

## Initial Food for Thought on Segment Selection

### Guiding/Clarifying Questions

1. What do we specifically need identified for our August CAP meeting? Are we choosing segments for our respective jurisdictions or are we selecting the decision factors that will be used to select those segments?
2. If selecting specific segments to use in the creation of the model - How can we prioritize which segments?
  - a. Should we choose a set of segments that are sufficiently different so as to make sure the model is calibrated to the breadth of segments that we have?
    - i. What factors make these segments different?
      1. # of designated uses
      2. Mainstem or tributary segments
      3. Eastern shore vs. Western Shore
      4. Salinity regime
      5. Size
  - b. Should we choose segments that are similar so as to feel confident in the model's ability to choose good sites to place monitoring stations?
  - c. Select segments where we already have a large amount of data so as to ground truth the model and determine how good our BPJ-selected locations were?
    - i. Fishing Bay
    - ii. Patapsco River
    - iii. James River
3. Is it correct to assume that we are not, at this time, being asked to choose where in each monitoring segment we should place the equipment, correct? B/c that will be determined by the model results and later discussions, correct?
4. Or is our task to prioritize Bay segments for monitoring after the model has been developed and is being used to direct monitoring equipment and efforts?
  - a. What equipment do we have to be placed?
  - b. A few examples of decision factors are described on the next page.

## Possible Priority Factors

- What available monitoring resources are already there in that segment?
  - Maybe prioritize areas with less data?
- Limitations of the specific monitoring gear available for sampling?
  - What equipment do you have? What segments are those feasible to place in?
- Modeler needs
  - Do the modelers say they need more data in a specific area?
  - Vision 2.0 for TMDL development
  - Projects they may have to provide feedback for permits (Guido mentioned Baltimore Harbor).
- % Exceedance of the 30-day mean DO criterion
  - Could go with those that are closest to meeting
  - Could also go with those that are not closest to meeting criteria and we want to know why
- Number of other designated uses in the segment
  - Do we want to prioritize those with more or less?
  - Seasonal Migratory Fish Spawning and Nursery hasn't been able to be assessed
- Public health
  - Number / concentration of Shellfish harvesting areas (and oyster leases?)CM
  - Proximity to recreational areas / common fishing areas
  - Proximity to disadvantaged communities
- Aquatic life health
  - Distribution of Spawning grounds for migratory fish spp.
  - Concentration / distribution of sensitive spp.? Do we have data on this?
  - SAV coverage / goals for SAV. Areas where SAV restoration efforts are actively being pursued?
- Ease of access / sampling
  - Select sites that are accessible to get to, less likely to be vandalized – or can talk with local community groups to ask them to keep an eye on / educate people about monitoring stations?
  - Ex)Shipping channels, might be harder to monitor
- Land use cover factors for areas draining to that specific segment?
  - Maybe if completed assessment, but there have been a lot of land use changes in the local watershed for that segment, we may need to resample
  - Or if there are certain land use factors we want to test for efficacy in meeting criteria goals?
  - WWTPs / dischargers in watershed?
- Meeting loading allocations or not ?
- Nutrient trends
  - Are they improving or not, despite the % exceedances shown.