

Exploring the Use of Unmanned Aerial Systems (UAS), in River Research and Monitoring

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Unmanned aerial systems have provided a new perspective on the timely collection of aerial data for projects which require monitoring. When using a UAV to monitor existing site conditions along a river corridor, or associated with instream construction, these platforms, when used with supporting software and a high end GPS system, provide a unique snapshot of existing features. The case studies presented will show the cost savings associated with using a UAS, while demonstrating the ability to efficiently track changes in an aquatic environment using a commercial grade UAS. The studies will focus on the development of a small dam in Northern Ontario. The UAS was used to track the changes to the new dam structure including in-stream physical habitat features associated with restoration techniques. It will demonstrate how UAV's can be incorporated into our normal work flow while providing efficiencies and unprecedented imagery of our rivers and streams.

Biography

Scott Finucan has been a Regional Aquatic Ecosystems Science Specialist with the Ontario Ministry of Natural Resources & Forestry in South Porcupine, Ontario since April 1999. Much of his work has been focused on habitat restoration for various fish species. The last few years have focused on the use of Unmanned Aerial Systems, and their potential use in resource management. Scott holds Masters of Science degree from Trent University. He holds a Small UAV Professional Pilot certification from CQFA in Montreal, and has been working with Aviation Forest Fire and Emergency Services to help develop an Unmanned Aerial System program for MNRF.