



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

ENO RIVER ANNUAL WATER USERS MEETING

September 11, 2014 10:00 A.M.

Hillsborough, NC

Meeting Minutes

Attendees:

Linwood Peele, Bob Stea & Wayne Howard – Division of Water Resources (DWR);
Kevin Lindley & Tom Davis – Orange County;
Kenny Keel & Julie Laws – Town of Hillsborough;
Faye Metcalf & Dale Hamby – Orange-Alamance

- Linwood Peele convened the meeting;
 - Welcomed all participants and attendees and thanked the staff of the Town of Hillsborough for hosting the annual meeting.
- Introductions.

Old Business:

- At the 2013 meeting, Kenny Keel agreed to spearhead an effort to assemble a quorum on behalf of the Friend of Lake Orange to manage lake levels beyond the Voluntary Capacity Use Agreement (VCUA) current management.
 - The quorum met in November 2013 and discussed changing, on a voluntary basis, the flow from West Fork Eno Reservoir (WFER) to subsidize Lake Orange Reservoir (LOR) releases.
 - Kenny drafted a Memorandum of Understanding (MOU) with Kevin Lindley which states the requirements in detail.
 - Approved by Town Board in June 2014 and later signed by Kevin Lindley.
 - Since June WFER, releases up to 2.7 cfs but WFER level never fell below 1 ft thanks to the weather.
- Linwood notified the group the Cape Fear - Neuse Combined River Basin Model has been updated by Hydrologics and is going to the Environmental Management Commission (EMC) for approval.
 - EMC decided to send hydraulic model and eco flows statue back to the General Assembly for clarification.
 - Eco Flows recommendations based on current country-wide programs implemented.

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Historical Operations:

- Kevin Lindley provided a brief historical summary and overview of the Eno River VCUA;
 - Read excerpts from a copy of the December 1987 Eno River Capacity Use Investigation Main Report, Executive Summary, and Report Appendix.
 - The Orange County Board of Commissioners requested investigation
 - 1986 study determined Eno River flows of 0.02 cfs to 2,140 cfs.
 - The Eno River was dry for long periods of time; reported base flow of river dropping over the historical period.
 - Investigation recommended limited regulation until new sources of water could be identified.

Water Use & Stream Flow Report:

- Wayne Howard provided and discussed several graphs and tables;
 - **Table 1:** Summary for Stages of Restriction. (August 2013 – July 2014);
Provided number of weeks at each level of restrictions.
Provided average and total use for the Eno River Users.
 - **Graph 1:** Eno River Average Weekly Withdrawals (When Operating Average);
August 2013 – July 2014 with level of restrictions.
 - **Graph 2:** Eno River Average Weekly Withdrawals (7-day Average);
August 2013 – July 2014 with level of restrictions.
 - **Graphs 3 & 4:** Eno River @ Hillsborough Gage #02085000;
Flow vs. Date (flow less than 10 cfs for August 2013 – July 2014).



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ENO RIVER ANNUAL SUMMARY REPORT

August 2013 – July 2014

September 11, 2014

Month	Dates of Restrictions:	
	No Restrictions	Stage 1
August 2013	01 – 31	
September 2013		13 – 30
October 2013		01 – 31
November 2013		01 – 30
December 2013	03 – 31	01 – 02
January 2014	01 – 31	
February 2014	01 – 28	
March 2014	01 – 31	
April 2014	01 – 30	
May 2014	01 – 31	
June 2014	01 – 30	
July 2014	01 – 05	06 – 31

August - December 2013

Weeks of Restrictions

STAGE 1: 11 weeks, 4 days

January - July 2014

Weeks of Restrictions

STAGE 1: 3 weeks, 5 days

Hillsborough:

Total use: 1.101 mgd
Avg. Eno use: 1.101 mgd
(when operating: 1.101 mgd)

Total use: 1.132 mgd
Avg. Eno use: 1.132 mgd
(when operating: 1.132 mgd)

Orange-Alamance:

Total use: 0.582 mgd
Avg. Eno use: 0.135 mgd
(when operating: 0.216 mgd)

Total use: 0.706 mgd
Avg. Eno use: 0.248 mgd
(when operating: 0.319 mgd)

Piedmont Minerals:*

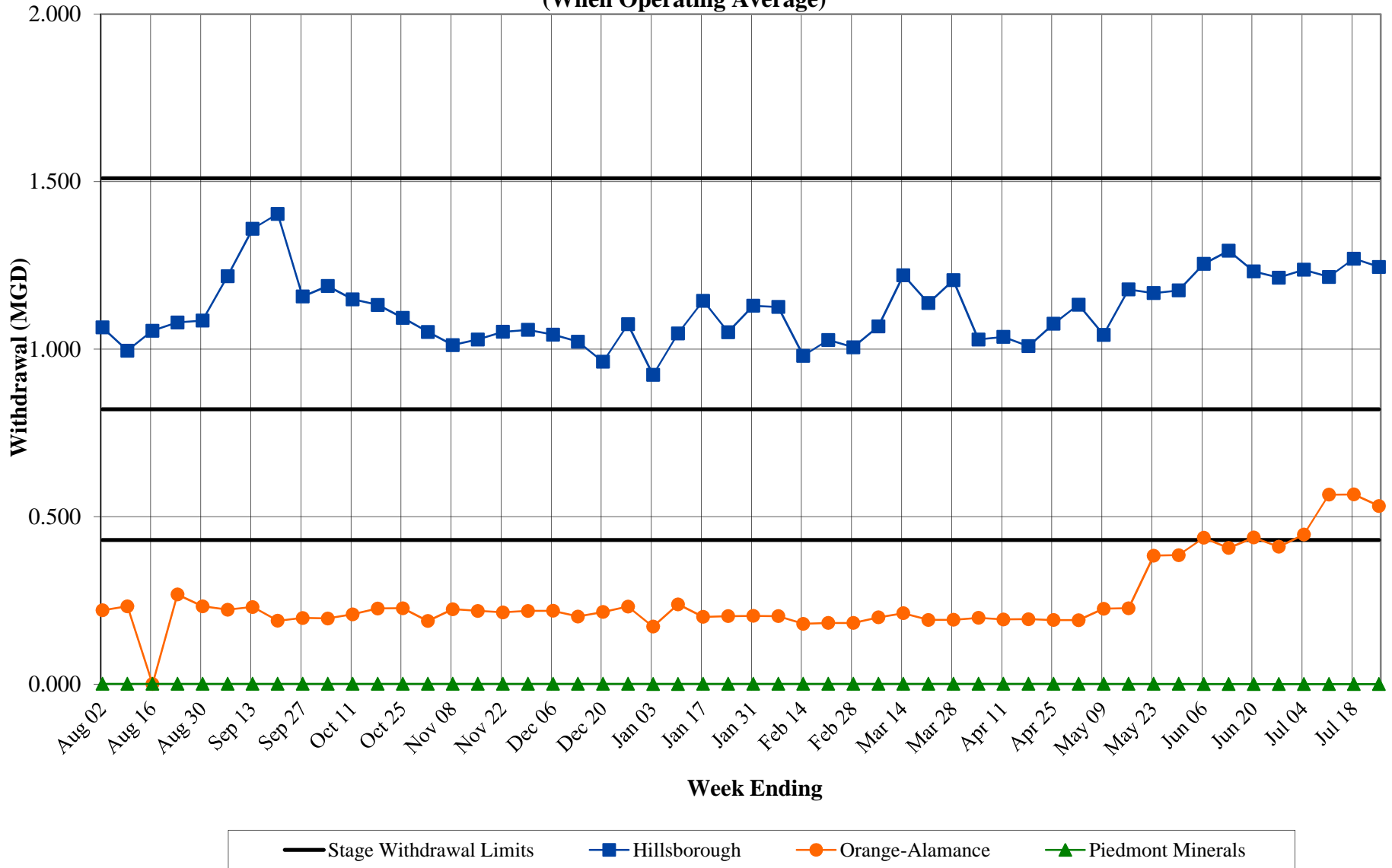
Total use: 0.0001 mgd
Avg. Eno use: 0.0001 mgd
(when operating: 0.0006 mgd)

Total use: 0.0001 mgd
Avg. Eno use: 0.0001 mgd
(when operating: 0.0005 mgd)

**Note: At the time of this report, Piedmont Minerals had not submitted withdrawal information for June 1, 2014- July 31, 2014.*

ENO RIVER AVERAGE WEEKLY WITHDRAWALS

August 2013 - July 2014
(When Operating Average)

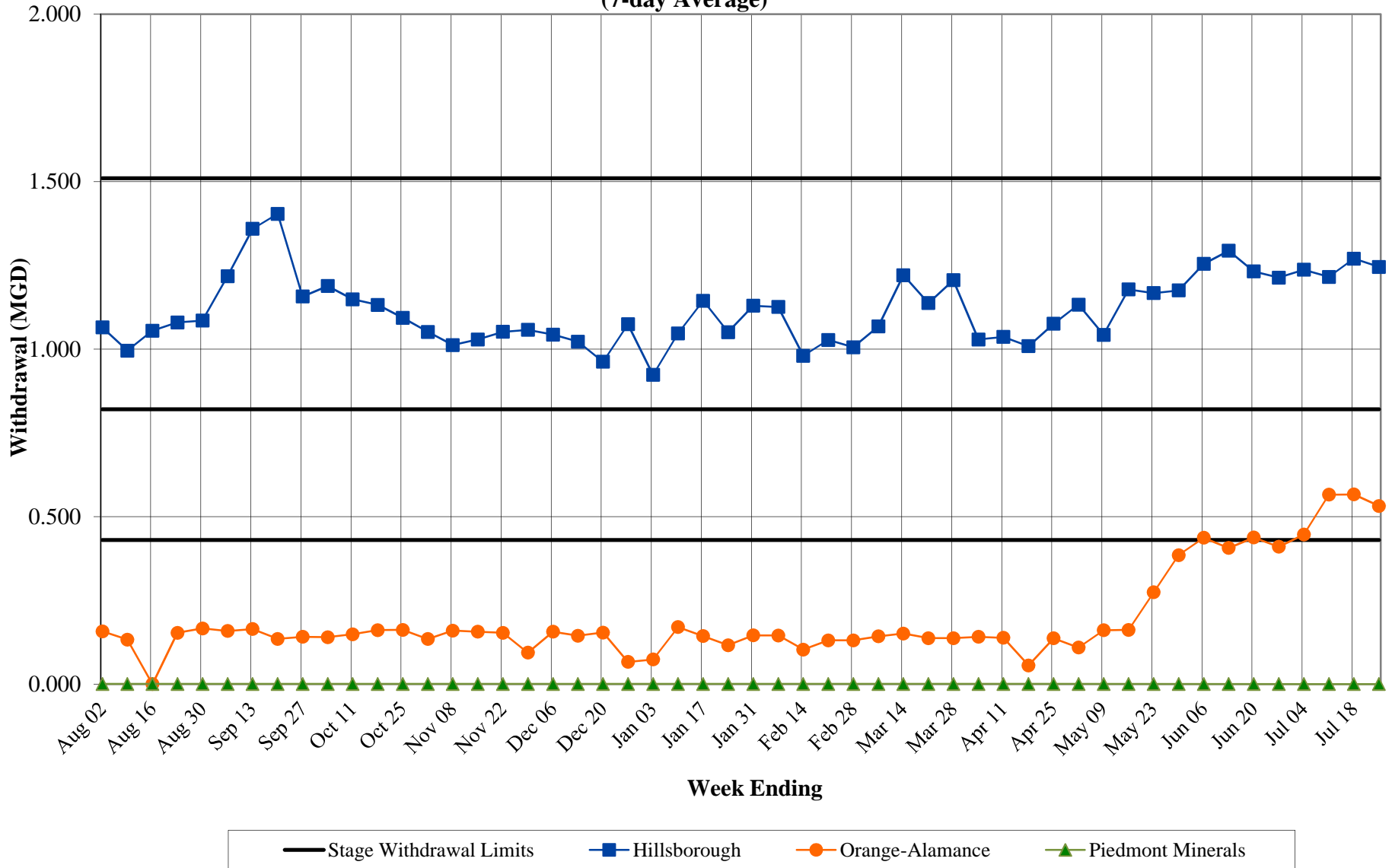


Note: At the time of this report, Piedmont Minerals had not submitted withdrawal information for June 1, 2014- July 31, 2014.

ENO RIVER AVERAGE WEEKLY WITHDRAWALS

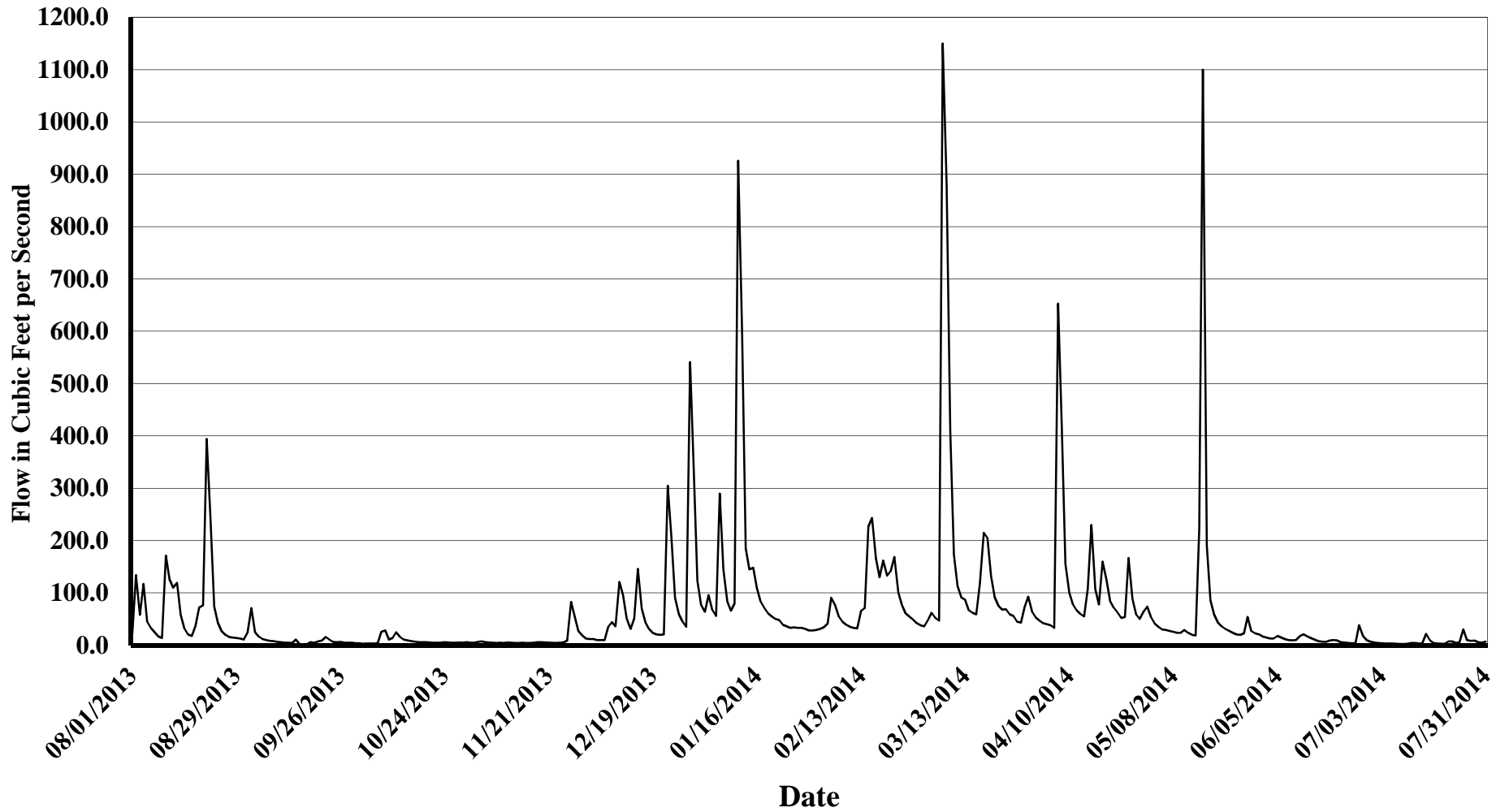
August 2013 - July 2014

(7-day Average)



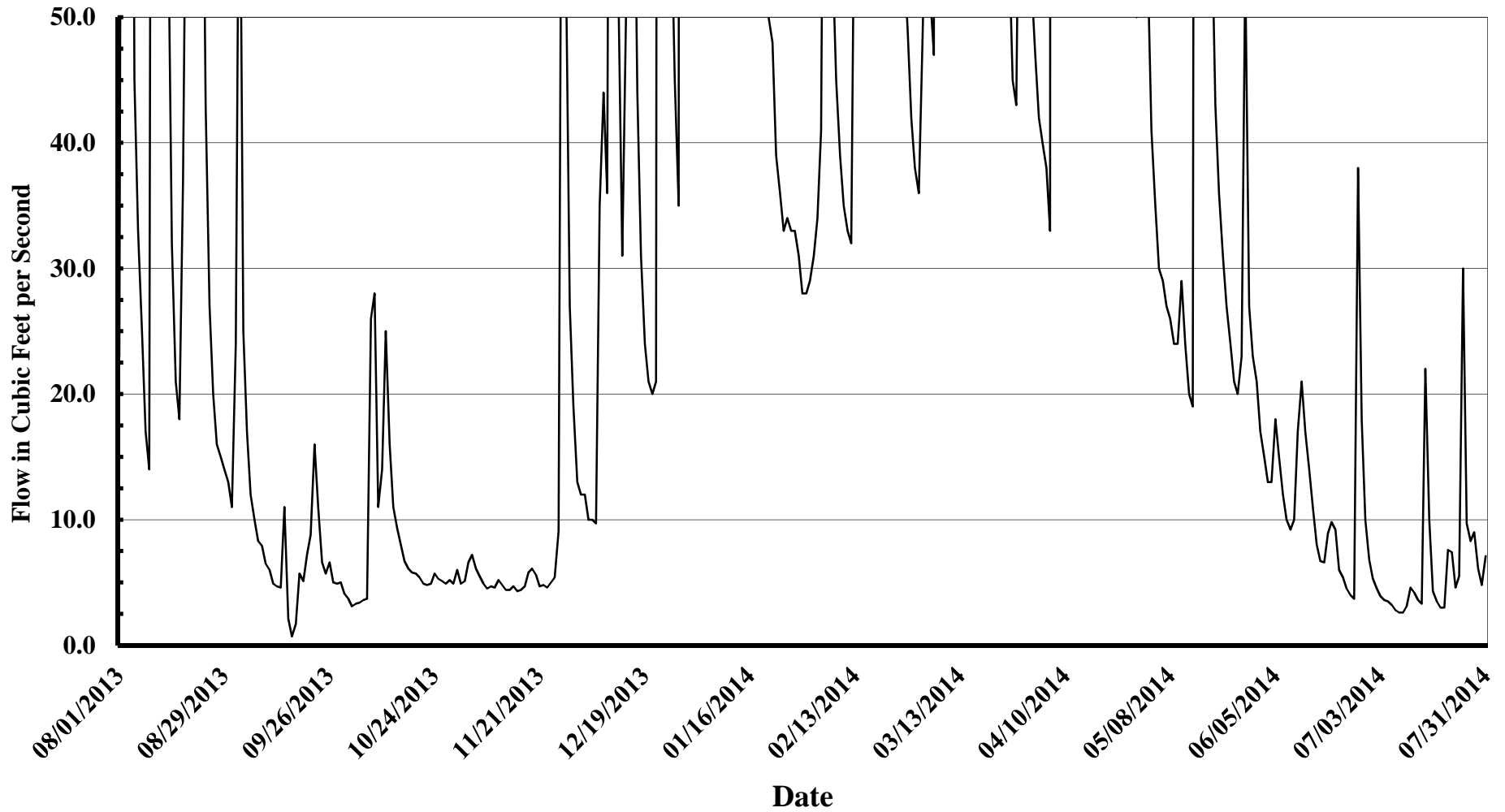
Note: At the time of this report, Piedmont Minerals had not submitted withdrawal information for June 1, 2014- July 31, 2014.

ENO RIVER @ HILLSBOROUGH, #02085000
August 1, 2013 - July 31, 2014



08/01/13-09/30/13: USGS data approved for publication.
10/01/13-07/31/14: USGS provisional data subject to revision.

ENO RIVER @ HILLSBOROUGH, #02085000
August 1, 2013 - July 31, 2014



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ENO RIVER ANNUAL WATER USERS MEETING

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Status of Water Users:

Hillsborough

- Kenny Keel provided the status of Hillsborough's WFER;
 - Hillsborough has seen a slight increase in usage (1.1 – 1.3 MGD);
 - WFER level 7" below full, 339 days of supply remaining;
 - Development of subdivisions means lots of new rooftops;
 - UNC Hospital construction;
 - Initial phase = 100 beds, 0.100 – 0.200 MGD anticipated usage;
 - Build out of hospital = 300 beds.
 - Hillsborough constructing first elevated storage tank (0.500 MGD);
 - Will be visible from I85.
 - Recently completed \$19 million water treatment plant upgrade (\$16 million construction)
 - Study Phase of WFER Phase 2 nearing completion;
 - COE permit expires the end of 2018;
 - Anticipate project cost to be \$6-7 million;
 - Coordinating with DOT to raise Old Cedar Grove Road;
 - Other roads and \$1 million bridge to be constructed summer 2016;
 - Anticipate project completion summer 2017;
 - Hillsborough is part of Jordan Lake Partnership;
 - Requested a 1 MGD allocation, Level II;
 - Water would be obtained via OWASA or Durham.

Orange-Alamance

- Faye Metcalf provided the status of Orange-Alamance;
 - No significant changes overall in water withdrawals within the last year;
 - Increase of ~0.250 MGD in May through August;
 - Due to temporary sales to Mebane;
 - Orange-Alamance water treatment plant returned to operating five days per week after Mebane was back on their own water;
 - Orange-Alamance maintains a 20-year purchase water contract with the Town of Haw River;
 - Contract purchase minimum of 0.300 MGD and a maximum of 0.800 MGD;
 - Orange-Alamance has two wells located on 119S that are rarely used;
 - Orange-Alamance anticipates no real-growth;
 - Graham services new development because Orange-Alamance does not provide sewer.
 - Faye announced she will be retiring in January 2015.

Piedmont Minerals

- There was no representative for Piedmont Minerals present to provide an update.
- Wayne explained there had been no major changes reported by Randy in the past six months.

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Orange County

- Kevin Lindley reported LOR relatively full;
 - Lowest elevation 3" down;
 - Minor changes due to the effect of the temporary protocol;
 - Release 1 cfs when not full, > 1 cfs when spilling.
- Orange County is part of Jordan Lake Partnership;
 - Have existing 1 MGD allocation, Level II;
 - Requested 0.500 MGD increase (1.500 MGD total);
 - Requested for projected future development with the County;
 - Allocation could be given to Durham or Hillsborough as needed;
- Working with Durham to tie their water and sewer into the fringe of the systems;
- In the design phase of sewer collection to be sent to Mebane;
 - Upon completion, Mebane will own/operate Efland's sewer system.

Eno River State Park

- There was no representative for Piedmont Minerals present to provide an update.
- Linwood discussed the NCDENR press release dated September 9, 2014 concerning hydrilla infestation of the Eno River.
- NCSU-DWR-DPR Task Force to study how to best control the hydrilla problem;
- Wildlife Resources Carp pilot study to track their travel habits and migration patterns;
- Kenny Keel noted hydrilla in WFER under control;
- Dale Hamby noted no major hydrilla issues in Orange-Alamance;
- Kevin Lindley noted LOR hydrilla issues needs to discuss treating the reservoir with carp.

Follow-up Items:

- No major follow-up items brought to the group's attention.
- Linwood Peele adjourned the meeting.