

Beltsville Agricultural Research Center



Greg McCarty
Hydrology & Remote Sensing Laboratory

Multi-disciplinary team

- Soil Science
- Hydrology
- Remote Sensing
- Modeling
- Ecology
- Chemistry

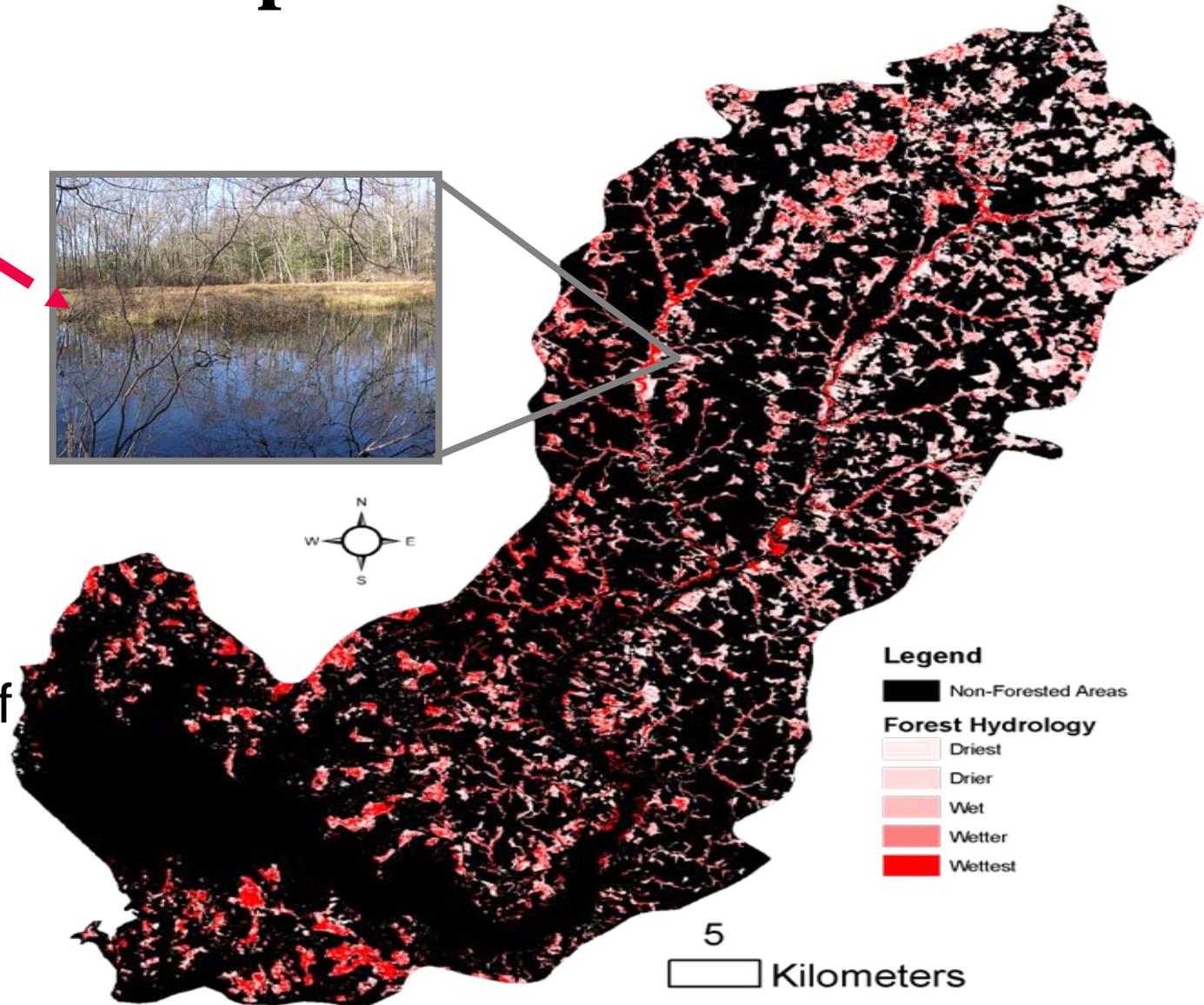
Location Specific Resources

- Full suite of chemical analytical equipment
- Remote sensing and GIS expertise
- Choptank River Watershed Project-
LULUC assessments
- Forest Service Scientist located at BARC

Accomplishments

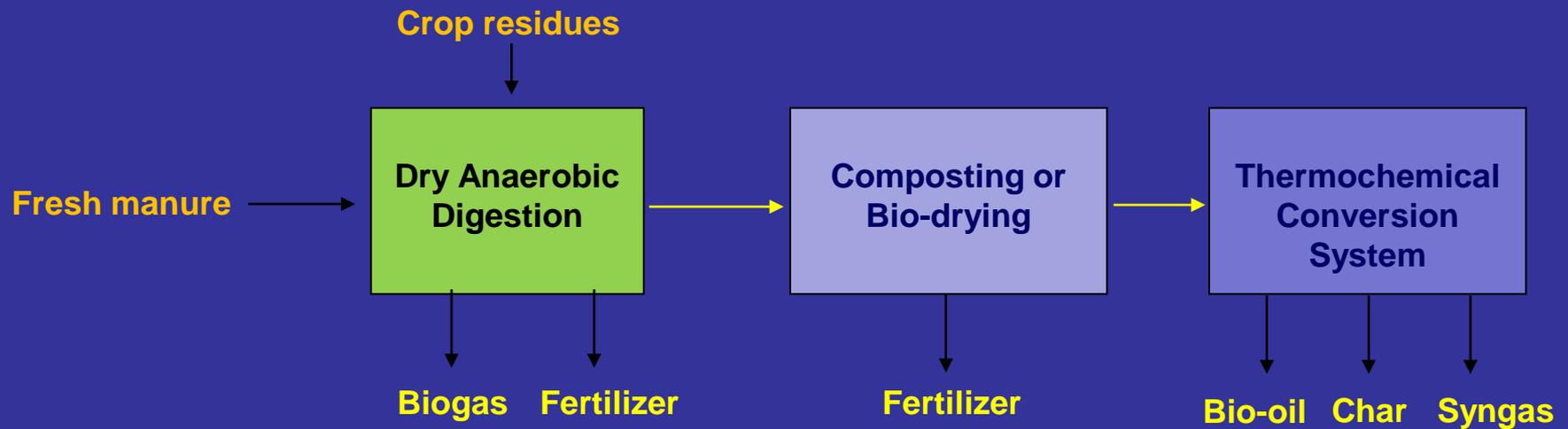
- Riparian buffer assessment
- Remote sensing of surface hydrology in forests
 - Radar & Lidar sensors
- Characterization of biochar from woody products
- Dry digestion and composting research

Monitoring Forested Wetland Hydrology in the Choptank Watershed



Developing novel remote sensing Radar and Lidar technologies for detection and characterization of wetlands in agricultural watersheds

◆ Available systems combining with dry anaerobic digester



◆ EMBUL Pilot-scale digester for co-digestion

◆ Pilot-scale digester : 200 gal. volume



- ① Dairy manure storage tank, ② Manure & food waste mixing tank, ③ Digester, ④ Distributing system, ⑤ Mixing pump, ⑥ Discharge control system, ⑦ Sampling port