A person wearing a green long-sleeved shirt and waders is bent over, using a blue and white water sampling device in a body of water. The background is a blurred view of the water and the person's reflection.

# **Integration of Citizen-based and Nontraditional Monitoring into the Chesapeake Bay Program Partnership: Vision and Strategy**

Management Board Meeting

April 14, 2016

# Partners

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# Types of Data

- Tidal Water Quality
- Nontidal Water Quality
- Benthic Macroinvertebrates

DO

Chlorophyll *a*

Temperature

% Saturation

pH

Alkalinity

Ammonium

Nitrates

TN

Orthophosphate

TP

Total Dissolved Solids

Total Suspended Solids

Biological Oxygen Demand

Conductivity

Turbidity

Water Clarity

Salinity



# Vision

Envisioning a Chesapeake community where all **data of known quality** are used to **inform** watershed management decisions and restoration efforts.

# Mission

To work with diverse partners to collect and share new and existing water quality data. Through this collaboration, we aim to develop a comprehensive understanding of Chesapeake Bay Watershed health.



# Our Strategy

- **Survey**
- Engage
- Classify
- Develop a database
- Identify data gaps
- Prioritize
- Train
- Provide resources



# Chesapeake Monitoring Census

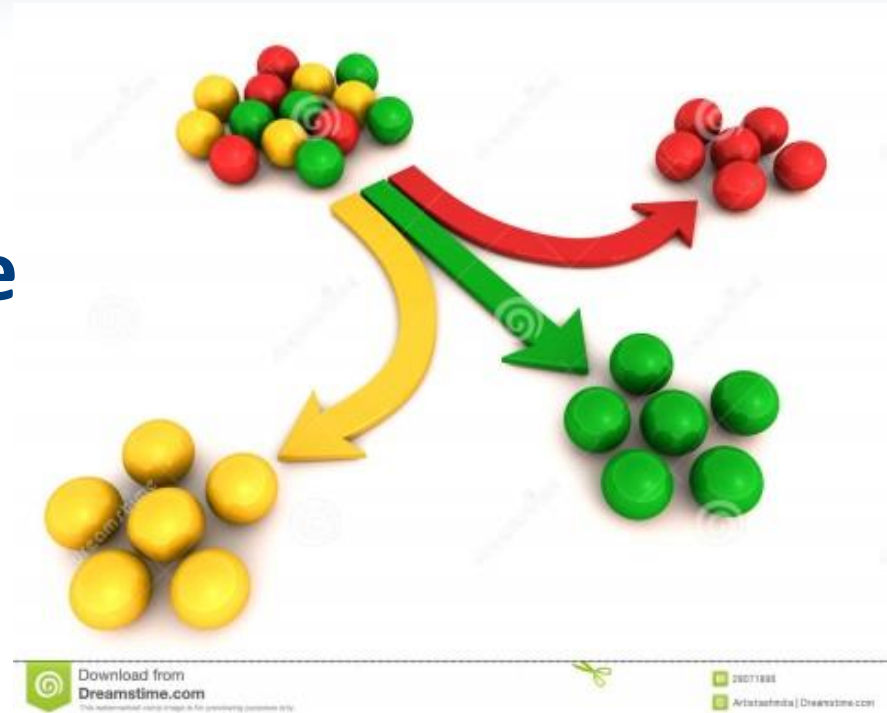
## Watershed Inventory (600+ entities):

- General Information
- Monitoring Program Overview (Where? Why?)
- Monitoring Program Design (How?)
- Data Use and Storage
- Newsletter Sign-up
- Share on Social Media

<http://www.surveygizmo.com/s3/2671540/Chesapeake-Monitoring-Census>

# Our Strategy

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# Tiered Framework for Data Classification

- First non-traditional data integration project at the federal level.
- Look to states for models of data integration (thank you Virginia, Missouri, Michigan, Alabama, and Indiana).



# Tiered framework

| Tiers  | Intended Data Use                                                                                        |
|--------|----------------------------------------------------------------------------------------------------------|
| Tier 1 | Education, Environmental Health Screening                                                                |
| Tier 2 | Environmental Health Report Cards,<br>Environmental Health Screening, Targeting of<br>Management Actions |
| Tier 3 | Regulatory Assessments of Water Quality<br>Standards Attainment                                          |

Hidden Tier Zero – there are data requirements that must be met to be included in this project.

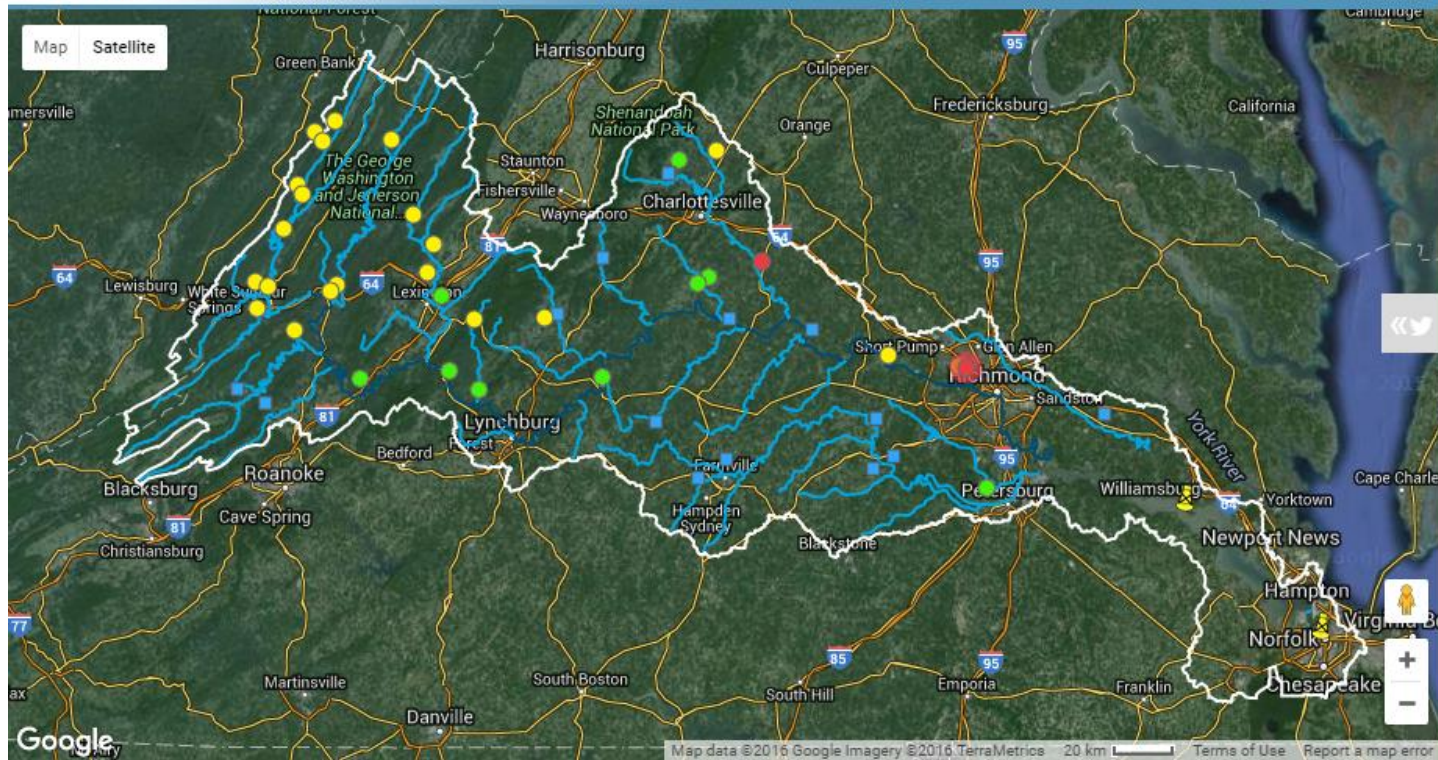
Courtesy of ALLARM



# Database by: Chesapeake Environmental Communications



## James River Watch



### 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.](#)

### Legend

#### Conditions

- ☒ Boating
- ☒ Fishing
- ☒ Swimming

☐ Boat Ramps

☐ River Alerts

☐ VDH Beach Alerts

☐ Fishing Alerts

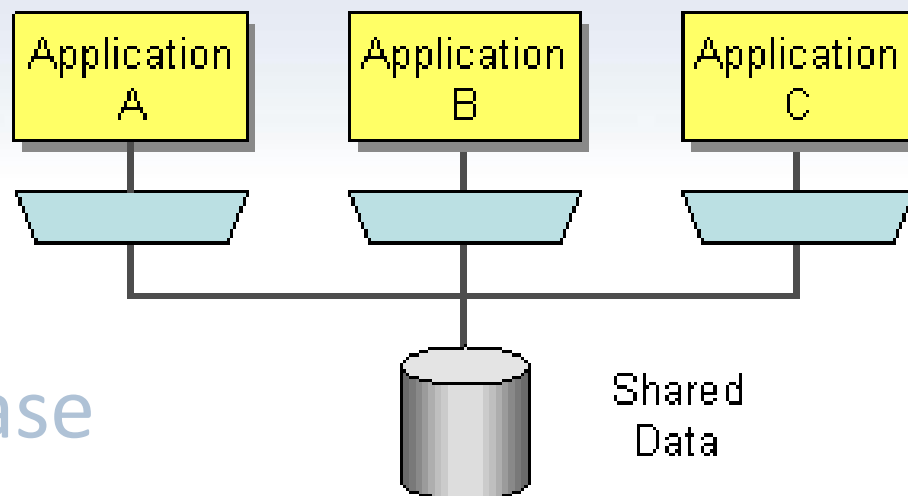
- Watershed Boundary
- James River
- Tributaries

This site contains data from:



# Our Strategy

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# Working with the CBP

*Under STAR:*

Integrated Monitoring Networks Workgroup

- Tier 1
- Tier 2

Data Integrity Workgroup

- Tier 3



# Our Strategy

- Survey
- Engage
- Classify
- Develop a database
- Identify data gaps
- Prioritize
- **Train**
- **Provide resources**





# Project

## Organizational Chart

CBP  
Partnership

STAR  
Workgroups

Volunteer  
Advisory  
Committee

Project Advisors

**ACB**  
Project  
Manager

**CEC**  
Database  
Contractor

**QA  
Manager**

**IWLA**  
Project  
Coordinator

**UMCES**  
Project  
Partner

**ALLARM**  
Project  
Partner

Biological

Water Quality

Data Communication

Biological

VA

VA

Tier III Tidal Monitoring

Water Quality

MD & DC

MD & DC

WV

WV

PA

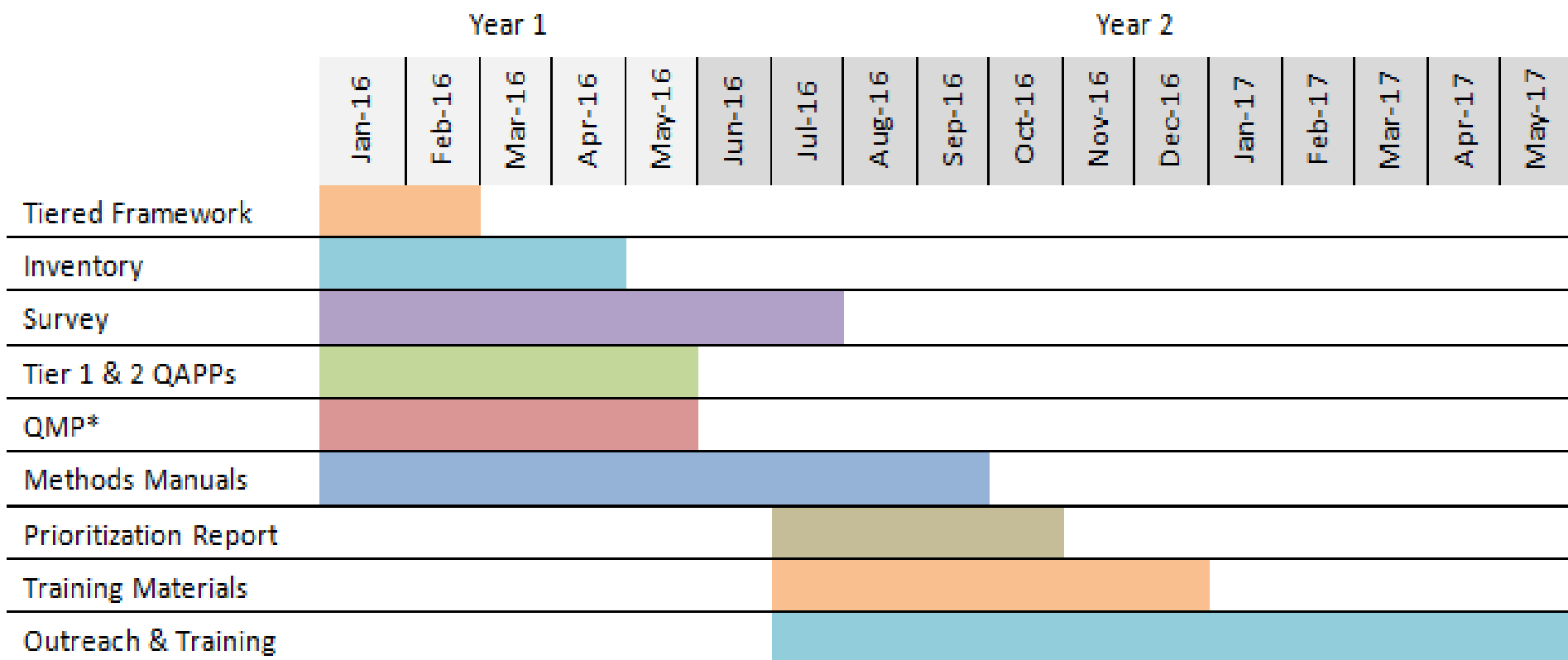
DE

DE

NY

Monitoring Groups

# Major Milestones: Year 1 & 2



\*Quality Management Plan (QMP)

# Contact Information

[www.chesapeakemonitoringcoop.org](http://www.chesapeakemonitoringcoop.org)



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