

Question Received from CAG

- How did EPA determine that 6” is the appropriate bioavailable zone?
- The CAG noted that they see organisms burrowing deeper than 6” regularly

Surface Sediment Definition

The biologically active zone (BAZ) for Newtown Creek was determined using the default depth derived by EPA's *Determination of the Biologically Relevant Sampling Depth for Terrestrial and Aquatic Ecological Risk Assessments* (EPA/600/R-15/176, October 2015). Scientific literature from 1985 through 2014, and some key older literature was searched for information on the depth distribution of benthic invertebrates in different habitats (e.g., marine, freshwater, rivers, lakes, varying sediment grain size). Based on the 80th percentile of depth distributions, EPA developed practical default values for the BAZ in various habitats. While a site-specific BAZ can be determined for a particular water body, contaminated sites may have little to no benthic fauna and/or may have only pollution-tolerant organisms, either of which conditions could introduce unacceptable uncertainty into site-specific derivation of the BAZ. Therefore, the default BAZ of 15 centimeters (6 inches) from EPA's 2015 guidance was used.

Please see the EPA guidance document for additional information:

<https://cfpub.epa.gov/ncea/erasc/recordisplay.cfm?deid=310058>

Additional Information needed from CAG

- (a) detailed data, consisting of species observed, depth measurements, and locations, along with a brief summary of the methods used to measure the depth of observed species so that EPA can evaluate the information and provide a more thorough response, and
- (b) questions/concerns on how the BAZ depth would impact any selected remedy

Next Steps

EPA can provide additional information at a future CAG meeting, once additional material is provided.