



NRCB | Natural Resources
Conservation Board



Natural Resources Conservation Board
ANNUAL REPORT **2016-17**



Vision, Mission and Values

Our vision: to be a respected decision-maker, exemplifying integrity and foresight in the best interests of Alberta.

Our mission: as a quasi-judicial and regulatory agency, the NRCB makes impartial and knowledge-based decisions across two distinct mandates:

- Under the *Natural Resources Conservation Board Act*, the NRCB decides if natural resource projects are in the public interest, considering social, environmental and economic effects, and
- Under the *Agricultural Operation Practices Act*, the NRCB fulfills applications and compliance responsibilities, administers and advances policies, and conducts board reviews for confined feeding operations.

Our values: in achieving our mission, we honour the NRCB's core values of integrity, fairness, respect, excellence and service.



Governance

The chair and board members of the Natural Resources Conservation Board provide strategic direction and are responsible for the overall governance of the organization and its financial reporting. The chief executive officer is responsible for corporate services, the delivery of the approvals and compliance functions of the *Agricultural Operation Practices Act*, and development of policy to support those functions, and is accountable to the chair and board members for the general operation of the corporation.

The Natural Resources Conservation Board complies with the requirements of the *Alberta Public Agencies Governance Act* and the *Public Agencies Governance Framework*. Its mandate and roles, code of conduct, compensation and expense disclosures, and board member competency framework are publicly available at www.nrcb.ca.

Accountability Statement

The Natural Resources Conservation Board is accountable to the Minister of Environment and Parks.

The *Natural Resources Conservation Board Act* (NRCBA) is the responsibility of Environment and Parks.

The *Agricultural Operation Practices Act* (AOPA) is the responsibility of Agriculture and Forestry. A 2006 memorandum of understanding between the Minister of Sustainable Resource Development, the Minister of Agriculture and Rural Development, the chair, and the chief executive officer of the Natural Resources Conservation Board describes the purpose of the act, and governance and mandate responsibilities.

The 2016-17 financial reports of the Natural Resources Conservation Board are provided in the annual report issued by Environment and Parks.



Message from the Chair

The Natural Resources Conservation Board has just completed its 25th year of service to Albertans. It has been my honour to serve as the board chair for the past 11 years. My term ends October 31, 2017, and this is the last annual report that I will participate in. It has been a wonderful 11 years. I will be leaving with a great deal of pride in what we have accomplished.

As chair, I have had the privilege of working closely with the NRCB's board members and board staff, its scientists, and its operational staff, on decisions under both mandates. I have said before, and will say again, that despite being a small organization, we are, in my mind, one of the best.

I want to especially acknowledge the pleasure it has been to work with the NRCB's chief executive officer, Peter Woloshyn. Peter has led the operations divisions with integrity, and has built an exceptionally talented organization. His commitment to communication and fairness has earned the respect of stakeholders, as well as my personal tribute.

I also want to acknowledge the board members who have worked with me over the past 11 years. Each of them brought special expertise and a strong commitment to public service: Sheila Leggett, Dr. Gordon Atkins, Jim Turner, Donna Tingley, Barb McNeil, Jay Nagendran, and Glenn Selland. It has been a privilege to work with all of them.

I am confident that the board will continue to make public transparency and accountability to Albertans a priority, including accountability for every dollar spent. In 2016-17 the NRCB once again passed the Auditor General's financial audit with flying colours, and complied with all Government of Alberta requirements for compensation and expense disclosure.

The next two years will be an extremely busy period for the NRCB, with three pending major public reviews under the *Natural Resources Conservation Board Act*, in addition to an increased volume of applications under the *Agricultural Operation Practices Act*. The NRCB is well equipped to meet these challenges. I am looking forward to the future, and to cheering on the NRCB's continued success.

Vern Hartwell
Chair



Message from the Chief Executive Officer

2016-17 tested the mettle of the NRCB. If adversity is the true test of strength, our organization has strength in spades.

The operations' workload went up dramatically, but a maternity leave, a retirement, and other absences limited the resources of our field staff. Staff responded with teamwork, focus, and sheer hard work. Despite a 41 per cent increase in permit applications, approvals staff nevertheless not only met but exceeded their performance target for all but 12 of 152 applications. On the inspections side, unauthorized construction – a serious violation of the *Agricultural Operation Practices Act* (AOPA) – was discovered at nine operations. Responding to this issue consumed significant inspector time and resources.

On the Board side, the departure of board members Donna Tingley and Jay Nagendran left large holes to fill. Recruitment for those positions through the Government of Alberta began in February 2017.

Two approval officers were hired in 2016-17 for succession planning and to help address long-term workloads. Due to the complexity of permit applications, approval officers need a minimum of six months of on-the-job training for authorization applications, and a year for registration and approval applications.

The NRCB continued to play a role in Alberta's fledgling biogas industry. We co-regulate three biogas facilities that use manure as a feedstock, and support the Alberta government's recognition of the potential for biogas as a renewable clean energy source.

Policy development also continued as an important focus for our operational divisions. AOPA was introduced in 2002 and last updated in 2006, requiring policy to address aspects of regulation not anticipated by the act. A major initiative to expand and update the NRCB's approvals policy was completed in 2015-16 in consultation with the Policy Advisory Group. Work on further policy issues continued in 2016-17. The Policy Advisory Group provided advice on emerging policy questions such as large scale country residential developments, and contract manure applicator liability under AOPA.

Inconsistencies between land use provisions in municipal land use plans, and the requirements of AOPA, is also a growing issue and was discussed with the Policy Advisory Group. A priority for the coming year will be to provide municipalities with information to help them develop plans that uphold their intentions and are not in conflict with the act.

Finally, on a personal note, I and the rest of our team will be saying good bye to our Board Chair, Vern Hartwell, whose appointment expires in October 2017. Vern joined the NRCB in 2006 and led the organization with a clear vision and solid guidance during a time of significant change. Working with Vern has been a privilege. During his tenure, Vern has been totally committed to the success of our organization, and has made everyone at the NRCB feel that their contribution is valued. He will be missed by all of us at the NRCB.

Peter Woloshyn
Chief Executive Officer



Strategic Priorities

1. **Cross government initiatives:** *Continue to support priority Government of Alberta initiatives such as Water for Life, the Clean Air Strategy and the Land-use Framework.*

The NRCB contributed to the work of the Cross Ministry Water for Life Committee as a full member; participated in cross-ministry meetings on the regulation of biodigesters; was a corresponding member of the Clean Air Strategic Alliance (CASA) non-point source project on non-industrial sources of emissions that affect air quality; and ensured that AOPA permit applications were consistent with approved regional land use plans. The NRCB also coordinated with Environment and Parks on the environmental impact assessment review process for projects under the NRCBA.

2. **Consistent delivery of the Agricultural Operation Practices Act:** *Continue to coordinate with government and stakeholders to develop operational policy and technical guidelines to support consistent delivery of the act.*

A significant volume of policy continued to be developed and updated in consultation with Agriculture and Forestry and with stakeholders through the Policy Advisory Group. Priorities were unauthorized construction and manure spreading violations, minimum distance separation requirements for large scale country residential development, and consultation on revisions to a guideline that distinguishes between confined feeding operations and seasonal feeding and bedding sites.

3. **Risk based approach to regulating confined feeding operations:** *Continue to use an environmental risk based approach for compliance activities at confined feeding operations and for reviewing permit applications for new or expanding operations.*

An environmental risk based approach to regulation is an ongoing NRCB priority. The risk based compliance program was completed, significant progress was made on an initiative to improve and standardize data that is collected about surface water conditions at confined feeding operations, and requirements for manure application on frozen or snow covered land were communicated to operators. A risk tool was developed to help approval officers with water well exception decisions, and to support a review of water well monitoring conditions in AOPA permits.

4. **Board procedures and public information:** *Complete the update of board regulations and information documents.*

The proposed revisions were submitted to the Government of Alberta Policy Coordination Office for review and issuance of the required compliance statement.

Board

Overview

Changes within the board during 2016-17 included the departure of board members Donna Tingley and Jay Nagendran. Recruitment for three part-time board member positions and three acting board member positions commenced in February 2017 through the Government of Alberta public agency recruitment process.



Left to right: Vern Hartwell, Chair; Jay Nagendran and Glenn Selland, board members



Donna Tingley

Donna Tingley joined the board on January 1, 2007 and retired on April 28, 2016. During her tenure, Donna sat on numerous AOPA and NRCBA board panels in addition to her general governance responsibilities. Donna also served as an acting board member for proceedings

held by the Alberta Energy and Utilities Board and the Surface Rights Board. A valued board member, Donna's

legal background and integrity were highly respected by everyone who worked with her.

Jay Nagendran joined the board on November 1, 2011. He was seconded to the Alberta Environmental Monitoring, Evaluation and Reporting Agency from October 1, 2014 until September 5, 2016. Jay returned to the NRCB until he resigned on March 31, 2017 to accept the position of registrar and chief executive officer with the Association of Professional Engineers and Geoscientists of Alberta (APEGA).

Performance

Strategic Priority 1: Cross government initiatives: *Continue to support priority Government of Alberta initiatives such as Water for Life, the Clean Air Strategy and the Land-use Framework.*

Strategy

Proactively provide opportunities for all participants to understand NRCBA and AOPA review and hearing processes through guides; public information sessions; and prompt, accurate responses to direct inquiries.

Identify critical issues related to applications under the *Natural Resources Conservation Board Act*, to ensure that all relevant information is included in the review process.

Results achieved

Federal officials, as well as proponents for the proposed Amisk and Springbank projects were briefed on the board's public review process. The Paul First Nation was briefed on the board's public review process for the proposed Cougar Creek debris and flood containment project. The board's website content was reviewed and updated. The manager of Board Reviews responded to public inquiries about NRCBA and AOPA reviews.

The NRCB participated in the Expert Panel review of federal environmental assessment processes. The NRCB also reviewed the environmental impact assessment (EIA) for the proposed Cougar Creek debris and flood containment project, and submitted supplemental information requests for the proposed project to Environment and Parks.

Natural Resources Conservation Board Act (NRCBA) reviews

The NRCBA requires the NRCB to determine whether certain projects that require an environmental impact assessment (EIA) under the *Environmental Protection and Enhancement Act* are in the public interest. The NRCB develops terms of reference for the NRCBA application. These are included in the terms of reference for the EIA process led by Environment and Parks, and are released under a joint public notice.

In 2016-17, the NRCB received and began the review of the Town of Canmore's formal application for the proposed Cougar Creek Debris Flood Retention Structure, and identified supplemental information requests in coordination with Environment and Parks review of the project's EIA. The NRCB participated in establishing required terms of reference for the application for the proposed Springbank Offstream Reservoir Project west of Calgary. The proponent for the proposed Cavus Pump Storage Generation Project near Grande Cache was advised that the project is reviewable under the NRCBA.

Reviews under the Agricultural Operation Practices Act (AOPA)

AOPA gives the Board authority to conduct quasi-judicial reviews of approval officer and inspector-issued decisions, on appeal by directly affected parties. The Board determines whether the request has merit before granting a review, and issues its reasons in a report. The Board may grant a review if it determines that the approval officer or inspector did not adequately address the issue or erred in their decision.

AOPA requires approval officers to reject an application that is inconsistent with the land use provisions in the local municipal development plan. The Board is not bound by the provisions.



In 2016-17, the Board received requests to review six approval officer decisions. The Board agreed to review two of the decisions. Both reviews addressed issues regarding the applications' consistency with the land use provisions of the local municipal development plan (MDP).

- Hutterian Brethren Church of Silver Valley – the application was inconsistent with the land use provisions in the MDP, and was therefore denied by the approval officer, but was supported by Saddle Hills County. The applicant requested a review by a Board panel to consider approving the expansion application. The Board panel directed the approval officer to issue an approval for the application.
- Jos and Dorothy Peters – the approval officer's decision to issue the permit was appealed by adjacent neighbours. The Board panel was satisfied that the relative risk of a water body designated a "lake" on the circa 1900 land title is addressed through AOPA. The Board panel also considered concerns related to a previously unknown water well. The approval officer was directed to rescind the permit and to issue a new permit with a condition requiring the well to be appropriately abandoned.

Strategic Priority 4: Board procedures and public information: *Complete the update of board regulations and information documents.*

Strategy

Complete the update of the Board Administrative Procedures Regulation in consultation with NRCB staff and stakeholders.

Result achieved

Board consultation on the proposed amendments was completed prior to 2016-17. The draft revisions were prepared in 2015-16 with the assistance of Legislative Counsel, Alberta Justice. They were submitted in 2016-17 to the Government of Alberta Policy Coordination Office for review and issuance of the required compliance statement.

Core Business One: Board reviews and appeals under the *Natural Resources Conservation Board Act* and the *Agricultural Operation Practices Act*.

Performance Measures and Results

Efficiency of review process

Target: 100%

Percentage of Natural Resources Conservation Board's decisions issued within 80 working days of the conclusion of reviews under the *Natural Resources Conservation Board Act*¹ and within 30 working days of the conclusion of hearings under the *Agricultural Operation Practices Act*²

Results achieved¹

2014/15

2015/16

2016/17

100%	NA	100%
No NRCBA reviews completed	No NRCBA reviews completed	No NRCBA reviews completed
7 AOPA hearings	No AOPA hearings	8 AOPA hearings

1. The performance measure addresses post-hearing decisions.

2. "Hearing" means any board deliberation resulting in a decision on a request for review, and any decision issued following an oral or written hearing.

Operations

Overview

Permits

In 2016-17, the NRCB received a 41 per cent increase in applications for AOPA permits (152 applications, compared to 108 the previous year). The increase was due to changes in quota, industry growth, and new livestock industry

codes of practice. The number of permits issued increased accordingly—143 permits were issued in 2016-17, compared to 83 the previous year.

Applications received and permits issued, by region, 2016-17¹

Region	Applications received						Permits issued					
	Approvals		Registrations		Authorizations		Approvals		Registrations		Authorizations	
	15/16	16/17	15/16	16/17	15/16	16/17	15/16	16/17	15/16	16/17	15/16	16/17
	Peace	2	5	0	1	0	1	0	4	0	0	1
North Central	3	5	3	4	2	7	2	3	2	5	2	7
Central	17	33	4	11	22	32	10	33	4	9	21	26
Southern	30	24	3	5	22	24	19	30	3	5	19	21
Total	52	67	10	21	46	64	31	70	9	19	43	54

1. Approvals are permits for larger operations. Registrations are permits for smaller operations. Authorizations are permits for manure storage facilities that do not involve a change in livestock numbers.

Applications received and permits issued, by livestock category, 2016-17¹

Livestock category	Applications received						Permits issued					
	Approvals		Registrations		Authorizations		Approvals		Registrations		Authorizations	
	15/16	16/17	15/16	16/17	15/16	16/17	15/16	16/17	15/16	16/17	15/16	16/17
	Cattle	11	14	0	0	8	7	7	13	0	0	7
Dairy	10	20	5	10	21	39	4	21	5	8	21	31
Other ²	2	5	0	1	0	0	1	5	1	3	0	0
Poultry	25	30	5	10	14	12	17	35	3	8	12	12
Swine	4	7	0	1	7	10	2	8	0	1	7	10

1. If an application is for more than one livestock category, it is listed under each applicable livestock category and is counted in each category.
2. Includes bison, goats, horses and sheep.



Processing efficiencies for the review of applications

The NRCB's performance measure for the time required to issue a decision on a permit application, from the date the NRCB receives the complete application to the date the approval officer issues their decision, was reviewed by the NRCB in 2015-16. The review found that the majority of decisions were issued in fewer than the performance target of 65 working days.

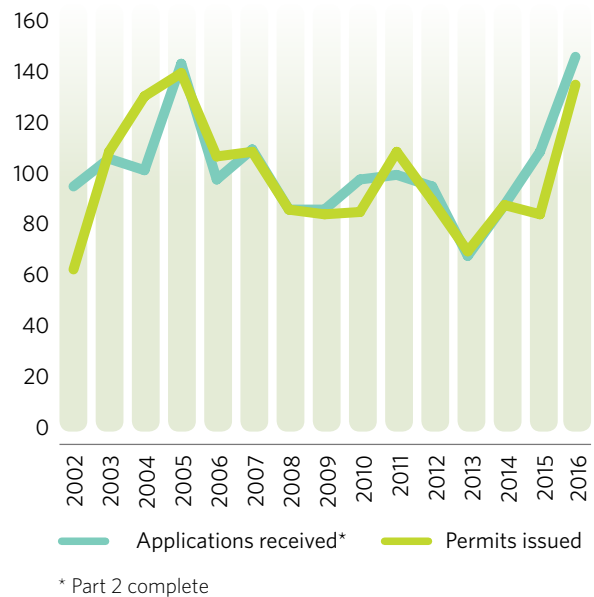
In 2016-17, the NRCB reviewed its procedures to see how a completed application could be processed more efficiently. Potential efficiencies were identified and implemented.

In addition, as a result of increased workloads, and for succession planning, one approval officer was hired for the Lethbridge office and one approval officer was hired for the Morinville office.

Average # of days to decision from date part 2 application is deemed complete

Authorizations	35.6 working days (54 decisions)
Registrations	46 working days (19 decisions)
Approvals	46 working days (70 decisions)

Applications received and permits issued, 2002 - 2016





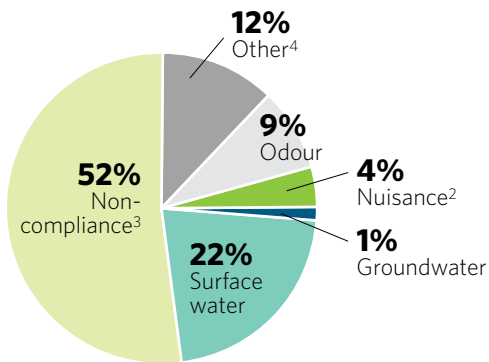
Complaints

The total number of complaints received continued to decline, with a year over year drop from 267 in 2015-16, to 209 in 2016-17. The number of operations involved in a complaint increased slightly, from 155 to 161.

Most complaints received in 2016-17 were about non-compliance and surface water. Most non-compliance issues involved permit conditions or non-compliance with AOPA's manure spreading and setback requirements. Most surface water concerns involved concerns about manure run-off.

Odour concerns declined from 23 per cent of complaints in 2015-16, to 9 per cent of total complaints in 2016-17. The decline may reflect weather conditions that delayed manure application, or improvements in manure-application technology, such as direct injection.

Type of Complaint 2016-17¹



1. Calculated by the number of operations that are involved in a type of complaint.
2. *Nuisance* complaints include dust and files. *Odour* is tracked separately because of the number of complaints received. Inspectors follow a specific odour response and reporting protocol.
3. *Non-compliance* includes manure spreading infractions, setbacks, etc.
4. *Other* includes dead animal disposal, animal welfare, and other issues that do not fall under the *Agricultural Operation Practices Act*.

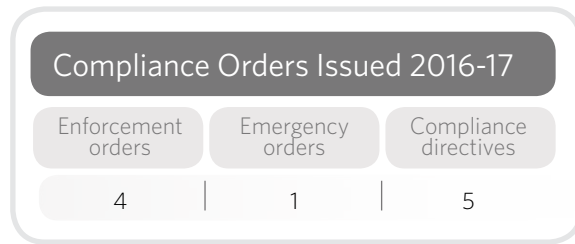
Complaints received, 2002 - 2016



Enforcement

The NRCB's compliance and enforcement policy starts with the objective of achieving voluntary compliance. Enforcement action is escalated as required. While rare, prosecution is the final step.

No cases were prosecuted in 2016-17. Most compliance directives issued in 2016-17 involved unauthorized construction (see page 13).



Performance

Strategic Priority 1: Cross government initiatives: *Continue to support priority Government of Alberta initiatives such as Water for Life, the Clean Air Strategy and the Land-use Framework.*

Strategy

Support other departments and agencies studying the effects of manure collection and storage facilities on groundwater quality.

Result achieved

The NRCB continued to provide scientific and technical support to Agriculture and Forestry on a study that is examining the impact of manure storage facilities on groundwater. In 2016-17 NRCB staff provided the study with in-kind support for groundwater sampling, data interpretation, and report writing.

Biodigesters

Biodigesters are a potentially viable alternative energy source that can utilize agricultural and other waste products. The NRCB co-regulates three biodigesters that use a predominantly manure-based feedstock. In 2016-17 the NRCB contributed to a whitepaper developed in collaboration with Alberta Innovates and other government ministries on a streamlined process for regulating biodigesters, aimed at encouraging more facilities to come into production.

Cross government initiatives

The NRCB continued to support key cross-ministry initiatives that are addressing Alberta's clean air and environmental stewardship priorities, including participating as a full member of the Cross Ministry Water for Life Committee. In 2016-17, the NRCB also provided technical reviews of the Milk River and Oldman watershed plans.



Strategic priority 2. Consistent delivery of the Agricultural Operation Practices Act: *Continue to coordinate with government and stakeholders to develop operational policy and technical guidelines to support consistent delivery of the act.*

Strategy

Continue to develop operational policies in consultation with the Policy Advisory Group (PAG), including the updated compliance and enforcement policy, and finalized policy for responding to requests for permission to apply manure to frozen or snow covered land.

Continue to work with the Technical Advisory Group (TAG) to develop guidelines that support delivery of the *Agricultural Operation Practices Act*.

Results achieved

One meeting was held with the Policy Advisory Group, on October 27, 2016. PAG was consulted on unauthorized construction; country residential category 2 and 4 determinations; the liability of contractors and custom applicators under AOPA; and spreading manure on frozen and snow covered land. The compliance and enforcement policy was updated and communicated to PAG and industry.

TAG made significant progress on a guideline that will explain the geotechnical information required to meet AOPA standards for groundwater protection, and how to collect the required information. Work was also begun on a guideline that will explain what parts of a facility are considered manure storage and manure collection areas, for permitting purposes.



Unauthorized construction

In 2016-17, a number of manure storage facilities and collection areas in Alberta were discovered to have been constructed or were in the process of being constructed without their required AOPA permit. The NRCB discussed the concern with the Policy Advisory Group. The NRCB policy was clarified and communicated to operators via its *Update* newsletter, an article for stakeholder publications, and information on the NRCB website. The NRCB has advised operators that unauthorized construction is a serious offence and, where warranted, they could face prosecution.

Large scale country residential

The Policy Advisory Group was also consulted on the development of policy to determine when a country residential development should be considered a large scale country residential development, for calculating the required minimum distance separation. AOPA specifies that the minimum distance separation for a large scale county residential development is twice the minimum distance separation of smaller country residential developments, but does not define the difference between the two types of development. These developments are also not defined in other legislation. A draft policy was developed and will be discussed with the Policy Advisory Group in 2017-18.

Other policy development

The NRCB consulted with Agriculture and Forestry and industry on the NRCB's guideline for distinguishing seasonal feeding and bedding facilities from confined feeding operations. A revised guideline will be finalized and released in 2017-18.

Policy was initiated for species that are becoming more common in Alberta's livestock industry: meat goats, sheep, and quail. A guideline for confirming the confined feeding operation status of a meat goat farm was completed and posted on the NRCB website. Initial work was also started on a guideline for pen floor maintenance. The guideline will explain what pen floor work is considered maintenance and does not require an AOPA permit, and what work on pen floors does require a permit.

The important interface of AOPA and the land use provisions in municipal development plans was highlighted in two board decisions issued during 2016-17. The NRCB developed a guide that will be shared with municipalities to help them ensure their land use provisions do not conflict with AOPA. A campaign to inform municipalities will take place in 2017-18.



Strategic priority 3. Risk based approach to regulating confined feeding operations: *Continue to use an environmental risk based approach for compliance activities at confined feeding operations and for reviewing permit applications for new or expanding operations.*

Strategy

Results achieved

Complete the design of and implement a program to review all water well monitoring conditions in *Agricultural Operation Practices Act* permits.

A risk screening tool for water wells was developed and implemented on a trial basis. A program to review water well monitoring requirements is now being developed and will be completed in 2017-18.

Use information on surface water conditions at confined feeding operations to inform policy development for permitting, and complaint response.

Surface water quality conditions at CFOs are documented by NRCB inspectors every time they conduct a site inspection and the findings are reported annually.

Continue to audit results from environmental risk screenings to maintain quality and ensure consistent risk determinations.

All results from environmental risk screenings conducted in 2016 were entered into the CFO database and audited for quality control. Upgrades to the database will continue to improve its reporting.

Continue upgrades to the confined feeding operation database to improve the efficiency of data entry and retrieval. Use quarterly exception reports to monitor the management and entry of compliance data.

In addition to improvements related to environmental risk screening data, new fields were added to provide more detailed reporting of permitting and compliance data.

Support efficiency of field work with clients by ensuring all field staff are provided with and trained in the use of current data management technology.

Staff received small group and individual training on the use of tablets and how to update the CFO database. Training will be continued in 2017-18.

Manure application on frozen or snow covered land

Manure application on frozen or snow covered land remained an important priority. Operators were reminded in the winter 2016-17 *Update* newsletter that AOPA requires them to obtain NRCB permission before spreading manure on frozen or snow covered land. The concern was discussed with the Policy Advisory Group. The Technical Advisory Group finalized a guideline for operators that defines the terms “frozen” and “snow covered” and explains how to test for these conditions. Further information is available to operators on the NRCB website.

Custom manure applicator liability

Custom manure applicator liability for manure spreading infractions under AOPA was also discussed with the Policy Advisory Group. The NRCB determined that contractors (as well as operators) are accountable for compliance with the act. Contractors can be subject to escalating enforcement action if they knowingly violate AOPA’s setbacks and its requirement for NRCB permission before applying manure to frozen or snow covered land. The AOPA requirements are in place to protect Alberta’s groundwater and surface water quality, and intentional violations are considered serious.

Custom manure applicator liability for manure spreading infractions was communicated to operators via the *Update* newsletter, and to custom manure applicators in a targeted campaign.

Environmental risk screenings—permit applications

When approval officers review a permit application, they use the NRCB’s environmental risk screening tool to evaluate risks to groundwater and surface water at the operation’s existing and proposed facilities. NRCB policy directs approval officers to include a condition in the permit, when required, to address the risk. For example, the permit may require the operator to install and maintain a leak detection system for the manure storage facility, and to report monitoring results at specified intervals, as deemed necessary by the approval officer.

If the proposed site is evaluated as moderate or high risk, the approval officer informs the applicant before making a decision on the application. This allows the applicant to revise their application if they choose to do so. Applicants may also decide to modify the site to address the risk.

In 2016-17, facilities at 125 confined feeding operations were screened for environmental risk as part of the review of a permit application. The number of facilities totalled 574. The majority were ranked low risk to groundwater (563 facilities) and low risk to surface water (554 facilities). Eleven facilities were ranked moderate risk to groundwater, and 19 were ranked moderate risk to surface water. One facility was ranked high risk to surface water.



Risk based compliance program

The risk based compliance program evaluated higher-risk facilities that were constructed before AOPA standards came into effect. These facilities were earthen manure storages, constructed before 2002 (pre-AOPA), and located in regions identified by Environment and Parks as a “high groundwater vulnerability areas.”

The program began in 2010 and concluded in 2016-17. Follow up will involve annual inspections of all sites that scored “high risk.” Their risk assessments will also be reviewed each year. In addition, inspectors will each reassess two sites per year that scored “moderate.” Each low risk site will be reassessed every four years.

Risk based compliance program as of 2016-17

Confined feeding operations (CFOs)	Number of CFOs identified at start of program in 2010	Number of CFOs identified as no longer operating or not meeting criteria	Number of CFOs screened since start of program
	172	89	170
Facilities ¹	Number of facilities ranked low risk to groundwater	Number of facilities ranked moderate risk to groundwater	Number of facilities ranked high risk to groundwater
	176	29	8

1. A confined feeding operation often has more than one facility.

Surface water inspection program

In 2016-17, surface water conditions were documented during site inspections of 185 CFOs (some CFOs had more than one inspection). Issues that required a compliance response were identified at 23 operations. Most involved manure run-off from the operation, and in each case the issue was preventable. All of the issues were remediated to the satisfaction of the NRCB. On the basis of the information gathered in 2016-17, the NRCB’s existing procedures are considered to be working well.

Surface water data for 2016-17

Number of inspection reports completed ¹	335
Number of CFOs where data was collected	185
Number of CFOs where surface water issues were identified	18
Number of CFOs with serious surface water issues requiring action	5

1. Reports completed by inspectors as part of a site inspection.



Core Business Two: Regulation under the *Agricultural Operation Practices Act*

Performance Measures and Results

Efficiency of permitting process	2014/15	2015/16	2016/17 ¹
Percentage of decisions issued within 65 working days from the date the application is determined to be complete	90%	93%	91.9%
Complaint resolution	2014/15	2015/16	2016/17 ²
Percentage of complaint files resolved or requiring no further action, within 90 days	99%	99%	99%

1. Twelve of 143 decisions required more than 65 working days to process.
 2. Three of 209 complaints exceeded 90 days.



Organizational Capacity

The NRCB's organizational capacity was enhanced through initiatives aimed at improving the management and security of records:

- Dayforce, a Ceridian application, was implemented to streamline and automate the management of employee absence requests and reporting, and earnings statements.
- Upgrades to the CFO database were made to improve its reporting capabilities. Ensuring the functionality and integrity of the CFO database is a priority for NRCB permitting and compliance records.
- The NRCB's Internet Technology (IT) Disaster Response Plan was implemented as a result of a malware attack in October 2016. No breach of information occurred. Third and fourth tier backups were put in place.
- A records management project was initiated to design a functions-based records system and to update the records retention and disposition schedule, in accordance with section 10 of Alberta's Records Management Regulation. An electronic information management system may be introduced at a future date.

The NRCB also continued to promote employee awareness about available human resource supports. Corporate Services staff visited every office in October 2016. At each session staff were reminded about the NRCB's benefit program and the free Employee Family Assistance Program. Articles and videos about healthy living were provided on the "A Better You" page of the NRCB's intranet site.

Video conferencing continued to be used when face to face meetings were not practical. Field staff received refresher training on the use of the environmental risk screening tool at a face to face meeting in January 2017. Training was also provided on biosecurity protocols, water well construction, and concrete sealing. In addition to ongoing training on use of the CFO database, staff were also trained on how to use field tablets, and how to update the CFO database from the field. Individual follow up training is being provided for use of the tool and tablet. Approval officers were brought together to discuss policy topics and review draft policies at three separate meetings, and all staff and board members were brought together in September 2016 for long service awards and a full day workshop on difficult conversations.

The NRCB also updated its risk matrix and initiated development of an environmental emergency response plan.

Staff changes:

- Anne Kelly, Administrative Assistant, Edmonton - retired January 27, 2017
- Donna Tingley, Board Member - retired April 28, 2016
- Jay Nagendran, Board Member - resigned March 31, 2017
- Joe Sonnenberg, Approval Officer, Lethbridge - joined the NRCB on November 7, 2016
- Judy Ireland, Field Office Administrator, Red Deer - retired August 12, 2016
- Nathan Shirley, Approval Officer, Morinville - joined the NRCB on May 30, 2016
- Suzanne Leshchyshyn, Field Office Administrator, Red Deer - joined the NRCB on June 22, 2016



Organizational Capacity

Performance Measures and Results

NRCB employee satisfaction		Result achieved		
Target: 75%		2014/15	2015/16	2016/17 ¹
Per cent of staff who express satisfaction on survey results		80%	Not available	83%

NRCB employees have appropriate training		Result achieved		
Target: 90%		2014/15	2015/16	2016/17
Per cent of staff who participate in training programs ²		74%	73%	79%

1. 2016/17 result is based on the staff survey question: "Overall, I am satisfied with my work as an employee of the NRCB." The staff survey was not run in 2015-16. The question was included in the 2014/15 staff survey. Board staff do not participate in the survey.
2. Reflects participation in external training.

Statement of Disclosures Under the Public Interest (Whistleblower Protection) Act

Policy and procedures for disclosures under the *Public Interest (Whistleblower Protection) Act* (PIDA) were developed in 2014 and communicated to staff in January 2015. The policy and procedures, and accompanying form, are posted for staff access on the internal intranet site.

No disclosures were initiated in 2016-17.



Where We Were

Communicating with stakeholders is a priority for the Natural Resources Conservation Board. In 2016-17, staff and board members participated in the following meetings, trade shows, and conferences to provide information about board programs, policies, and processes. These meetings are in addition to regularly scheduled, ongoing meetings with Agriculture and Forestry on policy and technical topics.

Municipalities

- Wheatland County, Strathmore, April 7, 2016
- Lethbridge County, Lethbridge, June 1, 2016
- Municipal District of Foothills No. 31, High River, June 1, 2016
- County of Grande Prairie No. 1, Grande Prairie, June 8, 2016
- Clear Hills County, Worsley, June 14, 2016
- Municipal District of Fairview No. 136, Fairview, June 14, 2016
- Parkland Airshed Management Zone (PAMZ), Innisfail, June 22, 2016
- Wheatland County, Strathmore, June 30, 2016
- Municipal District of Willow Creek No. 26, Claresholm, July 8, 2016
- Mountain View County, Didsbury, July 22, 2016
- Vulcan County, Vulcan, August 16, 2016
- Municipal District of Foothills No. 31, High River, September 28, 2016
- Town of Pincher Creek, Pincher Creek, October 13, 2016
- Vulcan County, Vulcan, October 19, 2016
- Wheatland County, Strathmore, November 8, 2016
- Vulcan County, Vulcan, November 22, 2016
- Red Deer County, Red Deer, December 19, 2016
- Ponoka County, Ponoka, March 21, 2017

Other Government

- Canadian Environmental Assessment Agency; Alberta Utilities Commission; Environment and Parks, Edmonton, April 4, 2016
- Alberta Innovates (biogas committee), Edmonton, April 21, June 10 & December 9, 2016; January 24 & February 14, 2017
- Alberta Transportation, Edmonton, June 17, 2016
- Environment and Parks, Water Team, Red Deer, July 29, 2016
- Canadian Environmental Assessment Agency; Environment and Parks, Edmonton, August 22, 2016
- Town of Canmore, Edmonton, October 24, 2016
- Agriculture and Forestry, Inspection & Investigation Section, Animal Health & Assurance Branch, Olds, October 27, 2016; Red Deer, January 10, 2017
- Paul First Nation, Edmonton, October 25, 2016
- Environment and Parks, Crown/Regulators, Edmonton, November 8, 2016
- Agriculture and Forestry, Dairy Farm and Processing, Morinville, December 13, 2016
- Cross Ministry Water for Life Committee, Edmonton, 2016-17 monthly

Industry Meetings & Events

- Alberta Pork Regional Producer Meeting, Grande Prairie, June 2, 2016
- Grow Tech, Edmonton, June 10, 2016
- Alberta Beef Producers Semi-Annual Meeting, Edmonton, June 14, 2016



- Calgary Stampede, Calgary, July 9-16, 2016 (tradeshow booth)
- Intensive Livestock Working Group (ILWG), Edmonton, September 19, 2016
- Environmental Law Centre, Green Regs & Ham, Edmonton, October 5, 2016 (presentation)
- Alberta Livestock and Meat Association (ALMA), Edmonton, October 13, 2016
- Policy Advisory Group, Nisku, October 27, 2016
- Agritrade, Red Deer, November 9-12, 2016 (tradeshow booth)
- Alberta Association of Municipal Districts and Counties, fall convention, November 14 & 17, 2016
- Alberta Milk Industry Conference, Calgary, November 22-23, 2016
- Alberta Beef Producers Annual General Meeting, Calgary, December 6, 2016
- Trace Associates (geotechnical), Morinville, December 16, 2016
- Alberta Beef Industry Conference, Red Deer, February 16, 2017
- Alberta Cattle Feeders' Association, Edmonton, February 21, 2017
- Alberta Poultry Annual General Meeting, Red Deer, February 28, 2017 (tradeshow booth)
- Ag Expo, Lethbridge, February 28, March 1-2, 2017 (tradeshow booth)
- Intensive Livestock Working Group, Edmonton, March 8, 2017

Front row, L to R: Randy Bjorklund, Kai Ma, Kari Lisowski, Anne Kelly, Amanda Cundliffe, Linda Brazel, Ashleen Dwivedi, Suzanne Leshchyshyn, Carolyn Taylor, Laura Friend, Jean Olynyk, Kevin Seward, Sylvia Kaminski, Nora Decosemo, Mike Wenig, Ben Hsu, Stephanie Fleck **Back row, L to R:** Glenn Selland, Denny Puszkas, Vern Hartwell, Scott Cunningham, Andy Cumming, Walter Ceroici, Tim Shum, Francisco Echegaray, Nathan Shirley, Jason Moodie, Tim Jespersen, Mike Iwanyshyn, Karl Ivarson, Jeff Froese, Karen Stewart, Carina Weisbach, Jay Nagendran, Peter Woloshyn

Photo credits

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Copies of the *Agricultural Operation Practices Act* and the *Natural Resources Conservation Board Act* can be obtained from the Queen's Printer at www.qp.gov.ab.ca or through the NRCB website.

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ISBN 978-1-4601-3499-3 (print)
ISBN 978-1-4601-3500-6 (PDF)
ISSN 2369-4483 (print)
ISSN 2369-4491 (online)