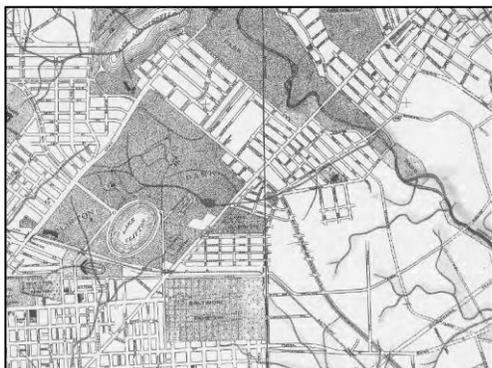


[USGS Maryland-Delaware-District of Columbia Water Science Center](#)  
[Seminar Series](#)

**Tuesday, April 18, 2017 11:00 a.m.**

**Ghost streams of Baltimore and their value to science, the social fabric and history** presented by Ken Belt, PhD, P.E. USDA Forest Service



Unknown to all but a few, a living aquatic system lives beneath the streets of Baltimore. They are part of a buried network of streams that once provided water, food and habitat to plants, critters and people. Today, most of these streams from pre-European colonization are known only from old maps and meticulously drawn DPW storm drain construction



contracts that were over the last few centuries witness to the paving-over and burial of those aquatic ecosystems. Such has been the fate of headwater streams and rivers in many cities. However, there is a building realization of the importance of their many ecosystem and eco-sociological functions (i.e., ecosystem services) especially in current urban water management efforts, where concrete is giving way to green infrastructure and urban landscapes feature “daylighting” of buried streams to create blue-green focal points for public use, education and enjoyment, as well as ecosystem habitat, functions and other services. We discuss what we know about these subterranean networks, their role in the urban watershed continuum (UWC), their potential value to groundwater and urban stream ecology research as well as a historical and educational resource for residents. We wish to initiate a dialogue to propose a collaborative to encourage new science coupled with contributions to a blue-green urban landscape.



*Ken is a hydrologist, engineer and aquatic ecologist, and has been with the USDA Forest Service Baltimore Field Station & Baltimore Ecosystem Study for almost 19 years, and was with the Baltimore City DPW for 19 years before that. He has bachelor degrees in biology and civil engineering, master degrees in aquatic ecology and environmental engineering, and a PhD in ecology. His interests include the biogeochemistry and ecohydrology of the urban stream networks, groundwater ecology and the urban watershed continuum.*

This presentation will also be available remotely via Webex:

<https://usgs.webex.com/usgs/j.php?MTID=m0565498c3380576bf733e1a698e9231e>

Phone: 703-648-4848 Code 39026# or 39026000#

For directions to the USGS MD-DE-DC WSC: <http://md.water.usgs.gov/directions/baltimore.html>.