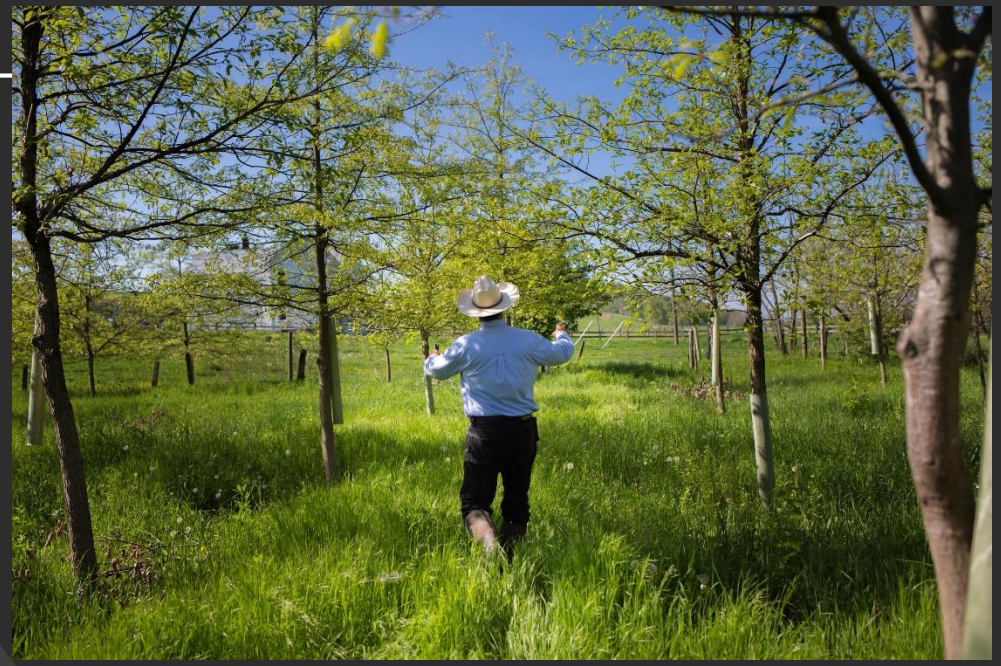
Data Wish List and Ideas for Forestry Tracking, Analysis and Forecasting

Joint FWG and LUWG Meeting

December 4, 2019

Meeting Objectives

- Generate ideas on how to use high-resolution change data (change from 2013-2018) to benefit forestry outcomes.
- Look closely at scale.
- What could the FWG use that the LUWG could produce?
- What does the LUWG need from the FWG?
- ID volunteers to review data as it is developed by LUWG.



"Restore 900 miles per year of riparian forest buffer and conserve existing buffers until at least 70 percent are forested."

Riparian Forest Buffer Outcome

- Improved map/definition of riparian
  - # and % of forested buffer
- Where is riparian area forested and where is there need?
  - How does this compare to Chesapeake Progress?
  - What goes in Data Dashboard?
- Look at combination of landform (floodplain) and vegetation
  - Separate out wetlands?
  - Is riparian area perched?
  - Does riparian area intercept farm runoff?

Tree Canopy Outcome

"Continually increase urban tree canopy to provide air quality, water quality and habitat benefits throughout the Chesapeake Bay watershed. Expand urban tree canopy by 2,400 acres by 2025."

In our definition, "urban" can include rural developed/turf but not ag land

- Tree Canopy Indicator – new, will see how well it works with the new land cover data analysis

equals	Tree Canopy over Impervious
plus	Tree Canopy over Turf
plus	Forest within 2010 Census Designated Urban Areas/Clusters
minus	Tree Canopy that was Forest in last land cover (shouldn't count towards "gain")
minus	Trees on active agricultural land (not sure how these are differentiated?)

Tree Canopy Outcome

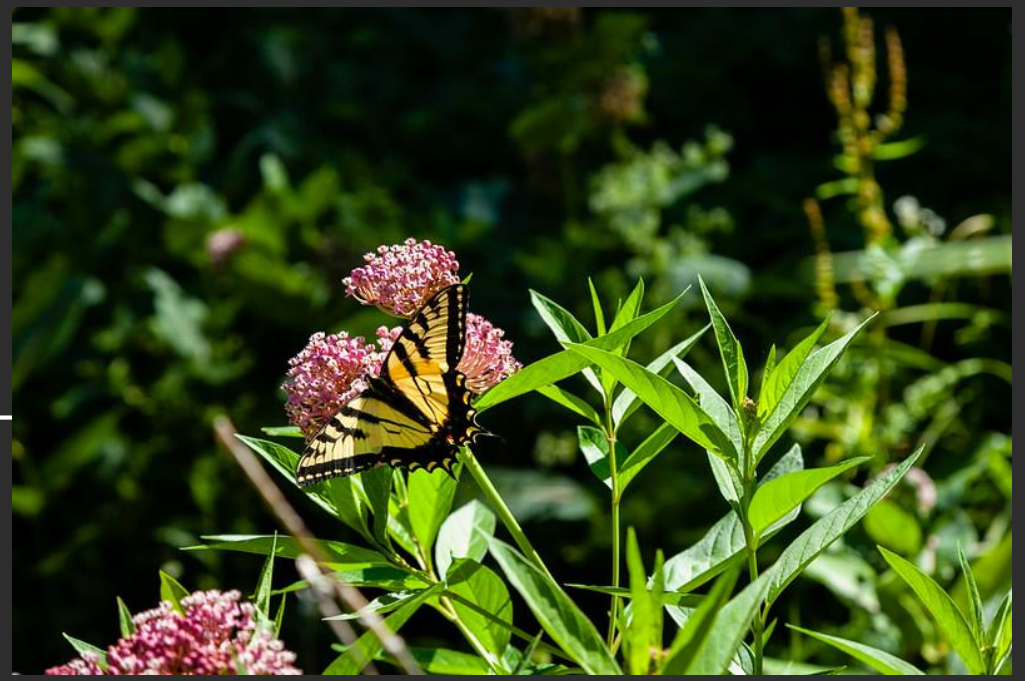
- Wish List – new land cover and change analysis data
  - Simplified version of land cover classification to import into i-Tree Landscape (watershed-wide) – enables quick and easy quantification of ecosystem benefits (air quality, stormwater, carbon, etc)
  - Tools and guidance that make it easier for localities to download simplified, tree canopy-focused land cover classification and change analysis for their desired geographic footprint
  - Tools (tied to CAST model) that calculate the loading implications of losses and gains of forest and tree canopy (past and future)

“Protect 695,000 acres of forest land of highest value for maintaining water quality.”

“High Value” for Forest Conservation

- Chesapeake Conservation Partnership layer (high value layer needs to be refined)
  - *Large blocks
  - *Riparian areas
  - *Woodlots
  - *Forest on less than 30% slope
- Vulnerability assessment-- how did we do?
- Where will the future large-diameter forests be? (where protected, sloped, wet, etc.)
- Other considerations?

Other Forest Characteristics



- Where is forest loss?
  - Is forest being lost to land uses other than development?
- Height/Biomass (carbon, water processing, vines, etc)
- Where is forest in transition from timber harvest?
  - % in Successional Classes (how has that changed?)
  - What does forest management look like from high resolution imagery?
  - What does lack of forest management look like?
- What does forest change look like over time and into the future?
- How much forest is considered fragmented?
  - What is the degree of fragmentation change across the watershed?

Deciduous v Evergreen

- YES.
- At what scale do we need to discern between them?
- Are ‘age class’ interests the same for both?
- Riparian area important?
- Other interests..?

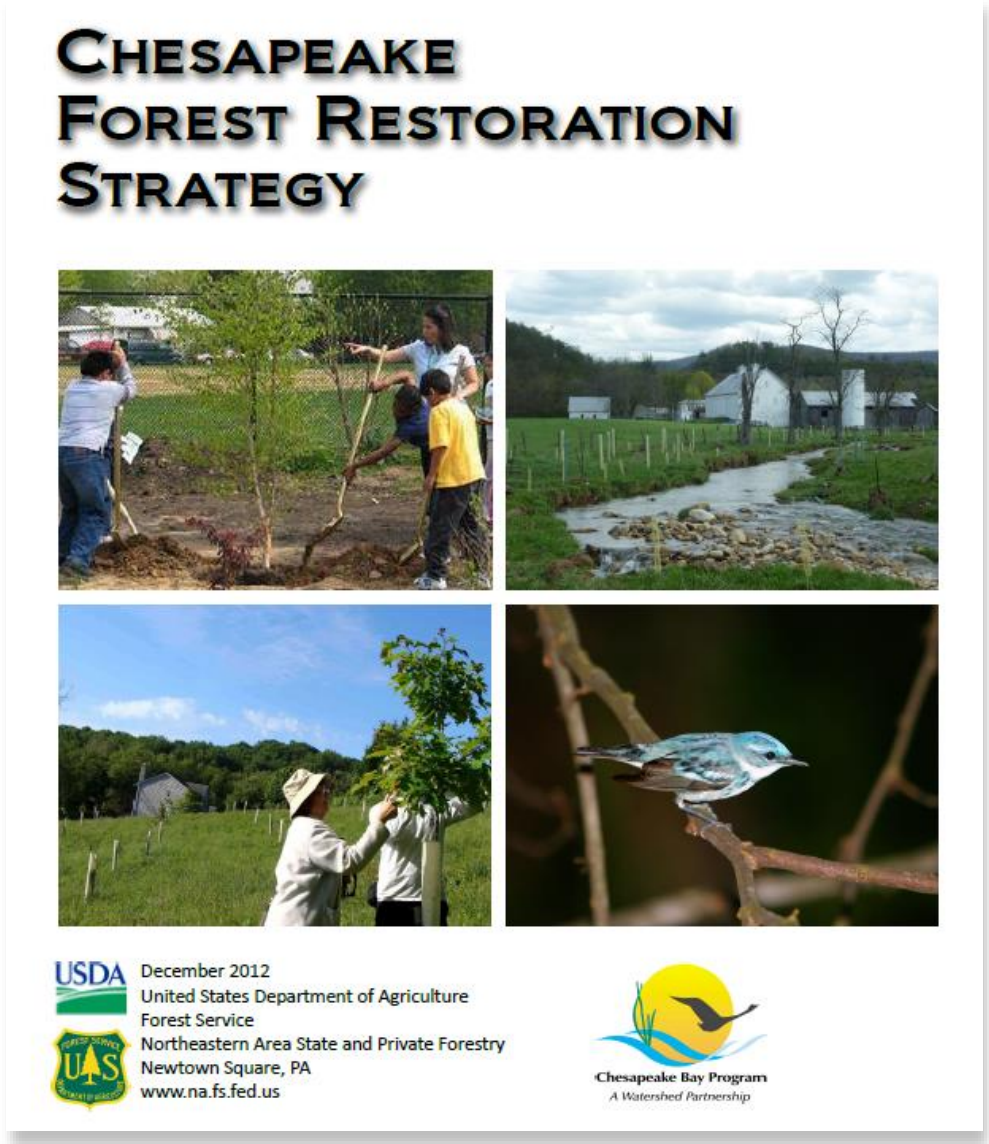
Chesapeake Forest Restoration Strategy update

Chesapeake Bay Program
Science. Restoration. Partnership.

FOREST SERVICE
U S
DEPARTMENT OF AGRICULTURE

Original Strategy

- Completed in 2012
- Target audience: Practitioners
- >60 people involved
- Signed by USFS Chief and all Chesapeake State Foresters



Proposed updates to the FRS

- Reframing to reflect new CB agreement and USFS priorities
- Updated data and figures
- Feature new forest restoration projects
- Financial and technical assistance information
- Tools and science for prioritizing restoration projects
- Reorganizing and adding new sections
  - Restoration of natural landscapes
  - Climate change

Assistance Requested

- Updated land use statistics and maps by county (forest, mixed-open, developed, turf grass)
- More detail on the state of our existing forests
  - Age/size class distribution of forests
  - Forest fragmentation statistics
- Timeline: Finalize document this spring (but the work will go on!)