ParklandGEO has been involved in many different aspects of watercourse crossings across Alberta, British Columbia and Saskatchewan, including:

- Geotechnical Assessments for temporary and permanent culvert and bridge structures;
- Geotechnical Assessments related to pipeline crossings including recommendations for horizontal direction drilling (HDD), open-cut and punch/bore installations;
- Slope assessments for new and existing watercourse crossing structures;
- Turbidity Monitoring during construction in or near waterbodies;
- Preparation of traffic accommodation plans during assessments and construction of watercourse crossings; and
- Materials testing for installation of crossing structures including compaction and concrete testing (CCIL certified).

**REPRESENTATIVE PIPELINE WATERCOURSE CROSSING PROJECTS**

- **Clearwater River** - Geotechnical Assessment for HDD Installation
- **Boone Creek** - Geotechnical Investigation including Slope Assessment for HDD Installation
- **Athabasca River** - Geotechnical Assessment for HDD Installation
- **Bald Mountain Creek** - Geotechnical Assessment for HDD Installation
- **Wapiti River** - Geotechnical Assessment (heli-portable) including Slope Assessment for HDD Installation
- **Albright Creek** - Geotechnical Assessment for WaterHighway 43 Crossing for HDD and Open Cut Installation; Turbidity Monitoring During Construction
- **Updike Creek** - Geotechnical Assessment for HDD and Open Cut Installation; Turbidity Monitoring During Construction
- **Narraway River** - Geotechnical Assessment (heli-portable) for HDD Installation
- **Oetata Creek** - Geotechnical Assessment at several crossing locations for HDD, Open Cut and Punch/Bore Installation
- **Skunk Creek, Salt Creek** - Geotechnical Assessment (heli-portable) for Temporary Bridge Structures including Slope Mitigation and Road Re-Alignment
- **d'Easum Creek** - Geotechnical Assessment for Multiple Crossings including Road Crossings using HDD, Open Cut and Punch/Bore Installation
- **Kiskatinaw River** - Geotechnical Assessment for HDD Installation
- **Muddy Creek** - Geotechnical Assessment for HDD Installation
- **Red Earth Creek** - Geotechnical Assessment for HDD Installation
- **Ministik Creek** - Geotechnical Assessment including Slope Assessment for HDD Installation
- **Pouce Coupe River** - Geotechnical Assessment including Slope Assessment for HDD Installation
- **Tributaries to Kakwa River** - Geotechnical Assessment of 10 Pipeline Crossings below Highway 40 using HDD
- **Red Deer River** - Geotechnical Investigation for HDD Installation, including slope stability assessment for large diameter storm and sanitary sewers.
- **Medicine River** - Geotechnical investigation for HDD installation and lift station for 200 mm force main in Eckville, AB
- **Blindman and Battle Rivers** - 70 km high pressure water line from Red Deer to Ponoka with two HDD crossings.
- **Euphrates River, Iraq** - review of Missan Crude Oil Export Pipeline HDD crossing report.