



# Hallstrom Associates

## Ecological Services



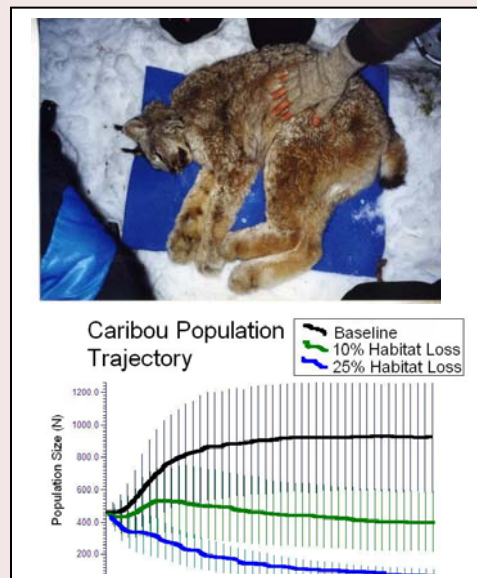
**Hallstrom Associates Environmental** is a Calgary-based firm which supports their clients with high-quality environmental consulting services. Our team of ethical environmental practitioners is committed to the protection and enhancement of the natural environment and its resources.

Professionals with our firm are experienced in helping clients confirm compliance with regulatory agency requirements, and providing practical and effective alternatives to mitigate project effects. We supply a complete package of services to suit the needs of your assessment and are available to help you determine which services you need and what resources will be required.

Staff at Hallstrom Associates include both registered professional biologists and experienced resource technicians. We provide environmental consulting services throughout Western Canada, with a focus on British Columbia and Alberta.

### Services

- Environmental impact assessment and planning
- Baseline biophysical inventory and field surveys
- Ecological land classification
- Wildlife habitat
- Population modeling
- DNA genetic studies
- Riparian assessment
- Fisheries assessment
- Water quality assessment
- Sediment and erosion control
- Watercourse crossings and Wetlands
- Habitat restoration and enhancement
- Public consultation
- Cumulative effects assessment
- Alignment and site selection
- GIS mapping and visualization
- Environmental protection plans
- Conservation and reclamation plans
- Environmental inspections and audits
- Project licensing and permitting
- Environmental monitoring



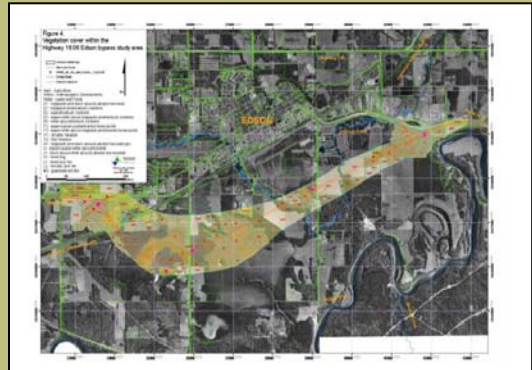
Our approach is to take care of client needs through our understanding of resource management concerns, environmental legislation and regulatory requirements. Meeting the environmental requirements of their projects helps clients move ahead with their plans.

We value high-quality, practical solutions that attain the dual benefit of reaching our clients' goals and doing good to the environment. Members of the team are dedicated to helping achieve balanced and sustainable use of our natural resources.

## Experience

Hallstrom Associates Environmental has 3 wildlife biologists and 2 fisheries biologists on staff, and additional strong working relationships with soil scientists, botanists, wetland specialists, foresters and state-of-the-art analytical laboratories to ensure our team provides a full range of services and experience. We are a reputable firm known for providing high-quality professional consulting services to a mixture of clients, including government, industry, and first nations peoples. Our group have managed and contributed to environmental assessments such as:

- Highways, Pipelines and Transmission lines
- Hydroelectric and Wind Power facilities
- Forestry
- Mining
- Oil and gas developments
- Vegetation planning for reclamation
- Residential and resort developments
- Parks and protected areas management
- Industrial plants and hazardous waste facilities



Projects were located in a variety of regions and across Western Canada, ranging from sub-arctic to temperate, and freshwater and marine ecosystems.

## Selected Project Highlights

### *Mining - Opti/Nexen, Long Lake South Oil Sands Project*

We were subcontracted by WorleyParsons Komex to write the wildlife component of the EIA for proposed Steam Assisted Gravity Drainage (SAGD) heavy oil sands project in the Athabasca Oil Sands region. Work included habitat suitability modeling, and assessment of wildlife mortality and disruption of habitat connectivity from pipelines.

### *Forestry – CFS Canopy Insect Diversity, Forestry impact to Marbled Murrelet habitat*

Analysis of insect samples from old-growth and second-growth forests for comparative assessment of diversity, murrelet capture, telemetry, nest searches, and habitat associations study to determine nesting habitat needs and impacts from forestry.

### *Pipelines – Kneehills Regional waterline Project, Enbridge Gateway Project*

Subcontracted by EXH Engineering for wildlife and Species At Risk surveys for the water pipeline, and by AXYS for wildlife assessment of the 'white zone' component of the pipeline EIA from Edmonton to Edson.

### *Parks Canada – Highway wildlife fencing and Culvert fish passage*

Contracted to assess effectiveness of highway wildlife fencing to protect different species of carnivores and ungulates in Banff National Park and adjacent lands. Examined potential of culverts along roadways in Banff park to allow fish passage.

### *Highways and Infrastructure - GPEC, AB Infrastructure, Pidherney's, EXH, among others.*

Permitting and biophysical surveys for functional planning of new roadways, highway interchanges and realignments (such as Hwy54 at Innisfail, Edson Bypass, Hwy 630/830).

### *Power generation and transmission projects.*

- Subcontracted for fish distribution, riparian and stream survey assessments for small hydro projects in south-western British Columbia (Run of River).
- Migratory bird nesting surveys prior to powerline construction land clearing at Cold Lake (CNRL) and at Ft McMurray (Albion).
- Surveys to assess potential impacts of wind generator towers to birds and other wildlife for a project near Chetwynd, BC (Dokie Wind Energy).

## General Rates

2008

Cost estimates will be based on discussion of scope of work and equipment required. Complete cost breakdowns will be provided.

### Staff rates

Wildlife/fish/vegetation field staff	\$60 per hour
GIS technician	\$55 per hour
Professional biologist – advising, writing	\$75 per hour

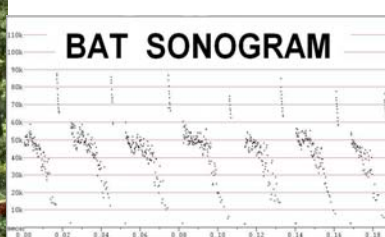
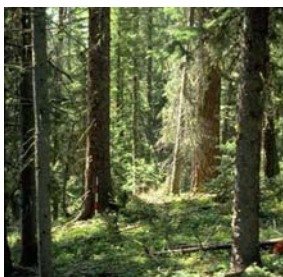
- Mileage or other transport costs to worksites are charged at provincial government rates.
- Specialized equipment may come with an additional charge. This will be discussed during project scope consultation with the client.

Hallstrom Associates carries vehicle and professional liability insurance. All staff are certified with appropriate safety training according to their level of involvement in a project.



## Contact Information

719 Trafford Drive  
Calgary, Alberta  
T2K 2T2  
Phone: 403-370-3832  
Fax : 403-274-2247  
[Domain.hallenv@yahoo.com](mailto:Domain.hallenv@yahoo.com)



## Who We Are

### **Wayne Hallstrom, MSc, R.P.Bio – Principal - Wildlife, Fisheries, GIS and Vegetation**

Wayne has over 8 years of experience with wildlife and fisheries research, monitoring, and reporting for academic, government and industry clients. He has a solid background in ecological work such as airphoto interpretation, vegetation classification and biophysical inventory. Projects he has been involved in have included amphibian and seabird surveys, forest canopy insect diversity, highway road-kill impacts to wildlife and effectiveness of highway fencing, fisheries inventory and stream classification, lynx and elk capture and monitoring, GIS habitat modeling, and population viability and cumulative effects impacts to caribou, moose and bears. Wayne has designed and carried out diverse applied projects for highway and pipeline infrastructure developments, wind power and hydro power projects, mining/oil sands developments studies, and toxicological monitoring, as well as government and academic research. He has experience with erosion and sediment control planning, fishery population assessment for quotas, wetland functional assessment and environmental monitoring of construction projects to ensure they meet instream water quality criteria. Wayne has substantial experience helping clients from BC and Alberta with their field and reporting needs, and ensuring that projects meet or exceed all the requirements of the legal and regulatory process.

## Associates

### **Yuri Hadikin, BSc – Forestry and Forest Management**

Yuri is a forester with over 10 years experience in the industry. He has worked on forest surveys in throughout British Columbia, including work in the Kootenay region and coastal BC. His background includes forest layout for private woodlots, private and Crown land forest management legislation, and forest mensuration surveys as a consultant. Yuri is familiar with forest certification and environmental management systems, and is currently manager of silvicultural operations for a private timber company.

### **Leah Darling, BSc – Wildlife, Prairie, Boreal and SARA**

Wildlife surveys and preparing reports primarily focused on SARA-listed species at risk and endangered species occurring in southern Alberta prairie grasslands. Her experience in habitat assessment for endangered piping plovers and sage grouse has included effects of oil and gas activity. She has worked with blood and DNA samples, and ground and aerial radio-telemetry. Leah has live-trapped endangered swift fox for population monitoring, and she has experience with West Nile Virus control programs.

### **Alyson Winkelaar, BSc – Wildlife, Avian and Aquatic Ecology**

Alyson is a biologist with 5 years of experience monitoring, surveying, and researching wildlife, insects and aquatic systems. Her background includes water quality sample collection and analyses, as well as lab and field experimentation in aquatic systems. She is currently co-authoring a journal article on aquatic food webs of alpine lakes. Additionally, Alyson is familiar with avian ecology techniques such as mistnetting, call playback, and nest searches. Generally she has been involved in DNA collection, vegetation sampling, beaver lodge and small mammal surveys, and use of remote cameras for wildlife population assessments.

### **Mark Taylor, BSc – Fisheries and Aquatic biologist**

Mark has a strong background in fisheries ecology. His lifelong interest in fishing has led him to work as an aquatic biologist for the past 5 years. He has experience with fish salvage and culvert fish passage studies, water quality monitoring, erosion control, wetland inventory and planning, and gillnetting and electrofishing for fish population estimation. Mark is experienced with obtaining fish sampling permits and with environmental monitoring. His skills in the aquatic realm extend to amphibian population monitoring and riparian area assessments.

*Additional personnel specializing in vegetation and range assessment, wetland and soils surveys, and ecotoxicology/risk assessment are available as required.*

