Novel Approaches to Decision-support & Stakeholder Engagement

Dave Jasinski, Vice President
Chesapeake Environmental Communications

Monitor Track
Berne Room
2:30-3:00pm

Albemarle-Pamlico Ecosystem Symposium
Embarking on a New Voyage

Novel approaches to decision support and stakeholder engagement

Dave Jasinski
Chesapeake Environmental Communications

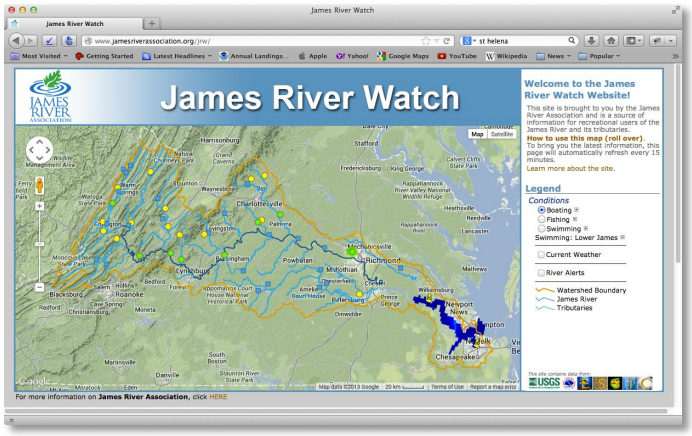
Pat Calvert
James River Association

Dr. Robert Wood
NOAA, NCCOS

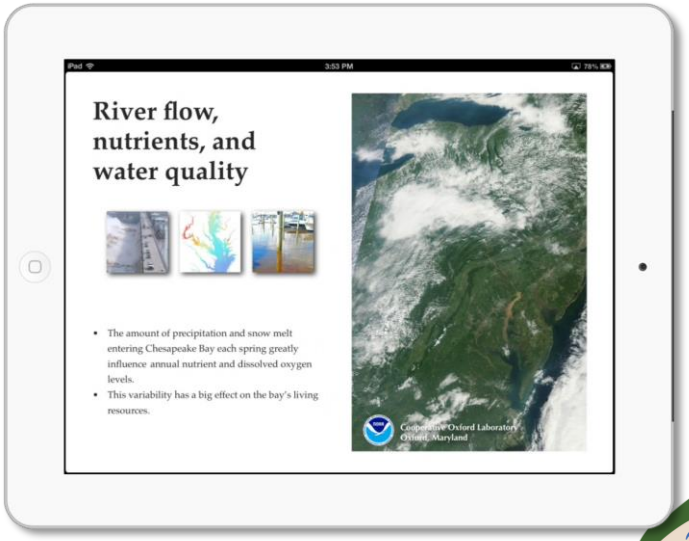
Paula Jasinski
Chesapeake Environmental Communications

Tools for Decision Support and Engagement

The James River Watch – *an interactive decision support and public engagement tool for the James River Association.*



Chesapeake Bay Ecological Atlas – *a custom iBook for the iPad developed for NOAA-NCCOS.*



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The James River Watch

www.jamesriverassociation.org/jrw

- The James River Association wanted a web application that would be an information resource to recreational users of the James River.
- Phase 1 consisted of developing a map based data base driven site that automatically updated itself with the latest information on river conditions.
- In Phase 2, a password protected administration section was added that allows citizen monitoring data to be uploaded to the site for display on the map.

JAMES RIVER ASSOCIATION

The James River Watch

www.jamesriverassociation.org/jrw

- We developed the site using Google Maps and a MySQL database. Both are opensource so there are no licenses to purchase and maintain.

- Data are pulled from the following sources every 15 minutes:

  USGS – River height and flow for 46 stations

  NWS – Air temperature data for 8 stations

  NOAA – Wave height, wind speed and direction, and water temperature for 2 buoys.

The James River Watch

www.jamesriverassociation.org/jrw

- Through a password protected area, JRA monitoring volunteers can upload data, reports, site pictures, and bacteria plate pictures.
- Administrators are alerted with a text message when data are uploaded.
- Site administrators can approve uploaded data and make edits to the site.
- Since it's inception, the JRW has driven unprecedented traffic to the JRA website.

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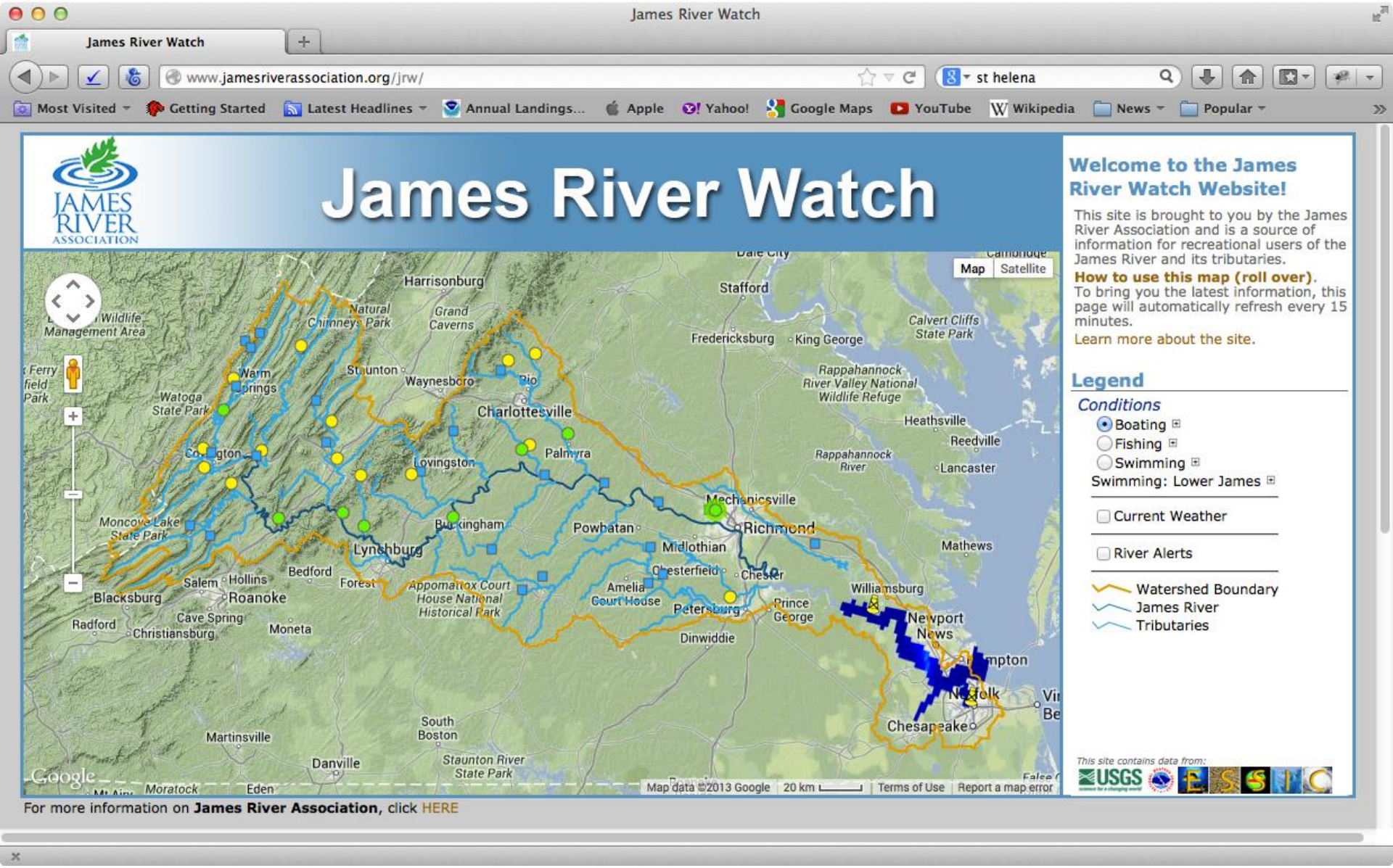
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Fredericksburg
King George
Calvert Cliffs State Park
Staunton
Waynesboro
Charlottesville
Rappahannock River Valley National Wildlife Refuge
Heathsville
Reedville
Lancaster
Rappahannock River
Palmyra
Lovingston
Watoga State Park
Warm Springs
Moncove Lake State Park
Buckingham
Powhatan
Mechanicsville
Richmond
Midlothian
Mathews
Lynchburg
Bedford
Forest
Appomattox Court House National Historical Park
Chesterfield
Chester
Amelia Court House
Petersburg
Prince George
Williamsburg
Newport News
Blacksburg
Salem
Hollins
Roanoke
Radford
Cave Spring
Christiansburg
Moneta
Dinwiddie
Martinsville
South Boston
Danville
Staunton River State Park
Chesapeake
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Report a map error
Welcome to the James River Watch Website!
This site is brought to you by the James River Association and is a source of information for recreational users of the James River and its tributaries.
How to use this map (roll over).
To bring you the latest information, this page will automatically refresh every 15 minutes.
Learn more about the site.
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Fishing
Swimming
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River Alerts
Watershed Boundary
James River
Tributaries
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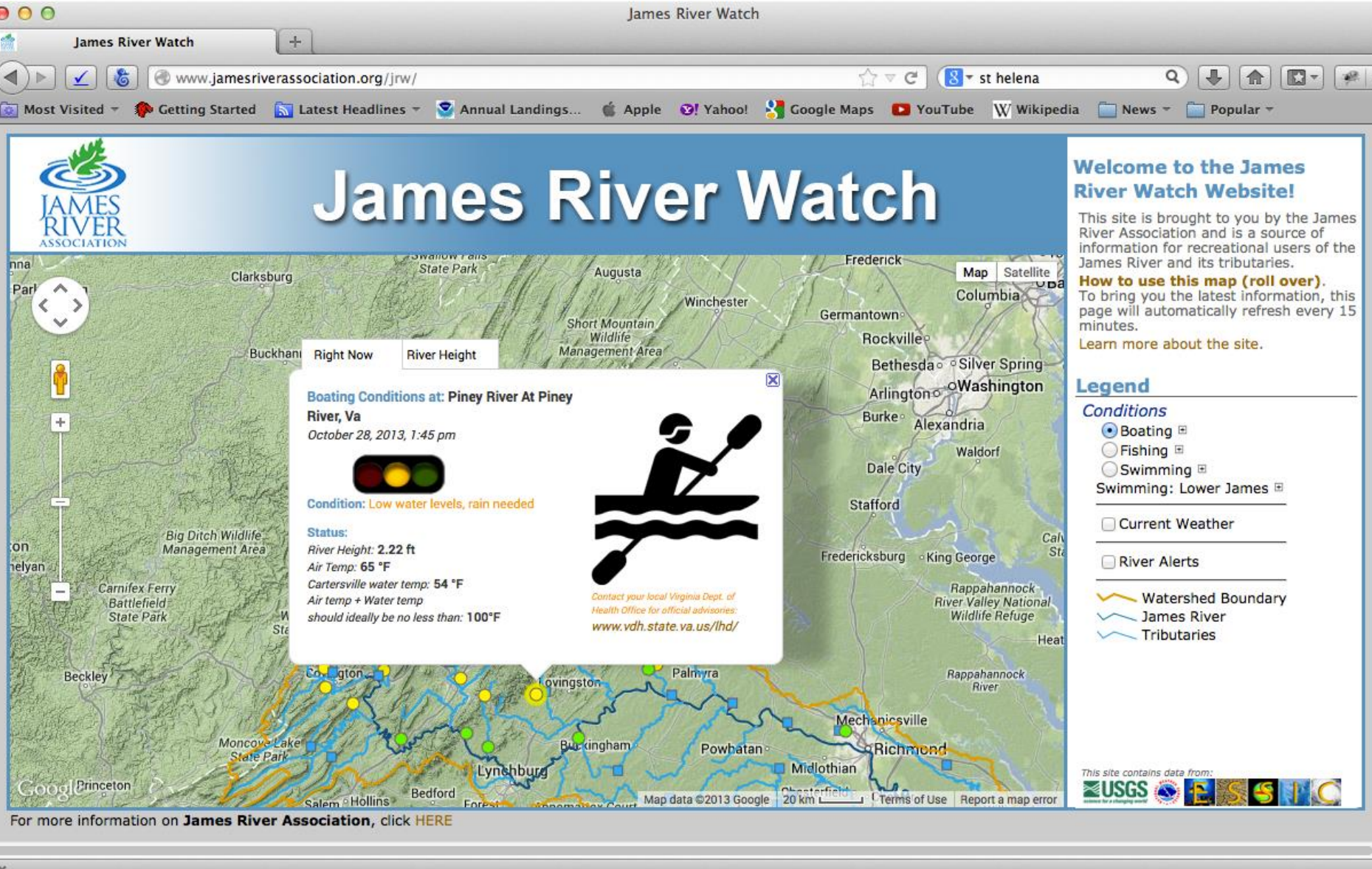
For more information on James River Association, click HERE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Right Now
River Height
Boating Conditions at: Piney River At Piney River, Va
October 28, 2013, 1:45 pm
Condition: Low water levels, rain needed
Status:
River Height: 2.22 ft
Air Temp: 65 °F
Cartersville water temp: 54 °F
Air temp + Water temp should ideally be no less than: 100°F
Contact your local Virginia Dept. of Health Office for official advisories:
www.vdh.state.va.us/lhd/
Clarksburg
Augusta
Winchester
Frederick
Columbia
Germantown
Rockville
Bethesda
Silver Spring
Washington
Arlington
Alexandria
Burke
Waldorf
Dale City
Stafford
Fredericksburg
King George
Short Mountain Wildlife Management Area
Big Ditch Wildlife Management Area
Carnifex Ferry Battlefield State Park
Rappahannock River Valley National Wildlife Refuge
Rappahannock River
Beckley
Lovingston
Palmyra
Mechanicsville
Richmond
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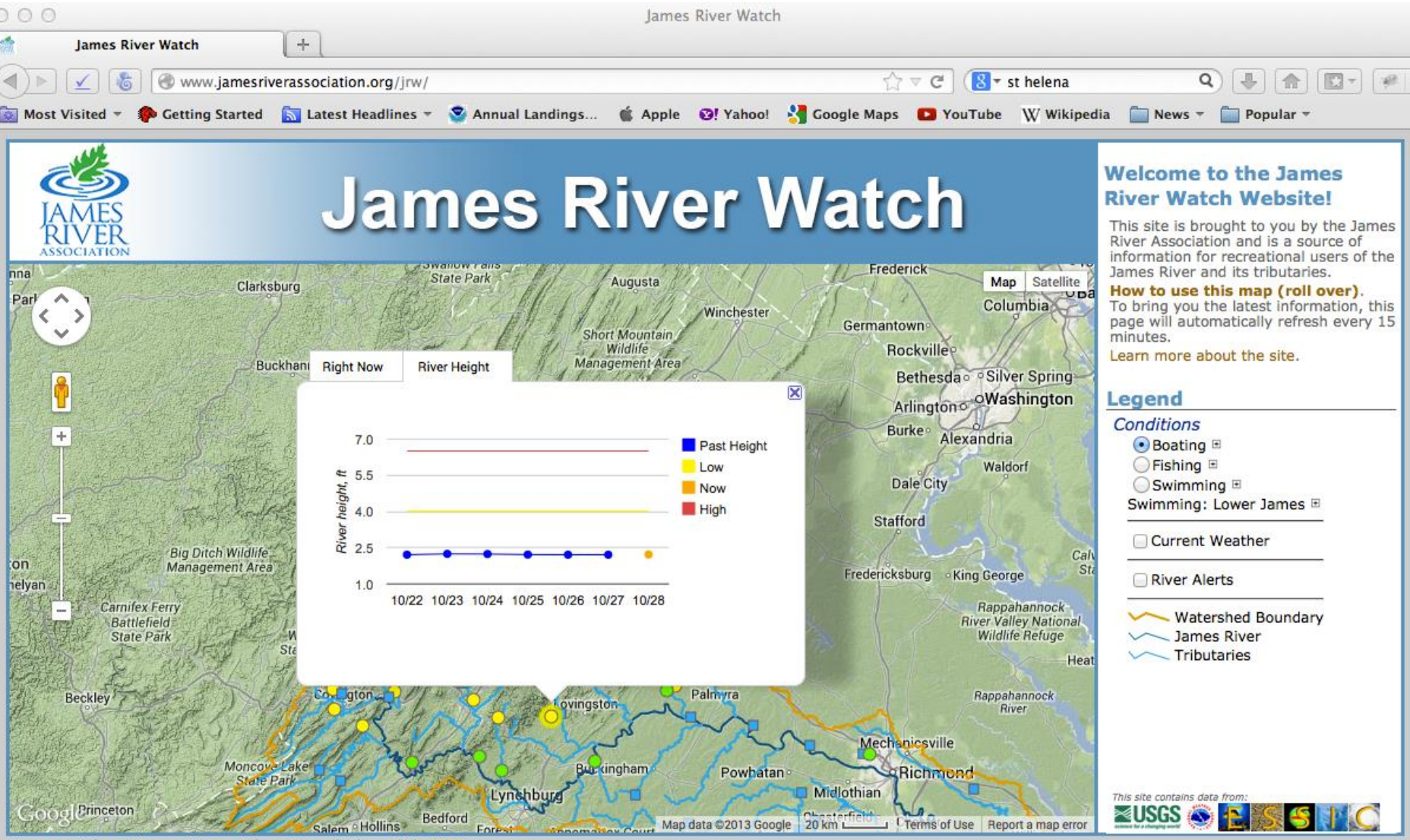

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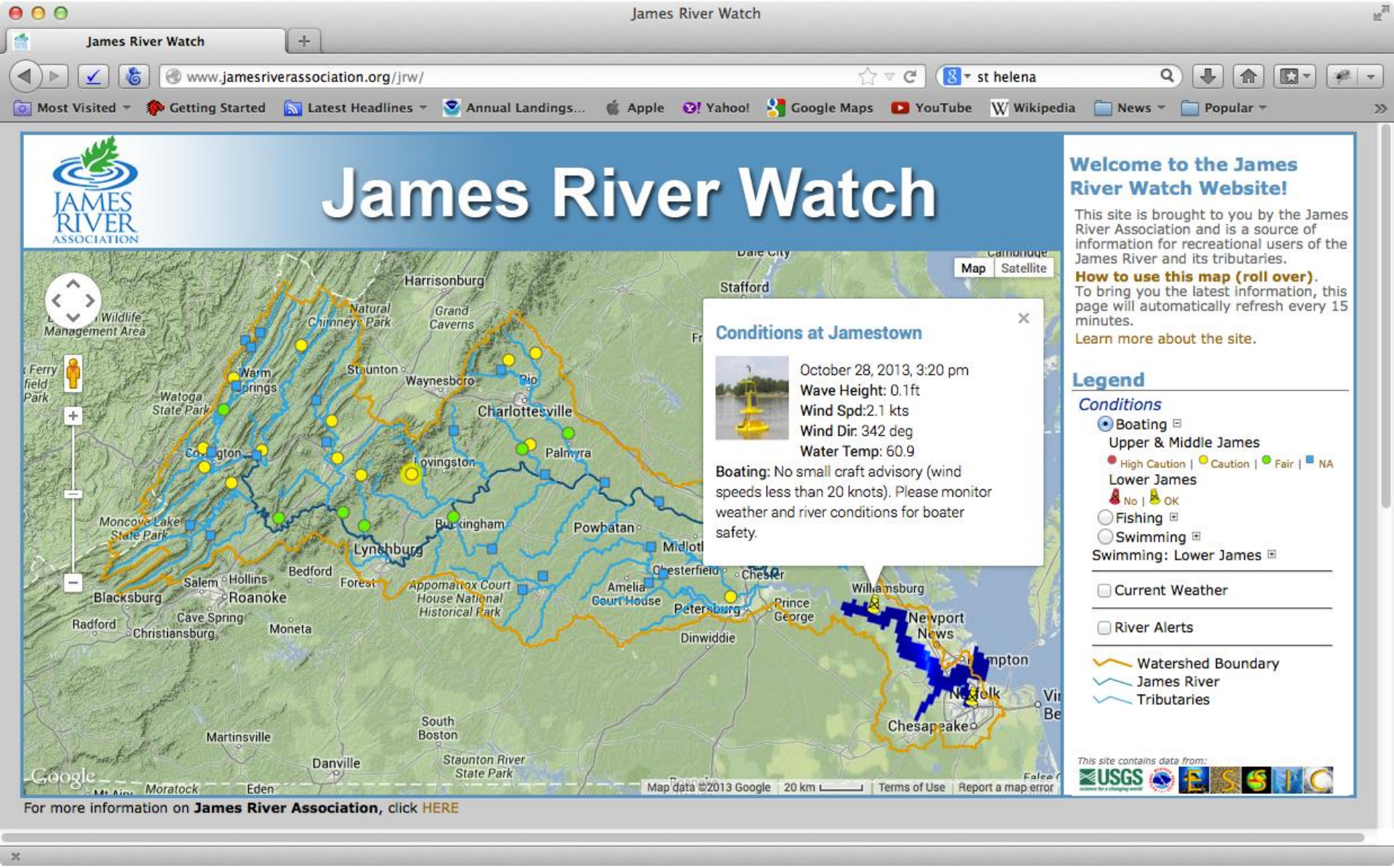

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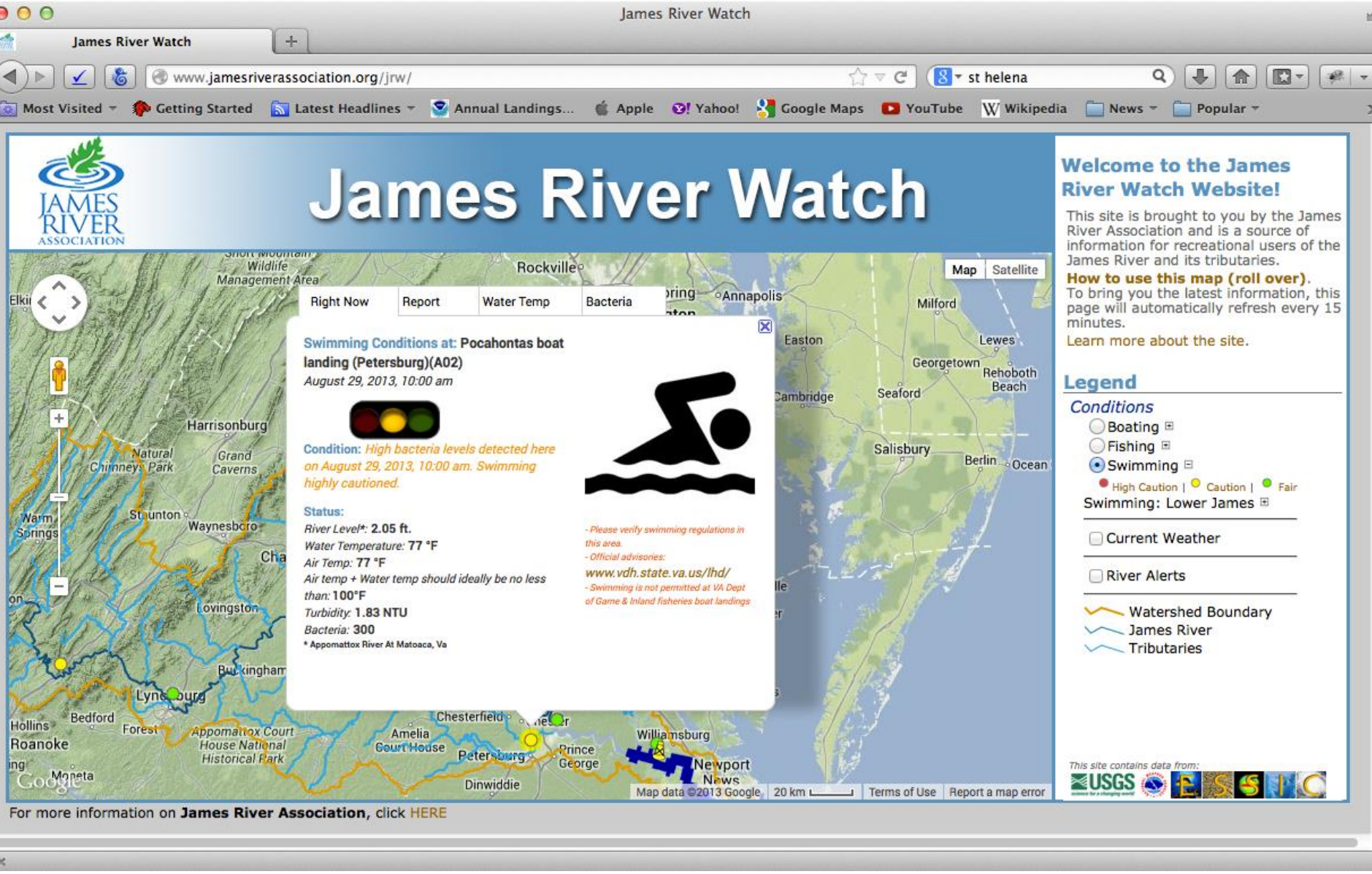
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Report
Water Temp
Bacteria
Swimming Conditions at: Pocahontas boat landing (Petersburg)(A02)
August 29, 2013, 10:00 am
Condition: High bacteria levels detected here on August 29, 2013, 10:00 am. Swimming highly cautioned.
Status:
River Level*: 2.05 ft.
Water Temperature: 77 °F
Air Temp: 77 °F
Air temp + Water temp should ideally be no less than: 100°F
Turbidity: 1.83 NTU
Bacteria: 300
* Appomattox River At Matoaca, Va
- Please verify swimming regulations in this area.
- Official advisories:
www.vdh.state.va.us/lhd/
- Swimming is not permitted at VA Dept of Game & Inland fisheries boat landings
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Staunton
Waynesboro
Warm Springs
Lovingston
Lynchburg
Bedford
Forest
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Right Now | Report | Water Temp | Bacteria

Condition Report for Pocahontas boat landing (Petersburg)(A02)

August 29, 2013, 10:00 am

The weather the past 48 hrs. has been warm with afternoon thunderstorms. Today it is cloudy with no wind. Compared to last week, there are very few butterflies, dragonflies and water striders.A few damselflies were noted. There were 2 large flocks of birds. 1 of Canada geese and one of a smaller black bird. The water itself has very little current today. It is very still. The water level is lower that the past few weeks.

Pocahontas boat landing (Petersburg)(A02)

Map | Satellite

Rockville, Annapolis, Milford, Easton, Lewes, Georgetown, Rehoboth Beach, Cambridge, Seaford, Salisbury, Berlin, Ocean, Harrisonburg, Natural Chimneys Park, Grand Caverns, Staunton, Waynesboro, Warm Springs, Lovingston, Buckingham, Lynchburg, Bedford, Forest, Roanoke, Hollins, Appomattox Court House National Historical Park, Amelia Court House, Chesterfield, Petersburg, Prince George, Williamsburg, Newport News, Dinwiddie, Moneta

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Learn more about the site.

Legend

Conditions

- Boating
- Fishing
- Swimming

High Caution | Caution | Fair

Swimming: Lower James

- Current Weather
- River Alerts

- Watershed Boundary
- James River
- Tributaries

This site contains data from: USGS

For more information on **James River Association**, click HERE

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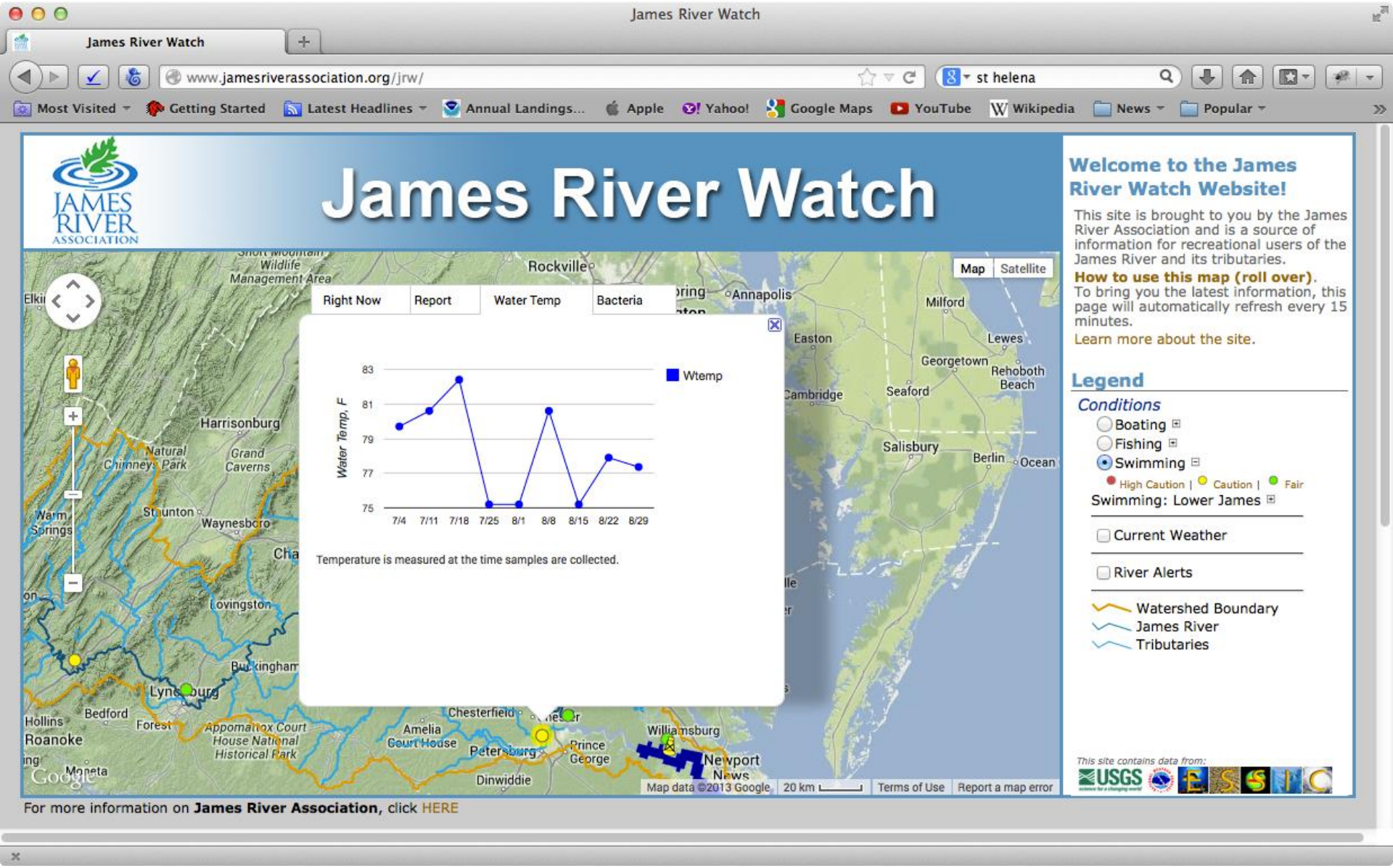
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Water Temp
Bacteria
Water Temp, F
83
81
79
77
75
7/4
7/11
7/18
7/25
8/1
8/8
8/15
8/22
8/29
Wtemp
Temperature is measured at the time samples are collected.
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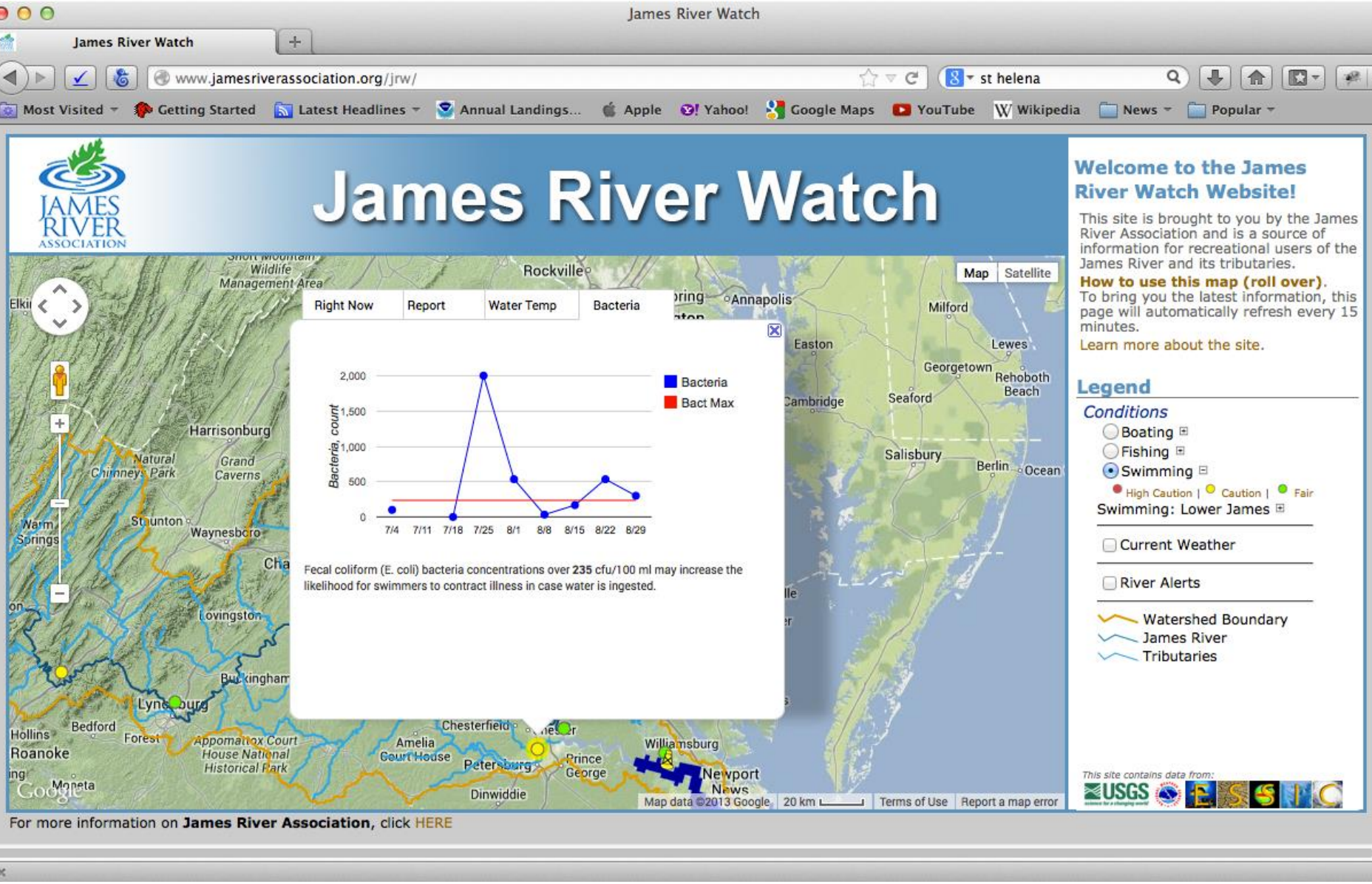
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Bacteria
2,000
1,500
1,000
500
0
Bacteria, count
7/4
7/11
7/18
7/25
8/1
8/8
8/15
8/22
8/29
Bacteria
Bact Max
Fecal coliform (E. coli) bacteria concentrations over 235 cfu/100 ml may increase the likelihood for swimmers to contract illness in case water is ingested.
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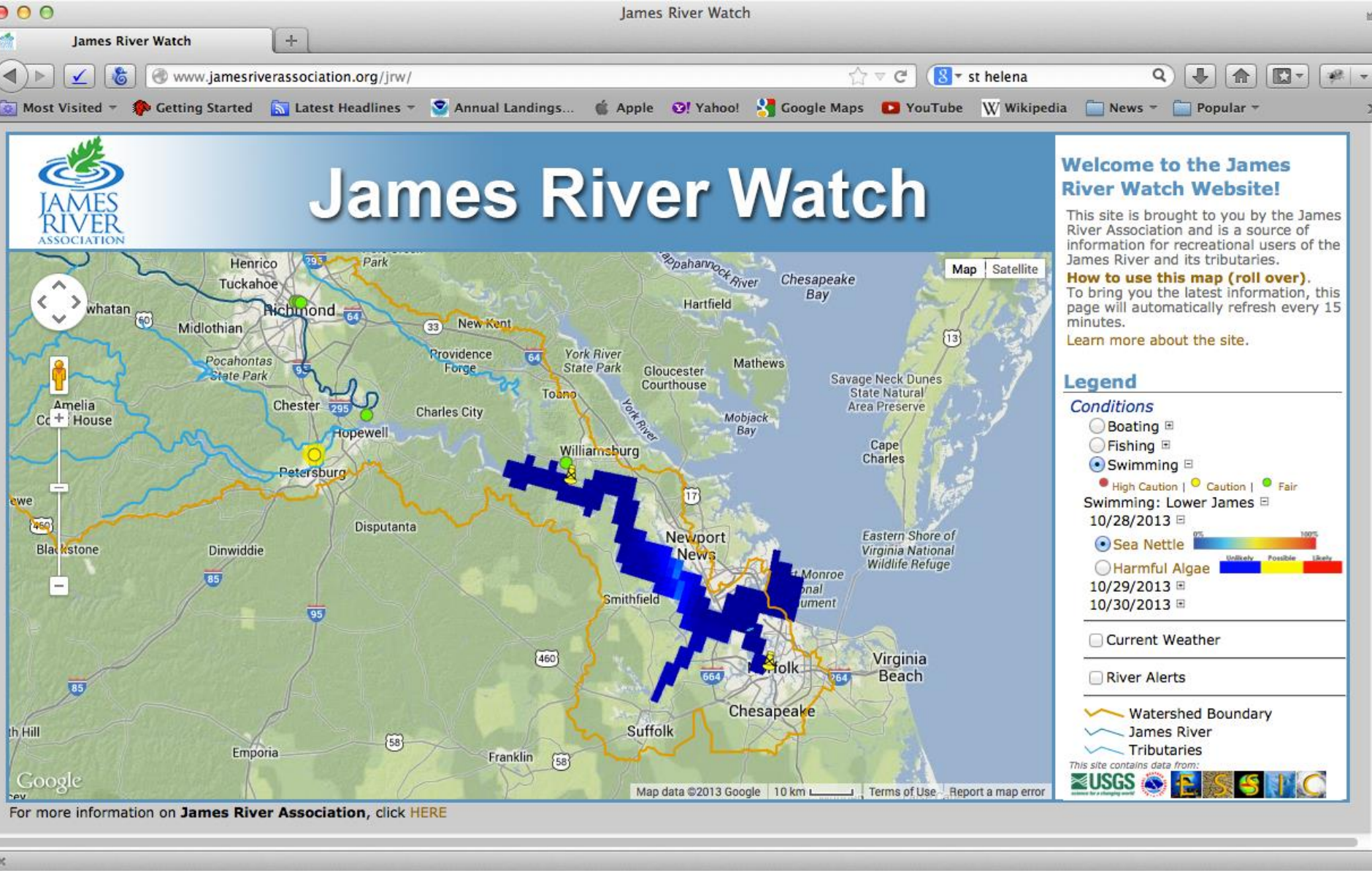

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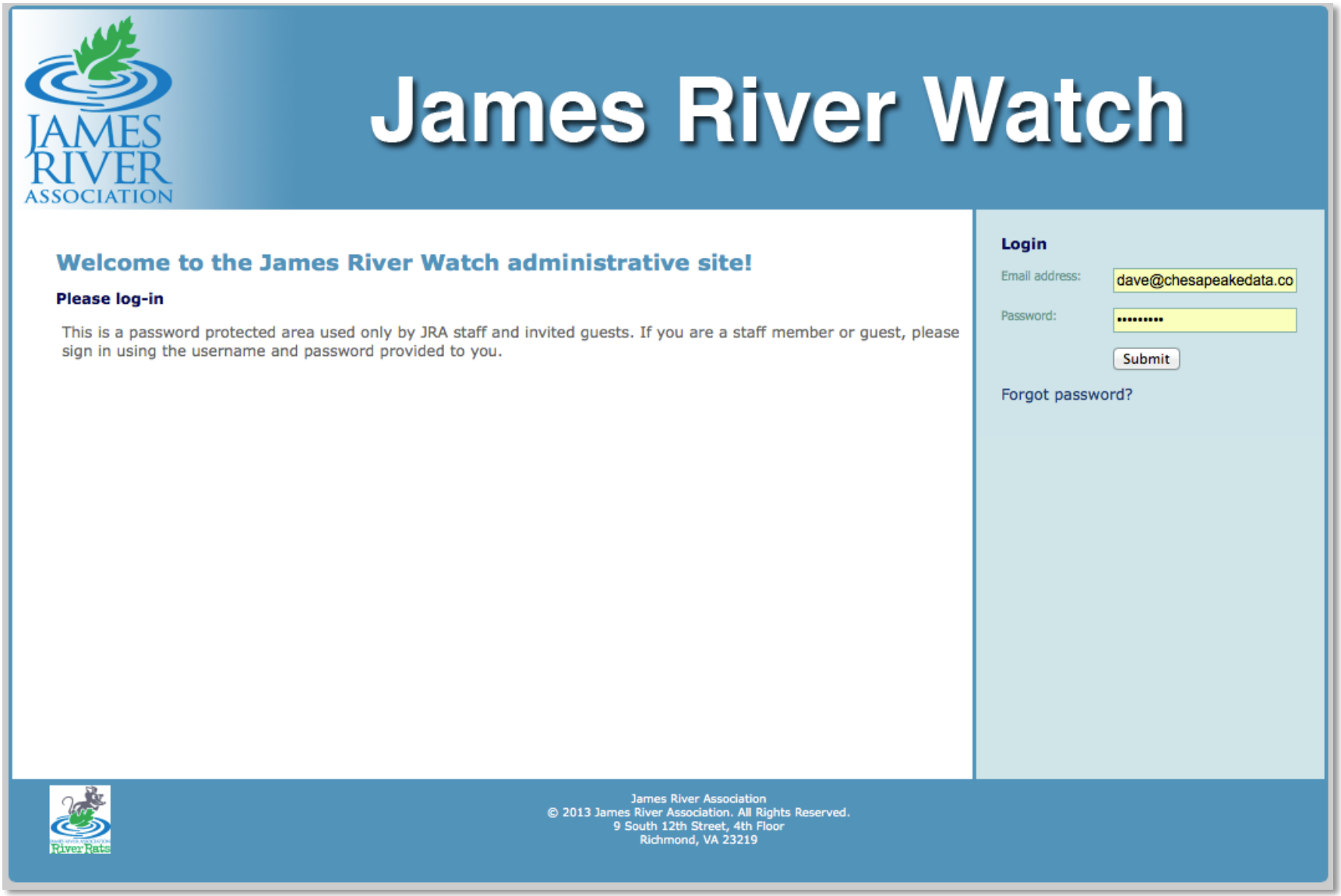

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James River Watch

Welcome back, Dave Jasinski

What would you like to do today?

- Upload data
- View RiverRat Station data
- Download Data
- Download Images
- River Monitor Manual
- Data Log Sheet
- Split Sample Schedule

Admin Options

Manage People

- Add::Edit MyJRW Members
- Email all members or click here to get a mail list.

Manage JRW

- Approve Data Uploads
- Alerts:: Issue alert | Cancel alerts
- Add::Edit a Station
- Add VDH email | Remove VDH email(s) | NOTIFY VDH
- Update RiverRat Monitoring Status:: RiverRat Monitoring is currently INACTIVE

Your Profile

Name: Dave Jasinski
Title: contractor
email: dave@chesapeakedata.com

MyJRW Options

- MyJRW Home
- Edit Profile/Change Password
- Upload/Change Picture
- Logout

JAMES RIVER ASSOCIATION

James River Watch

JRW Data Upload

Dave, on this page you can upload the data for the Jamestown Beach (J05) station. If you have no data to enter for a parameter, please enter a -9 for that parameter. Water and Air temperatures should be in Celcius.

Date and Time Sample Taken

Click on Calendar. Please enter date AND time of sample collection. 24hr time please

Air Temperature (degrees C)

One decimal place please (0.0).

Water Temperature (degrees C)

One decimal place please (0.0).

Turbidity (NTU)

Two decimal places please (0.00).

Date and Time sample placed in incubator

Click on Calendar. Please enter date AND time of sample incubation. 24hr time please

Plate Analysis Date/Time

Click on Calendar. Please enter date AND time of plate analysis. 24hr time please

Bacteria concentration (cfu/100ml; round UP to the nearest whole number (no decimal))

(whole number)

Agar Plate Image

Choose File no file selected

Upload agar plate picture

Fish Report Image

Choose File no file selected

Upload fish picture

Site Condition Image

Your Profile

Name: Dave Jasinski
Title: contractor
email: dave@chesapeakedata.com

MyJRW Options

- MyJRW Home
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- Logout

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Add an Alert

Dave, click on the segment or stream on the map where you would like to add an alert. Then type in a description of the alert. When you are ready to make a change, click the submit button.

Segment Advisory

Target Segment:

Target Segment ID:

Alert Type
- (•) Negative
- ( ) Positive

Alert Description:

Stream Warning

Target Stream: Appomattox River

Target Stream ID: ID_00084

Alert Type
- (•) Negative
- ( ) Positive

Alert Description:

Name: Dave Jasinski
Title: contractor
email: dave@chesapeakedata.com

MyJRW Options

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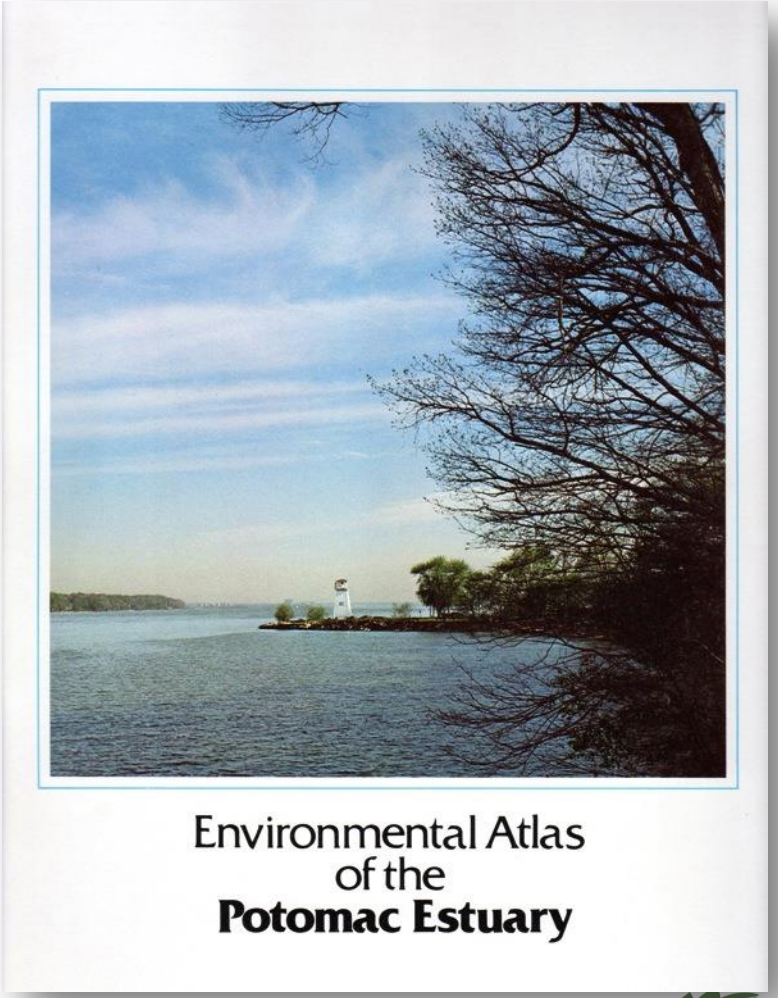
Chesapeake Bay Ecological Atlas

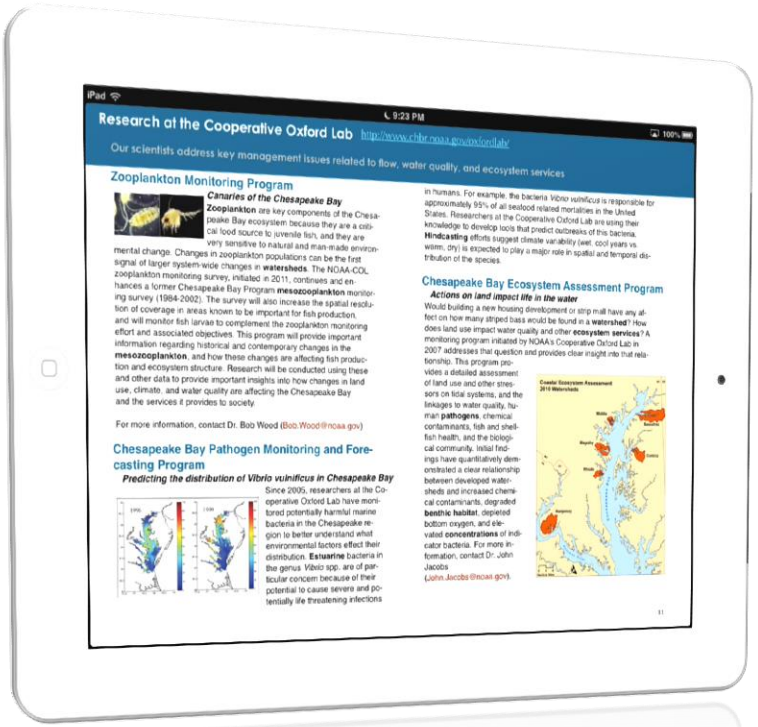
http://www.chesapeakedata.com/Atlas/

- Developed with the NOAA Cooperative Oxford Lab in Oxford, MD.
- A reference guide to the ecology of Chesapeake Bay
- Target audience is Middle School through environmental managers
- In a similar format to the "*Environmental Atlas of the Potomac Estuary*"



Is it a NOAA marketing tool or an educational tool?

- Yes and Yes



Reaction to date

- Have previewed with several science teachers
- All immediately grasp the utility of such a resource
- NOAA "seal" carries weight
- Easily updated vs textbooks
- Excited at the possibility of just being able to teach from the iPad
- Like the idea of a web resource to get access to all content