CHESAPEAKE BAY PROGRAM LAND USE WORKGROUP

Meeting Summary
March 1, 2017
10:00AM-12:00PM
Meeting Materials: http://www.chesapeakebay.net/calendar/event/24791/

Actions and Decisions:
Decision: The LUWG tentatively agreed to move forward with developing a historical trends land use scenario, and will work to develop a current policy scenario during future meetings.
Action: LUWG members should review the drafted future land use scenarios identified in the USGS workshop proceedings and send their recommendations on whether to incorporate those scenarios into the Phase 6 land use forecasting to Lindsey Gordon (Gordon.lindsey@epa.gov) and Peter Claggett (pclagget@chesapeakebay.net).
Action: Lindsey Gordon will distribute the methodology and protocols for conducting accuracy assessments of the land cover data that were developed by Sanborn, Inc. and the Chesapeake Conservancy.

Welcome and introductions/Review of meeting minutes – K. Berger, MWCOG
The LUWG approved the meeting minutes from the February 1st conference call.

Schedule and Process for Review of Land Use Forecasts – P. Claggett, USGS
Peter presented the proposed schedule and process for developing and reviewing the Phase 6 land use trends scenarios.

- Stephanie Martins: Related to the use of multiple alternative future scenarios, I think we need to be aware that in a lot of localities, from now until 2025 is within fairly close range of their current comprehensive plans. The impact of alternative scenarios may take longer than to the year 2025 to play out on the ground.
- Karl Berger: Is it safe to assume that we will definitely be running the 'business as usual' scenario?
    - Peter Claggett: I'm open to considering not doing it, but I think it makes a lot of sense to include because many people will likely not understand what the other scenarios mean unless they can compare it to something that they feel is more grounded.
    - Stephanie Martins: I agree completely – 'business as usual' is what's more than likely to be carried out between now and 2025.
    - Lee Epstein: I agree as well – in any analysis I've seen doing alternative future scenarios, you use a business as usual case. But 'business as usual' to me means developing a reasonable model facsimile of what's happening now. Not necessarily what zoning or policies are now, but what is actually happening now. In addition, making assumptions about effects of policies and institutional

controls is definitely crucial, but something I think is very hard. We as experts will need to agree that what is budgeted is what will actually happen.
    - David Newburn: I've worked with Peter on some of these forecasts, and the 'business as usual' forecasts are based on population. The spatial model that Peter also works on is an allocation model – so there's a certain population trajectory. But there's uncertainty about how the population will specifically play out. That said, the model gives us a trend and since it's probabilistic it will have ranges on those results. But Stephanie makes a good point that 'business as usual' probably best represents what the Bay will look like in the short term.
- Karl Berger asked how many scenarios could be realistically produced.
    - Peter Claggett: I anticipate the maximum would be 5. The other scenarios beside 'business as usual' would likely serve as 'bookends' to set the upper and lower bounds of what's possible. So I would recommend a minimum of 3, and maximum of 5. The biggest effort is actually developing the business as usual case. If we want to make edits afterwards, that will be much simpler to do.
- Question on the spatial scale of the population and employment data. Peter Claggett replied that the model would be run at the county level.
- Peter Claggett asked if the group felt comfortable using the proposed data to inform the 'business as usual' scenario.
    - Lee Epstein noted that the time period for data representing housing, population, and employment trends was unusual, and that effects from the recession may affect the data. Peter Claggett replied that they could use 2002-2013 data for employment trends, and Lee agreed that the approach would provide more accuracy.
    - Mark Symborski recommended supplementing the protected lands database with localized data. Peter Claggett recommended contacting Renee Thompson if localities would like to provide that information (rthompson@chesapeakebay.net).
    - Discussion on how to define the 'business as usual' scenario. Lee Epstein recommended that the group look at what is happening, rather than what is wished to happen. Mark Symborski commented that some of what is happening are fairly recent trends, and identified the difficulty in parsing out historical versus future trends.
- Peter Claggett suggested simulating 2 scenarios: one that only uses trend data and essentially extrapolates it into the future, and a second scenario that incorporates comprehensive plans and zoning information that would help dictate where near-term growth would occur. Peter noted that acquiring the local data for the second scenario would be very difficult.
    - Mark Symborski recommended creating a historical trend scenario, and a current trend scenario which would essentially update the historical scenario with information on what is being done currently. The current trends scenario would be dependent on local jurisdictions providing their data in the correct format.
    - George Onyullo recommended being specific about the timeframe that is covered by the 'trend', and agreed that the workgroup needs to clearly define

what 'current' means in the context of scenarios. Peter Claggett suggested developing a historic trends scenario, and a current policy scenario.
    - Mark Symborski supported the suggestion of historic trends and current policy scenarios.
    - David Newburn: So we're trying to spatially allocate population, and the parameters that help do that depend on how recent the current policies are regarding infill. So we're trying to determine if historical infill rates are accurate for current forecasting.
- Peter Claggett: So maybe we should start with a historical trends scenario, and then review it while simultaneously working on collecting and developing criteria for using local data. That would all help inform how we craft a current policy scenario.
    - Lee Epstein recommended using population data out to 2015 instead of 2010, if possible.
- Karl Berger noted that time availability will be a limiting factor in the development of the forecasts.
    - Peter Claggett replied that he would like to present a historical trends scenario by the end of March, and would be able to present results in time for the April face-to-face meeting.

Decision: The LUWG tentatively agreed to move forward with developing a historical trends land use scenario, and will work to develop a current policy scenario during future meetings.

Action: LUWG members should review the drafted future land use scenarios identified in the USGS workshop proceedings and send their recommendations on whether to incorporate those scenarios into the Phase 6 land use forecasting to Lindsey Gordon (Gordon.lindsey@epa.gov) and Peter Claggett (pclagget@chesapeakebay.net).

- Peter Claggett presented the assumptions for the historical trends scenario.
    - Ted Tesler: I would recommend that we don't incorporate data outside of the watershed that may skew perceptions inside the watershed.
    - Peter replied that the final simulations would be simulated by county, and noted that areas inside of the watershed are likely influenced by the development of areas that fall outside of the watershed lines. Ted replied that this seemed reasonable.
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Updates and Other Business – K. Berger, MWCOG, and P. Claggett, USGS

- Peter discussed how error rates are being incorporated into the Phase 6 land use data. Once the incorporation methodology is finalized by the CBP Modeling Team, tabular datasets of the back-casted land use will be publicly released.
    - Karl Berger: So the error rates have been determined through scientific/technical means, correct?
    - Peter Claggett: In every state, there is a unique set of error rates for the land uses determined by random sampling and visual inspection. We then used the

'fuzzy accuracies', and I have reports on these accuracies, and we can distribute them to the workgroup for everyone to review.

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- Phase 6 land use data availability
    - Darold Burdick asked if the 1-meter land use would be available for download. Peter Claggett replied that the data files are too large at the moment to hose on the viewer website, and that his team is looking into alternative accessibility options.
    - Renee Thompson asked if it would be helpful to discuss how the 10-meter land use could potentially be used in lieu of the 1-meter data for local applications. Peter noted that the 10-meter contains 100% of the information contained in the 1-meter dataset, with additional streams information, and that it is equally as accurate and useful as the 1-meter dataset. Karl Berger suggested documenting some of the applications of the land use data in order to provide justification for updates in future years.
    - Greg Evans: The 10-meter data might be available, but in terms of user-friendliness, what we've been discussing with our constituents is the 1-meter data so that we can see pictorially with high detail where streams and roads are without mischaracterizations.
    - Peter Claggett: I agree, and if we could have provided the 1-meter data for people to review, we likely would have received more comments. It's our intention to provide the 1-meter data to people, but it's a lower priority than completing the forecasting at this point. I would anticipate late-spring/mid-summer to have that ready.
    - Greg Evans added that with the WIP III timelines in December, it would be very useful to have that data in hand.
- Peter Claggett is working to develop the methodology document on how the Phase 6 land use was developed, and hopes to make that available soon as part of the fatal flaw review.
- April 5th face-to-face meeting agenda planning
    - Karl Berger suggested developing a lessons learned document to summarize the issues encountered and overall process of developing the Phase 6 land use to help inform future iterations of this effort. This document would be presented and discussed at a future LUWG meeting.
    - Discussion of forecasting, including preliminary results from the historical trends scenario, and the group will begin discussing current policy trends.

Participants:

Name	Affiliation

Karl Berger	MWCOG
Peter Claggett	USGS
Lindsey Gordon	CRC
George Onyullo	DOEE
Jeff White	MDE
Shannon McKenrick	MDE
Stephanie Martins	MDP
Paul Patnode	Prince George's County MD Planning
Mark Symborski	Montgomery County MD Planning
Steve Stewart	Baltimore County MD
Robert Hirsch	Baltimore County MD
David Newburn	UMD
Travis Stoe	PA DEP
Ted Tesler	PA DEP
Darold Burdick	Fairfax County VA
Justin Shafer	City of Norfolk VA Dept. of Public Works
Greg Evans	VA Dept. of Forestry
KC Filippino	HRPDC
Megan Grose	WVDEP
Sebastian Donner	WV DEP
Lori Brown	DNREC
Jimmie Crohn	DDA
Lee Epstein	CBF
Fred Irani	USGS
Renee Thompson	USGS
Labeeb Ahmed	USGS Contractor
Jennifer Herzog	Land Trust Alliance
Bill Merrey	Straughan Environmental, Inc.
Julie Minde	GMU