Project Uniqueness
Armoring of the existing spillway embankments with ACB mats effectively transforms the entire dam embankment into an emergency spillway. Creative engineering design adapted the mats to accommodate the irregularly shaped 253 ft. long by 14 ft. tall earthen embankment.

Value to Engineering Profession
The embankment armoring project at Corcoran’s Pond Dam can be used as a case study for other similar projects. This project proved that ACB mats can be tailored to fit even the most uniquely shaped project areas.

Social/Economic Impact
By implementing the ACB mats as scour protection, there was no need to make modifications to the dam that was constructed in 1985. This allows for the area to maintain its New England charm. Installation of ACB mats was the most cost-effective solution to the problem.

Project Complexity
The hydraulic modeling required by this project was complex due to the close proximity of buildings and structures to the dam spillway. This also created many logistical challenges during construction.

The “ACBs” of Flood Mitigation at Corcoran’s Pond Dam

Corcoran’s Pond is a popular tourist destination in Waterville Valley as well as a revenue-generating venue for weddings and community events. The earthen dam is classified as “high hazard” by NHDES because of the risk of flooding during storm events. Wright-Pierce presented four options to stabilize the dam and protect and sustain the Town Square. Armoring the spillway embankments was the selected option.