

Mitigation Project Name: Hoffer Property  
 DMS ID: 95355  
 River Basin: Chowan  
 Cataloging Unit: 03010203

County: Gates  
 Date Project Instituted: 6/15/2012  
 Date Prepared: 8/10/2018

USACE Action ID: 2012-01393  
 NCDWR Permit No: N/A

Credit Release Milestone	Stream Credits				Wetland Credits									
	Scheduled Releases (Stream)	Warm	Cool	Cold	Anticipated Release Year (Stream)	Actual Release Date (Stream)	Scheduled Releases (Forested)	Riparian Riverine	Riparian Non-riverine	Non-riparian	Scheduled Releases (Coastal)	Coastal	Anticipated Release Year (Wetland)	Actual Release Date (Wetland)
Potential Credits (Mitigation Plan)										23,000				
Potential Credits (As-Built Survey)										23,000				
1 (Site Establishment)	N/A				N/A	N/A	N/A				N/A		N/A	N/A
2 (Year 0 / As-Built)	30%				N/A	N/A	30%			8,600	30%		2015	10/1/2015
3 (Year 1 Monitoring)	10%				N/A	N/A	10%			2,900	10%		2016	4/25/2016
4 (Year 2 Monitoring)	10%				N/A	N/A	0%			2,900	15%		2017	Not Released
Unreleased non-riparian credits from 4 (Year 2 Monitoring)							10%			2,900			2017	8/10/2018
5 (Year 3 Monitoring)	10%				N/A	N/A	15%			3,450	20%		2018	8/10/2018
6 (Year 4 Monitoring)	5%				N/A	N/A	5%				10%		2019	
7 (Year 5 Monitoring)	10%				N/A	N/A	15%				15%		2020	
8 (Year 6 Monitoring)	5%				N/A	N/A	5%				N/A		2021	
9 (Year 7 Monitoring)	10%				N/A	N/A	10%				N/A		2022	
Stream Bankfull Standard	10%				N/A	N/A	N/A				N/A			
Total Credits Released to Date										14,950				

DEBITS (released credits only)

	Rates	1	1.5	2.5	5	1	3	2	5	1	3	2	5	1	3	2	5
		Stream Restoration	Stream Enhancement	Stream Enhancement	Stream Preservation	Riparian Restoration	Riparian Creation	Riparian Enhancement	Riparian Preservation	Nonriparian Restoration	Nonriparian Creation	Nonriparian Enhancement	Nonriparian Preservation	Coastal Marsh Restoration	Coastal Marsh Creation	Coastal Marsh Enhancement	Coastal Marsh Preservation
As-Built Amounts (feet and acres)										23,000							
As-Built Amounts (mitigation credits)										23,000							
Percentage Released										65%							
Released Amounts (feet / acres)										14,950							
Released Amounts (credits)										14,950							
NCDWR Permit	USACE Action ID	Project Name															
	2005-10482	SR 1339 Improvements - Division 1, Bertie County															
	2012-0286	NCDOT TIP R-2507A, US 13 Improvements, Hertford & Gates Counties															
	2011-1075	NCDOT TIP R-2583, US 158 Improvements, Hertford County															
	2012-0286	NCDOT TIP R-2507A Add'l, US 13 Improvements, Hertford & Gates Counties															
	2016-1221	NCDOT TIP R-5311A, US 11 / NC 11 Improvements, Hertford County															
	2016-0409	Earley's Substation Expansion, Hertford County															
	2016-1221	NCDOT TIP R-5311A, US 11 / NC 11 Improvements, Hertford County															
Remaining Amounts (feet / acres)										0.000							
Remaining Amounts (credits)										0.000							

Contingencies (if any): None

Signature of Wilmington District Official Approving Credit Release

Date

9/6/18

- 1 - For NCDMS, no credits are released during the first milestone
- 2 - For NCDMS projects, the second credit release milestone occurs automatically when the as-built report (baseline monitoring report) has been made available to the NCIRT by posting it to the NCDMS Portal, provided the following criteria have been met:
  - 1) Approval of the final Mitigation Plan
  - 2) Recodation of the preservation mechanism, as well as a title opinion acceptable to the USACE covering the property
  - 3) Completion of all physical and biological improvements to the mitigation site pursuant to the mitigation plan
  - 4) Receipt of necessary DA permit authorization or written DA approval for projects where DA permit issuance is not required
- 3 - A 10% reserve of credits is to be held back until the bankfull event performance standard has been met

**Monitoring Report  
Hofler Property  
Monitoring Year 4**

DMS Project ID #: 95355

DMS Contract #: 004628

USACE AID# SAW-2012-01393

Gates County, North Carolina

Submitted November, 2018



NC Department of Environmental Quality  
Division of Mitigation Services  
1652 Mail Service Center  
Raleigh, NC 27699-1652

**Submitted by:  
ALBEMARLE RESTORATIONS, LLC  
P.O. Box 176  
Fairfield, NC 27826  
(252) 333-0249**



Mitigation Services  
ENVIRONMENTAL QUALITY

ROY COOPER  
*Governor*

MICHAEL REGAN  
*Secretary*

Ashby Brown  
ALBEMARLE RESTORATIONS, LLC  
P.O. Box 176  
Fairfield, NC 27826

11/26/2018

Sent via e-mail (ashbybrown@woodswaterandwildlife.com)

RE: Hofler MY4  
Contract #004628  
Project # 95355

Ashby,

On November 15, 2018, the Division of Mitigation Services (DMS) received the Draft Monitoring Report for Hofler. A site visit occurred 5/30/2018 during the growing season.

After reviewing the document, please provide make the following updates and respond if necessary. Please submit 3 hard copies of the final document and one electronic. The digital deliverables are approved.

- Page 14 and 15, Please add dates that the photos were taken.
- Page 30. Hydrologic data. Please add a table number and update all years to include hydroperiod percentages (you can do this by providing one extra column in each year to show hydrology).
- Reference Gauge: it was noted in the two previous DMS comment letters that a suitable non-riparian hardwood or wetland flat reference gauge would be desirable. What happened with this gauge installed at Merchant Mill Pond? As previously mentioned, the area across the street from the project does not constitute a reference non-riparian hardwood flat.

Although this site appears to be meeting performance criteria, the IRT has expressed the potential for withholding credits which will result in DMS withholding payments. Albermarle was paid for 75% of the total contract value, but the IRT has only released 65% of the credits to date.

Thank you for your work.

A handwritten signature in black ink that reads 'Lindsay Crocker'.

Lindsay Crocker  
DMS

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## **1.0: PROJECT SUMMARY**

### **1.1: Project Objectives**

The project objectives of the Hofler property per the approved mitigation plan are as follows:

- Enhance water quality by providing shading from forest cover, which will reduce thermal impacts associated with excess algae growth and decreased dissolved oxygen concentrations
- Slow runoff rates and provide storage and desynchronization of overland flow before it reaches Lassiter Swamp, located directly north of the project, by restoring the wetland complex
- Provide nutrient attenuation and uptake by restoring dense vegetation interspersed with shallow diffuse flows, thus improving downstream habitat
- Provide minimal earthwork and disturbance, as determined through preliminary site analyses, to the area to accomplish designed wetland topography
- Impact existing ecological communities as little as possible. No remnant wetland communities exist on site and no impacts to wetlands or riparian buffers will occur due to the restoration project.

### **1.2: Project Success Criteria**

Wetland hydrology data must consistently document the appropriate hydroperiod has been restored for all areas proposed for wetland mitigation. The targeted hydroperiod for the Hofler Property is 6% or greater. Planted vegetation will be considered successful if at least 320 three year-old planted stems/acre are present after year three. At year five, density must be no less than 260 five year-old planted stems/acre. At year 7, density must be no less than 210 seven year-old planted stems/acre. Additionally, planted vegetation must average 10 feet in height in each plot at year 7. Per the recommendations of the NCIRT, the following understory species were incorporated in the planting schedule on the condition they be exempted from the minimum 10-foot height criterion and exempted from the calculation of average height as a measure of that success criterion: Button bush (*C. occidentalis*), Sweet bay (*M. virginiana*), Wax myrtle (*M. cerifera*), and Laurel oak (*Q. laurifolia*). These species will be included in the calculations for the survival criterion. All vegetative monitoring will follow CVS-EEP Protocol for Recording Vegetation-Version 4.0.

Additionally, the project will strive to establish a variety of hydrologic regimes ranging from shallow inundated areas to intermittently saturated conditions, restoring diffuse flow patterns through what will ultimately be a forested wetland. The successful establishment of these conditions, mimicking nearby reference wetlands will help determine the overall success of the project.

### **1.3: Project Setting**

The Hofler property consists of +/- 345 acres, of which 27 acres have been designated for this project. The site consisted of a rectangular tract of land primarily being used for cotton and small grain production. The prior converted wetlands on the site had been extensively ditched and drained, lowering the local water table and diminishing aquatic habitat and water quality. The site drained from south to north to an unnamed tributary of Lassiter Swamp and Bennets Creek upstream of Merchants Mill Pond. The project site along with the surrounding areas has undergone expansive hydrologic alterations and excessive sediment and nutrient inputs from agricultural production resulting in overall water quality degradation. The vicinity map is included with the CCPV in Appendix B. Table 4 in Appendix A contains additional information regarding the project's location and attributes.

### **1.4: Mitigation Components**

The mitigation components are 23 acres of non-riparian wetland restoration with a credit ratio of 1:1 (Restoration:WMU), please refer to Table 1 for more information.

### **1.5: Project Timeline**

Construction commenced on August 12<sup>th</sup>, 2014 with the installation of recommended erosion control practices and was completed on Oct. 14<sup>th</sup>, 2014. Planting was officially concluded on May 6<sup>th</sup>, 2015 (Table 2). Refer to Table 2 in Appendix A for the Project History and Reporting Timeline.

### **1.6: Design Approach**

A natural design approach focused on mimicking nearby wetlands, including non-riparian hardwood flats and swamp forests both in hydrologic regime and vegetative diversity. Grading was specifically formulated to provide storage for overland flow while creating densely vegetated plots interspersed with shallow diffuse flows. All of these features contribute to nutrient and sediment attenuation, improving downstream habitat and promoting diversity of ecological communities. The reference area for this project is a nearby mature hardwood flat with the same soils and topography and similar hydrologic function. The reference area is within Merchant's Millpond State Park.

### **1.7: Project Performance**

Hydrology was successful over the entire project site. The hydrology charts are included in Appendix E.

Rainfall for the period of January through November 6, 2017, totaled 34.04 inches which was much more consistent with normal precipitation for the area. This average is well within the 30 – 70 percent range.

In this, year four of monitoring, tree survival was not to be included in this report, but in May of 2018, a remeasurement of some of the permanent vegetation plots was made to assess the winter survival of planted trees. In addition, 4 randomly chosen, 1/100<sup>th</sup> acre plots were measured in other areas of the project site to help identify any specific problem areas. The results are in Appendix C.

The farmer that tends the adjoining land installed ditches on the east, west and south side of the projects to aid in drainage of the crop land. These ditches are shown on the CCPV on page 11. They are outside the boundaries of the easement and appear to pose no ill effects on the project.



## Vicinity Map





## **1.8: Methods and References**

Monitoring methodology did not differ from the approved Mitigation Plan. Vegetation assessment was done according to the level 2 protocol specified by the Carolina Vegetation Survey. Hydrology monitoring wells were installed per ERDC TN-WRAP-00-02 “Installing Monitoring Wells/Piezometers in Wetlands” dated 2000. Groundwater levels were recorded using the U20-001-01 water level data loggers manufactured by Onset Computer. The loggers were installed in the wells per the manufacturer’s instructions.

## **Appendix A: Background Tables**

Table 1. Project Components and Mitigation Credits

Table 2. Project Activity and Reporting History

Table 3. Project Contacts

Table 4. Project Information and Attributes

Table 1. Project Components and Mitigation Credits								
Hofler Project #95355, Contract #004628								
Mitigation Credit Summations								
	Stream	Riparian Wetland	Non-riparian Wetland	Buffer	Nitrogen Nutrient Offset	Phosphorous Nutrient Offset		
Overall Credit			23					
Project Components								
Project Component or- Reach	Stationing	Existing Footage or Acreage	Restoration Footage or Acreage	Restoration Level	Restoration or Rest. Equiv.	Mitigation Ratio	Mitigation Credits	Notes
Wetland 1		23	23		Restoration	1:1	23	
Length and Area Summations								
Restoration Level	Stream (Linear Feet)	Riparian Wetland (acres)		Non-riparian Wetland (acres)	Buffer (square feet)	Upland (acres)		
		Riverine	Non-Riverine					
Restoration			23					
Enhancement								
Enhancement I								
Enhancement II								
Creation								
Preservation								
High Quality Preservation								
BMP Elements								
Element	Location	Purpose/Function			Notes			

<b>Table 2. Project Activity and Reporting History Hofler Property Wetland Mitigation Project #95355</b>		
<b>Activity, Deliverable or Milestone</b>	<b>Data Collection Complete</b>	<b>Actual Completion or Delivery</b>
Project Institution	N/A	May-12
Mitigation Plan	May 2014	July 2014
Permits Issued	May 2014	July 2014
Final Design Construction Plans	May 2014	July 2014
Construction	N/A	October 2014
Temporary S & E mix applied to entire project area	N/A	N/A
Permanent seed mix applied to entire project area	N/A	October 2014
Containerized and BR Planting over entire project area	N/A	May 2015
Baseline Monitoring Document (Year 0 Monitoring-baseline)	May 2015	Sept. 2015
Year 1 monitoring	November 2015	November 2015
Year 2 monitoring	November 2016	November 2016
Year 3 monitoring	November 2017	November 2017
Year 4 monitoring	November 2018	November 2018
Year 5 monitoring		

<b>Table 3. Project Contacts Hofler Property Wetland Mitigation Project #95355</b>	
<b>Designer</b> Primary Project design POC	Ecotone, Inc. Scott McGill (410) 420-2600 2120 High Point Rd, Forest Hill, MD 21050
<b>Construction Contractor</b> Construction contractor POC	Jennings Land Development Rodney Jennings (252) 202-6954 156 Trotman Rd. Camden, NC 2791
<b>Planting Contractor</b> Planting contractor POC	Carolina Silvics, Inc. Mary-Margaret McKinney (252-482-8491) 908 Indian Trail Road Edenton, NC 27932
<b>Seeding Contractor</b> Seed planting contractor POC	Woods, Water and Wildlife, Inc. Ed Temple (252) 333-0249 P. O. Box 176, Fairfield, NC 27826
<b>Seed mix sources</b>	Earnst Conservation Seeds, LLP, Meadville, PA
<b>Nursery stock suppliers</b>	Carolina Silvics (from various sources)
<b>Monitoring Performers</b> Wetland and Vegetation POC	Woods, Water and Wildlife, Inc. Ashby Brown (757) 651-3162 P. O. Box 176, Fairfield, NC 27826

<b>Table 4. Project Information and Attributes</b>			
Project name		HOFLER PROPERTY	
County		GATES	
Project Area (ac)		27.0 AC	
Project Coordinates (Lat and Long)		+36° 25' 48.44", -76° 39' 10.91"	
<b>4.1 Project Watershed Summary Information</b>			
Physiographic province		INNER COASTAL PLAIN	
River basin		CHOWAN RIVER BASIN	
USGS Hydrologic Unit 8-digit	03010203	USGS Hydrologic Unit 14-digit	03010203040040
DWQ Sub-basin		BENNETTS CREEK LOCAL WATERSHED	
Project Drainage Area (acres)		103.8	
Project Drainage Area Percentage of Impervious Area		5%	
CGIA Land Use Classification		2.01.01.07 Annual Row Crop Rotation	
<b>4.2 Wetland Summary Information</b>			
Parameters	Wetland 1	Wetland 2	Wetland 3
Size of Wetland (acres)	23.0		
Wetland Type (non-riparian, riparian riverine or riparian non-riverine)	Non-riparian		
Mapped Soil Series	BnA & PnA		
Drainage Class	Poorly drained & very poorly drained		
Soil Hydric Status	Hydric		
Source of Hydrology	Surface and Ground		
Hydrologic Impairment	44.8' to 155.2'		
Native Vegetation Community			
Percent Composition of Exotic Invasive Vegetation	N/A		
<b>4.3 Regulatory Considerations</b>			
Regulation	Applicable?	Resolved?	Supporting Documents
Waters of the United States – Section 404	N	N/A	Appendix F
Waters of the United States – Section 401	N	N/A	Appendix F
Endangered Species Act	N	Y	
Historic Preservation Act	N	Y	
Coastal Zone Management Act (CZMA)/ Coastal Area Management Act (CAMA)	N	Y	
FEMA Floodplain Compliance	N	Y	
Essential Fisheries Habitat	N	Y	

## **Appendix B:**

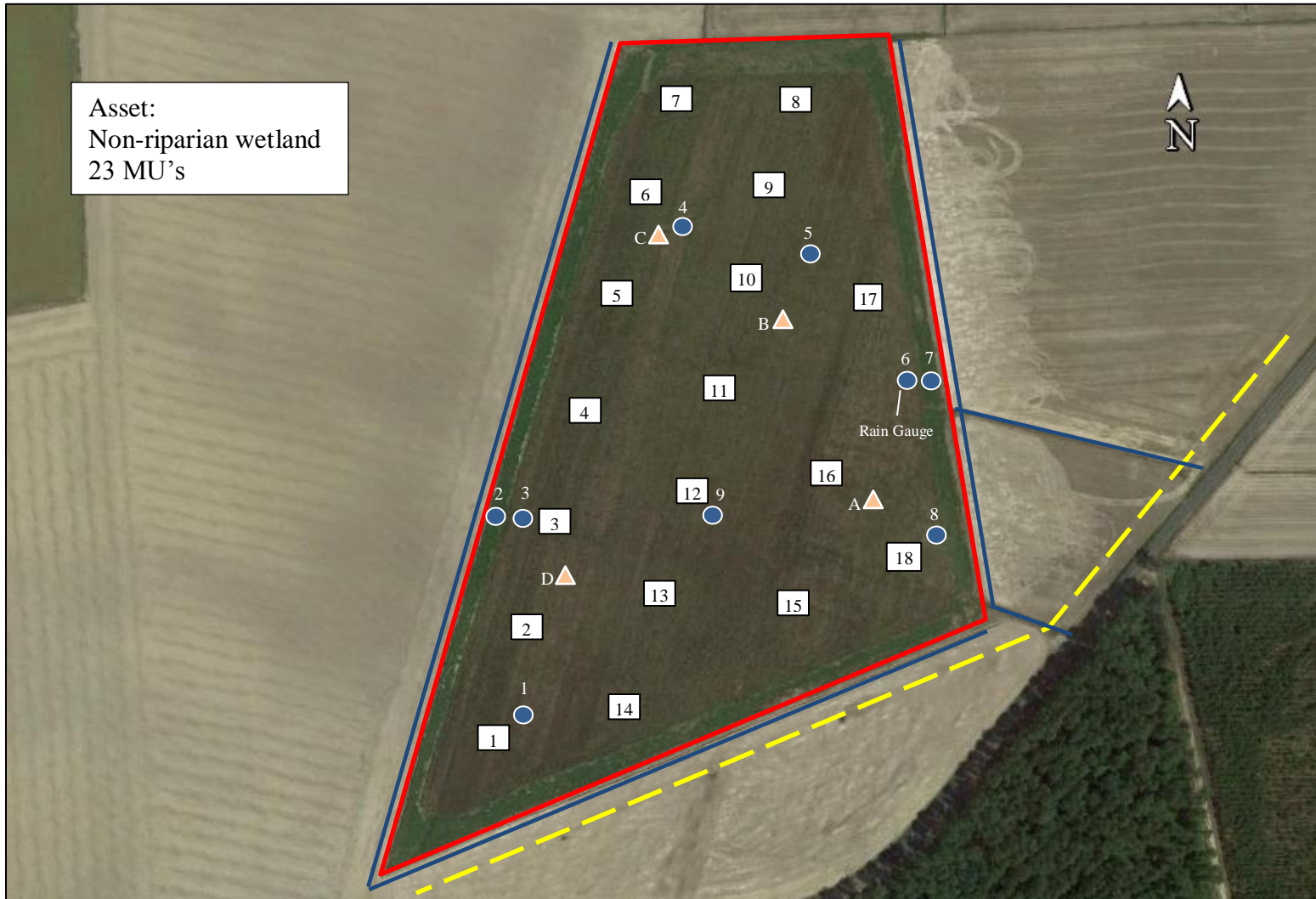
Current Condition Plan View

Table 5. Vegetation Condition Assessment Table

Figure 1. Proposed supplemental planting

Site Photos





Asset:  
Non-riparian wetland  
23 MU's

Hofler Restoration Project  
Current Condition Plan  
View  
Project # 95355  
Nov. 2018

Legend	
Easement Bndry	Veg Plot
Ditches	WtlnD Gauge
Pwrline	Veg Random

Year 4 Condition	
Criteria Met	WtlnD Gauges Hydrology Met
Criteria Unmet	Hydrology Not Met
	Hydrology Part. Met



**Table 5**  
Planted Acreage<sup>1</sup>

**Vegetation Condition Assessment**  
23

Vegetation Category	Definitions	Mapping Threshold	CCPV Depiction	Number of Polygons	Combined Acreage	% of Planted Acreage
1. Bare Areas	Very limited cover of both woody and herbaceous material.	0.1 acres	None	0	0.00	0.0%
2. Low Stem Density Areas	Woody stem densities clearly below target levels based on MY3, 4, or 5 stem count criteria.	0.1 acres	None	0	0.00	0.0%
<b>Total</b>				0	0.00	0.0%
3. Areas of Poor Growth Rates or Vigor	Areas with woody stems of a size class that are obviously small given the monitoring year.	0.25 acres	None	0	23.00	100.0%
<b>Cumulative Total</b>				0	23.00	100.0%

Easement Acreage<sup>2</sup>

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Vegetation Category	Definitions	Mapping Threshold	CCPV Depiction	Number of Polygons	Combined Acreage	% of Easement Acreage
4. Invasive Areas of Concern <sup>4</sup>	Areas or points (if too small to render as polygons at map scale).	1000 SF	None	0	0.00	0.0%
5. Easement Encroachment Areas <sup>3</sup>	Areas or points (if too small to render as polygons at map scale).	none	None	0	0.00	0.0%

Figure 1. Area of replanting that was done in winter 2017, shown shaded light red







Photo 1. General site vegetation. Head-high cattails and heavy grasses continue to occupy nearly the entire site. Generally the same as in 2016 and 2017.



Photo 2. Site conditions at Gauge 9 show dry conditions in November, despite recent rains.





Photo 3. Some of the trees, especially the cypress, are beginning to emerge above the heavy herbaceous layer.



Photo 4. Site conditions in November at the reference site in Merchants Millpond State Park also show dry conditions.

## **Appendix C**

### Vegetation Plot Data



Vegetation sampling and reporting was not required for the Year-4 monitoring report, but on May 30, 2018, Lindsay Crocker and Ashby Brown made a site visit to assess the over-winter survival of the trees.

Four of the permanent vegetation plots were sampled and an additional four randomly chosen 1/100<sup>th</sup> acre plots were sampled. The table below, in lieu of Table 6, which normally occupies this appendix, shows the results. The random plots, being 1/100<sup>th</sup> acre in size, have a radius of 11.8 feet. A plot center was chosen and all trees within that radius were noted. All the natural stems found in these random plots were red maple (*Acer rubrum*).

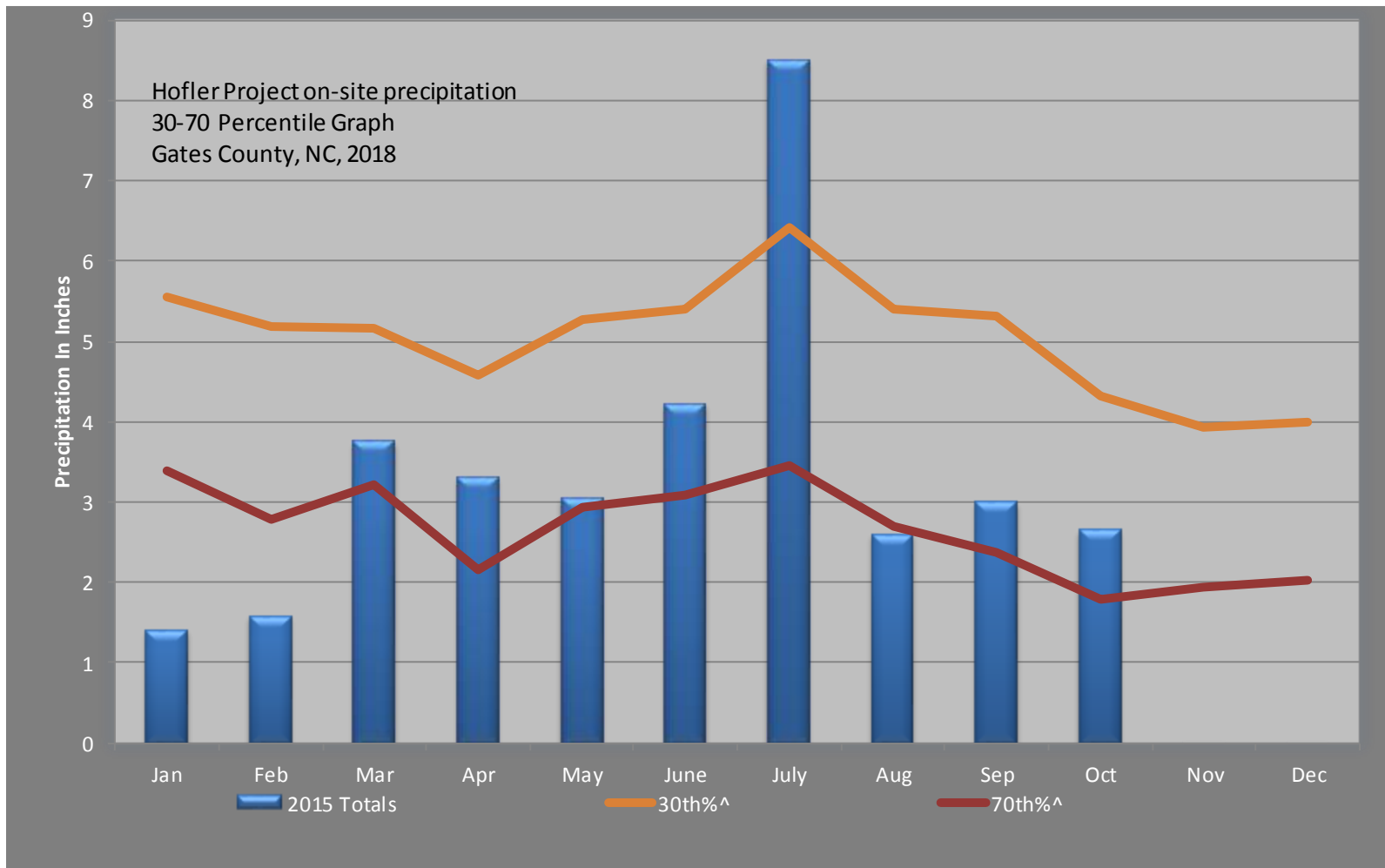
Permanent	Planted	Natural	Planted	Total
Veg Plot	Stems	Stems	SPA	SPA
3	6		255	255
6	11		468	468
10	7		298	298
16	6		255	255
		<b>Average</b>	<b>319</b>	<b>319</b>
Random Plot				
A	8	1	800	900
B	6	4	600	1000
C	4	3	400	700
D	5		500	500
		<b>Average</b>	<b>575</b>	<b>775</b>

## **Appendix E**

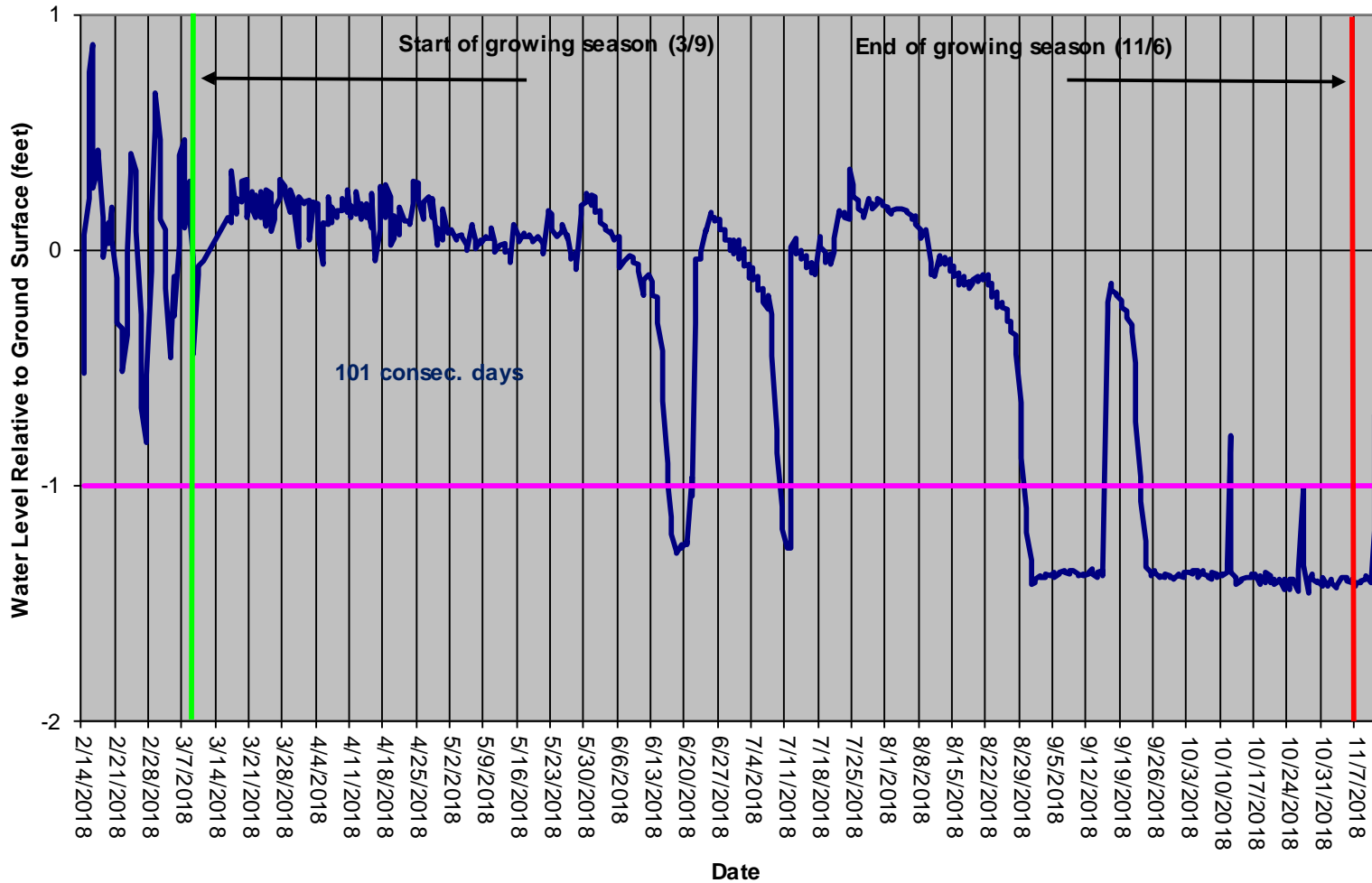
Precipitation Records

Hydrographs

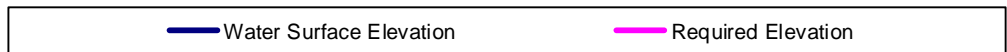
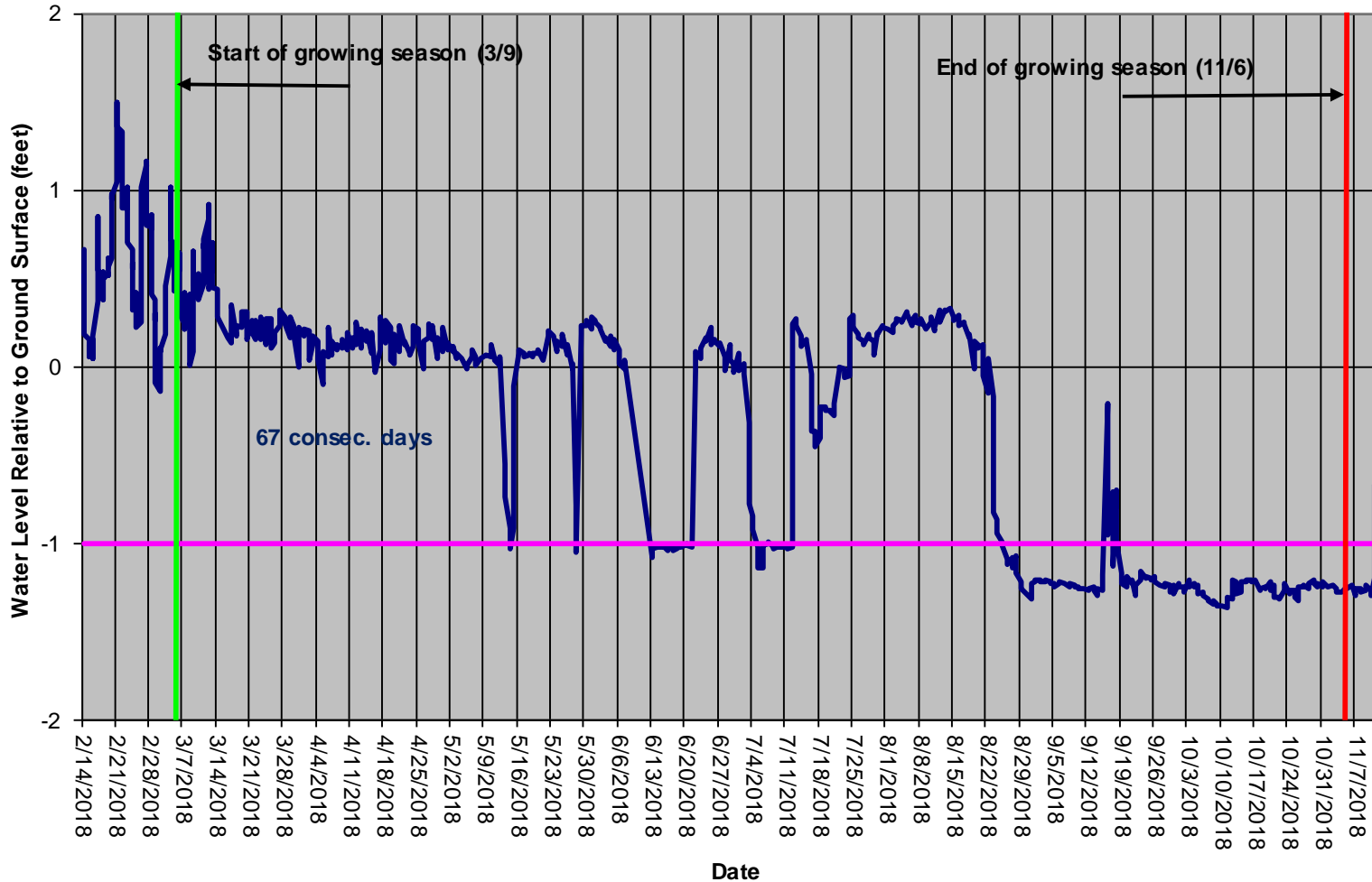
Table 8. Hydroperiod Summary Table



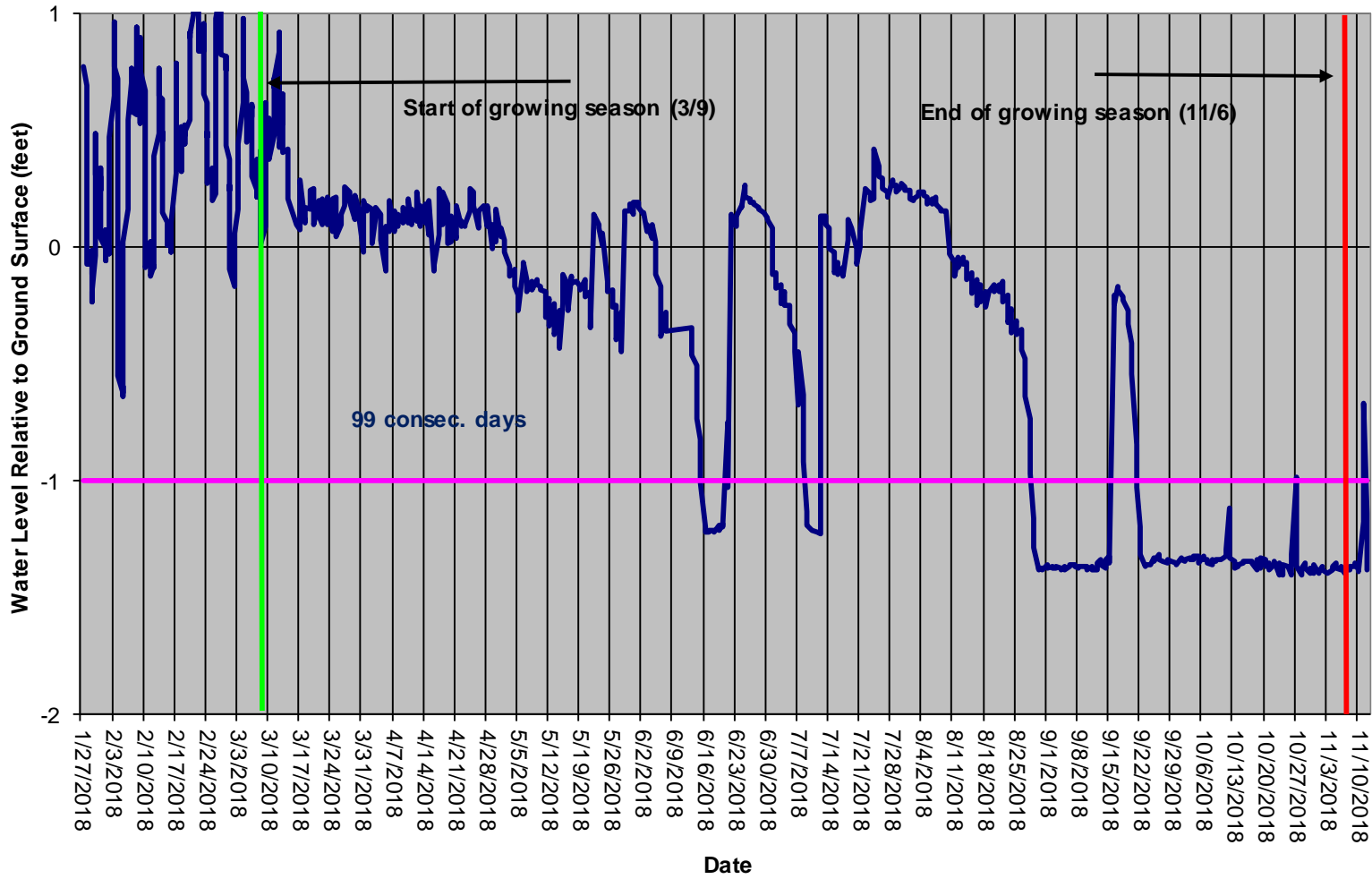
### Hofler Monitoring Gauge #1 (9669819)



### Hofler Monitoring Gauge #2 (9669784)

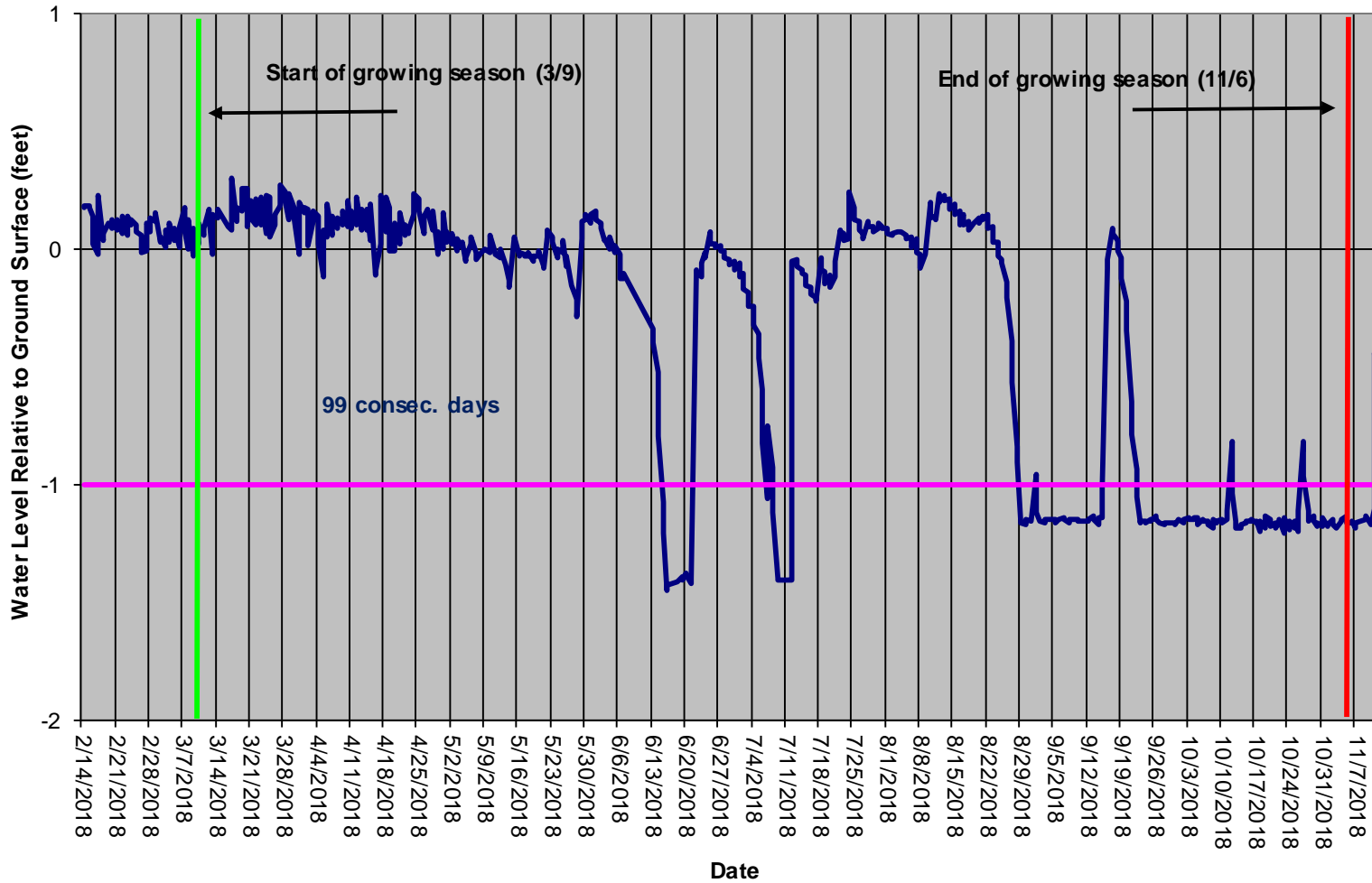


### Hofler Monitoring Gauge #3 (1272305)

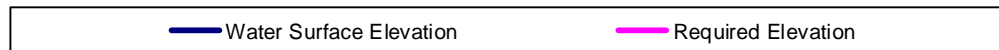
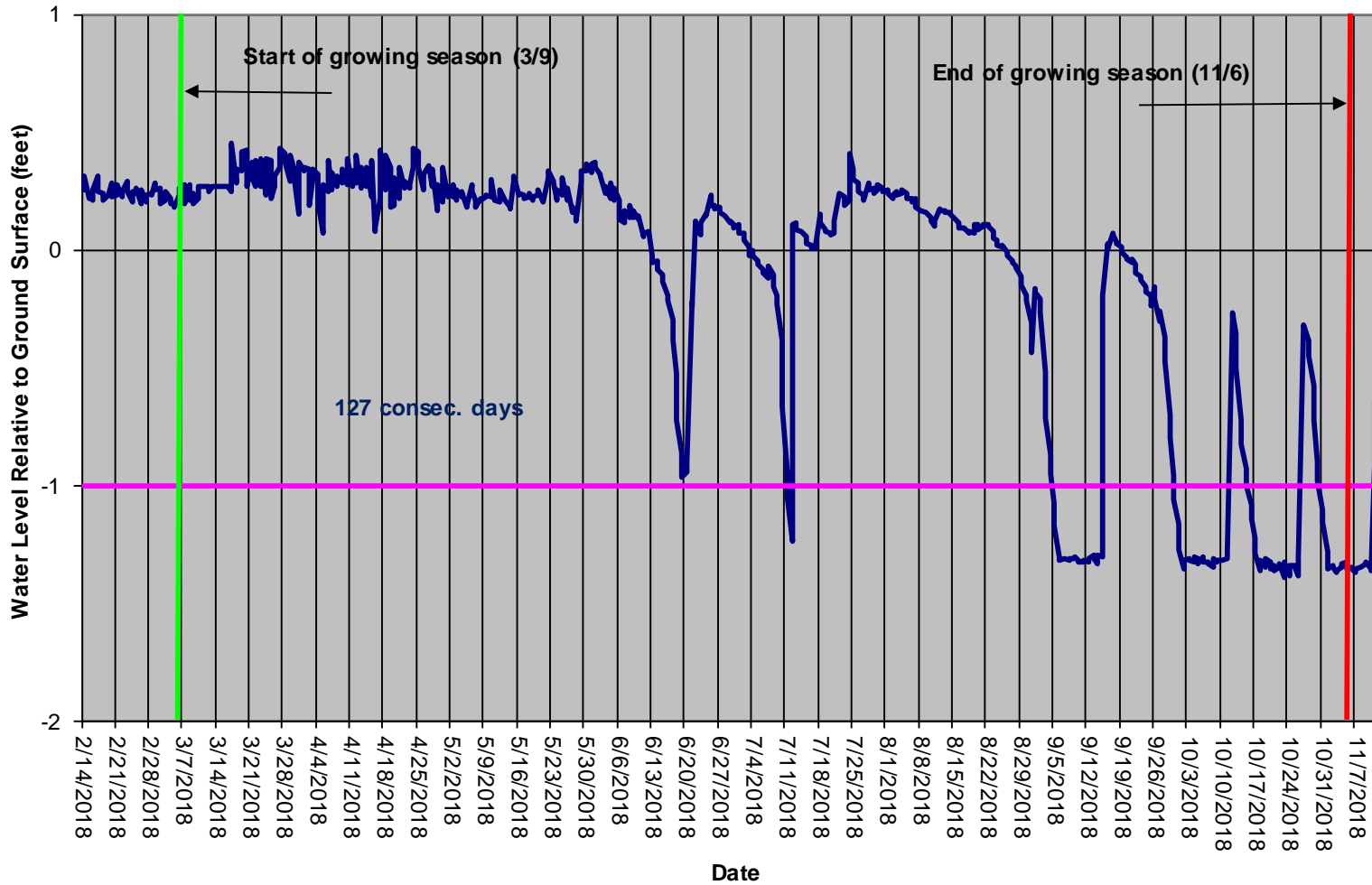




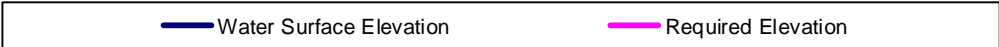
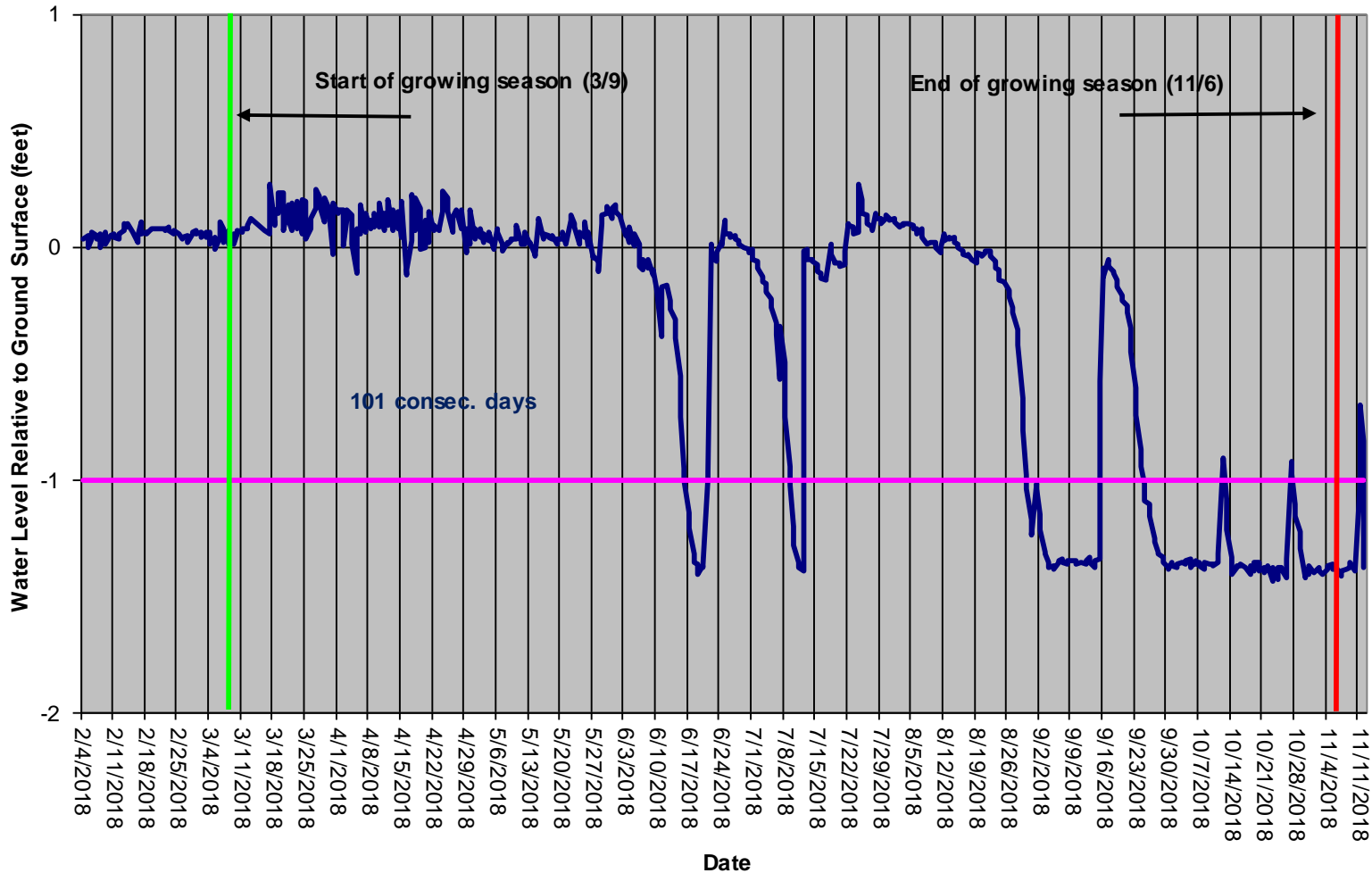
### Hofler Monitoring Gauge #4 (1303319)



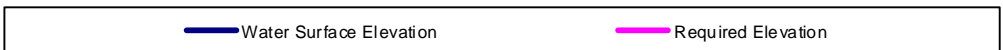
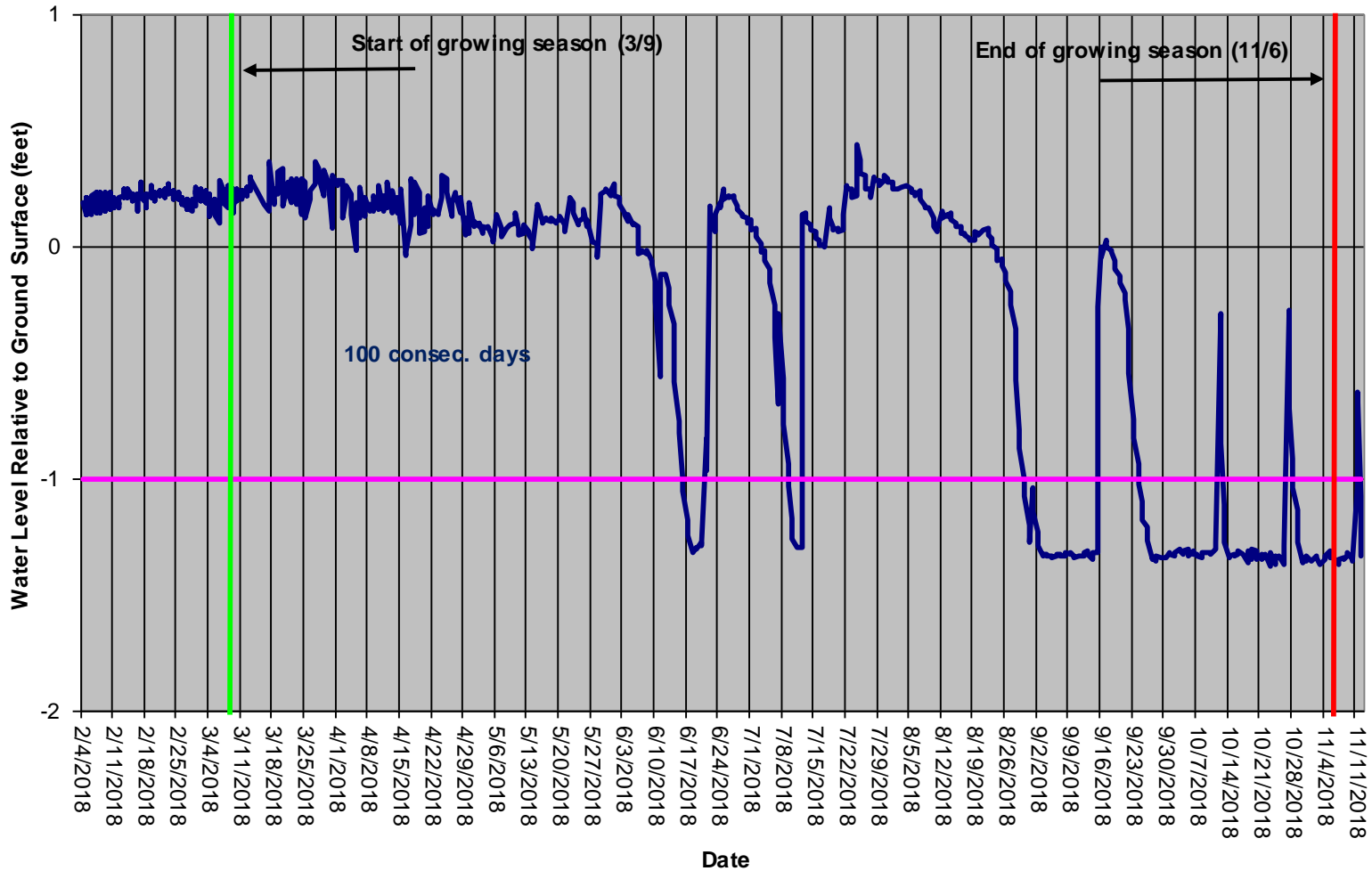
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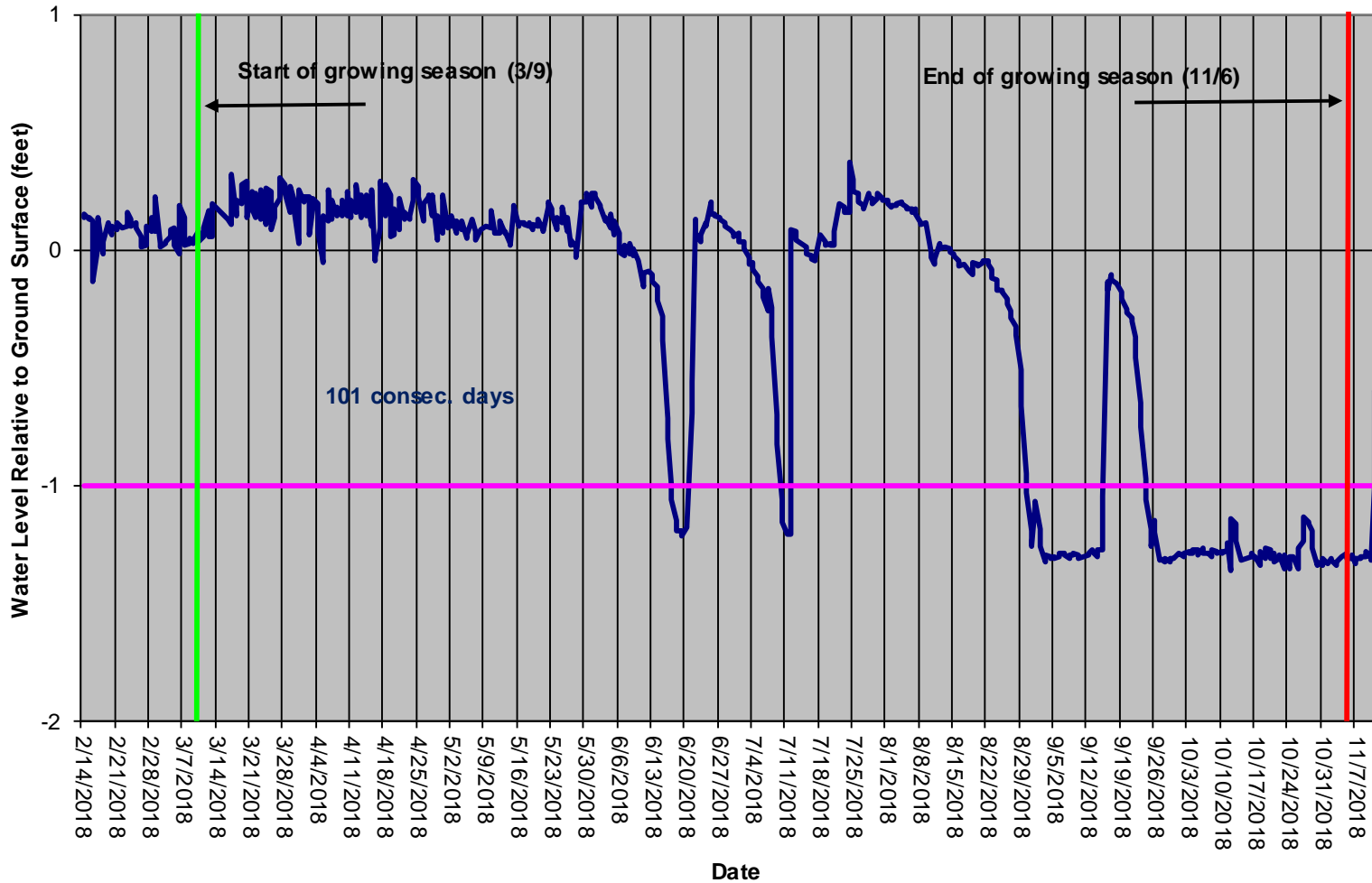
### Hofler Monitoring Gauge #6 (2250033)



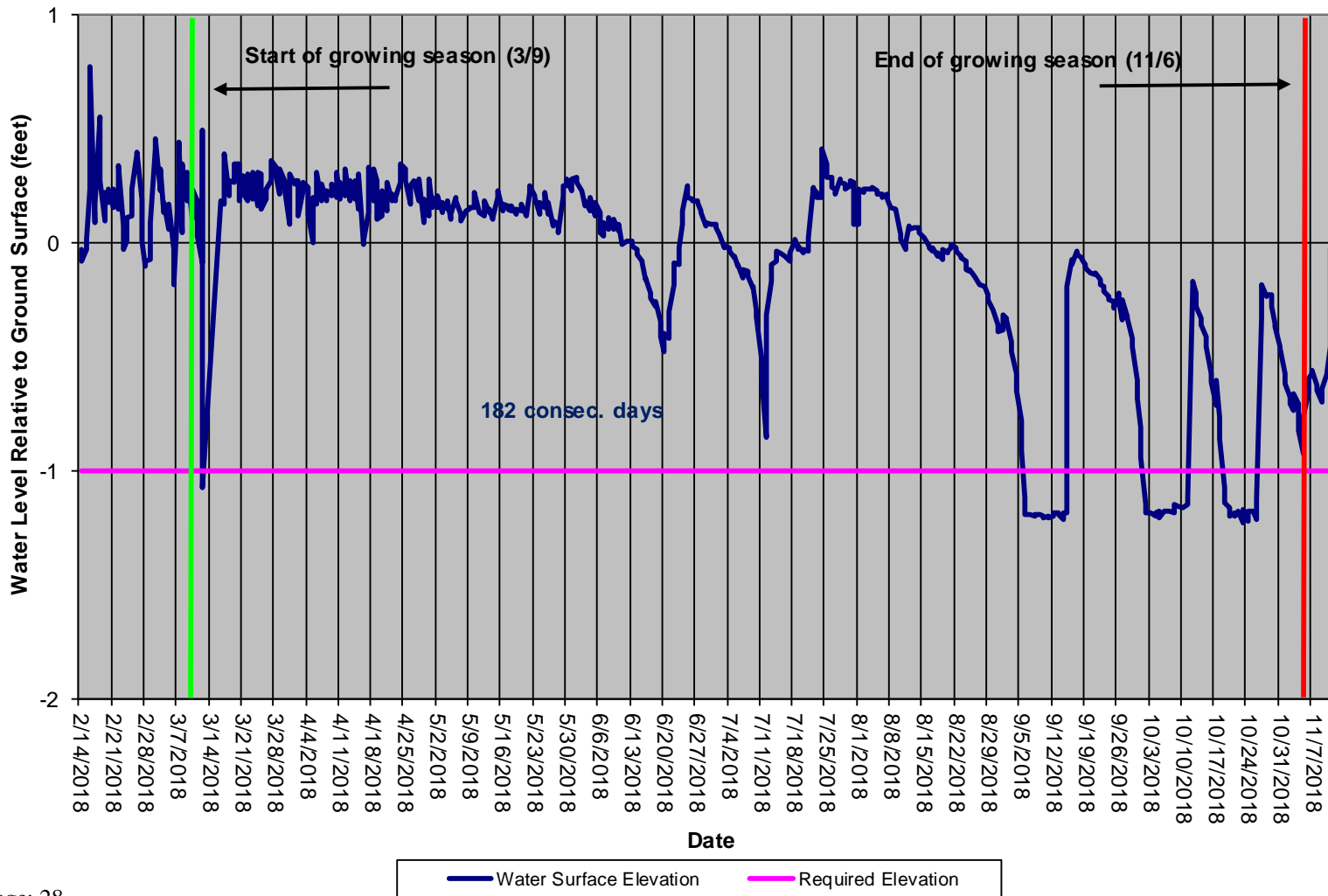
### Hofler Monitoring Gauge #7 (1126651)



### Hofler Monitoring Gauge #8 (1126652)



### Hofler Monitoring Gauge #9 (2238368)



### Hofler Monitoring Reference Gauge (2239789)

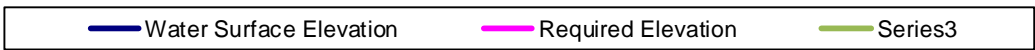
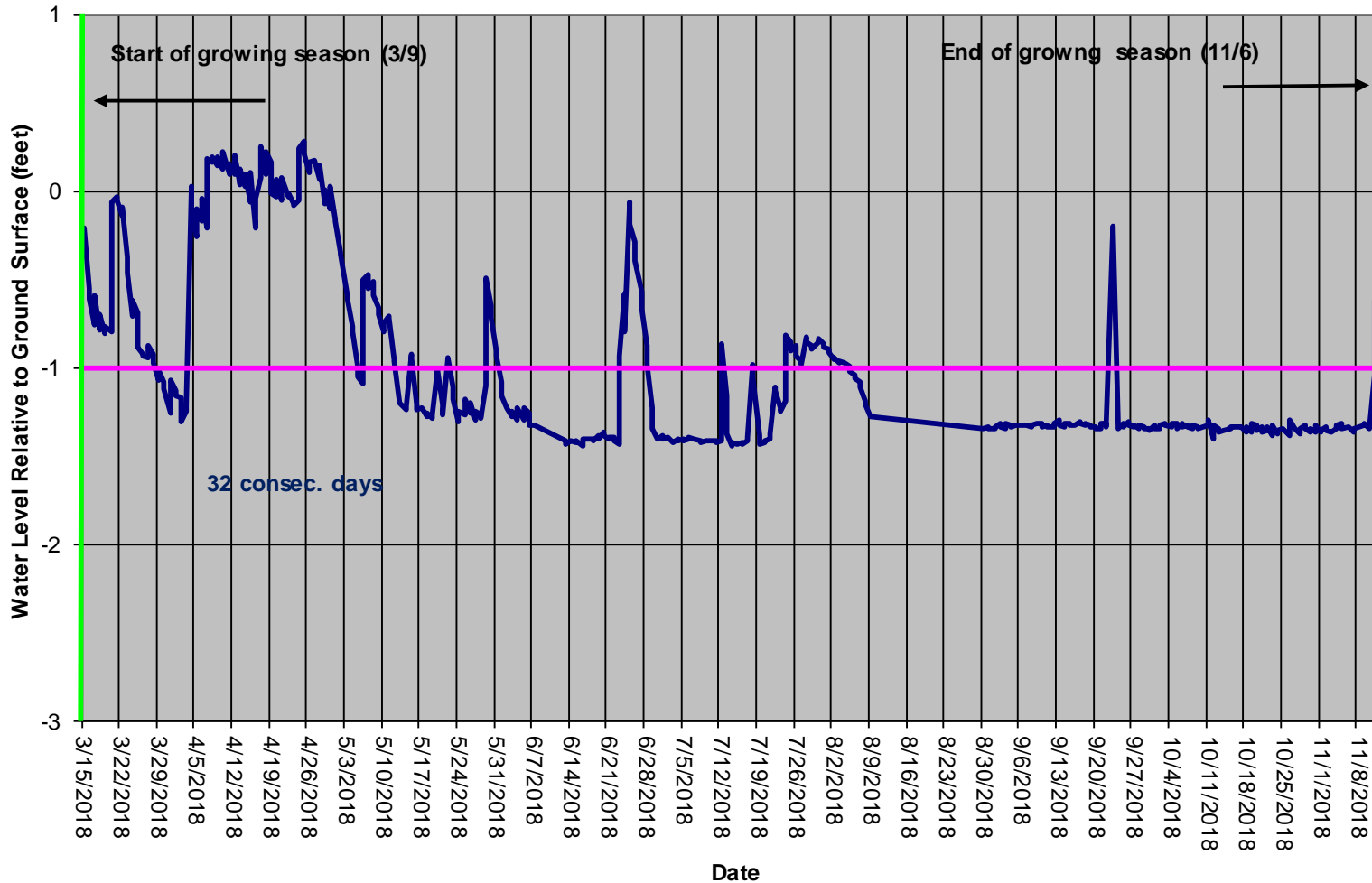


Table 8. Hydroperiod Summaries by Year

Monitoring Gauge Number	Max Consecutive Hydroperiod: Saturation within 12 Inches of Soil Surface: Percent of growing season and Dates																						Mean Days
	WEIS Table: Murfreesboro, NC Growing Season 3/9 - 11/6 (243 days)																						
	2015	Dates	% G.S.	2016	Dates	% G.S.	2017	Dates	% G.S.	2018	Dates	% G.S.	2019	Dates	% G.S.	2020	Dates	% G.S.	2021	Dates	% G.S.		
9669819 (1)	14.0	4/11-5/14	5.8	97	3/9-6/13	39.9	103	3/14-6/26	42.4	101	3/9-6/17	41.6										78.7	
9669784 (2)	9.1	4/15-5/6	3.7	53	9/3-10/25	21.8	59	4/23-6/20	24.3	67	3/9-5/14	27.6										47.0	
1272305 (3)	12.8	6/25-7/25	5.2	64	9/1-11/3	26.3	103	3/14-6/24	42.4	99	3/9-6/15	40.7										69.7	
1303319 (4)	12.8	6/25-7/25	5.2	65	8/30-11/2	26.7	102	3/13-6/22	42.0	99	3/9-6/15	40.7										69.7	
10610204 (5)	24.7	6/4-8/2	10.2	99	3/9-6/15	40.7	120	3/9-7/6	49.4	127	3/9-7/11	52.3										92.7	
2250033 (6)	14.0	6/25-7/28	5.8	97	3/9-6/13	39.9	103	3/14-6/24	42.4	101	3/9-6/17	41.6										78.7	
1126651 (7)	23.5	6/2-7/28	9.7	98	3/9-6/14	40.3	110	3/9-6/26	45.3	100	3/9-6/16	41.2										82.9	
1126652 (8)	14.0	6/25-7/28	5.8	98	3/9-6/14	40.3	109	3/9-6/25	44.9	101	3/9-6/17	41.6										80.5	
2238368 (9)	11.5	4/15-5/12	4.7	98	3/9-6/14	40.3	113	3/9-6/29	46.5	182	3/9-9/6	74.9										101.1	
2238372 (Ref)	Reference site deemed unsuitable, data removed per DMS						29	3/9-4/6	12.0	32	4/4-5/5	13.2										30.5	
<b>Precip Total</b>	30.02			63.84			54.68			34.04													
<b>Within 30%/70% Range?</b>	<b>Y</b>			<b>N</b>			<b>N</b>			<b>Y</b>													
	Meets or exceeds success criteria																						
	N/A Not available - Gage pulled or yet to be installed by this phase																						
	M Malfunction, Data Overwritten or Unretrievable																						



## **Appendix F**

Year 4 Comments and Responses  
USACE Permit Needs Determination



Mitigation Services  
ENVIRONMENTAL QUALITY

Ashby Brown  
ALBEMARLE RESTORATIONS, LLC  
P.O. Box 176  
Fairfield, NC 27826

11/26/2018

Sent via e-mail (ashbybrown@woodswaterandwildlife.com)

RE: Hofler MY4  
Contract #004628  
Project # 95355

Ashby,

On November 15, 2017, the Division of Mitigation Services (DMS) received the Draft Monitoring Report for Hofler. A site visit occurred 5/30/2018 during the growing season.

After reviewing the document, please provide make the following updates and respond if necessary. Please submit 3 hard copies of the final document and one electronic. The digital deliverables are approved.

- Page 14 and 15, Please add dates that the photos were taken.
- Page 30. Hydrologic data. Please add a table number and update all years to include hydroperiod percentages (you can do this by providing one extra column in each year to show hydrology).
- Reference Gauge: it was noted in the two previous DMS comment letters that a suitable non-riparian hardwood or wetland flat reference gauge would be desirable. What happened with this gauge installed at Merchant Mill Pond? As previously mentioned, the area across the street from the project does not constitute a reference non-riparian hardwood flat.

Although this site appears to be meeting performance criteria, the IRT has expressed the potential for withholding credits which will result in DMS withholding payments. Albermarle was paid for 75% of the total contract value, but the IRT has only released 65% of the credits to date.

Thank you for your work.

A handwritten signature in black ink that reads 'Lindsay Crocker'.

Lindsay Crocker  
DMS

- Dates have been added to the photos.
- The Hydrology Summary Table on page 30, is now Table 8. It has been modified as requested.
- In 2017, a reference gauge was installed in a mature hardwood flat in Merchants Millpond State Park. The site characteristics closely match the desired outcome of the project site in the future. The reference hydrology data from 2015 and 2016 were removed from the summary table as they were from an unsuitable site.



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

July 21, 2014

Regulatory Division

Re: NCIRT Review and USACE Approval of the Hofler Property Wetland Mitigation Site Plan; SAW-2012-01393; NCEEP Project # 95355

Mr. Tim Baumgartner  
North Carolina Ecosystem Enhancement Program  
1652 Mail Service Center  
Raleigh, NC 27699-1652

Dear Mr. Baumgartner:

The purpose of this letter is to provide the North Carolina Ecosystem Enhancement Program (NCEEP) with all comments generated by the North Carolina Interagency Review Team (NCIRT) during the 30-day comment period for the the Hofler Property Wetland Mitigation Site Plan, which was reposted and closed on April 5, 2014. These comments are attached for your review.

This mitigation plan was originally posted in January, 2014. Comments posted identified numerous concerns with the projects (see attached memo). Because of these comments, the plan was revised in March 2014, and reposted on March 6, 2014 for a second review. The deadline for comments was April 5, 2014. An initial review of the comments revealed that many of the comments from the first round of comments had not been addressed in the March mitigation plan revision.

Prior to making a determination as to whether to approve this project, a third copy of the mitigation plan, dated May 2014, was received on May 29, 2014. This plan has subsequently been reviewed in light of the comments provided by NCIRT members during the review. Most of the comments have been addressed in the recent version of the plan, including concerns regarding well placement, vegetation plots, appropriate hydroperiod, and the proposed species list for planting. Based on these modifications, we have determined that major concerns identified with the Draft Mitigation Plan have been addressed, and the mitigation plan is considered approved with this correspondence.

Nevertheless, we believe it is important to note that the location and method of construction at the proposed site are not preferred, and effort should be made to avoid this type of project in the future. As a general rule, we do not believe that building berms around a restored wetland is an appropriate way to reestablish hydrology on a site. To begin with, this is not true restoration as you are establishing an entirely new hydrology regime on the site. Water flow into and out of the wetland is severely restricted by the berms, and the outflow elevation for the entire site is controlled by "ditch plugs/check dams" (see discussion on page 23 of the mitigation plan dated May 2014). In addition, there is the potential that

berms may be breached in the future through natural or anthropogenic means, which could affect the hydrology of the entire site. Lastly, constructing a wetland site in the middle of an agricultural field is not ideal as it drastically limits the connection between the site and forested wetlands adjacent to or downstream from the project. In this case, water flowing from the site must travel through more than ¼ mile of ditch before it reaches the forested headwaters of Lassiter Swamp, limiting the benefit of the project and the ability of the site to fully achieve the stated goals of the mitigation plan.

The Final Mitigation Plan is to be submitted with the Preconstruction Notification (PCN) Application for Nationwide permit approval of the project along with a copy of this letter. All changes made to the Final Mitigation Plan should be summarized in an errata sheet included at the beginning of the document. As it was determined that the project does not contain jurisdictional waters of the U.S., construction for the project does not require a Department of the Army permit; however, you must still provide a copy of the Final Mitigation Plan, along with a copy of this letter, to the appropriate USACE field office at least 30 days in advance of beginning construction of the project. Please note that this approval does not preclude the inclusion of permit conditions in the permit authorization for the project. Additionally, this letter provides initial approval for the Mitigation Plan, but this does not guarantee that the project will generate the requested amount of mitigation credit. As you are aware, unforeseen issues may arise during construction or monitoring of the project that may require maintenance or reconstruction that may lead to reduced credit.

Thank you for your prompt attention to this matter, and if you have any questions regarding this letter, the mitigation plan review process, or the requirements of the Mitigation Rule, please call me at 919-846-2564.

Sincerely,



Todd Tugwell  
Special Projects Manager

TUGWELL.TODD.JASON.1048429293  
2014.07.21 14:23:23 -04'00'

Enclosures

Electronic Copies Furnished:

NCIRT Distribution List  
NCEEP/Heather Smith  
NCEEP/Lin Xu

## Ed Temple

---

**From:** Smith, Heather [heather.c.smith@ncdenr.gov]  
**Sent:** Monday, July 21, 2014 3:24 PM  
**To:** edtemple@vol.com  
**Subject:** FW: NCEEP Draft Mitigation Plan Approval Letter with Comment Memo / Hofler Property Wetland Mitigation Project / Gates County / SAW-2012-01393 (UNCLASSIFIED)

**Categories:** Red Category

Ed,

Here is the clarification email.

Sincerely,

Heather Smith  
Eastern Project Manager  
Ecosystem Enhancement Program  
919-707-8496  
[heather.c.smith@ncdenr.gov](mailto:heather.c.smith@ncdenr.gov)

Physical Address:  
217 West Jones St., 3rd Floor, Suite 3000A, Raleigh, N.C. 27603

Mailing address:  
1652 Mail Service Center, Raleigh, N.C. 27699-1652.

Parking and visitor access information is available on the EEP website.

Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

-----Original Message-----

From: Tugwell, Todd SAW [<mailto:Todd.Tugwell@usace.army.mil>]  
Sent: Monday, July 21, 2014 3:17 PM  
To: Baumgartner, Tim  
Cc: Smith, Heather  
Subject: RE: NCEEP Draft Mitigation Plan Approval Letter with Comment Memo / Hofler Property Wetland Mitigation Project / Gates County / SAW-2012-01393 (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

No, that was an oversight. No need for a PCN.

Todd

-----Original Message-----

From: Baumgartner, Tim [<mailto:tim.baumgartner@ncdenr.gov>]  
Sent: Monday, July 21, 2014 3:02 PM  
To: Tugwell, Todd SAW  
Cc: Smith, Heather  
Subject: [EXTERNAL] RE: NCEEP Draft Mitigation Plan Approval Letter with Comment Memo / Hofler Property Wetland Mitigation Project / Gates County / SAW-2012-01393 (UNCLASSIFIED)

Todd,

Thanks for the letter. We are a little confused. The last paragraph of the letter says to submit a PCN. There is no PCN needed for the project because the site is not currently jurisdictional. Do they submit a PCN anyway or was this an oversight?

Thanks  
Tim

=====

Tim Baumgartner, CPESC  
Deputy Director of Operations  
Ecosystem Enhancement Program  
Department of Environment and Natural Resources

Office - 919-707-8543

Cell - 919-218-2557

From: Tugwell, Todd SAW [<mailto:Todd.Tugwell@usace.army.mil>]  
Sent: Monday, July 21, 2014 2:43 PM  
To: Baumgartner, Tim  
Cc: Xu, Lin; Smith, Heather; Fritz Rohde ([Fritz.Rohde@noaa.gov](mailto:Fritz.Rohde@noaa.gov)); Chapman, Amy; Baker, Virginia; Beter, Dale E SAW; Biddlecome, William J SAW; [bowers.todd@epa.gov](mailto:bowers.todd@epa.gov); Crumbley, Tyler SAW; Karoly, Cyndi; Cox, David R.; Hall, Dolores; [Emily.Jernigan@fws.gov](mailto:Emily.Jernigan@fws.gov); Alsmeyer, Eric C SAW; Kulz, Eric; Gibby, Jean B SAW; Greer, Emily C SAW; Jones, Scott SAW; Higgins, Karen; [Kathryn.Matthews@fws.gov](mailto:Kathryn.Matthews@fws.gov); Marella Buncick ([Marella.Buncick@fws.gov](mailto:Marella.Buncick@fws.gov)); McLendon, Scott C SAW; Gledhill-earley, Renee; Sollod, Steve; Wilson, Travis W.; Wheeler, Tracey L SAW; Wicker, Henry M JR SAW  
Subject: NCEEP Draft Mitigation Plan Approval Letter with Comment Memo / Hofler Property Wetland Mitigation Project / Gates County / SAW-2012-01393 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Mr. Baumgartner,



Attached is the approval letter for the Draft Mitigation Plan for the Hofler Mitigation Project, along with all the comments that were generated during the IRT's review of the project on the Mitigation Plan Review Portal. Please note that this letter approves the Draft Mitigation Plan. The site was determined to have no waters of the U.S., so a permit is not required for construction; however, a copy of the final mitigation plan should be provided at least 30 days prior to construction on site. Also, please ensure that the Final Mitigation Plan is posted to NCEEP's documents portal so that all members of the IRT have access to the Final plan.

Please let me know if you have any questions about the process or the attached letter.

Todd Tugwell

Special Projects Manager

Regulatory Division

Wilmington District

U.S. Army Corps of Engineers

11405 Falls of Neuse Road

Wake Forest, NC 27587

(919) 846-2564

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE