Forestry Workgroup Land Uses Workgroup joint meeting

5/1/13

Participants: Karl Berger, Sally Claggett, Matt Johnston, Peter Claggett, Gary Shenk, Jim Baird, Judy Okay, Gary Speiran, Craig Highfield, Jeff, Frank Rodgers, Deb Hopkins, Tracey Coulter, Ted Tessler, Julie Mawhorter, Erick Sprague, Tim Culbreth, Steve, Barry Evans, Graham, Sarah, Teresa Coon, Allie Baird, Greg Noe, Jeff Sweeny, Beverly Quinlan, Justin Shafer, Jeremy Hanson, Chris Peiffer, Marya, Renee Thompson, Anne Hairston-Strang, Marsha Box, , Mike Knapp, Anne, Charlotte Katzenmoyer, Earl

Overview: Sally Claggett

- Objective of the meeting today is to get the discussion rolling
    - Three proposed new land use categories: true forest, urban tree canopy, floodplain zone
    - Propose to remove "forest" land use category
- STAC workshop
    - Mapping riparian forest and forested floodplains and other wetlands should be incorporated into the CB Model
    - Trees help us manage water on site
    - Does it have a unique loading characteristic? (Are upland and riparian forest loading rates actually different?)
- Overview of forest watershed functions
- Forest inventory analysis: 55% of CBW is "true" forest, but phase 5.2 lists 62% as "forest"
- Spatial location of land uses in relation to surrounding uses is important

Overview of modeling issues with changing land use categories: Gary Shenk

- Everything is on the table for Phase 6
- Need to know how loading rates vary (by setting, anthropogenic effect, BMPs)
- Forestry Workgroup will make recommendations on land use type, loading rates, and BMPs

Overview of forest land use mapping issues: Peter Claggett

- Why don't we apply a similar treatment to existing buffers and trees?
- We can't map forested wetlands well at the regional scale
- Mapping forests
    - Tree canopy

- o Fragmentation
- o Forest characteristics
- o Shrub scrub is often put into the forest category (succession)
- o Forest Inventory Analysis (FIA): ground collected data
- Mapping urban tree canopy
  - o Tree canopy
  - o How do old neighborhoods with full canopy get factored in? they are not currently considered forest
- Mapping riparian areas/ floodplains
  - o Hydrography
  - o Slope
  - o Landforms
  - o Soils
  - o Structural hazard zone (FEMA floodplain map)
- Mapping the Active River Area
- Many different ways to look at land use and land cover
- Setting BMP priorities
- Questions
  - o What do you do with the history of data? If you need data going back to 1983? 2012-2013 will be the magic date for data.
  - o CBP prefers the lowest common denominator for data, but starting to use more local data
  - o Groundwater, BMP implementation lag issues

Mapping tree canopy in Fairfax County: Mike Knapp

- Director of a local urban forestry group in Fairfax County
- Two big threat to tree canopy are deer and human impacts, while land development is still part of the issue
- At the convergence of three geomorphic regions
- Remote sensing projects
- Using trunk data from LIDaR
- Transit Oriented Development centers, concentrating canopy loss in very small areas
- What is your minimum per/acre canopy cover: varies between zoning location

Mapping tree canopy in Lancaster City: Charlotte Kastzenmoyer

- Monitor and report all stormwater discharge pollution
- 25 yr planning horizon at $140 million for green infrastructure will solve the problem
- Can manage 1,200 acres of impervious area and capture over 1 billion gallons of stormwater runoff over the long term

- Determined land cover metrics by acre
- Trying to decide how many trees and where?
- Canopy Analysis and Implementation Plan (CAIP)
- Several useful tools
- Mapped out vacant street trees

Mapping floodplain areas: Greg Noe, USGS

- Floodplain generally slows the water and can trap N and P
- Lots of potential GIS data for mapping floodplain area in the Chesapeake Bay (most accurate is very computer intensive)
- Large gaps in FEMA data throughout the watershed
- SSURGO coverage
- Questions
  - Hopefully you can plug in and keep asking questions and we can start to integrate some things (G. Shenk), so keep speaking up
  - Have you looked at the Active River Area?

Wrap Up and Next Steps

- Try to figure out how floodplain mapping dovetails with riparian forest maps
- Will focus on trying to fix upslope treatment areas
- Lots of riparian forest buffers, but we can't place buffers and BMPs on the landscape in a distributive way
- What do you need in the modeling world from the FWG to make things work (just need land use and loading rate)
  - Continue the dialogue
- FWG will take the lead on the urban tree canopy and work on loading rates as a work group
- Center for Watershed Protetion: is working on looking at low order streams and how to incorporate them and parameterize them into a model
- Not ruling out floodplain delineation in next version of the model, but seems that the FWG needs to justify a difference from the current land use
- Need a list of funding and staffing resource needs to complete these data gaps
- **Peter Claggett and Frank Rodgers will make a To-Do list**