

Project history

The project has been running for over 10 years and has involved numerous academics, postgraduates, undergraduates and support staff, all of whom we thank for their contribution to the ongoing success of this unique venture. The support of many people in and around Outlook is also much appreciated as is the work of our local 'fixer' Chris Simpson.



The project had its origins in 1999 with a NERC small grant awarded to Greg Sambrook Smith, Jim Best and Phil Ashworth to undertake a pilot project to use ground penetrating radar to quantify the alluvial architecture of the South Saskatchewan River. The classic sandy braided river made famous by Cant and Walker's (1978) influential paper. John Woodward (now based at Northumbria University), a radar expert, was appointed as a PDRA on the project and the main field season took place in 2000.

We continued to fund specially commissioned aerial photographs of the study reach after the pilot project finished as our aim was to build a long-term record of channel change that we continue to fund to this day. The project was given further impetus in 2004 when we were awarded a major NERC grant to build on the pilot project. Stuart Lane was a new addition to the team for this project and co-ordinated the 'process' side of the work with his expertise in digital elevation modelling, assisted by Rob Thomas who completed his PhD at Leeds on the project. We also benefitted from the involvement of one of the 'big names' in sedimentology as John Bridge joined us over several field seasons. Ian Lunt (now at Hydro in Bergen), who had just completed his PhD with John, was appointed as the PDRA on the project. Field seasons took place in 2004, 2005 and 2006 as part of the NERC funding. Arjan Reesink, one of John's PhD students also did some work with us as part of his thesis in 2005.



In 2005 the river experienced a large flood and we were awarded an additional NERC Urgency grant to investigate this aspect of river behaviour. This theme of 'magnitude-frequency' was taken up with the appointment of Natalie Parker, a PhD student at Birmingham, in 2006. She collated much of the earlier work and an additional field season took place in 2007. Natalie finished her PhD in 2010.

We continue to fund aerial photographs every year and analyse the large dataset that has amassed over the years. Most recently Tomasz Zuk, an MPhil student at Birmingham, has completed his thesis analysing 3D radar datasets collected from the river.