BUSINESS NEEDS PER POLY

- NEED 1.1 Feature attributes & standards to be maintained to fulfill Stakeholder needs

  - Identify the needs being presented in order to develop a stormwater model that satisfies those needs of the audience - Polygons anybody?

- NEED 2.3 Cartographic representation

  - How will this look on the map? - will a lake look like a lake? Poly for visual?

- NEED 2.7 Ability to apply to consumer applications such as 311, 'See-Click-Fix', etc.

  - How will polygons be utilized in such applications – will it be a general public audience? Poly for visual?

- NEED 2.8 Ability to incorporate in data in public education initiatives

  - Will polygons be desired for educational programs – more general public consumption? Poly for visual?

- NEED 5.1 Identifying inundation and flood prone areas

  - Representation of flood prone areas to better manage and prepare for water events - Polygons for area analysis?

- NEED 5.4 Watersheds and sub-watershed boundaries

  - DNR has a suit of boundaries, but at a catchment/waterbody scale they are automated and not well QAQCed. Polygons for visual and area analysis?

BACK TO 2010

- Polygons not present in the 2010 model

- Report recommends that for the purpose of directionality, polygons be excluded

  - *"polygons, lines that close on themselves (to represent structures such as manholes or flared end sections), and annotation features are not allowed in standardized data" (8.4)*

- Poly to Point for data transfers

  - *The 2010 report includes instruction on data exchange, with all Polygon features being converted to Points*

- Is that still the case?

  - *So given the methodology of the 2010 model –* *Do we incorporate any Polygon features?*

WHAT'S GOING ON IN WASHINGTON?

STATE D.O.T. THAT IS…

- Yes, Washington DOT does have Polygon features

- Features given as Polys include

  - **Dispersion Area** – areas designated by having met the State requirements for a natural or engineered dispersion

  - **Drainage Area** – land surface area contributing to runoff at specified point within the system

  - **Monitoring Site** – area being monitored as defined by the State's Environmental Services office

  - **Roadside Slope** – areas typically involved in a BMP. Also represented as Lines.

  - **Stormwater Pond** – ponds involved in the treatment and flow control with extent at max level. Also represented as Points.

  - **Stormwater System** – network of stormwater elements that direct the flow to a primary discharge point

- Referencing rules on Routing with Polygons

  - Washington DOT outlines the rules surrounding the creation of artificial points and lines for routing

ONE APPROACH WE DISCUSSED

- Include stormwater/water management related datasets that **do not have a authoritative regional source.**

- Include stormwater/water management related datasets where **dimensional area is critically important for interpretation. (pond, rain garden, underground infiltration YES; manhole, swirl separator NO.)**

- Datasets like watershed organization boundaries, cities, and impaired water information can be pulled in from the geospatial commons as reference when needed, or related through key fields.

POTENTIAL POLYS

- Stormwater system areas

- Inundation / flooding areas

- Drainage areas (subwatershed scale)

MSGP GROUP FEEDBACK, PLEASE

So with some of the ambiguity surrounding the use of polys, our team asks:

- How does the larger group feel about including any polys in the model?

- If so, which ones should we focus on?

- What is an appropriate scale for features we do include (if any)?
  Large pond vs "stormwater puddle"

For features that will remain represented only as points, we should have a discussion on the dimensional attributes to include in lieu of polygon representation.

POLYGON TEAM QUESTIONS

- Should any jurisdictions be addressed simply through the field of another feature? I.e. what if the feature point 'stormwater structure' had a field city (w/domain), and a field county (w/domain)?

- If we incorporate basins, what do you think about the point model? What do we want to modify?

- How would 'contributing drainage area' fit into all this - if at all? Poly? Field to another feature?

- What should our final features be?

GROUP QUESTIONS

- What would be an ideal delineation of what is to be represented via polygon feature vs point when it comes to surface water bodies? Lakes, ponds, and wetlands - yes? What about detention ponds? Size relevant?

- Are BMPs too varied, extensive, and complex to try and compile into a single feature class? - Would the components of that BMP exist in multiple features of different types?

- Identify 'authoritative data sources' per feature item? Will an index of sorts referencing the 'authoritative data sources' per item be created and utilized? I.e. A surface water boundary (poly) as provided by a specific organization (data owner)

- Standardize datums and projections? Metadata? Feature class attribute(s)?

- What is the ID format going to look like?

- What does "inundation/flooding areas" even refer to? Not a rehash of FEMA floodplain. Is there any definitive framework we could put around this that would lead to consistency from community to community?