

COUNTY COUNCIL OF BEAUFORT COUNTY

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AGENDA
NATURAL RESOURCES COMMITTEE

Monday, February 3, 2014
 2:00 p.m.

Executive Conference Room
 Administration Building

Staff Support: Tony Criscitiello

Committee Members:

Brian Flewelling, Chairman
 Cynthia Bensch, Vice Chairman
 Gerald Dawson
 William McBride
 Jerry Stewart
 Tabor Vaux
 Laura Von Harten

1. CALL TO ORDER – 2:00 P.M.
2. PRESENTATION / BEAUFORT COUNTY VOLUME SENSITIVE WATERS
 John Leffler, ACE Basin National Estuarine Research Reserve Coordinator, Marine Resources Research Institute, SCDNR – Project Principal Investigator
 Denise Sanger, Associate Marine Scientist, Marine Resources Research Institute, SCDNR – Project Research Lead
 April Turner, Coastal Communities Specialist, SC Sea Grant Consortium – Project Integration Lead
3. BLUFFTON GATE DEVELOPMENT AGREEMENT
4. DISCUSSION REAPPOINTMENTS AND APPOINTMENTS
 - A. Historical Preservation Review Board
 - B. Northern Corridor Review Board
 - C. Planning Commission
 - D. Rural and Critical Lands Preservation Review Board
 - E. Southern Corridor Review Board
 - F. Stormwater Management Utility Board
 - G. Zoning Board of Appeals
5. EXECUTIVE SESSION
 - A. Discussion of negotiations incident to proposed contractual arrangements and proposed purchase of property
6. ADJOURNMENT

ADD-ONS

The document(s) herein were provided to Council for information and/or discussion after release of the official agenda and backup items.

Topic: Beaufort County Water Sensitive Study
Date Submitted: February 3, 2014
Submitted By: Jeff Leffler, Denise Sangar and April Turner
Venue: Natural Resources Committee

Beaufort Volume Sensitive Waters Study

Beaufort County Natural Resource Committee

February 3, 2014



Outline

1. Background
 1. Identifying Critical Headwaters
 2. MOU
2. Collaborative Approach
 1. WAC
 2. Other Groups
3. Research Approach
 1. Systems
 2. Sampling
 3. Modeling



Identifying Critical Tidal Creek Headwaters

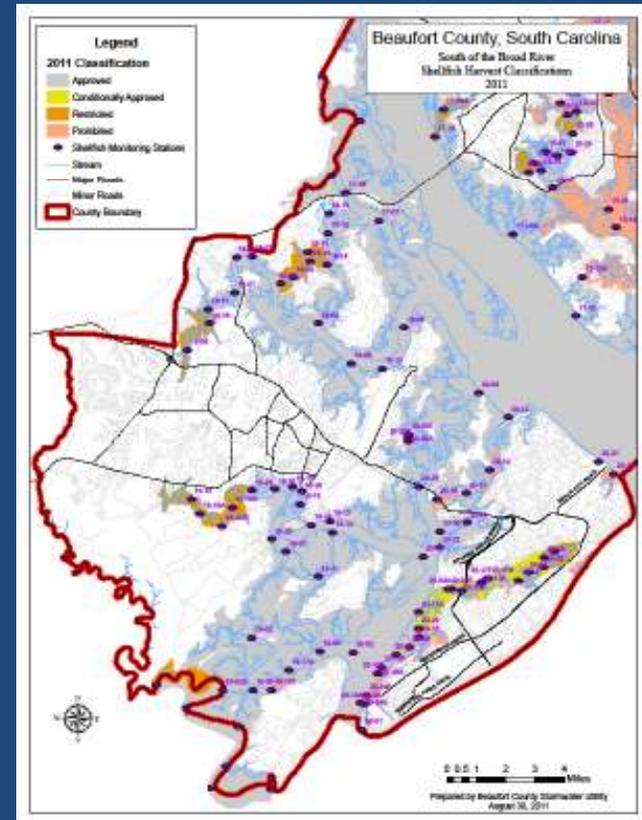
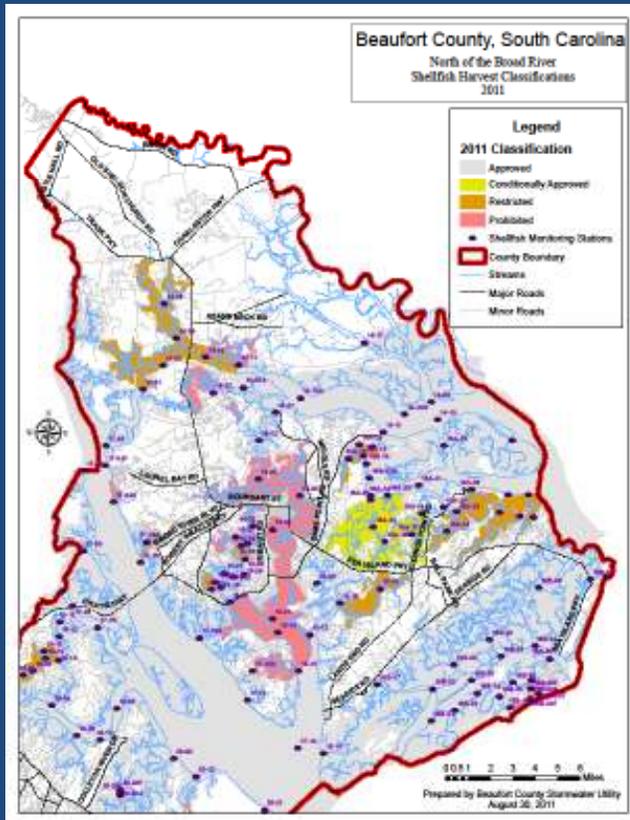
Waddell Mariculture Center

April 11, 2012

Dan Ahern, 2012

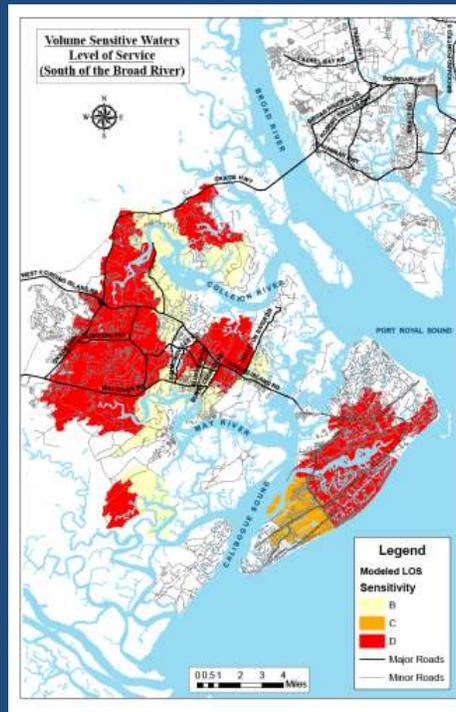
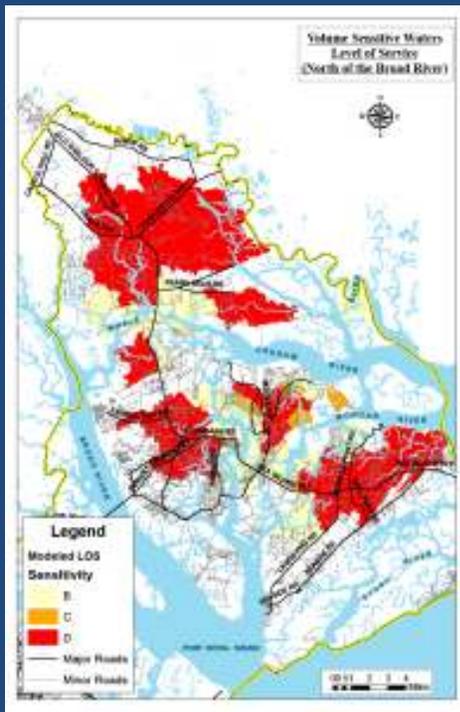
Dan explained the background of

- Beaufort County Stormwater Standards - Meeting volume requirements satisfies most pollutant and bacteria needs
- Water Quality Impairments in the County



Dan also described previous efforts to identify Volume Sensitive Waters:

- Stormwater Management Plan Modeling
- Analysis of SC DHEC shellfish monitoring data which sometimes suggests points of rapid change in water quality in headwater drainages.



Okatie Headwater Stations	2009	2010	2011
18-08	9/5	10/4	8/5
18-16	7/3	5/1	9/3
18-17	4/0	3/1	4/0
18-07	0/0	3/0	2/1
18-01	0/0	2/0	3/1
18-02	0/0	3/0	3/1

Partners in the 5-Year MOU

- Beaufort County – (Robert McFee, Danny Polk)
- Town of Bluffton – (Kim Jones)
- South Carolina Department of Natural Resources –
(Denise Sanger, John Leffler)
- University of South Carolina Beaufort – (Eric Monte)

Scope of Work

- Install rain gauges in each watershed.
- Measure salinity and depth down-stream from headwaters.
- Evaluate magnitude of salinity change as function of rainfall.
- Determine extent of signal downstream until attenuated.
- Identify location of “critical volume-sensitive waters”.
- Move from watershed to watershed over 5 years.
- Assess natural resource impacts.



May River



Okatie River

Additional Funding Opportunity

- National Estuarine Research Reserve (NERR) System's Science Collaborative Grants Program
- Proposal sponsored by the ACE Basin NERR
- Expand effort to deploy salinity/depth dataloggers and rain gauges in five watersheds simultaneously.
- Generate data and interpretations from five sites in 1-2 years rather than one site per year over 5 years.
- Incorporate information into the County's 2016-2026 Stormwater Management Plan.

Project Partners

- Beaufort County
 - Robert McFee - Collaborator
 - Danny Polk - Collaborator
- South Carolina Department of Natural Resources
 - John Leffler – PI
 - Denise Sanger – Science Lead
- University of South Carolina Beaufort
 - Eric Monte – Monitoring May
- South Carolina Sea Grant Consortium
 - April Turner – Collaborative Lead
- NOAA's Hollings Marine Laboratory
 - Anne Blair – Runoff Modeling

Primary Collaborative Objectives

1. Inform and update the Stormwater Utility Board and seek advice throughout project.
2. Work with an Advisory Committee that advises and assists through several workshops.
3. Communicate research activities and results to wider community.

Watershed Advisory Committee Members

- Kim Jones
- Andy Kinghorn
- Don Smith
- Danny Polk
- Al Segars
- Al Stokes
- Alan Warren
- Chris Marsh
- Reed Armstrong
- Russell Berry
- Dan Ahern
- Bob Gross

Purpose of the Watershed Advisory Committee

Provide advice and assistance in:

- additional watershed selection
 - specific site locations
 - interpretation of results
 - site-specific modeling modifications
 - synthesis of results
 - translation of results for the Intended User community charged with policy development
- First Workshop
- Second workshop
- Third workshop
-

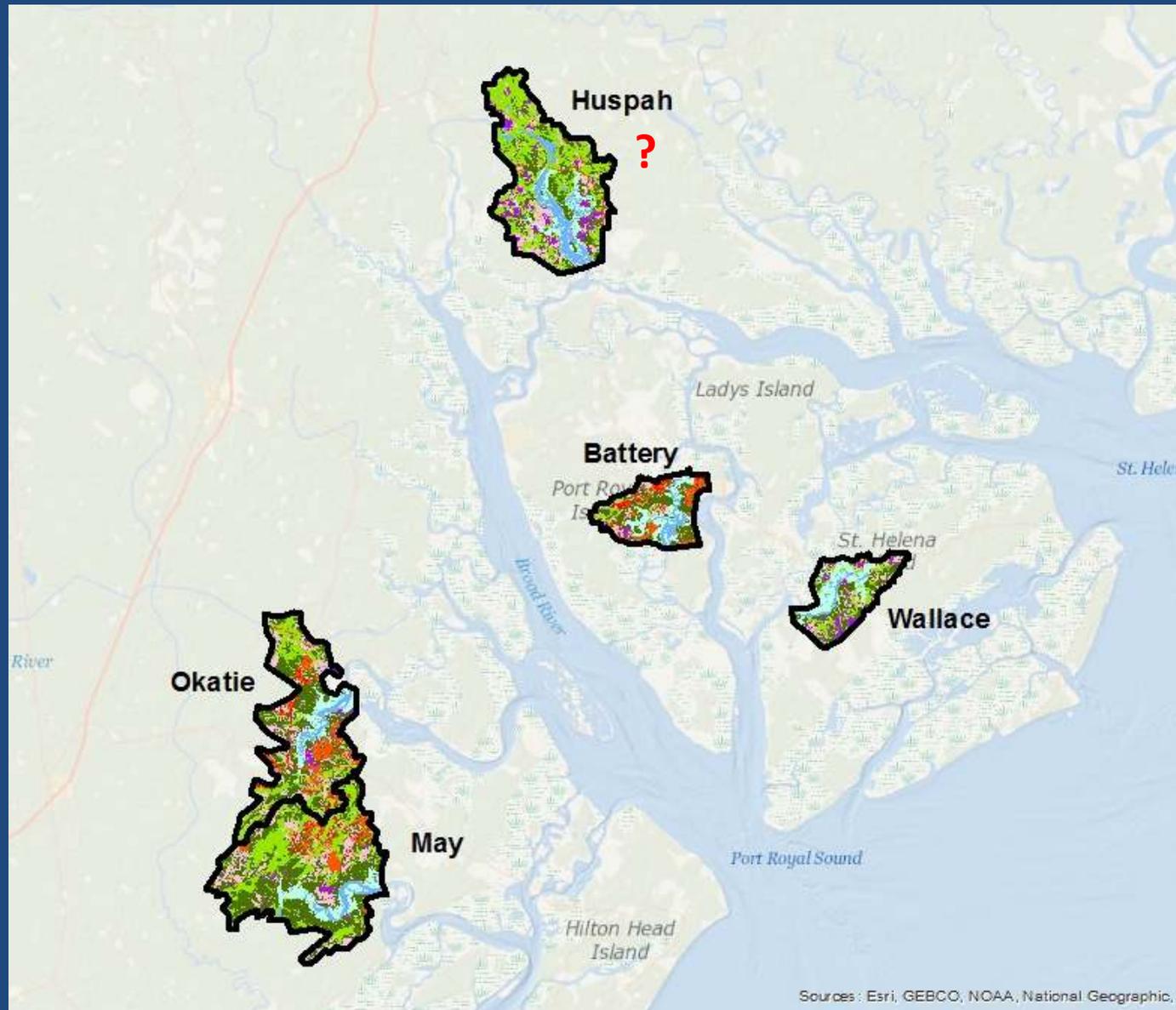
Primary Research Objectives

1. Assess the relationship between rainfall and salinity range throughout the length of tidal creeks in BC-selected watersheds in order to define what size water bodies and which particular watersheds are most volume sensitive.
2. Project the potential impacts that implementation of volume control BMPs and changing precipitation patterns might have on salinity range in priority watersheds.

Water Quality

- Salinity, temperature, and depth will be monitored in bottom water at ~6 sites within each creek system.
- Measurements will be taken every 30 minutes over a 9-10 month period.
- Site locations range from the headwaters to downstream in expected volume “insensitive” waters.

County Distribution



Creek Summary

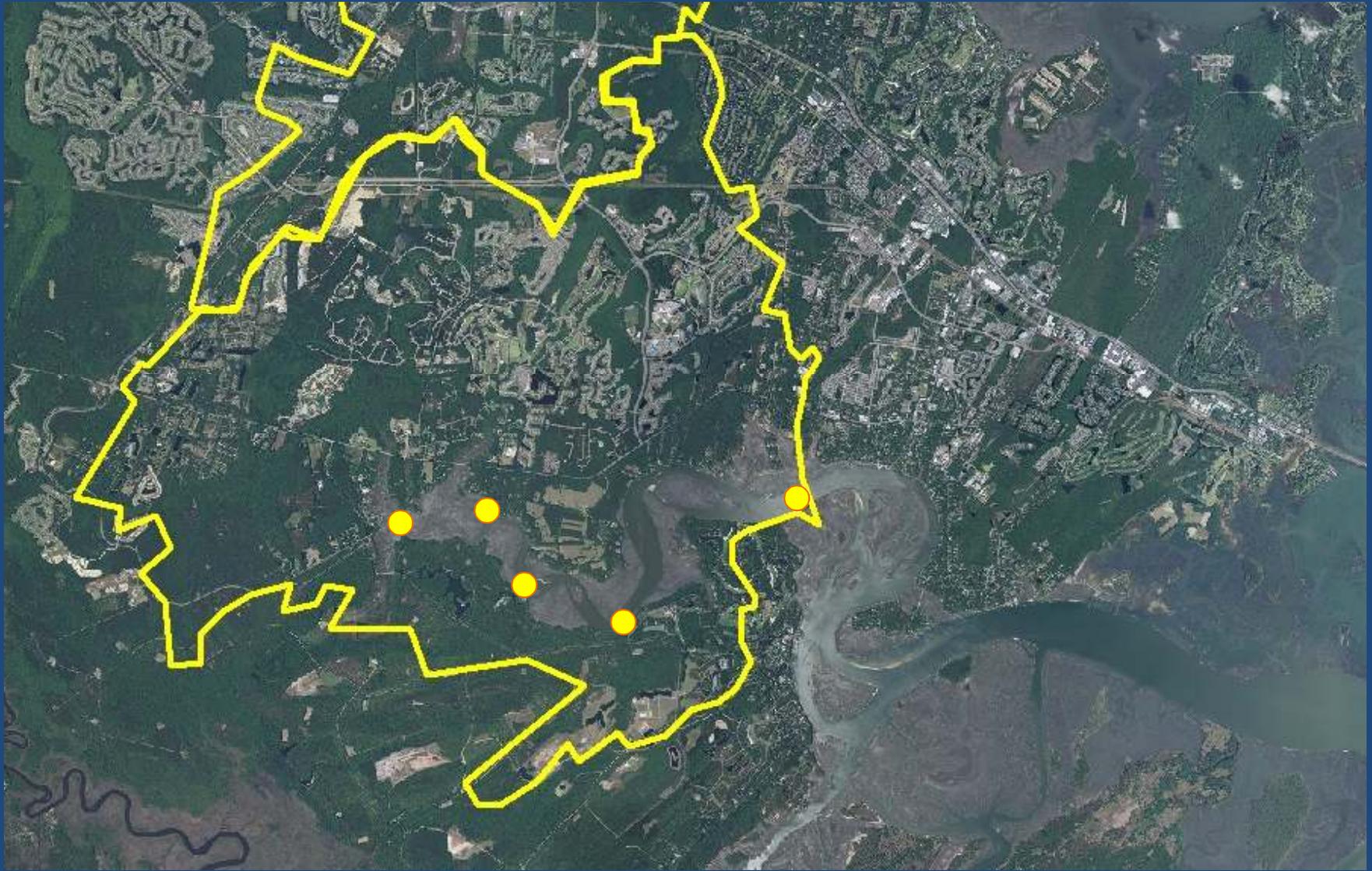
System Name	Watershed Area (acres)	Length (miles)	Bottom Creek Width (feet)	Shellfish Harvest Classifications	Predominant Land Cover 2006
Battery Creek (county com.)	4830*	3.8	630	prohibited to restricted	Suburban
Battery Creek (Burton-Grober)	4830*	2.6	630	prohibited to restricted	Suburban
May River	14810	6	1200	restricted to approved	Suburban
Okatie River	11389	5	850	restricted to approved	Suburban
Wallace Creek	4594	4.5	500	restricted throughout	Forest/Wetland Salt
Huspah Creek	12817	6	950	restricted throughout	Wetland Fresh/Forest

Okatie River

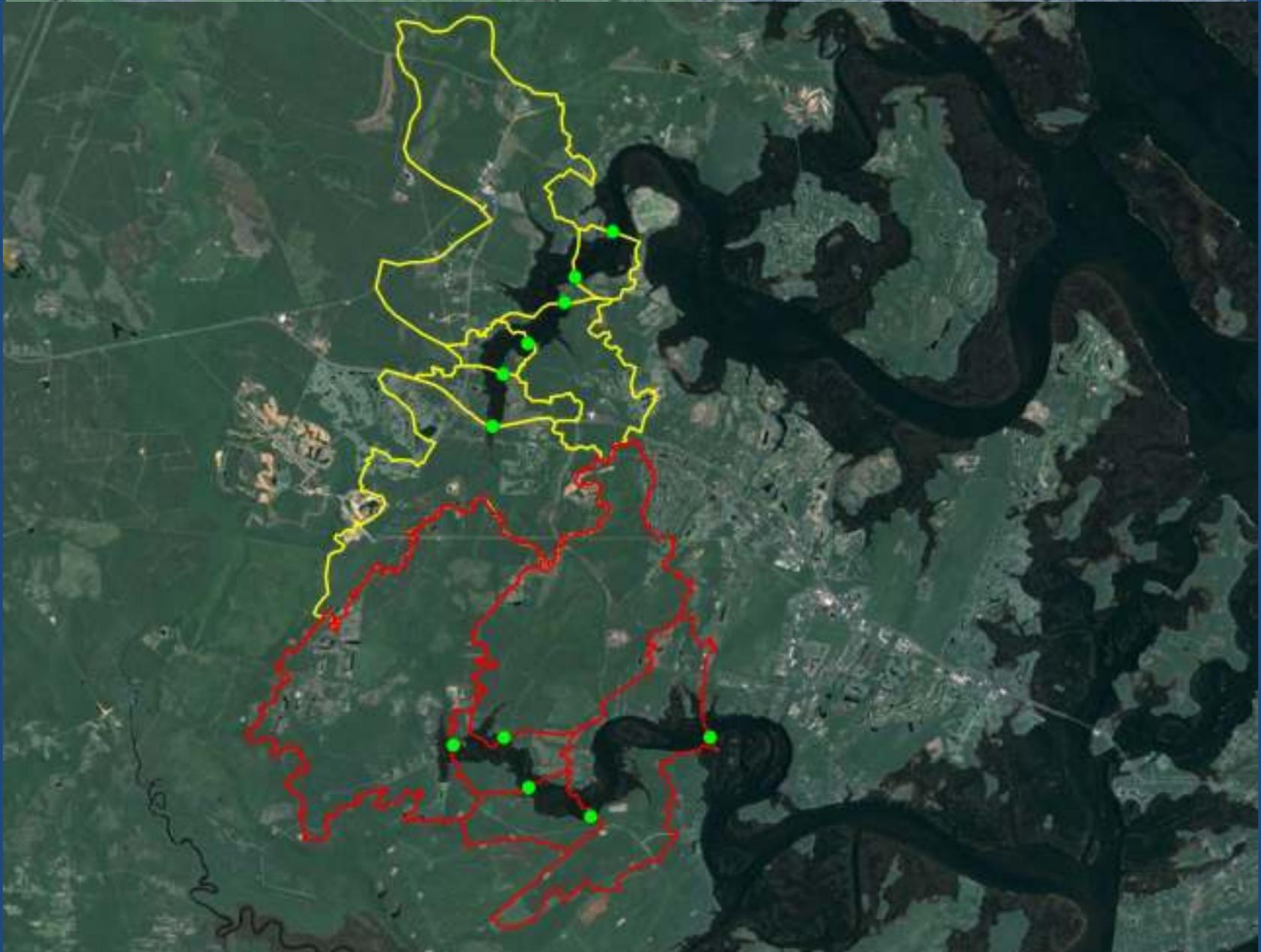
Collecting
data since
approx May
2013



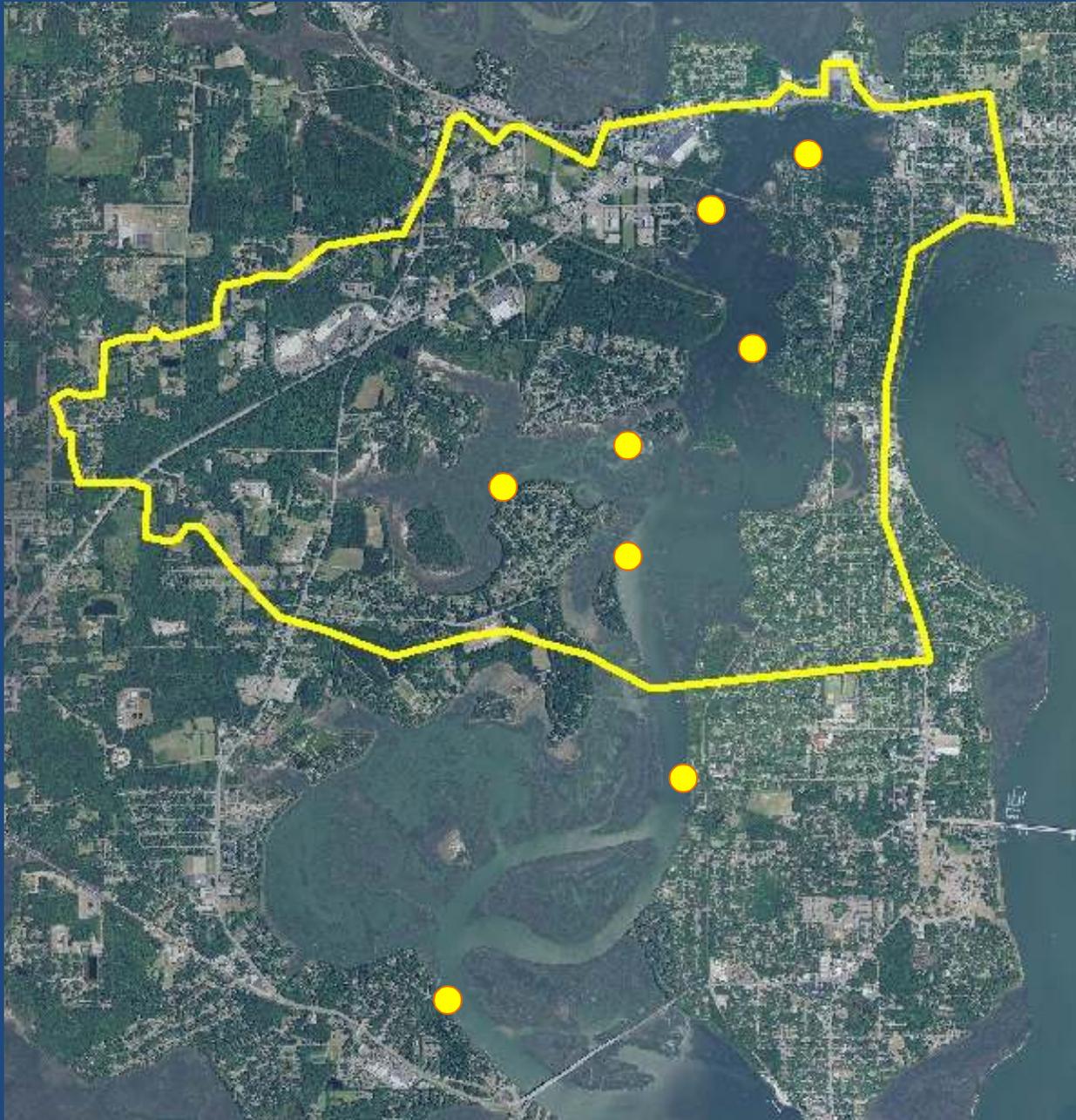
May River



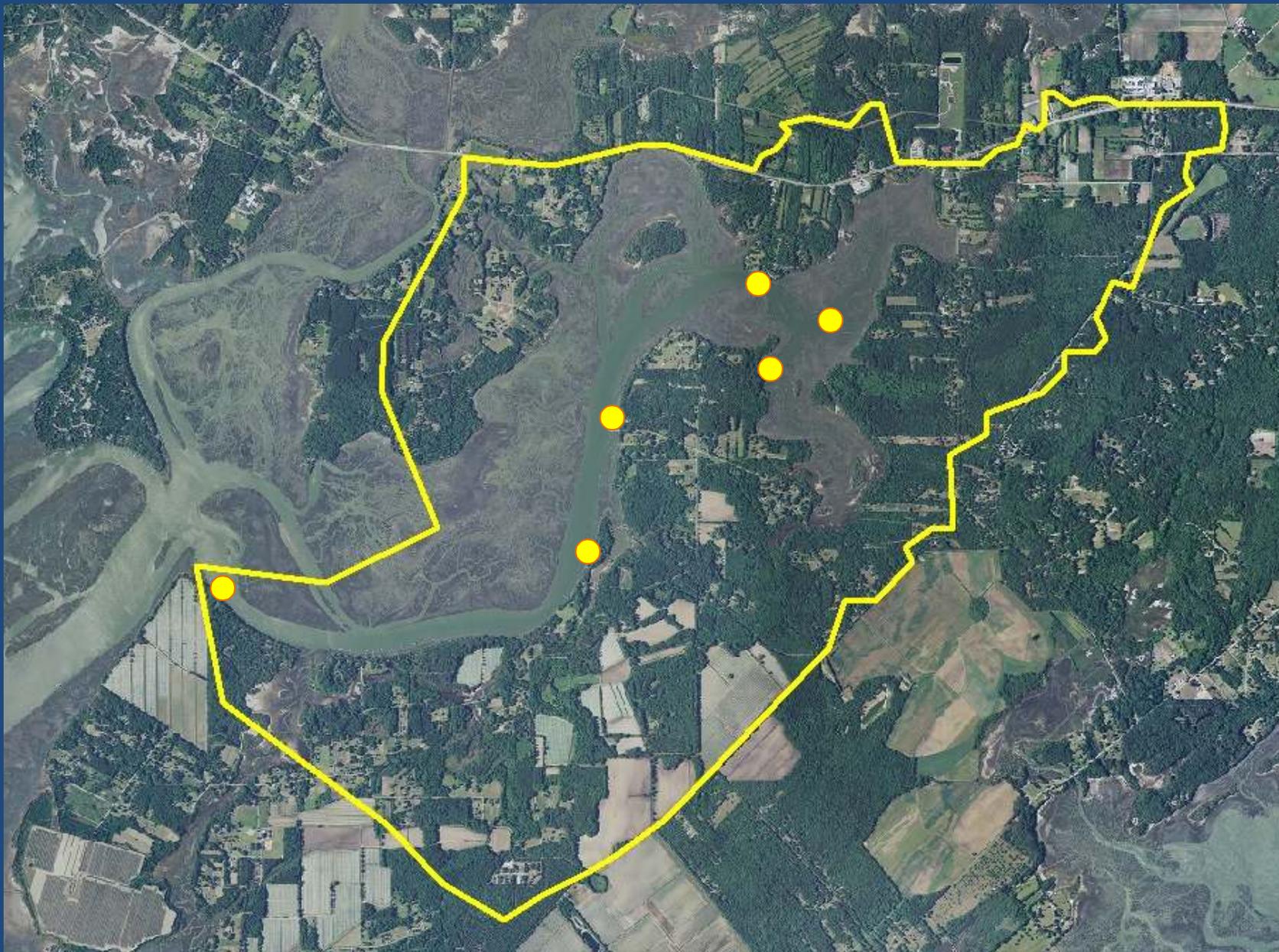
Okatie and May Rivers



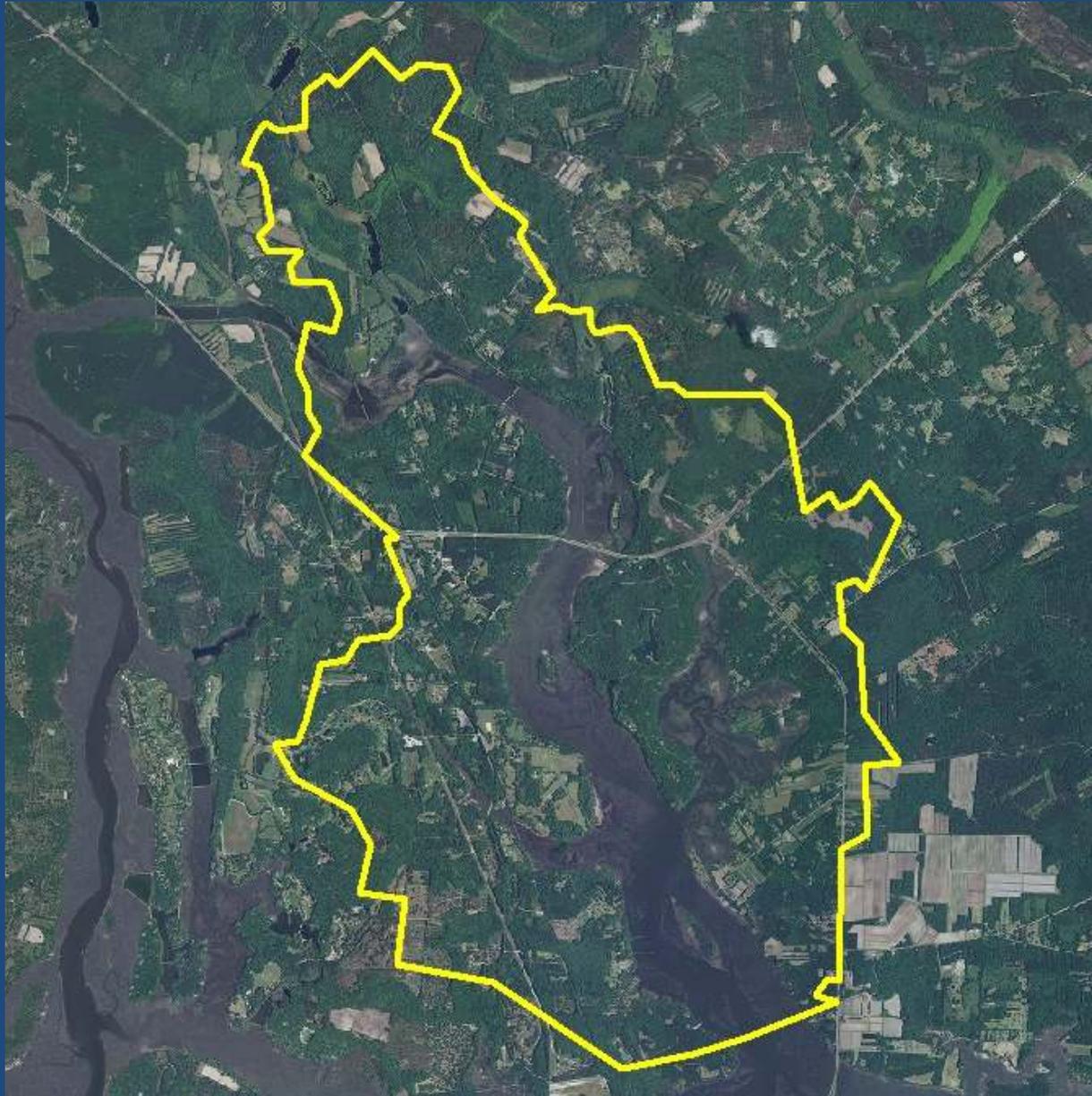
Battery Creek



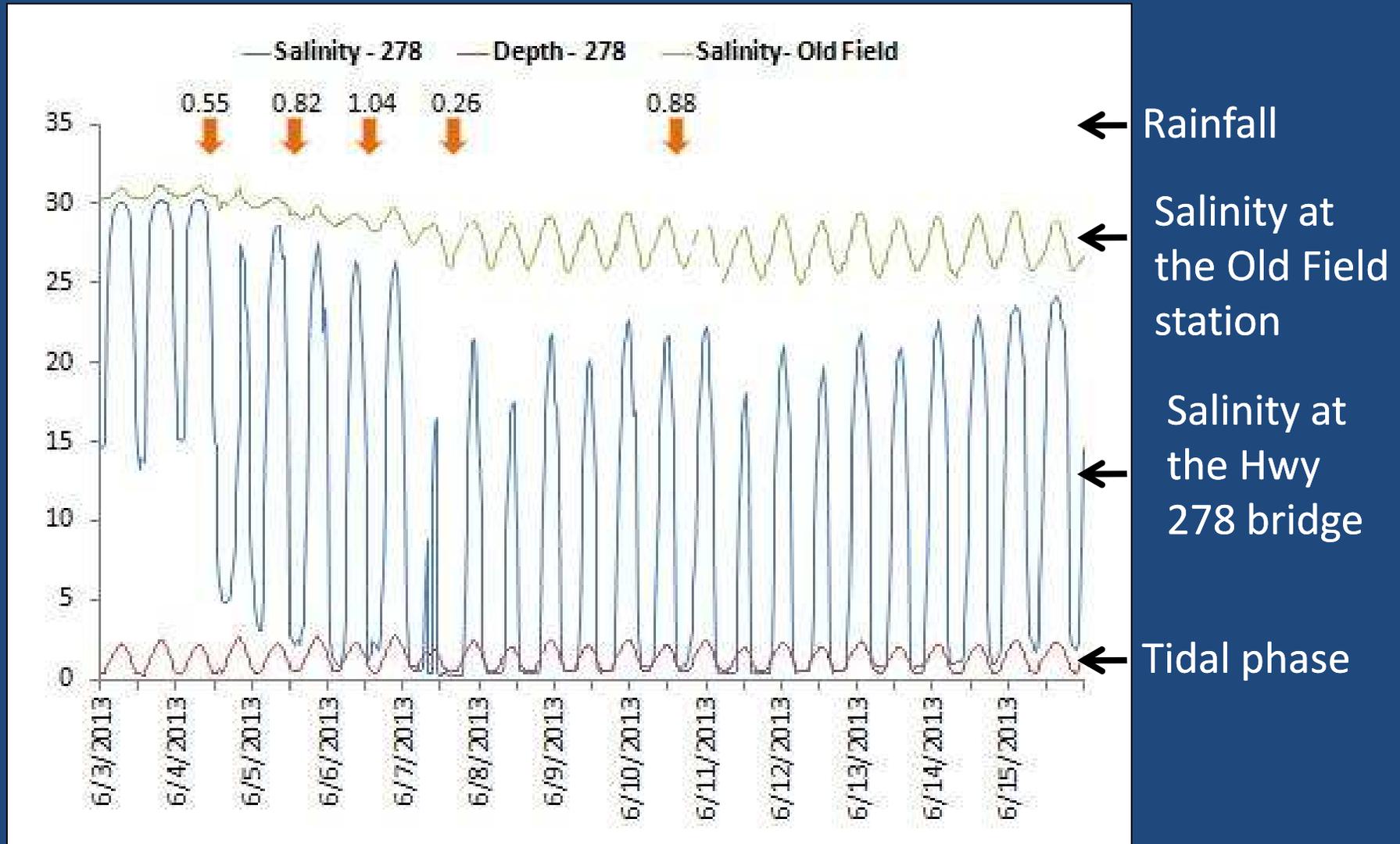
Wallace Creek



Huspah Creek

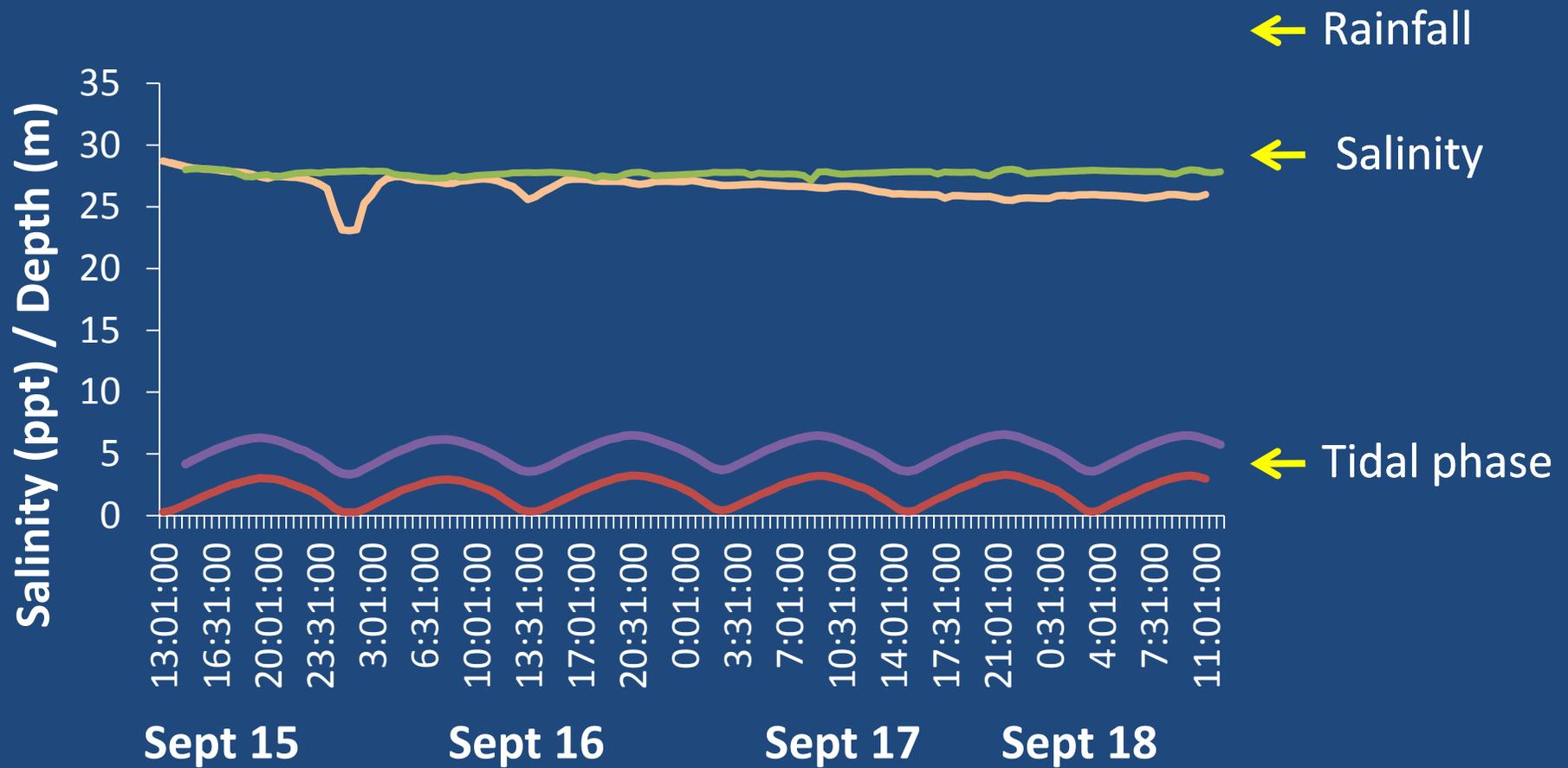


Example of Okatie Data



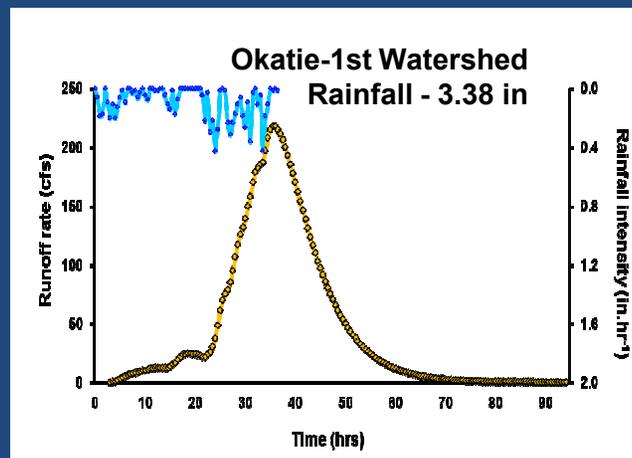
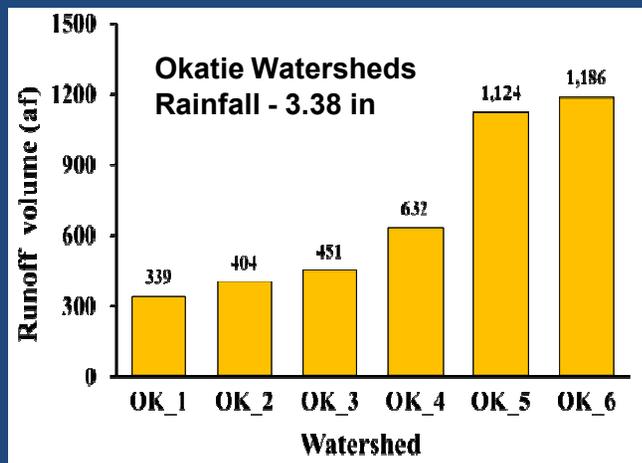
Example of Battery Creek Data

— B/G HW Salinity — B/G HW Depth
— Confluence Salinity — Confluence Depth



SWARM – Stormwater Runoff Modeling System

- Model is based on U.S.D.A., Natural Resources Conservation Service Volume - Flow Curve Number (CN) method
Rate & time – Dimensionless Unit Hydrograph method
- Calculates runoff based on environmental settings (e.g., levels of development, soil types, a range of sizes, topography);
- Integrates effects of development and projected climate change scenarios.



Analysis

- For each system, develop methodology for evaluating the translation of freshwater downstream.
 - Salinity range
 - Amount of rainfall
 - Antecedent rainfall
- Compare salinity results with DHEC shellfish data and modeling results
- Evaluate potential BMP effects

Steps

Aug.– Sep. 2013: Consult with Utility Board ; Organize and meet with Advisory Committee

Sep.– Oct. 2013: Set up accounts; Purchase equipment; Establish monitoring stations

Nov. – Dec. 2013: Deploy dataloggers and begin monitoring

Apr. 2014: Meet with WAC to review data, seek help in interpreting preliminary results, and specific detail for model

Steps (continued)

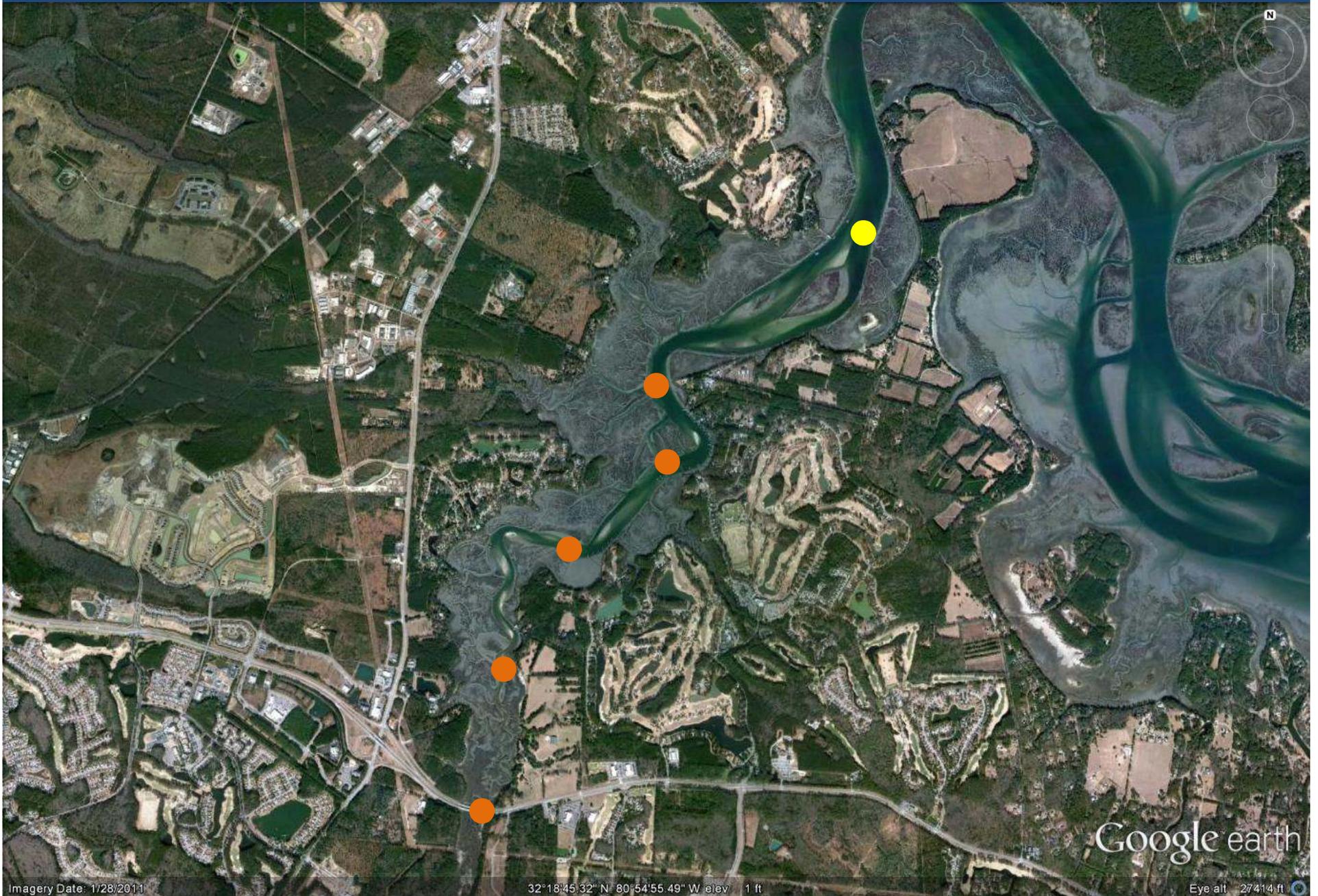
Sep. 2014: Meet with WAC to review data, rank priority watersheds by volume sensitivity, evaluate utility of runoff model and projections, describe limitations and uncertainties

Oct. 2014: Meet with Utility Board to present updates and discuss interpretations of results

Nov. 2014 - forward: Under the Memorandum of Understanding, continue monitoring specific locations to refine dataset and answer questions that arise from Advisory Committee and Utility Board.



Okatie River

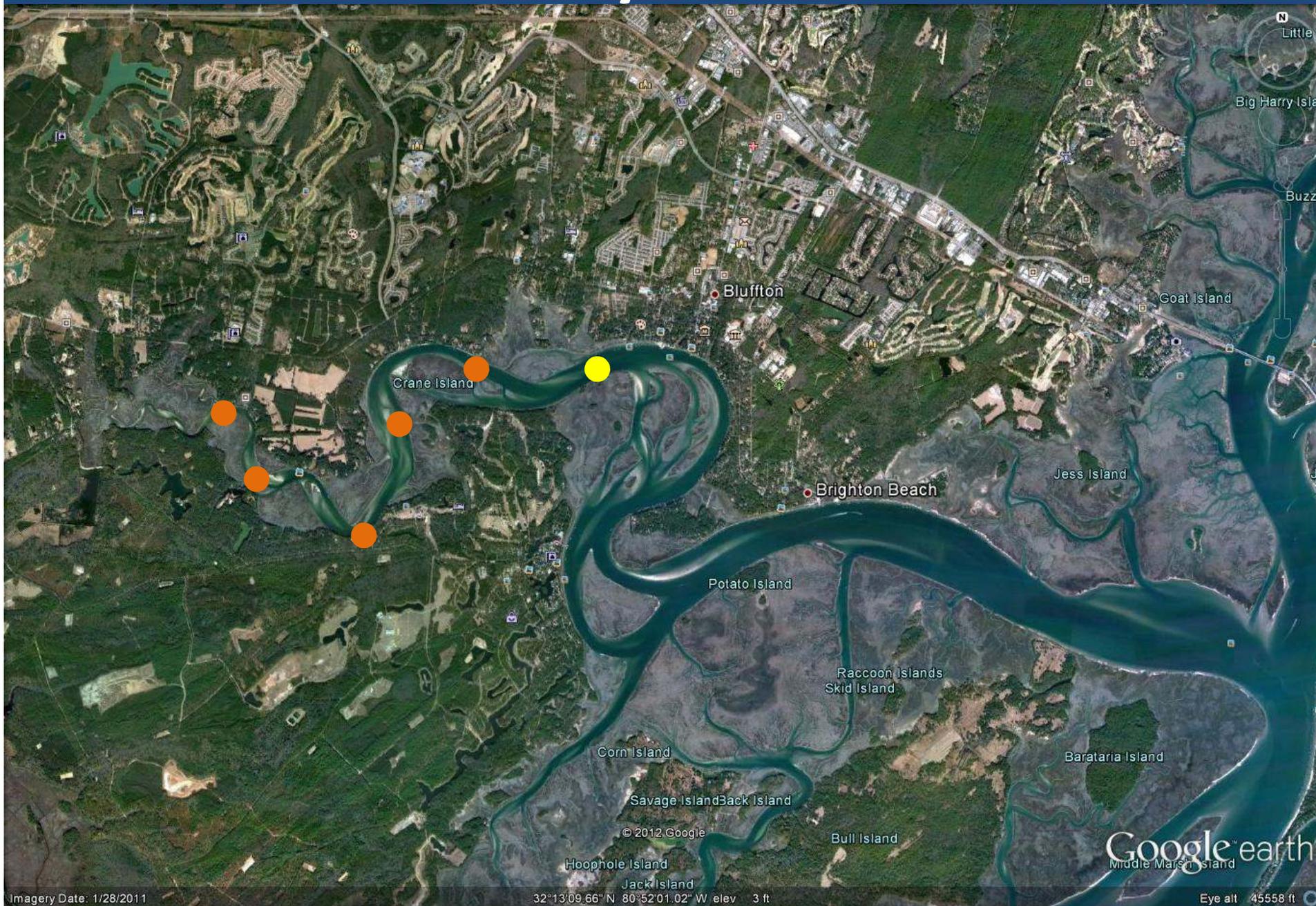


Imagery Date: 1/28/2011

32°18'45.32" N 80°54'55.49" W elev 1 ft

Eye alt 27414 ft

May River

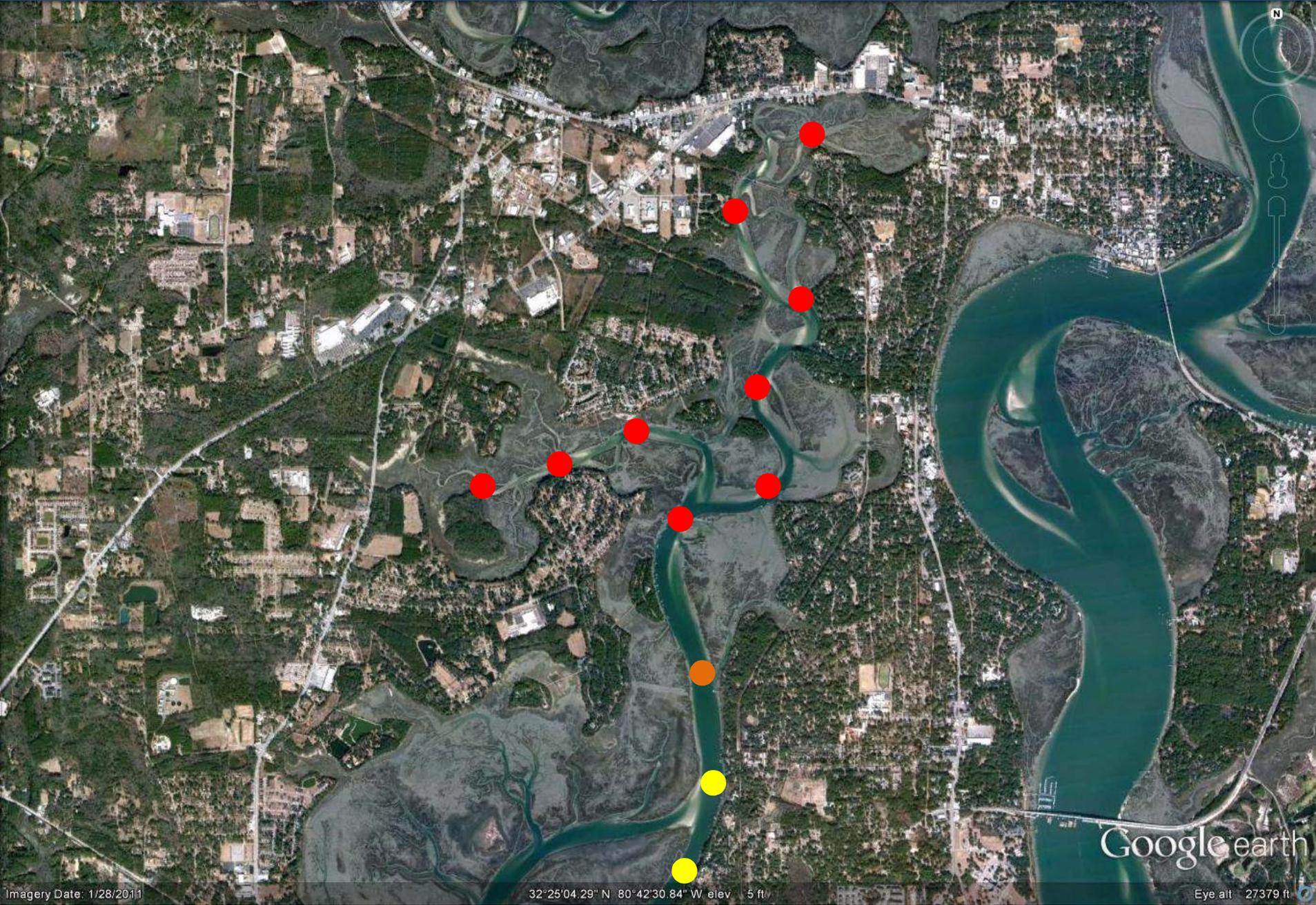


Imagery Date: 1/28/2011

32°13'09.66" N 80°52'01.02" W elev 3 ft

Eye alt 45558 ft

Battery Creek



Imagery Date: 1/28/2011

32°25'04.29" N 80°42'30.84" W elev 5 ft

Eye alt 27379 ft

Topic: Text Amendments, Adaptive Re-Use in Light Industrial Area
(Beaufort Liquidators)

Date Submitted: February 3, 2014

Submitted By: David Tedder

Venue: Natural Resources Committee

DAVID L. TEDDER, P.A.

604-A Bladen Street • Beaufort, South Carolina 29902 • (843) 521-4222 • (843) 521-0082 fax
dave@tedderlawoffice.com

MEMORANDUM

TO: BEAUFORT COUNTY COUNCIL

CC: GARY KUBIC, JOSH GRUBER, ANTHONY CRISCITIELLO

FROM: DAVID L. TEDDER

DATE: FEBRUARY 3, 2014

RE: TEXT AMENDMENTS, ADAPTIVE RE-USE IN LIGHT INDUSTRIAL AREA
(BEAUFORT LIQUIDATORS)

I have had further conversations with my client, and have made changes to the text which first, removes the restriction on the amount of retail within the building itself, which are contained in subsections (d) (1) and (2). These have been conceded by the military to be acceptable.

Secondly, addressing Flea Markets and Farmers Markets, which have no particular standards under the ZDSO, subsection (d)(3) creates standards for areas in the Light Industrial area that are not in the AICUZ areas, and subsection (d)(4) adds standards for those in the AICUZ which first, restrict the use to Saturdays only, and secondly, provides for a biannual review to determine if there has been a substantial increase in noise complaints registered with MCAS-Beaufort during that period, and if so, provides for termination of the permit.

This last provision should address the concerns expressed by Gerald Dawson at the last Council meeting, wherein he stated he wished there was a way to allow this and prevent complaints from harming MCAS. This ought to be acceptable. The restriction to Saturdays is something we tried to offer at the last meeting, but could not get it postponed to add in.

To clarify a misconception, current ordinance 106-1397 allows special events for 4 times a year, for up to 7 consecutive days, for a total of 28 days. This allows for less than a doubling of that, since there are only 52 Saturdays in a year. Furthermore, there are no restrictions on the days of operation at the adjacent drive-in; in reality, this ordinance will actually provide further restrictions on flea markets in this AICUZ area that do not now exist, with the movement of the flea market to the more restricted site.

We would request that you consider, and seek assistance and consensus from other Council members, to renew the motion to amend the ZDSO, and then substitute this revised version in its stead.

Sincerely Yours,

David L. Tedder

David L. Tedder
Natural Resources Committee
February 3, 2013

RE-WORDED SECTION 106-1287

(CLEAN)

Sec. 106-1287. Commercial retail, regional.

(a)

Limited/special standards for use in all applicable districts. Limited/special standards for regional commercial retail uses in all applicable districts are as follows:

(1)

These uses may constitute no more than five percent of the total permitted floor area of the project in which they are located.

(2)

The access to these uses shall be from the development's interior streets. The uses shall not have frontage on arterial or collector streets.

(b)

Reports/studies required. All applications for this use shall include a community impact statement.

(c)

Limited standards for regional commercial retail uses within rural business districts. Limited standards for regional commercial retail uses within rural business districts are as follows:

(1)

This use is limited to 3,500 square feet of floor area.

(2)

Drive-through facilities are not permitted as part of this use.

(3)

The following uses are not permitted as part of this use: Vehicular sales, rental and service uses (NAICS 441); and hospitals and medical facilities (NAICS 621, 622, 623, 624).

(d)

Limited standards for adaptive re-use; regional commercial retail uses in the Light Industrial zoning district. Limited and Special Use standards for regional commercial retail establishments utilizing developed site uses which have been unoccupied by an operating business for more than two years, and are in existence as of the date of this ordinance amendment, are as follows:

(1) It is the intent of this section to allow the adaptive re-use of sites developed in conformity with allowable uses for the Limited Industrial district, but which have become vacant and remained vacant for more than two years, thereby avoiding the creation or continuation of a blighted area.

(2) The permitted floor space size limitations of 106-1287(a)(1) shall not be applicable; existing structures can utilize up to 100 percent (100%) as a Limited Use for all uses qualifying as commercial retail, regional, and may utilize the existing permitted access to the site, notwithstanding 106-1287 (a)(2), provided that the following Limited Use Standards are met:

(i) adequate parking meeting the standards of Article XIII, Division 5 (Section 106-2891 through 106-2896) (Parking and Loading Standards) is provided on-site or through shared parking as allowed by Article XIII, with on-site individual parking spaces delineated;

(ii) the site is located within 1,000 feet of an arterial road, and traffic impacts as measured by trips per day will not exceed by more than 10% the traffic impact of the former permitted use on the site, as determined by reference to the ITE Manual, latest edition, with trips per day in excess of 10% requiring a Traffic Impact Analysis (TIA);

(iii) the proposed use and any structural addition shall conform with the Airport Overlay District for MCAS-Beaufort (Appendix A1), if the site is within that overlay zone;

(iv) Any structural additions shall not increase the existing floor space by more than 5%; if more than a 5% increase is proposed, the application will be treated as a Special Use; and

(v) Any increase in the total existing impervious surface on the site not contemplated in the original storm water submission will require a resubmission of stormwater calculations and appropriate mitigation measures as determined by reference to the Beaufort County Storm Water Manual.

(3) Limited Use Standards for Retail Uses having Exterior Sales Not Within the Airport Overlay District for MCAS-Beaufort (Appendix A1). Retail Uses consisting primarily of exterior sales (flea markets, farmers markets, etc.) which are within a site with fencing and buffers shall be allowed to operate year-round, without limitation as to the number of outdoor sales events imposed by Section 106-1397 (2)(b), provided that:

- (i) the outdoor sales area is located at least 50 feet from the public road servicing the site;
- (ii) a permanent structure with a roof is provided for at least 50% of the spaces to be used for sales in the outdoor sales area;
- (iii) there are clearly marked pedestrian paths of at least ten feet in width between the outdoor sales area and the existing structure within which interior retail sales will occur; and
- (iv) operating hours for outdoor sales will be limited to the hours of 7:00 a.m. to 8:00 p.m.
- (v) Outdoor sales will be allowed only on Fridays, Saturdays, Sundays and recognized national holidays.

(4) Special Use Standards for Exterior Sales within the Airport Overlay District for MCAS-Beaufort (Appendix A1). In addition to the standards set forth above, retail uses having exterior sales located within the Airport Overlay District for MCAS-Beaufort shall be permitted as a Special Use (Article III, Division 3, Subdivision IV (Section 106-551 through 106-555), with the following special considerations:

- (i) Hours of operation are further restricted to Saturdays only (set-up and break-down by vendors not included);
- (ii) In order to avoid noise impacts within the particular Airport Overlay District which might be deleterious to the health and safety of people visiting or participating in such activities or events on-site, giving due consideration to governmental publications, treatises and other matter as may be submitted, the site must include such noise mitigation measure as are necessary to protect the visiting public, which may be satisfied by having exterior sales areas covered by roofing (at least 75% of the exterior sales booths or sale areas), and vegetated buffers of at least 100 feet on sides not buffered by buildings;
- (iii) Permits may be authorized by the Zoning Board of Appeals of limited duration, with a review of the permit every twenty-four (24) months after issue to determine whether there have been a substantial number of noise complaints registered with MCAS-Beaufort by vendors or patrons of the establishment, and if so, additional measures to protect the public from noise exposure imposed, or should no additional measures be available, the permit may be terminated upon ninety (90) days written notice by the County.

RE-WORDED SECTION 106-1287

COMPARISON
FEBRUARY 3 to DECEMBER

Sec. 106-1287. Commercial retail, regional.

(a)

Limited/special standards for use in all applicable districts. Limited/special standards for regional commercial retail uses in all applicable districts are as follows:

(1)

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The access to these uses shall be from the development's interior streets. The uses shall not have frontage on arterial or collector streets.

(b)

Reports/studies required. All applications for this use shall include a community impact statement.

(c)

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(d)

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