

# Emergency Response to Historic Pit Mine Washout Leads to Improved Resiliency, Functionality, and Aesthetics<sup>1</sup>

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**Abstract:** On April 24, 2018, water from the historic Hector mine breached an earthen berm, lowering pit water levels four meters, washing sediment into the Embarrass River Diversion Channel, and taking out utilities and 60 meters of the Mesabi Trail bicycle path. The Minnesota Department of Iron Range Resources and Rehabilitation acted quickly to remove sediment from the channel and temporarily stabilize the wash-out ravine. Designs for trail and utility restoration were provided in August, and construction was 95% complete by November 2018, incorporating multiple features to enhance utility accessibility, site resiliency, and aesthetics.<sup>3</sup>

**Additional Key Words:** mine water management, restoration.

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  3. Work here was conducted near 47° 32' 28" North and 92° 18' 40" West.