

Rocky Ramp Case Study – Managing Socio-Political Expectations and Adverse Field Conditions

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The Town of Perth Rocky Ramps project involved the replacement of two damaged dam structures which occupied each branch of the Tay River through the picturesque town with a population of just over six thousand residents.

Rocky ramps were chosen as a cost effective approach to replacing the dams and provided an opportunity to address flooding in a park downstream that is popular with wedding parties, while maintaining upstream water levels, accessibility to land owners, and fish passage for a variety of native species. The presentation will briefly discuss the design constraints of the rocky ramps but will focus on the experiences and challenges of a young project manager in the presentation/communication with municipal employees, review agencies, and town residents throughout the project, and adverse field conditions encountered during the construction. The summary of the events will include a look into the socio-political expectations of a town focused on preserving its historical and aesthetic integrity, the challenges of addressing the needs and perspectives of individual property owners, the management of timely responses to equipment failure, lessons learned when dealing with record breaking flood events during construction, and the general challenges of working with a small town with limited staff during hunting season.

The story of the Perth Rocky Ramps will highlight the importance of various communication styles between consultants, municipalities, agencies, members of the public, and small-town politicians and employees. The presentation will also provide insight into what can go wrong during construction and lessons learned from various actions taken to accommodate changing field conditions and new hazards. The presentation will also ask what are appropriate flood considerations in construction planning when considering large river systems and whether relying on low-flow conditions is still an appropriate approach in a more unpredictable and evolving climate.

Biography

Matthew McCombs is a Water Resources Engineer who has focused mainly on projects associated with fluvial geomorphology over the past 4 years at Matrix Solutions.