ENVIRONMENTAL LAW CENTRE

What Lies Beneath?

Access to Environmental Information in Alberta

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The Environmental Law Centre (Alberta) Society

The Environmental Law Centre (Alberta) Society is an Edmonton-based charitable organization established in 1982 to provide Albertans with an objective source of information about environmental and natural resources law and policy. Its vision is an Alberta where the environment is a priority, guiding society's choices.

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Contents

Warnings
Material in this publication is current up to September 2014. Be aware that laws, policies and government departments change regularly.

The legal right to access to information is not a right to an answer to one's question. Environmental information can be inconclusive. In some cases the necessary information might simply not exist. Always use multiple information sources and never rely on one single source. Where information is inconclusive, information seekers need to make personal decisions about their own acceptable levels of risk and certainty.

Introduction

This guidebook is intended to help anyone obtain environmental information. The focus is on the real estate buyer seeking information about a specific property or location. This location-based approach can also help community groups, environmental organizations and the general public. Consider the following story:

In 2010, newspapers across Alberta featured a homebuyer's nightmare: old gas wells, some leaking, were discovered under ordinary suburban houses. Farmland on which petroleum extraction took place was re-zoned, subdivided, developed into a residential community and sold without exposing what lay beneath.

In the aftermath, several themes emerged. These themes show that there are gaps between what Albertans should know, could know and actually know about their environment.

"There was nothing on land title."
There is no centralized system of record keeping for information about land or any other component of the environment. This lack of one-stop shopping hides the fact that much environmental information – including the location of abandoned oil and gas wells – is accessible to the extent that the information exists. Many legal rights to information and programs to deliver it are improving, but it's still on the information seeker to know where to look and how to ask. This can be frustrating, but it's more a practical issue than a legal one.

"The homeowners were lucky to get a buyout."
Cases where responsibility for environmental problems can be clearly attributed are the fortunate ones. Activities that impact the environment have been around much longer than environmental regulation. In Alberta it was once common practice to dump, bury or abandon industrial waste on vacant land. Old industrial sites were not cleaned up to modern standards. As a result, there is significant "historic contamination" in Alberta that remains undiscovered and may never be traced to its source. Historic contamination exists in undeveloped areas that have regrown and look pristine at first glance. It can accumulate in towns and cities where land has been re-used. Once land has changed hands several times, establishing legal liability for historic contamination can be exceptionally difficult if not impossible.

Do your "due diligence."
Many people thought this incident was foreseeable. Most land in Alberta has been used for something already. This applies in rural and urban areas. In rural areas, agricultural land is used for many

overlapping activities. These include oil and gas, trucking, chemical storage and gravel extraction, all of which raise environmental concerns. Agricultural activities including feedlots and pesticide application can impact land, air and water quality. In urban areas, sites that are likely to raise environmental concerns may have high redevelopment potential in other ways. Foreseeable problem sites like old service stations, drycleaners or landfills may be in prime industrial or commercial locations.

Growth in Alberta guarantees that these trends will continue. Towns and cities will sprawl into rural land. Natural resource development will border residential neighborhoods. Pressure and incentives to re-develop known contaminated sites or "brownfields" will increase.

In almost all cases the burden is on the party who could be impacted by environmental problems to make inquiries. Real estate buyers, their agents and advisors have added legal duties that extend to environmental concerns. These persons must exercise due diligence by making "reasonable" inquiries based on the situation. This responsibility exists because the general rule for buying and selling real estate is "buyer beware" unless the contract states otherwise. It is very hard to rescind a real estate contract due to environmental concerns unless these concerns were fraudulently concealed by the seller.

There is no set checklist of mandatory inquiries that can prove due diligence. What the law deems reasonable can vary greatly depending on the circumstances. The best way to demonstrate due diligence is to identify environmental concerns, learn what information is available about those concerns, and to act on that knowledge.

Environmental due diligence is very location-specific. Increasingly, a duly diligent buyer, agent, or advisor will make inquiries into the environmental conditions of the specific site and the local area. Information seekers who take this approach will be in the best position to make sound choices and solid deals.

How to use this guidebook

It is not necessary to read this guidebook cover to cover. Readers can move between the five main sections based on their knowledge and where they are at in their inquiry into environmental concerns:

The basics of environmental information provides a series of primers on key terms and concepts that information seekers should understand. Inexperienced information seekers or those unfamiliar with the applicable law should read this section first.

Skills for information seekers provides practical tips meant to apply regardless of the legal regime under which information is accessed.

Identifying environmental concerns is basically a skill that gets its own section. This section provides techniques, charts, checklists and diagrams to help information seekers work methodically.

Key information holders describes the function, information held and disclosure regimes for key sources of information inside and outside of government. Plan to return to this section for specifics on how to access information from particular agencies.

The directory lists topics of most frequent concern to information seekers, type of information available on these topics, information holders and how the information is accessed. The Directory will be most useful for information seekers who understand the prior material.

Key words and technical concepts are [bolded and linked] to sections where they are discussed in more detail. The table of contents is also linked to each section. If you are reading it online, you can move around with a [control + click]. Advanced information seekers can go straight to what they need to know, but reading the guidebook in order will provide the best understanding of the access to information process.

The basics of environmental information

What are you buying when you buy land?

Anyone involved in real estate transactions needs to understand what comes with a land purchase, and what does not. After reading this section it should be clear why certificates of land title are not statements of environmental condition.

The most important legal concept is that of divided legal interests. Property rights once stretched up to the heavens and down to the depths of the earth, but this is ancient history. Land ownership now has legal boundaries in every direction.

The subsurface is separate from the surface: Rights to subsurface resources, especially minerals, are often held by people other than the landowner. Subsurface-related activities have a significant impact on land, especially those related to petroleum extraction. The section on land titles explains the mineral rights separation of land title and mineral rights in detail.

Land is bordered by other land: Boundaries between land parcels are important for two reasons. One is that environmental contamination and pollution can migrate from neighboring properties through the soil, air or water. The second is that much environmental information is identifiable by legal land descriptions. This Guide contains a section on how to find legal land descriptions.

Land is bordered by water: Permanent water bodies and the water they contain are owned by the provincial Crown (the provincial government). As a general rule, the province also owns the "beds and shores" of all permanent and naturally occurring water bodies, including rivers, streams, watercourses and lakes. This means that the provincial government can allocate water rights and authorize activities that impact water bodies. Water rights allocated by the government resemble property rights but are actually created by legislation. The provincial government may allocate rights to use and divert water, except as provided for by regulations.

The air above is separate: Air pollution is the largest environmental health issue and a frequent nuisance that can impact property values and life quality. Air pollution can contaminate land and water as well. (Remember acid rain). Air is the closest thing to common property or a "commons," but air quality is managed and regulated in ways that produce environmental information.

What is "contaminated land"?

Many information seekers want to know if land is "contaminated." This is a reasonable question but it has no straight answer. Even official standards are not straightforward. Consider these examples:

- The Government of Canada defines a contaminated site as one at which substances occur at concentrations above normally occurring levels and pose or are likely to pose a hazard to human health or the environment or exceed levels specified in their policies and regulations.
- The provincial government can designate a "contaminated site," but this has rarely ever been done due to the option of regulating the release of substances as opposed to designating the site itself. This Guide contains a full section on "releases."
- An Environmental Site Assessment (ESA) can identify the likelihood and extent of contamination, and recommend clean up measures. However, this is a lengthy, expensive process that it might be on the information seeker to initiate. This guide contains a full section on ESAs.

Due to the frequent absence of conclusive statements on contaminated land, it makes more sense to identify "environmental concerns." These concerns should be tailored to the information seekers' personal risk tolerance and specific circumstances. Does one abandoned gas well amount to contaminated land or does it take a big oil spill? The answer will differ depending on whether the next land use was organic farming or washing out tanker trucks. It may differ if the purchase price is one dollar or one million.

What is "environmental information"?

Information seekers should think about the "topic" and the "type" of information they might want.

Topics of information: For the purpose of this guide "environmental information" includes information about the major physical components of the environment: land, air or water. Information seekers should consider looking at more than just land condition depending on their circumstances. Air quality is the leading environmental health concern, while water quality and quantity can impact land use. Be aware that biodiversity (plants and animals), though not covered here, is a component of the environment too.

Environmental information in this guide also includes information on specific activities that cause environmental concerns. Most are human industrial activities. Always look for information about activities because direct information about condition of land, air, or water is often inconclusive.

A further topic of information to be aware of is the law itself. Laws and policies cause the creation of records on environmental condition and activities of concern. The direction on environmental protection, or lack thereof, taken through legal process can itself contribute to a picture of environmental condition.

Types of Information: There are two basic types of environmental information to be aware of:

Interpreted information has been analyzed, processed and presented with some explanatory context. Examples include summaries, rankings, comparisons or trends. The advantage of interpreted information is that it is more understandable for lay persons. The disadvantage is that it can be subjective or spun.

Sources of interpreted information include:

- media and official news releases;
- personal stories and neighbors' opinions;
- public relations materials; and
- books and articles.

Raw information is technical information or scientific data. Raw information can be numerical (quantitative) or descriptive (qualitative). The advantage of raw information is that it can be more objective and unbiased. The disadvantage is that information seekers must draw their own conclusions. Information that cannot be deciphered is useless.

Sources of raw information include:

- Monitoring data: Monitoring means taking measurements to determine the condition of the environment or to track changes and impacts. Monitoring is done on land, water, air, biodiversity, and human health. Monitoring is used to determine if activities of concern are

complying with regulations. Monitoring can be done to create a general picture of the environment.
- Assessments: Assessments are specific monitoring events that measure more than one thing. Examples include Environmental Assessments (EAs of EIAs) of proposed activities and Environmental Site Assessments (ESAs) to produce records of land condition.

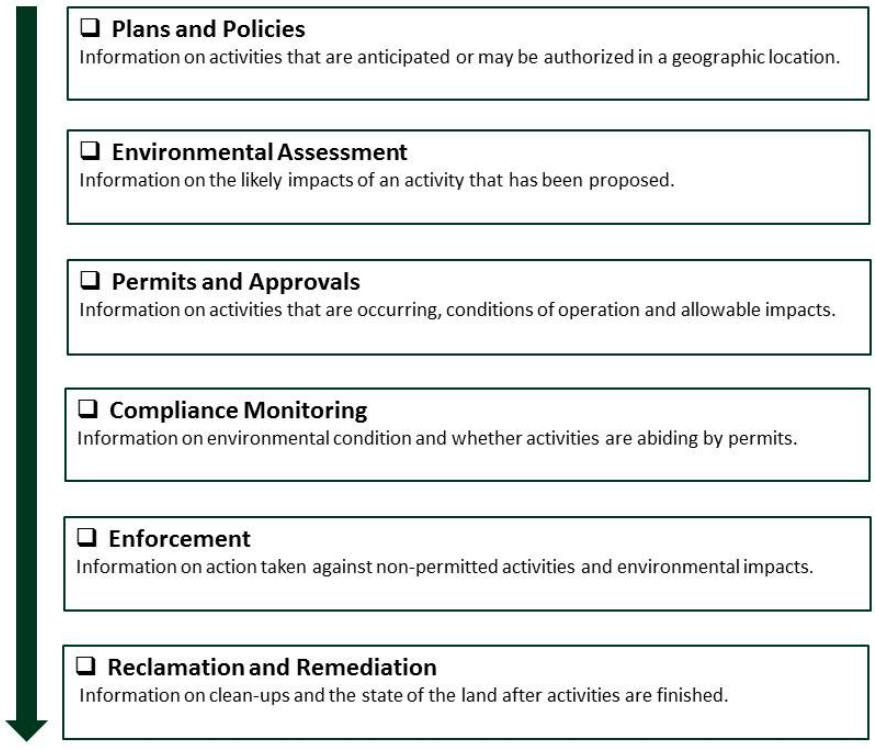
Some useful information sources combine raw and interpreted information. They will provide data with explanations or conclusions. Examples include “reports” and “studies.”

Information seekers should focus on types of information that meet their personal needs.

How does environmental regulation produce information?

Public authorities generally control activities that can adversely impact the environment through a set regulatory process. Each step in this process causes specific information to be created. These steps have corresponding entries in the Directory section of this guide. These entries explain the key regulations and who holds the information that is created. The Information Holders section explains the information access process for the main regulatory agencies.

The chart below shows a generic regulatory process and the information that is created at each step. Not all steps will be completed for every regulated activity.



Provincial environmental regulation:

The province of Alberta regulates two key areas that produce environmental information.

- Impacts on the environment, including water: The lead regulator for environment and water in the province is Alberta Environment and Sustainable Resource Development (AESRD).

- Development of natural resources: The province regulates resource development through multiple agencies. The province also manages access to land for natural resource use and other provincially regulated activities.

The main provincial regulators and their information sharing processes are covered in the section on Information Holders. The topics and types of information that they hold are covered in the Directory section.

Federal environmental regulation:
The federal government regulates several key areas that result in the creation of environmental information. As of 2012 there have been significant, ongoing changes to federal environmental legislation. These changes are reducing federal involvement in environmental protection. Future creation of federal environmental information will decline as a result. Accessing historical records may require more effort in searching and requesting where the records fall outside the scope of current federal environmental programs.

The basic areas of federal environmental regulation remain the same. The Directory section covers the following topics and the information that is available in more detail.

Toxic substances and pollution releases: The *Canadian Environmental Protection Act (1999)* (*CEPA*) lists toxic substances and requires reporting on "releases" (spills or pollution) of these substances. The federal National Pollutant Release Inventory (NPRI) is a huge publicly accessible database of these substance releases that is compiled annually by Environment Canada. The NPRI includes authorizes releases such as smokestack emissions as well as unauthorized releases such as spills. Information in the NPRI includes pollution reports and release data on specific facilities as well as summaries, maps and trends for specific pollutants. Information seekers with technical capacity can download data sets. Beware that for a release to be in the NPRI, the substance must be listed under *CEPA* and the emitting facility or the release must be large enough to require federal reporting. The NPRI does not include information on small emitters, small releases or non-federally listed substances.

Contaminated land: The Treasury Board of Canada Secretariat maintains a Federal Contaminated Sites Inventory. This publicly available database covers contaminated land for which the federal government has responsibility. This includes land under the custodianship of federal departments, for example military bases, national parks or Indian reserves. It also includes sites for which the federal government has accepted responsibility. For example, abandoned creosote posts in the aquatic environment could be federal responsibility.

Biodiversity: The federal *Species at Risk Act* is used to list species, identify critical habitat and create species recovery plans. It applies mostly to federal land, but in theory it could limit activities on private land as well.

Waterways and aquatic habitat: There are several pieces of federal legislation regulating activities that can impact water. The existence of permitting and enforcement records under these laws can be evidence of environmental concerns. The *Fisheries Act* prohibits activities and the deposit of substances that could harm fish. Current law prohibits unpermitted impacts on species of commercial, recreational or cultural value but for many years the prohibition extended to "fish" in general. The *Migratory Birds Convention Act* prohibits activities and the deposit of substances that may be harmful to listed migratory birds. This includes deposits into water. This act also prohibits the destruction of nests. *The Navigable*

Waters Protection Act prohibits the obstruction of listed waterways without a permit. Prior to 2012, this act applied to a much broader range of waterways.

Environmental Assessment: Environmental assessment reports and processes create information about the possible environmental impacts of proposed activities. The *Canadian Environmental Assessment Act (2012)* requires federal environmental assessments for projects listed in a regulation or otherwise determined by the Minister of Environment. The Directory Section on Environmental Assessment discusses this regime in more detail.

How is information shared?

All information is shared in one of two ways:

- **Actively (or "proactively"):** The information holder makes information available before anyone requests it.
- **Passively (or "reactively"):** The information seeker must request the information for it to be disclosed.

The provincial government – especially Alberta Environment and Sustainable Resource Development (AESRD) – is starting to use a three tiered system of information sharing. The tiers are "publicly available" information, "routine disclosure" and "*FOIP*."

Publicly available information: The information seeker can access the information by searching for it or by contracting a search agent to do so. Access is certain so long as the information exists and can be found. Some information is made publicly available because legislation requires it to be published. In other cases, information seekers would have a right to the information on request so the government makes it public in advance of requests.

Always search for publicly available information before making requests. Requests for information that is already public can be denied. Sources of publicly available information include:

- websites of government departments;
- government offices or information centres;
- notices in community locations;
- notices in newspapers;
- registries and search services;
- libraries; and
- courthouses.

Routine disclosure: The information seeker has a right to the information if they follow the correct procedure for requesting it. The information seeker must know the information holder's system. Not using the correct procedure gives government a right to refuse the request. Routine disclosure can occasionally be trumped by grants of confidentiality provided to persons that the information is about.

***Freedom of Information and Protection of Privacy Act* (*FOIP* or *FOIPPA*):** The information seeker must make a formal request for the information using *FOIP* procedure. The information holder must comply with *FOIP* in responding to the request. There is no guarantee that information will be disclosed or withheld.

For federally held information, there is a comparable process under the federal *Access to Information Act* (*ATIA*).

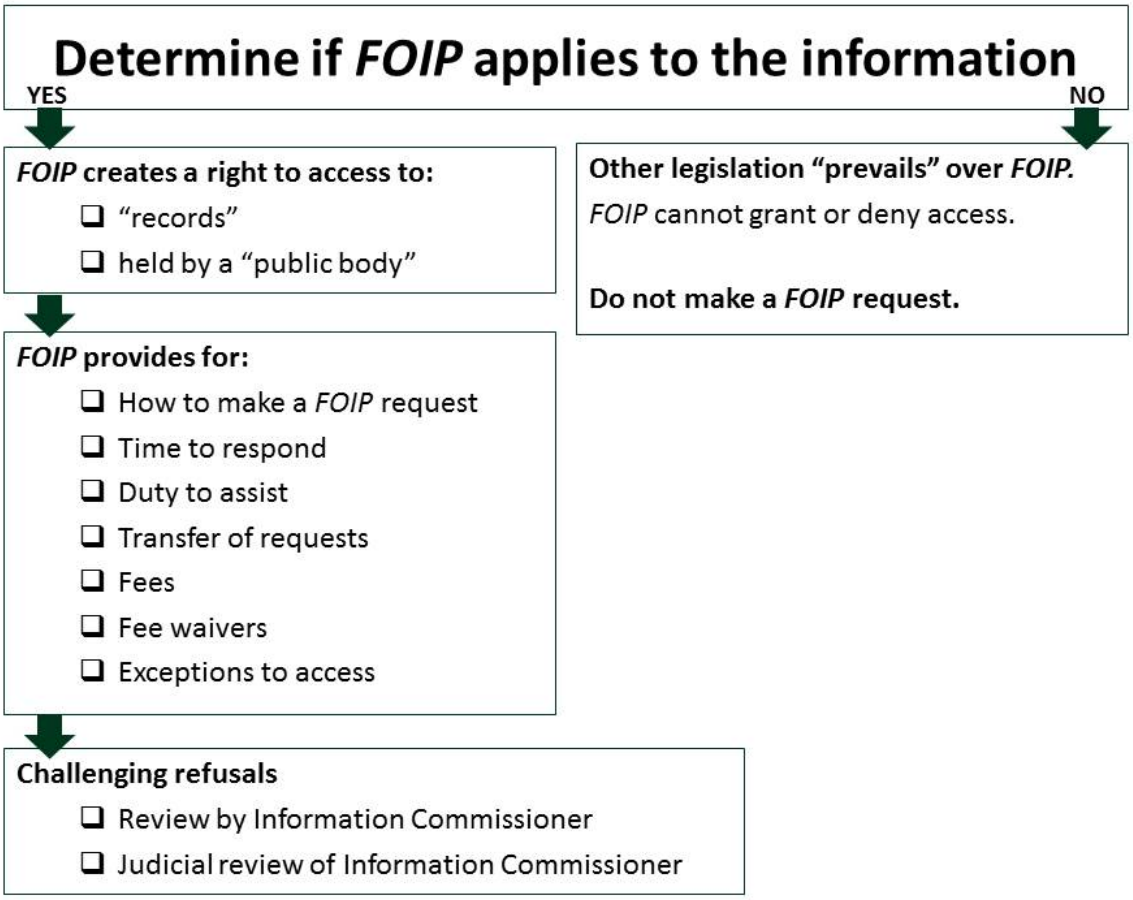
FOIP and *ATIA* should **not** be starting points for information seekers. Look for publicly available information and routine disclosure first.

How does the "*FOIP*" system work?

FOIP stands for the *Freedom of Information and Protection of Privacy Act* (also called *"FOIPPA"* or the *"FOIP Act"*). *FOIP* is the legal starting point for access to information held by provincial public sector bodies.

Information seekers should not begin their inquiries with *FOIP* requests because this may be unnecessary. Access to information held by public sector bodies is always governed by legislation, so if *FOIP* does not apply to provincially held information then other legislation will.

The following chart outlines the basic *FOIP* process. The steps in this process are described in detail below:



Determining if *FOIP* applies

FOIP does not apply to all environmental information. It only applies to "records" in the custody or control of a "public body."

"Records" includes almost all types of recorded information. "Public bodies" includes many organizations beyond the Government of Alberta, such as municipalities, Metis settlements, irrigation districts, drainage districts and numerous public services providers and educational institutions. All public bodies in Alberta are listed in the Directory of Public Bodies or in regulations under *FOIP*. *FOIP* does not apply to information held by private parties such as industry operators or landowners, non-government organizations or unlisted public sector organizations.

Paramountcy:

Other legislation can take "paramountcy" over *FOIP*. In other words it "overrides" *FOIP*. In these cases paramount legislation determines how information may be accessed or denied.

The Directory section of this guide identifies where *FOIP* applies or does not apply to information on each topic. The section on information holders identifies the Information Coordinators for the main government information holders. These people can help determine if *FOIP* applies.

Making a *FOIP* request

If *FOIP* applies to the information, there is right to access subject to exceptions in *FOIP*. There are numerous exceptions. There is also a mandatory procedure that information seekers and information holders must follow.

Inexperienced information seekers should review the Freedom of Information and Protection of Privacy website maintained by Service Alberta.

The basics of a *FOIP* request are:

Only make *FOIP* requests if the information is not already publicly available.

Make all *FOIP* requests to the Information Coordinator. The Directory of Public Bodies identifies the Information Coordinator for each public body. If the public body has no Information Coordinator, then the head of the public body is the person to make requests to.

FOIP requests must be in writing unless the information seeker has a writing impairment or limited use of English. Information seekers can write a letter or use a standard *FOIP* request form found on the *FOIP* website and the websites of departments with access to information pages (including AESRD and Alberta Municipal Affairs).

***FOIP* requests must include:**

- the requester's full name and contact information;
- sufficient detail about the information sought that it can be identified;
- a statement on the legislated right to access under *FOIP*. The standard *FOIP* Form makes this statement automatically. Letter writers need to state that they are seeking access under *FOIP*; and
- required fees.

Further content that is not required but that might be helpful includes:

- The preferred way of receiving the information: electronic copies, paper copies or on-site viewing at government offices.

  A request for copies of documents and records that can reasonably be reproduced: the requester has limited rights to copies. The response must include the copies or give reasons for delay.

  A request for on-site viewing: might help information seekers view more information. Public bodies may provide copies to prevent the viewing of information for which access would be denied or to prevent interference with operations.

- The intended use for the information: Under *FOIP*, information seekers are not required to state why they want the information and the information holder has no right to ask. Information seekers should consider whether sharing their motivation will help or hurt their efforts. A "public interest" purpose creates a right to request fee waivers. (See Keeping fees down.) However, a public interest motivation may include disseminating the information which may increase the likelihood that the information holder applies a discretionary exception to access (a "may withhold" exception to access, above).

Tips on writing requests are covered in Skills for information seekers.

FOIP timelines

Access requests under *FOIP* can take longer than searching for publicly available information or requesting routine disclosures. The public bodies that respond to the request are bound by timelines in *FOIP*. This chart shows the basic *FOIP* timeline:

***FOIP* timeline**	
Initial time for the public body to comply with the *FOIP* request	30 days
The public body may extend time if required to provide reasonable time to comply	Variable
The public body may transfer the request to the correct Information Holder	Variable
Time for requester to seek review by the Information Commissioner if access was refused	60 days
Time for Information Commissioner to review decision	90 days
Time for public body to comply with an order of Information Commissioner	50 days
Total possible time for *FOIP* request – 30 to 230 days without considering time extensions and transfers	

The information seeker has a role in reducing delay. Factors that create delay and how to reduce it are addressed in the section on Planning for delays.

The duty to assist with *FOIP* requests

FOIP requires public bodies make every reasonable effort to assist the applicant and respond to each application openly, accurately and completely. **However, this requirement is not a "right to an answer."** Public bodies might create a record in response to a request, but they will not create raw information that does not otherwise exist.

The duty to assist only exists where *FOIP* applies. Different departments have different policies for responding to *FOIP* requests and responding to requests for routine disclosure under other legislation. Information seekers should contact the Information Coordinator to discuss what form of assistance to expect with a request.

Non-government information holders have few legal duties to assist at all**.** The notable exception is the duties of sellers and real estate agents to make disclosures. Disclosure duties are covered in the entry on these persons in the section on information holders.

Transferred requests

FOIP allows public bodies to transfer requests to other public bodies. When a transfer occurs, the public body will provide the requester with notice of the transfer.

There is no obligation to transfer requests. Transfers will not be made if the topic of information is in the exclusive jurisdiction of the pubic body to which the request was made.

Transferring requests helps information seekers who made their request to the wrong place, but it will cause delay.

FOIP fees and fee waivers

FOIP allows public bodies to charge for responding to requests, so expect to pay for *FOIP* information.

Allowable fees: All *FOIP* requests require a starting fee of $25. Additional fees may be charged if the estimated cost of providing access to the information is over $150. Further fees are based on set hourly rates for producing, copying and shipping records.

FOIP fees are set for cost-recovery. Fees cannot exceed actual costs of services provided. Nonetheless, fees can be very high for large or complicated requests. Tips for reducing fees are covered in the section on Keeping fees down.

Fee estimates: The public body must provide an estimate of the total fees before providing services. Processing of requests stops once fee estimates have been provided. Requesters have 20 days to accept the fee estimate or modify their request to change the fees.

Payment of fees: Processing of requests resumes on payment of at least 50% of any fee over $150. If the request is a "continuing" request (an ongoing request, or a request in multiple parts), the 50% of $150 rule applies to the first installment of information.

Fee waivers under *FOIP*

The public body can waive all or part of any fees under *FOIP*.

Requests for fee waivers must be in writing and may be part of the *FOIP* request. The public body must give written notice of its decision within 30 days. If the fee waiver is refused, the notice must state that the applicant can ask for a review by the Information Commissioner.

There are two types of fee waivers:

- **The requester cannot afford to pay or for any other reason it is fair to excuse payment.** The requester must provide financial information for the public body to make a decision.

- **The records relate to a matter of public interest, including the environment or public health or safety.**

The public interest fee waiver
A public interest fee waiver can be sought for information that has been deemed accessible.

FOIP does not provide criteria for determining when public interest fee waivers should be granted. The information seeker must provide persuasive evidence or argument in support of a fee waiver. Simply asserting that the information relates to a matter of public interest is not enough.

The strongest case for a fee waiver will be where:
- the matter of interest is a benefit; and
- the relevant public is broad.

The weakest case will be where:
- the matter is a curiosity; and
- the relevant public is narrow.

Information seekers requesting public interest fee waivers should ask themselves some questions about themselves, the information holder and the information itself.

Questions about yourself:

Is your interest in accessing the information public or private?
How would the public benefit from you having this information?
Are you likely to disseminate the information?
How broad is your audience?

Examples of public uses	**Examples of private uses**
Sharing or distributing the information; Contributing to a public understanding of issues; Addressing risks to public health or the environment; Research on the operations of government Promoting transparent government.	Avoiding legal liabilities or assigning risk; Due diligence; Meeting the needs of lenders and financers; Commercial, financial or property interests; Deciding if a property is suitable for intended use; Seeking evidence for use in litigation or disputes.
Examples of where private and public interests could overlap	
Participating in hearings or consultations; Attempting to influence government policies; Researching environmental law enforcement; Determining the environmental performance of a company or person.	

Questions about the information holder:

How has it responded to the request?
Has it anticipated public need for the information where it should have?
Has it tried to help you find information and keep costs down?

Questions about the information:

Would it contribute to public debate or understanding of issues?
Would it foster open and transparent government?

Exceptions to access under *FOIP*

Harm to business interests of the third party

The information must be "trade secrets" or "commercial, financial, labor relations, scientific or technical information" of the third party. The information must not be otherwise available and must have been supplied to the government in confidence.

The third party must prove a probability of harm by showing evidence of:

- the connection between disclosure of the specific information and the alleged harm;
- how the harm constitutes "damage" or "detriment" to the matter; and
- a reasonable expectation that the harm will occur.

Harm to economic interests and other interests of a public body

Access may be refused if disclosure of specific information would cause financial loss or lost contracts to the public body.

This exception protects environmental testing done by government for a fee as a service to a person or done for the purpose of developing testing methods or products for possible purchase. It could not be used to deny the results of environmental monitoring carried out in the course of regulatory functions.

This exception is most apt to be argued where government is involved in contracts or negotiations, for example settlements to buy out property owners in relation to road construction or environmental studies prepared for government by a consultant.

There must be a direct link between the information itself and potential harm. Harm from the act of disclosure or the breaching of confidentiality agreements is not sufficient to deny access.

Privileged information

Information relating to any type of legal privilege may be refused. This includes any information prepared by or for government lawyers in relation to the provision of legal services. If the information relates to a person other than the public body (a third party) then it must be refused.

The Information Commissioner finds that litigation privilege can exist where:

- the public body is investigating a third party and contemplating enforcement action or any two parties are contemplating litigation;
- the information is intended to be confidential; and
- the "dominant purpose" for the document's preparation is for litigation.

The "dominant purpose" of environmental information can be uncertain. Assessments of contamination and required remediation may be prepared by consultants for third parties considering remediation, but they may also be provided to government in relation to investigations and regulatory action against those parties. Such information has previously been denied under *FOIP*. Currently the *Environmental Protection and Enhancement Act* would make similar information publically available without *FOIP*, but litigation privilege continues.

Information seekers faced with claims of litigation privilege will need to review past Information Commissioner's decisions and court cases and should consider retaining a lawyer.

Harm to law enforcement
Access may be refused where disclosure would harm the effectiveness of investigations or reveal confidential sources of law enforcement information, for example where disclosure would expose the author to civil liability.

Harm to law enforcement can be considered in relation to the investigation of specific properties, releases from municipal landfills and hydrocarbon contamination from underground storage tanks. The Commissioner will require that the records fit the definition of law enforcement and that the public body demonstrate a specific harm that could be caused by disclosure.

Challenging refusals

It may be necessary to challenge refusal of requests for information.

FOIP requests create a right to a response. The response will come as a letter, which can come with the requested information or on its own if the request was refused.

Read the response letter carefully. Look for indications that the information holder met their duties. Does the date indicate that the response was provided on time? Does the response show evidence of meeting the duty to assist? Check the letter for specific content required by *FOIP*, including:

- whether access or partial access is granted or refused;
- how access will be given;
- reasons for refusal;
- the provisions of *FOIP* on which refusal is based;
- the name, title and business address of the official who can answer questions about the refusal; and
- notice of rights to seek review by the Information Commissioner.

Note the reasons for refusal: *FOIP* requests can only be denied under the provisions of *FOIP*. There must either be paramountcy, a specific exception to access or some procedural failure by the requester. *FOIP* requests cannot be refused based on who the requester is, whether they would understand the information or what they intend to do with it.

Read the information provided: Compare the information provided to the request. It is only possible to challenge refusals of information that was requested. Check if partial information was provided. It is possible to challenge partial refusals. *FOIP* information often comes with parts "redacted" (blacked out) or with entire pages or documents missing. *FOIP* must be properly applied to every part of every document, otherwise it is possible to challenge refusal of the missing parts.

Review by the Information Commissioner
Information seekers can request a review of refusals from the Office of the Information and Privacy Commissioner (OIPC, or "the Information Commissioner"). The Information Commissioner is independent from the public bodies to which *FOIP* requests are made. The Commissioner's office provides a range of dispute resolution options including mediation, investigation by the Commissioner, or a hearing before an appointed adjudicator.

For more information, see the OIPC website.

The Public Interest Override
FOIP requires disclosure of certain information in the public interest. This requirement overrides all other *FOIP* provisions. The information must be disclosed whether or not a request was made and even if a request would otherwise be refused. Public interest disclosure is not available if other legislation has paramountcy over *FOIP*.

Information seekers can request public interest disclosure from the Information Commissioner as part of a review of a refusal. Do not make requests for public interest disclosure as part of the original request to the public body, as it has a duty to consider public interest disclosure with or without a request.

Public interest disclosure is very difficult to obtain and there are few examples of success. There must be a significant risk to the environment or to the health and safety of the public, an affected group of people, a person or the applicant (information seeker).

For more information, see the OIPC website.

Judicial Review of the Information Commissioner
Challenging the decision of the Information Commissioner requires going to the Alberta Court of Queen's Bench. Potential arguments are limited. *FOIP* provides that the Information Commissioner's Order is "final." Therefore there is no legislated right to appeal the Commissioner's substantive decision to grant or refuse access. Information Seekers can apply for "judicial review" of the Information Commissioner's decision. Because the Commissioner is the expert at interpreting *FOIP*, the Court is unlikely to intervene with the decision unless it was unreasonable.

For more information, see the OIPC website.

Refusals of information without *FOIP*
Requests for information made without *FOIP* can be refused for a greater range of reasons. Read the response and information provided with an eye to the same general principles, but play close attention to what legislation should apply. The response may state that:

- Routine disclosure is not available for this information. If so then make a *FOIP* request.
- Routine disclosure legislation provides for confidentiality that prevails over *FOIP*. This is a challenging situation. There is no recourse to *FOIP* or to the Information Commissioner as *FOIP* does not apply. The information seeker would have to seek judicial review from the courts and would likely need a lawyer. Fortunately, most environmental legislation that prevails over *FOIP* is far more apt to provide for disclosure than confidentiality. Confidentiality is often limited to cases where *FOIP* would provide an exception to access anyway.
- The request did not follow the correct procedure. Several routine disclosure requests to Alberta Environment and Sustainable Resource Development (AESRD) require asking permit holders first if that person holds the information. In cases of procedural error, make a new request correctly.

Be thorough when reviewing routine disclosures that are delivered by permit holders and activity operators instead of directly by government. The right to disclosure is provided by government. The permit holder is just a delivery person who may not share an interest in disclosure. It may be necessary to 'appeal' to the department even if a request was not technically refused.

The federal *Access to Information Act*

Access to federally held information is governed by the federal *Access to Information Act* (*ATIA*). *ATIA* is similar to Alberta's *FOIP* in its general scheme. In brief, *ATIA* provides:

- basic rights to access information held by the federal government;
- federal legislation on specific topics that requires that information be proactively made publicly available;
- a formal process for making requests and responding to requests;
- a process for review of refusals by the federal Information Commissioner; and
- court challenges to decisions of the Information Commissioner.

Information Seekers faced with *ATIA* should review the Information and Privacy webpage maintained by the Treasury Board of Canada Secretariat. Most of the federally held information in this Guidebook is publicly available without resorting to *ATIA*.

Skills for information seekers

Finding legal land descriptions

Legal land descriptions are necessary to make use of many information sources. The legal land description identifies a parcel of land that is bounded by other parcels. Legal land descriptions are different from street addresses, mailing addresses and general map locations. There are two main types of legal land descriptions in Alberta – one for rural land and one for urban land.

The Alberta Township System (ATS)

ATS is the most common legal land description for rural land. It is frequently used on official documents that help identify environmental issues such as the location of oil and gas wells, environmental permits and reclamation certificates. These topics are covered in the Directory Section of this Guidebook.

ATS can also be used to identify urban land if needed and can help find records that can also be found using the "plan, block and lot" system (described below). Examples include enforcement records and records of site condition. These topics are covered in the Directory Section of this Guidebook.

The disadvantage of ATS is that the land units are too large to indicate exactly where environmental concerns lie.

How ATS works

ATS is a grid system that divides land into large squares. The ATS grid designates parcels as being west of the 4th, 5th, or 6th "meridian." Meridians are longitude (north-south) lines. West of each meridian, "range" lines run north-south six miles apart. "Township" lines run east-west six miles apart. The result is equal sized squares called "sections." Each section is one mile across.

Each section can be divided into four quarter sections: northwest (NW), northeast (NE), southwest (SW), and southeast (SE).

The legal land description usually begins with the most specific unit and works backwards to the largest unit:

Quarter Section	Section	Township	Range	Meridian
SW	1	87	18	W4

The legal land description for the above property may appear in shorthand as: SW-1-87-18-W4 or may be written out as: Southwest quarter of section 1, Township 87, Range 20, West of the 4th Meridian.

Sometimes, the ATS description includes reference to a legal subdivision (or LSD). The LSD is a part of a quarter section.

How to find ATS descriptions

Documents in possession: Information seekers should start by checking documents they already have. ATS descriptions are found in Land Titles certificates, leases and regulatory records like permits.

Explanations and diagrams of ATS are available from

Alberta Environment and Sustainable Resource Development

Alberta Geological Survey

Alberta Land Surveyor's Association

Benchmark Retrieval System: The AESRD Benchmark Retrieval System on the AESRD website can be used to turn map locations into ATS descriptions. First find the property on a map. Street addresses are accurate enough to identify the general area on road maps. Postal codes can be used to identify the exact part of the street by using online maps like Google maps. Use the map location to search the Benchmark Retrieval System for an ATS description. The Benchmark Retrieval System uses Geographical Information System (GIS) technology to display online maps that are accurate down to the street or property level. Zoom in to the property to see the ATS grid. The Benchmark Retrieval System can also be searched using Plan, Block and Lot (PBL) coordinates described below.

Township Map: A township map available from the municipality in which the property is located will include the township, range and sections. This method requires the information seeker deduce the ATS description by reading the map lines.

The Natural Resources Canada (NRCAN) Mapping Services: NRCAN has an online mapping service that can produce ATS descriptions using common place names for cities and towns. The detail of the ATS coordinates produced may not include the section level in all cases.

The Alberta Geological Survey (AGS): The AGS has an online map converter that will produce ATS from other map descriptions including Universal Transverse Mercator (UTM) and latitude and longitude.

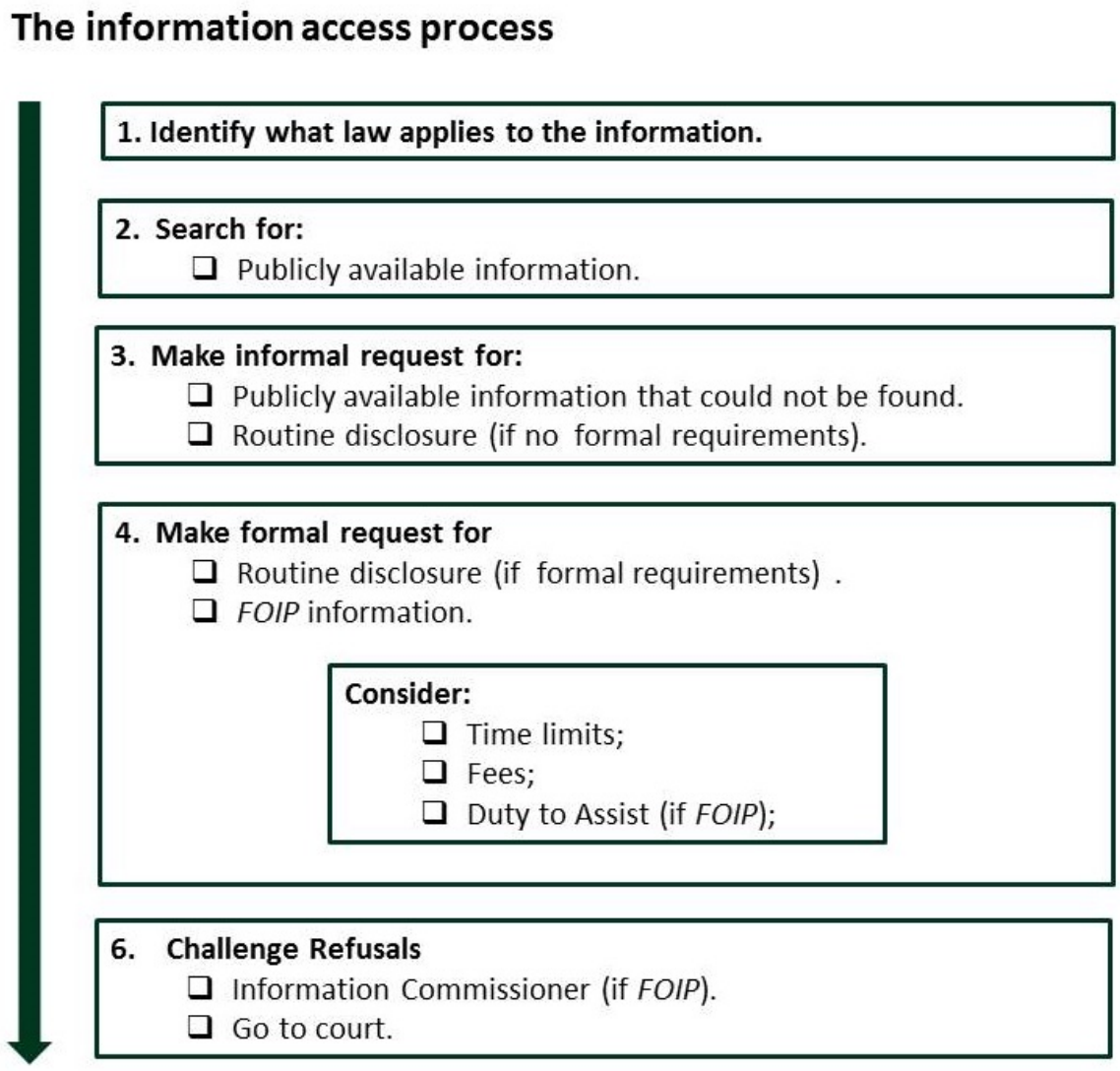
The Plan, Block and Lot system (PBL)

The Plan, block and lot system (PBL) is primarily used for urban land or land that has been subdivided. This includes cities, towns, villages, acreages and country residential developments. Once land is subdivided, the ATS description is changed to PBL. The PBL system is also called the “lot and block” system so information seekers should look closely to see which descriptor comes first.

The advantage of PBL is that identifies specific lots and separate land titles in subdivisions and densely populated areas. PBL allows for more accurate searches that can help identify environmental issues with specific properties. For example, enforcement records and records of site condition can be searched using PBL coordinates. These topics are covered in the Directory Section of the Guidebook.

The disadvantage of PBL is that much environmental information is not available to this level of accuracy. For example, records of abandoned gas wells may only be accurate to the level of a quarter section under the ATS system. If that quarter section has been subdivided and developed into lots, PBL coordinates cannot help identify what lot the gas wells are on.

An explanation of how to use PBL to search for environmental information is available in the User Guide for the Environmental Site Assessment Repository (ESAR User Guide).



Researching law

Legislation: Legislation is the most important source of information law. Legislation consists of statutes and regulations and has two main effects on environmental information:

- Statutes and regulations indicate what information may exist, including permits, enforcement orders, records of site condition, remediation certificates and reclamation certificates. These topics are covered in the Directory Section of the Guidebook.

- Statutes and regulations dictate how information held by government may be accessed. These rules begin with *FOIP*.

Sources of legislation include:

- Government department websites list the key legislation that the department administers. Departments with access to information websites (AESRD and Alberta Municipal Affairs) include links to relevant information law.

- Canlii is a free, fast and user friendly service for searching for legislation, court cases, and some administrative decisions across Canada. It lets users find court cases that considered the legislation in question.

- The Queen's Printer is the Alberta government publisher for legislation, government handbooks and policy manuals. The Laws Online website allows legislation to be downloaded for free. There may be fees for products other than legislation. The site is not as user friendly as Canlii but it provides official copies of legislation. Official copies are necessary to rely on in legal proceedings.

- University law libraries and courthouse libraries. See the entry on Paper Searching in the Searching for Information section.

Municipal bylaws: Bylaws are legislation made by municipal councils. Bylaws are legally enforceable, but cannot trump provincial statutes and regulations. They can be more stringent concerning allowable uses of a property. There may be records of bylaw infractions or municipal enforcement even if there are no provincial or federal records that would indicate environmental concerns. Bylaws cannot dictate how information is accessible. *FOIP* applies to all municipally-held information.

Common law: The common law is the body of principles generated by judges through successive court cases ("precedents"). Common law principles can be used to interpret legislation but they cannot trump legislation. There are often court decisions interpreting legislation.

Decisions of administrative agencies: The decisions of administrative boards, tribunals and commissions have quasi-legal status. Administrative decisions can reveal how that agency interprets legislation. Agencies are not bound by their own precedents. The most important decisions in this Guide are those of the Office of the Information and Privacy Commissioner of Alberta (the "Information Commissioner").

Searching for information

Searching is when the information seeker looks for the information instead of **requesting information** from someone. Searching can be done for information that is already **publicly available**. Searching can save time and money and lower the risk that subsequent requests for information will be refused.

Online searching vs. paper searching

Not all information is available online. Online searching is often a legitimate first choice, but believing that nothing else exists is a major risk. There are no legal requirements to post information online, even when it must be made **publicly available**. Information holders decide what to post online based on their financial costs, technological capacity and desire to share. Information seekers should consider four questions when deciding if online searching is the best way:

Is mine a common request? Information holders put commonly sought information online when doing so is cheaper than responding to numerous requests. Uncommon topics and historical information are more likely found in libraries, archives, registries and newspapers. Notices of permit applications for future activities of concern may be posted in newspapers, public locations or field offices.

Is my request conducive to an electronic format? Graphic information like maps and charts can be easier to read and reproduce on paper. Electronic mapping is a growing asset to information seekers,

but graphics created on paper still work best on paper. Online image transmission can be bogged down by software or hardware capacity on the part of either party. Information holders might lack capacity to digitize older materials.

Who is in control of the information I am seeking? Online information is controlled by the information holder. Web pages change and links disappear. Paper searching helps put the information seeker in control by avoiding the information holder's spin or omissions.

What is the cost of providing this information? Online information is more likely where information holders can recover costs of digitization through fees, funding or public image enhancement.

Online search skills
Information seekers should be familiar with the use of direct links and search engines.

Direct links
The Directory section of this Guidebook provides many direct links to information sources such as databases, registries or search portals.

Search engines
Skill with Google and other search engines can help avoid the problem of direct links changing.

Search engines work best to find:

- government and non-government information holder websites;
- online databases, registries and search portals;
- libraries that post online articles;
- secondary sources that make reference to primary sources; and
- interpreted information that references raw data.

Search engines are also useful for avoiding navigation problems with information holders' websites. Information holders' websites often have a search function that takes information seekers directly to specific documents instead of to pages on the website. General search engines will be more useful for finding topical webpages on a big website.

Search within documents and webpages. Most electronic text can be searched for specific words. This applies to web pages, Word files and PDF documents. There may be a visible "find" box in the web browser. If not, press [Ctrl + f] to make a "find" box appear.

Paper searching
Paper searching techniques will vary with the specific library or repository. Information seekers should discuss the search system with librarians and custodians of these records.

The Alberta Government Library, sometimes known as the "Great West Life Library"
The Alberta Government Library holds over 60,000 records in print, sound and video form related to environmental topics. This material is deposited into the library by Alberta Environment and Sustainable Development (AESRD) or by the Parks and Protected Areas branch of Alberta Tourism, Parks and Recreation. The topics of information are covered in the section on Government information holders and in the Directory section of this guidebook.

The Alberta Government Library is open to all Albertans from 8:15 a.m. to 4:30 p.m. Monday to Friday (except statutory holidays). The collection is searchable through the NEOS Library Consortium Catalogue. Circulating materials may be borrowed using either a NEOS library card or The Alberta Library card. Two copies of all departmental publications are available for lending. Non-departmental records are available for review.

The Alberta Environment Information Centre

The Information Centre holds scientific and technical reports, policies, guidelines and educational materials produced by or for the AESRD. The information is organized by categories including land, air, water, waste and climate change.

The Information Centre is searchable online and many records are available for download. Information in paper format can be ordered. For contact information and physical location of the Information Centre see the entry on AESRD in the section on Government Information Holders.

Alberta Legislature Library

The Alberta Legislature Library holds materials on Alberta history, politics and public administration. The collection includes federal and provincial government documents and non-government documents such as newspapers.

The catalogue is searchable online. The library is open to public Monday- Wednesday 8:15 a.m. to 6 p.m. and Thursday – Friday 8:15 a.m. to 4:30 p.m. when the Legislature is sitting, or Monday – Friday 8:15 a.m. to 4:30 p.m. when the Legislature is NOT sitting. Materials are available for loan to the public.

Other public libraries

University and college libraries, hospitals and health sector libraries, and government libraries are part of the NEOS consortium of libraries. Members of NEOS libraries will have searchable online catalogues, download, and online ordering. A NEOS library card is required to borrow materials.

Public libraries are part of The Alberta Library (TAL) system. The TAL catalogue is searchable online. To borrow materials you will need a library card recognized by the individual library. If the library is part of the NEOS system, a NEOS card will work. If not, TAL provides a separate library card. A TAL library card will work at all participating TAL libraries.

NEOS and TAL provide dozens of publicly accessible libraries with hundreds of physical locations, more than can be covered in this Guidebook. Information seekers should use the system home pages and catalogues to identify libraries in their area that hold environmental information.

Law libraries

Legislation and court cases on environmental law can be found in university law libraries and courthouse libraries. The two university libraries are the University of Alberta Law Library (the “John A. Weir Memorial Library”) and the University of Calgary Law Library (the “Bennett Jones Law Library”). Check with the individual library for its borrowing policy and card requirements.

Courthouse libraries require a Law Society Card to borrow materials, but any member of the public can browse the library and copy materials.

The Environmental Law Centre (the author of this Guidebook) provides online materials and a public information request service on environmental law topics.

Requesting information

A "request" is when the information seeker asks the information holder for information. Requests can be made for:

- publicly available information that could not be found by searching;
- routine disclosure information; or
- *FOIP* information.

Requests can be informal or formal.

An informal request simply involves asking for information and can be made by phone, email or in person.

The advantage of informal requests is that there is no need to cite legal right to access, use a written form or pay fees. The disadvantage is that the information holder has no legal duty to provide information, follow timelines or assist the information seeker. Informal requests will be denied if there is a chance that the information might be legally withheld, but the information might be accessible with a formal request.

Formal requests follow a legally required process with which the information seeker and the information holder must comply. Formal requests are required for all ***FOIP*** requests and for some **routine disclosure** requests. Formal requests must generally be in writing and cite the legislation under which access is available. Specific requirements are dictated by applicable legislation. See the *FOIP* section for the process. See the section on Government Information Holders for their routine disclosure processes. Make formal requests to the Information Coordinator unless the **routine disclosure** process states a different person.

Making good requests

Information seekers need to do their part to help information holders respond to requests. Good requests produce more satisfactory information and help avoid high fees and delay.

Good requests have common features. These features apply to informal requests, *FOIP* requests and routine disclosures. They can even help with requests to non-government information holders.

Identify the right information holder and applicable legislation. The Directory section of this guidebook provides this information for each topic. Identifying the right information holder and legislation avoids delays caused by transfers of requests or non-responses.

Be precise. Precision is the most important part of good requests, after making requests to the right information holder. Precision includes accurately identifying the information sought and keeping the scope of information narrow.

- **Identify specific records if possible:** State the exact documents sought and use the specific technical names for records, if known. The technical names for records can be found in:
    - legislation under which the information is created and shared;
    - permits for regulated activities, including conditions for monitoring and reporting; and

- websites and reports produced by the information holder.

- **Limit requests to a narrow range of information.** Even requests that identify specific records can be too broad in the number of records sought. Requests that could apply to a large volume of information take longer to fill, risk triggering exceptions to access, produce irrelevant information and require higher fees. Fishing expeditions can definitely backfire. To keep requests narrow:
  - focus on one type of information, one component of the environment or activity of concern;
  - keep geographic areas as small as possible; and
  - submit separate request forms for different topics.

State the preferred way of receiving the information. The information holder does not need to comply with the preferred form of delivery, but they may choose to. This knowledge also helps information holders estimate fees and develop programs to meet the demands of information seekers.

Show an effort to find information before requesting it. Requests should show that the information seeker has searched for information that is **publicly available** or that they have asked for **routine disclosures** from the appropriate person first.

Stay cool and courteous. Avoid making accusations of secrecy an do not cite possible reasons for refusal in an attempt to pre-empt refusals. Such tactics could backfire. Information Coordinators are even-handed professionals and the law they must apply is complicated. Save arguments for challenging refusals if necessary.

Sample requests

A good request

> "We request all _____ data on the ___ emissions of facility_____ for the month of ____. This information must be reported by ___under section ____ of approval #_____. We attach a copy of our request to ____ as required by _____ regulation. We asked ____ for this information on _____. We have not received a reply within ____days so we make this request to you in accordance with the ____ regulation."

This good request:

- ✓ Is precise and narrow;
- ✓ Identifies the correct information holder;
- ✓ Cites the legislation that creates a right to access; and
- ✓ Shows efforts to access the information using the correct process.

The information seeker knows what information must be created and shared and who to ask. The request enables an efficient search that will produce what is sought without irrelevant information or excessive fees. The request is respectful so might get sympathy. The request will force reasons for refusal and set up a challenge if needed.

A bad request

> "Pollution is killing our lakes and rivers and the public is sick of this cover up. We demand to know what is happening in northern Alberta."

This bad request:

- X Does not identify what information is sought;
- X Does not identify the information holder, which causes delay if the request is transferred between information holders;
- X Does not cite legislation that provides a right to access;
- X Is not precise or specific about the information sought, which could result in huge fees; and
- X Makes the allegation of secrecy self-fulfilling because the request is impossible to respond to.

A request with good and bad elements:

> "This request is for ALL information and records pertaining to Approval #_____. Records include, but are not limited to ___, ____, ____, ____. The approval pertains to ___ on legal land description_____. Time Frame: From the commencement of the approval process which may have been _____ to the present."

Good elements of the request:

- ✓ Precise identification of the land, activity of concern and the time of concern;
- ✓ Some of the information will definitely exist and be available.

Bad elements of the request:

- X A broad swath of information sought could result in delay, irrelevant information and large fees;
- X Not citing the legislation that provides a right to access or the request process; and
- X Flowery "legalese" does not make requests stronger.

This request makes it possible for the information holder to respond, but the results might not be satisfactory. The information holder will be forced to consider exceptions to access on numerous records. The response might be delayed, include too much information and require payment of high fees.

Another request with good and bad elements:

> "I would like information on air pollution by Incinerex in Smoke Town. The company rep said they have all their pollution tickets but I want to know what comes out of that stack."

This request identifies a concern in in general terms but it does not ask for specific records. The information seeker made efforts to learn about the topic but they did not search for the information. The information holder might conclude that the information is already publicly available. They might deny the request, or they might direct the information seeker to a department web page about emissions, the air quality index for Smoke Town, or a searchable database of permits. The information holder is in a position to provide general or highly spun information instead of a clear record of whether the polluter is complying with regulations.

Planning for delays

Delay is a reality of access to information. If "time is of the essence," information seekers should consider the risks of not having the information in time or renegotiate their timelines. If *FOIP* requests are needed, then review the section on *FOIP* to determine the possible timeline.

Delay can be reduced by understanding potential causes, including:

- large searches;
- transferring requests between departments;
- the need for information holders to consider numerous exceptions to access;
- informing third parties of their rights to confidentiality; and
- matters out of control of the information holder.

The above tips on **searching** and **requesting** show information holders how to reduce these causes of delay.

Delay can be planned for because the timelines for information holders to respond are set in legislation. The timeline varies with the type of request:

- **Informal requests** do not bind information holders to any timeline. The information could arrive instantly or never.

- ***FOIP* requests** must follow the timeline set out in the FOIP section.

- **Routine disclosure** requests follow different legislated timelines. There are timelines for routine disclosure from AESRD. See the section on information holders for these timelines.

Information holders must provide written notice of decisions to extend timelines. The notice letter should include reasons for the extension and the new deadline for complying with the request. Information seekers who wish to challenge a delay should be aware that the Information Commissioner might side with the information holder if they were delayed by matters out of their control.

Keeping fees down

Expect to pay for some information. It is unreasonable to expect all information to be free because information sharing creates costs that must somehow be distributed between the information holder and information seeker.

Government information holders have legislated rights to recover costs on the public purse by charging fees. *FOIP* requests always require fees. These fees, and opportunities for fee waivers, are covered in the section on *FOIP*. Publicly available information and routine disclosures may require fees. These fees must not be higher than *FOIP* fees and usually they are lower. See the section on information holders for fees charged by two major departments: Alberta Environment and Sustainable Resource Development and the Alberta Energy Regulator.

The following are general tips for keeping fees down regardless of the legislated fee regime:

- Searches involve fewer fees than requests. Even if "time is money," searching can be more economical than writing requests. The balance of efficiency may be search services that charge fees for searching on behalf of the information seeker.

- Paper searching may be cheaper than online searching. Libraries are free to use. Online searching is free for information that is commonly sought but fees may be required for technical documents delivered in electronic format. Electronic information services can be very expensive to develop and maintain.

- Fees charged in response to information requests can be reduced through the above tips on making good requests. Precise requests are cheaper to respond to because they require less time locating records, considering exceptions to access, notifying third parties and reproducing records.

- Shorter documents are cheaper to reproduce. Written documents are cheaper to reproduce than maps and multi-media records.

Identifying environmental concerns

Identifying potential environmental concerns, or "red flags," is the mother of all skills. Identifying concerns should start before searches and requests for official documents and records. Identified red flags can narrow what further information to seek. The key to identifying concerns is to work methodically.

Identification of environmental concerns should include the site, neighboring properties and the broader geographic area. Recognize that contamination and other environmental nuisances can migrate across property boundaries through the land, air and water. All information seekers should complete this simple chart:

Activities of Concern	**On Site**	**In the Area**
Past:		
Present:		
Future:		

Try to create an "A list" of concerns, and possibly a "B list."

Your A list should include activities in the area that are known to create serious legal, financial, and environmental liabilities from contamination. These are usually human industrial activities. Most A lists will include any petroleum-related activities, including oil and gas infrastructure and petroleum storage tanks. Other activities that create very serious concerns but arise in fewer circumstances include drycleaners and landfills. Depending on the information seeker's specific circumstances, an A-list could also include the need to look at components of the environment, especially air and water.

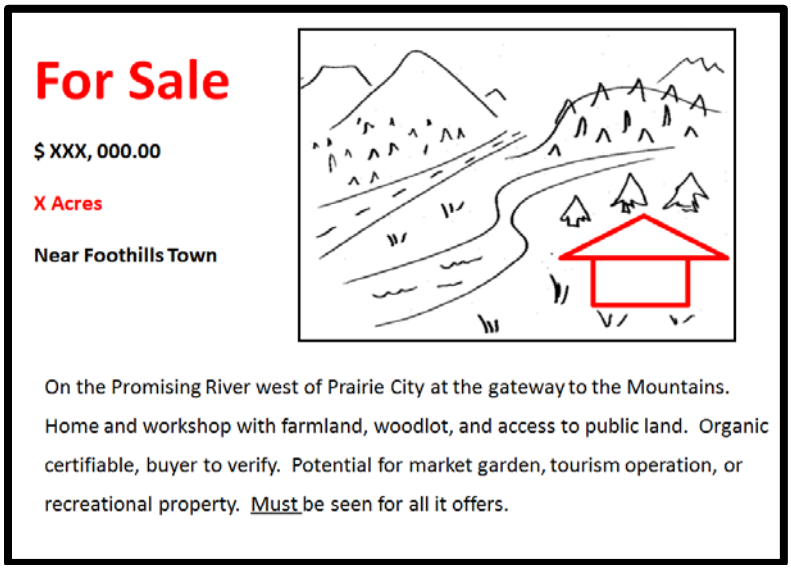
Activities that are not as frequent or do not create the same risk of serious legal or financial liabilities could be called B list activities. Examples include feedlots, gravel pits or forestry. B list activities can still be serious nuisances that tangibly impact quality of life, property value and the environment. For some information seekers these concerns may become A list activities.

Advertisements and representations

Look critically at real estate listings, marketing material and statements from sellers. What representations are being made? Does the seller attempt to assign risk right away? Remember that the legal starting point is always "buyer beware." Consider:

- Asking price: Is it below market value? Is it too good to be true?
- Location: What is known about this area? What other activities happen(ed) there?
- The sale package: what is included in the deal and what is not?
- Caveats: Is the buyer told to view the property or to verify representations?

Consider the following sample advertisement:



Make a worksheet

Make a worksheet or written notes that break down the specific representations from sales pitches and statements. Note concerns with each representation. The following example is based on the above advertisement.

File: Promising River Acreage (Foothills Town)	
Representations	**Environmental Concerns**
Rural acreage	Might be old farmland May have oil and gas wells
Woodlot	Check into forestry and forest health in the area.
Adjacent to Public Land	What activities are permitted on public land? Search for leases or permits.
Waterfront	Check water quantity and flood areas. Check water source: water license, water well or municipal water?
Organic certifiable	Search for pesticides and toxic substances.
"Quiet" recreation and tourism potential	What recreational activities on public land? Identify parks and recreation areas Identify transportation routes Check biodiversity (fish and wildlife)
Home and shop	Storage tanks for farm fuel or chemicals? Shop spills or junk dumps?
Notes or Special Circumstances: Agricultural land is being represented as suitable for multiple eco-business ventures. Buyer was put on notice TWICE in one ad. • Check if eco-certifiable. • Do a site inspection.	

Land titles: what they say and what they don't

The purpose of land titles is to provide notice about legal interests in that piece of land. The Provincial Government holds all original title documents and bears legal responsibility to guarantee the accuracy of these documents.

The key document is a Certificate of Title, available from a Land Titles Office in Edmonton and Calgary. Information seekers must request a "title search" or use the online SPIN 2 - Alberta Land Titles Spatial Information system. A legal land description is required to search for land titles information and there is a fee for delivery of the information.

For more information, see An Introduction to Alberta Land Titles or contact Service Alberta.

When reading a land title, two types of statements about property interests are especially helpful to identify environmental concerns and locate information holders. One type is known as a "reservation" and the other type is commonly called a "caveat."

Reservations: A reservation means that certain property interests are not included in the title. The most common reservation indicates where rights to subsurface mineral rights are excluded from the land title. Minerals include oil, gas, coal and other mineable resources.

If there is a mineral reservation, subsurface resources will be owned by someone other than the landowner. Most mineral rights are owned by the Provincial Government. A smaller number of mineral rights belong to private persons and are called "freehold" mineral rights. In Southern Alberta a larger portion of mineral rights are freehold. Even freehold minerals are often owned by someone other than the landowner. The government and freehold minerals owners can lease their mineral rights to other persons. The person holding the mineral lease can obtain a right to surface access to their lease to extract the minerals.

If the title includes both surface and minerals then it will not have a mineral reservation. The landowner will own the minerals. However, the vast majority of landowners do not have mineral rights.

The Certificate of Title will not indicate who owns the minerals. However, a Mineral Certificate of Title will identify which minerals are owned in a specific parcel of land and by whom. The minerals will be named in a phrase like "all coal, petroleum and natural gas" or "all mines and minerals." Land Titles Offices are required to issue mineral certificates before registering any transfers, mortgages or leases of mineral interests.

Caveats: The Certificate of Title lists legal interests in the land belonging to persons other than the title holder. These registered interests stay on the title after the land is transferred. They are removed when the legal interest they represent ceases to exist. Examples of interests on title include:

- mortgages and loans secured by the property;
- legal claims concerning the title. A certificate of pending litigation indicates that someone claims an interest in the property or compensation for its loss;
- surface leases and surface access orders that grant rights to enter onto the land to extract oil, gas and mineable minerals from under the land;
- leases that allow others to use the land or occupy buildings;
- utility right of ways that grant access for pipelines or municipal utilities;
- restrictive covenants that limit the allowable uses of the land;

- easements that allow others to access the land or travel across the land; and
- conservation easements.

Conservation easements can prohibit a range of developments that would raise environmental concerns. They are legally enforceable agreements between the landowner and a "qualified organization," usually a land trust or the provincial or municipal government. Prohibited activities could include:

- subdivision, residential or commercial development;
- petroleum storage;
- gravel pits;
- forestry;
- feedlots and factory farming; and
- fences or disturbances that would impair wildlife.

Conservation easements can reduce the value of the land for development, but they can also increase the market value of neighboring developable land. Easements help preserve the value of the land for the permitted compatible uses, including its ecological value.

Conservation easements are not guarantees of environmental condition. They cannot prohibit oil and gas or mineral mining where subsurface rights are separate from the land title. Environmental condition may also be impacted by activities prior to creation of the easement or by activities that are allowed under the easement, such as farming or livestock. Easements can be made for protection of the environment, natural scenic or aesthetic values or land for agricultural purposes. The easement may provide for uses of the land consistent with these purposes including recreation, open space use, environmental education, research or scientific studies of natural ecosystems.

Conservation easements registered at the Land Titles Office will appear on the Certificate of Title. Registered easements are binding on future landowners even after a land transfer and can be enforced against the landowner. Many easements are of perpetual duration, meaning there is potentially no end date to prohibitions.

Conservation easements can also be registered in the Conservation Easement Registry maintained by the Land Stewardship Centre. The registry is publicly accessible online. Searches require a legal land description. It is free to create a search account but there is a fee for delivery of information.

What land titles do not say

Land Titles are not statements of environmental condition. There are serious limits to what can be learned from a Certificate of Title because it is simply a statement of legal interests.

Caveats are removed when the legal interest ceases to exist. Abandoned oil and gas wells do not appear on the Certificate of Title because the well is not operating so the company no longer has a lease or order for surface access. The same applies to other caveats: debts get paid; lawsuits are settled; right of ways cease to be needed and easements can be terminated. A Historic Title Search can show caveats that no longer exist. Expired caveats can reveal historic uses of the property that may raise environmental concerns. This is described in the section on Oil and Gas Infrastructure.

Caveats must be registered at a Land Titles Office to appear on the Certificate of Title. It is possible that persons who might claim an interest in the land have not registered their interest.

Many surface activities that raise environmental concerns will not appear on title as they do not involve subsurface rights or require caveats. Examples include petroleum storage tanks, landfills, drycleaners, gravel pits, feedlots, pesticide use and forestry. Compliance with zoning, building setbacks, and other development requirements does not appear on title.

People reading land titles may also be interested in Real Property Reports and municipal land use regulation.

Real Property Reports are records of building locations relative to property boundaries. They can be used to determine compliance with setbacks and other on-site requirements. Real Property Reports must be prepared by registered land surveyors. Surveyors may be found through the Alberta Land Surveyors Association.

Municipalities are the primary regulator for the allowable use of private land. All municipalities in Alberta must have a Land Use Bylaw. The Land Use Bylaw provides enforceable zoning designations. The municipality further issues development permits and business licenses for activities that it regulates. Activities of concern that can be regulated by municipalities include petroleum storage tanks, landfills, dry cleaners gravel pits, forestry, and pesticide use. However, municipalities cannot prohibit provincially authorized activities such oil and gas infrastructure, mining, feedlots and major tourism and recreation projects. All of these activities are covered in this Guide. Municipal development plans, land use bylaws, development permits, business licenses and enforcement records for bylaw infractions are all publicly available from the municipality in question. Plans and bylaws are often posted on the municipal website.

Using maps and diagrams

Look for maps, photographs and aerial views of the property. A bird's eye view of the site and the broader area are important for spotting activities and creating a broader interpretive context.

- The Multiple Listing Service (MLS) map feature will identify the general location of the property.
- Google Maps satellite feature is accurate enough to show land disturbances from feedlots, larger industrial plants and dirt roads.
- Roadmaps and township maps identify transportation and settlement routes.
- Topographical maps will identify landscape features.
- Municipal Development Plans, Area Structure Plans and Land Use Bylaws often have maps that can help show what activities may occur in the area and may show environmental features;

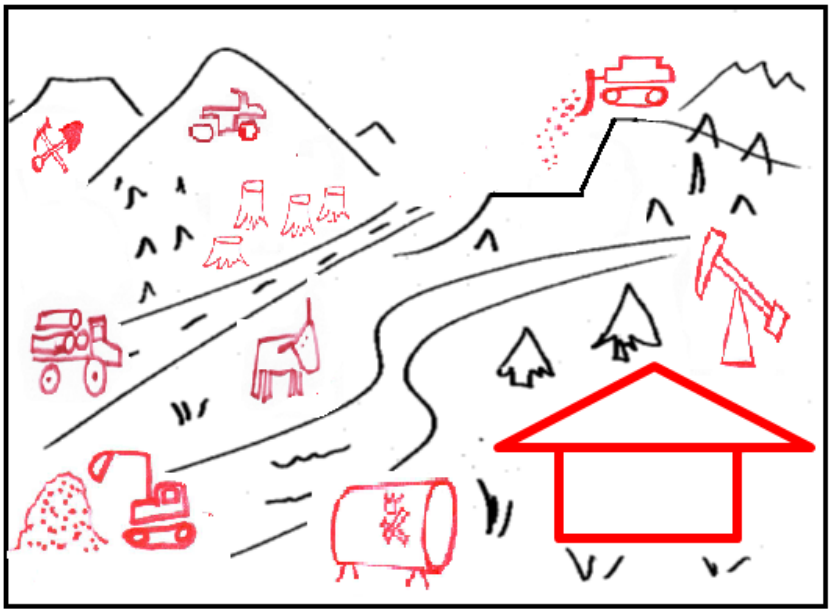
More technical maps in the Directory section include:

- Alberta Benchmark Retrieval System will convert geographic locations to legal land descriptions;
- Water basin maps;
- Geodiscover Alberta;
- Alberta Geological Survey; and
- Commercial Data Services and Mapping Services.

Zooming into photos provided in real estate advertisements can show activities of concern like above-ground petroleum storage tanks, machinery or waste piles.

Information seekers should make a diagram or at the very least paint a mental picture of the area. This individualized picture should show what isn't in the advertisement.

File: Promising River Acreage.



Site inspections

View properties in person whenever reasonably possible. This applies to all types of real estate transactions: commercial, industrial and residential. Buyers should make sure that the purchase contract allows them access to the physical site and all environmental records relating to the site.

Look for signs of trouble including:

- storage tanks;
- drums of chemicals, paint cans or piles of garbage; or
- activities on neighbouring land.

Look for signs of land disturbance such as:

- linear clearing for pipelines, utilities, roads or well pads;
- mounds and swells that could be waste burials, landfills or gravel pits;
- sink holes or cave-ins;
- changing watercourses, drainage or berms; and
- soil erosion or compaction.

Look for what is not there. Lack of vegetation can suggest soil contamination and vacant lots or derelict buildings in prime locations often indicate liabilities.

Take photographs and make diagrams.

Interviewing and questioning

Information seekers should ask questions of multiple persons. A list of potential persons to question is provided in the section on information holders. Information seekers should be very thorough in their questioning. Duties to proactively disclose information are limited and do not exist for many information holders.

Questioning technique

Consider using the "funnel" technique. This technique begins with broad questions to identify concerns and moves to specifics questions once concerns are identified.

Start with open-ended questions. Open-ended questions invite stories and descriptions instead of "yes-no" answers. Ask open-ended questions about the land, landowners or activities in the area. For example:

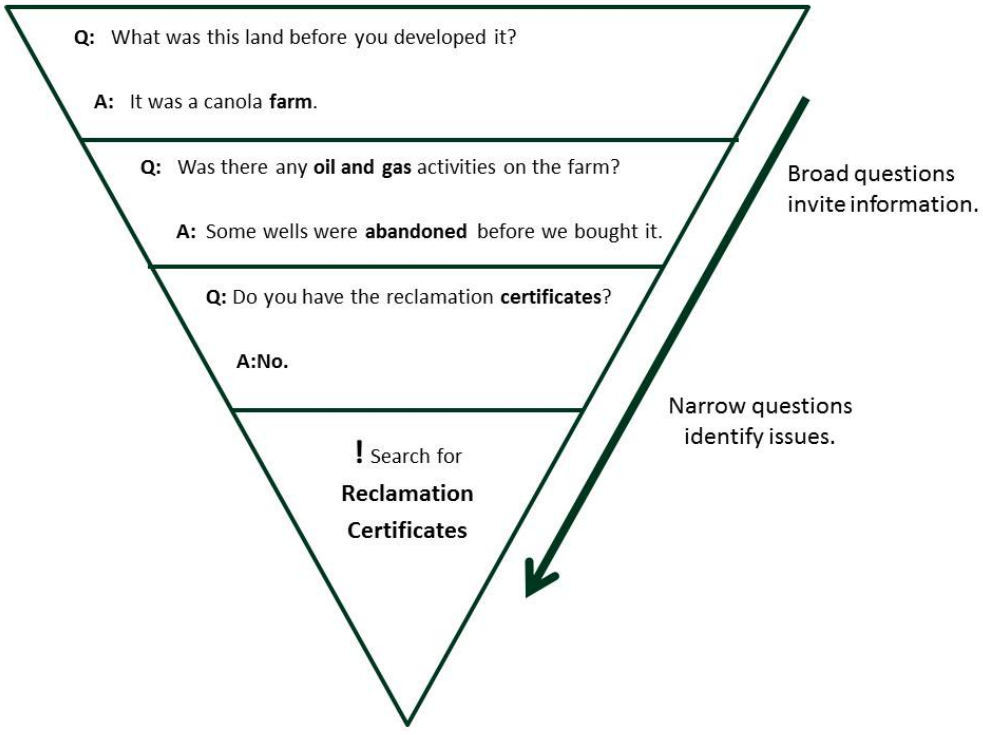
Q: What do you know about Jimmy Seller?
A: He was into everything. He ran a small feedlot, did some trucking and sprayed crops for other farmers. He probably made money from rent for oil and gas wells.

Move to closed-ended questions. Closed-ended questions require an answer of "yes," "no" or "I don't know." These answers will confirm problems or identify what information to search and request.

Q: Is this storage tank registered?
A: Yes.
Q: Can I see the registration?

End questioning sessions by asking if there is "anything else." There almost always is.

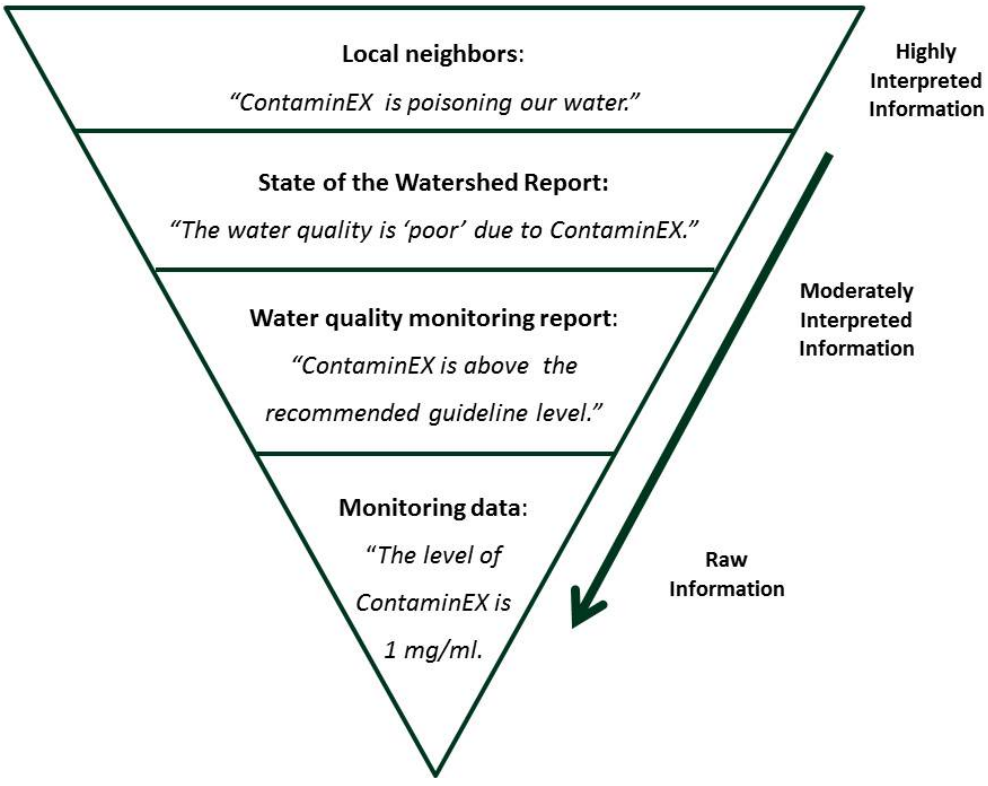
Here is an example of the funnel technique:



Avoid leading questions until concerns have been identified.
Leading questions are questions that invite a specific answer. This is usually the answer that the questioner wants to hear. Premature leading questions can backfire.

Leading questions	Non-leading questions
Q: Is this land clean? A: As clean as can be. Q: Did Jimmy Seller look suspicious? A: Not in the least.	Q: Were there any oil and gas wells on this quarter section? A: Yes. Q: How many? A: Two. Q: Who owned the wells? A: PetroCo. Q: What do you recall about PetroCo's operations? A: I remember my dad making a complaint in early 1990s.

Beware of subjective interpretations from interviewees.
Take interviewees' statements with a grain of salt. Some people enjoy venting and complaining a bit too much. Use subjective interpretations to identify the need for objective interpretations, which in turn identify the need for raw data. This resembles the "funnel" approach to questioning. Here is an example:



Reading documents and records

Two types of documents are especially important:

- Documents about the land itself: These include Environmental Site Assessments and Records of Site Condition, discussed below. However, never rely exclusively on this type of documentation as it may not exist.

- Documents about activities on the information seeker's A list of concerns: This documentation should include records created by the regulatory process for that activity. The goal is to picture the life of the activity and events that occurred. For example:
  - Did the activity require a **permit**?
  - Did the activity require an **environmental assessment** prior to permitting? (limited cases)
  - Were there any **releases** (spills or pollution)?
  - Were these releases in **compliance** with regulations?
  - Was there any **enforcement** action?
  - Was the site **remediated** (cleaned up)?
  - Was the site **reclaimed** (returned to a state for future use)?

Records from all of the above steps in the regulatory process are explained in the Directory section.

Carefully review all documents found.
Be extra thorough when reviewing documents that are disclosed from a seller. If a seller made disclosures then the buyer could be deemed to have that information whether or not they read and understood it. Get professional help with interpretation if needed.

Try to imagine what is not documented.
The absence of a written record does not mean that there are no environmental concerns. This is especially true when reviewing **land titles** and **regulatory records.** Keep in mind that:

- X Abandoned oil and gas wells are not on land titles.
- X Activities might be operating without a permit.
- X Spills might not be reported.
- X "Contaminated site" designations are rarely used on private land.
- X Non-compliance doesn't always result in enforcement action.

Environmental Site Assessments (ESAs)

ESAs are studies done to assess the likelihood of contaminated land, the extent of contamination and remediation measures required. Do not confuse ESAs with Environmental Assessments (EAs) or Environmental Impact Assessments (EIAs) conducted on proposed future activities.

ESAs are a leading tool for examining land condition. This is legitimate, but most information seekers should not start with ESAs unless they know they may be dealing with contamination on a high value land transaction. The costs of ESAs start in the low thousands and run into six figures based on the extent of the ESA and what concerns are discovered.

An ESA is performed by a private environmental consultant. The consultant is usually hired by the party who wants the ESA (commonly the buyer).

Buyers can ask sellers if ESAs have been done and request copies of ESA reports. Recall that **requesting** information puts the information holder in control. The information holder can only provide information they have, which is not necessarily what is sought. A buyer may also put limited reliance on a seller's ESA due to disclaimers or liability limits placed by the assessor. For a more detailed discussion of the role of ESAs in real estate transactions, see Get the Real Dirt, Contaminated Real Estate and the Law in Alberta.

ESAs can be also be required by Alberta Environment and Sustainable Resource Development (AESRD) in response to releases that could impact the environment. Government-ordered ESAs are publicly available in the Environmental Site Assessment Repository (ESAR). ESAR is discussed repeatedly in the Directory entries on releases and reclamation, and the Information Holders entry on AESRD.

Guidelines for ESAs are set by the Canadian Standards Association (CSA).

A Phase I ESA is used to identify the potential for contamination. Phase I activities include:

- a review of records;
- a site inspection;
- interviews with neighbors, government agencies and other people; and
- searches for noncompliance with regulations.

A Phase I ESA does not include environmental testing. The consultant's report will include recommendations for further action.

Phase II ESAs indicate whether potential contaminants are present and in what concentration. This involves surveying, drilling and testing samples.

Phase III ESAs establish the extent of contamination and options for remediation.

Environmental consultants can also test for specific soil and water conditions apart from conducting full ESAs.

Knowing what investigations are included in an ESA can help information seekers identify concerns themselves. Many of the records used in Phase I ESAs are found in the Directory section of this Guidebook. Always get professional help if needed.

Key information holders

It is the information seeker's job to identify who holds the information they require.

There is no "one stop shop" for environmental information. Information seekers should use multiple information holders for any issue that concerns them.

The advantage to using multiple information holders is a more balanced and complete picture of environmental condition. The Directory section lists multiple information holders for each component of the environment.

Many information holders are not government bodies. Government does not hold all environmental information or have the ability to answer all questions.

There are three key types of information holders:

Non-government information holders	Media Sellers and real estate agents People connected to the property and the area Industry Academic institutions Data services Environmental organizations (ENGOs)
Government information holders	Federal Provincial Municipal Aboriginal
Information agents	Delegated Authorities (Delegated Administrative Organizations) Information Service Providers Multi-Stakeholder Associations

Non-government information holders

The advantage to starting with non-government information holders is that information seekers can use any approach to learn what they can. There is usually no need to follow legislated formalities.

The disadvantage is that non-government information holders might not have rules or policies for sharing information. Their information might be self-serving or spun or they may not respond at all.

Media

Use newspapers, televisions and websites to identify current or contentious environmental issues. Major media covers major issues. Regional and local media can help identify issues in the immediate area, perhaps down to the parcel of land. Use news stories to locate primary source information, for example:

- "a government report from 2009";
- "his testimony at the inquiry"; or
- "in a farmer's field north of the city."

Media outlets help access to government information in a general sense as well. Media associations often oppose government secrecy, publishers might save their publications for longer than governments save records, and journalists are often experienced at making *FOIP* requests. The media may report on its experience as information seekers and publish records that it accessed.

Never rely on media as a direct source of information. News stories are highly interpreted. Stories may mix environmental information with social or political issues or frame environmental issues as black and white.

Sellers and real estate agents
Sellers and real estate agents have common law disclosure duties towards the purchasing side of a land transaction. They must disclose information about the any latent defects of a property. Latent defects are issues with the property that would not be revealed through a careful inspection by the buyer. Environmental contamination and dangers to health or safety can be latent defects based on the facts of the situation.

Be very thorough and specific when questioning sellers and real estate agents. Many environmental problems are not latent defects and do not create proactive duties of disclosure. The general legal rule is "buyer beware."

People connected to the property and the area
First-hand knowledge from people who live or work in an area is an important information source. Paper records may not capture what local people see and hear.

Key people to question include:

- property managers and facility operators;
- past owners;
- tenants, renters and lease holders;
- company shareholders;
- developers and builders; and
- neighbours.

Other people who may have information about environmental concerns in the area include:

- industry workers;
- recreational users;
- community organizations, landowner groups and watershed stewardship groups; and
- municipal planning and development officers.

Treat local knowledge with caution. The quality and truth of such information may vary. People other than the seller do not have legal duties to make disclosures on a potential real estate purchase. They might be the ones doing activities that impact the environment.

Industry
Lots of environmental information is created by private industry. Most industry sectors, associations and operators create and share information about their activities. Proactively shared information may be interpreted or spun for public relations purposes.

Regulated activity operators hold much information that actually qualifies as government records. This information includes applications for permits, permit conditions and monitoring data. These official records are covered in the Directory section.

Academic institutions
Universities, colleges, technical institutions and medical research facilities hold information on the topics studied at those institutions. Academic institutions hold raw data and information about how to interpret it. Studies and reports produced by academics may identify competing interpretations or provide balanced interpretations. Much of this information will be publicly available in libraries. If needed, *FOIP* applies to all public academic institutions and public service providers that are listed "public bodies."

Data services
Non-government data services provide consolidated information sources. They are not true "one-stop shops," but unlike governments they are not limited to what they hold by jurisdiction over the subject matter.

Much of the information held by data services has been obtained by governments. It is information that would be publicly available or routinely disclosed. Data services cannot provide information that the information seeker could not access directly from government. They simply help avoid the need to make information requests for each record sought.

Information held by data services will usually be raw data provided through electronic maps, charts and interpretive aids. Electronic maps help with interpretation because a map can show multiple topics at once, for example oil wells and water bodies.

Commercial data services were originally created as commercial ventures to help industry operators with stakeholder relations, community consultations or regulatory compliance. Industry-focused data services contain much environmental information, but this information might not be prominently featured or marketed. Commercial services often include information on:

- oil and gas activity locations;
- property interests, including public land leases and dispositions;
- First Nations and Aboriginal interests, archeological sites or heritage resources; and
- fish and wildlife resources.

Commercial data services require legal land descriptions and fees. Some services offer unlimited use subscriptions rather than per-use fees. One example of a commercial mapping service with much environmental information and a subscription option is AbaData.

Environmental Non-Governmental Organizations (ENGOs)
ENGOs are useful information sources because disseminating information is often part of their mandate. ENGOS will proactively share:

- issues they cover, and a position on these issues;
- activities they carry out;
- the geographic area they cover;
- information that would help advance their mission; and
- information that the general public would be served by knowing.

Some ENGOs may share further information on request. They may hold government records that they accessed or may have participated in regulatory processes. An ENGO may hold information on the specific issues that they tackle but not necessarily much else.

Information seekers looking to ENGOs should consider the ENGOs' issue focus, size and geographic area, and capacity to deliver information.

Government information holders

Information seekers should definitely look for information from government, but only as part of a broader search. Government does not hold all information and the information it holds cannot answer all questions.

Because there is no "one-stop shop" for information held by the government, information seekers need to identify specific sources of this information. Environmental information is divided between multiple holders. This is because "jurisdiction" (legal power) over the environment is shared between federal, provincial, municipal and Aboriginal governments. Each level of government assigns the environmental matters under its jurisdiction to "departments" or "ministries." For a detailed description of who regulates what, see the ELC's ABC's of Environmental Jurisdiction.

Government of Alberta

The big three environmental information holders in the provincial government are:

- the environment ministry;
- the public lands and resource manager; and
- the regulatory agencies for energy and natural resource industries.

The exact structure and names of these departments change regularly but the basic type of departments stay the same.

Other departments to consider include:

- agriculture, especially for information on rural areas; and
- municipal affairs, for information about municipalities.

Further provincial departments are covered under the topic section in the directory.

Provincial Government ministries can be found through the Government of Alberta homepage. The "contact" page allows browsing by organizational unit or searching for individuals. Each ministry's homepage explains which matters the department administers.

Smaller agencies and Delegated Administrative Organizations are listed in the Inventory of Government Agencies.

The Information Coordinator

Every provincial government department has an Information Coordinator (sometimes known as the *FOIP* Coordinator, *FOIP* Officer or *FOIP* Advisor). The Information Coordinator is a mandatory staff person under *FOIP*. The Information Coordinator's job is to field information requests and to know the department's access to information regime. The Information Coordinator will respond to the request or identify the appropriate person to receive the request. All *FOIP* requests go to the Information Coordinator. If there is no Information Coordinator then the head of the public body is deemed to be

that person. Information Coordinators are listed in the Directory of Public Bodies. See the section on *FOIP* for more details. If the information is Publicly Available or Routinely Disclosed without *FOIP* then the request might need to be made to a different staff person or a regulated activity operator.

Information seekers should start by contacting an Information Coordinator unless they already know how to access the information they want. It is hard to go wrong this way. Requests made to the Information Coordinator are more apt to be processed correctly.

Alberta Environment and Sustainable Resource Development (AESRD)
AESRD manages the natural environment and regulates development of natural resources, primarily under the *Environmental Protection and Enhancement Act* (*EPEA*) and the *Water Act*.

AESRD is the largest holder of environmental information in Alberta. It holds information on land, air, water and biodiversity. It also holds information from most steps of the regulatory process on many activities that create environmental concerns. The information ranges from raw monitoring data to public relations media.

Activities regulated under *EPEA* and the *Water Act* and the information that is created by regulatory process are listed in the directory section of this guidebook.

Information seekers should look for information from AESRD if they believe there was an activity on the property or in the area that would be regulated under *EPEA* or the *Water Act*. The activities and the information created are listed in the directory section.

How the AESRD shares information
AESRD has a strong mandate to provide access to information. The focus is on information that is commonly sought and would likely be accessible under *FOIP*. This policy is backed by legislation and ministerial orders that prevail over *FOIP*. Information obtained from AESRD may be subject to fees.

AESRD uses a two-tiered information sharing system: Routine Disclosure and *FOIP* Request. Routine Disclosure is information that is available under *EPEA*. *FOIP* request is information requested through *FOIP*.

Information seekers should generally start with the Ministry's Access to Information webpage, which provides the department's information sharing regime, instructions for information seekers and information on fees.

Other information held by AESRD is divided by topics including land, air and water. The AESRD page provides links to online search portals including the Environmental Site Assessment Repository (ESAR) and the Oil Sands Information Portal (OSIP).

AESRD is making increasing use of online information delivery but not all publicly available information is online. Other places to look for publicly available information include:

- The Information Centre for AESRD publications available for download or paper orders.
- The Environmental Education Centre for learning resources including State of the Environment reports.
- The Environmental Law Centre for enforcement search service records under *EPEA*, the *Water Act* and predecessor legislation. See Information Agents and Service Providers ____.

- Notices for applications for activities that are regulated under *EPEA* and the *Water Act*. These will have been posted in local newspapers, near the activity site or in prominent community locations.
- Library Services for over 60,000 resources on environmentally-related topics. The Directory Section lists where the Great West Life Library is a source of information.

For information on how to request both routine disclosure and FOIP information from AESRD, visit their Access to Information webpage.

Energy and natural resource regulators
Agencies that regulate the energy and natural resource industries are key information sources on activities that cause environmental concerns. Agencies hold information about the specific industries they regulate. This includes:

- applications and decision documents about permits and operations;
- permits and operating conditions;
- environmental monitoring data;
- compliance and enforcement records;
- technical data and statistics on industry operations; and
- policies, standards, directives, and guidelines for industry operations.

The province is the main regulator for energy and natural resources projects within provincial borders. Provincial agencies change names and functions periodically but the basic topics of information remain the same. There are three main areas of regulation:

- **Energy resources:** Oil and gas, oilsands and coal are regulated by the Alberta Energy Regulator (AER). The AER regulates production, storage and pipelines within the province.
- **Utilities:** Natural gas utilities, electric energy, transmission lines, hydroelectric generation and wind energy are regulated by the Alberta Utilities Commission (AUC).
- **Other natural resources:**
    - Feedlots (Confined Feeding Operations or "CFOs" are regulated by the Natural Resources Conservation Board (NRCB).
    - Mining for non-energy minerals, tourism and recreation, and water management projects are reviewed by the Natural Resources Conservation Board (NRCB) to determine whether they are in the public interest. Once the project is approved ongoing regulation is done by AESRD and municipalities based on their division of powers.

Information seekers should look directly to the regulatory agencies for information on the projects they regulate. Regulatory agencies report to ministers but they operate with a level of independence from the ministry.

The Alberta Energy Regulator (AER)
Look to the AER for information on:

- the location of oil and gas infrastructure, including abandoned infrastructure; and
- permits and applications for oil and gas activities on site or in the area.

Information seekers who discover oil and gas infrastructure in the area can also look to the AER for:

- technical data and statistics on industry operations;

- policies, standards, directives, and guidelines for industry operations;
- compliance and enforcement records and investigative reports; and
- maps and shapefiles on energy activities and resources.

The AER is progressively taking over environment and public land functions from AESRD where those functions are related to energy development. The intention is for the AER to become responsible for several environment and water permitting functions by mid-2014. This transition will gradually make the AER a source for the type of environmental information currently held by AESRD.

The AER's function is to provide access to data and information about the energy industry. The AER holds significant raw data, but this information is not presented as a statement of environmental condition. The quality of industry data and statistics is often very high but lay persons will need help with interpretation.

The location of abandoned oil and gas wells does not provide the level of accuracy that some information seekers want. Records might only confirm the existence of wells on a quarter section. The AER may direct the information seeker to companies for details and there may not be records for wells from the 1960s or earlier.

Overall, information seekers might not be wholly satisfied with AER information even though the information itself is very relevant. Information seekers who discover oil and gas infrastructure through information provided by the AER should definitely look for environmental information related to those activities from AESRD and from non-government sources (see Information Holders section).

How the AER shares information

The AER has an Information Services department and its own Information Coordinator (*FOIP* Coordinator). Field offices hold information, post notices and field complaints related to local activities but do not hold the full spectrum of information held by the AER. Information Services is the best point of contact for most public inquiries.

The AER is not required to obtain data that it does not have for the purpose of making it available, make data available other than upon request, or make data available other than through viewing at AER facilities and upon payment of fees. The AER may make regulations for Routine Disclosure or for Confidentiality that can be changed by the AER at any time. Any information may be made publicly available with consent of the person who submitted it, but this usually means consent of an industry operator who may have no interest in sharing the information.

As the AER takes over environment and public land functions it will become the holder of the same type of information that would have been held by AESRD but without the same requirements to make information available. The AER is a public body and subject to *FOIP* but the legislation creating the AER provides little commitment to transparency and accountability. The AER has no obligation to report annually to the public or the legislature. The Minister of Energy may request disclosure of information but there is not duty on the minister to make this information publicly available.

The AER makes vast amounts of data publicly available and provides routine disclosures of energy infrastructure locations. Information that must be made publicly available includes reports on processing plants, flaring emissions, enhanced oil recovery and underground waste disposal schemes.

This information is delivered directly by the AER, not by regulated activity operators or third party service providers.

Information seekers preparing for a hearing or a land sale should plan ahead if they will be seeking older information. Older information is often in microfiche format. Although the AER has a long-term project to convert this information to PDF format, the conversion process may create delays if the files requested are being scanned at the time of the request for information.

Publicly available information

The AER website provides direct links to map viewers that can be used to find the location of active and abandoned energy infrastructure, as well as other information on energy development. See the Directory entry on Oil and Gas infrastructure for these sources. The AER also makes publicly available reports, statistics, notices of project applications, recent decisions and orders of the AER. The website further provides background information on legislation and regulation of the energy industry.

The AER offers a Product and Services Catalogue of publications, maps, data and continuing information services. Product formats include print, CDs, microfiche and PDFs. Many products are available online for free download. If there is no direct link to these products, the Product Services Catalogue covers how to order information products and the information to include in requests. Place all orders and inquiries with Information Services unless directed otherwise.

The AER library at the Calgary office is not marketed to the general public but library staff may provide access to self-sufficient information searchers. Library computer portals and microfiche readers provide access to publicly available information listed in the Catalogue but not downloadable from the AER website.

AER Field Centres hold locally relevant information, distribute information to local residents, post notification of activities in the area and respond to complaints and inquiries. Field Centres do not hold all information held by the AER and might not process formal information requests.

Routine disclosures

To obtain routine disclosure the request must be properly made. Requests must:

- be in writing or by email to Information Services;
- state the exact properties to be searched must be identified by Alberta Township System (ATS);
- specify requests for maps of well sites if desired; and
- provide fees, if requested by AER.

Always look for publicly available information before making requests.

Unlike AESRD, it is not necessary to contact activity operators for routine disclosures from the AER. However, the AER may refer information seekers to activity operators concerning the location of infrastructure. Operators are required to share information on the location of abandoned wells.

Confidentiality

The AER may provide confidentiality on the request of the persons submitting information. If confidentiality is granted, the person has a chance to justify continued confidentiality. However, the AER may make information publicly available if not doing so would “severely prejudice” the AER’s decision-making position or restrict benefits to conservation of energy resources in Alberta. The Energy Minister

may also disclose provided information one year after an energy operator ceases to do business in Alberta.

FOIP requests are required for all information not made publicly available or routinely disclosed. The *FOIP* request process is the same for any government department. Make requests to the *FOIP* Coordinator at the AER Law Branch.

Fees for AER information

Some publicly available information in the AER Catalogue is free and some has a set price. Payment must accompany the order. The AER charges fees for some routine disclosure including information on oil and gas infrastructure location. *FOIP* requests always require fees.

The Utilities Regulator

The current regulator is the Alberta Utilities Commission (AUC).

Information held by the AUC

The AUC holds information similar to that held by the AER but for the utilities and electric production sectors, such as natural gas utility pipelines, electric transmission lines, power plants and hydroelectric dams. This includes the location of infrastructure, permits and applications for activities, data on industry operations, policies and guidance documents, and compliance records. Information from the AUC is not a statement of environmental condition.

How the AUC shares information

The AUC makes some information publicly available through its website. The AUC does not have significant legislation making information available or providing confidentiality as compared to the AER or AESRD. *FOIP* applies to much information held by the AUC.

Information seekers should contact the AUC Information Coordinator to ask how information that is not online is shared.

The Natural Resources Conservation Board (NRCB)

The NRCB has two main functions. The first is to review applications for major projects involving public land or resources other than energy. Examples include:

- mining and processing plants;
- forestry product mills;
- recreation and tourism developments; and
- water management projects.

The NRCB determines if proposed projects are in the public interest. Publicly available information on the NRCB website includes project applications and decisions. Information on environmental assessments for major projects reviewed by the NRCB may be found in the AESRD library. The NRCB is not responsible for ongoing regulation of these large projects. Provincial regulation is carried out by AESRD.

The NRCB also reviews applications and regulates large feedlots (confined feeding operations or "CFOs"). Information on CFO compliance, enforcement and statistical information (by region and livestock type) is available on the NRCB website. Information seekers concerned with a specific CFO can contact one of four NRCB Field Service Offices in Fairview, Morinville, Red Deer and Lethbridge. Field

offices review CFO applications, issue permits, respond to complaints and ensure compliance. If information on a specific CFO is not available from the field offices try the NRCB Calgary Office.

FOIP applies to all information held by the NRCB that is not made publicly available. Make requests directly to the NRCB's Information Coordinator at the Edmonton Office. Field Offices will not have all information held by the NRCB or administer *FOIP* requests.

Agriculture and Rural Development (ARD)
ARD manages agriculture and food industries in Alberta. It also seeks to sustain rural communities and the natural resource base of the agricultural industry. ARD shares responsibility for CFOs with the NRCB.

Information Seekers should look to ARD if they are interested in rural areas, pursuing agriculture or buying farmland for personal use. ARD holds information on:

- Land: soil fertility, soil conservation, and soil management;
- Water: rural water supply, quantity, and quality;
- Air: odor and dust from agricultural operations; and
- Biodiversity: weeds, insects, pests, and diseases.

ARD information will relate to:

- enhancing natural resources for agricultural activity;
- the impacts of agricultural operations; or
- environmental stewardship by the agricultural sector.

Information directed at producers may be available through the Ag-Info Centre, which has 13 branches around the province.

ARD includes the Farmer's Advocate Office (FAO). The FAO helps landowners protect their interests. The FAO produces information on:

- wildfires;
- source water loss and well replacement; and
- oil and gas development topics including surface leases for oil and gas, land rights taken, adverse effects, monetary losses and compensation rates.

FAO information combines raw data with interpretive aids like maps and statistical summaries by region.

How ARD shares information
ARD makes a large amount of information publicly available online, even though it is not required by law.

FOIP applies to all information held by ARD. The *FOIP* process is the same for all government departments. *FOIP* requests should be made to ARD's Information Coordinator.

Municipal Affairs
Municipal Affairs provides programs and services to help local governments ("municipalities") and to promote communities. It also helps manage public land through Improvement Districts and Special Areas.

Municipal Affairs holds information related to:

- Safety Code compliance and enforcement information, available from the Safety Codes Council at the Safety Services Branch;
- Private sewage permits and regulation;
- Services and emergency response in Improvement Districts and Special Areas; and
- Emergency Management Information, available from the Alberta Emergency Management Agency.

Municipal Affairs used to administer the Tank Site Remediation Program for the remediation of petroleum tanks at old service stations but this program is defunct. Information seekers concerned with petroleum storage tanks should look to the Petroleum Tank Management Association of Alberta.

How does Municipal Affairs share information?

Municipal Affairs has an access to information webpage and a department commitment to information sharing. *FOIP* applies to all information held by Municipal Affairs but *FOIP* requests are not always needed. Information seekers should contact the Information Coordinator to determine whether information is available through a department program or would require a *FOIP* request.

Persons seeking information on Safety Codes should contact the Safety Codes Council directly unless they are seeking information on enforcement of the Fire Code, which is done by municipalities.

Municipalities

Municipalities are the local governments of towns, cities, counties, municipal districts ("MDs") and Improvement Districts. The legal power ("jurisdiction") of municipalities is delegated by the province through legislation, primarily the *Municipal Government Act*.

Municipalities are the primary regulator for development and allowable uses of private land. Municipalities also regulate businesses, public nuisances, litter, unsightly property, health and safety hazards, and environmental impacts within their boundaries. Municipal bylaws can often be stricter than provincial regulations. Municipalities cannot prohibit activities that are permitted by the province through the AER, AUC or NRCB.

Information seekers concerned with land condition and land use activities should look to municipalities for information, including:

- planning, zoning and development bylaws;
- Fire Code compliance and enforcement orders and fire insurance maps;
- municipal permits for gravel pits on private land;
- oil and gas emergency response plans;
- enforcement orders and clean up orders for breaches of bylaws; and
- information on roads used for transportation of hazardous goods within municipal boundaries.

Some municipalities keep records on the location of contaminated land and landfills. This is more likely with larger municipalities. In many municipalities this information will need to be deduced from zoning and development records.

How do municipalities share information?

FOIP applies to all information held by all municipalities. Each municipality must have an Information Coordinator to handle *FOIP* requests. The *FOIP* contact for municipalities can be found through the Municipal Officials Search maintained by Municipal Affairs.

The openness of municipalities and their capacity to proactively share information without requests varies. Larger cities have more developed information sharing regimes, including policies for publicly available information and routine disclosure. This information would all be available under *FOIP*. Some major municipal initiatives to be aware of include:

- City of Edmonton OpenGov: This website provides access to data sets via the City's Open Data Catalogue.

- City of Calgary EnviroSite Report: EnviroSite reports are property reports showing historic commercial and industrial uses, and any environmental assessment reports submitted to the city. Reports can be obtained for adjacent properties as well. If petroleum tanks had been used on the primary site prior to 1996, the report will confirm the number of known tanks. EnviroSite helps buyers, sellers, and financers of commercial lands to better understand a property's environmental condition and these reports may be required when developing commercial or industrial lands.

For all municipalities, Fire Code orders and records can be obtained directly from the Fire Marshall at the Fire Department. Enforcement records can be obtained directly from Bylaw Service departments.

Information agents and third party delivery

Government information can be shared through agencies that are not part of government. These agencies have official roles under legislation, contractual agreements, or recognition in government policies. Information agents are valuable as they can provide access to government records. They might also add context or interpretation, or even generate their own information.

Three key examples of information agents are delegated authorities, information service providers and multi-stakeholder associations.

Delegated Authorities ("Delegated Administrative Organizations" or "DAOs")

DAOs perform functions that would otherwise be functions of government. These functions are assigned by the legislation that creates the DAO. Some DAOs are a public bodies to which *FOIP* applies, while others can be corporations or public-private partnerships.

Examples of DOAs include:

- Petroleum Tank Management Association
- Alberta One Call
- Alberta Conservation Association

Further DAOs can be identified through the Directory of Public Bodies.

Information held by DAOs is identified in the Directory section of this guidebook. The type of information held by a DAO depends on its level of independence from government. DOAs with low independence might simply hold information that activity operators are required created and submit

under regulations. DOAs with high levels of independence might proactively create, interpret, and share information on their own initiative.

DAOs must comply with *FOIP* as a minimum standard. Legislation assigns functions to the DAO to make information publicly available or provide for routine disclosure.

Information service providers
Governments may contract outside service providers to search for information in government databases and deliver it to the Information Seeker. The service provider is not really the information holder.

The Environmental Law Centre (the producer of this publication) is a contract search service provider for enforcement records created under specific provincial legislation. See the section on enforcement for a description the available records. The Enforcement Search Service can be accessed online.

Multi-stakeholder associations ("associations")
Multi-stakeholder associations are a mix of government, non-government, industry and private sector entities that come together to address specific environmental issues. The association might be a "partnership," a "council" or a "network."

Examples of multi-stakeholder associations include:
- Watershed Planning and Advisory Councils
- Clean Air Strategic Alliance
- Wood Buffalo Environmental Association
- Alberta Water Council / Alberta Water Portal

Information held by multi-stakeholder associations is identified in the Directory section of this Guidebook.

Multi-stakeholder associations hold information on the specific issues that they address. Associations may:
- collect information from individual members;
- promote information sharing between members; or
- hire consultants to produce information for the association.

Associations proactively share information through reports, media releases, public awareness programs and educational events. This information is usually interpreted. Associations might share raw data with Information Seekers that the association considers to be appropriate recipients of the information.

Information seekers should consider the following when seeking information from multi-stakeholder associations:
- Most associations were not created to be public information sources. Gathering, holding and sharing information is something they do to help tackle their environmental issue.
- Associations have a hard job when it comes to information sharing. They are information holders, seekers and agents. They might face information overload on one topic or lack information that they need on another.
- Public information programs run by associations are evolving. An association may feel that it benefits from the public profile and public confidence that results from sharing information.

However, the association likely lacks capacity to respond to all information requests. Information seekers should be clear about who wants their information, what it is wanted for, and how it will be used. This understanding will help the association respond to the information request and plan its approach to information sharing.

- Information seekers must accept information in the way that the association chooses to share it. The association is not a public body so *FOIP* does not apply. If the information is in the hands of the government member of the association, then information seekers could request the information from government subject to the rights and exceptions under *FOIP*.
- Association members might not agree on the interpretation of information that it makes public. Members might have divergent interests and information made public may affect them differently.
- Never rely solely on information from multi-stakeholder associations. Government reliance on multi-stakeholder information is equally contentious.

Directory of information topics

This section covers the major topics of environmental information. Each entry describes why one might want information on the topic, issues with the information, sources of the information and how it can be accessed. There are three main categories of topics:

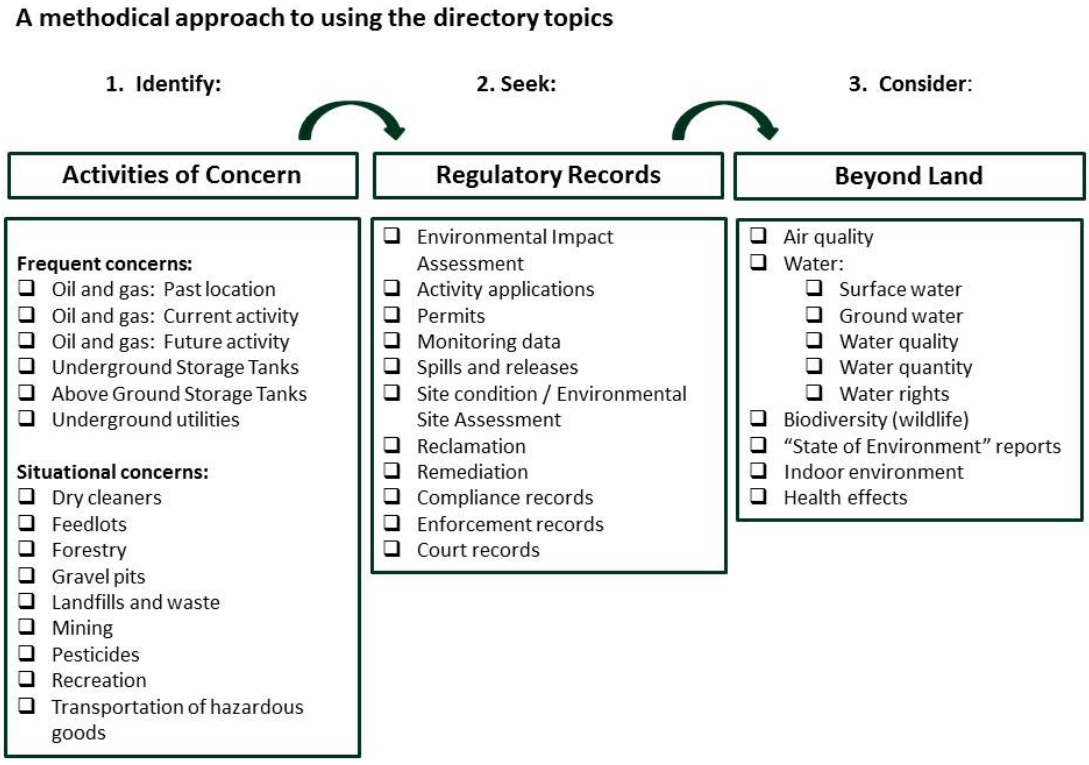
- activities of concern;
- regulatory records on these activities; and
- components of the environment other than land condition.

Information seekers should ideally have an "A-list" of concerns already. How to make this list is covered in the section on Identifying Environmental Concerns. Those who are still unsure what their concerns are can browse the Directory to read about the topics.

Each topic includes:

- a brief description of the topic;
- information issues to be aware of;
- what information exists;
- information holders and contact information; and
- how the information is accessible, including some direct links.

Where direct links are not provided, information seekers will need to understand the skills and terminology provided by the basics of environmental information section. Do not hesitate to go back in this publication to review unfamiliar words or concepts.



Activities of concern

Oil and gas infrastructure location

Always seek information on the location of oil and gas infrastructure wherever the extraction of petroleum resources might have occurred. This includes all farmland or rural land being repurposed for development. The reasons for accessing this information are numerous:

- Petroleum can cause serious environmental contamination and legal liabilities.
- Oil and gas activity is common in Alberta and may be foreseeable.
- Underground infrastructure might not be discovered by a site inspection.
- Sellers may have no knowledge of the concerns, in which case they have no duty to disclose.
- The mere existence of abandoned oil and gas wells can affect the types of development for which the land is suitable, even if there are no records of contamination.
- Developers are required to identify locations of abandoned wells and to ensure that development meets setback requirements. Municipalities are required by law to refer subdivision and development applications to the Alberta Energy Regulator (AER) where permanent dwellings or public facilities are subject to setback requirements.

Information issues to be aware of:

Current activity: Current oil and gas activity is easier to identify through conventional inquiries undertaking in relation to a property. Current activity on a property should appear on land titles as it requires a caveat on title for surface access. Active buried infrastructure can be identified by Alberta One Call for anyone planning an excavation. Site inspections can also help identify current activity in the area. Look for well heads and pipeline notices as well as the more obvious pump jacks and processing plants.

Historic activity: Historic activity requires special inquiries to identify. Abandoned oil and gas infrastructure is not on the land title because the legal interest in surface access no longer exists so the caveat is removed. Abandoned infrastructure is not on Alberta One Call because the infrastructure is not active so the operators no longer seek to protect it from excavations. Historic activity may not be visible from site inspections.

To identifying historic activities, ask specific questions of persons with knowledge of the property, make thorough site inspections to look for prior surface disturbances, and make searches and requests with the Alberta Energy Regulator. It is possible to discover past caveats through a historic title search. This might be the only record of very old wells that predate the modern regulatory system and the memory of persons interviewed.

Future activity: Oil and gas activity could occur in the future even if there are no current concerns with land condition. Information seekers should understand the steps of the energy development process. First, mineral resources must be identified and leased to a company that will extract them. Then there will be surface activity for exploration and commercial extraction. This second step can be further broken down into the steps described in the section on the general regulatory process: project applications, project permits, monitoring, enforcement, reclamation and remediation.

Future oil and gas activity is harder to be certain of than current and historic activity. The results of exploration activities can be withheld. Direct notice of project applications will only be given to persons deemed directly affected by the application. Other persons must search for project applications on the AER website without notice of when applications have been made. Information that requires formal

requests might not be delivered in time to meaningfully participate in application processes. For further reading on access to information in the project application process, see Access to Information in the Oil and Gas Industry.

Activities in the area: Consider accessing information on oil and gas operations in the surrounding area as well as the site in question. Spills and contamination can migrate through land and water.
Oil and gas activity in the surrounding area can impact property value, human health and life quality due to air emissions, noise and industrial traffic. Surface projects can impact open space views, landscapes and biodiversity. Multiple oil and gas operations can cause cumulative effects on land, air and water even if individual operations would not cause environmental concerns.

Accuracy of records: Records of the location of oil and gas wells may only be accurate to the level of a quarter section. This is a concern where residential subdivision and development uses the smaller units. The Alberta Energy Regulator may direct information seekers to contact industry operators for more detailed location information. Records of historic oil and gas well locations from prior to 1945 may not exist at all. Records from the mid-1960s onwards are likely to be more complete.

The need for further information sources: Information seekers concerned with oil and gas activity should use broader sources than those in the chart below. Persons who discover historic or current oil and gas activity should seek regulatory records about specific sites and activities. Such records provide more direct indications of environmental condition. Priority regulatory records include records of site condition, reclamation, remediation and enforcement. These records are held by AESRD, at least until the AER takes over responsibility for environmental permitting as anticipated. If the primary concern is future oil and gas development then information seekers need to be creative. Information on minerals exploration discoveries and anticipated projects may be within the knowledge of local landowners or industry workers. It may be anticipated through company representations such as websites highlighting plans for future development. Access to information law does not apply to non-government sources.

Oil and gas infrastructure		
What information is available?	**Who holds it?**	**How is it accessed?**
Caveats on land title for surface access indicating current oil and gas activity. Former caveats on title indicting historic oil and gas activity.	Land Titles Offices	Publicly available. Request a search for the Certificate of Title. Persons seeking historic records must specifically request a Historical Title Search.
The location of current and abandoned oil and gas wells.	AER	Publicly available. Use abandoned well viewer through the Systems & Tools portal of the AER website. The abandoned gas well link is featured at the bottom of the main page as well. Oil and gas operators are required to share information on the location of wells as directed by the AER. Abandoned well information can also be obtained from the GeoDiscover

		Alberta website.
Other mapped information on oil and gas development, including allowable spacing between wells Base of groundwater protection for a specific geographic area.	AER	Publicly available. Search through the Data and Statistics link on the AER webpage. If information is not found, check the publication catalogue for what can be ordered.
Advisory Land Use Planning Notes on Abandoned Well Sites.	Municipal Affairs and AER	Advisory notes are publicly available online from Municipal Affairs.
Legal requirements for development setbacks from oil and gas facilities, requirements on municipalities to refer subdivision and development plans to the AER, and requirements on developers to identify abandoned well information.	AER or Municipal Affairs, depending on the question.	See AER Bulletin 2013-03 for an overview of regulatory requirements, the AER's process for responding to inquiries, and a summary of where to find information on abandoned wells. See Directive 79 for setback requirements from abandoned wells. An overview is provided online. For questions concerning the responsibility of oil and gas permit holders contact the AER. For questions about the responsibility of the proponent of subdivision or development or the municipal approving authority, contact the local municipality or Municipal Affairs.
Land Development Information Package intended to assist municipalities with planning. The package provides information on provincially licensed oil and gas facilities within a 2km radius of the subject area.	AER	A Land Development package will be provided to the specific municipality by the AER on request.
Permit information for current oil and gas activities, including license numbers, company names, and location by legal land description.	AER	Publicly available online through the data and statistics page or through the catalogue.
Investigative reports on spills from oil and gas facilities.	AER	Publicly available. Search the data and statistics page online. If information is not found check the catalogue.
Burning, "flaring," "venting" and		Notice is provided to local residents

incineration of sour gas that could cause health risks.		that may be directly affected. The level of notice and consultation increases with proximity to the release. Data and statistical information on flaring and venting is publicly available through the catalogue.
Data on productions and operations other than that related to spills, health risks and emergencies.	AER	Access varies. Contact Information Services for information not made publicly available online or in the catalogue.
General and non-emergency oil and gas related inquiries.	Can be made to the toll free Energy Information Line 1-855-297-8311	Varies. Inquiries will be referred to the appropriate government agency or technical expert.
Information targeted at industry operators.	Petroleum Registry of Alberta	Available online to persons registered for the service.
Location of mineral deposits.	Alberta Geological Survey	Publicly available online.
Crown Minerals Dispositions including: • Maps of mineral sales results. (mineral leases) • Access for oil and gas on public land.	Alberta Energy	Publicly available Online at Land Status Automated System (LSAS)
Mineral exploration highlight maps and reports.	Alberta Geological Survey	Publicly available online, but not comprehensive. Much information is that which is made available by companies.
Mineral exploration plans and reports.	Alberta Energy	Confidential for one year. *FOIP* request afterwards.
Mineral exploration discoveries and developments.	Alberta Energy and AER	Confidential for 15 years for records that reveal "geological or geophysical works," including works that are aimed at: • discovering minerals or water; • investigating geological conditions; or

		• investigating the subsurface of the earth. *FOIP* request afterwards The Information Commissioner has allowed *FOIP* access to parts of records that did not reveal geological or geophysical works. (Note that the applicable provisions have changed since the time of this order.)
Notices of applications for oil and gas projects and notices of pipeline construction.	AER	Publicly available on AER website under Applications and Notices. Notices may also be provided in local newspapers. Persons who may be directly affected are required to be notified through consultations by the proponent company. Publicly available. Catalogue publication ST100: Pipeline Construction Notification.
Materials submitted as part of project applications.	AER	Some routine disclosure of information acquired by the AER. Submissions of applicants and interveners in AER proceedings must be made public.

Underground Storage Tanks (USTs)

Always identify the possible existence of Underground Storage Tanks (USTs) on site or in the area if concerned with contaminated land. USTs used for petroleum can create extremely serious legal, financial and environmental liabilities. Concerns include:

- migrating contamination to adjacent properties through soil and groundwater;
- risks to the health of humans, livestock, crops and wildlife;
- fire risks, especially if contamination migrates into buildings or industrial facilities;
- costs and difficulties with remediation (clean up) of leaking USTs; and
- lenders may consider the presence of USTs to be a high risk lending scenario.

There are thousands of leaking USTs in Alberta. Before the 1980s, there were few requirements to protect tanks from failure; therefore all old tanks are at risk of leaking eventually. A level of risk exists wherever any USTs existed. Land uses that indicate a risk of USTs include:

- gas stations ("service stations");
- farming and irrigation operations;
- airports and airstrips;
- trucking or other fleet operations;
- car dealerships; and
- premises heated by heating oil.

The key Information Holder on USTs is the Petroleum Tank Management Association of Alberta (PTMAA). PTMAA has authority to administer the Alberta Fire Code as it relates to construction, registration, upgrading, testing, closure, maintenance and operation standards for USTs and above-ground storage tanks that fall under the Fire Code. USTs must be registered with PTMAA for legal use. The registration form indicates the location of the tank. The location will be by legal land description or it may be by street address in urban areas.

Information issues to be aware of:

PTMAA does not have a complete inventory of all USTs in Alberta. There are abandoned and unregistered USTs that predate the creation of PTMAA.

Leaking tanks must be reported to the municipal fire department under the Fire Code and to AESRD under the *Environmental Protection and Enhancement Act*. As with any substance release, not all releases get reported.

Beyond the searches described below, information seekers concerned with USTs should seek regulatory records on releases, remediation, site condition, enforcement records and court records. Information seekers should also verify whether any remediation of USTs accords with the Risk Management Guidelines for Petroleum Storage Tanks (Alberta Environment, 2001). Information seekers should consider conducting an Environmental Site Assessments (ESA) if USTs are discovered.

Underground Storage Tanks (USTs)		
What information is available?	**Who holds it?**	**How is it accessed?**
Information on any registered USTs in Alberta including: • tanks located at an address, including the site/tank	Petroleum Tank Management Association (PTMAA)	*FOIP* applies to the PTMAA. PTMAA will routinely disclose information on tanks without the need for a *FOIP* request, so long as the disclosure would comply

detail, tank closure report and site diagram, (if they are available); and • registration certificates, applications for registrations, replacement of registrations, and cancellation of registrations.		with *FOIP*. PTMAA uses its own request form. The form is available online. Requests should include the complete address to be searched (including municipal, legal land description and lot/block/plan). Copies of site/tank details will be provided. Searches cost $20 + GST per address. An additional $10.00 + GST is charged per report provided.
Records of compliance with Alberta Fire Code for: • installation of USTs; • maintenance of USTs; • removal of USTs; and • whether existing USTs have been upgraded to meet the Fire Code. Enforcement records for non-compliance with Alberta Fire Code.	The Municipality	*FOIP* applies to municipalities. Fire Code records will likely be routinely disclosed as they would likely be available under *FOIP*.

Above Ground Storage Tanks

Above ground storage tanks are used for petroleum production, private fueling operations, used oil and industrial chemical storage. Look for above ground storage tanks if concerned with contaminated land, toxic substances or fire risks. Land uses that could indicate above ground tanks include:

- farms;
- golf courses;
- research labs;
- industrial properties;
- oil and gas operations; and
- "tank Farms," where multiple tanks are grouped together for chemical mixing or shipment.

Information issues to be aware of:

Above ground storage tanks are not on land titles.

There is no consolidated information holder to confirm the existence of above ground tanks or environmental concerns from the tank. Above ground storage tanks vary considerably in size and substance held. The permitting process for above ground tanks depends on the size of the tank and the fire risk.

- Large storage tanks that are not permitted as part of an oil and gas project may require an approval under the *Environmental Protection and Enhancement Act*. The approval requirement is based on the tank capacity. An approval is required for:
    - a "chemical storage facility" with a capacity over 5,000 cubic metres (5,000,000 litres);
    - a "bulk petroleum storage facility" with a capacity over 10,000 cubic metres (10,000,000 litres); and
    - a "petrochemical manufacturing plant." Plants that only blend or package petrochemicals are excluded from this approval requirement.

- Smaller tanks do not involve the same certainty of permit information.
    - Tanks over 2,500 litres that hold flammable or combustible material must be registered with PTMAA.
    - Tanks of 8,000 to 20,000 litres require a permit under the Fire Code. PTMAA provides a list of all municipalities where PTMAA has jurisdiction over permitting. In all other municipalities the fire department is the permitting authority.

- Municipalities may require a municipal development permit for tank projects.

    - Petroleum storage tanks used for oil and gas production and refining will be permitted by AER as part of the larger project permit. A project that includes tanks will need to comply with AER's "Storage Requirements for the Upstream Petroleum Industry" and "Emergency Preparedness and Response Requirements for the Petroleum Industry."

Due to possibility that regulatory records on smaller tanks may not exist, information seekers concerned with above ground storage tanks should:

- conduct site inspections and ask questions of persons with knowledge of the site;
- consider conducting an Environmental Site Assessment (ESA);

- search for regulatory records on releases, remediation and enforcement under *EPEA* and the Fire Code; and
- determine if tanks are in compliance with non-binding guidelines and standards. There are provincial Guidelines for Secondary Containment for Above Ground Storage Tanks. These guidelines are mostly concerned with spill containment using berms. The Canadian Council for Ministers of the Environment has an Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products.

Above Ground Storage Tanks		
What information is available?	**Who holds it?**	**How is it accessed?**
Permits ("approvals"), monitoring data and compliance information for larger tanks.	AESRD	Permits are Publicly available through the "authorization viewer" on the AESRD website. Information collected under a permit will be routinely disclosed. Requests should be made to the operator first.
Regulatory records on tanks used in the upstream oil and gas industry.	AER	Access varies. See the entry on AER for the information regime. See the entry on Oil and Gas for how to access information on oil and gas activities.
Registrations of tanks over 2,500 holding flammable or combustible materials	PTMAA	*FOIP* applies, but routine disclosure will be granted if disclosure complies with *FOIP*. See the entry on Underground Storage Tanks to learn about PTMAA.
Permits for tanks of 8,000-20,000 litres	PTMAA or the municipality	*FOIP* applies, but routine disclosure will be granted if disclosure complies with *FOIP*. See the PTMAA website for a list of whether the PTMAA or the municipality has jurisdiction over the tank.

Dry cleaners

Dry cleaning operations can cause contaminated land and all that involves – legal, financial and environmental liabilities, and human health risks. Dry cleaners are a concern in urban commercial and residential locations.

The location of dry cleaners can be found by requesting municipal business license records, searching phone books, asking questions and by visual observations of old signage and empty lots. Information seekers who discover dry cleaners should search for regulatory records on releases, site condition, remediation and enforcement. This search should include federal enforcement records from Environment Canada.

Information issues to be aware off:

Dry cleaning operations do not require a 'drycleaners permit' from provincial or federal regulators. The business is regulated at the municipal level. It is a spill or release of the substance that could trigger federal or provincial regulatory action. The use of toxic substances, and even spills of the same, can be allowed at levels that cause concern. These cases will not produce records of spills, non-compliance or enforcement. Compliance with regulations does not mean that the property is suitable for every intended use.

Dry cleaners		
What information is available?	**Who holds it?**	**How is it accessed?**
Provincial records of spills, releases, remediation and enforcement (if such records exist).	AESRD	Publicly available or routinely disclosed. See the entry on AESRD for the process.
Federal enforcement records including: • failure to have impermeable containers to catch spills from tanks or machines containing PERC; or • failure to transport wastewater and waste residue containing PERC to a proper waste management facility.	Environment Canada	Publicly available. Search the online CEPA Registry. Search the Enforcement Notifications and Environmental Offenders Registry. Enforcement records not posted will be routinely disclosed. Make requests to Enforcement Branch of Environment Canada.
Federal reports of spills and releases of toxic substances.	Environment Canada	Publicly available online through the National Pollutant Release Inventory (NPRI).
Municipal records of business licenses, bylaw infractions and enforcement.	Specific municipality	*FOIP* applies to municipalities. Licensing and enforcement records may be routinely disclosed where disclosure would comply with *FOIP*.

Feedlots

The technical name for feedlots in Alberta is Confined Feeding Operations (CFOs). CFOs are used for all forms of commercial meat animals, not just cows. CFOs may be indoors or outdoors. Look for information on feedlots if concerned with:

- water quality;
- air quality;
- nuisances that cause lost use and enjoyment of property;
- animal health and agricultural diseases;
- the suitability of the land condition for other agricultural uses; or
- the suitability of the location for the intended use, especially residential or recreational use.

CFOs are regulated by the NRCB. CFOs may exist alongside other industrial agriculture operations on the same property, most notably manure storage and composting (which includes materials broader than just manure). Large feedlots require an "approval." Smaller feedlots require a "registration." Construction of manure storage and composting facilities without an increase in livestock numbers a separate permit called an "authorization."

One particular environmental concern – disease that may threaten public health or be transmitted to humans – is regulated under the *Animal Health Act*. This act gives the Ministry of Agriculture a mandate to make information on animal disease and public health publicly available on its website or through other means.

Information issues to be aware of:

There may be no records of non-compliance by CFOs despite the existence of environmental concerns. Local residents may not agree with official determinations that air and water quality are not being adversely affected by feedlots. Despite local concerns, municipalities have limited power to take action against provincially-approved CFOs.

Information submitted to the Chief Veterinarian by animal owners is deemed confidential. If it is personal information it is confidential for 5 years. *FOIP* requests for this personal information must be refused if the information was collected to protect public health, protect animal health, or minimize the risk of a reportable disease spreading. This type of privacy protection is often used to encourage incident reporting.

Feedlots (Confined Feeding Operations or CFOs)		
What information is available?	**Who holds it?**	**How is it accessed?**
• CFO permit information; • Manure disposal and composting permit information; • complaints on water quality, air quality and odor; and • compliance and enforcement records.	Natural Resources Conservation Board (NRCB)	*FOIP* applies to the NRCB. Some information that would be disclosed under *FOIP*, including enforcement records, is made publicly available on the NRCB website.
Permits, compliance and enforcement records on commercial composting and biogas facilities.	AESRD	Publicly available or routinely disclosed under *EPEA*.

Water licenses held by CFOs.	AESRD	Publicly available under *Water Act.*
Dead animal disposal areas (aka "deadyards").	Office of the Chief Provincial Veterinarian	*FOIP* applies. See section on *FOIP* for how to make *FOIP* request.
Information on disease control, including quarantine and surveillance orders	Office of the Chief Provincial Veterinarian and Alberta Agriculture	Information may be publicly available on department website or routinely disclosed if compliant with *FOIP* and paramountcy provisions for confidentiality for personal information.
Information on food-borne illnesses and agricultural diseases.	Canadian Food Inspection Agency (CFIA)	Federal *Access to Information Act* applies.

Forestry

The forest industry includes logging (aka timber harvesting), sawmills and pulp mills, and private landfills and waste facilities. Forest industry activities do not create direct legal liabilities and financial risks in the manner of contaminated land, but they can cause nuisances and reduce property values or environmental quality.

Environmental concerns with logging can include:

- water quality and quantity changes from logging in upper watersheds;
- impacts on biodiversity due to habitat loss;
- changes to recreational opportunities, views and landscapes; and
- pesticides and herbicide used to control forest pests;

Environmental concerns with mills and waste facilities can include:

- air quality near mills;
- water pollution from mills;
- toxic substances used in mills; and
- contamination on the mill site.

Information issues to be aware of:

FOIP applies to most forestry information. *FOIP* fees for forestry information can be high due to the number and size of records. Forestry information has previously been provided to environmental non-governmental organizations with fee waivers in the public interest.

Some, but not all information on forestry planning, management and operations is made publicly available or routinely disclosed by the Forest Management Branch of AESRD. Not all publicly available information is online. Information seekers may need to search the Alberta Government Library or contact local offices of the Forest Management Branch.

There is not much environmental review of proposed forestry activities. Only large mills are likely to require a public review. If an Environmental Impact Assessment (EIA) has been ordered for such projects, then there will be a review by the Natural Resources Conservation Board (NRCB) to determine if the project will be in the public interest. Environmental assessments are not required for timber harvesting despite the size of operations and potential environmental impacts.

Some forestry occurs on private land. Landowners may operate their own woodlots or they may contract with forestry companies to supply timber. The contract may allow the forest company to harvest, or it may provide that the landowner harvest the timber and place it for pickup or deliver it to a mill. Landowners may grow trees to forestry company requirements. Private forestry may not produce many accessible records. There is no registry for private agreements between forestry companies and landowners. Forestry companies may be required to report the volume of timber coming from private land as a term of Forest Management Agreements. Some older FMAs had restrictions on the volume of timber that the FMA holder could harvest from private land. Some municipalities may require permits for tree harvesting on private land. Future private forestry is hard to predict as it is an individual landowner choice to use their property as a woodlot.

Because of these issues, information seekers concerned with forestry should consider non-government information sources as well. Past logging and re-growth may be visible from site inspections and tours of an area.

Forestry		
What information is available?	**Who holds it?**	**How is it accessed?**
General information about forestry on public lands.	AESRD	Publicly available, routine disclosure or *FOIP*. See section on AESRD.
Forest Management Agreements (FMAs).	AESRD and the forestry company	*FOIP* applies but routine disclosure is likely as some FMAs are already publicly available online. Some FMAs will be included in Forest Management Plans as an appendix.
Forest Management Plans (FMPs).	AESRD and the forestry company	Some FMPs are made publicly available online with no fees.
Enforcement orders and convictions for breaches of the *Forests Act.*	AESRD	Publicly available. Where a person is convicted in court, the court may further order the offender to publish the facts relating to the conviction. Enforcement records have previously been posted online but direct links are subject to change.
Forest resource programs, including: • pine beetle control; • reforestation • forest health programs • programs to enhance forest resources.	Forest Resource Improvement Association of Alberta (FRIAA)	*FOIP* applies to FRIAA.
Assignment of forestry dispositions.	AESRD	Routine disclosure.
Decisions on large forest industry projects for which EIAs have been ordered.	NRCB	NRCB decision documents are publicly available online. Notice and application materials will be routinely disclosed.
Approvals, monitoring and compliance information on mills and waste facilities. Water licenses or *Water Act* authorizations for mills and waste facilities.	AESRD	Publicly available or routinely disclosed.

Non-government information holders of note:

Forestry companies hold records applying to their own activities, including forestry permits, FMAs, FMPs, and Annual Operating Plans and Operating Ground Rules. Access to information law does not apply. Forestry companies also hold public information sessions on proposed logging.

The Foothills Research Institute conducts research on cultural, ecological, economic and social values of Alberta's forested landscape and prepares reports for government for use in land use planning. The core study area is around Hinton where the Institute is based.

ENGOS holding information on forestry in Alberta related to their own activities include:

- Global Forest Watch Canada;
- Forest Ethics;
- Alberta Wilderness Association;
- Canadian Parks and Wilderness Society; and
- Watershed stewardship groups.

Gravel pits

The technical term for gravel, sand and marl is "aggregate resources" or "surface materials." Surface materials belong to the surface owner. They are distinguishable from subsurface "minerals" that have a separate legal ownership. Gravel operations are likely to occur:

- near water bodies, as that is where the materials are geologically located; and/or
- near residential development or municipal expansion, as these are major uses for gravel.

Concerns with gravel pits include:

- nuisances, lost property values, and decreased life quality from dust, noise, and truck traffic;
- groundwater quality and quantity reduction;
- surface water quality and quantity reduction if the pits are near water bodies;
- concentration of naturally occurring contaminants or the disturbance of historic contamination; and
- loss of agricultural land or green space.

Reclaimed gravel pits have good redevelopment potential. The risks of contamination are lower than with other industrial uses. Gravel may be deliberately extracted prior to municipal development, or pits might later be repurposed for municipal development or recreational use.

Gravel pits are permitted under the *Environmental Protection and Enhancement Act* (*EPEA*) through a registration that requires compliance with a standardized Code of Practice for Pits. Gravel pits that are no longer producing require a reclamation certificate under the *EPEA*. Gravel pits on private land must comply with municipal zoning and permitting requirements. Gravel pits on public land require a lease of the land.

Information issues to be aware of:

Gravel pits do not appear on land title because surface materials belong to the surface owner.

Petroleum storage tanks used for gravel pits are regulated separately and will require further searches. See the entry on Above Ground Storage Tanks.

Gravel pits are unlikely to produce regulatory records on spills or releases even though they can concentrate or relocate existing contaminants.

Gravel pits require a reclamation certificate, but they are less likely to be reclaimed than petroleum activities, and the reclamation certificate does not require remediation of contaminants as with petroleum activities.

Environmental concerns may arise from the cumulative effect of multiple pits in an area of high gravel activity, even if individual pits do not pose significant concerns.

Gravel pits		
What information is available?	**Who holds it?**	**How is it accessed?**
Registrations for gravel pits.	AESRD	Publicly available by searching the online authorization viewer.

Public land leased for gravel extraction.	AESRD	Likely to be routinely disclosed as information associated with a disposition.
Reclamation Certificates for gravel pits on private land.	AESRD	Publicly available by searching the online Environmental Site Assessment Repository (ESAR).
Reclamation Certificates for gravel pits on public land.	AESRD	Routinely Disclosed with a request to CrownLandDataSupport@gov.ab.ca. See the entry on Reclamation Certificates for details.
Map of "aggregate resources" by region, including: • active pits; and • undeveloped deposits.	Alberta Geological Survey	Publicly available online.
Municipal zoning of gravel pits.	Specific municipality	Publicly available. Land Use Bylaws and zoning maps are often online.
Municipal permits for gravel pits.	Specific municipality	Routinely disclosed.
Non-government information holders: The Environmental Law Centre has produced a handbook and webinar entitled "Gravel Can Be The Pits." These resources cover: • the law of gravel pits in Alberta; • policies, codes of practice, guidelines, and standards for gravel pits; • links to maps of active pits and deposits; • links to non-government information holders; and • information on groundwater impacts of gravel pits.		

Landfills and waste management

The technical term for garbage disposal is “waste management.” Landfills and dumps are “waste management facilities.” Waste management activities include:

- local and municipal dumps;
- regional landfills;
- hazardous or toxic waste facilities;
- private waste disposal by industries including oil and gas, forestry, and agriculture;
- waste collection, transportation, and management services;
- composting; and
- recycling.

Waste can cause serious environmental contamination. Landfill sites can be contaminated with countless substances even if not permitted for toxic waste disposal. Warehouses and industrial buildings used for waste management may be contaminated. Groundwater and surface water can be contaminated by leaching from landfills. Modern landfill sites are lined to reduce this risk but old landfill sites were not. Legal responsibility for waste can be hard to identify in the case of historic or unregulated dumps or where there is multiple changes in ownership.

Always seek information on land condition if waste-related activities are suspected. Information seekers who discover waste management activities should access regulatory records and conduct Environmental Site Assessments (ESAs).

Waste management activities in the area can create concerns or benefits. Concerns include nuisances and reduced property value or life quality from traffic, air quality, or aesthetics or migrating contamination. Benefits include:

- commercial and industrial land users may prefer to be near waste disposal facilities;
- access to waste disposal facilities discourages illegal dumping and pollution; and
- reclaimed landfills have high redevelopment potential. The land has been cleared, graded, and shaped, and may come at a cheap price. Landfills can be repurposed for recreational and scenic use even if unsuitable for residential development.

Information issues to be aware of:

Locations of waste management activities change. Information seekers should search for historic activities as well as current activities.

Old dumpsites may lack adequate records. It used to be common practice to dump, bury or abandon industrial waste on empty land. There might have been no regulatory process at all. Information seekers concerned with historic landfills should use multiple information sources including municipal records, site visits and personal interviews.

Waste management operators may rent land or buildings. Leaseholder activities will not appear on land titles.

Information seekers may want to search for permits, compliance and enforcement records on waste collection, disposal or management companies operating in the area.

Landfills and waste management		
What information is available?	**Who holds it?**	**How is it accessed?**
Municipal records of waste facility location and waste collection activities within municipal boundaries.	Specific municipality	Varies by municipality. Publicly available from some larger cities, for example the City of Edmonton. *FOIP* applies to all municipalities. Routine disclosure is likely but not required. Providing legal land descriptions or property addresses may be required or helpful.
Provincial record of waste management locations.	AESRD	Locations can be deduced from publicly available permitting information. There is no publicly posted map of landfills in Alberta. Some information is online on the AESRD website.
Permits for waste management facilities including: • Class I landfill –hazardous waste; • Class II landfill – non-hazardous waste; • Class III landfill – inert waste; • Class I Compost; • Class II Compost; and • Recycling.	AESRD	Permits are publicly available through the online authorization viewer.
Monitoring and compliance information on waste management facilities.	AESRD	Routine disclosure. The process is to ask the responsible person (the landfill operator) first. In the case of a regional landfill this will often be a Regional Waste Management Commission.
Further information from a regional landfill.	Regional Waste Management Commission	*FOIP* applies to Delegated Administrative Organizations (DAOs). The request must be referred to the AESRD Information Coordinator and the DAO must comply with the Information Coordinator's directions.

Regional waste management authority contact list.	AESRD	Publicly available online.
Certified landfill and compost operators in Alberta (other than manure composting covered under feedlots).	AESRD	Publicly available online.
Private waste facilities associated with industrial plant sites.	AESRD	Publicly available Check the permit or approval that is granted for the full industrial operation.
Hazardous waste handling information including: • the names and addresses of persons consigning, transporting, accepting hazardous waste; and • the total quantity, or quantity per class, of hazardous waste consigned, transported or received by the facility or person.	AESRD	Routinely disclosed on request. See the entry on AESRD for the process. *FOIP* requests will be required for specific information that is excluded from the Ministerial Order granting disclosure. This includes: • information that links the generators of hazardous waste to the carriers and receivers; and • information on individual waste streams, including names, composition, and quantity.
Names and locations of approved hazardous waste management facilities.	AESRD	Publicly available online in a list format. The list provides legal land descriptions and approval numbers for use in the authorization viewer.
Used oil recycling information.	Alberta Used Oil Management Association	*FOIP* applies. The request must be referred to the AESRD Information Coordinator. The Delegated Administrative Organization must comply with the Information Coordinator's directions.
Used tire recycling information.	Tire Recycling Management Association of Alberta	*FOIP* applies. The request must be referred to the AESRD Information Coordinator. The Delegated Administrative Organization must comply with the Information Coordinator's directions.

Information on waste disposal by the upstream oil and gas industry including: • compliance of drilling waste disposal with Directive 50. "Drilling Waste Management"; and • compliance of non-drilling waste, including spills, with Directive 58, "Oilfield Waste Management Requirements."	Alberta Energy Regulator	See the section on the Alberta Energy Regulator.

Mining

Mining involves the extraction of subsurface minerals for which the title is separate from the land title. Most mining in Alberta is for coal, though some is for other minerals.

Mining operations are not as individually numerous as other forms of industry but they can cause some of the most serious environmental liabilities. Mining can cause widespread contamination of land, air and water. Mining contamination can impact large areas as it can migrate through surface water, groundwater and transportation routes like railways and roads. Contamination may include heavy metals that can be very "persistent" in the environment (the pollutants do not break down easily). Mining can also cause unstable or shifting ground that impacts redevelopment. Pits and tunnels can create safety hazards and liabilities for landowners. Reclamation and remediation of mining areas can be a huge undertaking. Generally any historic mining will create current concerns.

Historic mining areas also offer benefits and redevelopment potential. Mining infrastructure, including roads, open spaces and historic buildings provide recreation and tourism amenities. These amenities can increase property values and life quality. Countless destination towns in western North America were former mining towns.

Information issues to be aware of:

Historic mining will not appear on land title as there will be no current caveats.

Coal is an energy resource so its regulation shares features with oil and gas. Information seekers should refer to the section on the Alberta Energy Regulator (AER). Information on future mining can be limited as exploration information is partly protected by regulations that prevail over *FOIP*.

Mining		
What information is available?	**Who holds it?**	**How is it accessed?**
Map of approved and abandoned coal mines.	AER	Publicly available through the AER Map Viewer. Requires legal land description in ATS form.
Crown minerals dispositions that have been granted.	AESRD	Publicly available through online Land Status Automated System. ATS description and fees required.
Information filed by applicants and interveners in proceedings under AER rules.	AER	Routine disclosure with some discretion.
Exploration program data, including preliminary plan application, approvals, field reports, parameters of program design, plans and maps held by AER or AESRD.	AER or AESRD	Routine disclosure two years after completion date or with consent of operator. Requests must be provided: • within two years after completion of exploration program; • in writing; and • follow the Exploration Directives.

Information on coal exploration holes including: • the name and address of the operator; • data specified by AER; and • data on properties of materials found (if information is directed by AER).	AER	Routine disclosure. Requests must be provided: • two years after completion for • reconnaissance holes; • five years after completion for infill holes; • in writing; and • following the Exploration Directives. Operators may request confidentiality but the AER may direct that the information be available if it consults with the operator and if it would be in the public interest.
Interactive maps for geological deposits of Ammonite Shell, Coal and Metallic and Industrial Minerals.	Alberta Energy	Publicly available online.
Applications and approvals for non-energy mining projects.	NRCB	Publicly available.
Access to public land for non-energy mining.	AESRD	Routine disclosure for information on public lands dispositions.

Pesticides

Pesticides are used by forestry, agriculture, golf courses, industry sites, municipalities and private landowners. Environmental concerns from pesticide use include:

- groundwater and surface water quality;
- the suitability of soil for agriculture, vegetation growth, organic farming or gardening; and,
- human health impacts.

Pesticides can migrate through air and water. Factors that contribute to migration include: improper application, improper disposal and storm water runoff. Pesticides can accumulate in soil, vegetation and animals.

Multiple levels of government can hold information on pesticides. The federal government has a role in regulating pesticides at the product level. Pesticides may be prohibited or registered for use in Canada. The provincial government regulates the use pesticides under the *Environmental Protection and Enhancement Act.* The permitting requirement for regulated pesticides is a registration and compliance with a standardized Code of Practice. There are no permit requirements for home use ("domestic use") of retail pesticides in compliance with instructions. Municipalities can have pesticide bylaws and use policies that are more stringent than provincial requirements. Municipalities may prohibit pesticides, require spraying setbacks from water bodies or residential areas and make exemptions to their own pesticide restrictions.

Information issues to be aware of:

Information seekers concerned with commercial or industrial pesticide use should search for regulatory records including permits, spills and releases and enforcement. Beware that pesticides can be permitted despite known or uncertain health effects. Just because a substance is permitted and used in compliance with regulations does not mean that there are no concerns. There will be no records of domestic pesticide use unless municipalities have strict pesticide bylaws and enforcement has occurred.

Pesticides		
What information exists?	**Who holds it?**	**How is it accessed?**
Federal prohibitions on pesticides. Federally registered pesticides. Pesticide incident reports. Trends in pesticide use.	Pest Management Regulatory Agency at Health Canada	Some information is publicly available **o**nline in the Pesticide Product Information Database. The federal Access to Information Act applies to information not made publicly available.
Registrations for pesticide use under the *Environmental Protection and Enhancement Act* (*EPEA*).	AESRD	Publicly available through the online Authorization Viewer.
Municipal pesticide bylaws, spraying policies, records of over-spraying and enforcement records.	Municipality	Bylaws and policies are publicly available through municipal websites or offices.

		Enforcement records are likely to be routinely disclosed. *FOIP* applies to other municipal records.

Recreation

Recreation and tourism are generally perceived to provide environmental benefits, but they are having increasing impact in Alberta. Information seekers should consider the benefits and impacts of recreation.

The benefits of recreation and tourism areas can include increased property value, commercial opportunities, health benefits and life quality. Recreation sites in protected areas help preserve environmental quality and open space. Amenity migration to locations with natural assets is a growing trend.

Recreation does not create direct environmental liabilities like heavy industries but it can be a larger source of land use conflicts, safety risks and cumulative environmental degradation. Many of these impacts are highest with motorized recreation (off-highway vehicles and random camping). Concerns include:

- trespassing on private land or public land leases;
- harm to livestock or damage to fencing;
- displacement of other recreational users and reduced suitability of land for other uses;
- noise, litter and nuisances from large crowds;
- air quality problems from dust and emissions from motorized vehicles;
- safety risks from recreating on or around industrial infrastructure;
- fire risks from inadequately managed camping or sparks from off highway vehicles;
- reduced health of public land from soil erosion, compaction, dust, and weeds;
- wildlife deaths and displacement; and
- water quality problems from sediment and pollutants in run-off from trails.

Recreation is not managed, regulated and enforced to the same extent as other industrial activities. Legally protected areas are a small part of the public land base. The legal baseline for recreational access to forested land in the Green Area is that public land is open unless closed or otherwise designated. Access Management Plans and Public Land Use Zones may provide more detailed trail and area designations. The legal baseline for recreational access to public land in the White Area is consent of any grazing lease holders or agricultural lease holders. The leaseholder may require non-motorized travel but they cannot unreasonably deny access. Private landowners may use their land for recreation as they see fit, subject to municipal bylaws. In all cases, control of troublesome recreationalists is exceptionally difficult.

Information issues to be aware of:

Information on the environmental impacts of recreation may be limited or not exist at all. Environmental impacts of recreation are the cumulative effect of numerous users. There will not be regulatory records associated with specific operations that can indicate environmental condition.

The impact of recreation varies significantly with the environmental sensitivity of the land and adequacy of management. Parks, protected areas and public land-use zoning vary in the level of protection from recreational impacts.

Information seekers can find out what recreational activities are legally permitted in an area through the sources below. Identifying concerns with these activities may require site visits and asking questions of local persons.

Recreation		
What do I want to know about?	**Who holds it?**	**How do I access it?**
Information on recreational access to public land outside of the parks system.	AESRD	Publicly available online or from local and regional offices.
Applications for major tourism developments.	Natural Resources Conservation Board (NRCB)	Past decision documents are publicly available. *FOIP* applies to the NRCB.
Location of all provincial parks and protected areas, including site boundaries and legal land descriptions.	Tourism, Parks, and Recreation	Publicly available online. Search for the Land Reference Manual.
Management plans and documents for provincial parks and protected areas.	Tourism Parks and Recreation	Publicly available online where plans are current and in force.
Information about National Parks and Historic Sites in Alberta.	Parks Canada	Publicly available online or through specific parks administration and visitors centres.
Recreational access to provincial public land outside of the parks system.	AESRD	Publicly available online. Public Lands Recreational Access to Agricultural Public Land Contact and Access Condition Information
Enforcement records concerning unauthorized use of public land or destructive use of public land.	AESRD	Publicly available. Search the AESRD website for news releases and enforcement records first. Request routine disclosure for information not found. Enforcement and offense records related to public land must be published in many cases and must be disclosed in further cases.
Hunting and fishing opportunities and regulations.	AESRD	See biodiversity section.
Licensing and oversight of commercial hunting guides and outfitters.	Alberta Professional Outfitters' Society	*FOIP* applies to information held by the Outfitters' Society.

Municipal recreation lands and opportunities	Specific municipality	Publicly available. Delivery method varies by municipality.
Federal database of: • protected areas by region; • ecological integrity in parks; and • trends in protected area creation	Environment Canada	Publicly available online through the Canadian Environmental Sustainability Indicators (CESI) database.
Non-government sources of information on recreation include: • Alberta Wilderness Association; • Canadian Parks and Wilderness Society (CPAWS); • Watershed stewardship, landowner groups and local people; and • Recreational user groups and organizations for specific recreational activities.		

Transportation routes

Transportation routes like roads and railways can cause pollution and contaminated land from:

- spills and accidents;
- industrial sites beside roads and railways;
- cumulative effects of vehicle emissions and petroleum leakage;
- run-off from roads; and
- litter and dumping.

Information seekers should verify the existence of roads and railways in the area and what they are used for. Identifying responsibility for contamination beside transportation routes can be difficult due to multiple sources.

The transportation of hazardous goods and dangerous goods is regulated, so permit information and records of spills may be available. Transporters must comply with the provincial *Dangerous Goods Transportation and Handling Act* and the federal *Transportation of Dangerous Goods Act, 1992.*

If contamination results from cumulative effects of use rather than a specific spill then there may be no person responsible. Historic industries may have contaminated transportation routes in areas that look undeveloped today. Non-hazardous goods like heavy truck traffic and oilfield equipment can reduce life quality and property values.

Transportation routes		
What do I want to know about?	**Who holds it?**	**How do I access it?**
Provincial permits, compliance and enforcement records for transportation of dangerous goods under the *Dangerous Goods Transportation and Handling Act.*	Alberta Transportation	*FOIP* applies to all information held by Alberta Transportation. Routine disclosure is a possibility.
Highway cleanups that have taken place.	Alberta Transportation	*FOIP* applies to all information held by Alberta Transportation. Routine disclosure is a possibility. Make requests to the Information Coordinator.
Provincial regulatory records on spills, releases and enforcement actions.	AESRD	Publicly available or routinely disclosed. See section on AESRD.
Federal permits, compliance and enforcement records.	Transport Canada	The federal *Access to Information Act* applies but routine disclosure may be available.

Contaminated sites managed by Transport Canada.	Federal Contaminated Sites Inventory	Publicly available online.

Records created by regulatory processes

This section of the Directory covers records that are created through the regulation of activities of concern. The same type of record might exist for several of the activities listed in the above section. For other activities there may be no regulatory records at all. Information seekers unfamiliar with environmental regulation should review the primer on the regulatory process.

Environmental Assessments

Environmental Assessments are used to assess the potential impacts of proposed future activities. They are different from the Environmental Site Assessments (ESAs) used to assess the possibility of contamination from past activities.

Environmental assessments can be required by the federal or provincial government. Federal assessment requirements are triggered by proposed projects listed under the *Canadian Environmental Assessment Act (2012)*. Provincial assessments are required by the province for projects listed under regulations under the *Environmental Protection and Enhancement Act*. The provincial terminology is environmental impact assessment (EIA). EIAs can also be ordered for any activity that is not specifically exempted from EIA by regulations.

Information issues to be aware of:

Environmental assessments are not required for many activities that cause environmental concerns. Activities that do not undergo assessments at either the federal or provincial level include conventional oil and gas projects and forestry harvesting.

As of 2012, federal environmental assessments are only required for fairly large projects and impacts. Numerous environmental assessments in progress at the time of the 2012 change were discontinued. Even where a project is listed as requiring federal assessment it is possible for a provincial assessment process to be declared a substitute or equivalent.

Findings of environmental assessments may be contested. Assessments are usually conducted by private consultants retained by the activity proponent. Other participants in the assessment processes may contest the findings or the completeness of the report.

The content of EIA reports might not include what information seekers are looking for. Basic provincial contents for EIA reports are outlined in the *Environmental Protection and Enhancement Act* (*EPEA*). The Director of environmental assessment may require further information.

Documents created in relation to environmental assessments must be made publicly available in registries but there are practical barriers to access. Provincially, *EPEA* requires a public register ("registry") to contain any documents or information required to be provided, created or issued in relation to an environmental assessment. Federally, the *Canadian Environmental Assessment Act 2012* requires a public registry of records related to an environmental assessment. In both cases, online posting of documents does not include all records related to an assessment. In the federal case, many older projects and those projects discontinued in 2012 are removed from the online registry. It may be necessary to search for paper documents in the environmental assessment registry or to make requests for information. Requests may require that information seekers know which documents they are searching for.

Environmental Assessments		
What information is available	**Who holds it?**	**How is it accessed?**
Records in the Canadian Environmental Assessment Registry, including • descriptions and locations of projects; • notices for public involvement; • factors considered in assessments; and • outcomes of assessments.	Canadian Environmental Assessment Agency	Publicly available online if documents are posted to the registry. http://www.ceaa.gc.ca http://www.ceaa.gc.ca/050/index_e.cfm Archived records should be routinely disclosed with a request to the Canadian Environmental Assessment Agency. Requesters may need to know the specific records sought to be successful.
Records related to specific provincial EIAs in the Provincial EIA Registry. Examples include: • proposed activities; • public notices; • terms of reference for EIA; • EIA reports; and • disclosures by proponents Information seekers should review the Environmental Assessment Regulation for the full list of information required to be kept in the registry.	AESRD To view the Registry in person and/or get copies of documents, contact Environmental Assessment Team.	The Environmental Impact Assessment (EIA) Registry is publicly accessible without resorting to *FOIP*. Documents and information in the EIA Registry must be disclosed to the public.
Completed provincial EIA reports.	Alberta Government Library	Publicly available online. See section on paper information searching for details.
Compiled or summary information on provincial EIAS including: • status of current EIAs; • EIA program statistics; and • completed EIAs. Some but not all documents on current EIAs that would be available through the Registry.	AESRD	Publicly available online.

Permits and permit applications

Information seekers may want to see permits for activities of concern in the area. Permits will show the operating conditions or standards required to be in regulatory compliance. These conditions may include allowable emissions or releases and requirements to collect and report monitoring data. The permit will also include an official name, number and legal land description that can be used to seek further records. Application materials for potential activities will help anticipate future concerns.

Activities of concern may need multiple permits from provincial, federal and municipal governments. The Directory entries on specific activities identifies where permits are required.

The most important permitting legislation to be generally aware of is the provincial *Environmental Protection and Enhancement Act* (*EPEA*), followed by the provincial *Water Act* for water licenses and activities that impact the aquatic environment. This section covers common environmental permits under *EPEA*. More detailed information on permitting under *EPEA* and the *Water Act* is available through:

- ELC Fact Sheet: Environmental Approvals and Licenses; and
- ELC Guide to Public Participation.

Topics in this Guide that could require *EPEA* permits include:

- release of substances;
- landfills and other waste management facilities;
- mines;
- gravel pits;
- forestry product mills;
- pesticide use; and,
- hazardous substance storage.

The three main types of *EPEA* permits are “approvals,” “registrations” and “notices.” Approvals are individualized permits for activities that are likely to have significant impacts on the environment. Registrations are used for moderately smaller or more common activities. Notices are used for minor activities.

***EPEA* application material:**

Applicants for approvals and registrations must provide:

- a list of substances that will be released into the environment;
- a summary of environmental monitoring information gathered;
- a list of the wastes that may be produced;
- any impact that may result from the activity;
- emergency response plans required by municipalities;
- plans to deal with releases of substances;
- reclamation plans;
- whether an environmental impact assessment is required; and
- whether approvals from other agencies are required

This is a partial list of *EPEA* requirements. The full list of required information is provided by regulation. Approval and registration holders must further provide information about potential adverse effects of their activity that came to their attention after the authorization was issued.

Applications for a notice must provide a description of the activity, the location, the person responsible, and any information required by the AESRD Director.

***EPEA* permit information:**
Approvals set out conditions and requirements specific to the approved activity. This generally includes:

- the conditions of operation including authorized pollution;
- requirements for monitoring and reporting of releases of pollution; and
- requirements for monitoring components of the environment.

Registrations and notices require compliance with a standardized Code of Practice for that activity. The Code of Practice sets out the operating conditions, monitoring and reporting requirements.

Permits and permit applications		
What information exists?	**Who holds it?**	**How is it accessed?**
Public notice of proposed activities requiring *EPEA* permits, including the location where information about the activity may be obtained or is available for public disclosure.	AESRD	Notice of the application must be published in a local newspaper, provided to persons in a manner determined by AESRD, or both.
Information about applications for approvals or registrations under *EPEA*. Information provided to AESRD as part of an application or that relates to an application. Statements of Concern about the activity. Correspondence from the Department to the applicant relating to the submitted information or records. Decisions of a Director provided to an applicant, authorization holder, or Statement of Concern filer.	AESRD	Must be routinely disclosed if it is not already publicly available. Requests must follow the process for routine disclosure in the section on AESRD.
Direct notice of decisions.	AESRD	The right to notice of a decision about the application is limited to persons

		who submitted a Statement of Concern and were found to be directly affected. AESRD may choose to notify all persons who filed statements. Persons who are not notified may contact AESRD to find out if an approval or license has been issued.
Permits under *EPEA* and the *Water Act*	AESRD	Publicly available through the online authorization viewer. Searching the authorization viewer works best with a full legal land description. Advanced search options can be used to search for land approvals by township only or to search for company names using "wildcard" search symbols. Put the search term in percentage brackets like this: %company%. This approach may produce a list of authorizations. Use the "edit/find" feature to type in a key word to find the desired authorization. Requests for paper copies can be made to the Regulatory Approvals Centre.

Monitoring data

Monitoring data can indicate potential environmental concerns in the absence of more direct statements. Monitoring data can show what substances are worthy of concern.

Monitoring data can also be used to determine whether specific activities are in compliance with their permits. The permit will indicate substances to be monitored and the reporting requirements. It is possible to compare the data to what emissions are allowed under the permit.

Information issues to be aware of:

Monitoring data that is collected for compliance purposes is tied to a specific activity. It might not help with a bigger picture of the environment. It might not include baseline environmental information against which to measure environmental impacts.

Monitoring is frequently carried out by regulated activity operators instead of by government. This form of 'self-monitoring' creates concerns with the accuracy of the environmental picture or the extent to which information is reported.

Monitoring data		
What information is available?	**Who holds it?**	**How is it accessed?**
Environmental monitoring data and emissions monitoring data required to be submitted under an approval or a code of practice. The processing information necessary to interpret the data. Reports or studies provided to AESRD under a condition of an approval or Code of Practice. Reports or studies otherwise required by regulations to be disclosed to the public. Information and records submitted to AESRD under regulations, approvals, or directions.	AESRD or the activity operator.	Routine disclosure on request. See the section on AESRD for the detailed process. Requests for information created by the department can be made directly to the environmental monitoring and reporting branch/section. Requests for information created by activity operators and proponents must be made to that person before asking the department.

Spills, releases and pollution

A "release" is the technical term for spills and pollution. Some releases are permitted while others are prohibited.

Information on releases may be held by provincial, federal or municipal information holders as indicated in the chart below. Information holders should be familiar with the main provincial and federal reporting regimes.

Provincially: There is a legal duty to report releases under *EPEA*. Reporting is required where there may be an adverse effect on the environment. Reports must include the date, location, duration and substance composition of the release. The report must also describe the circumstances of the spill, steps in response and steps to prevent re-occurrence. Releases in the upstream oil and gas industry will have separate regulation and reporting requirements for the Alberta Energy Regulator.

Provincial government agencies may only publish notice of spills that the agency deems to be of public importance or would require disclosure in the "public interest" under *FOIP*. Mandatory disclosure in the public interest is rare as it is only required for imminent threat to health, safety or the environment.

The Environmental Sites Assessment Repository (ESAR): ESAR is a key source of publicly available information on potentially contaminated land that this Guide references repeatedly.

ESAR contains:

- ESAs ordered by government and recorded in a standard form called a Record of Site Condition;
- some ESAs that are voluntarily carried out and posted is association with land transactions; and
- Reclamation Certificates.

Beware that ESAR is not a spill database or a registry of contaminated land. ESAR does not include information on releases for which there has been no government-ordered ESA or reclamation activity. The only ESAs on ESAR are those that have been ordered or posted voluntarily. ESAR also does not include Reclamation Certificates issued for voluntary clean ups. Requests will be required for this information.

Federally: There are legal duties to report authorized and unauthorized releases of listed substances under the *Canadian Environmental Protection Act* (*CEPA*). The federal government also keeps an inventory of federal contaminated land.

The National Pollutant Release Inventory (NPRI) is a massive public database of federally reported releases. Search the NPRI by province, postal code, city, facility name or substance. Searching for facilities works best using registered corporate names. Searching with the trade names of large corporations may not yield facilities operated by subsidiary companies.

Access to information through the NPRI is very good but the quality of information in the NPRI can be an issue. There are known incidents of non-reporting. Reports are submitted on a yearly basis rather than by incident. The NPRI includes raw information that may require technical knowledge of specific pollutants. It also includes trend and summary information for lay readers. Comparing federal and provincial information can be difficult because the NPRI uses scientific names for pollutants and provincial authorizations use trade names for regulated substances.

Municipally: Some municipalities track contaminated land within their boundaries. For example, the City of Edmonton has an Environmental Management Department that keeps an Environmental Site Information Database. It is possible that municipal records may not exist, especially with smaller municipalities.

Information issues to be aware of:
Records on releases are often disclosed by government information holders but there are numerous issues with the availability of information. General issues regardless of the information holder include:

- Information is not proactively shared, especially in the case of routine releases or smaller spills. Formal requests may be necessary for routine disclosures and are always necessary for information covered by *FOIP* or the federal *Access to Information Act*.

- *FOIP* requests for spill records have occasionally been withheld under the exceptions of "harm to third parties" and "litigation privilege." Individual departments may grant confidentiality as an exception to routine disclosure. One policy rationale for confidentiality is to encourage spill reporting.

- Spill reports might not include information on contamination migrating from the spill site. This information might not have been required. Alternatively the contamination may have migrated after the spill report.

- Many releases are never reported or discovered. There is reliance on operators and observers to reports spills that require reporting. There will be thresholds for reporting in permits and for non-permitted spills. Non-permitted spills that require reporting are generally those that would have an impact on the environment by themselves. Small spills and the cumulative effect of multiple spills may not be apparent from spill reports. Non-reporting by polluters is not always enforced. If spills are reported, self-reporting by industry raises concerns with the credibility of the information.

- Information related to investigations in progress will not be disclosed.

Spills, releases and pollution		
What information exists?	**Who holds it?**	**How is it accessed?**
Information submitted to AESRD under *EPEA* including: • scientific or technical information; • studies, reports, records, tests and assessments; • environmental site condition; • delineation or remediation of sites; and • correspondence between the information submitter and the department concerning any of the above.	Alberta Environment and Sustainable Resource Development (AESRD)	Routine disclosure is mandatory. See the section on AESRD for the detailed process. Requests for information created by the department can be made directly to the environmental monitoring and reporting branch/section. Requests for information created by activity operators and proponents must be made to that person before asking the department.

		Contact *FOIP* branch for how to access spill information not listed here.
ESAs ordered by government. Records of Site Condition (the standard form for government-ordered ESAs). Some ESAs voluntarily created and made publicly available (potentially by land sellers). Reclamation Certificates.	AESRD	Publicly available online by searching ESAR. See the ESAR website for detailed instructions and frequently asked questions. Legal Land Descriptions are required to search.
Records of reported petroleum spills by site or facility. Complaints about oil and gas wells and pipeline sites or facilities.	Alberta Energy Regulator (AER)	Information may be publicly available by searching at the AER library. Information will be routinely disclosed on request. Requests should be made by company, license, number or location by legal land description. Expect fees for requests and paper copies.
Catalogue of pipeline spills and incident reports. The list is updated monthly and yearly and goes back to 1975.	AER	Publicly available. Order through the AER Catalogue.
Pipeline spill information for persons proposing to undertake ground disturbance. Information includes spills and releases, and control and cleanup steps.	The company holding the license to operate the pipeline (the "licensee").	Routinely disclosed to persons proposing to undertake ground disturbance.
Releases of federally listed substances under the *Canadian Environmental Protection Act*.	Environment Canada	Publicly available online at National Pollution Release Inventory. Compilations of NPRI data by substance, province and sources are further available through the general Federal Government data site.
Contaminated sites on federal land or under federal responsibility.	Treasury Board of Canada Secretariat	Publicly available online through the Federal Contaminated Sites Inventory (FCSI).

Municipal records of contaminated land.	The specific municipality	Access depends on municipality. *FOIP* applies to all municipalities. Routine disclosure is likely if the information exists. Higher capacity municipalities may make contaminated site information publicly available in databases. Contact information for municipalities is available through the Directory of Municipal officials.
Non-government sources of information on pollution releases: Emitter.ca is a pollution tracker website that takes raw date from the NPRI and provides interpretive context like maps and rankings. It can help lay readers see where emitters are located and how much pollution the area is exposed to. The most recent mapped data is from 2008 but links are provided to the NPRI for current data. Users can search by address, riding or city. The results: • provide a list of emissions sources with a radius of the searched location; • show a map of where facilities are located; • sort emitting facilities by industry; and • rank emitting facilities against other facilities in the same class of emitters.		

Reclamation

Reclamation means returning land that was used for an activity to a certifiable standard. Reclamation is required by law for regulated industrial activities in Alberta. To show compliance, the activity operator must successfully apply to the province for a Reclamation Certificate.

Information issues to be aware of:

"Reclamation" and "remediation" (cleaning up contamination) are related but different. Reclamation of oil and gas activities currently requires "remediation," but that was not the case historically. A Reclamation Certificate from before the mid-1990s does not guarantee that an oil and gas site has been remediated.

Much abandoned oil and gas infrastructure has not been reclaimed. The absence of a reclamation certificate for known oil and gas infrastructure is a sign that environmental concerns might not have been addressed.

Compliance with reclamation requirements does not guarantee the land will be suitable for a specific use. The regulatory objective is to return land to an "equivalent capability." This means that the ability of the land to support various uses is similar to that which existed prior to the activity, though the uses may not be the same. The regulation does not set out the reclamation standards. The standards are created by Alberta Environment and Sustainable Resource Development (AESRD). The standards have historically focused on soil type, soil classification, and re-contouring and re-vegetating the landscape. Reclamation is not ecological restoration.

For more on reclamation and remediation, see AESRD's reclamation program.

Reclamation		
What do I want to know?	**Who holds it?**	**How do I access it?**
Reclamation Certificates for private lands.	AESRD	Publicly available online through the Environmental Site Assessment Repository (ESAR)
Reclamation certificates for public lands.	AESRD	Routine disclosure. To request a search, contact Crown Land Data Support 780-422-5727 or CrownLandDataSupport@gov.ab.ca.
Applications for reclamation certificates.	AESRD	Routine disclosure. See the section on AESRD for the request process.
Scientific or technical information about reclaimed land.	AESRD	Routine disclosure
Reclamation of oil and gas infrastructure with no clear owner.		The Alberta Energy Regulator (AER) has one Delegated Authority. The Orphan Well Association (OWA) manages the abandonment and reclamation of "orphan" oil and gas

		facilities. Orphan facilities are those for which no legally responsible or financially able party can be identified. Lists of orphan wells and defunct companies are publicly available through OWA.
What has not been reclaimed?	Local knowledge	Access to information law does not apply.

Remediation

Remediation means cleaning up pollution, spills and contamination. Spills and pollution are technically called "releases." See the entry above for information on "releases."

Remediation can be required or voluntary. Persons responsible for releases can voluntarily clean up and seek a remediation certificate. The remediation certificate protects the person responsible from future regulatory liability for the contamination that was remediated.

Information issues to be aware of:
"Remediation" and "reclamation" are related but different. Remediation can occur at any time, not just when an activity is concluded. A remediation certificate does not mean that the land has been reclaimed.
Not all spills are reported or remediated. The absence of remediation records does not mean that there is no contamination.

Remediation certificates are issued for a specific substance and a level of remediation, not for a specific piece of land. There are guidelines for remediation certificates for upstream oil and gas facilities and petroleum storage tanks.

AESRD will issue remediation certificates for other types of remediation but there are no guidelines yet.

For more on reclamation and remediation, see AESRD's reclamation program.

Remediation		
What information exists?	**Who holds it?**	**How is it accessible?**
Remediation certificates. Applications for certificates. Cancelations of certificates.	AESRD	Publicly available.
Petroleum storage tanks at gas stations that completed the former Tank Site Remediation Program. (The Tank Site Remediation Program is defunct. No certificate applications were accepted after March 31, 2009.)	Municipal Affairs	*FOIP* applies to Municipal Affairs. Some access is likely.

Enforcement records

Enforcement records provide documentation of government action against contraventions of environmental legislation. Enforcement Records are strong indicators of environmental problems. Information seekers should search for enforcement records whenever there are past or present activities of concern.

Enforcement records are held by the government departments that regulate the activity. Enforcement action can be taken against permit holders or against members of the general public.

Information issues to be aware of:
Enforcement records are usually publicly available or routinely disclosed but the way that they are shared varies with the department.

Minor enforcement actions such as administrative penalties (fines and tickets) often do not result in public notice. Information seekers will have to search compilations and reports.

The absence of enforcement records does not mean much. Governments are rarely required to enforce environmental laws and often do not. Enforcement is often a last resort. It may be used in cases where there are public complaints and uncooperative violators.

Enforcement action that occurs is not necessarily against the largest polluters.

Enforcement records do not disclose everything about the offense or the offender.

Often information is linked to the offender and not to a geographical or physical location.

Information related to investigations in progress will not be disclosed.

Information on remediation procedures and agreements between government and persons responsible for the substance has been withheld in some cases.

Enforcement records		
What information exists?	**Who holds it?**	**How is it accessed?**
Public notices of enforcement actions, environmental protection orders, water management orders and charges that have been laid.	AESRD	Publicly available online through media releases at the time of the action and through Annual and Quarterly Compliance Reports.
Records of administrative actions under the *Environmental Protection and Enhancement Act* (*EPEA*) and the *Water Act*, including warning letters, administrative penalties or tickets/fines.	AESRD	Publicly available online through Annual and Quarterly Compliance Reports.
Enforcement summaries, compilations and statistics	AESRD	Publicly available online through the AESRD compliance assurance website.

Individual enforcement records under *EPEA*, the *Water Act*, and predecessor legislation. Records include: • prosecutions; • enforcement orders; • environmental protection orders; • emergency environmental protection orders; • administrative penalties; • tickets; • warnings; • emission control orders; • chemical control orders; • water management orders; • water quality control orders; and • stop orders.		Publicly available through a requested search. The Environmental Law Centre Enforcement Historical Search Service delivers enforcement records under current and past legislation administered by AESRD. Searches require corporate name and a $40.00 fee.
Directions of an inspector or a director.	AESRD	Routine disclosure
Oil and gas enforcement information including: • Oil and gas regulatory enforcement summaries (Individual offenders not named). Includes interpretive and contextual information on concerns with compliance by oil and gas operators. • Orders issued to oil and gas operators, including “closure,” “Closure,” “abandonment” and "miscellaneous" operational orders.	AER	Publicly available online or by searching the AER Catalogue. Monthly and yearly enforcement summaries are available back to 1999.
Further enforcement actions against oil and gas operators.	AER	Some routine disclosure may be available by contacting AER Information Services.

Federal enforcement action related to toxic substances. Offenders under federal environmental legislation, including company names and province where offences occurred.	Environment Canada	Publicly available online through the Environment Registry, Compliance and Enforcement Reports, and annual reports under The Canadian Environmental Protection Act (1999). Recent enforcement action can be identified through notifications. Historic enforcement actions are archived. Offender registration is required under the *Environmental Enforcement Act* but the registry only goes back to 2009.
Alberta Fire Code violations and fire prevention orders. Fire Code records will indicate where there have been fire risks or occurrences. Many flammable substances including petroleum or chemicals can cause environmental contamination.	Specific municipality	*FOIP* applies to municipalities. Some information will be disclosed but the Delivery process will vary by municipality. Contact the municipal fire department, fire marshal or fire prevention branch.
Unsightly property orders and cleanup orders under the *Environmental Protection and Enhancement Act*.	Specific municipality	*FOIP* applies to municipalities. Some information will be disclosed. Delivery process will vary by municipality. Contact bylaw enforcement.

Beyond land

Air quality

Air quality is one of the largest environmental concerns for human health, safety and quality of life. Airborne pollution also accumulates in land and water. Air and precipitation quality are general indicators of environmental condition and often featured in government state of the environment reporting (below). The leading example is acid deposition (acid rain).

Sources of air quality information:
Both federal and provincial governments have roles in sharing air quality information.
Federal roles include:

- Identifying air contaminants.
  The federal "Criteria Air Contaminants" and other related pollutants are listed and explained by Environment Canada. Health Canada provides information on The Health Effects of Air Pollution.
- Interpreting air quality.
  The Air Quality Health Index (AQHI): The AQHI is an interpreted information tool to help protect health from air pollution on a daily basis. The AQHI produces a ranking of 1 to 10 based on common air pollutants that can impact human health. The lower the number, the lower the health risk. The AQHI has been adopted by Alberta and is available for 11 Alberta cities.
- The federal government has two sets of air quality guidelines under the *Canadian Environmental Protection Act*.
  - The Canada Wide Standards (CWS) are signed on to by the provinces, including Alberta, and are for the provinces to implement. There is a CWS for ozone.
  - National Ambient Air Quality Objectives (NAAQO) are available for the provinces to use as they see fit. The NAAQO includes objectives for sulphur dioxide, total suspended particulates, carbon monoxide, nitrogen dioxide and ozone.

Provincial roles include:

- regulating activities that impact air quality;
- setting emissions standards for industrial sectors;
- monitoring air quality;
- enforcing emissions limits; and
- tracking provincial air quality trends and assessing environmental implications.

Air contaminants regulated and monitored under Alberta regulations include carbon monoxide, oxides of nitrogen, ozone, sulphur dioxide, hydrogen sulphide, total reduced sulphur, particulate matter, dust and smoke, hydrocarbons and ammonia, and carbon dioxide.

Non-government information holders are extremely important to air quality information at the provincial level. Industry, environmental organizations, municipalities and the provincial government all have an interest in air quality and often come together as multi-stakeholder associations. These associations include the Clean Air Strategic Alliance (CASA) and several regional monitoring networks.

The Clean Air Strategic Alliance (CASA) is a province-wide association that carries out strategic management of air quality issues in Alberta. Not all information generated by CASA is marketed to the public. CASA performs two main public information services:

- CASA collects monitoring data from government and regional networks and maintains the Alberta Ambient Air Data Management System (AAADMS). The CASA data warehouse makes

audited raw data publicly available as an alternative to the real time data made publicly available by AESRD.
- CASA houses reports from its own project teams on specific air quality issues including feedlot emissions and flaring and venting by oil and gas. Some reports are available online. Other reports may be disclosed to information seekers who can interpret the material.

There are also regional monitoring networks for several "airshed zones." These monitoring networks use on-the ground equipment and in many cases conduct monitoring of regional industries. The networks can be a direct source of regional air quality data or information on region-specific industries (for example in-situ oil sands). Data may be provided in summary form or posted online. Information that is not proactively delivered may be available through the network office. Regional monitoring networks have no legal requirement to provide access to information but the network may benefit from the public profile and public confidence created by doing so.

Information issues to be aware of:
Never expect perfect air quality information. Air quality problems may not register in monitoring systems. Reasons include:

- Air quality information relates to specific contaminants. Even general statements on air quality such as "good" or "poor" are based on the presence of specific contaminants that have been monitored.
- Air quality problems can be very local but air quality monitoring is often regional.
- Air quality problems can be caused by short term emissions but air quality monitoring can be intermittent. Alberta uses intermittent monitoring for polycyclic aromatic hydrocarbons and volatile organic compounds.
- Ambient air quality monitoring is often not required by law. Ambient monitoring has moved from the conditions of activity permits to regional monitoring programs.

Air quality		
What do you want to know?	**Who holds it?**	**How do you access it?**
Air quality indicators according to the Alberta government	AESRD	Publicly available online. Current reports are available through the State of the Environment webpage. Past reports are available from the Information Centre.
Air quality indicators according to the federal government including: • ground level ozone; • fine particulates; and • seasonal averages – daily concentration.	Environment Canada	Publicly available online through the Canadian Environmental Sustainability Indicators (CESI) page.
Acid rain, precipitation and airborne pollution including regional trends and patterns.	Environment Canada	Publicly available online at Canadian Air and Precipitation Monitoring Network (CAPMoN).

Seasonal averages and daily concentrations of air quality indicators.	Environment Canada	Publicly available online through National Air Pollution Surveillance (NAPS).
Current air quality in a region or city in the province.	AESRD	Publicly available online through the Air Quality Health Index page. Air quality information collected the previous hour becomes available beginning at about 15 minutes after the current hour. Current air quality information is retained for the previous 45 days on this website.
Audited Inventory of real time air quality results, including historical data.	Clean Air Strategic Alliance (CASA)	Publicly available online in the Clean Air Strategic Alliance Data Warehouse.
Historic air quality information, including data by region and site, urban air quality trends and emissions inventories.	Environment Canada	Publicly available online through National Air Pollution Surveillance (NAPS).
Forest Fire smoke forecasts, smoke concentrations and impacts on air quality.	Joint initiative between AESRD and British Columbia	Publicly available online through the The BlueSky Western Canada Smoke Forecasting System.
Federally reported emissions (primarily from sources). Emissions trends and summary reports. Historical emissions information	Environment Canada	Publicly available online through the National Pollution Release Inventory. (NPRI).
Interpreted and contextual information on emissions from large polluters, including maps of pollution sources and relative ranking of emitters.	Emitter.ca	Publicly available online through www.emitter.ca.
Oil and gas emissions deemed to be safety risks and emergencies.	AER	Publicly available through notices to area landowners.

Information on oil and gas flaring, venting, incineration, burning of oily matter or waste, and pollution control.	AER	Routine disclosure. Make requests to AER Information Services.
Hydrogen sulfide (sour gas) production and operation data for wells and processing plants. Emissions monitoring data Yearly reports on processing plants or monthly reports on hydrogen sulphide processing.	AER	Some information publicly available online through the AER Catalogue. Make further requests to AER Information Services.

Regional air quality information

Use CASA to find the "airshed zone" and monitoring network if not listed below.

Calgary region - Calgary Region Airshed Zone - (403) 268-5737

Fort Saskatchewan region - Fort Air Partnership - 1-800-998-2832

Bonnyville, Cold Lake and St. Paul region - Lakeland Industry and Community Association - (780) 812-2182

Medicine Hat and Redcliff region - Palliser Airshed Society – (780) 446-3277

Red Deer, Rocky Mountain House, Sundre, Banff and surrounding region - Parkland Airshed Management Zone – (403) 862-7046

Grande Prairie and region - Peace Airshed Zone Association – (780) 539-2298

Jasper, Hinton, Edson, Lake Wabamun, Drayton Valley, Pigeon Lake and surrounding regions - West Central Airshed Society - (780) 514 3533

Fort McMurray and the Wood Buffalo region - Wood Buffalo Environmental Association - 780-799-4420

Edmonton region - Alberta Capital Airsheds Alliance – (587) 520-7935

Water

Water has an impact on:

- possible land uses;
- property values;
- viability of industries that depend on water;
- ecosystem health; and
- human health and life quality.

Water concerns are foreseeable in Alberta, so accessing information is reasonable in many circumstances. Water concerns can be divided into "water quality" and "water quantity." They can also be divided into "groundwater" and "surface water." The result is at least four distinguishable concerns:

	Water quality	**Water quantity**
Ground water	Groundwater quality	Groundwater quantity
Surface water	Surface water quality	Surface water quantity

The charts below provide three separate charts for information sources on surface water quality, surface water quantity, and groundwater generally. In reality these issues are connected. Water quality and quantity are connected as the concentration of contaminants in the water can increase due to droughts and low water volume, or from floods and runoff. Groundwater and surface water can also be connected as groundwater quality and quantity can impact surface water quality and quantity.

Water quality concerns include contamination from spills, pollution or natural substances. Polluting substances move quickly through water. Water quality is impacted by:

- chemical contamination, including heavy metals, industrial chemicals, pharmaceuticals and pesticides;
- microbial contamination, including bacteria, viruses and parasites; and
- sediment from erosion and runoff.

Activities that can impact water quality include:

- oil and gas;
- mining;
- landfills, especially historic dumps that lacked liners to prevent seepage into groundwater;
- transportation routes including pipelines, railways, roads and trails;
- logging and forestry product mills;
- forest product mills;
- factories;
- feedlots, livestock grazing, and intensive agriculture;
- sewage systems and treatment plant discharges; and
- recreational use of land.

Most drinking water sources in urban locations make use of surface water.

Surface water quality is a concern where the water source is from lakes, rivers or reservoirs. Most urban locations use surface water sources. Groundwater quality is a concern where the water source is from wells. Many rural locations and industrial activities use groundwater sources.

Water quantity concerns include droughts, floods, water levels, river flows and water supply. Water quantity is impacted by upstream withdrawals, land use activities and weather events. Water quantity may be managed by dams and reservoirs. Surface Water Quantity is an issue where the water source is rivers, lakes or reservoirs. Groundwater quantity is an issue where the water source is wells. Surface water and groundwater quantity can impact the suitability of land for development.

Water allocation – the availability and ownership of rights and licenses to use water – is also included in the chart below on water quantity.

Key information holders:
Most water information is generated at the provincial level. The largest information holder is Alberta Environment and Sustainable Resource Development (AESRD). Most of the entries below pertain to AESRD but it is not the only source of information. The federal government has a role in producing water quality indicators and monitoring large-scale water trends. Non-government information holders have an important role in sharing water information at the provincial, regional, and local level. Three partnerships are identified in the provincial Water for Life Strategy:

- Alberta Water Council (AWC): The AWC examines provincial scale water issues and makes policy recommendations. AWC is involved in the production of the Alberta Water Portal, a consolidated information source on water topics that aims to make publicly available information more accessible and free.
- Watershed Planning and Advisory Councils (WPACs): WPACs are multi-stakeholder associations that evaluate watersheds and produce reports on the state of the watershed. They develop watershed management plans and policies and actions which they recommend to their members. WPACs also have educational programs and support local stewardship groups.
- Watershed Stewardship Groups (WSGs): WSGs are local groups and grassroots organizations that take action to improve their local water body or watershed. WSGs are frequently comprised of landowners or volunteers. Some WSGs are multi-stakeholder associations that include local industry or government representatives.

All three of the above organizations share information with each other and the public but there is no formal reporting relationship. See the Information Holders section on Multi Stakeholder Associations for more details.

Information issues to be aware of:
Groundwater data is less complete than surface water data.

Spills into water may not be reported or discovered. See section on spills, pollution and releases for details.

Properties that can be impacted by floods may not be in provincially designated flood plains or flood hazard areas. Flood mapping is incomplete.

Not all activities that are regulated for water quality impacts have the same monitoring and reporting requirements. Substances monitored and frequency of monitoring may vary. Information seekers

requesting data created by regulated activity operators may need to check permits to know what information to request.

Water is impacted by cumulative effects of multiple activities that are not individually regulated for their impact on water.

Residential, industrial and recreational land use and development impacts water quality and quantity in the watershed where it occurs.

Water quality is often impacted by "non-point source pollution" (pollution that lacks a single origin) instead of "end of pipe" pollution.

Information seekers should identify activities of concern in the area and consider accessing information on those activities rather than just relying on water quality information. Environmental testing can be done by environmental consultants where no records can be found but water quality is believed to be a concern.

Water quality information		
What information is available?	**Who holds it?**	**How is it accessed?**
Provincial water quality indicators.	AESRD	Publicly available online through the State of the Environment Reporting page for current information and the Information Centre for archived information.
Federal water quality indicators. Trends in water quality at the national, regional and local levels. Percent of monitoring stations that register poor, excellent, etc. Data sources and collection methods.	Environment Canada	Publicly available online through the Canadian Environmental Sustainability Indicators (CESI) page.
Drinking water quality information for specific municipalities (by treatment plant).	AESRD	Publicly available online from the Regulated Drinking Water page for many municipalities. Not all treatment plants participate in online reporting. Paper reports are publicly available from local AESRD Offices. Monitoring data not yet reported should be routinely disclosed. The request process requires asking the approval holder (the treatment plant) before asking the department. See the section on AESRD for details on the process.

Local concerns with microbial contamination.	Environmental Health Services branch of Alberta Health Services	Local notices are provided where health risks are determined. Phone consultations and limited water testing are available in rural areas. Inspections of private wells are not broadly available.
Annual water quality by major river, rated on a scale of "good" to "poor."	AESRD	Publicly available online through Alberta River Water Quality Index.
Lake water quality and technical data for specific lakes.	AESRD	Publicly available online through Lake Water Quality Data.
Long term river quality monitoring data.	AESRD	Publicly available online through River Network Station Water Quality Data
Monitoring data collected as required by approvals and registrations under *EPEA*. Permits will be held by: water treatment plants, sewage and wastewater plants, landfills and waste management facilities. See the permit for the specific substances monitored and the monitoring and reporting requirements. The information must include the processing information necessary to interpret the data	AESRD or the permit holder.	Some monitoring data, primarily from treatment plants, is made publicly available online by AESRD (see above). Not all data is online as operators have the option of paper reporting. Information may be available at local AESRD offices. Monitoring data not yet released will be available through routine disclosure. The request process requires asking the permit holder before asking the department. See the section on AESRD for the full process.
Oil and gas drilling in water covered areas, releases of water used in oil and gas operations, and activities on the prevention and control of water pollution	Alberta Energy Regulator (AER)	Access will vary with information sought. Some information will be publicly available or routinely disclosed and some will require *FOIP* requests. Contact AER Information Services.
Enforcement records, offenses and penalties under the *Water Act*	AESRD	Publicly available. See the entry on enforcement records for details.
Large spills and releases into water, classified by: pollutants, geographic location, or polluting sector.	Environment Canada	Publicly available online through the National Pollutant Release Inventory (NPRI).

Health effects of water contamination. Guidelines for Canadian Drinking Water Quality.	Health Canada	Publicly available online through Canadian Drinking Water Guidelines. More detailed technical documents are also available online.

Water quantity information		
What information exists?	**Who holds it?**	**How is it accessible?**
Water levels, precipitation data and river flows in the major river basins and water sources in Alberta. (Water quality information included as well).	AESRD	Publicly available online through Alberta's River Basins.
Flood hazard areas that have been provincially identified to date, including maps and studies of flood hazard areas. (Note that not all flood hazard areas have been identified).	AESRD	Publicly available online through AESRD's Flood Hazard Mapping program.
Water levels. Summaries and trends for national, regional, and international water quantity information.	Environment Canada	Canadian Environmental Sustainability Indicators (CESI).
Applications for *Water Act* approvals, licenses, registrations and preliminary certificates. Statements of concern filed in response to water act applications.	AESRD	Notices of applications will be posted in the area or local newspaper. Application information is routinely disclosed. The process requires asking the applicant for the information first. See the section on AESRD for the process.
Water licenses and approvals under the *Water Act*. Licenses will be held by municipalities, landowners, industry operators, livestock operations and recreational facilities among others.	AESRD	Publicly available online by searching the authorization viewer. Search from list of water bodies or by legal land description. See the section on permits for details on using the approval viewer. Paper copies are available from the Regulatory Approvals Centre.

Water licenses and traditional agricultural registrations in the South Saskatchewan River Basin. Maps of surface water diversions, well diversions and water management areas in the South Saskatchewan River Basin.	AESRD	Publicly available online through a Water Allocation Licence Viewer Search System specific to the South Saskatchewan River Basin.

Groundwater information		
What information exists?	**Who holds it?**	**How is it accessed?**
Compiled or general groundwater information.	AESRD	Publicly available online through Alberta Groundwater Resources. AESRD Groundwater Information Map
Well drilling reports and chemical analysis for individual water wells.	AESRD	Publicly available online through Alberta Water Well Information Database.
Locations of potable groundwater.	Watershed Planning and Advisory Council (WPAC) for the specific watershed	If information exists, it may be publicly available in State of Watershed Reports or sub-watershed reports.
Location of groundwater monitoring wells and continuous monitoring of groundwater levels.	AESRD	Publicly available online at Groundwater Observation Well Network.
Base of groundwater protection level (for oil and gas operations).	Alberta Energy Regulator (AER)	Publicly available through the AER website.
Disposal of oil and gas waste into underground formations. Records of underground injection by sour gas operators.	AER	Oil and gas operators are required to provide notice to directly affected landowners. For other information seekers, some routine disclosure may be available on request to AER Information Services.
Agricultural risks to groundwater, such as manure storage facilities. Enforcement orders and complaints against livestock operators. Applications for livestock operations. Areas of high vulnerability.	Natural Resources Conservation Board (NRCB)	Much information is publicly available online through NRCB statistics and reports. Routinely disclosed if not posted. For local concerns contact NRCB field offices. Dial 310-0000 to be connected toll free.

One-stop shopping and technological advances

There is no true one-stop shopping for environmental information. That is why this section comes last, and it is why a Guide like this is needed.

It is crucial for information seekers to understand the barriers to one-stop shopping, even in the electronic age. Government information holders cannot produce true one-stop shopping services because they only hold information over topics within their legal jurisdiction. Other barriers to one stop shopping include the cost of creating such services and the fact that the law still applies. Online delivery does not circumvent legal exceptions to disclosure. The only information made available by government information holders is that which would be accessible through requests and that the information holder decides to post online. In the case of non-government information holders, all that will ever be shared is what the information holder wants to share.

Nonetheless, attempts at consolidated information sources are increasing. Most such services are not required by law. They are voluntary initiatives driven by economics or responding to requests or the desire to share certain information.

State of the environment reporting

The most established consolidated information service is a report on the general health of the environment. This is often called "state of the environment" reporting. State of the Environment reports provide highly interpreted information. They will use selected indicators for the condition of land, air, water and biodiversity to track trends or changes in environmental quality. State of the environment reporting began in the paper age and continues online.

Provincial: AESRD produces State of the Environment reports. These publicly available reports provide indicators for air, land, water and biodiversity.

Federal: The Canadian Environmental Sustainability Indicators Initiative (CESI) is the current incarnation of former federal State of the Environment Reports. CESI reports provide indicators and trends for air, water, greenhouse gas and protected areas. They cover the science and limits of indicators, socio-economic context and factors influencing the indicators. Some regional and sectoral pollution details are available.

Topic-specific services

An increasing number of online services compile information on a specific topic. Examples from this Guidebook include the National Pollutant Release Inventory, the Environmental Site Assessment Repository, the Alberta Water Portal (a multi-stakeholder initiative) and commercial data services. A recent major provincial initiative not covered in this publication the Oil Sands Information Portal.

Data sets

Mass disclosure is increasingly possible through the sharing of data sets. Data sets are compilations of records that can be machine-read as opposed to delivering each record separately. Releasing data sets can reduce costs to information holders and it allows for the development of new interpretive tools. Releasing data sets can follow the uptake of broader transparency initiatives like Open Gov (an initiative of government agencies). A leading example of this trend, though not specific to environmental information, is the City of Edmonton Open Data Catalogue.

Electronic mapping

Advances in electronic mapping provide opportunities for information seekers to derive objective context from geographic information that is not necessarily marketed as "environmental" information. Geographic Information System (GIS) mapping in particular can be a powerful interpretive tool. GIS makes use of data sets. It turns mass raw data into multiple layers of visual information that can provide context for a record. It also requires that the Information Seeker's computer be able to read the maps. Two significant services are GeoDiscover Alberta and the Alberta Geological Survey:

GeoDiscover Alberta is targeted at land managers and land use planners. It provides interactive map services that consolidate a number of information collects held by Alberta Energy and by Alberta Environment and Sustainable Resource Development. It can be used to identify the location of water bodies, land uses, legal land boundaries, license agreements for select natural resources, and administrative boundaries.

The Alberta Geological Survey (AGS) "provides geological information to help with the exploration, development, and conservation of Alberta's resources." The maps and reports produced by the AGS can provide environmental information seekers with visual information on the location of natural resources and groundwater. The AGS predates modern electronic mapping and goes beyond that in the scope of its information.