



Tuana Phillips

Maintain Healthy Watersheds Goal  
Implementation Team  
& Forestry Workgroup



Duke University, Class of 2013  
Environmental Science (B.S.)  
Earth and Ocean Science (B.A.)  
Biology (minor)





# Project WILD (Wilderness Initiatives for Learning at Duke)





# Undergraduate Research



Abundance and diversity of phytoplankton



Macroinvertebrate communities, habitat quality



Intertidal rock pool species richness



Density variation of *Acacia nigrecens* hooks at different herbivory pressures



Alpine lake biogeochemistry and atmospheric deposition of phosphorus



Rhododendron dieback and restoration

# Maintain Healthy Watersheds GIT

Tracking  
Workgroup

Local Engagement  
Workgroup

**Chair**

Mark Bryer (TNC)

**Vice-Chair**

Jason Dubow (MDP)

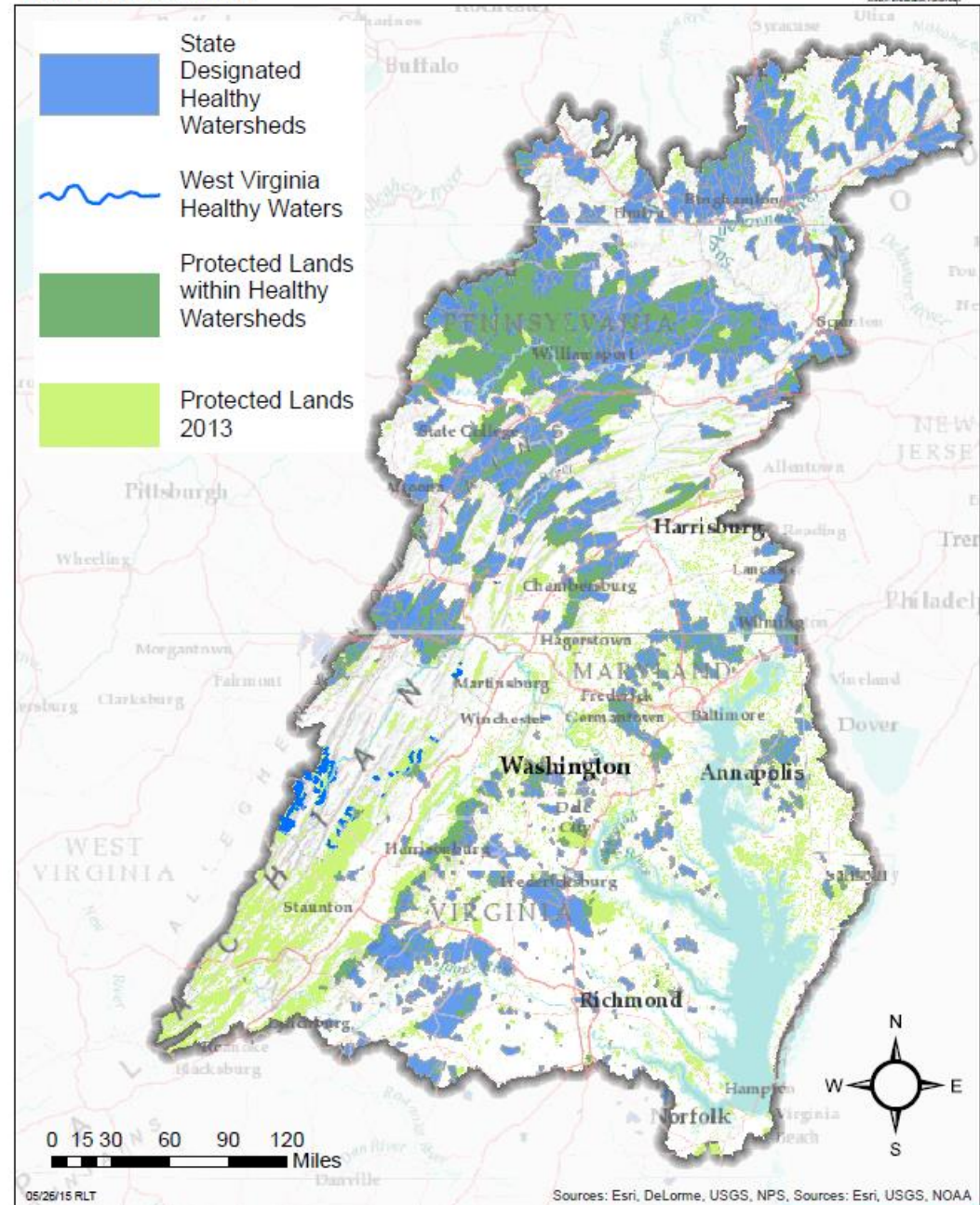
**Coordinator**

Renee Thompson (USGS)

# Chesapeake Bay Watershed Agreement

*Outcome: 100 percent of state-identified healthy watersheds and watersheds remain healthy*

## State Identified Healthy Watersheds With Protected Lands







# 1 Track the health...

of watersheds and our effectiveness in protecting them

1) Where are the healthy watersheds located?

4) How are we tracking the health and viability of those watersheds over time? (E.g., landscape characteristics, changes in land use)

2) Which healthy watersheds are threatened? (E.g., by energy or urban development)

3) What is being done to ensure that healthy watersheds are protected? (E.g., local land policies, easements, citizen stewardship)

# Water Quality GIT

## Forestry Workgroup

### **Chair**

Rebecca Hanmer

### **Coordinator**

Sally Claggett (USFS)

### **Staff**

Julie Mawhorter (USFS)



# Forestry Updates

STAC 2012 Workshop: *The Role of Natural Landscape Features in the Fate and Transport of Nutrients and Sediment*

- Progress to date

& we need more science!



Professional Development:  
goals, interests and future plans



# Goal: explore professional interests

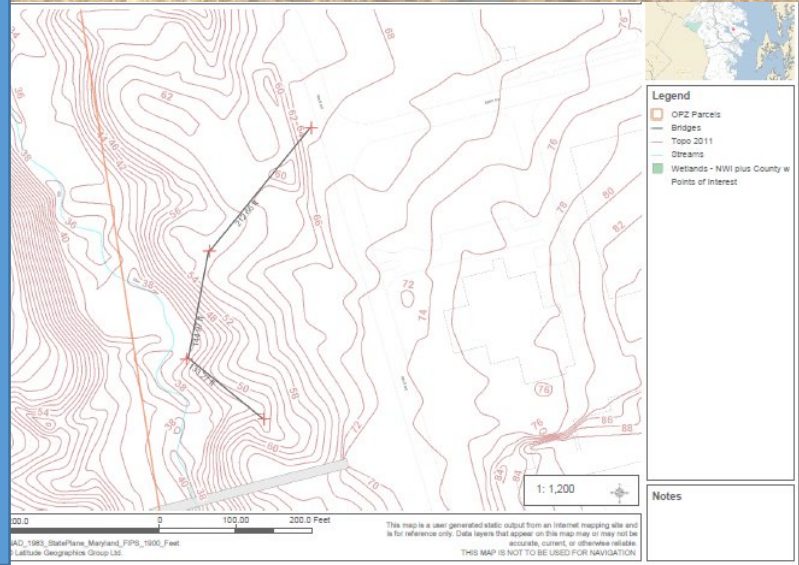
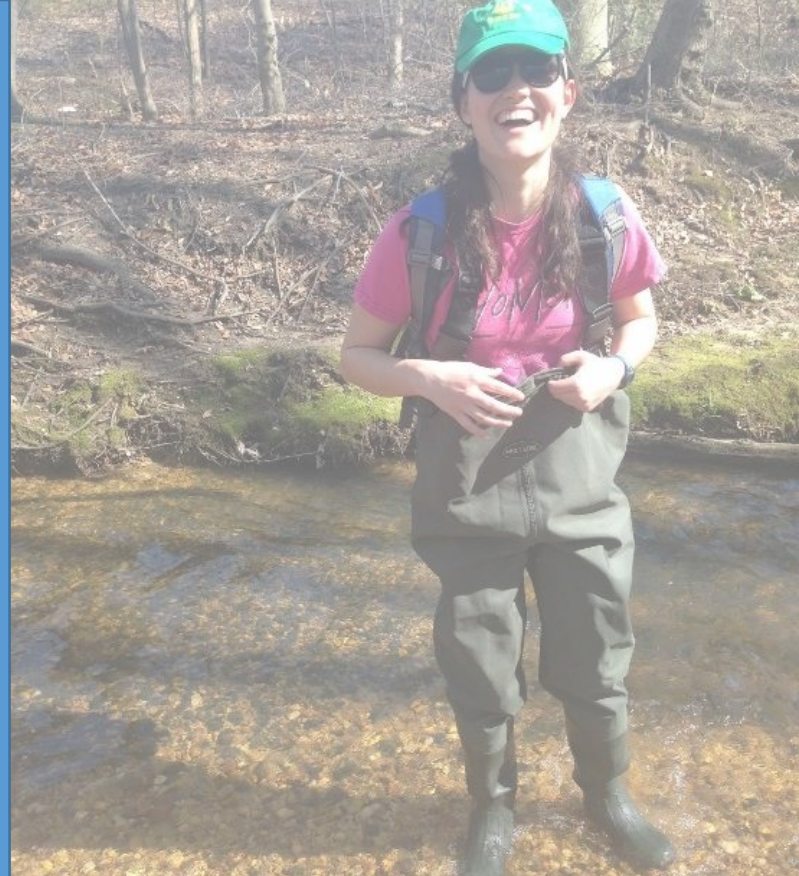
- ✓ Green Infrastructure workshop
- ✓ CUAHSI 2014 Conference

# Goal: improve skills

- ✓ Three conference presentations
- ✓ Adobe InDesign training

# Goal: trainings and certifications

- ✓ Maryland Biological Stream Survey Macroinvertebrate Sampling Certified
- ✓ Forest Conservation Qualified Professional Training course

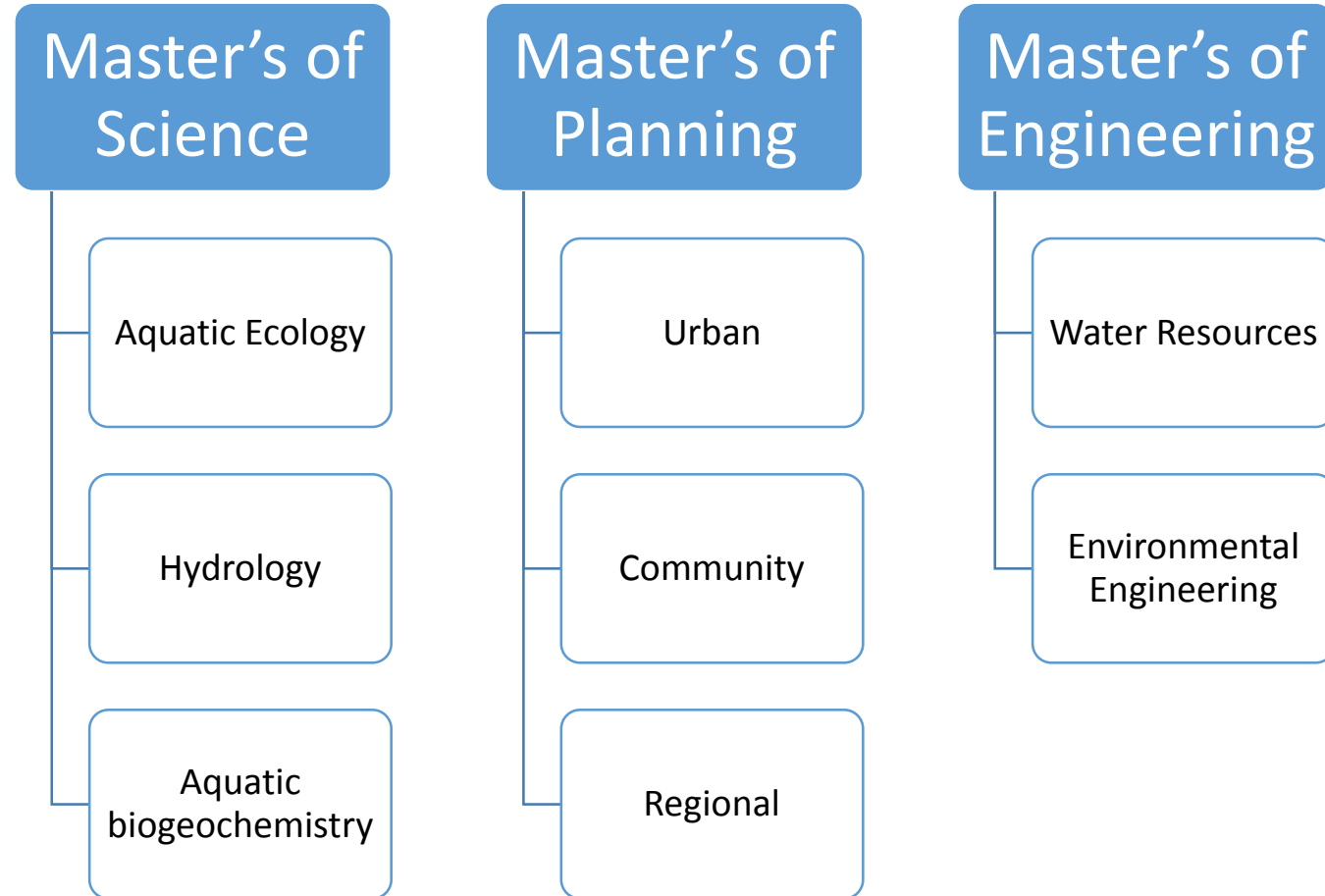


environmental

restoration  
phytoplankton  
infrastructure biogeochemistry ocean learning  
conservation science international green  
ecology planning research  
watershed  
forestry quality  
hydrology health  
landscape  
geology estuary management  
aquatic education geomorphology  
policy volunteering water  
marine



# Future Plans: graduate school?





For more information...

Maintain Healthy Watersheds Goal Team website page:

[http://www.chesapeakebay.net/groups/group/maintaining\\_healthy\\_watersheds\\_goal\\_implementation\\_team](http://www.chesapeakebay.net/groups/group/maintaining_healthy_watersheds_goal_implementation_team)

Forestry Workgroup website page:

[http://www.chesapeakebay.net/groups/group/forestry\\_workgroup](http://www.chesapeakebay.net/groups/group/forestry_workgroup)

Contact:

Phillips.tuana@epa.gov

(410)267-5737

Thank you!



# Healthy Watersheds Management Approaches

- 1** Track the health...  
of watersheds and our effectiveness in protecting them
- 2** Strengthen local commitment and capacity...  
to protect healthy watersheds
- 3** Increase communication within the federal family...  
So that federal programs and agency decision-making are more protective of state-identified healthy watersheds
- 4** Support state-based efforts...  
Encourage and recognize important activities within states