

# Environmental Monitoring for Pipeline Construction



## Project Profile

SynergyAspen provided environmental planning and monitoring services pre-, post- and during construction of a major pipeline project. We completed the work along approximately 225 km of proposed oil and gas pipeline right of way (ROW) sections located 15 to 100 km away from Fort St John, BC.

## Issue

Large construction projects as these can have detrimental effects on the wildlife and vegetation if not properly planned. They must be completed with regulatory mandated assessments and monitoring throughout the life cycle of the project to ensure they do not adversely affect wildlife or native plant species. For this project, some of the pre-construction vegetation clearing work required to be completed within the regulated timing windows in place for the protection of migratory and nesting birds, which required additional surveying and monitoring.

As often happens with large projects, the needs and required outcomes change mid-project. Mid-project changes included minimal information at the onset for planning and rerouting of the pipeline in different areas.

## Solution

### *Pre-Construction:*

Our Schedule A assessments documented, mapped and classified site conditions of the project area prior to development and obtained a 'pre-disturbance' assessment of landowner records, soil quality and type, topography, and vegetation, including invasive plants.

As part of the Construction Environmental Monitoring, SynergyAspen prepared management plans for noxious weed transport prevention, soil handling and storage, erosion control, wetland/muskeg crossings, waste handling and disposal generated during spills and spill response. SynergyAspen also completed migratory bird surveys during the pre-construction phase.

We completed Fish Habitat Assessments at all proposed pipeline stream crossings. A fish survey using various methods, including electro-fishing and minnow traps, was completed to confirm presence/absence of fish species. The data was then used to complete habitat quality cards for each stream.



## Solution (cont'd)

### *Construction*

SynergyAspen's Environmental Inspectors were on-site to direct and implement our environmental plans during contractor pre-construction clearing of vegetation, during construction, and in particular, completing nest sweeps to ensure song birds were not harmed during construction and during clearing for geotechnical surveys. We also monitored the clean-up activities.

### *Post--Construction:*

We completed a vegetation assessment during the first year of revegetation as part of the post-construction phase. This included a ROW inspection for any deficiencies and made recommendations for repairing them.

### *Overall Project Management:*

SynergyAspen's timely communication, regular on-site meetings, highly trained and knowledgeable staff, availability of local resources and kickoff training meetings for the contractors, helped with the successful completion of the project, minimizing delays and budget increase.

## Outcome

Monitoring and inspections provided prompt addressing of any identified deficiencies. Vegetation was growing successfully and a Schedule B assessment will be completed within 24 months of construction and the report will be completed and submitted to the OGC.

Recently SynergyAspen implemented a training program for the Halfway River First Nation (HRFN) for environmental construction monitoring for this project. SynergyAspen is in the process of hiring HRFN members as contractors to assist with the monitoring. We started the program to develop and strengthen working relations between our client and the HRFN community where some of the proposed pipeline will be crossing. SynergyAspen is acting as a liaison.