.63		101
11-May-2007	00:00:00	4.92	48	48	07-Jun-2007	00:00:00	3.04	75	75	04-Jul-2007	00:00:00	-16.35		102
11-May-2007	12:00:00	4.85	48	48	07-Jun-2007	12:00:00	2.87	75	75	04-Jul-2007	12:00:00	-17.18		102
12-May-2007	00:00:00	4.72	49	49	08-Jun-2007	00:00:00	2.58	76	76	05-Jul-2007	00:00:00	-18.67		103
12-May-2007	12:00:00	4.66	49	49	08-Jun-2007	12:00:00	2.43	76	76	05-Jul-2007	12:00:00	-19.31		103
13-May-2007	00:00:00	4.73	50	50	09-Jun-2007	00:00:00	2.16	77	77	06-Jul-2007	00:00:00	-19.12		104
13-May-2007	12:00:00	4.6	50	50	09-Jun-2007	12:00:00	1.93	77	77	06-Jul-2007	12:00:00	-15.84		104
14-May-2007	00:00:00	4.34	51	51	10-Jun-2007	00:00:00	1.53	78	78	07-Jul-2007	00:00:00	-14.95		105
14-May-2007	12:00:00	4.22	51	51	10-Jun-2007	12:00:00	1.21	78	78	07-Jul-2007	12:00:00	-15.28		105
15-May-2007	00:00:00	4.05	52	52	11-Jun-2007	00:00:00	0.81	79	79	08-Jul-2007	00:00:00	-17		106
15-May-2007	12:00:00	3.87	52	52	11-Jun-2007	12:00:00	0.52	79	79	08-Jul-2007	12:00:00	-17.89		106
16-May-2007	00:00:00	3.66	53	53	12-Jun-2007	00:00:00	1.08	80	80	09-Jul-2007	00:00:00	-19.84		107
16-May-2007	12:00:00	3.5	53	53	12-Jun-2007	12:00:00	0.87	80	80	09-Jul-2007	12:00:00	-20.58		107
17-May-2007	00:00:00	4.86	54	54	13-Jun-2007	00:00:00	0.38	81	81	10-Jul-2007	00:00:00	-21.9		108
17-May-2007	12:00:00	4.73	54	54	13-Jun-2007	12:00:00	0.13	81	81	10-Jul-2007	12:00:00	-22.26		108
18-May-2007	00:00:00	4.59	55	55	14-Jun-2007	00:00:00	-0.35	82	82	11-Jul-2007	00:00:00			109
18-May-2007	12:00:00	4.66	55	55	14-Jun-2007	12:00:00	-0.48	82	82	11-Jul-2007	12:00:00			109
19-May-2007	00:00:00	4.42	56	56	15-Jun-2007	00:00:00	-0.77	83	83	12-Jul-2007	00:00:00	-7.24	1	110
19-May-2007	12:00:00	4.26	56	56	15-Jun-2007	12:00:00	-0.95	83	83	12-Jul-2007	12:00:00	-8.74	1	110
20-May-2007	00:00:00	4.03	57	57	16-Jun-2007	00:00:00	-1.18	84	84	13-Jul-2007	00:00:00	-10.95	2	111
20-May-2007	12:00:00	3.88	57	57	16-Jun-2007	12:00:00	-1.45	84	84	13-Jul-2007	12:00:00	-11.58	2	111
21-May-2007	00:00:00	3.58	58	58	17-Jun-2007	00:00:00	-1.89	85	85	14-Jul-2007	00:00:00	-13		112
21-May-2007	12:00:00	3.41	58	58	17-Jun-2007	12:00:00	-2.88	85	85	14-Jul-2007	12:00:00	-14.15		112

HAW 3

Data Acquired : September 11, 2007

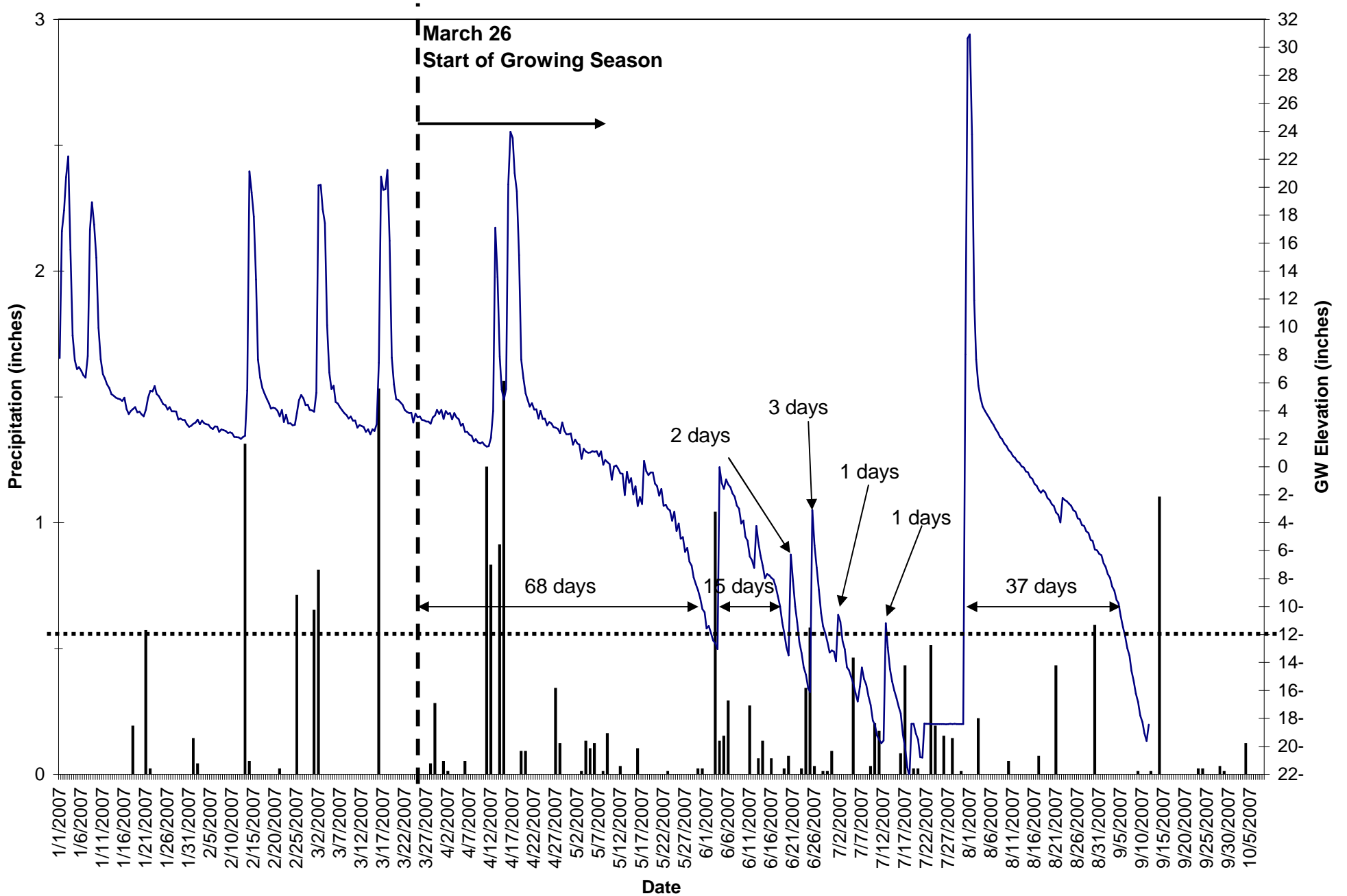
Serial Number: N3ECCEC5

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

15-Jul-2007	00:00:00	-16.84		113	11-Aug-2007	00:00:00	5.3	13	140	07-Sep-2007	00:00:00	-13.26		167
15-Jul-2007	12:00:00	-18.08		113	11-Aug-2007	12:00:00	5.15	14	140	07-Sep-2007	12:00:00	-14.31		167
16-Jul-2007	00:00:00	-20.38		114	12-Aug-2007	00:00:00	4.98	14	141	08-Sep-2007	00:00:00	-15.18		168
16-Jul-2007	12:00:00	-21.15		114	12-Aug-2007	12:00:00	4.83	15	141	08-Sep-2007	12:00:00	-16.12		168
17-Jul-2007	00:00:00			115	13-Aug-2007	00:00:00	4.67	15	142	09-Sep-2007	00:00:00	-16.81		169
17-Jul-2007	12:00:00			115	13-Aug-2007	12:00:00	4.52	16	142	09-Sep-2007	12:00:00	-18.04		169
18-Jul-2007	00:00:00	-11.38	1	116	14-Aug-2007	00:00:00	4.36	16	143	10-Sep-2007	00:00:00	-18.42		170
18-Jul-2007	12:00:00	-14.74		116	14-Aug-2007	12:00:00	4.2	17	143	10-Sep-2007	12:00:00	-19.48		170
19-Jul-2007	00:00:00	-16.42		117	15-Aug-2007	00:00:00	4	17	144	11-Sep-2007	00:00:00	-19.93		171
19-Jul-2007	12:00:00	-17.36		117	15-Aug-2007	12:00:00	3.83	18	144					
20-Jul-2007	00:00:00	-19.76		118	16-Aug-2007	00:00:00	3.62	18	145					
20-Jul-2007	12:00:00	-20.04		118	16-Aug-2007	12:00:00	3.47	19	145					
21-Jul-2007	00:00:00	-21.14		119	17-Aug-2007	00:00:00	3.28	19	146					
21-Jul-2007	12:00:00	-21.62		119	17-Aug-2007	12:00:00	3.52	20	146					
22-Jul-2007	00:00:00			120	18-Aug-2007	00:00:00	3.24	20	147					
22-Jul-2007	12:00:00	-21.43		120	18-Aug-2007	12:00:00	3.01	21	147					
23-Jul-2007	00:00:00	-21.42		121	19-Aug-2007	00:00:00	2.78	21	148					
23-Jul-2007	12:00:00	-21.42		121	19-Aug-2007	12:00:00	2.66	22	148					
24-Jul-2007	00:00:00	-21.42		122	20-Aug-2007	00:00:00	2.4	22	149					
24-Jul-2007	12:00:00	-21.42		122	20-Aug-2007	12:00:00	2.19	23	149					
25-Jul-2007	00:00:00	-21.42		123	21-Aug-2007	00:00:00	1.83	23	150					
25-Jul-2007	12:00:00	-21.41		123	21-Aug-2007	12:00:00	1.57	24	150					
26-Jul-2007	00:00:00	-21.42		124	22-Aug-2007	00:00:00	3.13	24	151					
26-Jul-2007	12:00:00	-21.41		124	22-Aug-2007	12:00:00	3.04	25	151					
27-Jul-2007	00:00:00	-21.41		125	23-Aug-2007	00:00:00	2.82	25	152					
27-Jul-2007	12:00:00	-21.41		125	23-Aug-2007	12:00:00	2.71	26	152					
28-Jul-2007	00:00:00	-21.42		126	24-Aug-2007	00:00:00	2.49	26	153					
28-Jul-2007	12:00:00	-21.42		126	24-Aug-2007	12:00:00	2.34	27	153					
29-Jul-2007	00:00:00	-21.42		127	25-Aug-2007	00:00:00	2.08	27	154					
29-Jul-2007	12:00:00	-21.42		127	25-Aug-2007	12:00:00	1.84	28	154					
30-Jul-2007	00:00:00	-21.42		128	26-Aug-2007	00:00:00	1.52	28	155					
30-Jul-2007	12:00:00	11.71	1	128	26-Aug-2007	12:00:00	1.32	29	155					
31-Jul-2007	00:00:00	35.91	1	129	27-Aug-2007	00:00:00	1.09	29	156					
31-Jul-2007	12:00:00	36.85	2	129	27-Aug-2007	12:00:00	0.88	30	156					
01-Aug-2007	00:00:00	29.45	2	130	28-Aug-2007	00:00:00	0.58	30	157					
01-Aug-2007	12:00:00	16.75	3	130	28-Aug-2007	12:00:00	0.27	31	157					
02-Aug-2007	00:00:00	12.33	3	131	29-Aug-2007	00:00:00	-0.1	31	158					
02-Aug-2007	12:00:00	10.46	4	131	29-Aug-2007	12:00:00	-0.52	32	158					
03-Aug-2007	00:00:00	9.47	4	132	30-Aug-2007	00:00:00	-0.92	32	159					
03-Aug-2007	12:00:00	8.93	6	132	30-Aug-2007	12:00:00	-1.04	33	159					
04-Aug-2007	00:00:00	8.57	6	133	31-Aug-2007	00:00:00	-1.44	33	160					
04-Aug-2007	12:00:00	8.36	7	133	31-Aug-2007	12:00:00	-2.05	34	160					
05-Aug-2007	00:00:00	8.12	7	134	01-Sep-2007	00:00:00	-2.65	34	161					
05-Aug-2007	12:00:00	7.9	8	134	01-Sep-2007	12:00:00	-3.26	35	161					
06-Aug-2007	00:00:00	7.64	8	135	02-Sep-2007	00:00:00	-3.89	35	162					
06-Aug-2007	12:00:00	7.39	9	135	02-Sep-2007	12:00:00	-4.77	36	162					
07-Aug-2007	00:00:00	7.12	9	136	03-Sep-2007	00:00:00	-5.99	36	163					
07-Aug-2007	12:00:00	6.89	10	136	03-Sep-2007	12:00:00	-6.75	37	163					
08-Aug-2007	00:00:00	6.66	10	137	04-Sep-2007	00:00:00	-7.46	37	164					
08-Aug-2007	12:00:00	6.44	11	137	04-Sep-2007	12:00:00	-8.32	38	164					
09-Aug-2007	00:00:00	6.2	11	138	05-Sep-2007	00:00:00	-9.04	38	165					
09-Aug-2007	12:00:00	5.98	12	138	05-Sep-2007	12:00:00	-10.13	39	165					
10-Aug-2007	00:00:00	5.72	12	139	06-Sep-2007	00:00:00	-10.94	39	166					
10-Aug-2007	12:00:00	5.52	13	139	06-Sep-2007	12:00:00	-12.25		166					

Haw Gauge 4



■ Precipitation — GW Elevation

HAW 4

Data Acquired : September 11, 2007

Serial Number: N4241D5C

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	7.77			27-Jan-2007	00:00:00	3.97			22-Feb-2007	00:00:00	3.2		
01-Jan-2007	12:00:00	16.85			27-Jan-2007	12:00:00	3.97			22-Feb-2007	12:00:00	3.72		
02-Jan-2007	00:00:00	18.35			28-Jan-2007	00:00:00	3.95			23-Feb-2007	00:00:00	3.09		
02-Jan-2007	12:00:00	20.72			28-Jan-2007	12:00:00	3.38			23-Feb-2007	12:00:00	3.11		
03-Jan-2007	00:00:00	22.2			29-Jan-2007	00:00:00	3.45			24-Feb-2007	00:00:00	2.97		
03-Jan-2007	12:00:00	15.52			29-Jan-2007	12:00:00	3.36			24-Feb-2007	12:00:00	3		
04-Jan-2007	00:00:00	9.38			30-Jan-2007	00:00:00	3.35			25-Feb-2007	00:00:00	3.81		
04-Jan-2007	12:00:00	7.62			30-Jan-2007	12:00:00	3.04			25-Feb-2007	12:00:00	4.77		
05-Jan-2007	00:00:00	6.98			31-Jan-2007	00:00:00	2.86			26-Feb-2007	00:00:00	5.14		
05-Jan-2007	12:00:00	7.13			31-Jan-2007	12:00:00	2.94			26-Feb-2007	12:00:00	4.9		
06-Jan-2007	00:00:00	6.87			01-Feb-2007	00:00:00	3.07			27-Feb-2007	00:00:00	4.41		
06-Jan-2007	12:00:00	6.55			01-Feb-2007	12:00:00	3.15			27-Feb-2007	12:00:00	4.44		
07-Jan-2007	00:00:00	6.37			02-Feb-2007	00:00:00	3.37			28-Feb-2007	00:00:00	4.07		
07-Jan-2007	12:00:00	7.92			02-Feb-2007	12:00:00	3.04			28-Feb-2007	12:00:00	4.03		
08-Jan-2007	00:00:00	16.96			03-Feb-2007	00:00:00	3.3			01-Mar-2007	00:00:00	3.94		
08-Jan-2007	12:00:00	18.93			03-Feb-2007	12:00:00	3.11			01-Mar-2007	12:00:00	5.29		
09-Jan-2007	00:00:00	17.32			04-Feb-2007	00:00:00	3.04			02-Mar-2007	00:00:00	20.14		
09-Jan-2007	12:00:00	14.96			04-Feb-2007	12:00:00	3.01			02-Mar-2007	12:00:00	20.17		
10-Jan-2007	00:00:00	9.93			05-Feb-2007	00:00:00	2.79			03-Mar-2007	00:00:00	18.43		
10-Jan-2007	12:00:00	7.69			05-Feb-2007	12:00:00	2.7			03-Mar-2007	12:00:00	17.44		
11-Jan-2007	00:00:00	6.63			06-Feb-2007	00:00:00	2.89			04-Mar-2007	00:00:00	10.14		
11-Jan-2007	12:00:00	6.32			06-Feb-2007	12:00:00	2.88			04-Mar-2007	12:00:00	6.75		
12-Jan-2007	00:00:00	5.88			07-Feb-2007	00:00:00	2.49			05-Mar-2007	00:00:00	5.55		
12-Jan-2007	12:00:00	5.64			07-Feb-2007	12:00:00	2.67			05-Mar-2007	12:00:00	5.79		
13-Jan-2007	00:00:00	5.2			08-Feb-2007	00:00:00	2.62			06-Mar-2007	00:00:00	4.63		
13-Jan-2007	12:00:00	5.09			08-Feb-2007	12:00:00	2.56			06-Mar-2007	12:00:00	4.52		
14-Jan-2007	00:00:00	4.94			09-Feb-2007	00:00:00	2.42			07-Mar-2007	00:00:00	4.25		
14-Jan-2007	12:00:00	4.89			09-Feb-2007	12:00:00	2.46			07-Mar-2007	12:00:00	4.03		
15-Jan-2007	00:00:00	4.84			10-Feb-2007	00:00:00	2.4			08-Mar-2007	00:00:00	3.83		
15-Jan-2007	12:00:00	4.71			10-Feb-2007	12:00:00	2.14			08-Mar-2007	12:00:00	3.69		
16-Jan-2007	00:00:00	4.94			11-Feb-2007	00:00:00	2.12			09-Mar-2007	00:00:00	3.46		
16-Jan-2007	12:00:00	4.13			11-Feb-2007	12:00:00	2.1			09-Mar-2007	12:00:00	3.6		
17-Jan-2007	00:00:00	3.77			12-Feb-2007	00:00:00	1.99			10-Mar-2007	00:00:00	3.3		
17-Jan-2007	12:00:00	3.99			12-Feb-2007	12:00:00	2.14			10-Mar-2007	12:00:00	3.31		
18-Jan-2007	00:00:00	4.13			13-Feb-2007	00:00:00	2.22			11-Mar-2007	00:00:00	2.79		
18-Jan-2007	12:00:00	4.27			13-Feb-2007	12:00:00	5.44			11-Mar-2007	12:00:00	2.98		
19-Jan-2007	00:00:00	3.9			14-Feb-2007	00:00:00	21.14			12-Mar-2007	00:00:00	2.92		
19-Jan-2007	12:00:00	3.94			14-Feb-2007	12:00:00	19.64			12-Mar-2007	12:00:00	2.84		
20-Jan-2007	00:00:00	3.74			15-Feb-2007	00:00:00	17.89			13-Mar-2007	00:00:00	2.5		
20-Jan-2007	12:00:00	3.61			15-Feb-2007	12:00:00	13.41			13-Mar-2007	12:00:00	2.69		
21-Jan-2007	00:00:00	4.08			16-Feb-2007	00:00:00	7.66			14-Mar-2007	00:00:00	2.32		
21-Jan-2007	12:00:00	4.95			16-Feb-2007	12:00:00	6.38			14-Mar-2007	12:00:00	2.68		
22-Jan-2007	00:00:00	5.43			17-Feb-2007	00:00:00	5.64			15-Mar-2007	00:00:00	2.56		
22-Jan-2007	12:00:00	5.39			17-Feb-2007	12:00:00	5.23			15-Mar-2007	12:00:00	3.05		
23-Jan-2007	00:00:00	5.78			18-Feb-2007	00:00:00	4.86			16-Mar-2007	00:00:00	7.44		
23-Jan-2007	12:00:00	5.21			18-Feb-2007	12:00:00	4.53			16-Mar-2007	12:00:00	20.75		
24-Jan-2007	00:00:00	5.05			19-Feb-2007	00:00:00	4.16			17-Mar-2007	00:00:00	19.8		
24-Jan-2007	12:00:00	4.78			19-Feb-2007	12:00:00	4.23			17-Mar-2007	12:00:00	19.87		
25-Jan-2007	00:00:00	4.48			20-Feb-2007	00:00:00	4.17			18-Mar-2007	00:00:00	21.24		
25-Jan-2007	12:00:00	4.41			20-Feb-2007	12:00:00	4			18-Mar-2007	12:00:00	16.17		
26-Jan-2007	00:00:00	4.09			21-Feb-2007	00:00:00	3.61			19-Mar-2007	00:00:00	7.8		
26-Jan-2007	12:00:00	4.27			21-Feb-2007	12:00:00	4.07			19-Mar-2007	12:00:00	5.88		

HAW 4

Data Acquired : September 11, 2007

Serial Number: N4241D5C

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	4.84			16-Apr-2007	00:00:00	23.53	22	22	13-May-2007	00:00:00	-1.14	49	49
20-Mar-2007	12:00:00	4.77			16-Apr-2007	12:00:00	21.02	22	22	13-May-2007	12:00:00	-0.81	49	49
21-Mar-2007	00:00:00	4.62			17-Apr-2007	00:00:00	19.71	23	23	14-May-2007	00:00:00	-1.98	50	50
21-Mar-2007	12:00:00	4.44			17-Apr-2007	12:00:00	15.14	23	23	14-May-2007	12:00:00	-1.39	50	50
22-Mar-2007	00:00:00	4.06			18-Apr-2007	00:00:00	7.67	24	24	15-May-2007	00:00:00	-2.8	51	51
22-Mar-2007	12:00:00	3.92			18-Apr-2007	12:00:00	6.34	24	24	15-May-2007	12:00:00	-2.17	51	51
23-Mar-2007	00:00:00	3.84			19-Apr-2007	00:00:00	5.26	25	25	16-May-2007	00:00:00	-2.67	52	52
23-Mar-2007	12:00:00	3.87			19-Apr-2007	12:00:00	4.8	25	25	16-May-2007	12:00:00	0.42	52	52
24-Mar-2007	00:00:00	3.17			20-Apr-2007	00:00:00	4.3	26	26	17-May-2007	00:00:00	-0.31	53	53
24-Mar-2007	12:00:00	3.8			20-Apr-2007	12:00:00	4.56	26	26	17-May-2007	12:00:00	-0.59	53	53
25-Mar-2007	00:00:00	3.53			21-Apr-2007	00:00:00	4.09	27	27	18-May-2007	00:00:00	-0.4	54	54
25-Mar-2007	12:00:00	3.59			21-Apr-2007	12:00:00	4.11	27	27	18-May-2007	12:00:00	-0.4	54	54
26-Mar-2007	00:00:00	3.34	1	1	22-Apr-2007	00:00:00	3.45	28	28	19-May-2007	00:00:00	-1.21	55	55
26-Mar-2007	12:00:00	3.33	1	1	22-Apr-2007	12:00:00	4	28	28	19-May-2007	12:00:00	-1.38	55	55
27-Mar-2007	00:00:00	3.23	2	2	23-Apr-2007	00:00:00	3.42	29	29	20-May-2007	00:00:00	-2.07	56	56
27-Mar-2007	12:00:00	3.23	2	2	23-Apr-2007	12:00:00	3.44	29	29	20-May-2007	12:00:00	-1.59	56	56
28-Mar-2007	00:00:00	3.08	3	3	24-Apr-2007	00:00:00	2.97	30	30	21-May-2007	00:00:00	-2.79	57	57
28-Mar-2007	12:00:00	3.53	3	3	24-Apr-2007	12:00:00	3.21	30	30	21-May-2007	12:00:00	-2.72	57	57
29-Mar-2007	00:00:00	3.67	4	4	25-Apr-2007	00:00:00	3.09	31	31	22-May-2007	00:00:00	-2.99	58	58
29-Mar-2007	12:00:00	4.07	4	4	25-Apr-2007	12:00:00	2.85	31	31	22-May-2007	12:00:00	-3.12	58	58
30-Mar-2007	00:00:00	3.78	5	5	26-Apr-2007	00:00:00	2.8	32	32	23-May-2007	00:00:00	-3.86	59	59
30-Mar-2007	12:00:00	4.07	5	5	26-Apr-2007	12:00:00	2.72	32	32	23-May-2007	12:00:00	-3.21	59	59
31-Mar-2007	00:00:00	3.43	6	6	27-Apr-2007	00:00:00	2.4	33	33	24-May-2007	00:00:00	-4.59	60	60
31-Mar-2007	12:00:00	3.98	6	6	27-Apr-2007	12:00:00	3.17	33	33	24-May-2007	12:00:00	-4.06	60	60
01-Apr-2007	00:00:00	3.77	7	7	28-Apr-2007	00:00:00	2.57	34	34	25-May-2007	00:00:00	-5.15	61	61
01-Apr-2007	12:00:00	3.84	7	7	28-Apr-2007	12:00:00	2.33	34	34	25-May-2007	12:00:00	-5.03	61	61
02-Apr-2007	00:00:00	3.39	8	8	29-Apr-2007	00:00:00	2.32	35	35	26-May-2007	00:00:00	-6.08	62	62
02-Apr-2007	12:00:00	3.85	8	8	29-Apr-2007	12:00:00	2.38	35	35	26-May-2007	12:00:00	-5.8	62	62
03-Apr-2007	00:00:00	3.53	9	9	30-Apr-2007	00:00:00	1.58	36	36	27-May-2007	00:00:00	-6.8	63	63
03-Apr-2007	12:00:00	3.41	9	9	30-Apr-2007	12:00:00	1.94	36	36	27-May-2007	12:00:00	-7.08	63	63
04-Apr-2007	00:00:00	2.93	10	10	01-May-2007	00:00:00	1.66	37	37	28-May-2007	00:00:00	-7.9	64	64
04-Apr-2007	12:00:00	3.08	10	10	01-May-2007	12:00:00	1.59	37	37	28-May-2007	12:00:00	-8.4	64	64
05-Apr-2007	00:00:00	2.5	11	11	02-May-2007	00:00:00	0.57	38	38	29-May-2007	00:00:00	-8.83	65	65
05-Apr-2007	12:00:00	2.49	11	11	02-May-2007	12:00:00	1.29	38	38	29-May-2007	12:00:00	-9.4	65	65
06-Apr-2007	00:00:00	2.3	12	12	03-May-2007	00:00:00	1.08	39	39	30-May-2007	00:00:00	-10.18	66	66
06-Apr-2007	12:00:00	2.21	12	12	03-May-2007	12:00:00	1	39	39	30-May-2007	12:00:00	-10.41	66	66
07-Apr-2007	00:00:00	1.81	13	13	04-May-2007	00:00:00	1.02	40	40	31-May-2007	00:00:00	-11.56	67	67
07-Apr-2007	12:00:00	1.98	13	13	04-May-2007	12:00:00	1.12	40	40	31-May-2007	12:00:00	-11.39	67	67
08-Apr-2007	00:00:00	1.75	14	14	05-May-2007	00:00:00	1.07	41	41	01-Jun-2007	00:00:00	-11.9	68	68
08-Apr-2007	12:00:00	1.66	14	14	05-May-2007	12:00:00	1.12	41	41	01-Jun-2007	12:00:00	-12.42		68
09-Apr-2007	00:00:00	1.76	15	15	06-May-2007	00:00:00	0.76	42	42	02-Jun-2007	00:00:00	-12.63		69
09-Apr-2007	12:00:00	1.56	15	15	06-May-2007	12:00:00	1.1	42	42	02-Jun-2007	12:00:00	-13.04		69
10-Apr-2007	00:00:00	1.45	16	16	07-May-2007	00:00:00	0.14	43	43	03-Jun-2007	00:00:00	-0.03	1	70
10-Apr-2007	12:00:00	1.47	16	16	07-May-2007	12:00:00	0.49	43	43	03-Jun-2007	12:00:00	-1.16	1	70
11-Apr-2007	00:00:00	2.07	17	17	08-May-2007	00:00:00	0.33	44	44	04-Jun-2007	00:00:00	-1.58	2	71
11-Apr-2007	12:00:00	3.98	17	17	08-May-2007	12:00:00	0.19	44	44	04-Jun-2007	12:00:00	-0.91	2	71
12-Apr-2007	00:00:00	17.11	18	18	09-May-2007	00:00:00	-0.93	45	45	05-Jun-2007	00:00:00	-1.27	3	72
12-Apr-2007	12:00:00	13.58	18	18	09-May-2007	12:00:00	0.01	45	45	05-Jun-2007	12:00:00	-1.47	3	72
13-Apr-2007	00:00:00	7.9	19	19	10-May-2007	00:00:00	0.09	46	46	06-Jun-2007	00:00:00	-1.89	4	73
13-Apr-2007	12:00:00	5.53	19	19	10-May-2007	12:00:00	-0.12	46	46	06-Jun-2007	12:00:00	-2.13	4	73
14-Apr-2007	00:00:00	4.81	20	20	11-May-2007	00:00:00	-0.47	47	47	07-Jun-2007	00:00:00	-2.78	5	74
14-Apr-2007	12:00:00	5.56	20	20	11-May-2007	12:00:00	-0.5	47	47	07-Jun-2007	12:00:00	-2.99	5	74
15-Apr-2007	00:00:00	20.2	21	21	12-May-2007	00:00:00	-2.02	48	48	08-Jun-2007	00:00:00	-4.07	6	75
15-Apr-2007	12:00:00	23.96	21	21	12-May-2007	12:00:00	-0.36	48	48	08-Jun-2007	12:00:00	-3.84	6	75

HAW 4

Data Acquired : September 11, 2007

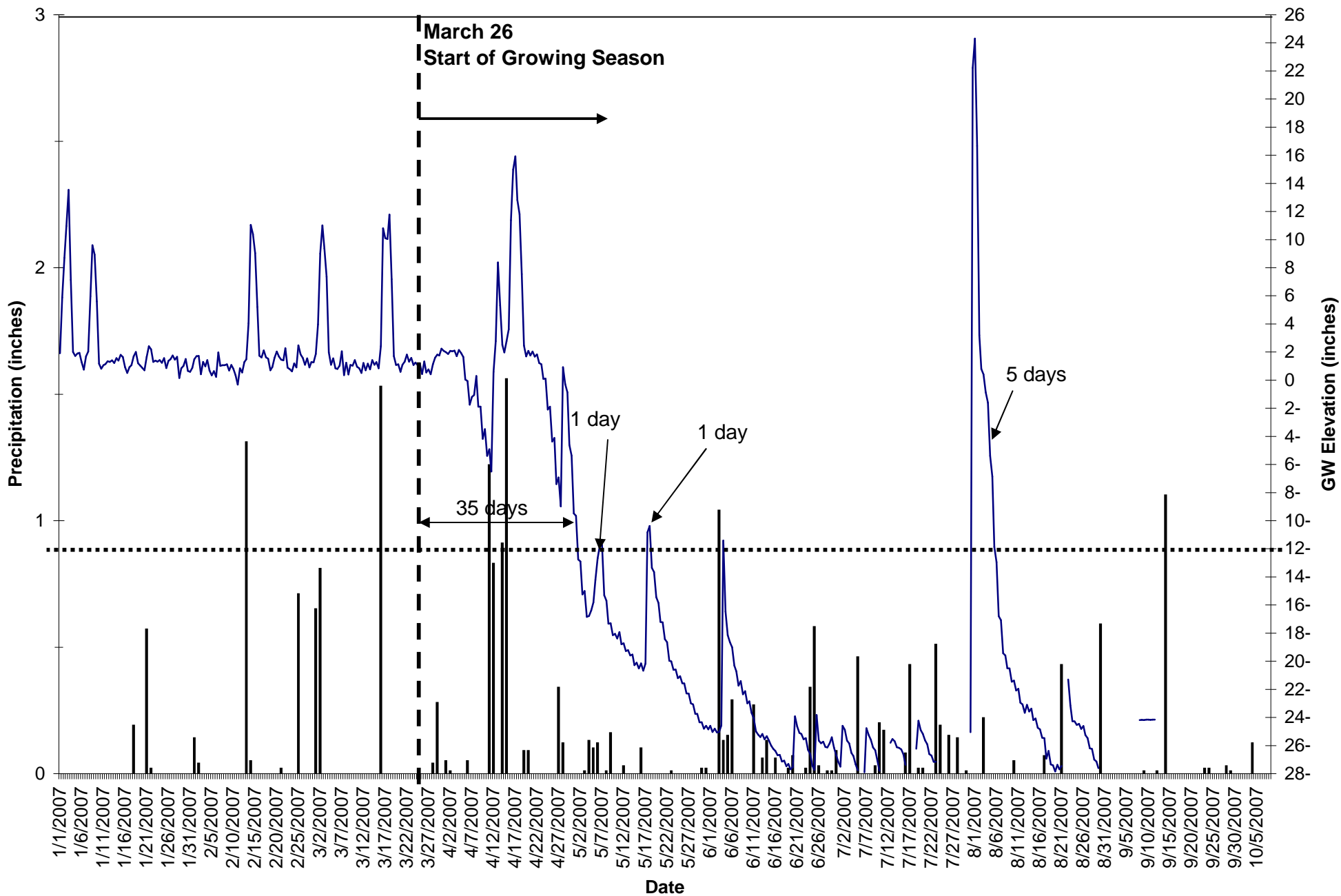
Serial Number: N4241D5C

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-5	7	76	06-Jul-2007	00:00:00	-14.35		103	02-Aug-2007	00:00:00	5.81	4	130
09-Jun-2007	12:00:00	-5.31	7	76	06-Jul-2007	12:00:00	-15.19		103	02-Aug-2007	12:00:00	4.91	4	130
10-Jun-2007	00:00:00	-6.42	8	77	07-Jul-2007	00:00:00	-15.6		104	03-Aug-2007	00:00:00	4.3	5	131
10-Jun-2007	12:00:00	-6.69	8	77	07-Jul-2007	12:00:00	-16.41		104	03-Aug-2007	12:00:00	4.01	5	131
11-Jun-2007	00:00:00	-7.23	9	78	08-Jul-2007	00:00:00	-17.04		105	04-Aug-2007	00:00:00	3.73	6	132
11-Jun-2007	12:00:00	-4.23	9	78	08-Jul-2007	12:00:00	-18.16		105	04-Aug-2007	12:00:00	3.52	6	132
12-Jun-2007	00:00:00	-5.41	10	79	09-Jul-2007	00:00:00	-18.43		106	05-Aug-2007	00:00:00	3.23	7	133
12-Jun-2007	12:00:00	-6.36	10	79	09-Jul-2007	12:00:00	-19.23		106	05-Aug-2007	12:00:00	3	7	133
13-Jun-2007	00:00:00	-7.07	11	80	10-Jul-2007	00:00:00	-19.54		107	06-Aug-2007	00:00:00	2.68	8	134
13-Jun-2007	12:00:00	-7.97	11	80	10-Jul-2007	12:00:00	-19.77		107	06-Aug-2007	12:00:00	2.45	8	134
14-Jun-2007	00:00:00	-7.67	12	81	11-Jul-2007	00:00:00	-19.59		108	07-Aug-2007	00:00:00	2.12	9	135
14-Jun-2007	12:00:00	-7.76	12	81	11-Jul-2007	12:00:00	-11.18	1	108	07-Aug-2007	12:00:00	1.98	9	135
15-Jun-2007	00:00:00	-7.94	13	82	12-Jul-2007	00:00:00	-12.92		109	08-Aug-2007	00:00:00	1.66	10	136
15-Jun-2007	12:00:00	-8.06	13	82	12-Jul-2007	12:00:00	-14.47		109	08-Aug-2007	12:00:00	1.5	10	136
16-Jun-2007	00:00:00	-8.57	14	83	13-Jul-2007	00:00:00	-15.36		110	09-Aug-2007	00:00:00	1.19	11	137
16-Jun-2007	12:00:00	-9.26	14	83	13-Jul-2007	12:00:00	-16.02		110	09-Aug-2007	12:00:00	1.03	11	137
17-Jun-2007	00:00:00	-9.98	15	84	14-Jul-2007	00:00:00	-16.56		111	10-Aug-2007	00:00:00	0.76	12	138
17-Jun-2007	12:00:00	-11.14	15	84	14-Jul-2007	12:00:00	-17.19		111	10-Aug-2007	12:00:00	0.65	12	138
18-Jun-2007	00:00:00	-11.9	16	85	15-Jul-2007	00:00:00	-17.64		112	11-Aug-2007	00:00:00	0.4	13	139
18-Jun-2007	12:00:00	-12.9		85	15-Jul-2007	12:00:00	-19.17		112	11-Aug-2007	12:00:00	0.28	13	139
19-Jun-2007	00:00:00	-13.49		86	16-Jul-2007	00:00:00	-20.09		113	12-Aug-2007	00:00:00	0.04	14	140
19-Jun-2007	12:00:00	-6.28	1	86	16-Jul-2007	12:00:00	-21.5		113	12-Aug-2007	12:00:00	-0.05	14	140
20-Jun-2007	00:00:00	-8.18	1	87	17-Jul-2007	00:00:00	-22.15		114	13-Aug-2007	00:00:00	-0.34	15	141
20-Jun-2007	12:00:00	-10	2	87	17-Jul-2007	12:00:00	-18.39		114	13-Aug-2007	12:00:00	-0.39	15	141
21-Jun-2007	00:00:00	-11.11	2	88	18-Jul-2007	00:00:00	-18.39		115	14-Aug-2007	00:00:00	-0.73	16	142
21-Jun-2007	12:00:00	-12.55		88	18-Jul-2007	12:00:00	-19.08		115	14-Aug-2007	12:00:00	-0.86	16	142
22-Jun-2007	00:00:00	-13.32		89	19-Jul-2007	00:00:00	-19.51		116	15-Aug-2007	00:00:00	-1.22	17	143
22-Jun-2007	12:00:00	-14.35		89	19-Jul-2007	12:00:00	-20.78		116	15-Aug-2007	12:00:00	-1.36	17	143
23-Jun-2007	00:00:00	-14.88		90	20-Jul-2007	00:00:00	-20.81		117	16-Aug-2007	00:00:00	-1.68	18	144
23-Jun-2007	12:00:00	-15.82		90	20-Jul-2007	12:00:00	-18.38		117	16-Aug-2007	12:00:00	-1.85	18	144
24-Jun-2007	00:00:00	-16.11		91	21-Jul-2007	00:00:00	-18.39		118	17-Aug-2007	00:00:00	-1.67	19	145
24-Jun-2007	12:00:00	-3.09	1	91	21-Jul-2007	12:00:00	-18.39		118	17-Aug-2007	12:00:00	-1.83	19	145
25-Jun-2007	00:00:00	-5.61	1	92	22-Jul-2007	00:00:00	-18.4		119	18-Aug-2007	00:00:00	-2.23	20	146
25-Jun-2007	12:00:00	-7.21	2	92	22-Jul-2007	12:00:00	-18.41		119	18-Aug-2007	12:00:00	-2.38	20	146
26-Jun-2007	00:00:00	-8.8	2	93	23-Jul-2007	00:00:00	-18.41		120	19-Aug-2007	00:00:00	-2.68	21	147
26-Jun-2007	12:00:00	-10.46	3	93	23-Jul-2007	12:00:00	-18.41		120	19-Aug-2007	12:00:00	-2.81	21	147
27-Jun-2007	00:00:00	-11.41	3	94	24-Jul-2007	00:00:00	-18.41		121	20-Aug-2007	00:00:00	-3.27	22	148
27-Jun-2007	12:00:00	-11.9	4	94	24-Jul-2007	12:00:00	-18.41		121	20-Aug-2007	12:00:00	-3.44	22	148
28-Jun-2007	00:00:00	-12.53		95	25-Jul-2007	00:00:00	-18.41		122	21-Aug-2007	00:00:00	-3.98	23	149
28-Jun-2007	12:00:00	-13.29		95	25-Jul-2007	12:00:00	-18.42		122	21-Aug-2007	12:00:00	-2.22	23	149
29-Jun-2007	00:00:00	-13.14		96	26-Jul-2007	00:00:00	-18.41		123	22-Aug-2007	00:00:00	-2.38	24	150
29-Jun-2007	12:00:00	-13.23		96	26-Jul-2007	12:00:00	-18.39		123	22-Aug-2007	12:00:00	-2.46	24	150
30-Jun-2007	00:00:00	-13.92		97	27-Jul-2007	00:00:00	-18.41		124	23-Aug-2007	00:00:00	-2.63	25	151
30-Jun-2007	12:00:00	-10.59	1	97	27-Jul-2007	12:00:00	-18.39		124	23-Aug-2007	12:00:00	-2.79	25	151
01-Jul-2007	00:00:00	-11.1	1	98	28-Jul-2007	00:00:00	-18.41		125	24-Aug-2007	00:00:00	-3.11	26	152
01-Jul-2007	12:00:00	-12.47		98	28-Jul-2007	12:00:00	-18.41		125	24-Aug-2007	12:00:00	-3.22	26	152
02-Jul-2007	00:00:00	-13.06		99	29-Jul-2007	00:00:00	-18.4		126	25-Aug-2007	00:00:00	-3.68	27	153
02-Jul-2007	12:00:00	-14.34		99	29-Jul-2007	12:00:00	-18.41		126	25-Aug-2007	12:00:00	-3.75	27	153
03-Jul-2007	00:00:00	-14.54		100	30-Jul-2007	00:00:00	8.03	1	127	26-Aug-2007	00:00:00	-4.15	28	154
03-Jul-2007	12:00:00	-15.01		100	30-Jul-2007	12:00:00	30.65	1	127	26-Aug-2007	12:00:00	-4.24	28	154
04-Jul-2007	00:00:00	-15.52		101	31-Jul-2007	00:00:00	30.94	2	128	27-Aug-2007	00:00:00	-4.61	29	155
04-Jul-2007	12:00:00	-16.2		101	31-Jul-2007	12:00:00	23.77	2	128	27-Aug-2007	12:00:00	-4.74	29	155
05-Jul-2007	00:00:00	-16.79		102	01-Aug-2007	00:00:00	11.9	3	129	28-Aug-2007	00:00:00	-5.22	30	156
05-Jul-2007	12:00:00	-15.73		102	01-Aug-2007	12:00:00	7.68	3	129	28-Aug-2007	12:00:00	-5.31	30	156

Haw Gauge 5



■ Precipitation — GW Elevation

HAW 5

Data Acquired : September 11, 2007

Serial Number: N3ECD4F3

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	1.91			27-Jan-2007	00:00:00	1.76			22-Feb-2007	00:00:00	2.27		
01-Jan-2007	12:00:00	5.88			27-Jan-2007	12:00:00	1.45			22-Feb-2007	12:00:00	0.89		
02-Jan-2007	00:00:00	8.71			28-Jan-2007	00:00:00	1.66			23-Feb-2007	00:00:00	0.78		
02-Jan-2007	12:00:00	10.97			28-Jan-2007	12:00:00	0.16			23-Feb-2007	12:00:00	0.63		
03-Jan-2007	00:00:00	13.54			29-Jan-2007	00:00:00	0.85			24-Feb-2007	00:00:00	1.19		
03-Jan-2007	12:00:00	7.14			29-Jan-2007	12:00:00	1.01			24-Feb-2007	12:00:00	0.9		
04-Jan-2007	00:00:00	2			30-Jan-2007	00:00:00	1.5			25-Feb-2007	00:00:00	2.48		
04-Jan-2007	12:00:00	1.72			30-Jan-2007	12:00:00	0.65			25-Feb-2007	12:00:00	1.83		
05-Jan-2007	00:00:00	1.9			31-Jan-2007	00:00:00	0.6			26-Feb-2007	00:00:00	1.58		
05-Jan-2007	12:00:00	1.94			31-Jan-2007	12:00:00	0.87			26-Feb-2007	12:00:00	1.1		
06-Jan-2007	00:00:00	1.28			01-Feb-2007	00:00:00	1.49			27-Feb-2007	00:00:00	1.55		
06-Jan-2007	12:00:00	0.75			01-Feb-2007	12:00:00	1.71			27-Feb-2007	12:00:00	0.91		
07-Jan-2007	00:00:00	1.69			02-Feb-2007	00:00:00	1.73			28-Feb-2007	00:00:00	1.29		
07-Jan-2007	12:00:00	2.03			02-Feb-2007	12:00:00	0.42			28-Feb-2007	12:00:00	1.26		
08-Jan-2007	00:00:00	5.98			03-Feb-2007	00:00:00	1.3			01-Mar-2007	00:00:00	1.86		
08-Jan-2007	12:00:00	9.6			03-Feb-2007	12:00:00	0.98			01-Mar-2007	12:00:00	3.97		
09-Jan-2007	00:00:00	8.92			04-Feb-2007	00:00:00	1.43			02-Mar-2007	00:00:00	9		
09-Jan-2007	12:00:00	5.6			04-Feb-2007	12:00:00	0.69			02-Mar-2007	12:00:00	11.02		
10-Jan-2007	00:00:00	1.17			05-Feb-2007	00:00:00	0.34			03-Mar-2007	00:00:00	9.37		
10-Jan-2007	12:00:00	0.81			05-Feb-2007	12:00:00	0.64			03-Mar-2007	12:00:00	7.35		
11-Jan-2007	00:00:00	1.06			06-Feb-2007	00:00:00	0.23			04-Mar-2007	00:00:00	1.98		
11-Jan-2007	12:00:00	1.14			06-Feb-2007	12:00:00	1.98			04-Mar-2007	12:00:00	1.1		
12-Jan-2007	00:00:00	1.35			07-Feb-2007	00:00:00	1.01			05-Mar-2007	00:00:00	1.55		
12-Jan-2007	12:00:00	1.3			07-Feb-2007	12:00:00	1.06			05-Mar-2007	12:00:00	0.85		
13-Jan-2007	00:00:00	1.41			08-Feb-2007	00:00:00	1.07			06-Mar-2007	00:00:00	0.8		
13-Jan-2007	12:00:00	1.22			08-Feb-2007	12:00:00	1.12			06-Mar-2007	12:00:00	1.04		
14-Jan-2007	00:00:00	1.56			09-Feb-2007	00:00:00	0.68			07-Mar-2007	00:00:00	2.06		
14-Jan-2007	12:00:00	1.4			09-Feb-2007	12:00:00	1.08			07-Mar-2007	12:00:00	0.36		
15-Jan-2007	00:00:00	1.8			10-Feb-2007	00:00:00	0.82			08-Mar-2007	00:00:00	1.23		
15-Jan-2007	12:00:00	1.64			10-Feb-2007	12:00:00	0.36			08-Mar-2007	12:00:00	0.41		
16-Jan-2007	00:00:00	0.92			11-Feb-2007	00:00:00	-0.31			09-Mar-2007	00:00:00	1.08		
16-Jan-2007	12:00:00	0.51			11-Feb-2007	12:00:00	0.84			09-Mar-2007	12:00:00	1.04		
17-Jan-2007	00:00:00	0.93			12-Feb-2007	00:00:00	0.54			10-Mar-2007	00:00:00	1.42		
17-Jan-2007	12:00:00	1.06			12-Feb-2007	12:00:00	1.28			10-Mar-2007	12:00:00	0.95		
18-Jan-2007	00:00:00	1.69			13-Feb-2007	00:00:00	1.48			11-Mar-2007	00:00:00	0.85		
18-Jan-2007	12:00:00	2.01			13-Feb-2007	12:00:00	4.04			11-Mar-2007	12:00:00	0.52		
19-Jan-2007	00:00:00	1.21			14-Feb-2007	00:00:00	11.04			12-Mar-2007	00:00:00	1.22		
19-Jan-2007	12:00:00	1.04			14-Feb-2007	12:00:00	10.39			12-Mar-2007	12:00:00	0.71		
20-Jan-2007	00:00:00	0.86			15-Feb-2007	00:00:00	9.03			13-Mar-2007	00:00:00	1.17		
20-Jan-2007	12:00:00	0.71			15-Feb-2007	12:00:00	5.21			13-Mar-2007	12:00:00	0.77		
21-Jan-2007	00:00:00	1.64			16-Feb-2007	00:00:00	1.74			14-Mar-2007	00:00:00	1.42		
21-Jan-2007	12:00:00	2.42			16-Feb-2007	12:00:00	1.62			14-Mar-2007	12:00:00	1.09		
22-Jan-2007	00:00:00	2.2			17-Feb-2007	00:00:00	2.12			15-Mar-2007	00:00:00	1.29		
22-Jan-2007	12:00:00	1.3			17-Feb-2007	12:00:00	1.63			15-Mar-2007	12:00:00	0.85		
23-Jan-2007	00:00:00	1.39			18-Feb-2007	00:00:00	1.52			16-Mar-2007	00:00:00	2.42		
23-Jan-2007	12:00:00	1.31			18-Feb-2007	12:00:00	0.7			16-Mar-2007	12:00:00	10.81		
24-Jan-2007	00:00:00	1.43			19-Feb-2007	00:00:00	0.94			17-Mar-2007	00:00:00	10.11		
24-Jan-2007	12:00:00	1.23			19-Feb-2007	12:00:00	1.6			17-Mar-2007	12:00:00	10.04		
25-Jan-2007	00:00:00	1.57			20-Feb-2007	00:00:00	2.03			18-Mar-2007	00:00:00	11.78		
25-Jan-2007	12:00:00	0.86			20-Feb-2007	12:00:00	1.68			18-Mar-2007	12:00:00	7.19		
26-Jan-2007	00:00:00	1.38			21-Feb-2007	00:00:00	1.46			19-Mar-2007	00:00:00	1.71		
26-Jan-2007	12:00:00	1.48			21-Feb-2007	12:00:00	1.41			19-Mar-2007	12:00:00	1.08		

HAW 5

Data Acquired : September 11, 2007

Serial Number: N3ECD4F3

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	1.12			16-Apr-2007	00:00:00	15.92	22	22	13-May-2007	00:00:00	-19.52		49
20-Mar-2007	12:00:00	0.6			16-Apr-2007	12:00:00	12.82	22	22	13-May-2007	12:00:00	-20.28		49
21-Mar-2007	00:00:00	1.09			17-Apr-2007	00:00:00	11.81	23	23	14-May-2007	00:00:00	-20.1		50
21-Mar-2007	12:00:00	1.32			17-Apr-2007	12:00:00	7.55	23	23	14-May-2007	12:00:00	-20.52		50
22-Mar-2007	00:00:00	1.82			18-Apr-2007	00:00:00	2.46	24	24	15-May-2007	00:00:00	-20.15		51
22-Mar-2007	12:00:00	1.31			18-Apr-2007	12:00:00	1.69	24	24	15-May-2007	12:00:00	-20.67		51
23-Mar-2007	00:00:00	1.58			19-Apr-2007	00:00:00	2.08	25	25	16-May-2007	00:00:00	-20.17		52
23-Mar-2007	12:00:00	1.08			19-Apr-2007	12:00:00	1.76	25	25	16-May-2007	12:00:00	-10.83	1	52
24-Mar-2007	00:00:00	1.25			20-Apr-2007	00:00:00	2.04	26	26	17-May-2007	00:00:00	-10.37	1	53
24-Mar-2007	12:00:00	1.07			20-Apr-2007	12:00:00	1.67	26	26	17-May-2007	12:00:00	-13.36		53
25-Mar-2007	00:00:00	1.18			21-Apr-2007	00:00:00	1.83	27	27	18-May-2007	00:00:00	-13.66		54
25-Mar-2007	12:00:00	0.44			21-Apr-2007	12:00:00	1.22	27	27	18-May-2007	12:00:00	-15.45		54
26-Mar-2007	00:00:00	1.33	1	1	22-Apr-2007	00:00:00	1.13	28	28	19-May-2007	00:00:00	-15.86		55
26-Mar-2007	12:00:00	0.55	1	1	22-Apr-2007	12:00:00	0.09	28	28	19-May-2007	12:00:00	-17.2		55
27-Mar-2007	00:00:00	0.76	2	2	23-Apr-2007	00:00:00	0.1	29	29	20-May-2007	00:00:00	-17.23		56
27-Mar-2007	12:00:00	0.42	2	2	23-Apr-2007	12:00:00	-2.09	29	29	20-May-2007	12:00:00	-18.43		56
28-Mar-2007	00:00:00	1.12	3	3	24-Apr-2007	00:00:00	-1.89	30	30	21-May-2007	00:00:00	-18.64		57
28-Mar-2007	12:00:00	1.6	3	3	24-Apr-2007	12:00:00	-4.36	30	30	21-May-2007	12:00:00	-19.96		57
29-Mar-2007	00:00:00	1.81	4	4	25-Apr-2007	00:00:00	-4.12	31	31	22-May-2007	00:00:00	-20.02		58
29-Mar-2007	12:00:00	1.76	4	4	25-Apr-2007	12:00:00	-7.4	31	31	22-May-2007	12:00:00	-20.61		58
30-Mar-2007	00:00:00	2.24	5	5	26-Apr-2007	00:00:00	-6.92	32	32	23-May-2007	00:00:00	-20.6		59
30-Mar-2007	12:00:00	2.09	5	5	26-Apr-2007	12:00:00	-8.98	32	32	23-May-2007	12:00:00	-21.21		59
31-Mar-2007	00:00:00	1.99	6	6	27-Apr-2007	00:00:00	0.93	33	33	24-May-2007	00:00:00	-21.07		60
31-Mar-2007	12:00:00	1.87	6	6	27-Apr-2007	12:00:00	-0.28	33	33	24-May-2007	12:00:00	-21.57		60
01-Apr-2007	00:00:00	2.08	7	7	28-Apr-2007	00:00:00	-0.86	34	34	25-May-2007	00:00:00	-21.58		61
01-Apr-2007	12:00:00	2.05	7	7	28-Apr-2007	12:00:00	-4.61	34	34	25-May-2007	12:00:00	-22.29		61
02-Apr-2007	00:00:00	2.1	8	8	29-Apr-2007	00:00:00	-5.37	35	35	26-May-2007	00:00:00	-22.3		62
02-Apr-2007	12:00:00	1.71	8	8	29-Apr-2007	12:00:00	-9.48	35	35	26-May-2007	12:00:00	-22.99		62
03-Apr-2007	00:00:00	2.14	9	9	30-Apr-2007	00:00:00	-9.65	36	36	27-May-2007	00:00:00	-23.07		63
03-Apr-2007	12:00:00	1.92	9	9	30-Apr-2007	12:00:00	-12.76	36	36	27-May-2007	12:00:00	-23.75		63
04-Apr-2007	00:00:00	1.65	10	10	01-May-2007	00:00:00	-12.91	37	37	28-May-2007	00:00:00	-23.75		64
04-Apr-2007	12:00:00	0.05	10	10	01-May-2007	12:00:00	-15.24	37	37	28-May-2007	12:00:00	-24.34		64
05-Apr-2007	00:00:00	-0.07	11	11	02-May-2007	00:00:00	-15.01	38	38	29-May-2007	00:00:00	-24.35		65
05-Apr-2007	12:00:00	-1.74	11	11	02-May-2007	12:00:00	-16.85	38	38	29-May-2007	12:00:00	-24.8		65
06-Apr-2007	00:00:00	-1.19	12	12	03-May-2007	00:00:00	-16.78	39	39	30-May-2007	00:00:00	-24.6		66
06-Apr-2007	12:00:00	-1.05	12	12	03-May-2007	12:00:00	-16.39	39	39	30-May-2007	12:00:00	-24.85		66
07-Apr-2007	00:00:00	0.3	13	13	04-May-2007	00:00:00	-15.81	40	40	31-May-2007	00:00:00	-24.6		67
07-Apr-2007	12:00:00	-1.89	13	13	04-May-2007	12:00:00	-14.21	40	40	31-May-2007	12:00:00	-25.03		67
08-Apr-2007	00:00:00	-1.89	14	14	05-May-2007	00:00:00	-12.69	41	41	01-Jun-2007	00:00:00	-24.8		68
08-Apr-2007	12:00:00	-4.18	14	14	05-May-2007	12:00:00	-11.78	41	41	01-Jun-2007	12:00:00	-25.06		68
09-Apr-2007	00:00:00	-3.49	15	15	06-May-2007	00:00:00	-11.73	42	42	02-Jun-2007	00:00:00	-25.04		69
09-Apr-2007	12:00:00	-5.38	15	15	06-May-2007	12:00:00	-15.31	42	42	02-Jun-2007	12:00:00	-24.58		69
10-Apr-2007	00:00:00	-4.91	16	16	07-May-2007	00:00:00	-15.69	43	43	03-Jun-2007	00:00:00	-11.41	1	70
10-Apr-2007	12:00:00	-6.5	16	16	07-May-2007	12:00:00	-17.33	43	43	03-Jun-2007	12:00:00	-16.47		70
11-Apr-2007	00:00:00	0.59	17	17	08-May-2007	00:00:00	-17.29	44	44	04-Jun-2007	00:00:00	-18.15		71
11-Apr-2007	12:00:00	2.78	17	17	08-May-2007	12:00:00	-18.15	44	44	04-Jun-2007	12:00:00	-18.64		71
12-Apr-2007	00:00:00	8.37	18	18	09-May-2007	00:00:00	-18.05	45	45	05-Jun-2007	00:00:00	-19		72
12-Apr-2007	12:00:00	5.32	18	18	09-May-2007	12:00:00	-18.38	45	45	05-Jun-2007	12:00:00	-20.31		72
13-Apr-2007	00:00:00	2.5	19	19	10-May-2007	00:00:00	-17.93	46	46	06-Jun-2007	00:00:00	-20.72		73
13-Apr-2007	12:00:00	1.97	19	19	10-May-2007	12:00:00	-18.79	46	46	06-Jun-2007	12:00:00	-21.74		73
14-Apr-2007	00:00:00	2.77	20	20	11-May-2007	00:00:00	-18.73	47	47	07-Jun-2007	00:00:00	-21.41		74
14-Apr-2007	12:00:00	3.62	20	20	11-May-2007	12:00:00	-19.27	47	47	07-Jun-2007	12:00:00	-22.35		74
15-Apr-2007	00:00:00	11.37	21	21	12-May-2007	00:00:00	-19.21	48	48	08-Jun-2007	00:00:00	-22.13		75
15-Apr-2007	12:00:00	14.98	21	21	12-May-2007	12:00:00	-19.59	48	48	08-Jun-2007	12:00:00	-23		75

HAW 5

Data Acquired : September 11, 2007

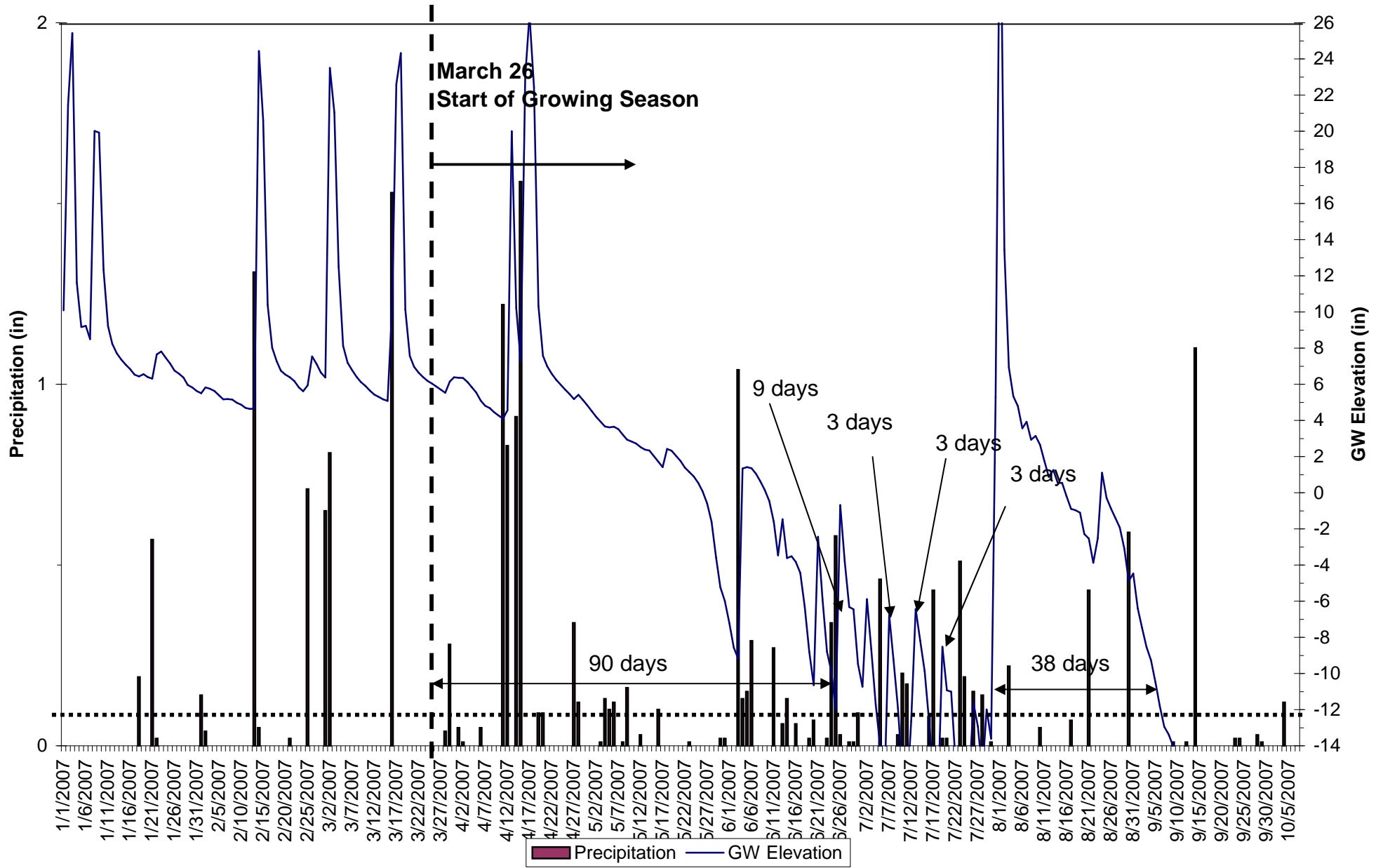
Serial Number: N3ECD4F3

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-22.86		76	06-Jul-2007	00:00:00	-24.76		103	02-Aug-2007	00:00:00	0.4	3	130
09-Jun-2007	12:00:00	-23.67		76	06-Jul-2007	12:00:00	-25.24		103	02-Aug-2007	12:00:00	-0.87	4	130
10-Jun-2007	00:00:00	-24.06		77	07-Jul-2007	00:00:00	-25.59		104	03-Aug-2007	00:00:00	-1.6	4	131
10-Jun-2007	12:00:00	-24.98		77	07-Jul-2007	12:00:00	-26.14		104	03-Aug-2007	12:00:00	-5.39	5	131
11-Jun-2007	00:00:00	-25.22		78	08-Jul-2007	00:00:00	-26.34		105	04-Aug-2007	00:00:00	-6.86	5	132
11-Jun-2007	12:00:00	-25.39		78	08-Jul-2007	12:00:00	-27.09		105	04-Aug-2007	12:00:00	-11.87	6	132
12-Jun-2007	00:00:00	-25.18		79	09-Jul-2007	00:00:00	-27.8		106	05-Aug-2007	00:00:00	-12.95		133
12-Jun-2007	12:00:00	-25.55		79	09-Jul-2007	12:00:00			106	05-Aug-2007	12:00:00	-16.79		133
13-Jun-2007	00:00:00	-25.34		80	10-Jul-2007	00:00:00			107	06-Aug-2007	00:00:00	-17.08		134
13-Jun-2007	12:00:00	-25.65		80	10-Jul-2007	12:00:00			107	06-Aug-2007	12:00:00	-19.43		134
14-Jun-2007	00:00:00	-26		81	11-Jul-2007	00:00:00			108	07-Aug-2007	00:00:00	-19.59		135
14-Jun-2007	12:00:00	-26.25		81	11-Jul-2007	12:00:00	-25.8		108	07-Aug-2007	12:00:00	-20.5		135
15-Jun-2007	00:00:00	-26.38		82	12-Jul-2007	00:00:00	-25.53		109	08-Aug-2007	00:00:00	-20.52		136
15-Jun-2007	12:00:00	-26.68		82	12-Jul-2007	12:00:00	-25.69		109	08-Aug-2007	12:00:00	-21.46		136
16-Jun-2007	00:00:00	-26.67		83	13-Jul-2007	00:00:00	-26.12		110	09-Aug-2007	00:00:00	-21.38		137
16-Jun-2007	12:00:00	-27.13		83	13-Jul-2007	12:00:00	-26.16		110	09-Aug-2007	12:00:00	-22.08		137
17-Jun-2007	00:00:00	-27.07		84	14-Jul-2007	00:00:00	-26.27		111	10-Aug-2007	00:00:00	-21.96		138
17-Jun-2007	12:00:00	-27.46		84	14-Jul-2007	12:00:00	-26.63		111	10-Aug-2007	12:00:00	-22.95		138
18-Jun-2007	00:00:00	-27.31		85	15-Jul-2007	00:00:00	-27.38		112	11-Aug-2007	00:00:00	-23.07		139
18-Jun-2007	12:00:00	-27.68		85	15-Jul-2007	12:00:00			112	11-Aug-2007	12:00:00	-23.67		139
19-Jun-2007	00:00:00	-27.53		86	16-Jul-2007	00:00:00			113	12-Aug-2007	00:00:00	-23.11		140
19-Jun-2007	12:00:00	-23.92		86	16-Jul-2007	12:00:00			113	12-Aug-2007	12:00:00	-23.58		140
20-Jun-2007	00:00:00	-24.64		87	17-Jul-2007	00:00:00			114	13-Aug-2007	00:00:00	-23.37		141
20-Jun-2007	12:00:00	-25.1		87	17-Jul-2007	12:00:00	-26.23		114	13-Aug-2007	12:00:00	-24.18		141
21-Jun-2007	00:00:00	-25.18		88	18-Jul-2007	00:00:00	-24.24		115	14-Aug-2007	00:00:00	-24.08		142
21-Jun-2007	12:00:00	-25.55		88	18-Jul-2007	12:00:00	-24.89		115	14-Aug-2007	12:00:00	-24.74		142
22-Jun-2007	00:00:00	-25.47		89	19-Jul-2007	00:00:00	-25.17		116	15-Aug-2007	00:00:00	-24.84		143
22-Jun-2007	12:00:00	-26.3		89	19-Jul-2007	12:00:00	-25.63		116	15-Aug-2007	12:00:00	-25.44		143
23-Jun-2007	00:00:00	-26.59		90	20-Jul-2007	00:00:00	-25.92		117	16-Aug-2007	00:00:00	-25.47		144
23-Jun-2007	12:00:00	-27.43		90	20-Jul-2007	12:00:00	-26.6		117	16-Aug-2007	12:00:00	-26.93		144
24-Jun-2007	00:00:00	-27.73		91	21-Jul-2007	00:00:00	-26.72		118	17-Aug-2007	00:00:00	-26.38		145
24-Jun-2007	12:00:00	-23.83		91	21-Jul-2007	12:00:00	-27.16		118	17-Aug-2007	12:00:00	-27.34		145
25-Jun-2007	00:00:00	-25.64		92	22-Jul-2007	00:00:00	-27.15		119	18-Aug-2007	00:00:00	-27.41		146
25-Jun-2007	12:00:00	-25.84		92	22-Jul-2007	12:00:00			119	18-Aug-2007	12:00:00	-27.85		146
26-Jun-2007	00:00:00	-25.72		93	23-Jul-2007	00:00:00			120	19-Aug-2007	00:00:00	-27.37		147
26-Jun-2007	12:00:00	-26.1		93	23-Jul-2007	12:00:00			120	19-Aug-2007	12:00:00	-27.68		147
27-Jun-2007	00:00:00	-26.13		94	24-Jul-2007	00:00:00			121	20-Aug-2007	00:00:00	-27.45		148
27-Jun-2007	12:00:00	-25.85		94	24-Jul-2007	12:00:00			121	20-Aug-2007	12:00:00			148
28-Jun-2007	00:00:00	-25.41		95	25-Jul-2007	00:00:00			122	21-Aug-2007	00:00:00			149
28-Jun-2007	12:00:00	-26.15		95	25-Jul-2007	12:00:00			122	21-Aug-2007	12:00:00	-21.3		149
29-Jun-2007	00:00:00	-26.7		96	26-Jul-2007	00:00:00			123	22-Aug-2007	00:00:00	-23.15		150
29-Jun-2007	12:00:00	-27.18		96	26-Jul-2007	12:00:00			123	22-Aug-2007	12:00:00	-24.26		150
30-Jun-2007	00:00:00	-27.5		97	27-Jul-2007	00:00:00			124	23-Aug-2007	00:00:00	-24.28		151
30-Jun-2007	12:00:00	-24.6		97	27-Jul-2007	12:00:00			124	23-Aug-2007	12:00:00	-24.53		151
01-Jul-2007	00:00:00	-24.87		98	28-Jul-2007	00:00:00			125	24-Aug-2007	00:00:00	-24.45		152
01-Jul-2007	12:00:00	-25.64		98	28-Jul-2007	12:00:00			125	24-Aug-2007	12:00:00	-24.82		152
02-Jul-2007	00:00:00	-25.85		99	29-Jul-2007	00:00:00			126	25-Aug-2007	00:00:00	-24.61		153
02-Jul-2007	12:00:00	-26.53		99	29-Jul-2007	12:00:00			126	25-Aug-2007	12:00:00	-25.25		153
03-Jul-2007	00:00:00	-26.75		100	30-Jul-2007	00:00:00	-25.05		127	26-Aug-2007	00:00:00	-25.47		154
03-Jul-2007	12:00:00	-27.34		100	30-Jul-2007	12:00:00	22.22	1	127	26-Aug-2007	12:00:00	-26.19		154
04-Jul-2007	00:00:00	-27.76		101	31-Jul-2007	00:00:00	24.3	1	128	27-Aug-2007	00:00:00	-26.25		155
04-Jul-2007	12:00:00			101	31-Jul-2007	12:00:00	16.67	2	128	27-Aug-2007	12:00:00	-27		155
05-Jul-2007	00:00:00			102	01-Aug-2007	00:00:00	3.2	2	129	28-Aug-2007	00:00:00	-27.13		156
05-Jul-2007	12:00:00	-27.9		102	01-Aug-2007	12:00:00	0.8	3	129	28-Aug-2007	12:00:00	-27.6		156

Haw Gauge 6



HAW 6

Data Acquired : September 11, 2007

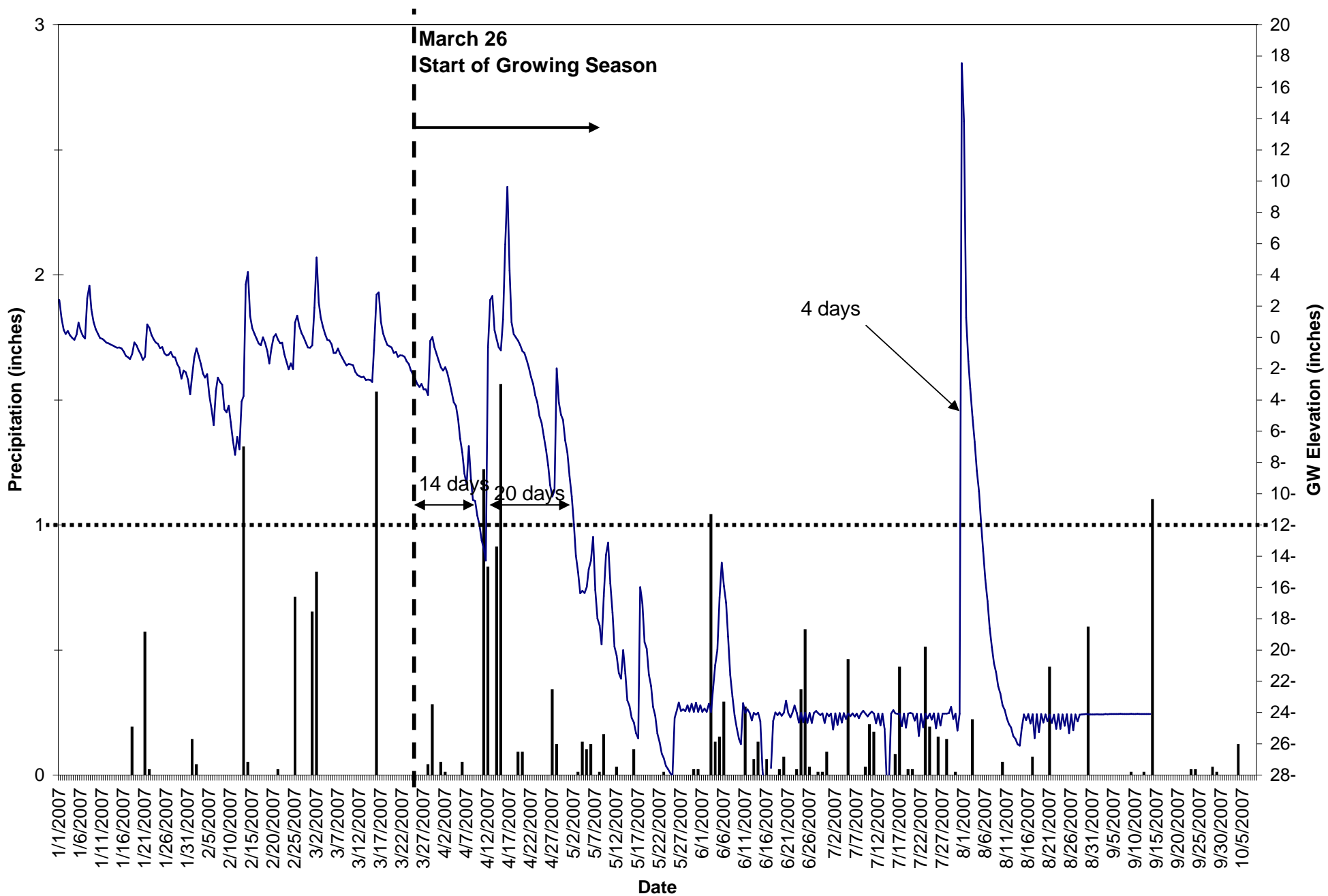
Serial Number: N4241601

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
1/1/2007	12:00:00	10.09			2/22/2007	12:00:00	6.17			4/15/2007	12:00:00	22.99	21	21
1/2/2007	12:00:00	21.45			2/23/2007	12:00:00	5.83			4/16/2007	12:00:00	26.45	22	22
1/3/2007	12:00:00	25.43			2/24/2007	12:00:00	5.62			4/17/2007	12:00:00	22.46	23	23
1/4/2007	12:00:00	11.62			2/25/2007	12:00:00	5.94			4/18/2007	12:00:00	10.32	24	24
1/5/2007	12:00:00	9.17			2/26/2007	12:00:00	7.54			4/19/2007	12:00:00	7.58	25	25
1/6/2007	12:00:00	9.23			2/27/2007	12:00:00	7.12			4/20/2007	12:00:00	6.99	26	26
1/7/2007	12:00:00	8.5			2/28/2007	12:00:00	6.65			4/21/2007	12:00:00	6.59	27	27
1/8/2007	12:00:00	20.01			3/1/2007	12:00:00	6.37			4/22/2007	12:00:00	6.25	28	28
1/9/2007	12:00:00	19.93			3/2/2007	12:00:00	23.5			4/23/2007	12:00:00	5.97	29	29
1/10/2007	12:00:00	12.33			3/3/2007	12:00:00	21.03			4/24/2007	12:00:00	5.7	30	30
1/11/2007	12:00:00	9.22			3/4/2007	12:00:00	12.51			4/25/2007	12:00:00	5.47	31	31
1/12/2007	12:00:00	8.24			3/5/2007	12:00:00	8.13			4/26/2007	12:00:00	5.18	32	32
1/13/2007	12:00:00	7.71			3/6/2007	12:00:00	7.19			4/27/2007	12:00:00	5.41	33	33
1/14/2007	12:00:00	7.37			3/7/2007	12:00:00	6.78			4/28/2007	12:00:00	5.13	34	34
1/15/2007	12:00:00	7.08			3/8/2007	12:00:00	6.41			4/29/2007	12:00:00	4.84	35	35
1/16/2007	12:00:00	6.84			3/9/2007	12:00:00	6.12			4/30/2007	12:00:00	4.52	36	36
1/17/2007	12:00:00	6.54			3/10/2007	12:00:00	5.91			5/1/2007	12:00:00	4.2	37	37
1/18/2007	12:00:00	6.44			3/11/2007	12:00:00	5.65			5/2/2007	12:00:00	3.92	38	38
1/19/2007	12:00:00	6.56			3/12/2007	12:00:00	5.43			5/3/2007	12:00:00	3.67	39	39
1/20/2007	12:00:00	6.4			3/13/2007	12:00:00	5.3			5/4/2007	12:00:00	3.61	40	40
1/21/2007	12:00:00	6.31			3/14/2007	12:00:00	5.17			5/5/2007	12:00:00	3.65	41	41
1/22/2007	12:00:00	7.65			3/15/2007	12:00:00	5.08			5/6/2007	12:00:00	3.51	42	42
1/23/2007	12:00:00	7.81			3/16/2007	12:00:00	10.2			5/7/2007	12:00:00	3.21	43	43
1/24/2007	12:00:00	7.46			3/17/2007	12:00:00	22.6			5/8/2007	12:00:00	2.93	44	44
1/25/2007	12:00:00	7.16			3/18/2007	12:00:00	24.32			5/9/2007	12:00:00	2.83	45	45
1/26/2007	12:00:00	6.76			3/19/2007	12:00:00	10.14			5/10/2007	12:00:00	2.72	46	46
1/27/2007	12:00:00	6.59			3/20/2007	12:00:00	7.57			5/11/2007	12:00:00	2.52	47	47
1/28/2007	12:00:00	6.37			3/21/2007	12:00:00	6.97			5/12/2007	12:00:00	2.38	48	48
1/29/2007	12:00:00	5.96			3/22/2007	12:00:00	6.64			5/13/2007	12:00:00	2.34	49	49
1/30/2007	12:00:00	5.82			3/23/2007	12:00:00	6.4			5/14/2007	12:00:00	2.02	50	50
1/31/2007	12:00:00	5.63			3/24/2007	12:00:00	6.19			5/15/2007	12:00:00	1.72	51	51
2/1/2007	12:00:00	5.5			3/25/2007	12:00:00	6.04			5/16/2007	12:00:00	1.42	52	52
2/2/2007	12:00:00	5.83			3/26/2007	12:00:00	5.87	1	1	5/17/2007	12:00:00	2.42	53	53
2/3/2007	12:00:00	5.75			3/27/2007	12:00:00	5.7	2	2	5/18/2007	12:00:00	2.32	54	54
2/4/2007	12:00:00	5.63			3/28/2007	12:00:00	5.53	3	3	5/19/2007	12:00:00	2.04	55	55
2/5/2007	12:00:00	5.39			3/29/2007	12:00:00	6.15	4	4	5/20/2007	12:00:00	1.75	56	56
2/6/2007	12:00:00	5.17			3/30/2007	12:00:00	6.39	5	5	5/21/2007	12:00:00	1.39	57	57
2/7/2007	12:00:00	5.18			3/31/2007	12:00:00	6.36	6	6	5/22/2007	12:00:00	1.14	58	58
2/8/2007	12:00:00	5.15			4/1/2007	12:00:00	6.35	7	7	5/23/2007	12:00:00	0.89	59	59
2/9/2007	12:00:00	4.98			4/2/2007	12:00:00	6.13	8	8	5/24/2007	12:00:00	0.53	60	60
2/10/2007	12:00:00	4.87			4/3/2007	12:00:00	5.84	9	9	5/25/2007	12:00:00	0.08	61	61
2/11/2007	12:00:00	4.7			4/4/2007	12:00:00	5.54	10	10	5/26/2007	12:00:00	-0.58	62	62
2/12/2007	12:00:00	4.63			4/5/2007	12:00:00	5.09	11	11	5/27/2007	12:00:00	-1.62	63	63
2/13/2007	12:00:00	4.66			4/6/2007	12:00:00	4.81	12	12	5/28/2007	12:00:00	-3.58	64	64
2/14/2007	12:00:00	24.44			4/7/2007	12:00:00	4.68	13	13	5/29/2007	12:00:00	-5.23	65	65
2/15/2007	12:00:00	20.6			4/8/2007	12:00:00	4.46	14	14	5/30/2007	12:00:00	-5.99	66	66
2/16/2007	12:00:00	10.39			4/9/2007	12:00:00	4.27	15	15	5/31/2007	12:00:00	-7.2	67	67
2/17/2007	12:00:00	8.02			4/10/2007	12:00:00	4.1	16	16	6/1/2007	12:00:00	-8.57	68	68
2/18/2007	12:00:00	7.28			4/11/2007	12:00:00	4.56	17	17	6/2/2007	12:00:00	-9.17	69	69
2/19/2007	12:00:00	6.74			4/12/2007	12:00:00	20	18	18	6/3/2007	12:00:00	1.34	70	70
2/20/2007	12:00:00	6.54			4/13/2007	12:00:00	10.22	19	19	6/4/2007	12:00:00	1.42	71	71
2/21/2007	12:00:00	6.38			4/14/2007	12:00:00	7.24	20	20	6/5/2007	12:00:00	1.36	72	72

Haw Gauge 7



■ Precipitation — GW Elevation

HAW 7

Data Acquired : September 11, 2007

Serial Number: N3ECCF90

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	2.39			27-Jan-2007	00:00:00	-0.93			22-Feb-2007	00:00:00	-0.34		
01-Jan-2007	12:00:00	1.22			27-Jan-2007	12:00:00	-1.23			22-Feb-2007	12:00:00	-1.08		
02-Jan-2007	00:00:00	0.49			28-Jan-2007	00:00:00	-1.29			23-Feb-2007	00:00:00	-1.57		
02-Jan-2007	12:00:00	0.22			28-Jan-2007	12:00:00	-1.72			23-Feb-2007	12:00:00	-2.04		
03-Jan-2007	00:00:00	0.41			29-Jan-2007	00:00:00	-1.93			24-Feb-2007	00:00:00	-1.66		
03-Jan-2007	12:00:00	0.14			29-Jan-2007	12:00:00	-2.64			24-Feb-2007	12:00:00	-2.03		
04-Jan-2007	00:00:00	-0.03			30-Jan-2007	00:00:00	-2.13			25-Feb-2007	00:00:00	0.94		
04-Jan-2007	12:00:00	-0.16			30-Jan-2007	12:00:00	-2.24			25-Feb-2007	12:00:00	1.39		
05-Jan-2007	00:00:00	0.18			31-Jan-2007	00:00:00	-2.69			26-Feb-2007	00:00:00	0.71		
05-Jan-2007	12:00:00	0.94			31-Jan-2007	12:00:00	-3.64			26-Feb-2007	12:00:00	0.28		
06-Jan-2007	00:00:00	0.43			01-Feb-2007	00:00:00	-2.45			27-Feb-2007	00:00:00	0		
06-Jan-2007	12:00:00	0.09			01-Feb-2007	12:00:00	-1.27			27-Feb-2007	12:00:00	-0.35		
07-Jan-2007	00:00:00	-0.08			02-Feb-2007	00:00:00	-0.7			28-Feb-2007	00:00:00	-0.65		
07-Jan-2007	12:00:00	2.51			02-Feb-2007	12:00:00	-1.18			28-Feb-2007	12:00:00	-0.66		
08-Jan-2007	00:00:00	3.32			03-Feb-2007	00:00:00	-1.69			01-Mar-2007	00:00:00	-0.51		
08-Jan-2007	12:00:00	1.78			03-Feb-2007	12:00:00	-2.32			01-Mar-2007	12:00:00	1.9		
09-Jan-2007	00:00:00	0.98			04-Feb-2007	00:00:00	-2.57			02-Mar-2007	00:00:00	5.11		
09-Jan-2007	12:00:00	0.52			04-Feb-2007	12:00:00	-2.35			02-Mar-2007	12:00:00	2.21		
10-Jan-2007	00:00:00	0.24			05-Feb-2007	00:00:00	-3.72			03-Mar-2007	00:00:00	1.26		
10-Jan-2007	12:00:00	-0.04			05-Feb-2007	12:00:00	-4.58			03-Mar-2007	12:00:00	0.68		
11-Jan-2007	00:00:00	-0.09			06-Feb-2007	00:00:00	-5.61			04-Mar-2007	00:00:00	0.21		
11-Jan-2007	12:00:00	-0.2			06-Feb-2007	12:00:00	-3.44			04-Mar-2007	12:00:00	-0.16		
12-Jan-2007	00:00:00	-0.34			07-Feb-2007	00:00:00	-2.57			05-Mar-2007	00:00:00	-0.2		
12-Jan-2007	12:00:00	-0.38			07-Feb-2007	12:00:00	-2.85			05-Mar-2007	12:00:00	-0.45		
13-Jan-2007	00:00:00	-0.47			08-Feb-2007	00:00:00	-3.03			06-Mar-2007	00:00:00	-1		
13-Jan-2007	12:00:00	-0.52			08-Feb-2007	12:00:00	-4.61			06-Mar-2007	12:00:00	-1		
14-Jan-2007	00:00:00	-0.61			09-Feb-2007	00:00:00	-4.79			07-Mar-2007	00:00:00	-0.71		
14-Jan-2007	12:00:00	-0.66			09-Feb-2007	12:00:00	-4.37			07-Mar-2007	12:00:00	-1.06		
15-Jan-2007	00:00:00	-0.64			10-Feb-2007	00:00:00	-5.41			08-Mar-2007	00:00:00	-1.31		
15-Jan-2007	12:00:00	-0.7			10-Feb-2007	12:00:00	-6.59			08-Mar-2007	12:00:00	-1.58		
16-Jan-2007	00:00:00	-0.89			11-Feb-2007	00:00:00	-7.51			09-Mar-2007	00:00:00	-1.79		
16-Jan-2007	12:00:00	-1.18			11-Feb-2007	12:00:00	-6.37			09-Mar-2007	12:00:00	-1.71		
17-Jan-2007	00:00:00	-1.27			12-Feb-2007	00:00:00	-7.16			10-Mar-2007	00:00:00	-1.73		
17-Jan-2007	12:00:00	-1.38			12-Feb-2007	12:00:00	-4.1			10-Mar-2007	12:00:00	-1.78		
18-Jan-2007	00:00:00	-1.06			13-Feb-2007	00:00:00	-3.75			11-Mar-2007	00:00:00	-2.19		
18-Jan-2007	12:00:00	-0.32			13-Feb-2007	12:00:00	3.38			11-Mar-2007	12:00:00	-2.4		
19-Jan-2007	00:00:00	-0.51			14-Feb-2007	00:00:00	4.18			12-Mar-2007	00:00:00	-2.47		
19-Jan-2007	12:00:00	-0.84			14-Feb-2007	12:00:00	1.37			12-Mar-2007	12:00:00	-2.55		
20-Jan-2007	00:00:00	-1.09			15-Feb-2007	00:00:00	0.58			13-Mar-2007	00:00:00	-2.52		
20-Jan-2007	12:00:00	-1.44			15-Feb-2007	12:00:00	0.24			13-Mar-2007	12:00:00	-2.73		
21-Jan-2007	00:00:00	-1.23			16-Feb-2007	00:00:00	-0.06			14-Mar-2007	00:00:00	-2.69		
21-Jan-2007	12:00:00	0.84			16-Feb-2007	12:00:00	-0.38			14-Mar-2007	12:00:00	-2.73		
22-Jan-2007	00:00:00	0.61			17-Feb-2007	00:00:00	-0.51			15-Mar-2007	00:00:00	-2.85		
22-Jan-2007	12:00:00	0.15			17-Feb-2007	12:00:00	0.01			15-Mar-2007	12:00:00	-0.18		
23-Jan-2007	00:00:00	-0.13			18-Feb-2007	00:00:00	-0.37			16-Mar-2007	00:00:00	2.74		
23-Jan-2007	12:00:00	-0.33			18-Feb-2007	12:00:00	-0.88			16-Mar-2007	12:00:00	2.89		
24-Jan-2007	00:00:00	-0.41			19-Feb-2007	00:00:00	-1.66			17-Mar-2007	00:00:00	0.99		
24-Jan-2007	12:00:00	-0.69			19-Feb-2007	12:00:00	-0.67			17-Mar-2007	12:00:00	0.25		
25-Jan-2007	00:00:00	-0.62			20-Feb-2007	00:00:00	0.02			18-Mar-2007	00:00:00	-0.12		
25-Jan-2007	12:00:00	-1.02			20-Feb-2007	12:00:00	0.21			18-Mar-2007	12:00:00	-0.48		
26-Jan-2007	00:00:00	-1.15			21-Feb-2007	00:00:00	-0.14			19-Mar-2007	00:00:00	-0.56		
26-Jan-2007	12:00:00	-1.11			21-Feb-2007	12:00:00	-0.38			19-Mar-2007	12:00:00	-0.64		

HAW 7

Data Acquired : September 11, 2007

Serial Number: N3ECCF90

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	-0.99			16-Apr-2007	00:00:00	4.28	6	22	13-May-2007	00:00:00	-21.51		49
20-Mar-2007	12:00:00	-0.93			16-Apr-2007	12:00:00	0.97	6	22	13-May-2007	12:00:00	-23.22		49
21-Mar-2007	00:00:00	-1.24			17-Apr-2007	00:00:00	0.2	7	23	14-May-2007	00:00:00	-23.58		50
21-Mar-2007	12:00:00	-1.15			17-Apr-2007	12:00:00	0	7	23	14-May-2007	12:00:00	-24.35		50
22-Mar-2007	00:00:00	-1.16			18-Apr-2007	00:00:00	-0.21	8	24	15-May-2007	00:00:00	-24.64		51
22-Mar-2007	12:00:00	-1.23			18-Apr-2007	12:00:00	-0.51	8	24	15-May-2007	12:00:00	-25.32		51
23-Mar-2007	00:00:00	-1.52			19-Apr-2007	00:00:00	-0.88	9	25	16-May-2007	00:00:00	-25.65		52
23-Mar-2007	12:00:00	-1.7			19-Apr-2007	12:00:00	-1	9	25	16-May-2007	12:00:00	-15.97		52
24-Mar-2007	00:00:00	-2.1			20-Apr-2007	00:00:00	-1.42	10	26	17-May-2007	00:00:00	-17		53
24-Mar-2007	12:00:00	-2.37			20-Apr-2007	12:00:00	-1.91	10	26	17-May-2007	12:00:00	-19.49		53
25-Mar-2007	00:00:00	-2.65			21-Apr-2007	00:00:00	-2.51	11	27	18-May-2007	00:00:00	-19.93		54
25-Mar-2007	12:00:00	-2.99			21-Apr-2007	12:00:00	-2.98	11	27	18-May-2007	12:00:00	-21.58		54
26-Mar-2007	00:00:00	-3.17	1	1	22-Apr-2007	00:00:00	-3.72	12	28	19-May-2007	00:00:00	-22.31		55
26-Mar-2007	12:00:00	-2.98	1	1	22-Apr-2007	12:00:00	-4.14	12	28	19-May-2007	12:00:00	-23.64		55
27-Mar-2007	00:00:00	-3.33	2	2	23-Apr-2007	00:00:00	-5.02	13	29	20-May-2007	00:00:00	-24.21		56
27-Mar-2007	12:00:00	-3.33	2	2	23-Apr-2007	12:00:00	-5.47	13	29	20-May-2007	12:00:00	-25.35		56
28-Mar-2007	00:00:00	-3.69	3	3	24-Apr-2007	00:00:00	-6.34	14	30	21-May-2007	00:00:00	-25.9		57
28-Mar-2007	12:00:00	-0.23	3	3	24-Apr-2007	12:00:00	-7.18	14	30	21-May-2007	12:00:00	-26.63		57
29-Mar-2007	00:00:00	0.02	4	4	25-Apr-2007	00:00:00	-8.19	15	31	22-May-2007	00:00:00	-26.91		58
29-Mar-2007	12:00:00	-0.62	4	4	25-Apr-2007	12:00:00	-9.45	15	31	22-May-2007	12:00:00	-27.41		58
30-Mar-2007	00:00:00	-1.05	5	5	26-Apr-2007	00:00:00	-10.19	16	32	23-May-2007	00:00:00	-27.62		59
30-Mar-2007	12:00:00	-1.49	5	5	26-Apr-2007	12:00:00	-9.78	16	32	23-May-2007	12:00:00	-27.88		59
31-Mar-2007	00:00:00	-1.92	6	6	27-Apr-2007	00:00:00	-1.99	17	33	24-May-2007	00:00:00	-28.06		60
31-Mar-2007	12:00:00	-2.13	6	6	27-Apr-2007	12:00:00	-4.17	17	33	24-May-2007	12:00:00	-24.35		60
01-Apr-2007	00:00:00	-1.9	7	7	28-Apr-2007	00:00:00	-4.96	18	34	25-May-2007	00:00:00	-23.91		61
01-Apr-2007	12:00:00	-2.25	7	7	28-Apr-2007	12:00:00	-5.27	18	34	25-May-2007	12:00:00	-23.35		61
02-Apr-2007	00:00:00	-2.82	8	8	29-Apr-2007	00:00:00	-6.59	19	35	26-May-2007	00:00:00	-23.9		62
02-Apr-2007	12:00:00	-3.47	8	8	29-Apr-2007	12:00:00	-7.36	19	35	26-May-2007	12:00:00	-23.79		62
03-Apr-2007	00:00:00	-4.14	9	9	30-Apr-2007	00:00:00	-8.87	20	36	27-May-2007	00:00:00	-23.91		63
03-Apr-2007	12:00:00	-4.39	9	9	30-Apr-2007	12:00:00	-10.16	20	36	27-May-2007	12:00:00	-23.53		63
04-Apr-2007	00:00:00	-5.24	10	10	01-May-2007	00:00:00	-11.96	21	37	28-May-2007	00:00:00	-23.94		64
04-Apr-2007	12:00:00	-6.46	10	10	01-May-2007	12:00:00	-13.95		37	28-May-2007	12:00:00	-23.44		64
05-Apr-2007	00:00:00	-7.35	11	11	02-May-2007	00:00:00	-15.02		38	29-May-2007	00:00:00	-23.95		65
05-Apr-2007	12:00:00	-8.72	11	11	02-May-2007	12:00:00	-16.36		38	29-May-2007	12:00:00	-23.37		65
06-Apr-2007	00:00:00	-9.41	12	12	03-May-2007	00:00:00	-16.21		39	30-May-2007	00:00:00	-23.96		66
06-Apr-2007	12:00:00	-6.95	12	12	03-May-2007	12:00:00	-16.35		39	30-May-2007	12:00:00	-23.54		66
07-Apr-2007	00:00:00	-9.1	13	13	04-May-2007	00:00:00	-15.96		40	31-May-2007	00:00:00	-23.96		67
07-Apr-2007	12:00:00	-10.39	13	13	04-May-2007	12:00:00	-14.83		40	31-May-2007	12:00:00	-23.75		67
08-Apr-2007	00:00:00	-10.46	14	14	05-May-2007	00:00:00	-14.29		41	01-Jun-2007	00:00:00	-23.96		68
08-Apr-2007	12:00:00	-11.4	14	14	05-May-2007	12:00:00	-12.77		41	01-Jun-2007	12:00:00	-23.44		68
09-Apr-2007	00:00:00	-12.01		15	06-May-2007	00:00:00	-16.15		42	02-Jun-2007	00:00:00	-23.97		69
09-Apr-2007	12:00:00	-12.99		15	06-May-2007	12:00:00	-17.98		42	02-Jun-2007	12:00:00	-22.37		69
10-Apr-2007	00:00:00	-13.53		16	07-May-2007	00:00:00	-18.43		43	03-Jun-2007	00:00:00	-20.97		70
10-Apr-2007	12:00:00	-14.27		16	07-May-2007	12:00:00	-19.64		43	03-Jun-2007	12:00:00	-19.99		70
11-Apr-2007	00:00:00	-0.64	1	17	08-May-2007	00:00:00	-16.55		44	04-Jun-2007	00:00:00	-16.66		71
11-Apr-2007	12:00:00	2.39	1	17	08-May-2007	12:00:00	-13.92		44	04-Jun-2007	12:00:00	-14.41		71
12-Apr-2007	00:00:00	2.65	2	18	09-May-2007	00:00:00	-13.13		45	05-Jun-2007	00:00:00	-15.91		72
12-Apr-2007	12:00:00	0.47	2	18	09-May-2007	12:00:00	-15.74		45	05-Jun-2007	12:00:00	-16.98		72
13-Apr-2007	00:00:00	-0.13	3	19	10-May-2007	00:00:00	-17.6		46	06-Jun-2007	00:00:00	-19.14		73
13-Apr-2007	12:00:00	-0.63	3	19	10-May-2007	12:00:00	-19.78		46	06-Jun-2007	12:00:00	-21.6		73
14-Apr-2007	00:00:00	-0.83	4	20	11-May-2007	00:00:00	-20.36		47	07-Jun-2007	00:00:00	-22.96		74
14-Apr-2007	12:00:00	1.16	4	20	11-May-2007	12:00:00	-21.47		47	07-Jun-2007	12:00:00	-24.19		74
15-Apr-2007	00:00:00	5.95	5	21	12-May-2007	00:00:00	-21.84		48	08-Jun-2007	00:00:00	-25		75
15-Apr-2007	12:00:00	9.64	5	21	12-May-2007	12:00:00	-20.01		48	08-Jun-2007	12:00:00	-25.69		75

HAW 7

Data Acquired : September 11, 2007

Serial Number: N3ECCF90

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-26.02		76	06-Jul-2007	00:00:00	-24.06		103	02-Aug-2007	00:00:00	-5.1	2	130
09-Jun-2007	12:00:00	-23.39		76	06-Jul-2007	12:00:00	-24.36		103	02-Aug-2007	12:00:00	-6.68	3	130
10-Jun-2007	00:00:00	-24.03		77	07-Jul-2007	00:00:00	-24.06		104	03-Aug-2007	00:00:00	-8.54	3	131
10-Jun-2007	12:00:00	-23.79		77	07-Jul-2007	12:00:00	-23.89		104	03-Aug-2007	12:00:00	-9.87	4	131
11-Jun-2007	00:00:00	-24.03		78	08-Jul-2007	00:00:00	-24.06		105	04-Aug-2007	00:00:00	-11.98	4	132
11-Jun-2007	12:00:00	-24.5		78	08-Jul-2007	12:00:00	-24.25		105	04-Aug-2007	12:00:00	-13.68		132
12-Jun-2007	00:00:00	-24.02		79	09-Jul-2007	00:00:00	-24.08		106	05-Aug-2007	00:00:00	-15.52		133
12-Jun-2007	12:00:00	-24.13		79	09-Jul-2007	12:00:00	-23.94		106	05-Aug-2007	12:00:00	-16.87		133
13-Jun-2007	00:00:00	-24.01		80	10-Jul-2007	00:00:00	-24.07		107	06-Aug-2007	00:00:00	-18.61		134
13-Jun-2007	12:00:00	-24.55		80	10-Jul-2007	12:00:00	-24.69		107	06-Aug-2007	12:00:00	-19.83		134
14-Jun-2007	00:00:00	-27.66		81	11-Jul-2007	00:00:00	-24.06		108	07-Aug-2007	00:00:00	-20.88		135
14-Jun-2007	12:00:00	-29.26		81	11-Jul-2007	12:00:00	-24.82		108	07-Aug-2007	12:00:00	-21.42		135
15-Jun-2007	00:00:00			82	12-Jul-2007	00:00:00	-24.06		109	08-Aug-2007	00:00:00	-22.32		136
15-Jun-2007	12:00:00			82	12-Jul-2007	12:00:00	-25.06		109	08-Aug-2007	12:00:00	-22.8		136
16-Jun-2007	00:00:00	-27.56		83	13-Jul-2007	00:00:00	-28.45		110	09-Aug-2007	00:00:00	-23.53		137
16-Jun-2007	12:00:00	-24.54		83	13-Jul-2007	12:00:00	-28.35		110	09-Aug-2007	12:00:00	-23.84		137
17-Jun-2007	00:00:00	-24		84	14-Jul-2007	00:00:00	-24.06		111	10-Aug-2007	00:00:00	-24.39		138
17-Jun-2007	12:00:00	-24.16		84	14-Jul-2007	12:00:00	-23.84		111	10-Aug-2007	12:00:00	-24.74		138
18-Jun-2007	00:00:00	-24		85	15-Jul-2007	00:00:00	-24.05		112	11-Aug-2007	00:00:00	-24.96		139
18-Jun-2007	12:00:00	-24.21		85	15-Jul-2007	12:00:00	-24.08		112	11-Aug-2007	12:00:00	-25.5		139
19-Jun-2007	00:00:00	-24.01		86	16-Jul-2007	00:00:00	-24.06		113	12-Aug-2007	00:00:00	-25.69		140
19-Jun-2007	12:00:00	-23.24		86	16-Jul-2007	12:00:00	-24.88		113	12-Aug-2007	12:00:00	-26.03		140
20-Jun-2007	00:00:00	-24.02		87	17-Jul-2007	00:00:00	-24.06		114	13-Aug-2007	00:00:00	-26.11		141
20-Jun-2007	12:00:00	-24.32		87	17-Jul-2007	12:00:00	-24.97		114	13-Aug-2007	12:00:00	-24.98		141
21-Jun-2007	00:00:00	-24.02		88	18-Jul-2007	00:00:00	-24.06		115	14-Aug-2007	00:00:00	-24.12		142
21-Jun-2007	12:00:00	-23.55		88	18-Jul-2007	12:00:00	-24.03		115	14-Aug-2007	12:00:00	-24.49		142
22-Jun-2007	00:00:00	-24.01		89	19-Jul-2007	00:00:00	-24.07		116	15-Aug-2007	00:00:00	-24.1		143
22-Jun-2007	12:00:00	-24.64		89	19-Jul-2007	12:00:00	-24.51		116	15-Aug-2007	12:00:00	-24.71		143
23-Jun-2007	00:00:00	-24.02		90	20-Jul-2007	00:00:00	-24.08		117	16-Aug-2007	00:00:00	-24.11		144
23-Jun-2007	12:00:00	-24.63		90	20-Jul-2007	12:00:00	-25.5		117	16-Aug-2007	12:00:00	-25.64		144
24-Jun-2007	00:00:00	-24.01		91	21-Jul-2007	00:00:00	-24.09		118	17-Aug-2007	00:00:00	-24.11		145
24-Jun-2007	12:00:00	-24.65		91	21-Jul-2007	12:00:00	-24.95		118	17-Aug-2007	12:00:00	-25.27		145
25-Jun-2007	00:00:00	-24.02		92	22-Jul-2007	00:00:00	-24.07		119	18-Aug-2007	00:00:00	-24.1		146
25-Jun-2007	12:00:00	-24.66		92	22-Jul-2007	12:00:00	-24.38		119	18-Aug-2007	12:00:00	-24.64		146
26-Jun-2007	00:00:00	-24.02		93	23-Jul-2007	00:00:00	-24.07		120	19-Aug-2007	00:00:00	-24.12		147
26-Jun-2007	12:00:00	-23.9		93	23-Jul-2007	12:00:00	-24.46		120	19-Aug-2007	12:00:00	-24.57		147
27-Jun-2007	00:00:00	-24.04		94	24-Jul-2007	00:00:00	-24.05		121	20-Aug-2007	00:00:00	-24.13		148
27-Jun-2007	12:00:00	-24.16		94	24-Jul-2007	12:00:00	-25.01		121	20-Aug-2007	12:00:00	-24.67		148
28-Jun-2007	00:00:00	-24.05		95	25-Jul-2007	00:00:00	-24.05		122	21-Aug-2007	00:00:00	-24.13		149
28-Jun-2007	12:00:00	-24.67		95	25-Jul-2007	12:00:00	-24.84		122	21-Aug-2007	12:00:00	-25.04		149
29-Jun-2007	00:00:00	-24.05		96	26-Jul-2007	00:00:00	-24.06		123	22-Aug-2007	00:00:00	-24.11		150
29-Jun-2007	12:00:00	-24.24		96	26-Jul-2007	12:00:00	-24.06		123	22-Aug-2007	12:00:00	-25.04		150
30-Jun-2007	00:00:00	-24.06		97	27-Jul-2007	00:00:00	-24.06		124	23-Aug-2007	00:00:00	-24.12		151
30-Jun-2007	12:00:00	-25.09		97	27-Jul-2007	12:00:00	-24.04		124	23-Aug-2007	12:00:00	-24.85		151
01-Jul-2007	00:00:00	-24.05		98	28-Jul-2007	00:00:00	-23.64		125	24-Aug-2007	00:00:00	-24.11		152
01-Jul-2007	12:00:00	-24.79		98	28-Jul-2007	12:00:00	-24.41		125	24-Aug-2007	12:00:00	-25.32		152
02-Jul-2007	00:00:00	-24.04		99	29-Jul-2007	00:00:00	-24.07		126	25-Aug-2007	00:00:00	-24.12		153
02-Jul-2007	12:00:00	-24.64		99	29-Jul-2007	12:00:00	-25.15		126	25-Aug-2007	12:00:00	-25.14		153
03-Jul-2007	00:00:00	-24.04		100	30-Jul-2007	00:00:00	-24.08		127	26-Aug-2007	00:00:00	-24.12		154
03-Jul-2007	12:00:00	-24.42		100	30-Jul-2007	12:00:00	17.55		127	26-Aug-2007	12:00:00	-24.57		154
04-Jul-2007	00:00:00	-24.05		101	31-Jul-2007	00:00:00	13.82		128	27-Aug-2007	00:00:00	-24.13		155
04-Jul-2007	12:00:00	-24.23		101	31-Jul-2007	12:00:00	1.25	1	128	27-Aug-2007	12:00:00	-24.12		155
05-Jul-2007	00:00:00	-24.05		102	01-Aug-2007	00:00:00	-1.52	1	129	28-Aug-2007	00:00:00	-24.11		156
05-Jul-2007	12:00:00	-24.26		102	01-Aug-2007	12:00:00	-3.29	2	129	28-Aug-2007	12:00:00	-24.1		156

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Data Acquired : September 11, 2007

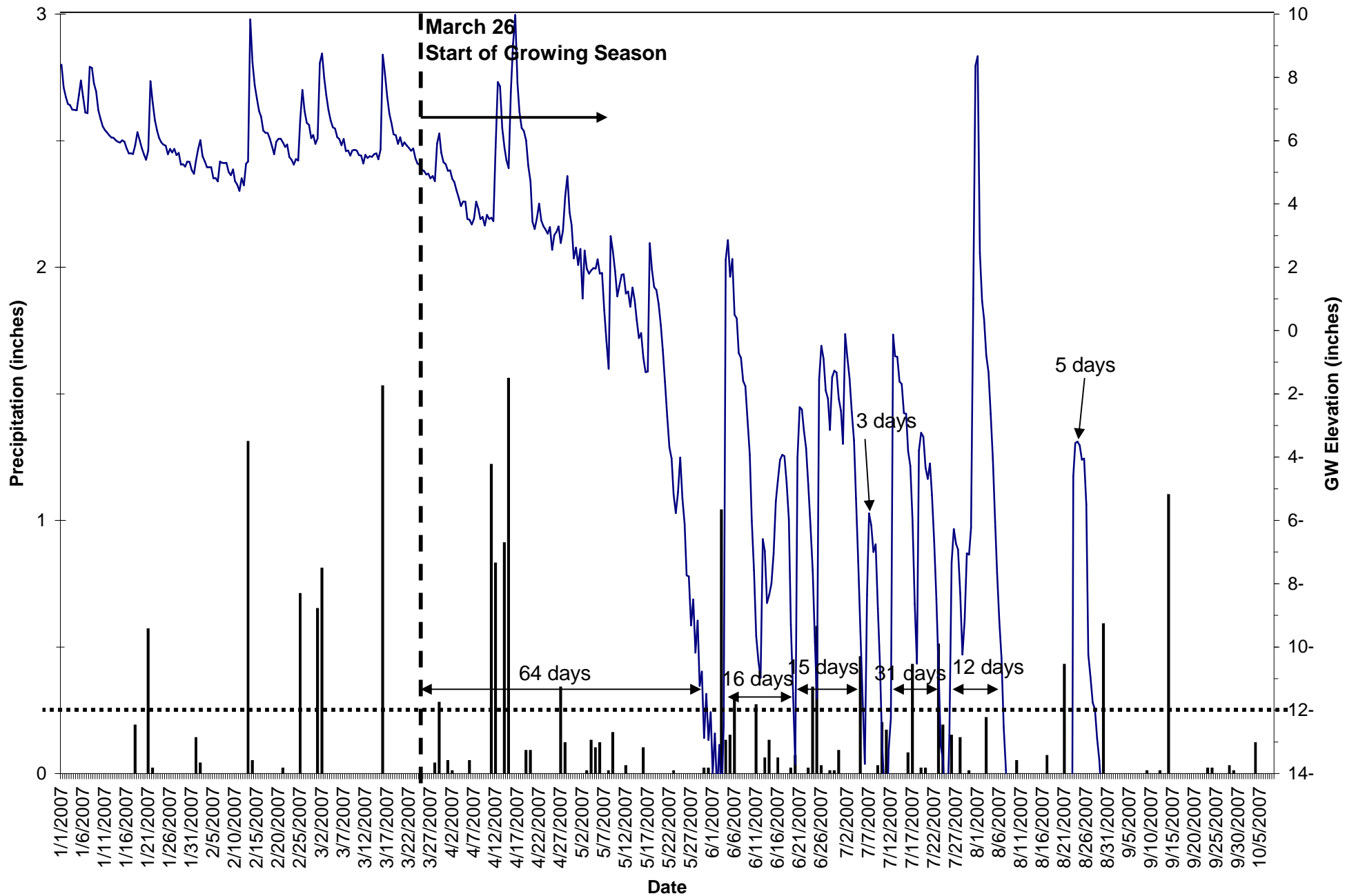
Serial Number: N3ECCF90

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

29-Aug-2007	00:00:00	-24.11		157																
29-Aug-2007	12:00:00	-24.12		157																
30-Aug-2007	00:00:00	-24.12		158																
30-Aug-2007	12:00:00	-24.12		158																
31-Aug-2007	00:00:00	-24.11		159																
31-Aug-2007	12:00:00	-24.12		159																
01-Sep-2007	00:00:00	-24.12		160																
01-Sep-2007	12:00:00	-24.12		160																
02-Sep-2007	00:00:00	-24.1		161																
02-Sep-2007	12:00:00	-24.11		161																
03-Sep-2007	00:00:00	-24.1		162																
03-Sep-2007	12:00:00	-24.09		162																
04-Sep-2007	00:00:00	-24.09		163																
04-Sep-2007	12:00:00	-24.09		163																
05-Sep-2007	00:00:00	-24.09		164																
05-Sep-2007	12:00:00	-24.08		164																
06-Sep-2007	00:00:00	-24.09		165																
06-Sep-2007	12:00:00	-24.1		165																
07-Sep-2007	00:00:00	-24.1		166																
07-Sep-2007	12:00:00	-24.09		166																
08-Sep-2007	00:00:00	-24.08		167																
08-Sep-2007	12:00:00	-24.1		167																
09-Sep-2007	00:00:00	-24.09		168																
09-Sep-2007	12:00:00	-24.08		168																
10-Sep-2007	00:00:00	-24.09		169																
10-Sep-2007	12:00:00	-24.1		169																
11-Sep-2007	00:00:00	-24.09		170																
11-Sep-2007	12:00:00	-24.09		170																
12-Sep-2007	00:00:00	-24.09		171																
12-Sep-2007	12:00:00	-24.09		171																

Haw Gauge 8



■ Precipitation — GW Elevation

HAW 8

Data Acquired : September 11, 2007

Serial Number: N3ECCF18

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	8.4			27-Jan-2007	00:00:00	5.74			22-Feb-2007	00:00:00	5.88		
01-Jan-2007	12:00:00	7.68			27-Jan-2007	12:00:00	5.54			22-Feb-2007	12:00:00	5.48		
02-Jan-2007	00:00:00	7.38			28-Jan-2007	00:00:00	5.61			23-Feb-2007	00:00:00	5.4		
02-Jan-2007	12:00:00	7.16			28-Jan-2007	12:00:00	5.24			23-Feb-2007	12:00:00	5.24		
03-Jan-2007	00:00:00	7.12			29-Jan-2007	00:00:00	5.26			24-Feb-2007	00:00:00	5.42		
03-Jan-2007	12:00:00	6.98			29-Jan-2007	12:00:00	5.18			24-Feb-2007	12:00:00	5.37		
04-Jan-2007	00:00:00	6.97			30-Jan-2007	00:00:00	5.34			25-Feb-2007	00:00:00	6.64		
04-Jan-2007	12:00:00	6.96			30-Jan-2007	12:00:00	5.33			25-Feb-2007	12:00:00	7.6		
05-Jan-2007	00:00:00	7.44			31-Jan-2007	00:00:00	5.07			26-Feb-2007	00:00:00	6.93		
05-Jan-2007	12:00:00	7.9			31-Jan-2007	12:00:00	4.95			26-Feb-2007	12:00:00	6.56		
06-Jan-2007	00:00:00	7.38			01-Feb-2007	00:00:00	5.36			27-Feb-2007	00:00:00	6.5		
06-Jan-2007	12:00:00	6.89			01-Feb-2007	12:00:00	5.74			27-Feb-2007	12:00:00	6.08		
07-Jan-2007	00:00:00	6.87			02-Feb-2007	00:00:00	6.02			28-Feb-2007	00:00:00	6.18		
07-Jan-2007	12:00:00	8.33			02-Feb-2007	12:00:00	5.51			28-Feb-2007	12:00:00	5.9		
08-Jan-2007	00:00:00	8.3			03-Feb-2007	00:00:00	5.35			01-Mar-2007	00:00:00	6.07		
08-Jan-2007	12:00:00	7.81			03-Feb-2007	12:00:00	5.16			01-Mar-2007	12:00:00	8.45		
09-Jan-2007	00:00:00	7.55			04-Feb-2007	00:00:00	5.16			02-Mar-2007	00:00:00	8.75		
09-Jan-2007	12:00:00	6.96			04-Feb-2007	12:00:00	5.16			02-Mar-2007	12:00:00	7.97		
10-Jan-2007	00:00:00	6.69			05-Feb-2007	00:00:00	4.81			03-Mar-2007	00:00:00	7.45		
10-Jan-2007	12:00:00	6.45			05-Feb-2007	12:00:00	4.82			03-Mar-2007	12:00:00	6.97		
11-Jan-2007	00:00:00	6.33			06-Feb-2007	00:00:00	4.71			04-Mar-2007	00:00:00	6.64		
11-Jan-2007	12:00:00	6.26			06-Feb-2007	12:00:00	5.34			04-Mar-2007	12:00:00	6.42		
12-Jan-2007	00:00:00	6.17			07-Feb-2007	00:00:00	5.3			05-Mar-2007	00:00:00	6.38		
12-Jan-2007	12:00:00	6.1			07-Feb-2007	12:00:00	5.29			05-Mar-2007	12:00:00	6.11		
13-Jan-2007	00:00:00	6.09			08-Feb-2007	00:00:00	5.3			06-Mar-2007	00:00:00	6.05		
13-Jan-2007	12:00:00	6.01			08-Feb-2007	12:00:00	5.01			06-Mar-2007	12:00:00	5.86		
14-Jan-2007	00:00:00	5.96			09-Feb-2007	00:00:00	4.91			07-Mar-2007	00:00:00	6.05		
14-Jan-2007	12:00:00	5.94			09-Feb-2007	12:00:00	5.09			07-Mar-2007	12:00:00	5.67		
15-Jan-2007	00:00:00	6.01			10-Feb-2007	00:00:00	4.72			08-Mar-2007	00:00:00	5.69		
15-Jan-2007	12:00:00	5.97			10-Feb-2007	12:00:00	4.61			08-Mar-2007	12:00:00	5.53		
16-Jan-2007	00:00:00	5.76			11-Feb-2007	00:00:00	4.41			09-Mar-2007	00:00:00	5.69		
16-Jan-2007	12:00:00	5.6			11-Feb-2007	12:00:00	4.81			09-Mar-2007	12:00:00	5.71		
17-Jan-2007	00:00:00	5.6			12-Feb-2007	00:00:00	4.59			10-Mar-2007	00:00:00	5.69		
17-Jan-2007	12:00:00	5.58			12-Feb-2007	12:00:00	5.27			10-Mar-2007	12:00:00	5.54		
18-Jan-2007	00:00:00	5.86			13-Feb-2007	00:00:00	5.34			11-Mar-2007	00:00:00	5.53		
18-Jan-2007	12:00:00	6.27			13-Feb-2007	12:00:00	9.83			11-Mar-2007	12:00:00	5.28		
19-Jan-2007	00:00:00	6.02			14-Feb-2007	00:00:00	8.47			12-Mar-2007	00:00:00	5.55		
19-Jan-2007	12:00:00	5.76			14-Feb-2007	12:00:00	7.76			12-Mar-2007	12:00:00	5.45		
20-Jan-2007	00:00:00	5.56			15-Feb-2007	00:00:00	7.33			13-Mar-2007	00:00:00	5.51		
20-Jan-2007	12:00:00	5.4			15-Feb-2007	12:00:00	6.93			13-Mar-2007	12:00:00	5.49		
21-Jan-2007	00:00:00	5.68			16-Feb-2007	00:00:00	6.76			14-Mar-2007	00:00:00	5.57		
21-Jan-2007	12:00:00	7.88			16-Feb-2007	12:00:00	6.32			14-Mar-2007	12:00:00	5.6		
22-Jan-2007	00:00:00	7.21			17-Feb-2007	00:00:00	6.25			15-Mar-2007	00:00:00	5.41		
22-Jan-2007	12:00:00	6.65			17-Feb-2007	12:00:00	6.24			15-Mar-2007	12:00:00	5.72		
23-Jan-2007	00:00:00	6.32			18-Feb-2007	00:00:00	6.05			16-Mar-2007	00:00:00	8.72		
23-Jan-2007	12:00:00	6.09			18-Feb-2007	12:00:00	5.81			16-Mar-2007	12:00:00	8.11		
24-Jan-2007	00:00:00	5.95			19-Feb-2007	00:00:00	5.57			17-Mar-2007	00:00:00	7.39		
24-Jan-2007	12:00:00	5.87			19-Feb-2007	12:00:00	5.97			17-Mar-2007	12:00:00	6.85		
25-Jan-2007	00:00:00	5.84			20-Feb-2007	00:00:00	6.06			18-Mar-2007	00:00:00	6.57		
25-Jan-2007	12:00:00	5.57			20-Feb-2007	12:00:00	6.06			18-Mar-2007	12:00:00	6.2		
26-Jan-2007	00:00:00	5.74			21-Feb-2007	00:00:00	5.94			19-Mar-2007	00:00:00	6.17		
26-Jan-2007	12:00:00	5.63			21-Feb-2007	12:00:00	5.8			19-Mar-2007	12:00:00	5.9		

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Data Acquired : September 11, 2007

Serial Number: N3ECCF18

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	6.11			16-Apr-2007	00:00:00	7.82	22	22	13-May-2007	00:00:00	0.95	49	49
20-Mar-2007	12:00:00	5.83			16-Apr-2007	12:00:00	6.91	22	22	13-May-2007	12:00:00	0.33	49	49
21-Mar-2007	00:00:00	5.95			17-Apr-2007	00:00:00	6.4	23	23	14-May-2007	00:00:00	-0.24	50	50
21-Mar-2007	12:00:00	5.85			17-Apr-2007	12:00:00	6.3	23	23	14-May-2007	12:00:00	-0.08	50	50
22-Mar-2007	00:00:00	5.77			18-Apr-2007	00:00:00	6.01	24	24	15-May-2007	00:00:00	-0.86	51	51
22-Mar-2007	12:00:00	5.68			18-Apr-2007	12:00:00	5.2	24	24	15-May-2007	12:00:00	-1.31	51	51
23-Mar-2007	00:00:00	5.75			19-Apr-2007	00:00:00	4.71	25	25	16-May-2007	00:00:00	-1.3	52	52
23-Mar-2007	12:00:00	5.44			19-Apr-2007	12:00:00	3.44	25	25	16-May-2007	12:00:00	2.76	52	52
24-Mar-2007	00:00:00	5.28			20-Apr-2007	00:00:00	3.21	26	26	17-May-2007	00:00:00	1.92	53	53
24-Mar-2007	12:00:00	5.23			20-Apr-2007	12:00:00	3.55	26	26	17-May-2007	12:00:00	1.37	53	53
25-Mar-2007	00:00:00	5.08			21-Apr-2007	00:00:00	4.01	27	27	18-May-2007	00:00:00	1.28	54	54
25-Mar-2007	12:00:00	5.04			21-Apr-2007	12:00:00	3.47	27	27	18-May-2007	12:00:00	0.85	54	54
26-Mar-2007	00:00:00	4.93	1	1	22-Apr-2007	00:00:00	3.29	28	28	19-May-2007	00:00:00	0.18	55	55
26-Mar-2007	12:00:00	4.96	1	1	22-Apr-2007	12:00:00	3.19	28	28	19-May-2007	12:00:00	-0.61	55	55
27-Mar-2007	00:00:00	4.81	2	2	23-Apr-2007	00:00:00	3.06	29	29	20-May-2007	00:00:00	-1.63	56	56
27-Mar-2007	12:00:00	4.88	2	2	23-Apr-2007	12:00:00	3.27	29	29	20-May-2007	12:00:00	-2.7	56	56
28-Mar-2007	00:00:00	4.72	3	3	24-Apr-2007	00:00:00	2.55	30	30	21-May-2007	00:00:00	-3.69	57	57
28-Mar-2007	12:00:00	5.91	3	3	24-Apr-2007	12:00:00	3.02	30	30	21-May-2007	12:00:00	-4.05	57	57
29-Mar-2007	00:00:00	6.23	4	4	25-Apr-2007	00:00:00	3.12	31	31	22-May-2007	00:00:00	-5.18	58	58
29-Mar-2007	12:00:00	5.61	4	4	25-Apr-2007	12:00:00	3.29	31	31	22-May-2007	12:00:00	-5.77	58	58
30-Mar-2007	00:00:00	5.32	5	5	26-Apr-2007	00:00:00	2.77	32	32	23-May-2007	00:00:00	-5.11	59	59
30-Mar-2007	12:00:00	5.26	5	5	26-Apr-2007	12:00:00	3.16	32	32	23-May-2007	12:00:00	-4.01	59	59
31-Mar-2007	00:00:00	5.05	6	6	27-Apr-2007	00:00:00	4.23	33	33	24-May-2007	00:00:00	-5.31	60	60
31-Mar-2007	12:00:00	5.06	6	6	27-Apr-2007	12:00:00	4.88	33	33	24-May-2007	12:00:00	-6.12	60	60
01-Apr-2007	00:00:00	4.79	7	7	28-Apr-2007	00:00:00	3.74	34	34	25-May-2007	00:00:00	-7.74	61	61
01-Apr-2007	12:00:00	4.69	7	7	28-Apr-2007	12:00:00	3.34	34	34	25-May-2007	12:00:00	-7.77	61	61
02-Apr-2007	00:00:00	4.43	8	8	29-Apr-2007	00:00:00	2.28	35	35	26-May-2007	00:00:00	-9.32	62	62
02-Apr-2007	12:00:00	4.2	8	8	29-Apr-2007	12:00:00	2.62	35	35	26-May-2007	12:00:00	-8.5	62	62
03-Apr-2007	00:00:00	3.93	9	9	30-Apr-2007	00:00:00	2.07	36	36	27-May-2007	00:00:00	-10.18	63	63
03-Apr-2007	12:00:00	4.08	9	9	30-Apr-2007	12:00:00	2.58	36	36	27-May-2007	12:00:00	-9.17	63	63
04-Apr-2007	00:00:00	4.07	10	10	01-May-2007	00:00:00	1.01	37	37	28-May-2007	00:00:00	-11.23	64	64
04-Apr-2007	12:00:00	3.53	10	10	01-May-2007	12:00:00	2.53	37	37	28-May-2007	12:00:00	-10.78	64	64
05-Apr-2007	00:00:00	3.5	11	11	02-May-2007	00:00:00	1.95	38	38	29-May-2007	00:00:00	-12.88		65
05-Apr-2007	12:00:00	3.35	11	11	02-May-2007	12:00:00	1.8	38	38	29-May-2007	12:00:00	-11.48	1	65
06-Apr-2007	00:00:00	3.53	12	12	03-May-2007	00:00:00	1.9	39	39	30-May-2007	00:00:00	-12.94		66
06-Apr-2007	12:00:00	4.07	12	12	03-May-2007	12:00:00	1.97	39	39	30-May-2007	12:00:00	-12.06		66
07-Apr-2007	00:00:00	3.84	13	13	04-May-2007	00:00:00	1.96	40	40	31-May-2007	00:00:00	-13.99		67
07-Apr-2007	12:00:00	3.52	13	13	04-May-2007	12:00:00	2.25	40	40	31-May-2007	12:00:00	-12.73		67
08-Apr-2007	00:00:00	3.59	14	14	05-May-2007	00:00:00	1.8	41	41	01-Jun-2007	00:00:00	-14.6		68
08-Apr-2007	12:00:00	3.32	14	14	05-May-2007	12:00:00	1.82	41	41	01-Jun-2007	12:00:00	-13.09		68
09-Apr-2007	00:00:00	3.65	15	15	06-May-2007	00:00:00	0.63	42	42	02-Jun-2007	00:00:00	-14.87		69
09-Apr-2007	12:00:00	3.53	15	15	06-May-2007	12:00:00	-0.34	42	42	02-Jun-2007	12:00:00	-12.48		69
10-Apr-2007	00:00:00	3.56	16	16	07-May-2007	00:00:00	-1.21	43	43	03-Jun-2007	00:00:00	2.24	1	70
10-Apr-2007	12:00:00	3.46	16	16	07-May-2007	12:00:00	2.98	43	43	03-Jun-2007	12:00:00	2.86	1	70
11-Apr-2007	00:00:00	5.79	17	17	08-May-2007	00:00:00	2.51	44	44	04-Jun-2007	00:00:00	1.7	2	71
11-Apr-2007	12:00:00	7.85	17	17	08-May-2007	12:00:00	1.88	44	44	04-Jun-2007	12:00:00	2.26	2	71
12-Apr-2007	00:00:00	7.71	18	18	09-May-2007	00:00:00	1.08	45	45	05-Jun-2007	00:00:00	0.5	3	72
12-Apr-2007	12:00:00	6.4	18	18	09-May-2007	12:00:00	1.43	45	45	05-Jun-2007	12:00:00	0.38	3	72
13-Apr-2007	00:00:00	5.79	19	19	10-May-2007	00:00:00	1.76	46	46	06-Jun-2007	00:00:00	-0.71	4	73
13-Apr-2007	12:00:00	5.38	19	19	10-May-2007	12:00:00	1.78	46	46	06-Jun-2007	12:00:00	-0.86	4	73
14-Apr-2007	00:00:00	5.13	20	20	11-May-2007	00:00:00	1.17	47	47	07-Jun-2007	00:00:00	-1.59	5	74
14-Apr-2007	12:00:00	7.54	20	20	11-May-2007	12:00:00	1.23	47	47	07-Jun-2007	12:00:00	-1.76	5	74
15-Apr-2007	00:00:00	9.06	21	21	12-May-2007	00:00:00	0.75	48	48	08-Jun-2007	00:00:00	-2.85	6	75
15-Apr-2007	12:00:00	9.97	21	21	12-May-2007	12:00:00	1.36	48	48	08-Jun-2007	12:00:00	-3.92	6	75

HAW 8

Data Acquired : September 11, 2007

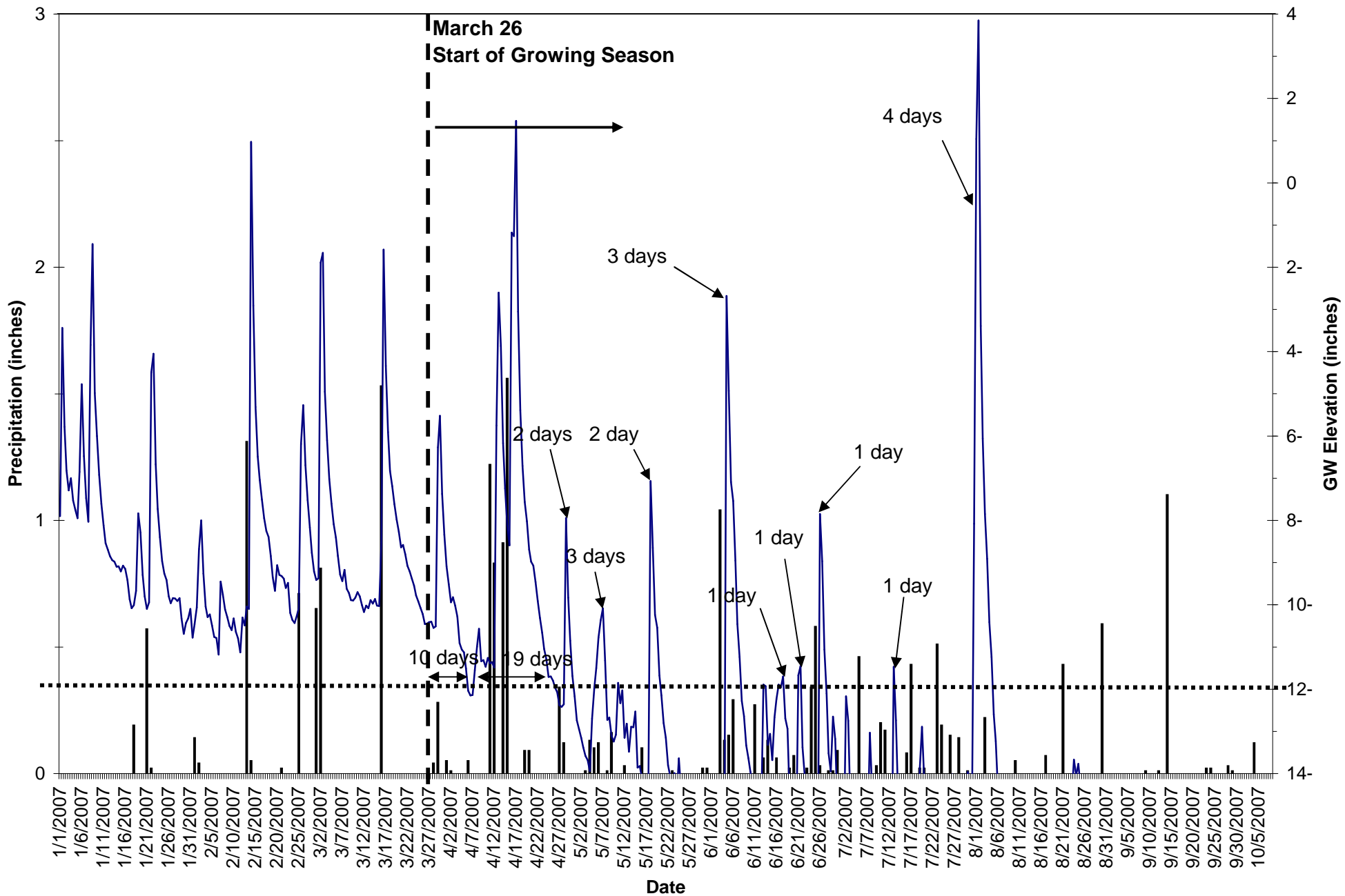
Serial Number: N3ECCF18

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-6.01	7	76	06-Jul-2007	00:00:00	-5.78	1	103	02-Aug-2007	00:00:00	-0.79	9	130
09-Jun-2007	12:00:00	-7.57	7	76	06-Jul-2007	12:00:00	-6.15	2	103	02-Aug-2007	12:00:00	-1.31	9	130
10-Jun-2007	00:00:00	-9.65	8	77	07-Jul-2007	00:00:00	-7	2	104	03-Aug-2007	00:00:00	-2.64	10	131
10-Jun-2007	12:00:00	-10.44	8	77	07-Jul-2007	12:00:00	-6.75	3	104	03-Aug-2007	12:00:00	-4.09	10	131
11-Jun-2007	00:00:00	-10.97	9	78	08-Jul-2007	00:00:00	-8.78	3	105	04-Aug-2007	00:00:00	-6.04	11	132
11-Jun-2007	12:00:00	-6.59	9	78	08-Jul-2007	12:00:00	-10.65	4	105	04-Aug-2007	12:00:00	-7.66	11	132
12-Jun-2007	00:00:00	-6.97	10	79	09-Jul-2007	00:00:00	-13.03		106	05-Aug-2007	00:00:00	-9.18	12	133
12-Jun-2007	12:00:00	-8.61	10	79	09-Jul-2007	12:00:00	-14.45		106	05-Aug-2007	12:00:00	-10.35	12	133
13-Jun-2007	00:00:00	-8.35	11	80	10-Jul-2007	00:00:00	-16.31		107	06-Aug-2007	00:00:00	-12.55		134
13-Jun-2007	12:00:00	-8	11	80	10-Jul-2007	12:00:00	-13.25		107	06-Aug-2007	12:00:00	-13.89		134
14-Jun-2007	00:00:00	-7.04	12	81	11-Jul-2007	00:00:00	-12.24		108	07-Aug-2007	00:00:00	-15.98		135
14-Jun-2007	12:00:00	-5.39	12	81	11-Jul-2007	12:00:00	-0.13	1	108	07-Aug-2007	12:00:00	-16.4		135
15-Jun-2007	00:00:00	-4.75	13	82	12-Jul-2007	00:00:00	-0.81	1	109	08-Aug-2007	00:00:00	-18.54		136
15-Jun-2007	12:00:00	-4.09	13	82	12-Jul-2007	12:00:00	-0.83	2	109	08-Aug-2007	12:00:00	-19.52		136
16-Jun-2007	00:00:00	-3.93	14	83	13-Jul-2007	00:00:00	-1.61	2	110	09-Aug-2007	00:00:00	-20.86		137
16-Jun-2007	12:00:00	-3.97	14	83	13-Jul-2007	12:00:00	-1.69	3	110	09-Aug-2007	12:00:00	-21.88		137
17-Jun-2007	00:00:00	-4.82	15	84	14-Jul-2007	00:00:00	-2.61	3	111	10-Aug-2007	00:00:00	-22.16		138
17-Jun-2007	12:00:00	-5.97	15	84	14-Jul-2007	12:00:00	-2.63	4	111	10-Aug-2007	12:00:00	-22.92		138
18-Jun-2007	00:00:00	-9.3	16	85	15-Jul-2007	00:00:00	-3.81	4	112	11-Aug-2007	00:00:00	-23.83		139
18-Jun-2007	12:00:00	-11.47	16	85	15-Jul-2007	12:00:00	-4.28	5	112	11-Aug-2007	12:00:00	-24.52		139
19-Jun-2007	00:00:00	-13.7		86	16-Jul-2007	00:00:00	-6	5	113	12-Aug-2007	00:00:00	-24.08		140
19-Jun-2007	12:00:00	-4.02	1	86	16-Jul-2007	12:00:00	-8.65	6	113	12-Aug-2007	12:00:00	-23.49		140
20-Jun-2007	00:00:00	-2.42	1	87	17-Jul-2007	00:00:00	-10.53	6	114	13-Aug-2007	00:00:00	-22.94		141
20-Jun-2007	12:00:00	-2.5	2	87	17-Jul-2007	12:00:00	-3.79	7	114	13-Aug-2007	12:00:00	-23.1		141
21-Jun-2007	00:00:00	-3.15	2	88	18-Jul-2007	00:00:00	-3.23	7	115	14-Aug-2007	00:00:00	-23.61		142
21-Jun-2007	12:00:00	-3.72	3	88	18-Jul-2007	12:00:00	-3.36	8	115	14-Aug-2007	12:00:00	-23.49		142
22-Jun-2007	00:00:00	-4.89	3	89	19-Jul-2007	00:00:00	-4.33	8	116	15-Aug-2007	00:00:00	-23.88		143
22-Jun-2007	12:00:00	-6.18	4	89	19-Jul-2007	12:00:00	-4.69	9	116	15-Aug-2007	12:00:00	-24.54		143
23-Jun-2007	00:00:00	-7.58	4	90	20-Jul-2007	00:00:00	-4.2	9	117	16-Aug-2007	00:00:00	-25.3		144
23-Jun-2007	12:00:00	-9.86	5	90	20-Jul-2007	12:00:00	-5.2	10	117	16-Aug-2007	12:00:00	-26.2		144
24-Jun-2007	00:00:00	-11.63	5	91	21-Jul-2007	00:00:00	-6.66	10	118	17-Aug-2007	00:00:00	-26.56		145
24-Jun-2007	12:00:00	-1.55	6	91	21-Jul-2007	12:00:00	-8.48	11	118	17-Aug-2007	12:00:00	-27.61		145
25-Jun-2007	00:00:00	-0.48	6	92	22-Jul-2007	00:00:00	-10.72	11	119	18-Aug-2007	00:00:00	-28.94		146
25-Jun-2007	12:00:00	-0.89	7	92	22-Jul-2007	12:00:00	-13.13		119	18-Aug-2007	12:00:00	-29.51		146
26-Jun-2007	00:00:00	-1.9	7	93	23-Jul-2007	00:00:00	-13.59		120	19-Aug-2007	00:00:00	-29.44		147
26-Jun-2007	12:00:00	-2.15	8	93	23-Jul-2007	12:00:00	-15.01		120	19-Aug-2007	12:00:00	-29.52		147
27-Jun-2007	00:00:00	-3.14	8	94	24-Jul-2007	00:00:00	-15.4		121	20-Aug-2007	00:00:00			148
27-Jun-2007	12:00:00	-1.47	9	94	24-Jul-2007	12:00:00	-12.78		121	20-Aug-2007	12:00:00			148
28-Jun-2007	00:00:00	-1.27	9	95	25-Jul-2007	00:00:00	-7.33	1	122	21-Aug-2007	00:00:00			149
28-Jun-2007	12:00:00	-1.33	10	95	25-Jul-2007	12:00:00	-6.27	1	122	21-Aug-2007	12:00:00	-27.21		149
29-Jun-2007	00:00:00	-2.16	10	96	26-Jul-2007	00:00:00	-6.74	2	123	22-Aug-2007	00:00:00	-4.6	1	150
29-Jun-2007	12:00:00	-2.54	11	96	26-Jul-2007	12:00:00	-6.92	2	123	22-Aug-2007	12:00:00	-3.56	1	150
30-Jun-2007	00:00:00	-3.58	11	97	27-Jul-2007	00:00:00	-8.3	3	124	23-Aug-2007	00:00:00	-3.51	2	151
30-Jun-2007	12:00:00	-0.11	12	97	27-Jul-2007	12:00:00	-10.24	3	124	23-Aug-2007	12:00:00	-3.63	2	151
01-Jul-2007	00:00:00	-0.86	12	98	28-Jul-2007	00:00:00	-9.16	4	125	24-Aug-2007	00:00:00	-4.08	3	152
01-Jul-2007	12:00:00	-1.52	13	98	28-Jul-2007	12:00:00	-7.04	4	125	24-Aug-2007	12:00:00	-4.05	3	152
02-Jul-2007	00:00:00	-2.59	13	99	29-Jul-2007	00:00:00	-7.08	5	126	25-Aug-2007	00:00:00	-5.5	4	153
02-Jul-2007	12:00:00	-3.47	14	99	29-Jul-2007	12:00:00	-6.24	5	126	25-Aug-2007	12:00:00	-10.24	4	153
03-Jul-2007	00:00:00	-5.3	14	100	30-Jul-2007	00:00:00	1	6	127	26-Aug-2007	00:00:00	-10.96	5	154
03-Jul-2007	12:00:00	-7.3	15	100	30-Jul-2007	12:00:00	8.37	6	127	26-Aug-2007	12:00:00	-11.76	5	154
04-Jul-2007	00:00:00	-9.52	15	101	31-Jul-2007	00:00:00	8.67	7	128	27-Aug-2007	00:00:00	-11.96	6	155
04-Jul-2007	12:00:00	-11.62	16	101	31-Jul-2007	12:00:00	2.45	7	128	27-Aug-2007	12:00:00	-12.9		155
05-Jul-2007	00:00:00	-13.69		102	01-Aug-2007	00:00:00	0.93	8	129	28-Aug-2007	00:00:00	-13.59		156
05-Jul-2007	12:00:00	-8.35	1	102	01-Aug-2007	12:00:00	0.36	8	129	28-Aug-2007	12:00:00	-14.66		156

Haw BH Reference



■ Precipitation — GW Elevation

HAW BH Ref

Data Acquired : September 11, 2007

Serial Number: N43D7425

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	-7.9			27-Jan-2007	00:00:00	-9.84			22-Feb-2007	00:00:00	-9.6		
01-Jan-2007	12:00:00	-3.44			27-Jan-2007	12:00:00	-9.85			22-Feb-2007	12:00:00	-9.48		
02-Jan-2007	00:00:00	-5.78			28-Jan-2007	00:00:00	-9.91			23-Feb-2007	00:00:00	-10.19		
02-Jan-2007	12:00:00	-6.82			28-Jan-2007	12:00:00	-9.84			23-Feb-2007	12:00:00	-10.36		
03-Jan-2007	00:00:00	-7.29			29-Jan-2007	00:00:00	-10.33			24-Feb-2007	00:00:00	-10.43		
03-Jan-2007	12:00:00	-7			29-Jan-2007	12:00:00	-10.69			24-Feb-2007	12:00:00	-10.26		
04-Jan-2007	00:00:00	-7.53			30-Jan-2007	00:00:00	-10.43			25-Feb-2007	00:00:00	-10.07		
04-Jan-2007	12:00:00	-7.75			30-Jan-2007	12:00:00	-10.32			25-Feb-2007	12:00:00	-6.19		
05-Jan-2007	00:00:00	-7.95			31-Jan-2007	00:00:00	-10.1			26-Feb-2007	00:00:00	-5.27		
05-Jan-2007	12:00:00	-6.85			31-Jan-2007	12:00:00	-10.78			26-Feb-2007	12:00:00	-6.69		
06-Jan-2007	00:00:00	-4.77			01-Feb-2007	00:00:00	-10.46			27-Feb-2007	00:00:00	-7.52		
06-Jan-2007	12:00:00	-6.48			01-Feb-2007	12:00:00	-10.06			27-Feb-2007	12:00:00	-8.17		
07-Jan-2007	00:00:00	-7.47			02-Feb-2007	00:00:00	-8.68			28-Feb-2007	00:00:00	-8.77		
07-Jan-2007	12:00:00	-8.03			02-Feb-2007	12:00:00	-8			28-Feb-2007	12:00:00	-9.21		
08-Jan-2007	00:00:00	-3.84			03-Feb-2007	00:00:00	-9.26			01-Mar-2007	00:00:00	-9.41		
08-Jan-2007	12:00:00	-1.45			03-Feb-2007	12:00:00	-10.04			01-Mar-2007	12:00:00	-9.37		
09-Jan-2007	00:00:00	-4.98			04-Feb-2007	00:00:00	-10.29			02-Mar-2007	00:00:00	-1.89		
09-Jan-2007	12:00:00	-6			04-Feb-2007	12:00:00	-10.23			02-Mar-2007	12:00:00	-1.66		
10-Jan-2007	00:00:00	-6.92			05-Feb-2007	00:00:00	-10.49			03-Mar-2007	00:00:00	-4.95		
10-Jan-2007	12:00:00	-7.61			05-Feb-2007	12:00:00	-10.76			03-Mar-2007	12:00:00	-6.1		
11-Jan-2007	00:00:00	-8.12			06-Feb-2007	00:00:00	-10.79			04-Mar-2007	00:00:00	-7.02		
11-Jan-2007	12:00:00	-8.54			06-Feb-2007	12:00:00	-11.18			04-Mar-2007	12:00:00	-7.6		
12-Jan-2007	00:00:00	-8.69			07-Feb-2007	00:00:00	-9.45			05-Mar-2007	00:00:00	-8.09		
12-Jan-2007	12:00:00	-8.85			07-Feb-2007	12:00:00	-9.76			05-Mar-2007	12:00:00	-8.41		
13-Jan-2007	00:00:00	-8.94			08-Feb-2007	00:00:00	-10.11			06-Mar-2007	00:00:00	-8.84		
13-Jan-2007	12:00:00	-8.98			08-Feb-2007	12:00:00	-10.29			06-Mar-2007	12:00:00	-9.28		
14-Jan-2007	00:00:00	-9.1			09-Feb-2007	00:00:00	-10.5			07-Mar-2007	00:00:00	-9.44		
14-Jan-2007	12:00:00	-9.09			09-Feb-2007	12:00:00	-10.6			07-Mar-2007	12:00:00	-9.17		
15-Jan-2007	00:00:00	-9.21			10-Feb-2007	00:00:00	-10.32			08-Mar-2007	00:00:00	-9.62		
15-Jan-2007	12:00:00	-9.07			10-Feb-2007	12:00:00	-10.64			08-Mar-2007	12:00:00	-9.72		
16-Jan-2007	00:00:00	-9.15			11-Feb-2007	00:00:00	-10.8			09-Mar-2007	00:00:00	-9.89		
16-Jan-2007	12:00:00	-9.41			11-Feb-2007	12:00:00	-11.13			09-Mar-2007	12:00:00	-9.9		
17-Jan-2007	00:00:00	-9.87			12-Feb-2007	00:00:00	-10.3			10-Mar-2007	00:00:00	-9.83		
17-Jan-2007	12:00:00	-10.08			12-Feb-2007	12:00:00	-10.49			10-Mar-2007	12:00:00	-9.7		
18-Jan-2007	00:00:00	-10.01			13-Feb-2007	00:00:00	-10.04			11-Mar-2007	00:00:00	-9.8		
18-Jan-2007	12:00:00	-9.67			13-Feb-2007	12:00:00	-10.1			11-Mar-2007	12:00:00	-10.01		
19-Jan-2007	00:00:00	-7.83			14-Feb-2007	00:00:00	0.97			12-Mar-2007	00:00:00	-10.17		
19-Jan-2007	12:00:00	-8.29			14-Feb-2007	12:00:00	-2.91			12-Mar-2007	12:00:00	-10.02		
20-Jan-2007	00:00:00	-9.29			15-Feb-2007	00:00:00	-5.31			13-Mar-2007	00:00:00	-10.08		
20-Jan-2007	12:00:00	-9.8			15-Feb-2007	12:00:00	-6.49			13-Mar-2007	12:00:00	-9.89		
21-Jan-2007	00:00:00	-10.1			16-Feb-2007	00:00:00	-7.04			14-Mar-2007	00:00:00	-9.97		
21-Jan-2007	12:00:00	-9.94			16-Feb-2007	12:00:00	-7.51			14-Mar-2007	12:00:00	-9.86		
22-Jan-2007	00:00:00	-4.49			17-Feb-2007	00:00:00	-7.95			15-Mar-2007	00:00:00	-10.02		
22-Jan-2007	12:00:00	-4.05			17-Feb-2007	12:00:00	-8.25			15-Mar-2007	12:00:00	-10.03		
23-Jan-2007	00:00:00	-6.67			18-Feb-2007	00:00:00	-8.39			16-Mar-2007	00:00:00	-8.52		
23-Jan-2007	12:00:00	-7.73			18-Feb-2007	12:00:00	-8.84			16-Mar-2007	12:00:00	-1.58		
24-Jan-2007	00:00:00	-8.4			19-Feb-2007	00:00:00	-9.35			17-Mar-2007	00:00:00	-4.34		
24-Jan-2007	12:00:00	-8.96			19-Feb-2007	12:00:00	-9.67			17-Mar-2007	12:00:00	-5.91		
25-Jan-2007	00:00:00	-9.26			20-Feb-2007	00:00:00	-9.06			18-Mar-2007	00:00:00	-6.83		
25-Jan-2007	12:00:00	-9.41			20-Feb-2007	12:00:00	-9.29			18-Mar-2007	12:00:00	-7.19		
26-Jan-2007	00:00:00	-9.8			21-Feb-2007	00:00:00	-9.32			19-Mar-2007	00:00:00	-7.62		
26-Jan-2007	12:00:00	-9.96			21-Feb-2007	12:00:00	-9.38			19-Mar-2007	12:00:00	-7.98		

HAW BH Ref

Data Acquired : September 11, 2007

Serial Number: N43D7425

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	-8.27			16-Apr-2007	00:00:00	1.47	10	22	13-May-2007	00:00:00	-12.9		49
20-Mar-2007	12:00:00	-8.64			16-Apr-2007	12:00:00	-3.05	11	22	13-May-2007	12:00:00	-12.53		49
21-Mar-2007	00:00:00	-8.58			17-Apr-2007	00:00:00	-5.39	11	23	14-May-2007	00:00:00	-13.86		50
21-Mar-2007	12:00:00	-8.8			17-Apr-2007	12:00:00	-6.71	12	23	14-May-2007	12:00:00	-13.82		50
22-Mar-2007	00:00:00	-9.08			18-Apr-2007	00:00:00	-7.56	12	24	15-May-2007	00:00:00	-14.11		51
22-Mar-2007	12:00:00	-9.21			18-Apr-2007	12:00:00	-8.02	13	24	15-May-2007	12:00:00	-14.19		51
23-Mar-2007	00:00:00	-9.38			19-Apr-2007	00:00:00	-8.69	13	25	16-May-2007	00:00:00	-14.39		52
23-Mar-2007	12:00:00	-9.55			19-Apr-2007	12:00:00	-8.98	14	25	16-May-2007	12:00:00	-14.32		52
24-Mar-2007	00:00:00	-9.78			20-Apr-2007	00:00:00	-9.07	14	26	17-May-2007	00:00:00	-7.07	1	53
24-Mar-2007	12:00:00	-9.92			20-Apr-2007	12:00:00	-9.46	15	26	17-May-2007	12:00:00	-8.65	1	53
25-Mar-2007	00:00:00	-10.07			21-Apr-2007	00:00:00	-9.91	15	27	18-May-2007	00:00:00	-10.24	2	54
25-Mar-2007	12:00:00	-10.22			21-Apr-2007	12:00:00	-10.31	16	27	18-May-2007	12:00:00	-10.54	2	54
26-Mar-2007	00:00:00	-10.46	1	1	22-Apr-2007	00:00:00	-10.66	16	28	19-May-2007	00:00:00	-11.68	3	55
26-Mar-2007	12:00:00	-10.45	1	1	22-Apr-2007	12:00:00	-11.05	17	28	19-May-2007	12:00:00	-12.15		55
27-Mar-2007	00:00:00	-10.41	2	2	23-Apr-2007	00:00:00	-11.29	17	29	20-May-2007	00:00:00	-12.8		56
27-Mar-2007	12:00:00	-10.4	2	2	23-Apr-2007	12:00:00	-11.71	18	29	20-May-2007	12:00:00	-13.15		56
28-Mar-2007	00:00:00	-10.55	3	3	24-Apr-2007	00:00:00	-11.7	18	30	21-May-2007	00:00:00	-13.8		57
28-Mar-2007	12:00:00	-10.51	3	3	24-Apr-2007	12:00:00	-11.8	19	30	21-May-2007	12:00:00	-14.07		57
29-Mar-2007	00:00:00	-6.27	4	4	25-Apr-2007	00:00:00	-11.97	19	31	22-May-2007	00:00:00	-14.59		58
29-Mar-2007	12:00:00	-5.52	4	4	25-Apr-2007	12:00:00	-12.07		31	22-May-2007	12:00:00	-13.99		58
30-Mar-2007	00:00:00	-7.37	5	5	26-Apr-2007	00:00:00	-12.38		32	23-May-2007	00:00:00	-14.56		59
30-Mar-2007	12:00:00	-8.34	5	5	26-Apr-2007	12:00:00	-12.42		32	23-May-2007	12:00:00	-13.64		59
31-Mar-2007	00:00:00	-9.09	6	6	27-Apr-2007	00:00:00	-12.36		33	24-May-2007	00:00:00	-14.41		60
31-Mar-2007	12:00:00	-9.51	6	6	27-Apr-2007	12:00:00	-7.94	1	33	24-May-2007	12:00:00	-14.28		60
01-Apr-2007	00:00:00	-9.94	7	7	28-Apr-2007	00:00:00	-9.83	1	34	25-May-2007	00:00:00	-14.79		61
01-Apr-2007	12:00:00	-9.82	7	7	28-Apr-2007	12:00:00	-10.85	2	34	25-May-2007	12:00:00	-14.44		61
02-Apr-2007	00:00:00	-10.02	8	8	29-Apr-2007	00:00:00	-11.69	2	35	26-May-2007	00:00:00	-15.03		62
02-Apr-2007	12:00:00	-10.28	8	8	29-Apr-2007	12:00:00	-12.17		35	26-May-2007	12:00:00	-14.81		62
03-Apr-2007	00:00:00	-10.91	9	9	30-Apr-2007	00:00:00	-12.74		36	27-May-2007	00:00:00	-15.25		63
03-Apr-2007	12:00:00	-11.06	9	9	30-Apr-2007	12:00:00	-12.95		36	27-May-2007	12:00:00	-15.16		63
04-Apr-2007	00:00:00	-11.13	10	10	01-May-2007	00:00:00	-13.16		37	28-May-2007	00:00:00	-15.83		64
04-Apr-2007	12:00:00	-11.51	10	10	01-May-2007	12:00:00	-13.38		37	28-May-2007	12:00:00	-15.69		64
05-Apr-2007	00:00:00	-12.04		11	02-May-2007	00:00:00	-13.58		38	29-May-2007	00:00:00	-16.2		65
05-Apr-2007	12:00:00	-12.15		11	02-May-2007	12:00:00	-13.68		38	29-May-2007	12:00:00	-15.83		65
06-Apr-2007	00:00:00	-12.14		12	03-May-2007	00:00:00	-13.94		39	30-May-2007	00:00:00	-16.27		66
06-Apr-2007	12:00:00	-11.55	1	12	03-May-2007	12:00:00	-12.7		39	30-May-2007	12:00:00	-15.35		66
07-Apr-2007	00:00:00	-10.99	1	13	04-May-2007	00:00:00	-11.98	1	40	31-May-2007	00:00:00	-16.29		67
07-Apr-2007	12:00:00	-10.57	2	13	04-May-2007	12:00:00	-11.5	1	40	31-May-2007	12:00:00	-15.65		67
08-Apr-2007	00:00:00	-11.34	2	14	05-May-2007	00:00:00	-10.78	2	41	01-Jun-2007	00:00:00	-16.54		68
08-Apr-2007	12:00:00	-11.31	3	14	05-May-2007	12:00:00	-10.37	2	41	01-Jun-2007	12:00:00	-15.9		68
09-Apr-2007	00:00:00	-11.47	3	15	06-May-2007	00:00:00	-10.08	3	42	02-Jun-2007	00:00:00	-16.56		69
09-Apr-2007	12:00:00	-11.26	4	15	06-May-2007	12:00:00	-11.32	3	42	02-Jun-2007	12:00:00	-15.81		69
10-Apr-2007	00:00:00	-11.39	4	16	07-May-2007	00:00:00	-12.73		43	03-Jun-2007	00:00:00	-15.99		70
10-Apr-2007	12:00:00	-11.36	5	16	07-May-2007	12:00:00	-12.67		43	03-Jun-2007	12:00:00	-2.68	1	70
11-Apr-2007	00:00:00	-11.49	5	17	08-May-2007	00:00:00	-13.1		44	04-Jun-2007	00:00:00	-4.93	1	71
11-Apr-2007	12:00:00	-5.75	6	17	08-May-2007	12:00:00	-13.24		44	04-Jun-2007	12:00:00	-7.09	2	71
12-Apr-2007	00:00:00	-2.6	6	18	09-May-2007	00:00:00	-13.08		45	05-Jun-2007	00:00:00	-7.54	2	72
12-Apr-2007	12:00:00	-3.87	7	18	09-May-2007	12:00:00	-11.85	1	45	05-Jun-2007	12:00:00	-8.95	3	72
13-Apr-2007	00:00:00	-6.17	7	19	10-May-2007	00:00:00	-12.33		46	06-Jun-2007	00:00:00	-10.46	3	73
13-Apr-2007	12:00:00	-7.24	8	19	10-May-2007	12:00:00	-12.03		46	06-Jun-2007	12:00:00	-11.24	4	73
14-Apr-2007	00:00:00	-8.12	8	20	11-May-2007	00:00:00	-13.15		47	07-Jun-2007	00:00:00	-12.28		74
14-Apr-2007	12:00:00	-8.59	9	20	11-May-2007	12:00:00	-12.82		47	07-Jun-2007	12:00:00	-12.64		74
15-Apr-2007	00:00:00	-1.18	9	21	12-May-2007	00:00:00	-13.48		48	08-Jun-2007	00:00:00	-13.33		75
15-Apr-2007	12:00:00	-1.26	10	21	12-May-2007	12:00:00	-12.89		48	08-Jun-2007	12:00:00	-13.64		75

HAW BH Ref

Data Acquired : September 11, 2007

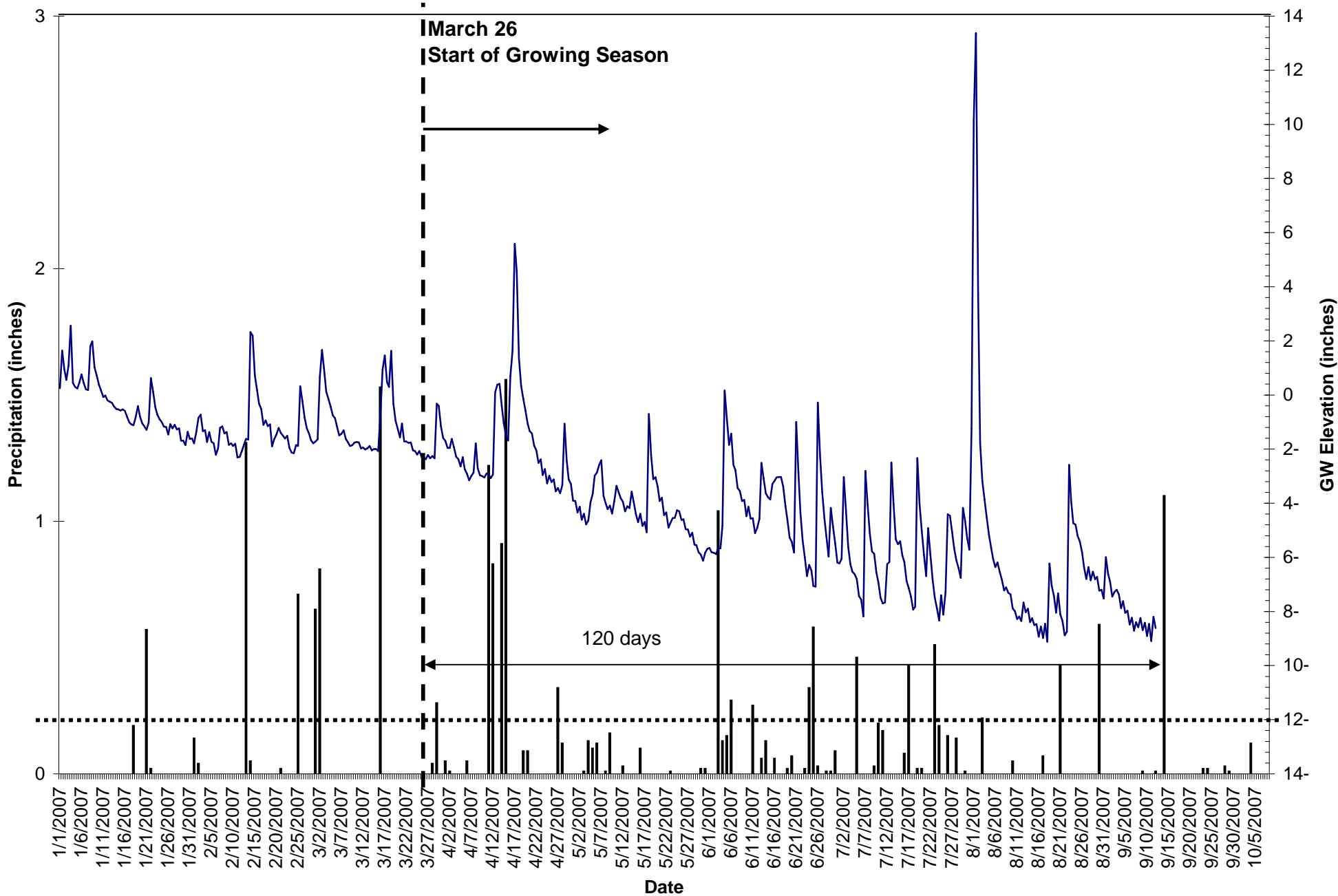
Serial Number: N43D7425

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-13.96		76	06-Jul-2007	00:00:00	-15.44		103	02-Aug-2007	00:00:00	-7.85	3	130
09-Jun-2007	12:00:00	-14.3		76	06-Jul-2007	12:00:00	-13.03		103	02-Aug-2007	12:00:00	-8.91	4	130
10-Jun-2007	00:00:00	-14.93		77	07-Jul-2007	00:00:00	-14.41		104	03-Aug-2007	00:00:00	-10.41	4	131
10-Jun-2007	12:00:00	-15.18		77	07-Jul-2007	12:00:00	-14.71		104	03-Aug-2007	12:00:00	-11.24	5	131
11-Jun-2007	00:00:00	-15.57		78	08-Jul-2007	00:00:00	-15.75		105	04-Aug-2007	00:00:00	-12.6		132
11-Jun-2007	12:00:00	-14.65		78	08-Jul-2007	12:00:00	-15.81		105	04-Aug-2007	12:00:00	-13.23		132
12-Jun-2007	00:00:00	-11.89	1	79	09-Jul-2007	00:00:00	-17.09		106	05-Aug-2007	00:00:00	-14.41		133
12-Jun-2007	12:00:00	-11.93	1	79	09-Jul-2007	12:00:00	-17.05		106	05-Aug-2007	12:00:00	-14.46		133
13-Jun-2007	00:00:00	-13.32		80	10-Jul-2007	00:00:00	-17.62		107	06-Aug-2007	00:00:00	-15.54		134
13-Jun-2007	12:00:00	-13.06		80	10-Jul-2007	12:00:00	-17.67		107	06-Aug-2007	12:00:00	-15.62		134
14-Jun-2007	00:00:00	-13.68		81	11-Jul-2007	00:00:00	-17.67		108	07-Aug-2007	00:00:00	-16.9		135
14-Jun-2007	12:00:00	-12.67		81	11-Jul-2007	12:00:00	-16.33		108	07-Aug-2007	12:00:00	-16.6		135
15-Jun-2007	00:00:00	-12.23		82	12-Jul-2007	00:00:00	-11.47		109	08-Aug-2007	00:00:00	-17.09		136
15-Jun-2007	12:00:00	-11.89	1	82	12-Jul-2007	12:00:00	-12.74		109	08-Aug-2007	12:00:00	-17.04		136
16-Jun-2007	00:00:00	-11.96	1	83	13-Jul-2007	00:00:00	-14.63		110	09-Aug-2007	00:00:00	-17.25		137
16-Jun-2007	12:00:00	-11.7	2	83	13-Jul-2007	12:00:00	-14.86		110	09-Aug-2007	12:00:00	-17.13		137
17-Jun-2007	00:00:00	-12.69		84	14-Jul-2007	00:00:00	-15.31		111	10-Aug-2007	00:00:00	-17.08		138
17-Jun-2007	12:00:00	-12.94		84	14-Jul-2007	12:00:00	-15.52		111	10-Aug-2007	12:00:00	-17.03		138
18-Jun-2007	00:00:00	-14.47		85	15-Jul-2007	00:00:00	-16.47		112	11-Aug-2007	00:00:00	-17.04		139
18-Jun-2007	12:00:00	-14.71		85	15-Jul-2007	12:00:00	-16.66		112	11-Aug-2007	12:00:00	-17.03		139
19-Jun-2007	00:00:00	-15.75		86	16-Jul-2007	00:00:00	-17.58		113	12-Aug-2007	00:00:00	-17.03		140
19-Jun-2007	12:00:00	-15.75		86	16-Jul-2007	12:00:00	-17.46		113	12-Aug-2007	12:00:00	-17.03		140
20-Jun-2007	00:00:00	-11.67	1	87	17-Jul-2007	00:00:00	-17.19		114	13-Aug-2007	00:00:00	-17.03		141
20-Jun-2007	12:00:00	-11.45	1	87	17-Jul-2007	12:00:00	-17.06		114	13-Aug-2007	12:00:00	-17.04		141
21-Jun-2007	00:00:00	-13.38		88	18-Jul-2007	00:00:00	-13.88		115	14-Aug-2007	00:00:00	-17.02		142
21-Jun-2007	12:00:00	-14.06		88	18-Jul-2007	12:00:00	-12.89		115	14-Aug-2007	12:00:00	-17.06		142
22-Jun-2007	00:00:00	-15.4		89	19-Jul-2007	00:00:00	-14.14		116	15-Aug-2007	00:00:00	-17.03		143
22-Jun-2007	12:00:00	-15.67		89	19-Jul-2007	12:00:00	-14.67		116	15-Aug-2007	12:00:00	-17.04		143
23-Jun-2007	00:00:00	-16.17		90	20-Jul-2007	00:00:00	-16.44		117	16-Aug-2007	00:00:00	-17.03		144
23-Jun-2007	12:00:00	-15.82		90	20-Jul-2007	12:00:00	-15.59		117	16-Aug-2007	12:00:00	-17.04		144
24-Jun-2007	00:00:00	-17.16		91	21-Jul-2007	00:00:00	-16		118	17-Aug-2007	00:00:00	-17.03		145
24-Jun-2007	12:00:00	-16.58		91	21-Jul-2007	12:00:00	-16.49		118	17-Aug-2007	12:00:00	-17.05		145
25-Jun-2007	00:00:00	-7.85	1	92	22-Jul-2007	00:00:00	-17.21		119	18-Aug-2007	00:00:00	-17.03		146
25-Jun-2007	12:00:00	-8.97	1	92	22-Jul-2007	12:00:00	-17.11		119	18-Aug-2007	12:00:00	-17.03		146
26-Jun-2007	00:00:00	-11.06	2	93	23-Jul-2007	00:00:00	-17.07		120	19-Aug-2007	00:00:00	-17.03		147
26-Jun-2007	12:00:00	-12.1		93	23-Jul-2007	12:00:00	-17.05		120	19-Aug-2007	12:00:00	-17.05		147
27-Jun-2007	00:00:00	-13.52		94	24-Jul-2007	00:00:00	-17.05		121	20-Aug-2007	00:00:00	-17.03		148
27-Jun-2007	12:00:00	-13.95		94	24-Jul-2007	12:00:00	-17.05		121	20-Aug-2007	12:00:00	-17.03		148
28-Jun-2007	00:00:00	-12.65		95	25-Jul-2007	00:00:00	-17.05		122	21-Aug-2007	00:00:00	-17.03		149
28-Jun-2007	12:00:00	-13.18		95	25-Jul-2007	12:00:00	-14.02		122	21-Aug-2007	12:00:00	-17.05		149
29-Jun-2007	00:00:00	-14.81		96	26-Jul-2007	00:00:00	-14.12		123	22-Aug-2007	00:00:00	-14.45		150
29-Jun-2007	12:00:00	-15.11		96	26-Jul-2007	12:00:00	-14.33		123	22-Aug-2007	12:00:00	-13.67		150
30-Jun-2007	00:00:00	-16.05		97	27-Jul-2007	00:00:00	-15.37		124	23-Aug-2007	00:00:00	-14.04		151
30-Jun-2007	12:00:00	-15.81		97	27-Jul-2007	12:00:00	-15.31		124	23-Aug-2007	12:00:00	-13.77		151
01-Jul-2007	00:00:00	-12.17		98	28-Jul-2007	00:00:00	-16.94		125	24-Aug-2007	00:00:00	-14.32		152
01-Jul-2007	12:00:00	-12.75		98	28-Jul-2007	12:00:00	-15.95		125	24-Aug-2007	12:00:00	-14.14		152
02-Jul-2007	00:00:00	-14.84		99	29-Jul-2007	00:00:00	-13.96		126	25-Aug-2007	00:00:00	-15.24		153
02-Jul-2007	12:00:00	-15.19		99	29-Jul-2007	12:00:00	-14.09		126	25-Aug-2007	12:00:00	-15.32		153
03-Jul-2007	00:00:00	-16.35		100	30-Jul-2007	00:00:00	-15.23		127	26-Aug-2007	00:00:00	-16.84		154
03-Jul-2007	12:00:00	-16.21		100	30-Jul-2007	12:00:00	-8.08	1	127	26-Aug-2007	12:00:00	-16.47		154
04-Jul-2007	00:00:00	-16.96		101	31-Jul-2007	00:00:00	1.04	1	128	27-Aug-2007	00:00:00	-16.97		155
04-Jul-2007	12:00:00	-16.94		101	31-Jul-2007	12:00:00	3.85	2	128	27-Aug-2007	12:00:00	-16.67		155
05-Jul-2007	00:00:00	-17.51		102	01-Aug-2007	00:00:00	-3.39	2	129	28-Aug-2007	00:00:00	-17.03		156
05-Jul-2007	12:00:00	-17.47		102	01-Aug-2007	12:00:00	-6.06	3	129	28-Aug-2007	12:00:00	-16.93		156

Haw SF Reference



■ Precipitation — GW Elevation

HAW SF Ref

Data Acquired : September 11, 2007

Serial Number: N43D744E

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD	Date	Time	Level (in)	CD	JD
01-Jan-2007	00:00:00	0.25			27-Jan-2007	00:00:00	-1.23			22-Feb-2007	00:00:00	-1.61		
01-Jan-2007	12:00:00	1.64			27-Jan-2007	12:00:00	-1.1			22-Feb-2007	12:00:00	-1.51		
02-Jan-2007	00:00:00	0.95			28-Jan-2007	00:00:00	-1.27			23-Feb-2007	00:00:00	-1.96		
02-Jan-2007	12:00:00	0.56			28-Jan-2007	12:00:00	-1.23			23-Feb-2007	12:00:00	-2.13		
03-Jan-2007	00:00:00	1.08			29-Jan-2007	00:00:00	-1.69			24-Feb-2007	00:00:00	-2.15		
03-Jan-2007	12:00:00	2.56			29-Jan-2007	12:00:00	-1.69			24-Feb-2007	12:00:00	-1.85		
04-Jan-2007	00:00:00	0.44			30-Jan-2007	00:00:00	-1.85			25-Feb-2007	00:00:00	-1.88		
04-Jan-2007	12:00:00	0.3			30-Jan-2007	12:00:00	-1.36			25-Feb-2007	12:00:00	0.32		
05-Jan-2007	00:00:00	0.24			31-Jan-2007	00:00:00	-1.62			26-Feb-2007	00:00:00	-0.23		
05-Jan-2007	12:00:00	0.45			31-Jan-2007	12:00:00	-1.61			26-Feb-2007	12:00:00	-0.84		
06-Jan-2007	00:00:00	0.76			01-Feb-2007	00:00:00	-1.79			27-Feb-2007	00:00:00	-1.23		
06-Jan-2007	12:00:00	0.44			01-Feb-2007	12:00:00	-1.37			27-Feb-2007	12:00:00	-1.43		
07-Jan-2007	00:00:00	0.21			02-Feb-2007	00:00:00	-0.84			28-Feb-2007	00:00:00	-1.67		
07-Jan-2007	12:00:00	0.18			02-Feb-2007	12:00:00	-0.73			28-Feb-2007	12:00:00	-1.79		
08-Jan-2007	00:00:00	1.8			03-Feb-2007	00:00:00	-1.34			01-Mar-2007	00:00:00	-1.72		
08-Jan-2007	12:00:00	1.98			03-Feb-2007	12:00:00	-1.3			01-Mar-2007	12:00:00	-1.64		
09-Jan-2007	00:00:00	1.02			04-Feb-2007	00:00:00	-1.74			02-Mar-2007	00:00:00	0.66		
09-Jan-2007	12:00:00	0.72			04-Feb-2007	12:00:00	-1.37			02-Mar-2007	12:00:00	1.66		
10-Jan-2007	00:00:00	0.39			05-Feb-2007	00:00:00	-1.73			03-Mar-2007	00:00:00	0.98		
10-Jan-2007	12:00:00	0.16			05-Feb-2007	12:00:00	-1.79			03-Mar-2007	12:00:00	0.13		
11-Jan-2007	00:00:00	-0.08			06-Feb-2007	00:00:00	-2.21			04-Mar-2007	00:00:00	-0.14		
11-Jan-2007	12:00:00	-0.02			06-Feb-2007	12:00:00	-1.97			04-Mar-2007	12:00:00	-0.43		
12-Jan-2007	00:00:00	-0.2			07-Feb-2007	00:00:00	-1.22			05-Mar-2007	00:00:00	-0.75		
12-Jan-2007	12:00:00	-0.25			07-Feb-2007	12:00:00	-1.16			05-Mar-2007	12:00:00	-0.86		
13-Jan-2007	00:00:00	-0.29			08-Feb-2007	00:00:00	-1.42			06-Mar-2007	00:00:00	-1.17		
13-Jan-2007	12:00:00	-0.43			08-Feb-2007	12:00:00	-1.37			06-Mar-2007	12:00:00	-1.49		
14-Jan-2007	00:00:00	-0.52			09-Feb-2007	00:00:00	-1.84			07-Mar-2007	00:00:00	-1.44		
14-Jan-2007	12:00:00	-0.53			09-Feb-2007	12:00:00	-1.79			07-Mar-2007	12:00:00	-1.31		
15-Jan-2007	00:00:00	-0.57			10-Feb-2007	00:00:00	-1.88			08-Mar-2007	00:00:00	-1.62		
15-Jan-2007	12:00:00	-0.53			10-Feb-2007	12:00:00	-1.8			08-Mar-2007	12:00:00	-1.75		
16-Jan-2007	00:00:00	-0.59			11-Feb-2007	00:00:00	-2.31			09-Mar-2007	00:00:00	-1.88		
16-Jan-2007	12:00:00	-0.81			11-Feb-2007	12:00:00	-2.29			09-Mar-2007	12:00:00	-1.86		
17-Jan-2007	00:00:00	-1.01			12-Feb-2007	00:00:00	-2.07			10-Mar-2007	00:00:00	-1.76		
17-Jan-2007	12:00:00	-1.09			12-Feb-2007	12:00:00	-1.83			10-Mar-2007	12:00:00	-1.74		
18-Jan-2007	00:00:00	-1.12			13-Feb-2007	00:00:00	-1.62			11-Mar-2007	00:00:00	-1.75		
18-Jan-2007	12:00:00	-0.82			13-Feb-2007	12:00:00	-1.65			11-Mar-2007	12:00:00	-1.97		
19-Jan-2007	00:00:00	-0.41			14-Feb-2007	00:00:00	2.32			12-Mar-2007	00:00:00	-1.94		
19-Jan-2007	12:00:00	-0.81			14-Feb-2007	12:00:00	2.19			12-Mar-2007	12:00:00	-2.01		
20-Jan-2007	00:00:00	-1.05			15-Feb-2007	00:00:00	0.72			13-Mar-2007	00:00:00	-1.97		
20-Jan-2007	12:00:00	-1.15			15-Feb-2007	12:00:00	0.18			13-Mar-2007	12:00:00	-1.88		
21-Jan-2007	00:00:00	-1.29			16-Feb-2007	00:00:00	-0.32			14-Mar-2007	00:00:00	-2.05		
21-Jan-2007	12:00:00	-1.02			16-Feb-2007	12:00:00	-0.52			14-Mar-2007	12:00:00	-2		
22-Jan-2007	00:00:00	0.62			17-Feb-2007	00:00:00	-1.1			15-Mar-2007	00:00:00	-2		
22-Jan-2007	12:00:00	0.13			17-Feb-2007	12:00:00	-0.94			15-Mar-2007	12:00:00	-2.07		
23-Jan-2007	00:00:00	-0.45			18-Feb-2007	00:00:00	-1.15			16-Mar-2007	00:00:00	-0.72		
23-Jan-2007	12:00:00	-0.72			18-Feb-2007	12:00:00	-1.09			16-Mar-2007	12:00:00	0.94		
24-Jan-2007	00:00:00	-0.89			19-Feb-2007	00:00:00	-1.9			17-Mar-2007	00:00:00	1.46		
24-Jan-2007	12:00:00	-1			19-Feb-2007	12:00:00	-1.63			17-Mar-2007	12:00:00	0.48		
25-Jan-2007	00:00:00	-1.17			20-Feb-2007	00:00:00	-1.46			18-Mar-2007	00:00:00	0.3		
25-Jan-2007	12:00:00	-1.18			20-Feb-2007	12:00:00	-1.22			18-Mar-2007	12:00:00	1.63		
26-Jan-2007	00:00:00	-1.46			21-Feb-2007	00:00:00	-1.4			19-Mar-2007	00:00:00	-0.32		
26-Jan-2007	12:00:00	-1.08			21-Feb-2007	12:00:00	-1.51			19-Mar-2007	12:00:00	-0.96		

HAW SF Ref

Data Acquired : September 11, 2007

Serial Number: N43D744E

CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

20-Mar-2007	00:00:00	-1.26			16-Apr-2007	00:00:00	5.59	22	22	13-May-2007	00:00:00	-3.57	49	49
20-Mar-2007	12:00:00	-1.57			16-Apr-2007	12:00:00	4.58	22	22	13-May-2007	12:00:00	-3.95	49	49
21-Mar-2007	00:00:00	-1.05			17-Apr-2007	00:00:00	1.37	23	23	14-May-2007	00:00:00	-4.4	50	50
21-Mar-2007	12:00:00	-1.71			17-Apr-2007	12:00:00	0.34	23	23	14-May-2007	12:00:00	-4.7	50	50
22-Mar-2007	00:00:00	-1.72			18-Apr-2007	00:00:00	-0.15	24	24	15-May-2007	00:00:00	-4.39	51	51
22-Mar-2007	12:00:00	-1.77			18-Apr-2007	12:00:00	-0.59	24	24	15-May-2007	12:00:00	-4.84	51	51
23-Mar-2007	00:00:00	-1.75			19-Apr-2007	00:00:00	-1.07	25	25	16-May-2007	00:00:00	-4.69	52	52
23-Mar-2007	12:00:00	-2.05			19-Apr-2007	12:00:00	-1.34	25	25	16-May-2007	12:00:00	-5.07	52	52
24-Mar-2007	00:00:00	-2.07			20-Apr-2007	00:00:00	-1.42	26	26	17-May-2007	00:00:00	-0.7	53	53
24-Mar-2007	12:00:00	-2.2			20-Apr-2007	12:00:00	-1.87	26	26	17-May-2007	12:00:00	-2.21	53	53
25-Mar-2007	00:00:00	-2.07			21-Apr-2007	00:00:00	-2.05	27	27	18-May-2007	00:00:00	-3.11	54	54
25-Mar-2007	12:00:00	-2.29			21-Apr-2007	12:00:00	-2.51	27	27	18-May-2007	12:00:00	-3.04	54	54
26-Mar-2007	00:00:00	-2.32	1	1	22-Apr-2007	00:00:00	-2.38	28	28	19-May-2007	00:00:00	-3.39	55	55
26-Mar-2007	12:00:00	-2.37	1	1	22-Apr-2007	12:00:00	-2.96	28	28	19-May-2007	12:00:00	-3.92	55	55
27-Mar-2007	00:00:00	-2.22	2	2	23-Apr-2007	00:00:00	-2.74	29	29	20-May-2007	00:00:00	-3.8	56	56
27-Mar-2007	12:00:00	-2.34	2	2	23-Apr-2007	12:00:00	-3.27	29	29	20-May-2007	12:00:00	-4.44	56	56
28-Mar-2007	00:00:00	-2.26	3	3	24-Apr-2007	00:00:00	-2.98	30	30	21-May-2007	00:00:00	-4.34	57	57
28-Mar-2007	12:00:00	-2.34	3	3	24-Apr-2007	12:00:00	-3.22	30	30	21-May-2007	12:00:00	-4.9	57	57
29-Mar-2007	00:00:00	-0.32	4	4	25-Apr-2007	00:00:00	-3.12	31	31	22-May-2007	00:00:00	-4.72	58	58
29-Mar-2007	12:00:00	-0.4	4	4	25-Apr-2007	12:00:00	-3.56	31	31	22-May-2007	12:00:00	-4.55	58	58
30-Mar-2007	00:00:00	-1.17	5	5	26-Apr-2007	00:00:00	-3.44	32	32	23-May-2007	00:00:00	-4.54	59	59
30-Mar-2007	12:00:00	-1.59	5	5	26-Apr-2007	12:00:00	-3.63	32	32	23-May-2007	12:00:00	-4.26	59	59
31-Mar-2007	00:00:00	-1.7	6	6	27-Apr-2007	00:00:00	-3.33	33	33	24-May-2007	00:00:00	-4.3	60	60
31-Mar-2007	12:00:00	-1.96	6	6	27-Apr-2007	12:00:00	-1.06	33	33	24-May-2007	12:00:00	-4.62	60	60
01-Apr-2007	00:00:00	-1.96	7	7	28-Apr-2007	00:00:00	-2.44	34	34	25-May-2007	00:00:00	-4.59	61	61
01-Apr-2007	12:00:00	-1.62	7	7	28-Apr-2007	12:00:00	-3.12	34	34	25-May-2007	12:00:00	-4.96	61	61
02-Apr-2007	00:00:00	-1.93	8	8	29-Apr-2007	00:00:00	-3.29	35	35	26-May-2007	00:00:00	-4.97	62	62
02-Apr-2007	12:00:00	-2.28	8	8	29-Apr-2007	12:00:00	-3.91	35	35	26-May-2007	12:00:00	-5.24	62	62
03-Apr-2007	00:00:00	-2.37	9	9	30-Apr-2007	00:00:00	-3.92	36	36	27-May-2007	00:00:00	-5.09	63	63
03-Apr-2007	12:00:00	-2.64	9	9	30-Apr-2007	12:00:00	-4.34	36	36	27-May-2007	12:00:00	-5.53	63	63
04-Apr-2007	00:00:00	-2.3	10	10	01-May-2007	00:00:00	-4.13	37	37	28-May-2007	00:00:00	-5.55	64	64
04-Apr-2007	12:00:00	-2.75	10	10	01-May-2007	12:00:00	-4.61	37	37	28-May-2007	12:00:00	-5.81	64	64
05-Apr-2007	00:00:00	-2.91	11	11	02-May-2007	00:00:00	-4.39	38	38	29-May-2007	00:00:00	-5.9	65	65
05-Apr-2007	12:00:00	-3.15	11	11	02-May-2007	12:00:00	-4.78	38	38	29-May-2007	12:00:00	-6.12	65	65
06-Apr-2007	00:00:00	-2.99	12	12	03-May-2007	00:00:00	-4.64	39	39	30-May-2007	00:00:00	-5.82	66	66
06-Apr-2007	12:00:00	-2.87	12	12	03-May-2007	12:00:00	-3.97	39	39	30-May-2007	12:00:00	-5.68	66	66
07-Apr-2007	00:00:00	-1.79	13	13	04-May-2007	00:00:00	-3.65	40	40	31-May-2007	00:00:00	-5.65	67	67
07-Apr-2007	12:00:00	-2.71	13	13	04-May-2007	12:00:00	-2.98	40	40	31-May-2007	12:00:00	-5.81	67	67
08-Apr-2007	00:00:00	-2.97	14	14	05-May-2007	00:00:00	-2.87	41	41	01-Jun-2007	00:00:00	-5.83	68	68
08-Apr-2007	12:00:00	-3	14	14	05-May-2007	12:00:00	-2.59	41	41	01-Jun-2007	12:00:00	-5.88	68	68
09-Apr-2007	00:00:00	-3.05	15	15	06-May-2007	00:00:00	-2.41	42	42	02-Jun-2007	00:00:00	-5.65	69	69
09-Apr-2007	12:00:00	-2.9	15	15	06-May-2007	12:00:00	-3.72	42	42	02-Jun-2007	12:00:00	-5.67	69	69
10-Apr-2007	00:00:00	-2.94	16	16	07-May-2007	00:00:00	-4.01	43	43	03-Jun-2007	00:00:00	-4.83	70	70
10-Apr-2007	12:00:00	-3.07	16	16	07-May-2007	12:00:00	-4.22	43	43	03-Jun-2007	12:00:00	0.17	70	70
11-Apr-2007	00:00:00	-2.94	17	17	08-May-2007	00:00:00	-4.09	44	44	04-Jun-2007	00:00:00	-0.87	71	71
11-Apr-2007	12:00:00	0.09	17	17	08-May-2007	12:00:00	-4.38	44	44	04-Jun-2007	12:00:00	-1.84	71	71
12-Apr-2007	00:00:00	0.38	18	18	09-May-2007	00:00:00	-3.93	45	45	05-Jun-2007	00:00:00	-1.43	72	72
12-Apr-2007	12:00:00	0.41	18	18	09-May-2007	12:00:00	-3.36	45	45	05-Jun-2007	12:00:00	-2.58	72	72
13-Apr-2007	00:00:00	-0.4	19	19	10-May-2007	00:00:00	-3.6	46	46	06-Jun-2007	00:00:00	-2.78	73	73
13-Apr-2007	12:00:00	-1.04	19	19	10-May-2007	12:00:00	-3.81	46	46	06-Jun-2007	12:00:00	-3.44	73	73
14-Apr-2007	00:00:00	-1.48	20	20	11-May-2007	00:00:00	-3.94	47	47	07-Jun-2007	00:00:00	-3.54	74	74
14-Apr-2007	12:00:00	-1.68	20	20	11-May-2007	12:00:00	-4.3	47	47	07-Jun-2007	12:00:00	-3.92	74	74
15-Apr-2007	00:00:00	0.68	21	21	12-May-2007	00:00:00	-4.11	48	48	08-Jun-2007	00:00:00	-3.88	75	75
15-Apr-2007	12:00:00	1.64	21	21	12-May-2007	12:00:00	-4.18	48	48	08-Jun-2007	12:00:00	-4.48	75	75

HAW SF Ref

Data Acquired : September 11, 2007

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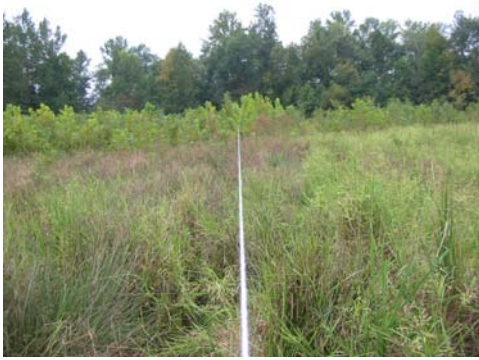
CD: Consecutive Days Saturation (within 12 inches of the soil surface) During the Growing Season

JD: Julian Days During Growing Season

09-Jun-2007	00:00:00	-4.13	76	76	06-Jul-2007	00:00:00	-2.8	103	103	02-Aug-2007	00:00:00	-3.18	130	130
09-Jun-2007	12:00:00	-4.57	76	76	06-Jul-2007	12:00:00	-4.04	103	103	02-Aug-2007	12:00:00	-3.86	130	130
10-Jun-2007	00:00:00	-4.55	77	77	07-Jul-2007	00:00:00	-5.11	104	104	03-Aug-2007	00:00:00	-4.53	131	131
10-Jun-2007	12:00:00	-5.11	77	77	07-Jul-2007	12:00:00	-5.78	104	104	03-Aug-2007	12:00:00	-5.16	131	131
11-Jun-2007	00:00:00	-4.91	78	78	08-Jul-2007	00:00:00	-5.87	105	105	04-Aug-2007	00:00:00	-5.64	132	132
11-Jun-2007	12:00:00	-4.58	78	78	08-Jul-2007	12:00:00	-6.56	105	105	04-Aug-2007	12:00:00	-6.06	132	132
12-Jun-2007	00:00:00	-2.51	79	79	09-Jul-2007	00:00:00	-6.92	106	106	05-Aug-2007	00:00:00	-6.36	133	133
12-Jun-2007	12:00:00	-3.09	79	79	09-Jul-2007	12:00:00	-7.5	106	106	05-Aug-2007	12:00:00	-6.19	133	133
13-Jun-2007	00:00:00	-3.63	80	80	10-Jul-2007	00:00:00	-7.7	107	107	06-Aug-2007	00:00:00	-6.54	134	134
13-Jun-2007	12:00:00	-3.78	80	80	10-Jul-2007	12:00:00	-7.67	107	107	06-Aug-2007	12:00:00	-6.83	134	134
14-Jun-2007	00:00:00	-3.86	81	81	11-Jul-2007	00:00:00	-6.25	108	108	07-Aug-2007	00:00:00	-7.22	135	135
14-Jun-2007	12:00:00	-3.28	81	81	11-Jul-2007	12:00:00	-6.17	108	108	07-Aug-2007	12:00:00	-7.11	135	135
15-Jun-2007	00:00:00	-3.18	82	82	12-Jul-2007	00:00:00	-2.49	109	109	08-Aug-2007	00:00:00	-7.31	136	136
15-Jun-2007	12:00:00	-3.05	82	82	12-Jul-2007	12:00:00	-4.04	109	109	08-Aug-2007	12:00:00	-7.37	136	136
16-Jun-2007	00:00:00	-3.03	83	83	13-Jul-2007	00:00:00	-5.33	110	110	09-Aug-2007	00:00:00	-7.89	137	137
16-Jun-2007	12:00:00	-3.03	83	83	13-Jul-2007	12:00:00	-5.51	110	110	09-Aug-2007	12:00:00	-7.99	137	137
17-Jun-2007	00:00:00	-3.39	84	84	14-Jul-2007	00:00:00	-5.41	111	111	10-Aug-2007	00:00:00	-8.28	138	138
17-Jun-2007	12:00:00	-4.1	84	84	14-Jul-2007	12:00:00	-5.94	111	111	10-Aug-2007	12:00:00	-8.19	138	138
18-Jun-2007	00:00:00	-4.61	85	85	15-Jul-2007	00:00:00	-6.17	112	112	11-Aug-2007	00:00:00	-8.35	139	139
18-Jun-2007	12:00:00	-5.27	85	85	15-Jul-2007	12:00:00	-6.87	112	112	11-Aug-2007	12:00:00	-7.67	139	139
19-Jun-2007	00:00:00	-5.43	86	86	16-Jul-2007	00:00:00	-7.14	113	113	12-Aug-2007	00:00:00	-8.03	140	140
19-Jun-2007	12:00:00	-5.82	86	86	16-Jul-2007	12:00:00	-7.45	113	113	12-Aug-2007	12:00:00	-7.9	140	140
20-Jun-2007	00:00:00	-1	87	87	17-Jul-2007	00:00:00	-7.93	114	114	13-Aug-2007	00:00:00	-8.39	141	141
20-Jun-2007	12:00:00	-2.88	87	87	17-Jul-2007	12:00:00	-7.82	114	114	13-Aug-2007	12:00:00	-8.25	141	141
21-Jun-2007	00:00:00	-4.33	88	88	18-Jul-2007	00:00:00	-2.33	115	115	14-Aug-2007	00:00:00	-8.5	142	142
21-Jun-2007	12:00:00	-5.37	88	88	18-Jul-2007	12:00:00	-4.04	115	115	14-Aug-2007	12:00:00	-8.47	142	142
22-Jun-2007	00:00:00	-6	89	89	19-Jul-2007	00:00:00	-5.02	116	116	15-Aug-2007	00:00:00	-8.93	143	143
22-Jun-2007	12:00:00	-6.69	89	89	19-Jul-2007	12:00:00	-5.9	116	116	15-Aug-2007	12:00:00	-8.56	143	143
23-Jun-2007	00:00:00	-6.28	90	90	20-Jul-2007	00:00:00	-6.69	117	117	16-Aug-2007	00:00:00	-8.98	144	144
23-Jun-2007	12:00:00	-6.49	90	90	20-Jul-2007	12:00:00	-4.92	117	117	16-Aug-2007	12:00:00	-8.45	144	144
24-Jun-2007	00:00:00	-7.06	91	91	21-Jul-2007	00:00:00	-5.88	118	118	17-Aug-2007	00:00:00	-9.12	145	145
24-Jun-2007	12:00:00	-7.08	91	91	21-Jul-2007	12:00:00	-6.8	118	118	17-Aug-2007	12:00:00	-6.23	145	145
25-Jun-2007	00:00:00	-0.28	92	92	22-Jul-2007	00:00:00	-7.48	119	119	18-Aug-2007	00:00:00	-7.05	146	146
25-Jun-2007	12:00:00	-2.2	92	92	22-Jul-2007	12:00:00	-7.89	119	119	18-Aug-2007	12:00:00	-7.42	146	146
26-Jun-2007	00:00:00	-3.59	93	93	23-Jul-2007	00:00:00	-8.34	120	120	19-Aug-2007	00:00:00	-8.04	147	147
26-Jun-2007	12:00:00	-4.55	93	93	23-Jul-2007	12:00:00	-7.4	120	120	19-Aug-2007	12:00:00	-7.33	147	147
27-Jun-2007	00:00:00	-5.23	94	94	24-Jul-2007	00:00:00	-8.12	121	121	20-Aug-2007	00:00:00	-8.11	148	148
27-Jun-2007	12:00:00	-5.97	94	94	24-Jul-2007	12:00:00	-7.29	121	121	20-Aug-2007	12:00:00	-8.35	148	148
28-Jun-2007	00:00:00	-4.17	95	95	25-Jul-2007	00:00:00	-4.41	122	122	21-Aug-2007	00:00:00	-8.88	149	149
28-Jun-2007	12:00:00	-4.86	95	95	25-Jul-2007	12:00:00	-4.46	122	122	21-Aug-2007	12:00:00	-8.74	149	149
29-Jun-2007	00:00:00	-5.49	96	96	26-Jul-2007	00:00:00	-5.07	123	123	22-Aug-2007	00:00:00	-2.58	150	150
29-Jun-2007	12:00:00	-6.2	96	96	26-Jul-2007	12:00:00	-5.66	123	123	22-Aug-2007	12:00:00	-3.89	150	150
30-Jun-2007	00:00:00	-6.22	97	97	27-Jul-2007	00:00:00	-6.11	124	124	23-Aug-2007	00:00:00	-4.74	151	151
30-Jun-2007	12:00:00	-6.06	97	97	27-Jul-2007	12:00:00	-6.39	124	124	23-Aug-2007	12:00:00	-4.79	151	151
01-Jul-2007	00:00:00	-3.03	98	98	28-Jul-2007	00:00:00	-6.76	125	125	24-Aug-2007	00:00:00	-5.21	152	152
01-Jul-2007	12:00:00	-4.28	98	98	28-Jul-2007	12:00:00	-4.17	125	125	24-Aug-2007	12:00:00	-5.42	152	152
02-Jul-2007	00:00:00	-5.61	99	99	29-Jul-2007	00:00:00	-4.67	126	126	25-Aug-2007	00:00:00	-5.82	153	153
02-Jul-2007	12:00:00	-6.25	99	99	29-Jul-2007	12:00:00	-5.28	126	126	25-Aug-2007	12:00:00	-6.37	153	153
03-Jul-2007	00:00:00	-6.53	100	100	30-Jul-2007	00:00:00	-5.72	127	127	26-Aug-2007	00:00:00	-6.8	154	154
03-Jul-2007	12:00:00	-6.62	100	100	30-Jul-2007	12:00:00	-1.25	127	127	26-Aug-2007	12:00:00	-6.36	154	154
04-Jul-2007	00:00:00	-6.8	101	101	31-Jul-2007	00:00:00	10.14	128	128	27-Aug-2007	00:00:00	-6.85	155	155
04-Jul-2007	12:00:00	-7.43	101	101	31-Jul-2007	12:00:00	13.37	128	128	27-Aug-2007	12:00:00	-6.53	155	155
05-Jul-2007	00:00:00	-7.56	102	102	01-Aug-2007	00:00:00	3.69	129	129	28-Aug-2007	00:00:00	-6.81	156	156
05-Jul-2007	12:00:00	-8.18	102	102	01-Aug-2007	12:00:00	-1.76	129	129	28-Aug-2007	12:00:00	-6.72	156	156

APPENDIX B
VEGETATION PLOT PHOTOGRAPHS

**Haw River Swamp Wetland Restoration Site
Year 3 (2007) Annual Monitoring Report
Vegetation Photographs Taken September 2007**



Plot 1



Plot 2



Plot 3



Plot 4



Plot 5



Plot 6



Plot 7



Plot 8