



DAVE L. COOPER *P.Eng.* Pipeline Experience

- River Surveys
- Alignment
- EIA
- Design
- Bank Protection
- River Training Structures
- Monitoring
- Repairs

NOVA GAS TRANSMISSION and NOVA CORPORATION, AB. (1980-1997)

Project Engineer for the hydrotechnical/river engineering design of pipeline river crossings for NOVA's transmission network throughout Alberta. Projects have included the 36 inch Grande Prairie Lateral in 1980 and 42 inch Loop in 1997, the 48 inch Edson Mainline in 1980 and Loop in 1982, Husky's Cold Lake to Lloydminster line and numerous other lines involving minor and major river crossings as well as the evaluation and design of alternative remedial measures for several exposed pipelines. Hydrologic analyses and river engineering design input for NOVA's Design Guidelines for Minor Stream Crossings.

PALLISER PIPELINE / SINGLETON ENGINEERING, ALBERTA (1996)

Design of river crossings for the proposed pipeline and lateral collection network from north of Calgary to the Saskatchewan border north of Medicine Hat. River crossings include: Red Deer, Matzhiwin, Berry, Rosebud, Onetree, and South Saskatchewan.

WESTCOAST ENERGY INC., B. C. (1994-1996)

Design of remedial measures for existing lines and new river crossings for expansion of Westcoast's transmission network in B.C. Remedial measures have included river training works, riprap banks and spurs, sills, bank revegetation, and design of pool and riffle fisheries habitat. Responsibilities have included: evaluation and design of options, permitting and approvals with MELP and DFO, and design of water management and sediment control. Rivers include the Coquihalla, Pine, Shangweshi, Peace, and Beatton.

TRANSGAS, SASKATCHEWAN (1995)

Crossing design and evaluation of open trench construction considerations for a crossing of the North Saskatchewan River crossing near North Battleford.

AMOCO CANADA PETROLEUM CO. LTD., B.C./AB. (1990-94)

Project Manager responsible for surveys, design and permitting of the following: design of remedial measures to protect several wells and pipeline crossings on an active braided reach of the Red Deer River; bank protection measures involving bin walls and riprap to protect a well site on the North Saskatchewan River near Drayton Valley; remedial measures for exposed pipelines on the James River, Alberta; pipeline and bridge designs of two stream crossings in northeast B. C., river intake, pipeline and reservoir designs and permitting and inspection for a deep well injection project on the Red Deer River near Jenner, Alberta.

KOCH VALLEY PIPELINES, AB. (1992)

Design and permitting of 7 crossings for a 170 kilometer long condensate pipeline and laterals including crossings of the Bow, Elbow and Red Deer.



CANADIAN WESTERN NATURAL GAS CO. LTD. (1981-1983)

Design of crossings of the Sheep, Little Bow, Highwood, Bow, Waterton, and Belly rivers as part of CWNG's transmission network.

ALYESKA PIPELINE SERVICE COMPANY, ALASKA (1979-83)

Hydrologic and river crossing design reviews for various sections of the 800 mile trans-Alaska oil pipeline. This included review of ice dam breaks and impacts, hydrologic and hydraulic designs for workpad bridges and design modifications in reburial sections such as Atigun pass.

ARCO ALASKA INC., ALASKA (1979-82)

Hydrologic and hydraulic modeling and analyses for river engineering designs to protect pipelines, a 500 foot long bridge and a 6 mile long causeway crossings of the Sag River delta at Prudhoe Bay as part of the Endicott oil development.

FOOTHILLS PIPELINES (YUKON) LTD., ALBERTA (1982)

Evaluation, survey and design input of 26 river crossings for the 56 inch Alaska Highway Pipeline Project from the Macleod River north to the Peace River.

EXXON U. S. A., POINT THOMPSON DEVELOPMENT, ALASKA (1982)

Hydrologic analysis and review of breakup conditions to develop hydrotechnical design criteria for development of an oil and gas field in the Point Thompson area located about 100 km. East of Prudhoe Bay.

ALBERTA ENERGY COMPANY / CANUK ENGINEERING, ALBERTA (1981-84)

Responsible for surveys, hydrologic analysis and river engineering design of the AEC Cold Lake to Edmonton pipeline involving crossings of the Beaver and North Saskatchewan Rivers and several minor crossings.

ARCTIC GAS PIPELINE PROJECT, ALBERTA / N. W. T. (1975)

Collection of river regime data, and performed analyses for design of pipeline river crossings from Caroline, Alberta to the North Slope, Alaska. Directed river surveys and collected site data.

MISCELLANEOUS RIVER CROSSING DESIGN PROJECTS

1995	Tri Ocean Engineering	Unnamed creek
1992	Dekalb Energy Canada Ltd.	James River
1991	Bow River Pipe Lines	South Saskatchewan River
1991-1993	Home Oil/Federated Pipeline	Swan River, various minors
1983-1987	Esso Resources	Swan R., N. Sask. R., Poplar Ck., Bucklake Ck.
1987	Petro-Canada Ltd.	Eagle Creek
1984	Alberta Natural Gas Co. Ltd.	Peace River
1984	Gulf Canada Resources	Clearwater River, Raven River
1982	BP Canada Inc.	Wolf Lake Project crossings
1980	Ranchmens Resources Ltd.	Athabasca River

