

#### **Phase 6 Land Use Viewer**

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November 9, 2015 Water Quality Goal Implementation Team Meeting Annapolis, Maryland

#### **Overview**

Next Steps
Overview of the Viewer
Examples



### **Next Steps**

- 1. Discuss the purpose, audience, and design of website.
- 2. Identify the primary user tasks and goals
- 3. Develop focus group to review draft CBP Phase 6 website.
- 4. Provide names of 5-10 users that would be willing to participate in the test.
  - Website usability study proposed for PA
- 5. Host webinar presenting Phase 6 Land Use website, data review methodology, CBP expectations, and review schedule
- 6. Finalize the reviewer contact list for all counties.



#### Purposes

- Familiarize with Phase 6 regional, county, and overlay layers
- Conduct a technical review by providing location specific comments
- Download data



# **Target Audiences**

- Technical (review):
  - Planning and GIS staff
- Secondary (awareness):
  - State government (DCED, DCNR, DEP)
  - County Conservation Districts (need AG community involved)
  - PDC's
  - Soil Conservation Districts
  - MWCOG



# What do you expect users to be able to accomplish on the site?

- View data and compare with aerials
- Comment on data for specific places
- Submit comments
- Download data
- Ask focus group what else they would like to do with the site



### **Conduct a Training Workshop**

- Members should represent a broad spectrum of technical capability/familiarity.
- Request in-person attendance at DEP's South-central regional office with parking and 24 computers
- Time commitment = 90min.
- Remote option a different focus group connecting via webex or adobe connect.
- Recommend test using different web browsers



#### Host a Webinar with Reviewers

- Update of Phase 6 LU project
- Benefit of the data sets
- Expectation of reviewers
- Address any issues raised by focus groups.
- Briefly review purpose of project and the relevance to TMDL and relevance to local decisions
- Describe land use/cover data being developed and merged with locally provided data. Highlight the utility of the high-res data for local decisionsirrespective of the TMDL



# Webinar (cont'd)

- Overview of the review process
  - What type of feedback is needed
  - How to provide feedback
  - When to provide feedback
  - Who will and can review the data
  - How will comments be addressed
  - How will counties obtain the data



**Chesapeake Bay Phase 6** 

# LAND USE VIEWER



#### Features 💌 🔍 🕮 🔍 💢 🔭



















Zoom and Pan





Previous/Next Extent



Information (about the county)





**Comment** X,Y coordinate marker for comments

**Overlay Transparency Bar** 

Overlay Transparency:



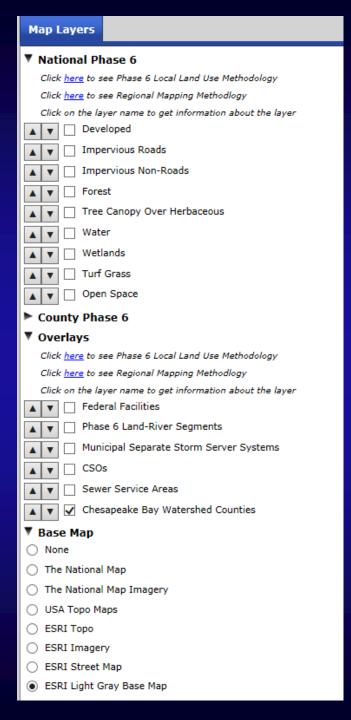
### **Data Acquisition (Under Construction)**

- Download
- Permalink



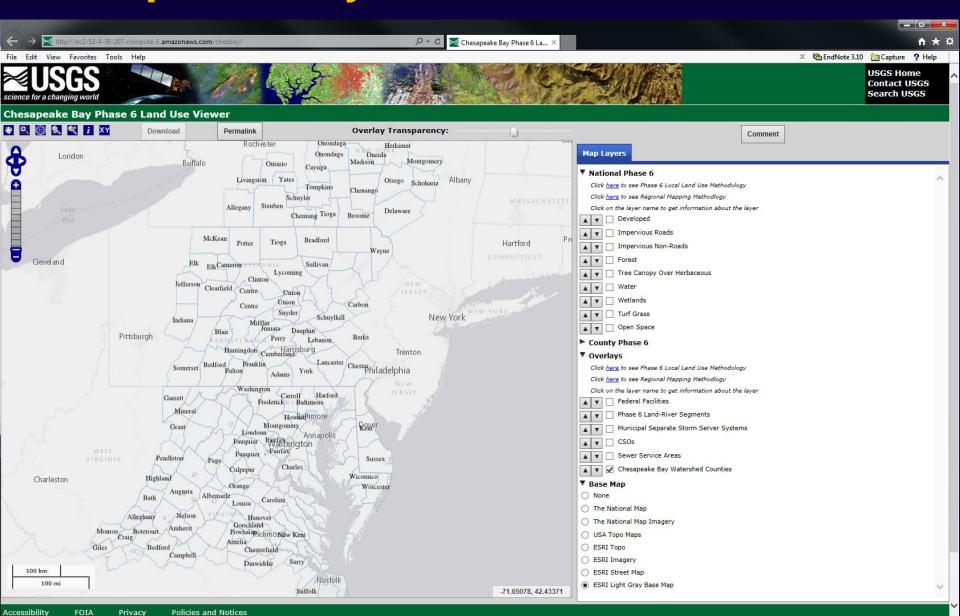
# **Map Layers**

- National Phase 6
  - Local and Regional Methodologies
- County Phase 6
- Overlays
- Base Map





### **Chesapeake Bay Watershed Counties**





# **Examples**

- National Phase 6 Layer
  - Cambridge, MD
- National Phase 6 + Overlay Layers
  - Washington, DC
- Lat/Long Comment Tool
  - Annapolis, MD

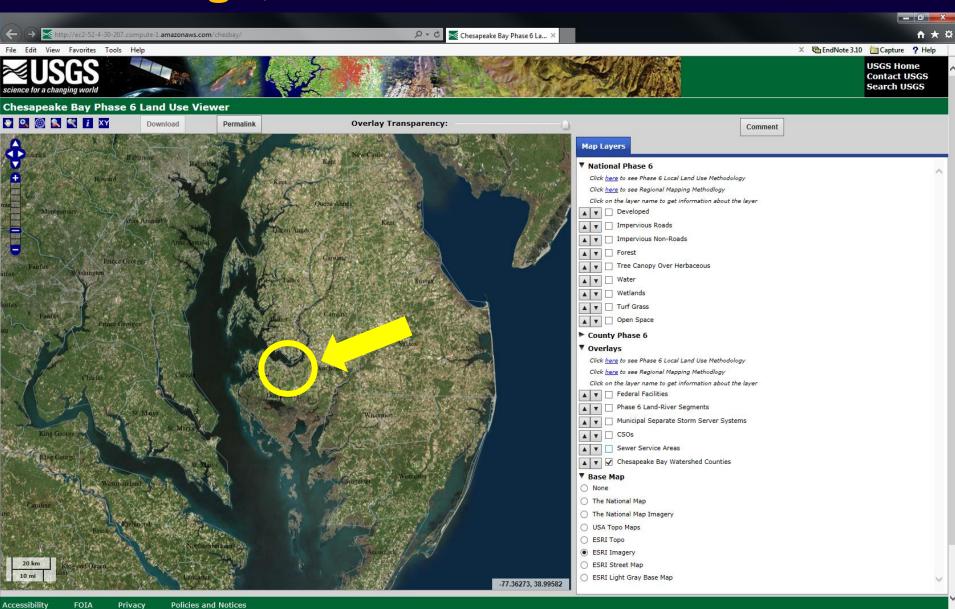


**National Phase 6** 

CAMBRIDGE, MD

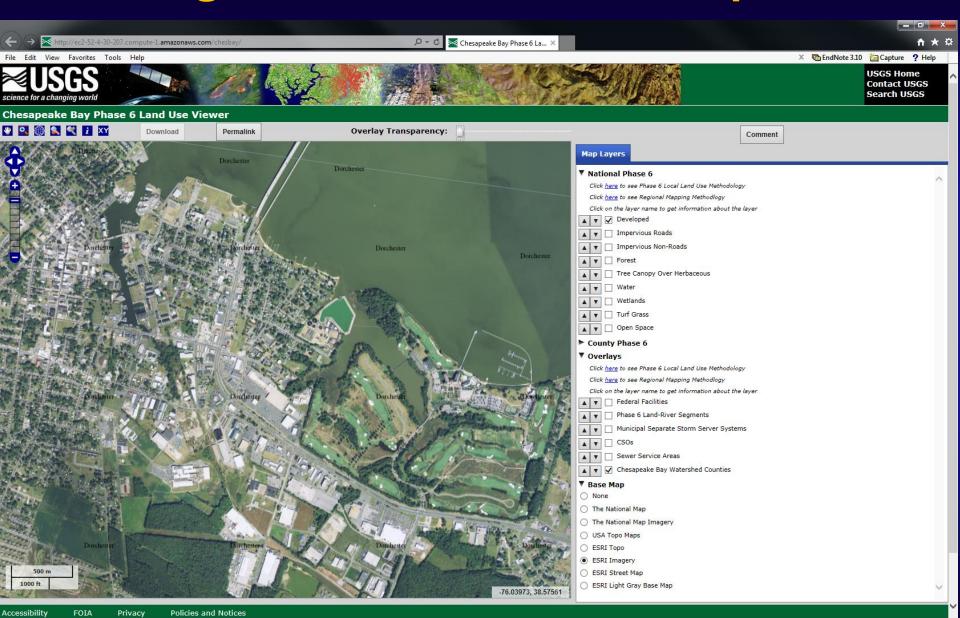


# Cambridge, MD



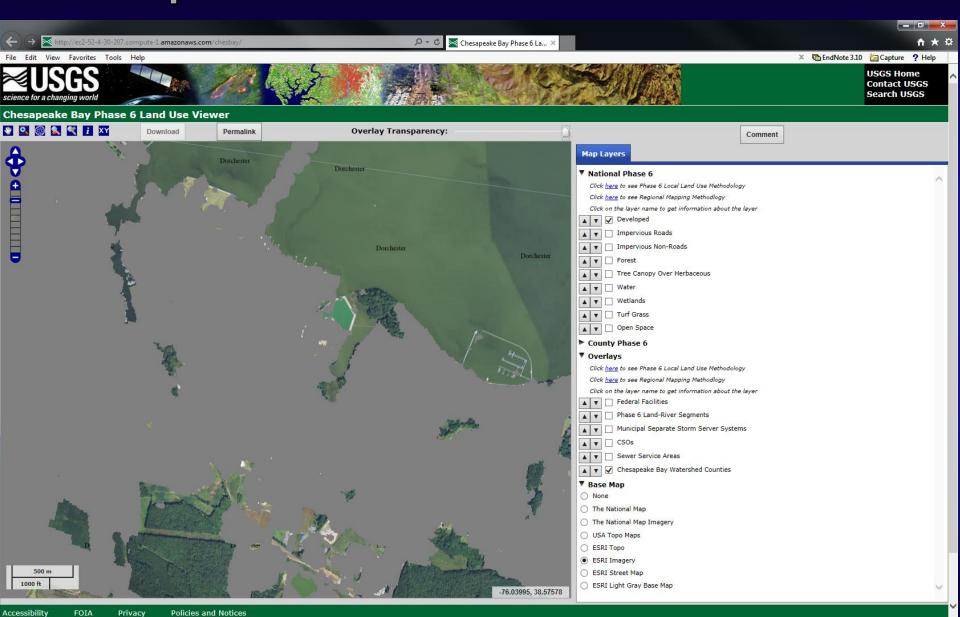


# Cambridge, MD - Route 50 & Choptank R.



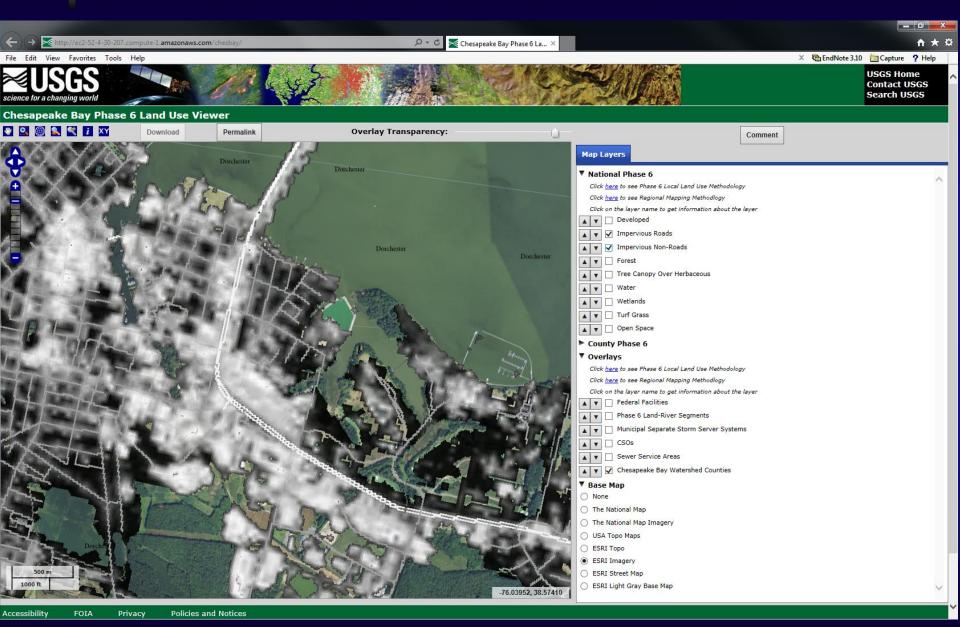


### **Developed Areas**



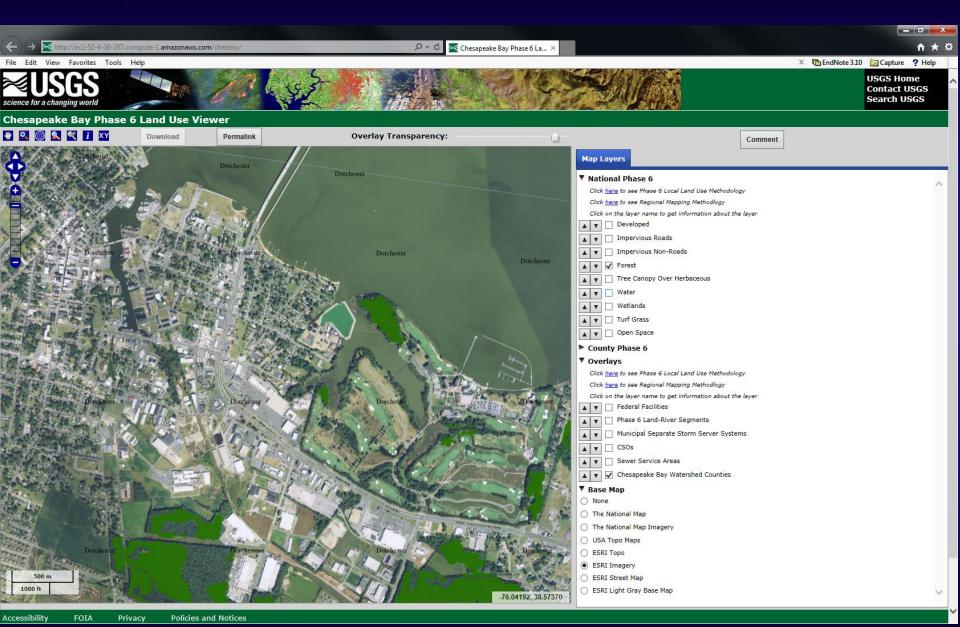


#### Impervious Roads & Non-Roads



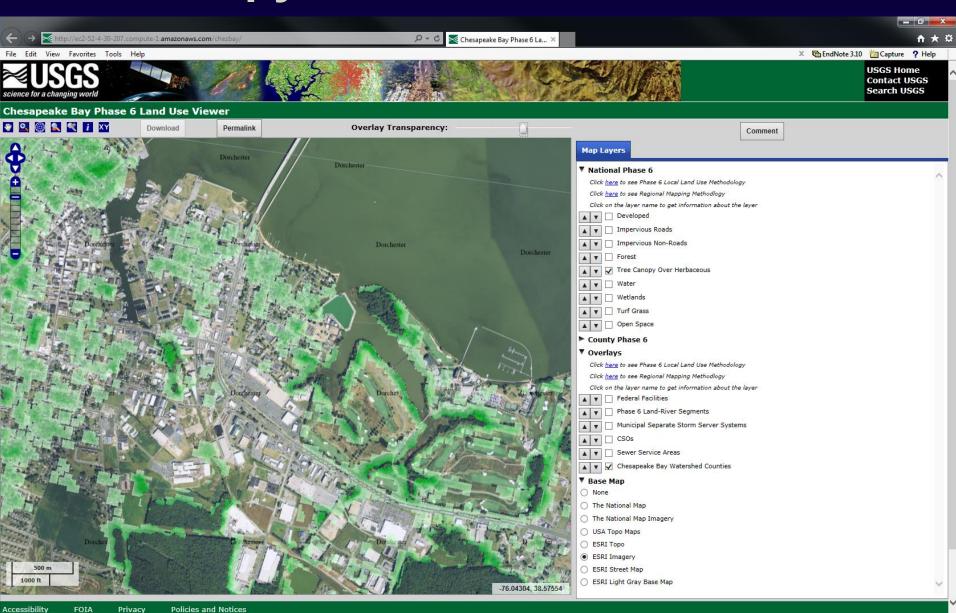


# **Forest**



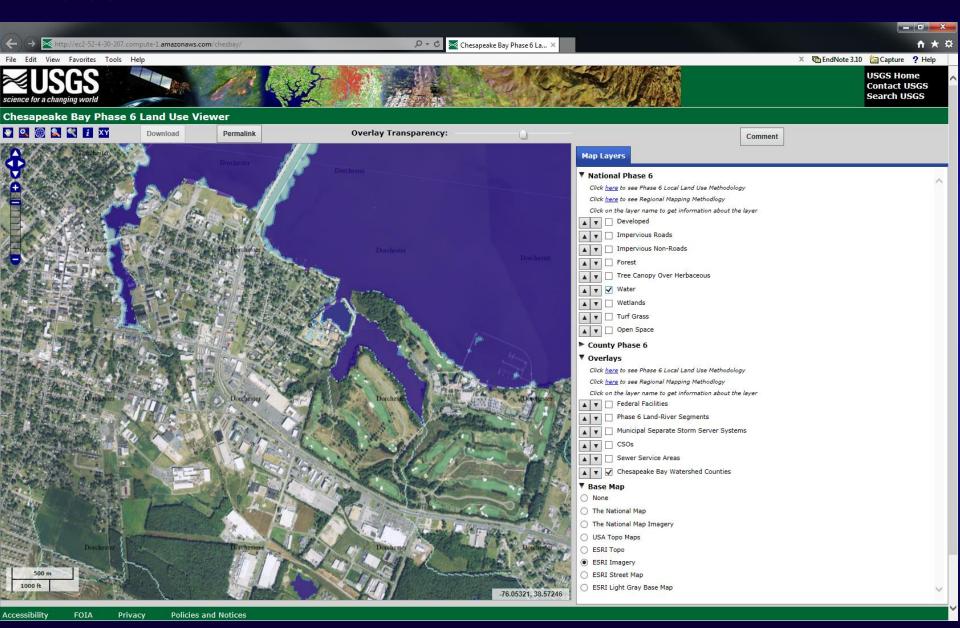


# **Tree Canopy Over Herbaceous**



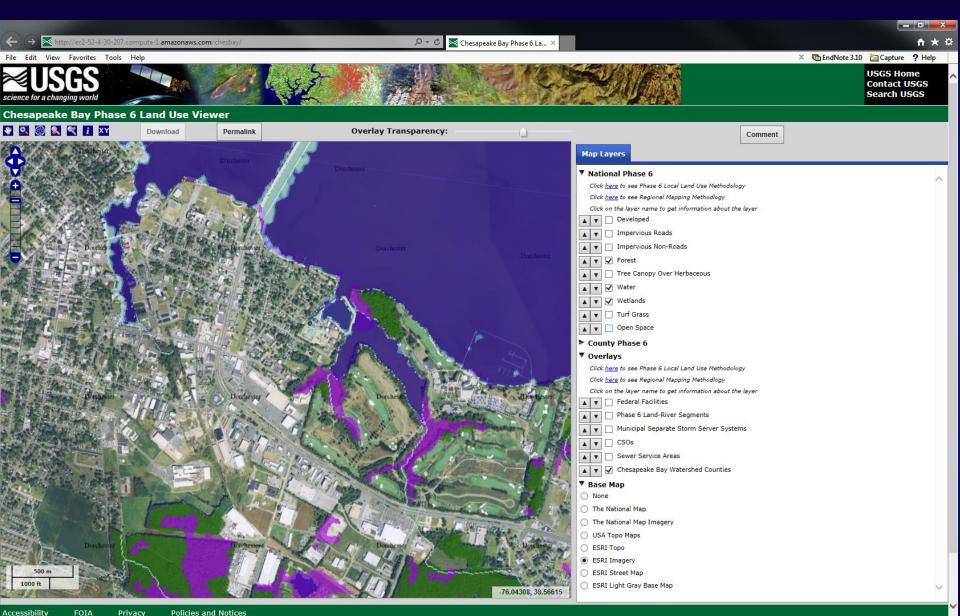


# Water



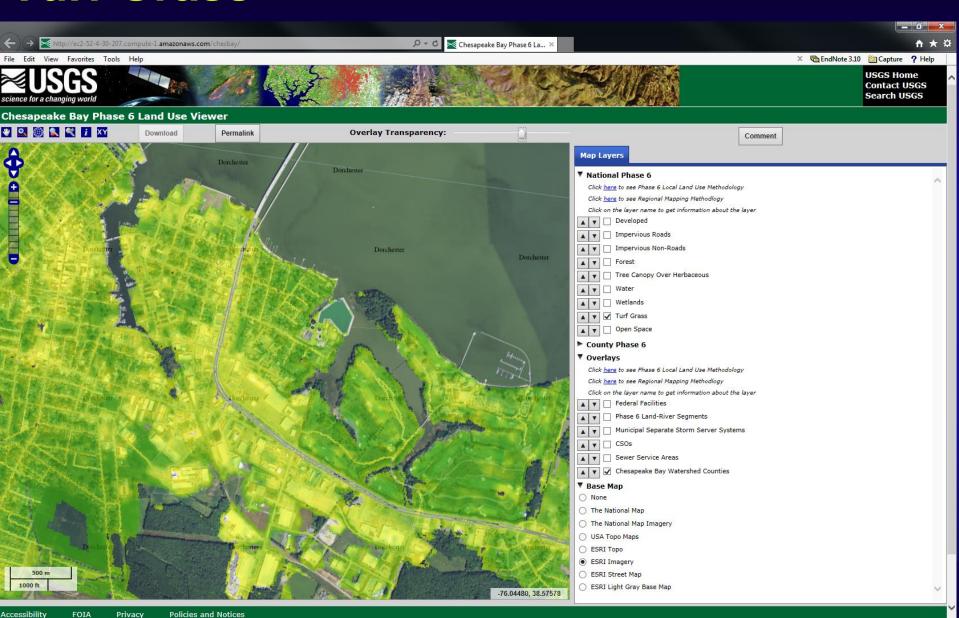


### Forest, Water, & Wetlands





# **Turf Grass**



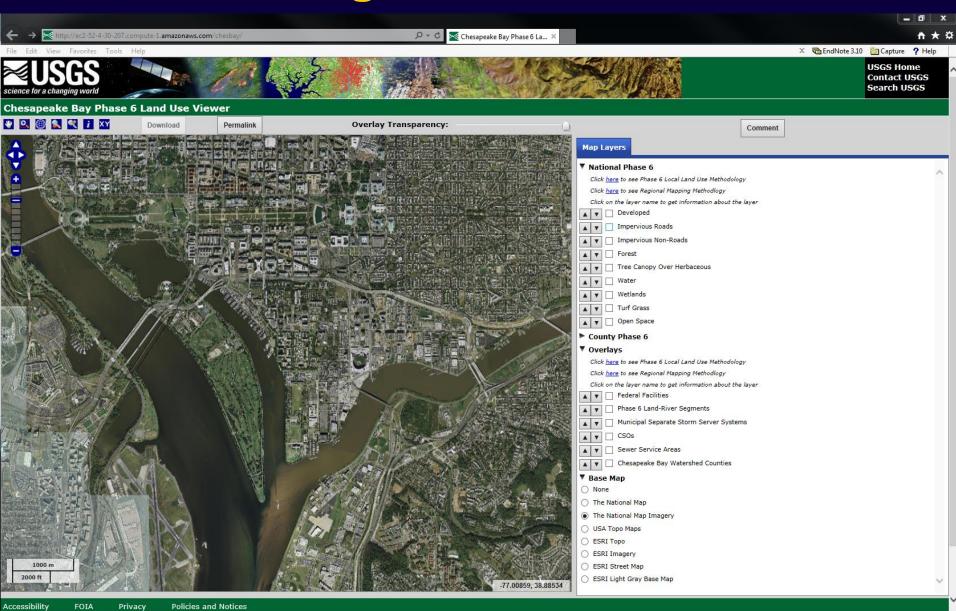


National Phase 6 + Overlays

# WASHINGTON, DC

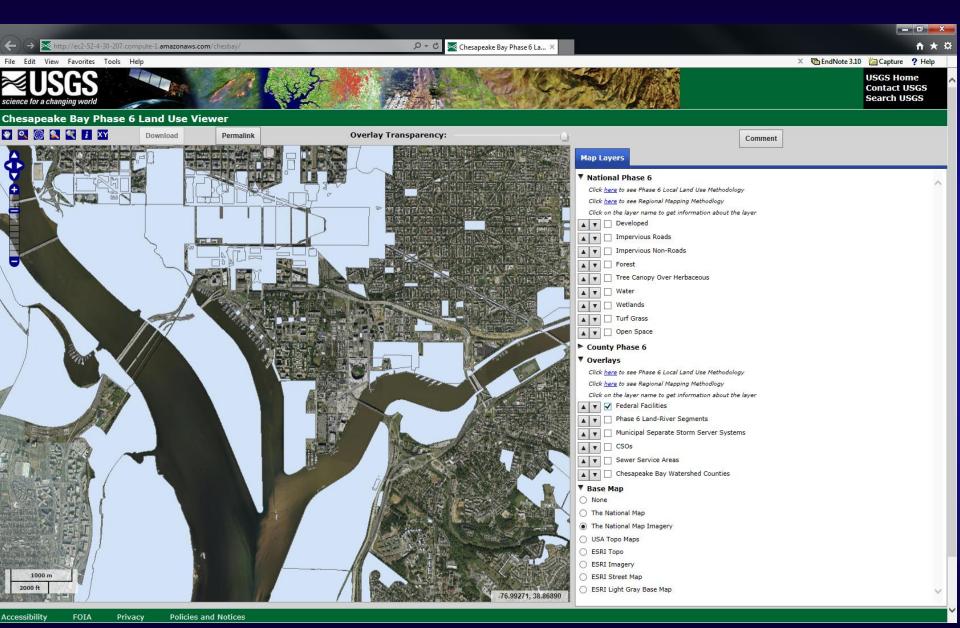


# SE/SW Washington, DC



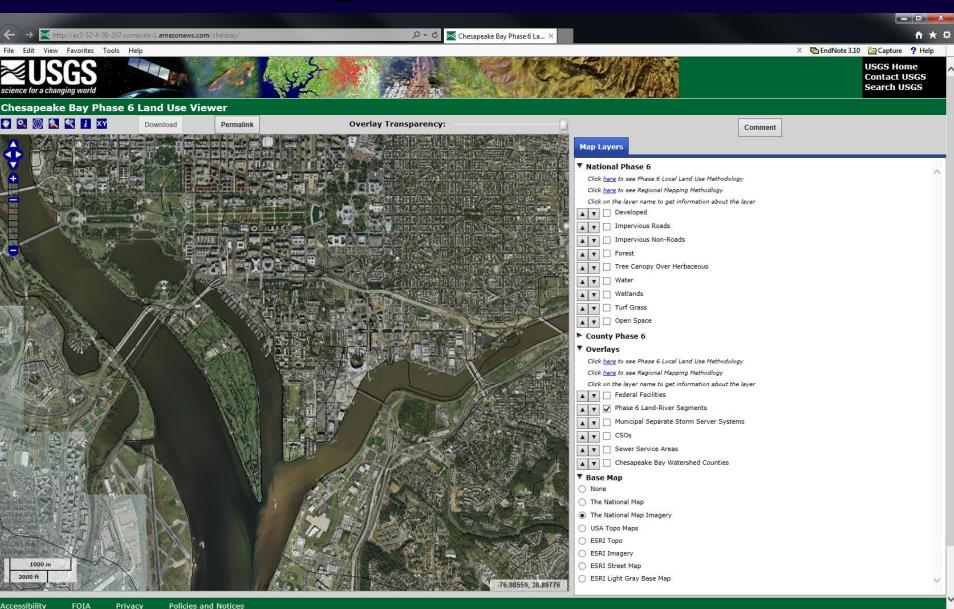


#### **Federal Facilities**



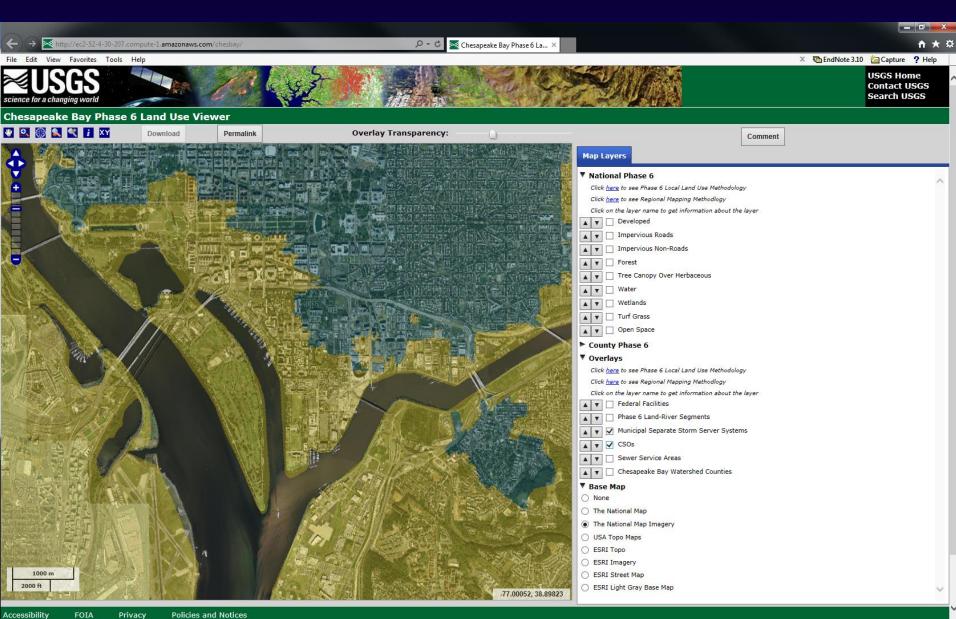


# **Land River Segments**



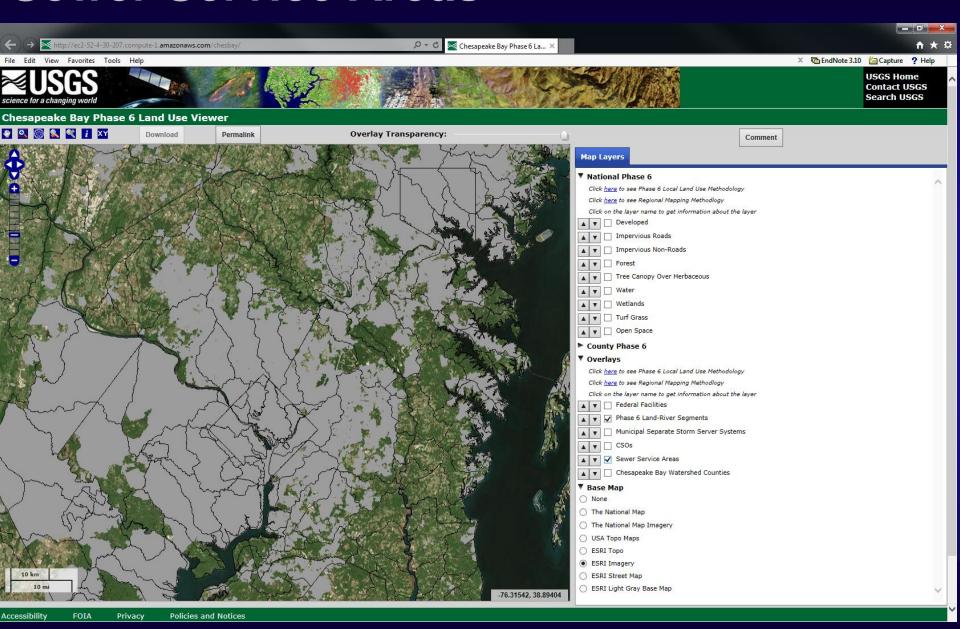


#### MS4's & CSO's





#### **Sewer Service Areas**



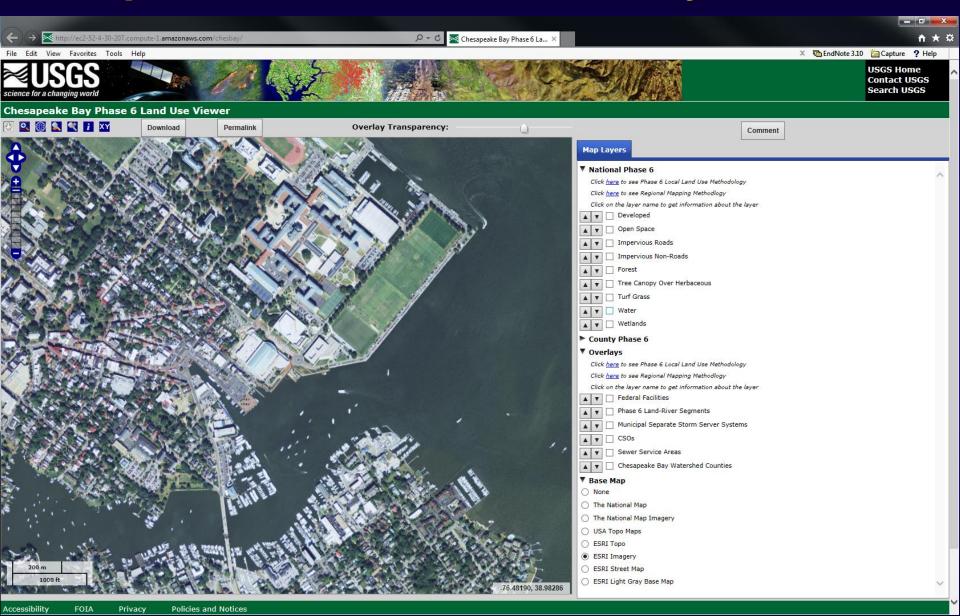


**Lat/Long Comment Tool** 

ANNAPOLIS, MD

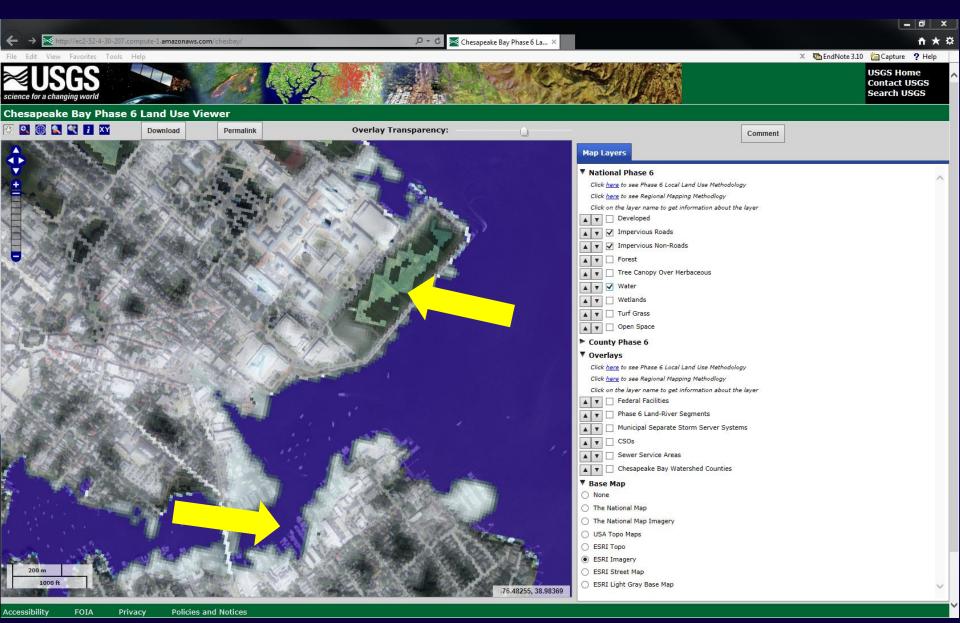


### Annapolis, MD - Naval Academy & CBPO



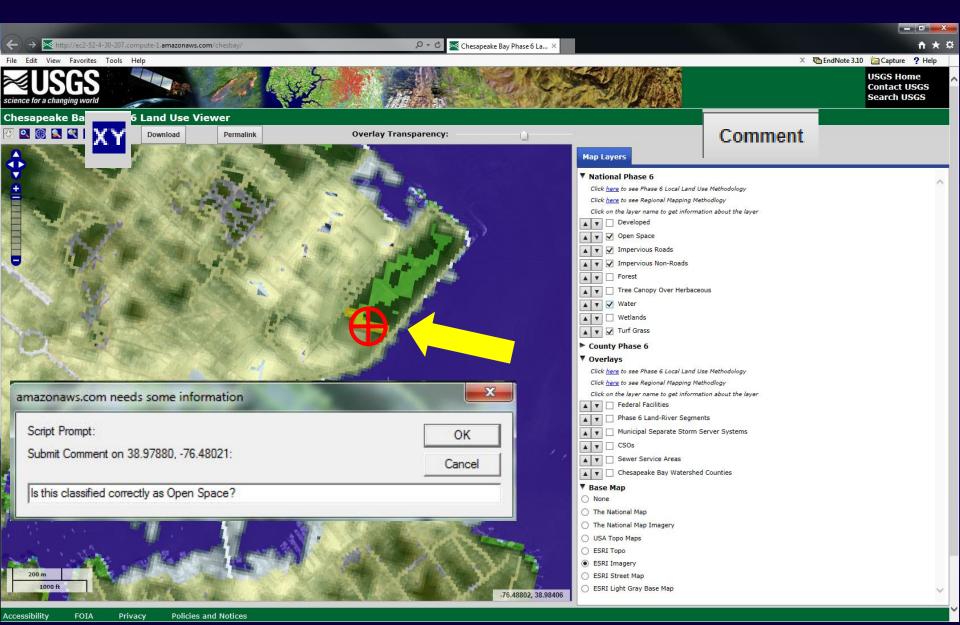


#### **Omission & Commission Errors**



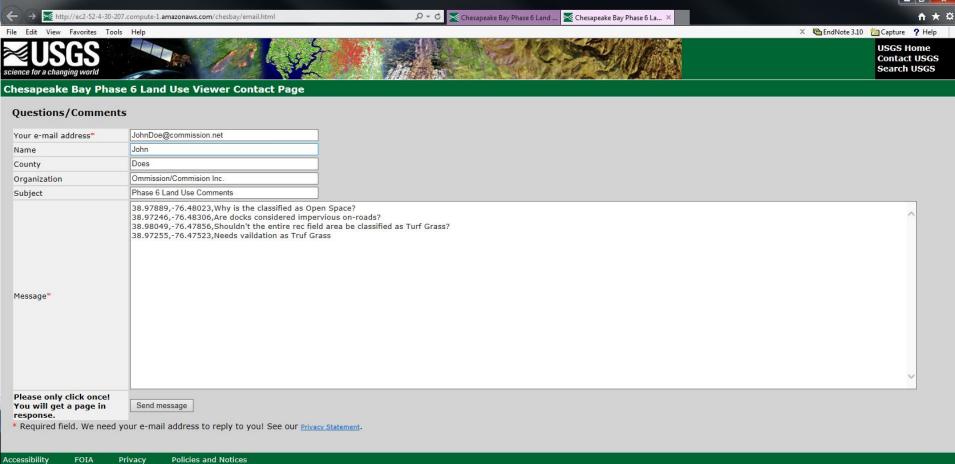


#### **Omission & Commission Errors**





#### **Questions/Comments**



U.S. Department of the Interior | U.S. Geological Survey

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### **Next Steps**

- Focus groups to review Phase 6 Land Use Data website.
- Update Phase 6 Land Use website.
- Host webinar presenting Phase 6 Land Use website, data review methodology, CBP expectations, and review schedule.
- Begin synthesizing high-res land cover and local land use data for final land use dataset (P6LU\_v3).
- Reconcile CBP and MDE/MDP land use classification and aggregation methodologies (Pilot County: PG County, MD)



# Extra





#### P6 Land Use Development and Review Schedule

Complete regional land use dataset using nationally available data: May 2015 Phase 6 Land Use Database v1 (P6LU v1). Rolling jurisdictional proof-of-concept review of how CBP is using their Aug - Sep 2015 data. Sep 1, 2015 Deadline to incorporate local land use/cover data. Submit P6LU v2 to CBP Modeling Team. Incorporate additional local data and high-res land cover into P6 Land Oct 15 – May 16 Use Database, version 3 (P6LU v3). Jan – Jul 2016 Rolling jurisdictional review of P6LU\_v3 and CBPO response to comments. Aug 2016 Finalization of P6LU\_v3 database (1985 – 2014) Sep 1, 2016 Submit P6LU\_v3 database to CBP Modeling Team



#### **P6 Land Use Database Versions**

#### Version 1 (July 2015)

- Based on national/regional data
- Includes updated sewer/septic estimates

#### Version 2 (October 2015)

- Incorporates some local land use/cover data
- Includes multiple wetland classes
- Includes proportions of crop and pasture/hay by LRSEG

#### Version 3 (August 2016)

- Incorporates local land use/cover data
- Incorporates high-resolution land cover, everywhere
- Includes new sediment delivery factors
- Includes wetland efficiencies
- Extensively reviewed



#### Land Use vs. Land Cover

- Low-density Residential
- Transportation
- Agriculture
- Rural conservation

- Impervious surfaces
- Tree canopy
- Herbaceous
- Barren

#### Phase 6 Land Uses

- Impervious-Roads
- Turf Grass
- Open Space
- Agriculture space



#### Phase 6 Land Uses – version 2 (P6LU\_v2)

#### **Primary Sectors:**

- Agriculture
- Developed
- Natural

#### **Overlays:**

- Developed Areas
- Federal Agency Lands
- Combined Sewer Overflows (CSS)
- Municipal Separate Storm Sewer System (MS4)
- Wastewater Sewer Service Areas

