

Aerial reconnaissance and survey methods for former mine site investigations on Crown Lands in Nova Scotia using low-cost and freely available Remotely Piloted Aircraft Systems (RPAS) hardware and software

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The Province of Nova Scotia is currently undergoing a review of potential contamination at former mine sites on provincially owned Crown lands. Nova Scotia Lands Inc. has been tasked to conduct a review of 69 sites and here we report on the preliminary field methods used to assess the current state of former mine sites to assist in estimating public financial liabilities, if any.

In this presentation, following desktop site assessments, NS Lands outlines the use Remotely Piloted Aircraft Systems (RPAS) in conjunction with ground truthing traverses to analyze for evidence of contamination and physical features that may pose a risk to human and ecological health. We explain the field work planning process and how the use of low-cost and freely available software for mission planning and creating high-resolution aerial orthomosaic photographs has been effective and invaluable when working in remote locations with limited access.