

SCEK Report



Fiscal Year
2013/14

The Science and Community Environmental Knowledge (SCEK) Fund is an industry-sponsored fund overseen by the BC Oil and Gas Commission (Commission), the Canadian Association of Petroleum Producers (CAPP), and the Explorers and Producers Association of Canada (EPAC). The SCEK Fund is administered by the Commission.

Vision

To continuously improve understanding and management of the impacts of oil and gas activities in B.C.

Mission

The SCEK Fund supports practical studies that develop credible and relevant information to address knowledge gaps in the understanding and management of high priority environmental and social matters related to oil and gas exploration and development in B.C. Research findings from funded projects are shared with organizations in the oil and gas industry as well as regulators and government agencies, other stakeholders and First Nations.

SCEK Report

This report documents the SCEK Fund's operational and financial achievements for the 2013/14 fiscal year (April 1, 2013 to March 31, 2014) along with an overview of plans for the 2014/15 fiscal year.

Contact Us

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Suite 300, 398 Harbour Road, Victoria, BC V9A 0B7.

www.scek.ca

Message from the SCEK Steering Committee

Natural gas development and developing a new Liquefied Natural Gas (LNG) export industry is a key component of the province of British Columbia's economic vision. On the road to this vision, public policy discussions on a range of topics will occur and require information for consideration and support. SCEK is well positioned to support this discussion through funding projects that deliver science-based information that assist decision makers understand potential impacts and options, and to enable a standard of environmental and social performance that British Columbians expect of the upstream industry.

The SCEK Fund is funded through contribution by the upstream oil and gas companies, large and small, through fees and levies administered by the Commission and is part of industry's commitment to responsible development and the Commission's mission to regulate oil and gas activities for the benefit of British Columbians.

In 2013/14, activity in the SCEK Fund increased in both our Caribou and Operating Fund. The Caribou Fund continued its programs to collect data and analyze findings to support the development of management options for the B.C. government's boreal caribou initiative. Several site level projects were identified to explore and refine these management options. With the reinstatement of fees and levies into the Operating Fund, we have resumed the support of several larger, multi-year projects that are closely tied to research requested by the B.C. government.

Going forward into 2014/15, we will continue our funding approach from 2013/14 for both our Caribou and Operating Fund. Major themes for funding in 2014/15 include boreal caribou populations and habitat, seismicity, water quality and quantity, air quality and greenhouse gas reductions. We will conduct a strategic review of our organizational structure and governance processes to ensure we have the capacity to respond to the information needs and expectations of our stakeholders—including delivering important and relevant projects and disseminating findings.

SCEK's ability to support the identification of science-based information to address knowledge gaps and inform public policy discussions will be a strategic asset to the oil and gas sector as we pursue the Province's opportunities for natural gas development and LNG exports. We look forward to playing an integral part of our Province's journey.

Geoff Morrison
Chair, SCEK Fund Steering Committee
September, 2014

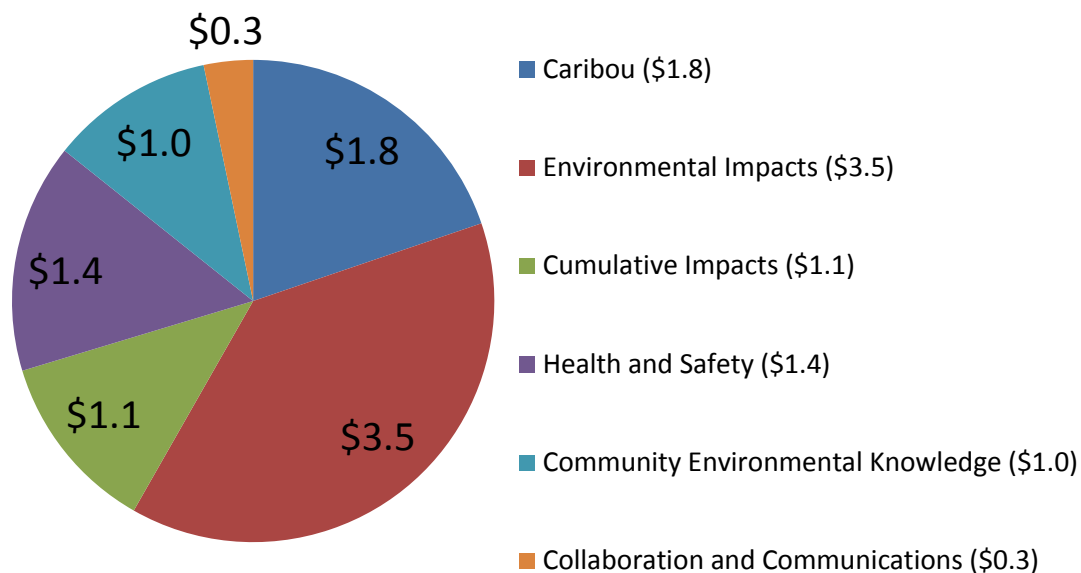
Report on the SCEK Fund (FY 2013/14)

Introduction

The SCEK Fund is a professional research fund that focuses on researching the environmental and social impacts of upstream oil and gas activities in B.C. Key principles of flexibility, responsiveness and transparent operations help distinguish the SCEK Fund and attract quality research projects that address significant and timely issues and knowledge gaps.

The charts below and following section summarizes the activity in the SCEK Fund. More information on the SCEK Fund, including the terms of reference and business plan, can be found on the SCEK website at: www.scek.ca.

Investment To-date (Millions)*



* Since project expenditures commenced in 2000.

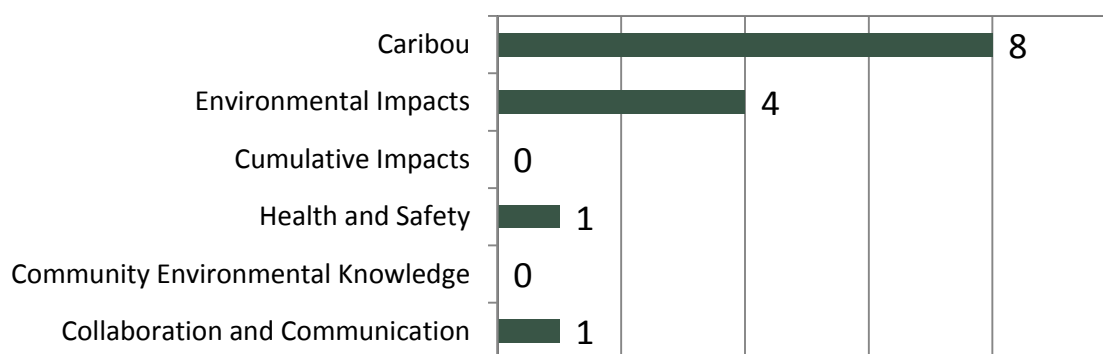
Accomplishments (FY 2013/14)

Project and Proposal Activity

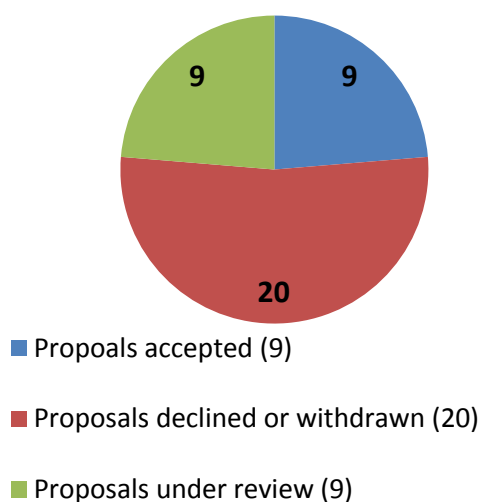
Proposal and project activity for the 2013/14 fiscal year is summarized in the charts below.

Projects accepted for support in the 2013/14 fiscal year were within the funding areas of Caribou, Environmental Impacts, Health and Safety and Collaboration and Communication. In total, nine new projects were approved for funding while six projects were completed.

Project Activity



Proposal Activity

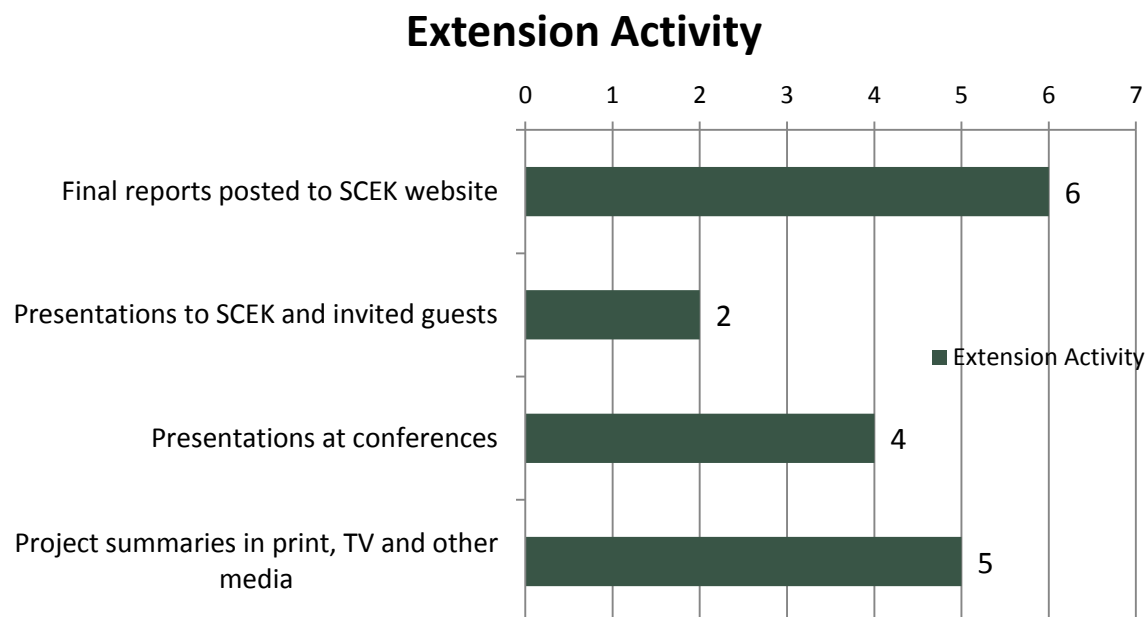


The review and recommendation of projects for funding is divided into Caribou Fund projects and Operating Fund projects. Recommendations to fund boreal caribou related projects were made by a committee structure external to the SCEK Fund. Non-boreal caribou related projects were strategic requests from our major stakeholders to support the collection of science-based information to inform emerging public policy discussions.

A description of the SCEK Fund's active projects can be found in Appendix 1 of this Report. More information on projects and findings within the Caribou Fund can be found in the Research and Effectiveness Monitoring Board (REMB) Annual Report available on the SCEK website at: <http://www.scek.ca/boreal-caribou/about>.

Extension Activity

Extension activities undertaken this year to disseminate findings and raise awareness about SCEK funded research projects are summarized below.



Final reports—all projects delivered a report explaining the project and its findings. These reports—prepared by the project team—were posted on the SCEK Fund’s website for distribution.

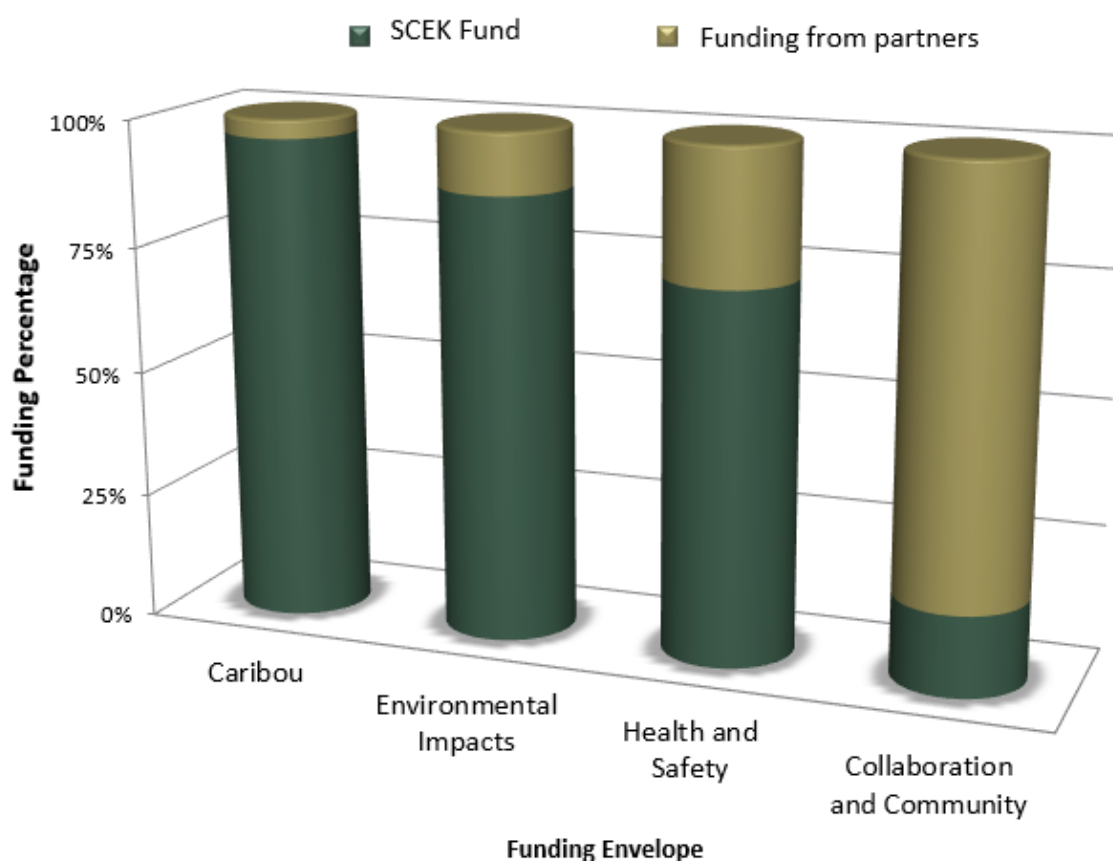
Presentations—in FY 2013/14, two project presentations were made to the SCEK Steering Committee and invited guests such as representatives from government, regulators and industry, while four other presentations were made at environmental themed conferences. These presentations explained the project’s findings and potential applications. In addition, three of the boreal caribou funded projects are being profiled at the North American Caribou Workshop (Whitehorse, Yukon) in May, 2014.

Project summaries in print, TV and other media—in FY 2013/14, the SCEK Fund and its extension partners published five releases such as newspaper articles, press releases and project profiles and engaged in social media activities to raise awareness about projects funded by the SCEK Fund in communities where we operate.

Leveraging our Investments

An increasing number of the SCEK Fund's research projects involve collaboration with external subject matter experts, research and extension partners. This enables the SCEK Fund to leverage its investment in projects as well as share the management and extension activities with other organizations. This trend is expected to continue in future years as it allows the SCEK Fund to undertake a wider range of topical and important research projects with the same financial and personnel resources. The resulting extension activities are significantly enhanced through the combined resources of the participating organizations—leading to wider exposure and use of the research findings.

Leveraging of SCEK Fund Investments

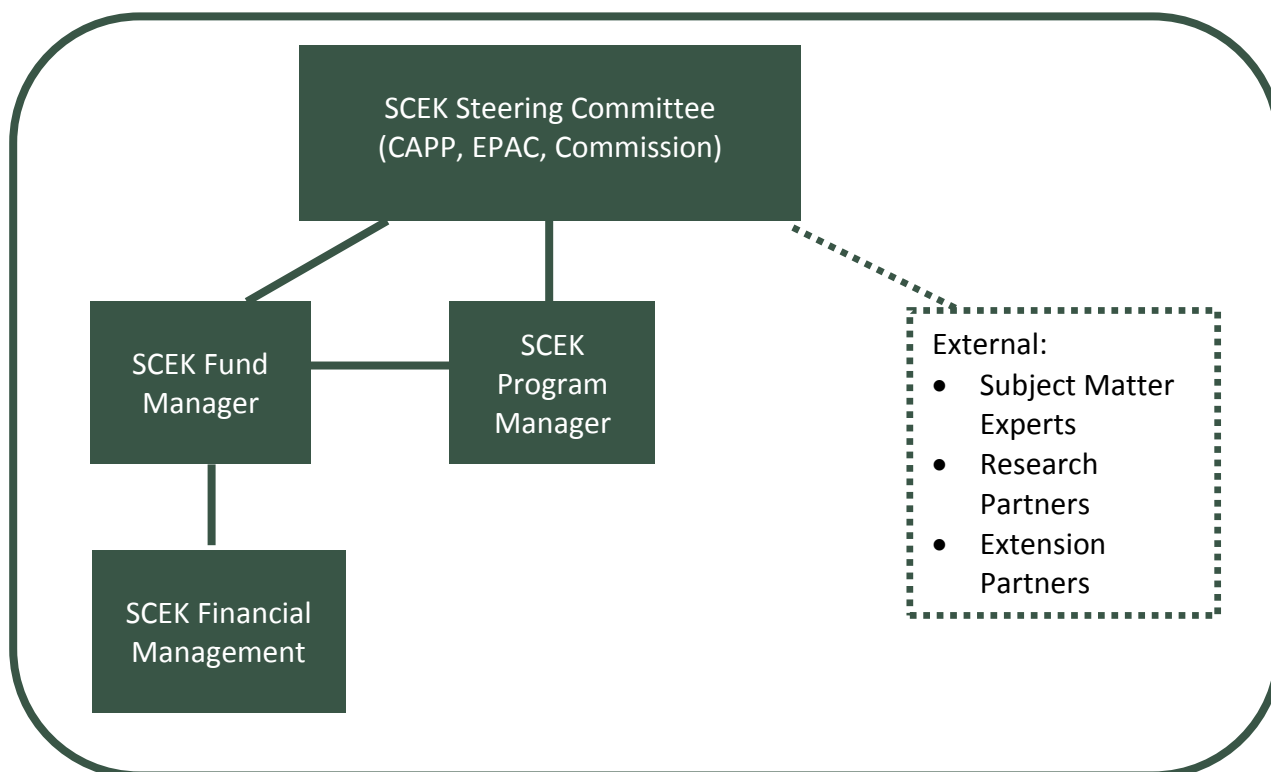


Leveraging of SCEK Funds in research projects undertaken in FY 2013/14
(by Funding Envelope)

The illustration above summarizes the leveraging of SCEK funding in 2013/14. The illustration shows the percentage of funding provided by the SCEK Fund and the percentage by our research partners. Funding envelopes with no activity are not shown. The Operating Fund (i.e., non-Caribou funding envelopes) supported an average of between 16 per cent and 87 per cent of the total value of research projects in which it participated while the Caribou Fund supported 96%.

Governance and Management

The SCEK Steering Committee is responsible for the governance and management of the SCEK Fund. The SCEK Steering Committee is a three-member committee containing representatives of the Canadian Association of Petroleum Producers (CAPP), Explorers and Producers Association of Canada (EPAC) and the BC Oil and Gas Commission (Commission).



Administration of the SCEK Fund is the responsibility of the SCEK Fund Manager who oversees the financial and contractual matters. The SCEK Fund Manager is a Commission employee. A part-time SCEK Program Manager supports the SCEK Fund Manager and the SCEK Steering Committee in administrative matters.

SCEK Financial Management is undertaken by the Commission's Corporate Services Division. Financial and contract management processes along with tracking and reporting systems are provided by this group. Assistance with records management and technical support of the SCEK website are also provided by this group.

Financial Report (FY 2013/14)

Results of Operations

The SCEK Fund receives most of its investment funds from levies on production volumes and fees from well applications. These levies and fees were re-instated in January of 2011 and dedicated to supporting a funding envelope for caribou-related research. The levies and fees were increased again in January of 2014 to support larger, multi-year research projects in the Operating Fund.

In FY 2013/14, additional revenue was received from TransCanada Pipelines who made a contribution to the Caribou Fund and thirteen (13) oil and gas companies who contributed to the Northeast Air Monitoring Project under the Health and Safety funding envelope.

A summary of financial activity in FY 2013/14 is shown below. The activity is broken down by funding envelopes with the Operating Fund column representing all the funding envelopes except the Caribou Fund. The annual financial audit of the SCEK Fund was completed by external auditors. Copies of the audit statement and the audited financial reports are available on the SCEK website at <http://www.scek.ca/content/about>.

Statement of Financial Position (as at March 31, 2014)

	Operating Fund	Caribou Fund	Total
Assets			
Current assets			
Cash	\$ 75,201	\$ 2,721,175	\$ 2,796,376
Accounts receivable	1,100	530	1,630
Due from the Commission	363,541	605,895	969,436
Prepays	--	16,667	16,667
Sub-total	439,842	3,344,267	3,784,109
Capital assets			
Caribou collars	—	128,015	128,015
Total Assets	439,842	3,472,282	3,912,124
Current liabilities			
Accounts payable	96,530	327,625	424,155
Due to Commission	27,370	34,954	62,324
Sub-total	123,900	362,579	486,479
Fund Balances			
Operating	315,942	—	315,942
Caribou	—	3,109,703	3,109,703
Sub-total	315,942	3,109,703	3,425,645
Total Liabilities and Net Assets	439,842	3,472,282	3,912,124

Statement of Operations and Net Assets (for year ending March 31, 2014)

	Operating Fund	Caribou Fund	Total
Revenue			
Contributions	\$ 249,475	\$ 25,000	\$ 274,475
Fees	25,200	414,400	439,600
Levies	363,541	1,671,168	2,034,709
Interest	14,911	7,333	22,244
Sub-total	653,127	2,117,901	2,771,028
Expenses			
Project costs	503,861	765,294	1,269,155
Professional services	35,687	85,068	120,755
Amortization expense	—	30,481	30,481
Management fees	29,480	14,520	44,000
Miscellaneous	362	8,019	8,381
Sub-total	569,390	903,382	1,472,772
Excess of revenue over expenses	83,737	1,214,519	1,298,256
Fund balance beginning of year	232,205	1,895,184	2,127,389
Fund balance end of year	315,942	3,109,703	3,425,645
Forecasted Commitments (14/15)	608,000	2,023,000	2,631,000

Priorities (FY 2014/15)

Priorities for the SCEK Fund in FY 2014/15 include the following:

Priority		Description
✓	Ensure good governance of the SCEK Fund	Providing oversight of projects and ensuring all projects use and follow applicable processes, tools and policies while ensuring flexibility to respond to additional opportunities as they arise. Governance of individual projects will be undertaken applicable to the investment level, type of research and project specific risks.
	Ensure good use of the investment funds	Soliciting research proposals and making decisions on funding research consistent with the following SCEK Fund principles:
	<ul style="list-style-type: none"> • Targeting research 	<ul style="list-style-type: none"> • at known knowledge gaps that are important to our major stakeholders such as undertaking projects to inform emerging public policy topics, regulatory discussions in government and best management practices in industry.
	<ul style="list-style-type: none"> • Leveraging our research funding 	<ul style="list-style-type: none"> • by including other stakeholders and research partners in our funding agreements and being flexible in our funding models.
	<ul style="list-style-type: none"> • Conducting extension activities 	<ul style="list-style-type: none"> • to ensure research findings and the application and implications of the research findings are easy to find and use by our target audiences.
	<ul style="list-style-type: none"> • Minimizing administrative expenses 	<ul style="list-style-type: none"> • through sharing administrative and overhead costs with research partners and structuring simple, yet flexible and appropriate funding agreements.

Research Activities (FY 2014/15)

The table below illustrates the forecasted research funding, by funding envelope, over the next three years. The SCEK Fund will continue to fund a diversity of research projects while ensuring the projects focus on addressing knowledge gaps important to the oil and gas sector and our major stakeholders.

The funding priorities for FY 2014/15 include the following items:

- Caribou—collect and analyze data, monitor collared caribou/wolves and undertake site-level research projects;
- Seismicity—maintain a seismic array network, collect and analyze data on seismic activity in Northeast B.C.;
- Air—establish a monitoring network to collect data on air quality in Northeast B.C.;
- Water—support research on surface and ground water quality and quantity; and
- Green House Gas (GHG) reductions—collect baseline data.

Forecasted Research Funding (FY 2014/15)

	2014/15*	2015/16*	2016/17*	Total*
Research Projects (Current and Forecasted)				
Current research projects (2013/14)	\$428	--	--	\$428
Forecasted Caribou Fund projects	\$3,000	\$2,500	\$2,000	\$7,500
Forecasted Operating Fund projects	\$1,000	\$1,050	\$1,150	\$3,200
Total	\$4,428	\$3,550	\$3,150	\$11,128
Project expenditure (by funding envelope)				
Caribou Fund	\$3,365	\$2,500	\$2,000	\$7,865
Operating Fund:				
- Environmental impacts	\$513	\$500	\$550	\$1,563
- Community Environmental Knowledge	\$25	\$25	\$25	\$75
- Health and Safety	\$300	\$250	\$250	\$800
- Cumulative Impact Management	\$100	\$150	\$200	\$450
- Collaboration and Communication	\$25	\$25	\$25	\$75
- Unallocated	\$100	\$100	\$100	\$300
Total	\$4,428	\$3,550	\$3,150	\$11,128

* Numbers in thousands.

Appendix 1: Active Projects

The following projects, listed by funding area, were undertaken in FY 2013/14. More information on these projects can be found on the SCEK website at www.scek.ca or by contacting the SCEK Program Manager at scek@alantem.ca.

Caribou

Investment to-date: \$1.8 million

Focus

Supporting the Government of British Columbia's implementation plans for the ongoing management of caribou in B.C. through conducting research on caribou and their habitat. The governance around the implementation plan and underlying activities is supported by a Memorandum of Understanding (MoU) between industry and the B.C. Government signed on August 8, 2011.

Active projects (FY 2013/14)



Boreal Caribou Telemetry Program—tracking collared boreal caribou
(courtesy Diversified Environmental Services).

Boreal Caribou Health Study

Collect baseline data on the health of boreal caribou in Northeast B.C. and build a Boreal Caribou Health Model for future monitoring activities. (*BC Ministry of Forests, Lands and Natural Resource Operations; University of Calgary*).

Boreal Caribou Telemetry Program

Collect, monitor and report population and habitat information through a network of over 200 GPS/VHF radio collars deployed on boreal caribou and wolves. This includes conducting monitoring surveys to obtain approximate locations, investigating mortalities and conducting a spring recruitment survey to refine population growth estimates (*Caslys Consulting; Diversified Environmental Services*).



Boreal Caribou Telemetry Program project team following animal care guidelines while deploying radio collars
(courtesy Diversified Environmental Services).

Predation Risk to Caribou Calves Project

Assessment of spatial factors affecting predation risk to boreal caribou calves. Year three of a four-year project to inform policy and best management practices for protecting and managing boreal caribou and their habitat (*University of Alberta*).

Collaboration and Communication

Investment to-date: \$0.3 million

Focus

Improving communication between industry, regulators and government agencies, other stakeholders and First Nations.

Active projects (FY 2013/14)



Climate Change Readiness Survey
Year One Report
(courtesy Resources North Association).

Climate Change Readiness Survey

Survey the oil and gas sector to assess the collective awareness and preparedness of the sector for climate change. The project will identify opportunities to improve the awareness and preparedness for climate change as well as identifying opportunities for coordinating adaptation strategies (*Resources North Association*).

Cumulative Impacts Management

Investment to-date: \$1.1 million

Focus

Advancing the understanding and management of the cumulative impacts of oil and gas projects in the context of landscape level management.

Active projects (FY 2013/14)

No active projects in FY 2013/14.

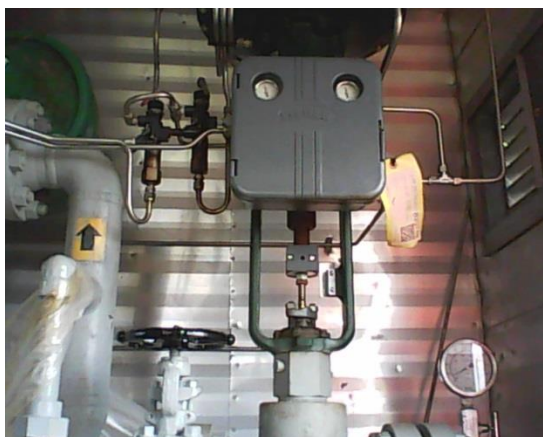
Environmental Impacts

Investment to-date: \$3.5 million

Focus

Collecting information and identifying methods to avoid, minimize, or mitigate the impacts of oil and gas activities on terrestrial and aquatic ecosystems.

Active projects (FY 2013/14)



Emission Factors for Pneumatic Devices project
(courtesy The Prasino Group).

Emission Factors for Pneumatic Devices

Sample pneumatic devices at oil and gas sites and develop emission factors for those devices in support of compliance reporting in B.C. (*The Prasino Group*).

Seismic Array Network Project

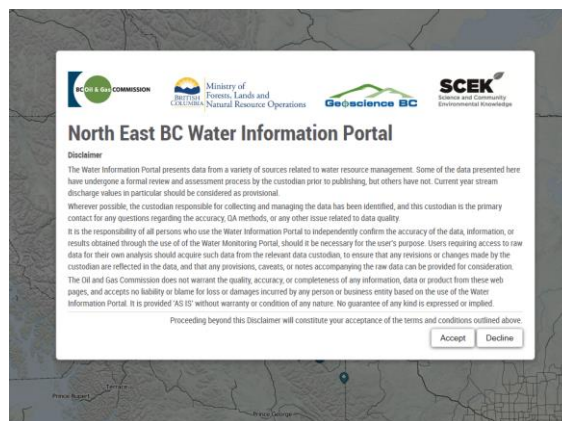
Year two of a five-year project to establish and maintain a network to collect and analyze data on seismic activity in Northeast B.C. (*Geoscience BC*).



Seismic Array Network project
equipment—an installed seismograph station
(courtesy Geoscience BC).

Northeast B.C. Water Information Portal

Create a web-based GIS interface to provide public access to water related data in Northeast B.C. Develop charting and analytical tools to assist users understand the data. (*BC Oil and Gas Commission; Geoscience BC*).



Web interface to the Northeast B.C.
Water Information Portal
(<http://waterportal.geoweb.bcogc.ca/>).

Health and Safety

Investment to-date: \$1.4 million

Focus

Advancing oil and gas practices related to human health and safety.

Active projects (FY 2013/14)



Northeast Air Monitoring project equipment—an air monitoring station (courtesy BC Ministry of Environment).

Northeast Air Monitoring Project

Year one of a three-year project to establish a monitoring network in Northeast B.C. to capture air quality data for use in making informed public health decisions (*BC Ministry of Environment*).

Community Environmental Knowledge

Investment to-date: \$1.0 million

Focus

Documenting, demonstrating and improving the application of community environmental knowledge to oil and gas planning, development and restoration.

Active projects (FY 2013/14)

No active projects in FY 2013/14. Community environmental knowledge projects are scheduled to commence in FY 2014/15.

In Closing

From our beginning in 1999, we have supported close to 100 projects ranging in size from short studies and reports to multi-year projects involving multiple researchers and organizations. In the last three years, our level of activity in funding requests and projects has quadrupled. This trend is forecasted to continue. Our projects are getting larger and focused on strategic requests from the B.C. Government. This is an exciting time for the SCEK Fund as we move into a new phase of our growth.

We thank all our stakeholders, researchers, technical reviewers and administration team for their assistance in delivering these research projects. Your support and assistance enable us to meet our goals and deliver findings that address important knowledge gaps in environmental and social aspects of oil and gas development in B.C.

Comments and questions on this report and/or the SCEK Fund can be sent to scek@alantem.ca.

Contact Us

SCEK Fund

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Victoria, BC**

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