

Case Study:

Scheffer Andrew Uses Drone Data to Report on Environmental and Safety Concerns

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Scheffer Andrew Ltd. Planner and Engineers is a leading supplier of professional engineering and municipal planning services in western Canada. Scheffer Andrew performs UAV surveys and inspections with Propeller, in addition to a range of services, including transportation planning, site development, municipal planning, land development and construction services to the private sector and all levels of government.

Propeller is a global leader in drone mapping and analytics solutions that give worksites the power to measure and manage themselves. With visual tools everyone can use, Propeller is helping teams on thousands of worksites track, inspect and report on job progress and productivity safely and accurately.

Ray Penner of Scheffer Andrew Ltd. was contacted by the Tire Stewardship of Saskatchewan Inc. (TSS), a non-profit corporation that serves as the scrap tire recycling program operator in the province of Saskatchewan. Their mandate is to manage the existing scrap tires and provide management of the recycling programs to reduce and eliminate the growing scrap tire problem.



When the TSS was established, they inherited legacy piles of tires. One tire yard in southern Saskatchewan was of particular concern. After the recycling center had closed its doors, the problem of what to do with the remaining scrap tire stockpiles became an issue with obvious environmental and safety concerns that needed to be addressed. To complete this, accurate inventory information was needed to communicate to the new vendors the scope and quantity of the proposed recycling tender. The legacy reports and survey performed by a third party, and competitor of Propeller, quantified the tire piles at 45 million pounds.

Once the TSS was created and after several months of changing site conditions, the team at TSS realized that they could benefit from another survey. They contacted Penner to survey the site with his drone. Having an accurate volumetric count of materials on a site like this is important because the need to estimate the cost to properly dispose of and recycle the tire debris.

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Penner flew the tire stockpile site with his DJI Phantom 3 Advanced. Propeller AeroPoints helped maintain tight survey control and the Propeller Platform was used to process the data, visualizing the site to help Penner and TSS gain an understanding of the conditions of the site. “We flew very low and had optimal clarity in the imagery, so much so that we could read the words on the tires,” said Penner, “We volumized the entire site and all of the numbers worked out really tight. I felt confident in our results and in making a guarantee to our client that the volumes of the piles are correct.” After all this, Penner’s team reported back a volume of 15 million pounds of tires.

The large difference between volumes were attributed to old report information and incomplete survey data. Propeller helped visualize and quantify the current environment and with the Aeropoints, bring centimeter (sub inch) level survey control to the scrap yard.



“When we used our drone and Propeller, we got a way more accurate measurement of the site and it helped the TSS place their tire management issues into perspective!” said Penner, “They now have accurate volumes and Propeller made it easy to report the numbers back to the client with confidence. Not only were we able to clearly articulate the environmental impact, we saved them millions of dollars in offload costs.”

TSS confidence in Ray Penner’s drone-mapping survey and analytics workflow ultimately helped Scheffer Andrew Ltd. secure another job with them in just a couple of days.

Learn how your worksite could benefit from drone data analytics:

[Watch a demo](#)