

CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP Conference Call Minutes

March 26, 2015

ACTIONS, DECISIONS & RECOMMENDATIONS

ACTION: There will be a separate conference call between members of the Land Use Workgroup and LGAC to discuss how to publicize the rollout of the draft Phase 6.0 Land Use Data, and to engage local governments in the review process.

DECISION: The Land Use Workgroup made a series of recommendations to the CBPO GIS team for development of the first draft Phase 6.0 land use data sets.

RECOMMENDATION: Remove farmstead impervious/pervious from the list of mappable Phase 6.0 land uses. LUWG will ask the Agriculture Modeling Subcommittee to explore options for a tabular representation instead.

RECOMMENDATION: Group “open space” under the natural land uses.

RECOMMENDATION: Combine dirt and gravel roads with other roads for mapping purposes unless the USWG recommends otherwise.

FEEDBACK: Some states count pools as impervious area rather than open water.

RECOMMENDATION: If stream width is less than 30ft, and therefore unknown, assume 15ft width.

RECOMMENDATION: Group barren land cover within developed area under with construction. Use known construction acres to avoid double counting. Group barren land cover within rural land under open space.

RECOMMENDATION: Define tree canopy larger than 1 acre circle as forest. When under 1 acre circle in developed land define as tree canopy. In rural areas all tree canopy is forest. Classify scrub/shrub as either tree canopy or forest according to the same rules.

RECOMMENDATION: Overlay the 11 layers of the P6 LU dataset so that they appear as one map. Reviewers will be able to turn on and off the different layers as well as download the data.

MINUTES

Welcome and Introductions

Review schedule

- Karl reviewed the [LUWG GANTT chart](#) of upcoming projects and deadlines in 2015 and 2016
- LGAC: Is LUWG putting together a plan to get the P6 LU out to local jurisdictions?
 - Berger: We will need a plan to get the word out that the data is available for review and what the schedule is. Perhaps LGAC can assist with the effort.
 - LGAC: Will set up a separate meeting to have a discussion on how to get the word out to local governments. Will send a doodle poll to the workgroup members, request a representative from each of the jurisdictions as well as anyone else interested in participating.
 - Claggett: Note that MDE & MDP will have their own communication strategy with localities and different time scale.
 - Berger: Request the jurisdictions attempt to participate in this effort.
 - VA: Will the posted data be a tabular or spatial data set?

- Claggett: Spatial dataset with several layers. The tabular data by land river segment will also be available for download.
- LGAC: What is involved with task 2.03 identify alternative future scenarios?
 - Claggett: Local jurisdictions may have future scenarios that they would like to see simulated. Then LUWG could identify some that are common across jurisdictions and explore these. Would be willing to delay this task a few months if needed given the P6 LU development.
- LGAC: Clarify on the GANTT chart that the review of P6 LUs is for both state and local jurisdictions.

ACTION: There will be a separate conference call between members of the Land Use Workgroup and LGAC to discuss how to publicize the rollout of the draft Phase 6.0 Land Use Data, and to engage local governments in the review process.

Workgroup updates

- The Principals' Staff Committee approved funding for the Chesapeake Conservancy high-res land cover project. They will be starting the project next month, and will be looking at all counties in or intersecting the watershed everywhere except VA.
 - VA had a similar RFP that was released earlier this year, and they have re-issued with an April 8th deadline in order to get more bids to choose from.
 - We should have 1m data for the entire watershed by May 2016. GIS team at CBPO will be trying to incorporate all data by summer 2016.
 - Add this project to the GANTT schedule.
- [Land use metrics management strategy](#) is currently out for public review.
- MDE/MDP have responsibility for developing the P6 land use for MD. They are in close contact with their local jurisdictions.
- Mapping team at the CBPO have split up the local land use data by state and are working to incorporate the data. Then there will be a recipe of steps of how we incorporate the data and conflate with the P6 land classes, which we will share with LUWG. Hoping to finish by April.
- Berger: The decision rules will still be uniform across all jurisdictions?
 - Claggett: Yes.
- PA encouraged GIS team to contact DEP if they need additional information.
 - Claggett: We have initiated calls with each state to go over the data and talk about filling gaps.

Discussion: Phase 6 land use mapping issues

Farmstead impervious/pervious

- Claggett: Farmstead impervious/pervious is a proposed Phase 6.0 land use from the Agriculture Workgroup. So far it doesn't seem that we can map this. Have recommended to the AgWG that we drop the mapping of farmstead impervious/pervious.
 - VA: With animal operations there was a need to separate the regulated from un-regulated.
 - Claggett: Unless we had watershed wide point data that was fairly accurate, we would be hard pressed to identify those that are WLA vs. LA vs. other structures.

- Claggett: Recommend that we drop this from what we can map, and ask the AMS and AgWG if it is possible to represent as tabular data instead.
- VA: Suggest representing animal operations as a number of animal units instead of an acreage (similar to septic).
 - Bill Keeling will bring this up with the AMS.
 - Berger: Request that Bill or Alisha report back to LUWG on what AMS recommends.

RECOMMENDATION: Remove farmstead impervious/pervious from the list of mappable Phase 6.0 land uses. LUWG will ask the Agriculture Modeling Subcommittee to explore options for a tabular representation instead.

Open space

- Claggett: Open space is mostly herbaceous, not turfgrass and doesn't receive fertilizer. In the natural realm it could be a meadow. In developed it could be a landfill, vacant or abandoned lot. Could also include barren land and beaches. In agriculture lands it could be barren, fallow or idle land. The AgWG has recommended an agricultural open space category derived from ag census categories, which would be a subset of this overall open space category. CBPO modeling team recommends that the overall open space land use fall under natural for communication purposes.
 - MD agrees with that grouping.
 - Claggett: From mapping perspective, everything that's not developed, trees, water, or wetland looks like open space (including agriculture). Most often there is acreage left over when the agriculture is subtracted out, and the remainder becomes open space. In some counties the acreage may be very small.
 - VA: Grass buffer and land retirement BMPs would need to be applied to an open agricultural space land use.
 - Railroads are included in open space. Beaches are proposed to be open space in this version rather than in water.
 - Do beaches have the same loading rate as other open space? Without seeing the loading rate it is hard to determine.

RECOMMENDATION: Group "open space" under the natural land uses.

Gravel roads

- Claggett: The workgroup should weigh in on whether we should distinguish gravel roads from other roads. We can also ask the USWG for input.
 - PA: Dirt and gravel road BMPs are reported by PA, however not a large acreage. Not too concerned that we have gravel roads mapped.
 - Berger: It is possible in PA to distinguish between dirt and gravel roads and other roads. If we find there's no loading difference, then they would be grouped anyway. If loading difference is found, then there is a potential in those jurisdictions where the data is available, to separate the types of roads.
 - Claggett: We will incorporate dirt and gravel roads with paved roads in PA, unless USWG recommends otherwise.

RECOMMENDATION: Combine dirt and gravel roads with other roads for mapping purposes unless the USWG recommends otherwise.

Water

- Claggett: Swimming pools show up with high res mapping and will be captured either as impervious or water depending on time of year. If they show up as water, recommend they be categorized as open water because they do not generate runoff.
 - VA treats pools as impervious area.
 - MD also counts pools as impervious area.
- Claggett: Stream widths unknown because of tree cover. Bank to bank mapping of water bodies tapers off below 25-30ft wide stream, so we just get a line. Propose assuming that all streams below 30 ft are 15 ft wide. There are algorithms to relate channel area to drainage width, and we might be able to get there eventually, but not by April.
 - Is there a way to assign by order?
 - Claggett: Order is not an attribute in the dataset.
 - Stream corridor overlay will be complete over the summer, not by the end of April.
 - Fairfax County may have a simple way of establishing with just planimetric information. Will get back to Peter on this option.
 - LGAC: Is reducing the acreage available for BMPs going to be an issue?
 - VA: Take the overage out of forest land, which wouldn't have BMPs applied to it.
 - Raise this to the FWG for input.
 - Members were in agreement with a 15ft wide stream decision rule.

FEEDBACK: Some states count pools as impervious area rather than open water.

RECOMMENDATION: If stream width is less than 30ft, and therefore unknown, assume 15ft width.

Barren land

- Claggett: Barren land may be a dirt/gravel road, an early stage of development, or shale gas extraction. We have a layer of extractive already, and PA has the dirt/gravel roads data. So we will be left with an acreage of barren land (non-extractive) that we have to put someplace. Two options are to call it construction (using county reported erosion and sediment control plans to ensure no double counting), or open space.
 - VA: How does it work in mountains with rock outcrops?
 - Claggett: Haven't mapped these areas yet.
 - Claggett: Could we take barren land cover and if within developed put it in construction, and if in rural or agricultural put it in open space?
 - If construction acres were known, would subtract the barren land out of construction rather than double counting.
 - MD: What if barren was greater than construction?
 - Could go to open space.

RECOMMENDATION: Group barren land cover within developed area under with construction. Use known construction acres to avoid double counting. Group barren land cover within rural land under open space.

Forest

- Claggett: Have talked with the Forestry Workgroup about defining tree canopy larger than 1 acre circle as forest. The smaller fragments under an acre in the developed land uses would be tree canopy. In rural areas small fragments would still be forests. Scrub/shrub is mostly areas undergoing succession, classify as tree canopy as well.
 - VA: Concern that if there isn't a tree canopy loading rate, what does it go to?
 - Claggett: Open space.
 - Sally Claggett: Also proposing a loading rate for tree canopy.

RECOMMENDATION: Define tree canopy larger than 1 acre circle as forest. When under 1 acre circle in developed land define as tree canopy. In rural areas all tree canopy is forest. Classify scrub/shrub as either tree canopy or forest according to the same rules.

P6 Land Use Data Review options

- Claggett: We were hoping to have one map and one dataset for P6. As we try to be true to the high res dataset, have realized that it is impossible to do that. We are coming up with 11 layers, each will be 10m raster pixels that will show 0-100% of each land use. We can overlay them so that they will appear as one map. Propose that we move forward with these 11 layers, make intelligible for jurisdiction review. Reviewers can turn on and off the different layers. The raster will be downloadable. Everything will be rolled up into the tabular data for P6 without losing any information.
 - No objections to this approach.

RECOMMENDATION: Overlay the 11 layers of the P6 LU dataset so that they appear as one map. Reviewers will be able to turn on and off the different layers as well as download the data.

Topics for April and May meetings

- Recommend that we skip April meeting and reconvene in May.
 - Tentative call in April
 - Move to a Tues 5/26 instead of Thurs 5/28 meeting in May.
 - Review all the data in May so that everyone on the workgroup has a chance to look at P6 LU data and ask questions.
- Other upcoming meeting topics include:
 - Forecasting
 - Rollout of V1 data.

Adjourned

Participants:

Karl Berger, Co-Chair	MWCOG
Peter Claggett, Coordinator	USGS

Robert Hirsch	Baltimore County
Ted Tesler	DEP
Darold Burdick	Fairfax County
Alisha Mulkey	MDA
Jeff White	MDE
Stephanie Martins	MDP
Norm Goulet	NVRC
Bill Keeling	VA-DEQ
Megan Grose	WV DEP
Emma Giese, staff	CRC
Sally Claggett	USFS
Mary Gattis	LGAC Coordinator
Lindsay Dodd	MASCD/DMAA
Kevin Lariscy	USAEC
Sarah	DDOE
Quentin Stubbs	USGS
Jenny Tribo	HRPDC