





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 Agricultutal Operation Practices Act (AOPA) 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 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 2017-18 financial reports of the Natural Resources Conservation Board are provided in the annual report issued by Environment and Parks.



Message from the Chair

I am honoured to have been appointed Board chair. I assumed this position in December 2017 following more than 10 years with the NRCB as chief executive officer. It was a privilege to work closely with the NRCB's talented and highly professional staff on its operations side, and I am very proud of our accomplishments: an impressive body of policy to guide the administration of AOPA, development and implementation of the risk based compliance program and environmental risk screening tool, and ongoing, important work with all of the NRCB's AOPA stakeholders—to name just a few.

When I joined the NRCB in the spring of 2006, AOPA was still a relatively new piece of legislation and the NRCB's mandate under AOPA was also still fresh. Policy and processes were still being worked out, and both industry and municipal stakeholders were questioning our ability to deliver the legislation fairly and with accountability. A turning point was the establishment of the Policy Advisory Group (PAG), a multi-stakeholder advisory body co-chaired by Agriculture and Forestry and the NRCB. Over the years PAG has provided sound advice and been an invaluable resource for the NRCB.

As Board chair I am looking forward to leading the NRCB from a new perspective and with an essentially new Board. Members Page Stuart and Michele Annich were both also appointed within the past year, and bring their experience and expertise, in agriculture and administrative law,

respectively, to their work on AOPA review panels and project reviews under the NRCBA. Three acting Board members were also appointed to provide additional panel expertise when required.

Since my appointment, the NRCB has been ably led by Walter Ceroici as acting chief executive officer. I appreciate his willingness to step into this interim role while continuing his work as director of our Science and Technology division. Walter's leadership has ensured a smooth transition for the NRCB despite numerous changes in staffing, and increased workloads.

In 2017-18 the Board issued written reasons to grant or deny a review of nine approval officer decisions, and conducted formal reviews of three approval officer decisions. The Board also participated in setting the terms of reference for two major project reviews under the NRCBA, and assisted with supplemental information requests for both projects. The Board will conduct comprehensive public review processes when the applications are complete. With these NRCBA project applications and six others on the horizon, I anticipate a very busy year—and years—to come. I look forward to these challenges, and to continuing to work with an exceptionally fine team.

Peter Woloshyn, Board Chair

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As acting chief executive officer since January 2018, I would like to thank the staff and Board of the NRCB for their support and for ensuring that the work of the NRCB continues to meet the highest possible standards. Despite the volume of work across the organization, timelines continue to be met, and the quality of work remains high.

Several retirements and departures in 2017-18 meant the loss of a number of seasoned staff who were important members of our team. We were fortunate to fill their positions with well qualified new staff who are already carrying a full load. The changes include the December 2017 appointment of our former chief executive officer, Peter Woloshyn, to the position of Board chair. Peter led the NRCB through a period of transition to its current status as a mature and well-honed organization. I speak for all of us when I thank him for his leadership, and wish him every success in his new position.

Despite a continued increase in permit applications in the past year, NRCB approval officers not only met but exceeded performance targets for processing the majority of applications. NRCB inspectors responded to a large volume of complaints related to unusual weather: a hot, dry summer that resulted in dust issues, and a long, cold winter with frequent snowfalls that created manure storage issues for farmers and runoff issues in the spring. Unauthorized construction continued to be a concern and required considerable response time by inspectors.

Under the NRCBA, the Science and Technology division provided support to the Board for the proposed Cougar Creek, Springbank, and Special Areas Water Supply projects. Division staff also provided technical support to field staff on a wide range of compliance and permitting issues.

Operational policy remained an important priority. It will continue to be an important focus to ensure a clear basis for NRCB response under AOPA to changes in weather patterns and Alberta's agricultural landscape. I look forward to working with NRCB staff and stakeholders on these issues, and to another productive year.

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Walter Ceroici, Acting Chief Executive Officer



Strategic Priorities

The NRCB's four strategic priorities for 2017-18, as identified in its business plan, are:

- 1. Consult with government and stakeholders to develop operational policy and technical guidelines that support delivery of AOPA. In 2017-18, special attention will be given to informing municipalities about the requirements of AOPA and how these requirements affect municipal land use planning.
- 2. Use an environmental risk based approach for compliance activities and for reviewing permit applications for new or expanding operations.
- 3. Support priority cross-government initiatives, ensuring consistency of NRCB-issued decisions with completed regional land use plans. In 2017-18, the NRCB will continue to participate in a cross-government initiative that is examining the potential for a streamlined regulatory process for biodigesters that use manure-based feedstock.
- 4. Complete the update of board regulations and information documents.



Board

Peter Woloshyn was appointed Board chair on December 21, 2017, replacing Vern Hartwell, whose appointment expired in December 2017.

Peter led the NRCB's operations and corporate divisions from May 2006 until December 2017. As chief executive officer he also ensured the development of operational policy in consultation with the Policy Advisory Group to support the NRCB's delivery of the *Agricultural Operation Practices Act*, and contributed under the *Natural Resources Conservation Board Act* to technical reviews of natural resource project applications. Peter oversaw the expansion of the NRCB's regulatory mandate to include biodigesters that use a manure-based feedstock, and is a community advisor board member of the Alberta Land Institute, University of Alberta. Peter also brings 22 years of prior experience with Agriculture and Forestry in economic analysis, resource use, and work in crop insurance and reinsurance with Agriculture Financial Services Corporation.

Board member Glenn Selland completed his contract with the NRCB in August 2017. Page Stuart and Michele Annich were appointed Board members in June and August 2017, respectively.

Page Stuart is a Professional Agrologist and holds an Executive Masters of Business Administration. Page has

more than 20 years' experience in the intensive livestock industry, including agricultural sustainability, operations management, and managing a large cattle feedlot through significant value-added growth. Most recently, Page has held positions as chair of the Alberta Cattle Feeders' Association and as inaugural co-chair of the AgCoalition, an unprecedented collaboration of agricultural producer groups in Alberta. Having started her career in environmental research, Page has a particular interest in furthering agricultural sustainability, farm safety, and policy development and has served in multiple provincial and federal initiatives. She currently volunteers as a member of the Lakeland College Capital Campaign Cabinet.

Michele Annich has 30 years of experience in aboriginal, municipal, and administrative law. Michele has represented Canada at the Supreme Court on aboriginal consultation matters, the nature and scope of treaty rights, and fiduciary duties. In private practice she dealt with many municipal development and planning issues. Michele was a full-time hearing chair for nearly five years with the Appeals Commission for Alberta Workers Compensation. She has taught municipal and administrative law to municipal administrators in the Northwest Territories and Nunavut, is an active community volunteer, and is presently chair of the Board of Directors of the Family Centre of Northern Alberta.

Board Activity

Agricultural Operation Practices Act

In 2017-18 the Board received requests to review nine approval officer decisions and reviewed three decisions. Two reviews were written hearings. One was an in-person (oral) hearing.

Each of the three reviews addressed permit denials based on the applications' inconsistency with the land use provisions of the counties' municipal development plans. The *Agricultural Operation Practices Act* requires approval officers to deny permit applications that are inconsistent with the land use provisions of the municipal development plan, but allows the Board discretion to determine whether a permit should be issued.

- Hutterian Brethren of Bear Canyon—Board Decision 2017-05 / FA14003 was issued May 3, 2017 following a written hearing. The Board overturned the approval officer's decision and directed the approval officer to issue the permit.
- Danny Friesen and Tara Warkentin—Board Decision 2017-08 / FA17001 was issued August 14, 2017 following a written hearing. The Board overturned the approval officer's decision and directed the approval officer to issue the permit.
- Milk & Honey Dairy Inc.—Board Decision 2018-04 / RA17042 was issued March 7, 2018, following an oral hearing. The Board upheld the approval officer's decision to deny the permit application.

All decisions issued by the Board are publicly available on the NRCB website.

Natural Resources Conservation Board Act

In accordance with the *Natural Resources Conservation Board Act*, projects that are directed by Alberta Environment and Parks to submit an environmental impact assessment are subject to a review by the Board to determine if the projects are in the public interest.

The Board's public interest review process begins when an application has been reviewed by Alberta Environment and Parks and the Board, and the applicant has addressed any deficiencies. The timeframe for commencing the Board's public interest review depends on the time required to review the application and the time required by the applicant to respond to any deficiencies.

Active files—applications for the following proposed projects have been submitted to the Board:

- Cougar Creek Debris Flood Retention Structure application to construct a debris flood retention structure and access road on Cougar Creek, near Canmore. The town of Canmore filed its formal application to the Board on August 19, 2016.
- Springbank Off-Stream Reservoir Project—application to construct a dry dam to temporarily store water from the Elbow River during a flood. Alberta Transportation filed its formal application to the Board on November 3, 2017.

Pending projects—the following project applicants have been directed by Alberta Environment and Parks to prepare environmental impact assessments. The formal applications have not yet been submitted to the Board:

- AHP Development Corporation: Amisk Hydroelectric Project
- Alberta Transportation: Special Areas Water Supply Project
- Cyclus Power Inc.: Cavus Pump Storage Generation Project
- Innergex Renewable Energy Inc.: Sundog Hydroelectric Project & Pelican Hydroelectric Project
- Stone Creek Resorts Inc.: Stone Creek Gondola Project
- TransAlta Corporation: Brazeau Pumped Storage Hydro Expansion Project





Performance

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

Strategic priority: 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.

Results achieved

Regulation update—the Agricultural Operation Practices Act Administrative Procedures Regulation became effective June 13, 2017, replacing the 2002 Board Administrative Procedures Regulation. The updated regulation clarifies the language of the previous regulation, provides for appeals of a permit cancellation and of a grandfathering determination, establishes processes for the appeals,

and establishes a 10 working day request for review (RFR) deadline for enforcement orders (or longer if specified by the inspector). Previously, the only recourse to appeal a permit cancellation or a grandfathering determination was to request a judicial review. The new regulation therefore makes appeal processes more accessible to Albertans.

Additional priorities:

Strategy

Proactively provide opportunities for all participants to understand Natural Resources Conservation Board Act and Agricultural Operation Practices Act 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

Information requests—Board staff responded to numerous information requests regarding the Board's public interest review processes under the Natural Resources Conservation Board Act and under the Agricultural Operation Practices Act. The Board Review Process Guide was updated for

natural resource project reviews and a fact sheet was produced on the Board review process under the *Agricultural Operation Practices Act.* NRCB staff participated in four public information sessions on the proposed Springbank Off-Stream Reservoir project to explain the NRCB review process.

Identification of critical issues—the NRCB reviewed the environmental impact assessments for the Cougar Creek Debris Flood Retention Structure and Springbank Off-Stream Reservoir project applications. It contributed to two rounds of supplementary information requests in October 2017 and March 2018 for the Cougar Creek project and reviewed the applicant's

responses to ensure that critical information is addressed in the final application. The NRCB also provided "priority" questions to Alberta Environment and Parks and Alberta Transportation for the Springbank Off-Stream Reservoir project, and reviewed the terms of reference for the Special Areas Water Supply project in central Alberta.

Performance measures and results

Efficiency of review processes

Percentage of Natural Resources Conservation Board decisions issued within 80 working days of the conclusion of reviews under the *Natural Resources*Conservation Board Act

2015/16	2016/17	2017/18	
Not available - no NRCBA	Not available - no NRCBA	Not available - no NRCBA	
reviews completed	reviews completed	reviews completed	

Efficiency of review processes

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

2015/16	2016/17	2017/18	
Not available - no AOPA reviews or hearings	100% 6 AOPA reviews and 2 AOPA hearings	100% 9 AOPA reviews and 3 AOPA hearings	

^{*&}quot;Hearing" means an oral or written board deliberation. "Reviews" are written decisions that grant or deny a request for review.

Field Operations

2017-18 was a challenging year for NRCB field staff due to extreme weather conditions. Dry conditions in the central and south areas of the province created challenging dust issues for a number of cattle feeding operations. Cold temperatures and frequent snow storms in the winter of 2017-18 resulted in atypical snow accumulation. The amount of snow, combined with a rapid spring melt, resulted in flooding and runoff challenges for operators in many parts of Alberta.

Field processes remained focused on mitigation of environmental risk at confined feeding operations. The NRCB risk screening tool continued to be used for reviewing permit applications and compliance response. Operational policy development also remained a priority focus. Communication with operators on unauthorized construction and manure application on frozen or snow-covered ground were also key priorities.

Surface water

Inspectors continued to collect information on surface water conditions at confined feeding operations during their inspections. Four hundred and thirty four inspections

were conducted at 230 confined feeding operations in 2017 (multiple inspections were conducted at some operations). The majority of inspections were conducted at dairy, feedlot, and swine operations. Inspectors documented surface water issues at 23 operations. Of those, serious issues were identified at four operations. (A serious surface water issue involves manure contaminated water runoff from an operation flowing into a surface water body.)

Inspectors concluded that all of the surface water issues identified were preventable. In all of the cases, the operator addressed the surface water issues to the satisfaction of the NRCB. Causes of surface water issues included:

- poorly constructed runoff/run-on systems
- poorly maintained manure storage facilities
- poorly located seasonal feeding and bedding sites
- non-compliance with AOPA manure spreading setbacks
- runoff from manure spreading activities

The unusually dry summer of 2017 meant that the NRCB received relatively few complaints about surface water, especially in the southern part of the province.



Unauthorized construction is a serious violation of the permitting requirements of the *Agricultural Operation Practices Act*. The NRCB received fewer reports of unauthorized construction in 2017-18; however, the number of incidents remained a concern. Violations were brought to NRCB attention via the complaint process or by operator self-reporting. Prosecution of operators who knowingly construct without a permit remains a potential enforcement tool.

The NRCB addressed unauthorized construction at 14 operations. Compliance directives were issued to seven operators, requiring them to cease construction and to apply for and obtain a permit. Appropriate enforcement action was taken with the other operations according to the NRCB's enforcement ladder, taking into consideration the stage of construction and the cooperation of the operator. As of March 31, 2018, the majority of the operators had complied with NRCB requirements. One permit application remained in process.

Environmental risks screenings

Approval officers continued to use the environmental risk screening tool during the confined feeding operation application review process to assess the risk to groundwater and surface water. The tool was also used by NRCB inspectors to respond to complaints, and for annual follow-up on operations that were identified under the NRCB's risk-based compliance program.

New and updated operational policies

New policy:

 Large Scale Country Residential Developments (for Determining Minimum Distance Separation)

Updated to be consistent with the revised AOPA Board Administrative Procedures Regulation:

- Approval Officer Amendments Under Section 23 of AOPA
- Permit Cancellations Under AOPA Section 29
- Public Notice for Grandfathering Decisions

Policies that will be finalized in 2018-19:

- NRCB biosecurity protocol (update)
- Risk Based Compliance Program Follow-up (update)
- Response protocol for manure spills (includes coordination with the Alberta Support and Emergency Response Team (ASERT) for large-scale releases)

New and updated fact sheets

- · Applying Manure on Frozen or Snow Covered Land
- Dust Control
- Permits under AOPA—Information for CFO Operators
- The Permitting Process for Confined Feeding Operations in Alberta
- Unauthorized Construction under the Agricultural Operation Practices Act

All operational policies and fact sheets are publicly available on the NRCB website.

Environmental Risk Screenings, 2017-181 Number of facilities ranked Number of facilities ranked Number of facilities ranked high potential risk Groundwater low potential risk moderate potential risk 528 19 2 Number of facilities ranked Number of facilities ranked Number of facilities ranked **Surface** low potential risk moderate potential risk high potential risk water 3 531 15

^{1.} Environmental risk screenings are completed as part of the review of every application received, as well as for risk based compliance program follow up and enforcement, as required. In 2017-18, a total of 549 facilities were assessed, involving 136 confined feeding operations.

Permits

In 2017-18, the total number of completed part 2 applications submitted to the NRCB remained consistent with the previous year. However, the number of permitting decisions issued by the NRCB increased as a result of applications that were carried over from 2016-17 into the new fiscal year.

The average number of days to issue a decision declined slightly. (Days to issue a decision are measured in the

number of working days from the point at which a part 2 application is deemed to be technically complete to the date the decision is issued.)

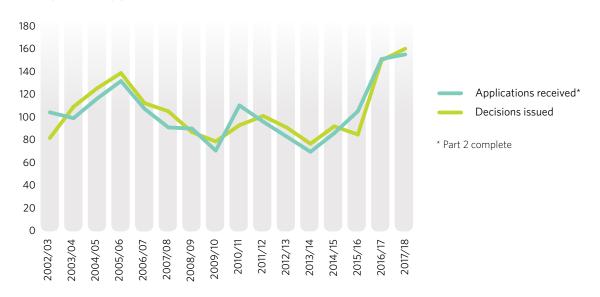
The majority of applications were submitted from operators in the central and southern regions of the province. Most applications were from the dairy sector, followed by the poultry and cattle sectors.

Completed applications received and decisions issued, by region, 2017-18¹

Region	Complet	ted applications	received	Decisions issued		
Region	Approvals	Registrations	Authorizations	Approvals	Registrations	Authorizations
Peace	2	0	1	3	2	2
North Central	7	3	8	8	3	5
Central	26	13	32	28	16	33
Southern	39	3	14	34	4	19
Total	74	19	55	73	25	59

^{1.} Based on part 2 applications, deemed complete. Approvals are permits for larger operations. Registrations are permits for smaller operations. Authorizations are permits for manure storage facilities where there is no change in livestock numbers. Decisions issued include denials, which included one approval application and three registration applications.

Completed applications received and decisions issued





Completed applications received and decisions issued, by livestock category, 2017-18¹

Livestock	Completed applications received		Decisions issued			
category	Approvals	Registrations	Authorizations	Approvals	Registrations	Authorizations
Cattle	21	2	9	21	2	2
Dairy	22	4	30	20	5	31
Other ²	3	0	2	2	0	2
Poultry	27	11	7	25	11	8
Swine	3	0	7	5	0	9

Applications received are based on part 2 applications, deemed complete. If an application is for more than one livestock category, it is listed under each applicable livestock category and is counted in each category.
 Includes bison, goats, horses, sheep, and stand-alone manure storage facilities.

Average number of days to decision¹

	2017/18
Approvals	45.4 (73 decisions)
Registrations	40.4 (25 decisions)
Authorizations	34.6 (59 decisions)

^{1.} From the date the part 2 application is technically complete.



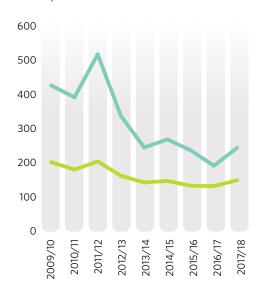


Complaints

In 2017-18 the NRCB received 258 complaints about 156 operations, compared with 189 complaints about 130 operations the previous year. The increase can partly be attributed to unusual weather patterns in several parts of the province. Dust was an issue in southern Alberta in the summer of 2017 due to hot, dry, windy conditions. The winter of 2017-18 brought heavy snow fall to parts of

the province and was followed by a late spring, making it challenging for some operators to empty their manure storage facilities. In these cases the operators were forced to winter spread, which resulted in non-compliance complaints about spreading on frozen or snow covered land. Finally, concerns regarding unauthorized construction also contributed to the number of non-compliance complaints.

Complaints received





No. of operations involved in a complaint

Complaints received 2017-18¹

Total complaints received	258
Number of operations complained about	156

1. Does not include operator self-reports and requests for permission to spread manure on frozen or snow covered land.

Number of operations involved in complaints by region, 2017-18

Peace	North Central	Central	Southern
4	29	66	56

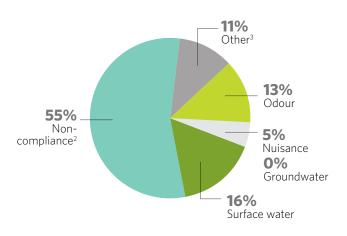
Number of operations¹ involved in complaints by livestock category, 2017-18

Cattle	Cow/calf ²	Dairy	Mixed	Other ³	Poultry	Swine
47	16	26	23	16	10	26

- An operation may be counted in more than one category.
- 2. Cow/calf do not require a permit under the Agricultural Óperation Practices Act but must comply with the manure management requirements of the act.
- 3. Includes bison, goats, horses, and sheep.



Types of complaints received by number of operations, 12017-18





- 1. An operation may be counted in more than category.
- Non-compliance includes setbacks for manure spreading and stockpiling, unauthorized construction, and non-compliance with permit conditions.
- 3. Other includes dead animal disposal, animal welfare and issues that do not fall under the *Agricultural Operation Practices Act*.

Enforcement

Due to frequent snowfalls and unusually cold temperatures in the winter of 2017-18, more feedlot operators than usual ran into difficulties with snow accumulation in their pens. The NRCB received 61 requests from operators (at 51 confined feeding operations) for permission to spread manure on frozen or snow covered land. The *Agricultural Operation Practices Act* prohibits spreading manure on frozen or snow covered land without prior permission from the NRCB. Field staff worked with the operators to ensure that manure removed from the pens was managed in an environmentally responsible manner.

Dairy and hog operators empty their liquid manure storage lagoons each fall to ensure they have capacity for the winter. Because of the exceptionally long winter in 2017/18, some operators were not able to spread manure from their lagoons in the spring and therefore had no remaining storage capacity. In these cases, the NRCB allowed the operators to land spread the lagoon contents on frozen or snow covered land with strict requirements in order to minimize any possible environmental risk.

Compliance orders issued 2017-18						
Enforcement orders	1					
Emergency orders	0					
Compliance directives	10					

The one enforcement order issued in 2017-18 was for a liquid manure storage facility that overflowed. The operator was ordered to clean up the spill and lower the level of the lagoon contents to maintain the half metre freeboard required by the Standards and Administration Regulation.

Seven of the compliance directives were issued by the NRCB for unauthorized construction. Two of the directives were for non-compliance for using their newly constructed manure storage before providing the engineers' inspection report to the NRCB. Both operations were required to stop using their facility until the engineering report was provided. One of the 10 operations had more livestock than its permit allowed. The directive required the operator to apply for and obtain a permit for the increased number of livestock, within a specified deadline.

Performance

Core Business Two: Regulation under the Agricultural Operation Practices Act

Strategic priority:

Consult with government and stakeholders to develop operational policy and technical guidelines that support delivery of AOPA. In 2017-18, special attention will be given to informing municipalities about the requirements of AOPA and how these requirements affect municipal land use planning.

Strategies

Through workshops and one on one meetings, ensure municipalities are aware of AOPA's permitting requirements and understand how the requirements affect the NRCB's decision making process with respect to municipal land use plans. In addition, meet with specific municipalities about the potential to amend certain municipal permit conditions [in permits issued by the municipalities for confined feeding operations before 2002].

Continue to develop operational policies in consultation with the Policy Advisory Group.

Continue to prioritize communication and enforcement action on issues involving unauthorized construction and the application of manure on frozen or snow covered land.

Results achieved

Meetings with municipalities—the NRCB met with five municipalities in 2017-18 to explain the requirements of AOPA and how municipalities can ensure land use objectives in their municipal development plans are consistent with the Agricultural

Operation Practices Act and NRCB operational policies, and can be considered in permit decisions. Meetings were also held with the Alberta Association of Municipal Districts and Counties (now the Rural Municipalities of Alberta).

Consultation on operational policy the NRCB continued to co-chair the Policy Advisory Group, which met on October 25, 2017 in Calgary. The NRCB consulted with the members on minimum distance separation for large scale country residential

developments, permit thresholds for liquid manure storage facilities, unauthorized construction, and dust control at feedlots. The members also discussed a framework for consistent interpretation of land use provisions in municipal development plans as they apply to permitting decisions.

Unauthorized construction communication and enforcementall livestock industry associations were provided with information about unauthorized construction to disseminate to their members through their newsletters. Information was also published in February 2017 in the NRCB newsletter Update. The newsletter was mailed directly to operators and posted on the NRCB

website. A fact sheet on unauthorized construction was available for operators at trade shows attended by NRCB personnel throughout the year. In addition, an acknowledgement letter sent to operators who have submitted a part 1 application was updated to emphasize that the Agricultural Operation Practices Act does not allow construction to commence until a permit has been issued.





Strategic priority:

Use an environmental risk based approach for compliance activities and for reviewing permit applications for new or expanding operations.

Strategies

Continue to support other provincial ministries and agencies studying the potential effects of manure collection and storage facilities on groundwater quality, and use the results for ongoing improvements to the NRCB's risk screening model.

Implement a program to review water well monitoring conditions in AOPA permits.

Continue to use information about surface water conditions at confined feeding operations to inform policy for permitting and complaint response.

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

Results achieved

Manure impact study—the NRCB continued its involvement with Agriculture and Forestry's five-year study on the impact on groundwater quality of manure storage and collection facilities and manure spreading. The study is scheduled

to be completed in 2018. The NRCB continues to apply information gained from the study to its approach to assessing environmental risks at confined feeding operations, and to inform its operational policy.

Water well monitoring conditions a comprehensive program to review all water well monitoring conditions in operator permits was deferred in favour of the NRCB's ongoing use of the water well screening tool for applications and compliance. The screening tool enables field staff to determine if a water well setback exemption from a manure storage facility is appropriate, or if water well monitoring conditions are necessary. Inspectors use the tool as required to respond to compliance issues.

Surface water—in 2017 NRCB inspectors completed 434 surface water site inspections at 230 confined feeding operations (some operations had multiple inspections completed). Surface water issues were identified at 23 of the operations. All of the

surface water issues identified were appropriately mitigated by operators to the satisfaction of the NRCB. Information from the inspections was used to upgrade several NRCB policies, including the Implementation Plan for Surface Water Data Collection.

Environmental risk screenings—The environmental risk screening results were audited in accordance with NRCB procedures. The audit identified some discrepancies in scoring that have

since been corrected. Approval officers were given additional training on how to enter the scoring results in the database.



Strategic priority:

Support priority cross-government initiatives, ensuring consistency of NRCB-issued decisions with completed regional land use plans. In 2017-18, the NRCB will continue to participate in a cross-government initiative that is examining the potential for a streamlined regulatory process for biodigesters that use manure-based feedstock.

Strategy

Results achieved

Consistency with completed regional land-use plans—all confined feeding operation permit applications are reviewed to determine if they are consistent with completed regional land use plans. In addition, all

applications are reviewed to ensure they are consistent with the land use provisions in municipal development plans, as required by the Agricultural Operation Practices Act.

Other priority cross-government initiatives—in 2017-18 NRCB staff continued to contribute their expertise to numerous cross-ministry initiatives, including providing technical advice on an Alberta Water Council report to improve lake watershed management; monthly participation

in Water for Life meetings; technical advice for the Surface Water Load Management Policy; member of the Bow River Phosphorus Management Plan committee; and participation in technical meetings for Agriculture and Forestry's Phosphorus Strategy.

Continue to work with Environment and Parks, Agriculture and Forestry, and the biogas industry to identify opportunities to streamline the regulation of manure-based biogas facilities.

Joint regulatory process for biodigesters—in 2017-18, the NRCB participated in discussions with Alberta Environment and Parks and Agriculture and Forestry on improved coordination of the regulatory process for biodigesters that use manurebased feedstock. These discussions built on the existing memorandum

of understanding between both ministries and the NRCB. The NRCB currently regulates manure storage and spreading for two biodigester facilities and is consulting with both ministries to clarify regulatory requirements for other proposed manure-based biodigester facilities.



Additional priorities:

Strategies

Review and update permit application forms and guides to improve the completeness of submitted applications. Evaluate and as appropriate revise permit decision document templates.

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 applications and compliance data.

Continue to work with the Technical Advisory Group to develop guidelines that support the delivery of AOPA.

Results achieved

Forms and guides—the part 1 and part 2 permit application forms were updated and simplified based on feedback from approval officers and applicants. The updated forms will

be easier for applicants to complete and will support more efficient processes and timelines. Guides to the application process were updated to reflect the new forms.

Database efficiencies—the NRCB continuously refines its confined feeding operation database to improve the efficiency of data entry and retrieval. In 2017-18, the steps required to enter a new confined

feeding operation into the database were simplified and streamlined. The database was also modified to accommodate new statistical reporting.

Guidelines—the Technical Advisory Group completed a technical guideline listing, reviewed previously issued guidelines, and continued developmental work on guidelines for geotechnical assessments, manure storage figures, and manure incorporation and manure injection.

Performance measures and results

Efficiency of permitting process

Percentage of decisions issued within 65 working days from the date the application is determined to be complete

2015/16	2016/17 ¹	2017/18
93%	92%	94%

Complaint resolution

Percentage of complaint files resolved or requiring no further action, within 90 days

2015/16	2016/17 ²	2017/18
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 takes pride in the exceptional quality of work that its staff delivers on an ongoing basis. The NRCB is committed to providing a work environment that supports this level of performance through internal and external training, continuous improvements to electronic systems, IT and records, and personal and wellness supports.

In addition, the NRCB takes pride in its fiscal accountability. In 2017-18 it once again achieved a clean financial audit from the Auditor General (no issues were identified).

The following initiatives were undertaken or completed in 2017-18:

- Information technology (IT)—a fourth tier backup
 was added and a restore from the third tier backup was
 successfully tested as part of the NRCB's IT disaster
 recovery plan. In addition, the servers in Edmonton,
 Calgary, Lethbridge, and Red Deer were replaced as part
 of a major system upgrade.
- Training—in addition to external professional development and training required for professional certification, staff were provided with internal training on biosecurity, use of roller compacted concrete for liners, and the use of drones in environmental assessments.
- CFO database upgrades—the database was upgraded to better support how CFO information is collected, stored, and used for permitting and compliance activities. Changes improved data entry and reporting for the surface water program, leak detection monitoring and the environmental risk screening tool.
- Vehicles—field staff continue to be provided with NRCB-leased vehicles to ensure they have safe transportation suitable for rural and farm roads, and for transporting biosecurity clothing and field equipment. In 2017-18, staff travelled 312,070 kilometres to respond to complaints and for permitting activities.
- Records management—a draft records retention and disposition schedule was developed. The schedule will be completed in 2018-19 and submitted for review to the Records Management Committee.

- Personal and wellness supports—corporate services staff met face to face with all employees to review benefits and key policies. Wellness information is provided on the Intranet site for staff access. Private meetings with Clearpoint Retirement Solutions continue to be provided annually for all staff to assist with personal financial planning.
- Policies—policies on the personal use of social media and NRCB electronic systems were developed and will be finalized in 2018-19. A media policy for operations staff was updated. The NRCB's code of conduct was substantially updated to reflect the recently enacted Conflicts of Interest Act. The draft code of conduct will be reviewed by the Office of the Ethics Commissioner in 2018-19.
- Scientific and technical support to the Board and operations—the NRCB's Science and Technology staff provided support for approval officers and inspectors by assisting with environmental risk assessments at confined feeding operations and the interpretation of results. They also continued to contribute to Agriculture and Forestry's manure impact study on groundwater and surface water, co-chaired the Technical Advisory Group, and participated in the review and development of technical guidelines. Science and Technology staff also provided support under the Natural Resources Conservation Board Act for the terms of reference and technical review of environmental impact assessments for the active Cougar Creek and Springbank applications and the pending Special Areas Water Supply Project.
- Stakeholder education and awareness—the NRCB completed a request for proposal for a new website and selected a new vendor. The site is scheduled to be completed in 2018-19. Two issues of *Update*, the NRCB newsletter for confined feeding operators, were mailed to all operations listed on the NRCB database. Fact sheets on unauthorized construction, dust control, the permitting process, and manure application on frozen and snow covered land were made available on the NRCB website; and information on unauthorized construction was provided to industry associations for their members. An article on regulation of confined feeding operations under

the Agricultural Operation Practices Act was written for and published by the Progressive Dairyman. Staff attended numerous industry association meetings and trade shows to speak directly with operators, and met with municipal councils to inform them about the requirements of the Agricultural Operation Practices Act.

- Stakeholder satisfaction survey—the NRCB engaged lpsos Reid to conduct a third-party survey of operators and complainants involved with the NRCB during the previous year, to gauge their satisfaction with permitting and compliance activities. The survey was conducted in February 2018. The report was finalized in April 2018. Feedback was positive and will be used to further improve how the NRCB communicates with stakeholders. The survey was previously conducted in 2009, 2012, and 2015. The survey results are posted on the NRCB website.
- Office closure—preparations were made to close the Fairview office of the NRCB effective March 31, 2018, in light of the retirement of the one remaining staff member

in that office. The Morinville office has supported the Peace region since 2010. Calls from operators and complainants are automatically connected to the office by the NRCB's call centre. In 2017-18, activity in the Peace region totalled three part 2 permit applications, and a total of four complaints, including two self-reports regarding over-flowing lagoons on separate confined feeding operations owned by the same company.

Staff changes

Due to retirements and departures, a number of new staff were hired in 2017-18 to fill existing positions:

- Adria Snowdon, Approval Officer, Lethbridge office
- David Smejkal, Inspector, Red Deer office
- · Julie Wright, Approval Officer, Morinville office
- Michele Annich, Board Member, Edmonton office
- Page Stuart, Board Member, Edmonton office
- Stephanie Gaetz, Field Office Administrator, Lethbridge office

Performance measures and results

NRCB employee satisfaction ¹	2015/16	2016/171	2017/18	
Percentage of staff who express satisfaction on survey results	Not available	83%	Not available	

NRCB employees have appropriate training ²	2015/16	2016/171	2017/18	
Percentage of staff who participate in training programs	73%	79%	63%	

- 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 survey is run on alternate years. It was not run in 2015-16 or 2017-18. Board members and Board staff do not participate in the survey.
- 2. Participation in external training. Includes Board members and Board staff.

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

Policy and procedures for disclosures under the Public Interest (*Whistleblower Protection*) Act (PIDA), and an accompanying form, are posted for staff access on the NRCB's internal intranet site.

No disclosures were initiated in 2017-18.



Where We Were

Communicating with stakeholders is a priority for the Natural Resources Conservation Board. In 2017-18, staff and Board members participated in the following meetings, trade shows, and conferences to provide information about its programs, policies, and processes. Regularly scheduled, ongoing meetings with Agriculture and Forestry were also held on operational policy and technical topics.

Municipalities

- Municipal District of Provost, Provost, April 12, 2017
- Kneehill Country, Threehills, May 17, 2017
- Parkland County, Stony Plain, June 5, 2017
- Sturgeon County, Morinville, July 26, 2017
- Vermilion County, Vermilion, August 4, 2017
- Ponoka County, Ponoka, August 17, 2017

- Paint Earth County, Castor, August 15, 2017
- Lacombe County, Lacombe, September 1, 2017
- Alberta Association of Rural Municipalities and Counties (now the Rural Municipalities Association), September 25, 2017
- Town of Pincher Creek, Pincher Creek, October 13, 2017
- Vulcan County, Vulcan, October 19, 2017
- Ponoka County, Ponoka, October 25, 2017



Other Government

- Parkland Airshed Management Zone Board Meetings, Red Deer, January 25, April 26, May 17, September 20, and November 22, 2017
- WaterTech, Banff, April 3-5, 2017 (presentation)
- Alberta Health Services, Red Deer, August 14, 2017
- Parkland Airshed Management Zone Issues Response Group, Sundre, August 24, 2017
- University of Calgary Environmental Science 501, Calgary, September 6, 2017 (presentation)
- Policy Advisory Group, Calgary, October 25, 2017
- Springbank EIA overview meeting, Alberta Environment and Parks and Alberta Transportation, Edmonton, November 7, 2017
- Springbank NRCB process meeting, Alberta Transportation, Edmonton, January 1, 2018
- University of Calgary Environmental Science 502, Calgary, January 11, 2018 (presentation)
- Alberta Health Services and Alberta Environment and Parks, Lethbridge, January 12, 2018 (presentation)
- Special Areas Water Supply Project (overview presentation), Edmonton, January 24, 2018
- Alberta Water Council bi-monthly meetings, 2017-18
- Bow River Phosphorous Management Plan meeting, May 4, 2017
- Cross Ministry Water for Life monthly meetings, 2017-18
- Watershed Policy and Advisory Councils, bi-monthly board and committee meetings, 2017-18

Industry Meetings & Events

- Intensive Livestock Working Group, Edmonton, September 11, 2017
- Alberta Milk Regional Meeting, Lethbridge, April 4, 2017
- Alberta Milk Regional Meeting, Red Deer, April 5, 2017
- Alberta Milk Regional Meeting, Barrhead, April 6, 2017
- Alberta Milk Regional Meeting, Leduc, April 7, 2017
- Aggie Days (trade show booth), Lethbridge, April 25-26, 2017
- Pork Congress (trade show booth), Red Deer, June 14-15, 2017
- Intensive Livestock Working Group, Edmonton, September 11, 2017
- Alberta Cattle Feeders' board meeting, Calgary, October 24, 2017,
- Alberta Milk Central Alberta Fall Meeting, Red Deer, October 16, 2017
- Alberta Milk Regional Meeting, Leduc, October 27, 2017
- Agri-Trade (trade show booth), Red Deer, November 9-10, 2017
- Intensive Livestock Working Group, Edmonton, March 29, 2018



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For additional copies of this publication, contact the Edmonton office of the NRCB at 780-422-1977 or email info@nrcb.ca. Dial 310-0000 to be connected toll free to any NRCB office.

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The NRCB gratefully acknowledges the permission of Peter Woloshyn to use the photographs on the front, back, and inside covers (all images), and the photographs on pages 4, 7, 9, 11 (thistles), 12, 13 (butterfly), 15, 16, 17, and 20.

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