

Boundary Comments

From: Spencer M. Simpson, Jr.
Information Technology Coordinator
Baltimore Metropolitan Council

Since the only document I've seen is the draft Phase 2 document, I don't know if you've defined this or not, but I'd like to know the goals of this project.

Specifically, are you creating high-accuracy county boundary datasets, ones that can be used by the counties themselves to edge-match their local datasets (i.e. cadastral)? A lot of properties are "split" along the straight-line county boundaries, and property owners along the line may have had surveyors mark where they think the boundary divides their properties.

Baltimore County/Carroll County: I think the Westminster Turnpike Bridge whose southwest corner is referenced in your research as "found" is a different bridge from the current bridge. The original bridge was demolished when the current bridge was built, and the southern end of the straight line is in the middle of a marsh a little north of the current bridge. Could the stone have been moved?

In your discussion of the southern boundary of Carroll County (page 5) you may wish to mention that it was the southern boundary of Baltimore County before Carroll County was created.

Baltimore City: The current limits of Baltimore City were set in 1917, the last time it expanded, and not in 1851, as the document asserts on page 5.

I haven't been able to find the actual document that describes the boundary, but I always think of the city as straight lines between seven corners. The NW corner is the intersection of Park Heights and Slade Avenues, the SW corner the intersection of Frederick Road and , from there the boundary runs SE to the intersection of Hanover Street, Potee Street, and Ritchie Highway, then to a point on Curtis Creek just south of the I-695 drawbridge. The eastern boundary passes through the western abutment of the railroad bridge over Dundalk Avenue, as well as the end of the pier at Fort Armistead Park.

Frederick, Carroll, Montgomery, Howard: Parr's Spring is the headwaters of the Patapsco River (southern/western branch), not the Patuxent (pg. 11). Do all four counties meet at a single point?

Frederick/Carroll: You probably want to mention that John Digges's Road is now called Buffalo Road north of Mount Airy. Inside Mount Airy, the boundary was changed to follow various streets (particularly Main Street)

Howard: Similar to Carroll, the northern boundary with Baltimore County and Carroll county

Queen Anne's/Talbot: Note that Maryland State Highway 404 runs along the boundary from US 50 all the way to Queen Anne, so it is an ideal definition of the boundary in most GIS datasets. The boundary comes up the Wye River to the dam in Wye Mills State Park (the site of Swetman's Mill) through the lake, to the intersection of 50 and 404.

Southern boundary of Maryland:

A Supreme Court decision in 1921 moved Luke, WV into Maryland after WESTVACO changed the course of the Potomac River.

The boundary from Smith Point east up into the Pocomoke River (St. Mary's and Somerset counties) was set in 1877; a line from the Pocomoke to the Atlantic was surveyed in 1688. This line was supposed to be a due east line, but it slants a bit north of east because the surveyors didn't know the difference between true north and magnetic north.

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From: David Jarvis
GIS Specialist II
Geographic Information Services Section
Information Management Division
Prince George's County Planning Department
The Maryland-National Capital Park & Planning Commission

Hello,
I've been asked to provide some comments per the recent request for feedback.

Overall, the report document is a good beginning. There is a mistake to be corrected in the section describing Prince George's County – the county is bounded on the west by the Potomac River, not the Patuxent River. The Patuxent instead forms the county's eastern boundary.

One comment on the mxd and the associated feature classes – it would be helpful to have some description/history/source of what these layers are, particularly hisdstatebdy, washdc_monuments, takomapoints, va_md_monuments, and mont_pg_points. Without knowing more about these, it is difficult to assess them or contribute any useful feedback. I can say that in a number of places along the western side that what you have is in close agreement to what I've determined on my own.

I've researched and worked on improving the existing mapping of Prince George's County's boundary off and on for the past five years. Attached to this email (change the extension to just '.zip') are some documents and a partial line boundary shape file that should help with background information and source material for further work. My sources for creating the line boundary shape:

The Maryland - Virginia boundary: USGS maps and acts of the US Congress, US Supreme Court decisions, and agreements reached by multi-state commissions trying to settle the border dispute. Reliance on the USGS maps is not perfect, but they're all I've found so far for a low-water line.

The District of Columbia boundary: the act of Congress authorizing the survey for the creation of the District, coordinates for the east corner from the US Geodetic Survey, location of the southern corner boundary marker as seen on the 2000 aerials and US Dept of the Interior architectural maps and survey of the Jones Point light house, and coordinates for the old DC-MO-PG tripoint from the Codes of Prince George's and Montgomery Counties.

The Takoma Park - Prince George's Co. border: the Charter of the Town of Takoma Park. This source does not lay out metes and bounds or coordinates so I am also relying on record plats of both counties, state highway plats, and our aerials to locate the boundary between Takoma Park and Prince George's County.

The rest of the Montgomery-Prince George's Co border: the coordinates for all the boundary lines between Montgomery and Prince George's Counties as laid out in both counties' legal code.

Further, I have determined that my changes to the boundary between the District and Montgomery County with Prince George's County agree closely with the boundary line marked on record plats of subdivision of both counties as located either by coordinates or aerial interpretation.

Today I found that NOAA offers geo-referenced images of their nautical charts, including one that covers a part of the Patuxent River. I've included a link to this chart (which could help establish the location of most of the Prince George's – Calvert County boundary).

If you'd be so kind as to pass these on to the folks working on this project, I'd appreciate it. I am available for any questions or discussion they might like to have.

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**From: Louis Wright
MD DNR Hydrographic Operations**

What is your time frame for comments? Some of the documentation and information that we have in Hydro for many of these lines varies considerably from the draft of the water and county boundaries. It may take us a while to assemble it to match the format of their document.

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**From: Cynthia Baxter
Professional Land Surveyor 10786**

We have been working for Lehigh Cement in Union Bridge. A few years ago, in conjunction with some plats that we were preparing, it was necessary to determine a portion of the county line because Sams Creek, which was the original boundary, had been relocated several times during quarry expansions over the last 50 years. We have an exhibit plat with report that we are willing to share with you. Where can I mail it?

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**From: Virginia Peterman
Howard County Maryland**

Message to Jeff Hobbs County Surveyor

Jeff,

Can you weigh in on this? SHA is apparently pinning down "official" State/County boundaries from a GIS standpoint. The attached file contains their descriptions of the boundaries. I have some questions on the Howard County description.

1. Since so much of the County boundary is river bank/channel. Does the boundary change every time the river changes course?
2. Does the 1976 ruling change the Howard County line to the middle of the Patapsco where the river is navigable below the Elkridge Viaduct?

3. The eastern boundary follows the west shore of Deep Run until it “reaches the B&O railroad”. Is the railroad wholly within Howard County? If the line is the middle of the railroad, what route does it follow? The number of tracks along the stretch in question varies from 2 to 16.
4. The southern boundary is “along the Patuxent River”. Is that the center of the river? If so, is it the center of the reservoirs or the historic channel before the reservoirs were built?

**From: Jeff Hobbs, Chief
Survey Division
Dept. of Public Works
Howard County, MD**

Jeff's reply to Virginia,

I will answer your questions based on my understanding of survey rules of evidence and language.

1. If the calls in the legal document are to the river bank, shore line or channel. Then the calls will rule, so if the call moves the boundary will move with it.
2. I don't think our portion of the Patapsco River comes under navigable waters. Black's Law Dictionary basically states that navigable waters are those used for commerce and trade or are those in which the tide ebbs and flows. So the 1726 law is in effect. “The control of the Patapsco River is with Baltimore and Carroll Counties since the south side of the river is specified as the boundary”
3. This question is interesting. The act of 1938 chapter 22 states “beginning for the same at the intersection of the west shore of Deep Run with the southern shore of the Patapsco River at or near Ellicott's Furnace, and thence southerly with said Deep Run, until it **reaches the Baltimore and Washington Railroad; and thence with the said railroad and including the same** until it reaches the south western line of Anne Arundel County on the big Patuxent River and thence with said river”. In surveying when you call to something physical such as “**reaches the Baltimore and Washington Railroad**” you are saying the actual feature; the physical railroad. Then when you say “to the road”, “to the railroad”, “with”, “running with” or “**with the said railroad**” it is understood that the line will be in the center of the actual feature. Such as the center of the road, stream or railroad. Since you are not stating to what part of the road, stream or railroad, such as west margin of road or east rail of railroad. The added part of the phrase “**and including the same**” could be interpreted as to encompass only the physical rails and the ties, or the entire right-of-way of the B&O/CSX. An argument could be made for both interpretations. However the B&O valuation map V181.3 is calling the “County Line” their southern Right-of-Way line. This map was made in 1915 and records transactions starting in 1833 which predate the Act of 1838. Since the B&O owned the property before the Act of 1838 are the B&O parcels senior to Howard County? If so, the County boundary would be the southern line of the B&O property. If not the county line would be the center of the railroad tracks. If the line is the southern line of the B&O right-of-way it will increase or diminish as the railroad adds or sells of parcels. If it is the centerline of the tracks it will change as the railroad moves tracks and adds tracks within their property. I think we need a higher authority to come in on this one.
4. The act of 1838 states “beginning for the same at the intersection of the west shore of Deep Run with the southern shore of the Patapsco River at or near Ellicott's Furnace, and thence southerly with said Deep Run, until it reaches the Baltimore and Washington Railroad; and thence with the said railroad and including the same until it reaches the south western line of Anne Arundel County on the **big Patuxent River and thence with said river,**”. As I said above when the statement is “with” a feature it is taken to be with the centerline of that feature. The channel and the centerline can be two different objects.

I don't know if what I said helps any or just raises more questions. I am interested in getting a legal opinion on question 3. My reflections are on real property in a surveyor's way of looking at it. I don't know if political boundaries come under the same rules of thumb or definitions as real property. I think as far as question 3 is concerned it should be looked at by someone that is involved with property law. I would recommend James J. Demma at jdermma@milesstockbridge.com 301-762-1600

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From: Megan DelGaudio
GIS Specialist II
Queen Anne's County
Landuse, Growth Management and the Environment

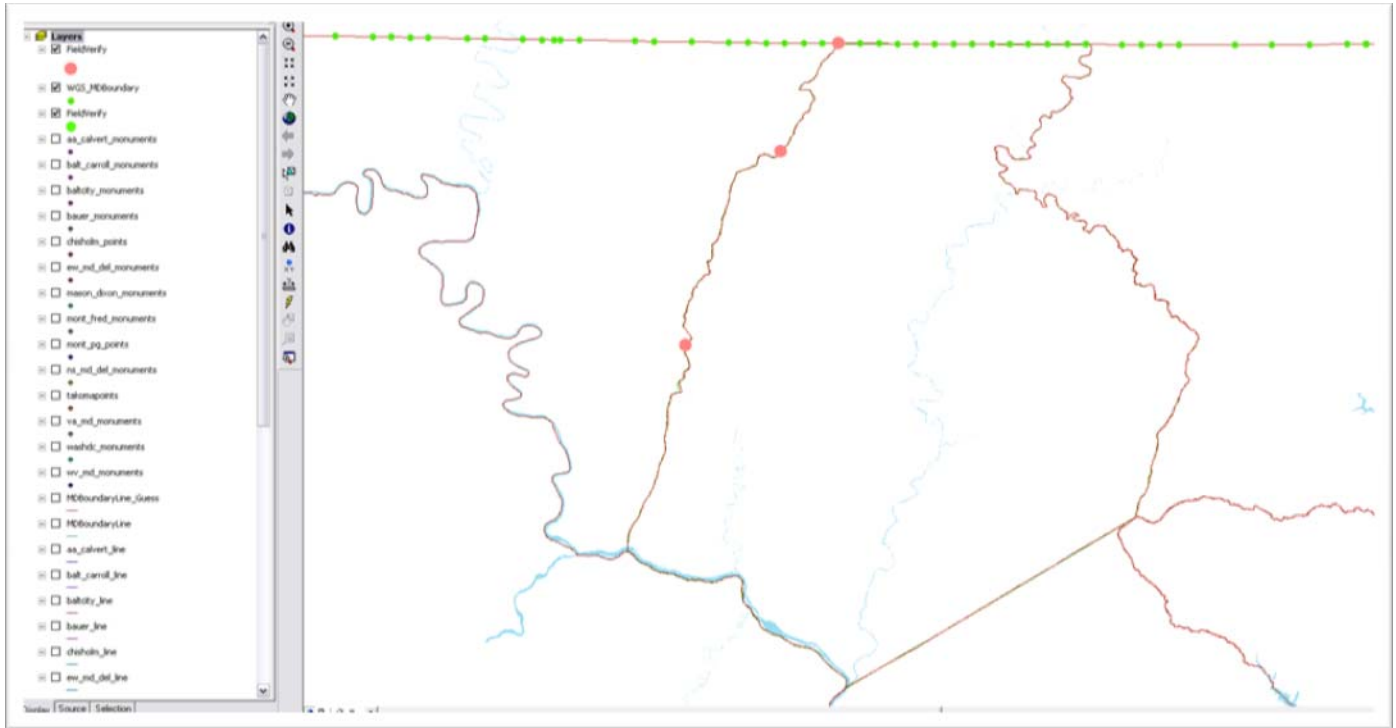
I just had an opportunity to review the documents and lines drawn regarding the boundaries between the Counties and States provided by MSGIC. I commend the efforts of all involved.

I reviewed the Queen Anne's County boundary and found it to be a good generalized boundary. There were several areas where the line should have followed the center of the channel, but does not – at least not according to today's aerial imagery. I am wondering what the next steps might be to refine this line.

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From: Marshall Stevenson
Frederick County GIS

After some internal discussion we determined that the boundary seems fairly accurate and is not significantly different than our current Frederick County boundary file. The differences can be viewed in the attached MXD, which shows the points of the mason Dixon line in green, our field collected boundary points in salmon, our county boundary in green and their boundary in red. The state boundary correctly shows the northern boundary as the surveyed mason Dixon line and while there are variances, it does show the southern boundary of the river correctly to their river polygon. The west and east boundaries are so fuzzy we can't be 100% accurate, but it looks decent.



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Mark Cohoon, GISP
GIS Manager
Talbot County Public Works
28712 Glebe Rd, Suite 3
Easton, MD 21601

This email is sent in response to an email that was sent out on behalf of Chris Slavin regarding the county boundary files on July 26th(see below). I've attached a couple of examples of inconsistent mapping that I came across after a quick review of the statepoly feature class. The red line is representative of the shoreline mapping done in 2006 for Talbot County and the white shaded area represents the statepoly layer. I'm not sure who I'm sending this email to and not real sure how this work was done, or what production scale is, however you should be aware that better mapping exists for the shoreline of Talbot County and if you are interested we can help to better represent the shoreline of Talbot County in this effort.

Just a thought: since technically the boundary between the state and private property is the mean high water maybe it would be best to use the waterline that the critical area commission is mapping for counties as part of the effort to remap critical areas. It will take a little while but eventually you'll have a much better boundary file than the one I was looking at and it would be consistent when overlaid with critical areas. The waterline for Baltimore County and Talbot County should be complete. Caroline and Queen Anne's County are in production now and many more to come in the near future. As I said, just food for thought.



North of Neavitt



South of Oxford



North of St Michaels

From: Jim Cannistra, Maryland Department of Planning
Date: Tuesday, September 28, 2010
Re: **New State Boundary Layer Review**

Background

Several MDP staff have reviewed the state/county boundary file posted for download via the MSGIC website. MDP is a major user of this boundary information for planning analysis and property mapping services. We typically include this dataset as one of the foundation datasets in our MdPropertyView products.

General comments are provided below. We have also provided screen shots illustrating the issues. Each screen capture is georeferenced if you want to look at the issue in ArcGIS. We have tried to name each file with a description of the issue. These are representative examples only.

Thank you for the opportunity to review. We understand and appreciate the amount of work that has gone into this file. We are available to meet to discuss any of these issues in more detail

MetaData

- Needs to be provided. Source, process, imagery used, purpose of the data, accuracy, display scales, etc.

Correspondence with imagery at shoreline

- Although an effort has clearly been made to refine boundaries to the 2006/2008 orthoimagery, there are many instances where the boundary file does not correspond very well with the imagery. This is particularly true for coastal areas when boundary is displayed at scales larger than 1:24,000. In many instances the boundary "clips" land area. This will impact spatial analysis functions involving overlays, buffers, clipping, etc.

River / Stream channels

- There are many instances where the boundary changes from a double line to a single line where there is no apparent change in width or change that is noted in the documentation. In general the legal descriptions refer to boundaries extending to the centerline of a stream channel.

Islands

- Islands in major waterways (e.g. Potomac River) are inconsistent. Along the Potomac River it is unclear what the boundary is to represent and why both edges of the shoreline are not included and why some islands are included and others are not.

Tributaries

- For some Counties the tributary is shown and excluded as part of the County boundary polygon. For other tributaries the boundary traverses the tributary inlet. Overall there seems to be too many tributaries that are represented and it is unclear as to what rules were followed when the boundary cut through the outlet and when the boundary “snaked” up the outlet.

Correspondence with Parcel data

- Although it was probably not the intention for registration with parcel data, several examples have been provided to illustrate the correspondence especially at shorelines.