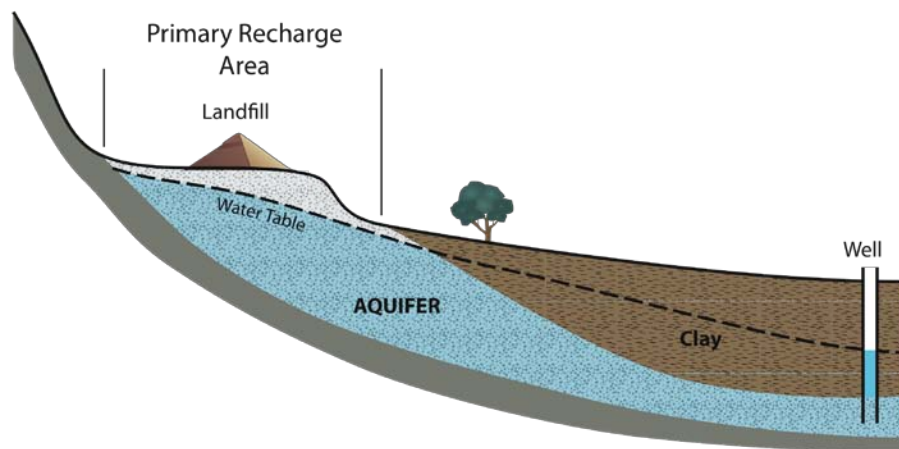


Why Aquifers and Landfills Don't Mix

A Position Paper by the Barnes Aquifer Protection Advisory Committee

The Barnes Aquifer supplies water to four municipalities within the Connecticut Valley of western Massachusetts including the cities of Westfield and Holyoke as well as the towns of Easthampton and Southampton. Currently 11 municipal wells supply 5 million gallons of water per day to 60,000 people in these communities and the aquifer serves as the sole source of drinking water for the City of Easthampton. Water in the aquifer is held within sand and gravel deposits which were laid down approximately 14,000 years ago by a retreating continental glacier. Meltwater streams flowing off the ice deposited sands and gravels into glacial Lake Hitchcock, where in part, they were then overlain by lake clays (varves). Recharge to the aquifer is restricted to areas where these sand and gravel deposits outcrop on the land surface (Figure below).



Over the past 20 years, The Barnes Aquifer Protection Advisory Committee (BAPAC) a coalition of four communities: Westfield, Holyoke, Easthampton and Southampton together with the Pioneer Valley Planning Commission (PVPC), has worked to protect the Barnes Aquifer as it represents a critically important regional water resource.

The City of Northampton currently operates a regional landfill and is planning to expand the operation to increase the lifetime of the facility and allow for the disposal of more municipal waste. The expansion would be designed with environmental protections including a double liner and a leachate collection system. However, the landfill is located in a primary recharge area within the western part of the Barnes Aquifer, an area that contributes recharge water to Easthampton's Maloney Well.

While recognizing the advances in technology and landfill engineering being proposed are more safe and environmentally sound than those used on the original landfill, BAPAC notes that across the country, landfill liners have failed, polluting streams and groundwater. While the landfill may have an extended lifetime of 30 years, the aquifer represents a critical water source for all future generations that must be protected.

The Massachusetts Department of Environmental Protection has excluded landfills from within the recharge areas of drinking water sources, with the Northampton Landfill expansion being the only exception. The BAPAC believes the long-term risk to the Barnes Aquifer far outweighs the short-term benefits of expanding this regional landfill.

