

Site 2: Little Ridge Ave. Dam

Site Information

The Little Ridge Avenue Dam is located approximately 0.2 miles above the confluence of Wissahickon Creek with the Schuylkill River, and on the creek's mainstem.



Problems, Opportunities & Constraints

Little Ridge Avenue Dam is a barrier restricting the movement of resident fish and other aquatic organisms between the Schuylkill River and Wissahickon Creek. In addition, existing bridge structures and past channel modifications have degraded stream habitat and bank vegetation, and this location lacks a riparian buffer. There is an opportunity to improve resident fish passage and the riparian buffer within the constraints of Ridge Avenue and Lincoln Drive. However, the relatively large size of the dams, with the downstream Big Ridge Avenue Dam approximately 20 feet high, existing large sewer interceptors passing through both dams, and other nearby infrastructure, including Ridge Avenue, Lincoln Drive and a SEPTA railroad bridge, all act as constraints.

Major Problems	Opportunities	Constraints
Siltation Habitat alteration Impediment to resident fish passage	Improve resident fish passage Improve riparian buffer	Sewer infrastructure passes through the dam Dam is a relatively large structure Site is confined laterally by roadways

Alternatives

Alternative	Overview
1: No action	The dam would remain an impassable barrier to fish movement and continue to trap sediment and poor habitat conditions would persist. The structure will likely exceed its design life within 50 years and require renovation or replacement.
2: Dam removal	Alternative #2 consists of the removal of the existing dam and accumulated sediment upstream, thereby improving fish passage and promoting the most significant improvements to aquatic habitat.
3: Partial dam removal & addition of rock ramp	Alternative #3 would lower the crest of the existing dam, and install a rough-channel, pool pass fish ramp to allow fish passage, locally improve aquatic habitat, and maintain some sensitivity to historic/cultural resources.
4: Bypass channel construction	Alternative #4 would construct a secondary channel through the east bank to allow fish passage and allow sensitivity to historic/cultural resources. This alternative would not appreciably affect backwater conditions and therefore would not improve upstream aquatic habitat.

