

{Pilot - Satellite Based Change Detection for Monitoring of Agricultural Lands}

PIA# [will be assigned by PCT] AGRI28-2019

Why do I need to do a PIA?

Section 69 (5) of the *Freedom of Information and Protection of Privacy Act* (FOIPPA) requires the head of a ministry to conduct a privacy impact assessment (PIA) in accordance with the <u>directions</u> of the minister responsible for FOIPPA. Section 69 (5.1) requires the head to submit the PIA to the minister responsible for FOIPPA for review, <u>during the development</u> of any new system, project, program or activity, or proposed enactment, or when making changes to an existing one. The Privacy, Compliance and Training Branch (PCT) is the representative of the Minister for these purposes. Ministries must submit PIAs to PCT at for review and comment <u>prior to implementation</u> of any initiative. If you have any questions, please call the Privacy and Access Helpline (250 356-1851) for a privacy advisor. Please see our <u>PIA Guidelines</u> for question-specific guidance on completing a PIA.

What if my initiative does not include personal information?

Ministries still need to complete Part 1 of the PIA and submit it, along with the signatures pages, to PCT even if it is thought that no personal information is involved. This ensures that the initiative has been accurately assessed.

Part 1 - General

Name of Ministry:	Agriculture	
PIA Drafter:	Corrine Roesler	
Email:	Corrine.Roesler@gov.bc.ca	Phone: 604 556 3110
Program Manager:	Willow Minaker	
Email:	Willow.Minaker@gov.bc.ca	Phone: 778 974-3846

In the following questions, delete the descriptive text and replace it with your own.

1. Description of the Initiative

A joint pilot project between-<u>T</u>the Ministry of Agriculture and-<u>is pursuing a joint pilot project with</u> the Provincial Agricultural Land Commission (ALC) to determine if radar satellite-based change detection has the potential to assist with monitoring and regulatory oversight of the Agricultural Land Reserve (ALR).

This project is an exploration of new technology and it's potential application—and not a new system, project, program or activity, or a change to an existing one.

The project will attempt to detect anthropogenic changes within three overlapping areas of Southern BC. The exact locations will depend on availability of <u>radar</u> satellite imagery but will be no larger than 90x50 km in size <u>as dictated by the size of a radar satellite image frame</u>. Southern

Commented [GAI1]: Corrine can you explain why this area was selected?

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BC was chosen as the availability of high-resolution optical imagery is greater than in Northern BC. A lower mainland location will be given preference due to proximity to the ALC offices and travel time for staff to verify results.

<u>TheSRadar s</u>atellite images from different time periods (1 year, 24 days, 12 hours) will be compared in an attempt analysedto_to-detect new land fill, infrastructure (buildings, roads, etc.) and large commercial vehicle parking within the <u>ALR-Agricultural Land Reserve</u>.

The resolution of these radar satellite images will be ould be-3m (Radarsat 2's Wide Ultra-Fine beam mode). At At this resolution, large commercial vehicles may be distinguishable from passenger vehicles, but the type of vehicle (sedan versus pickup truck), licence plates, or the presence of passengers will not be distinguishable. At this resolution, the approximate footprint of infrastructure may be distinguishable, but the type and use of infrastructure (house versus garage versus shop) will not be distinguishable.

Sample data is available to the public;

https://mdacorporation.com/geospatial/international/satellites/RADARSAT-2/sample-data

The Any A sample of the detected changes would then be verified by traditional methods, such as aerial photography, high resolution optical satellite imagery, or windshield survey from a public road.— The Ministry will support the ALC as needed to verify if detected changesatellite images accurately represents—the detected change to the land base. No compliance activities are included in this verification, the goal of verification is to confirm if the detected change is accurate.

Results of the verification will used to refine the change detection process using an iterative approach.

2. Scope of this PIA

This PIA does not cover assess compliance and enforcement any activities of the ALC.

This PIA covers only the role of the BC Ministry of Agriculture in this pilot project, which is to provide technical and funding support and to gain an understanding of the capabilities of radarbased satellite systems.

This PIA covers the exploration of new technology and potential applications.

4-3. Related Privacy Impact Assessments

The ALC has legislative authority for regulatory oversight in the ALR and may have submitted a PIA related to the activities being explored under this pilot project. The activities of the ALC in this pilot project have been assessed in a separate PIA.

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Commented [GA12]: Corrine can you expand on what would be visible at this resolution? Could you make out types of vehicles (ie; truck, car or van)? Is there an example image we could include as an appendix to the PIA for reference?



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5.4. Elements of Information or Data

<u>Radar s</u>The only data involved is <u>S</u>satellite imagery (both archive and current) for the selected ALR lands.

Existing (and available) aerial photography and optical or aerial satellite imagery of the selected ALR landspareels.

Location of detected change in a shapefile format. Depending on the success of the pilot, this data may include an initial estimate of type, such as land fill, infrastructure, or large vehicle parking.

Existing public datasets (accessed via the BC Geographic Warehouse or address BC) may be used to verify change detection results. Information utilized in these data sets may include

Civic address

Imagery of land base (including Lidar, scanned maps, land classification maps and digital elevation models)

Information may also will be collected in the process of verifying change detection results. This includes notes taken during windshield surveys. Survey staff are trained to not include personal information in notes, ensuring that they are technical in nature and refer only to the land base.

Within the scope of the Ministry's role, no personal identifiers will be included in the analysis of the land base. Images of the land base, and change verification results (ie: if change detected by the satellite satellite was accurate or inaccurate) will be retained by the Ministry to supplement existing data sets of ALR land, and inform future policy or programming. In the course of verifying the change detection results, datasets which are accessible through the BC Geographic Warehouse may be referenced in a GIS system and civic address (AddressBC) may be used to help orient the windshield survey.

If personal information is involved in your initiative, please continue to the next page to complete your PIA.

If **no** personal information is involved, please submit Parts 1, 6, and 7 unsigned to PCT at pia.intake@gov.bc.ca. A privacy advisor will be assigned to your file and will guide you through the completion of your PIA.

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Part 2 - Protection of Personal Information

In the following questions, delete the descriptive text and replace it with your own.

Storage or Access outside Canada

<u>Change detection results will not be accessible from outside Canada.</u>

Data-linking Initiative*

FOIPPA, "data linking" and "data-linking initiative" are strictly defined. Answer of following questions to determine whether your initiative qualifies as a "dataking initiative" under the Act. If you answer "yes" to all 3 questions, your taitive may be a data linking initiative. If so, you will need to comply with ocific requirements under the Act related to data-linking initiatives.

rsonal information from one database is linked or combined with rsonal information from another database;

e purpose for the linkage is different from those for which the rsonal information in each database was originally obtained or mpiled;

e data linking is occurring between either (1) two or more public dies or (2) one or more public bodies and one or more agencies.

<u>ou have answered "yes" to all three questions, please contact a</u>
<u>T Privacy Advisor to discuss the requirements of a data-linking tiative.</u>

Common or Integrated Program or Activity*

Commented [GAI3]: Addressing that MDS is American owned and managed. Corrine can we say here that schedules E and G will be included in the contact.

Commented [RCA4]: Can we add 'If necessary', or 'If personal information, will include E and G....'. If the pilot itself does not include any personal information, these two schedules are not required.

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FOIPPA, "common or integrated program or activity" is strictly defined. Answer			
: following questions to determine whether your initiative qualifies			
common or integrated program or activity" under the Act. If you ar	swer "yes"		
all 3 of these questions, you must comply with requirements under	the Act for		
mmon or integrated programs and activities.			
is initiative involves a program or activity that provides a service services);	s/no		
ose services are provided through:			
a public body and at least one other public body or agency			
rking collaboratively to provide that service; or			
one public body working on behalf of one or more other public			
dies or agencies;			
e common or integrated program/activity is confirmed by written			
cumentation that meets the requirements set out in the FOIPP			
gulation.			
ase check this box if this program involves a common or integrated			
ogram or activity based on your answers to the three questions			
eve.			

* Please note: If your initiative involves a "data-linking initiative" or a "common or integrated program or activity", consultation on this PIA must take place with the Office of the Information and Privacy Commissioner (OIPC). PCT will facilitate the consultation with the OIPC.

For future reference, ministries are required to notify the OIPC of a" data-linking initiative" or a "common or integrated program or activity" in the early stages of developing the initiative, program or activity. PCT will help facilitate this notification.

Personal Information Flow Diagram and/or Personal Information Flow Table

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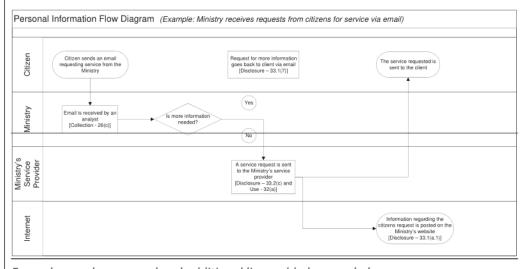
Please provide a diagram and/or table that shows how your initiative will collect, use, and/or disclose personal information (see examples below). Your diagram and/or table must also include the authorities for the collection, use, and disclosure of personal information, as laid out in FOIPPA. It should also outline the flows of personal information wherever it is transmitted or exchanged.

Both a flow diagram and a table must be included if the PIA is related to a common or integrated program or activity or a data-linking initiative.

For ease of reference, the collection, use, and disclosure authorities in FOIPPA can be found in the appendices. If you do not know what the relevant authorities are, please contact a PCT privacy advisor.

Depending on the complexity of your initiative, you may choose to provide one general diagram for the initiative, and more specific diagrams for particular components. If multiple organizations will collect, use, or disclose personal information, the diagram should identify how each organization is involved in the initiative.

Example:



Examples can be removed and additional lines added as needed.

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sonal Information Flow Table		
scription/Purpose	<u>∍e</u>	I PPA
		<u>thority</u>
nail received from client requesting service	<u>llection</u>	(c)
nail client back requesting more information	sclosure	.1(7)
rvice request transferred to service provider	sclosure &	.2(c) and
ntracted by Ministry	<u>e</u>	(a)

Risk Mitigation Table

Please identify any privacy risks associated with the initiative and the mitigation strategies that will be implemented. Please provide details of all such strategies. Also, please identify the likelihood (low, medium, or high) of this risk happening and the degree of impact it would have on individuals if it occurred.

Examples can be removed and additional lines added as needed.

Mitigation Table			
<u>k</u>	tigation Strategy	<u>elihood</u>	pact
nployees could access rsonal information and e or disclose it for rsonal purposes	th of Employment	w	<u>gh</u>
quest may not actually from client (i.e. their hail address may be ing used by someone e)	plementation of entification verification ocedures	W	g <u>h</u>
ent's personal formation is mpromised when insferred to the service ovider	ansmission is encrypted d over a secure line	W	<u>gh</u>

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1erent risks in sending	licy developed to inform	<u>dium</u>	<u>edium</u>
rsonal information to a	ents of risk and ask if they		
<u>ent via email</u>	ould like the information		
	ı a different medium, such		
	through the mail		

Collection Notice

If your initiative is collecting personal information directly from individuals you must ensure that all individuals involved are told the following:

The purpose for which the information is being collected

The legal authority for collecting it, and

The title, business address and business telephone number of an officer or employee who can answer questions about the collection.

Please include your proposed wording for a collection notice and where it will be located for individuals to read before collection takes place. You can also attach a screen shot or a copy of your form where the collection notice would be located. For further help with collection notices please see the "Collection Notice Tip Sheet" located on the CIO's website.

Part 3 - Security of Personal Information

If this PIA involves an information system, or if it is otherwise deemed necessary to do so, please consult with your Ministry Information Security Officer (MISO) when filling out this section. Your MISO will also be able to tell you whether you will need to complete a separate assessment called a Security Threat and Risk Assessment (STRA) for this initiative.

Please describe the physical security measures related to the initiative (if applicable).

For example: locked cabinets, securely stored laptops, or key card access to the building.

Please describe the technical security measures related to the initiative (if applicable).

For example: use of government firewalls, document encryption, or user access profiles assigned on a need-to-know basis.

Does your branch rely on security policies other than the Information Security Policy?

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<u>Please describe any specific policies and procedures and provide contact details</u> for someone who could answer further questions regarding these policies and <u>procedures</u>.

<u>Please describe any access controls and/or ways in which you will limit or restrict unauthorized changes (such as additions or deletions) to personal information.</u>

For example: role-based access.

Please describe how you track who has access to the personal information.

For example: audit trails or physical sign-in and sign-out of files.

Part 4 - Accuracy/Correction/Retention of Personal Information

How is an individual's information updated or corrected? If information is not updated or corrected (for physical, procedural or other reasons) please explain how it will be annotated? If personal information will be disclosed to others, how will the ministry notify them of the update, correction or annotation?

For example: users have access to update their own information or, notes will be made on a government case file.

<u>Does your initiative use personal information to make decisions that directly affect an individual(s)?</u> If yes, please explain.

If you answered "yes" to question 17, please explain the efforts that will be made to ensure that the personal information is accurate and complete.

For example: check to see that the information was obtained from a reputable source such as another government agency.

If you answered "yes" to question 17, do you have approved records retention and disposition schedule that will ensure that personal information is kept for at least one year after it is used in making a decision directly affecting an individual?

If you do not have a schedule, please document how these records will be kept until a schedule is in place. Please describe retention schedules that apply where retention exceeds the one year requirement of the FOIPPA. Please contact your Ministry Records Officer if you need assistance.

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Part 5 - Further Information

<u>Does the initiative involve systematic disclosures of personal information? If yes, please explain.</u>

For example: your ministry has a regular exchange of personal information (both collection and disclosure) with the federal government in order to provide services to your ministry's clients. Under section 69 (2), this information is required to be published in the Personal Information Directory (PID), which is maintained and published by PCT.

ease check this box if the related Information Sharing Agreement (ISA) is been prepared. If you have general questions about preparing an 1, please contact the Privacy and Access Helpline.

If an ISA has been prepared as part of your initiative, please complete the fields in the table below by deleting the descriptive text in the right-hand column and replacing it with your own.

ormation Sharing Agreement – Rec	uired Information
scription	egular exchange of personal information
	tween the Ministry of Administration
	ADMIN) and the University of Life in order to
	ovide scholarships to eligible residents of BC.
mary ministry/government	<u>ADMIN</u>
ency involved	
other ministries/government	iversity of Life
encies and public bodies involved	
siness contact title	mager, Administration Services
siness contact telephone number	0-555-555

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lication of whether or not record information is involved	<u>s</u>
<u>rt date</u>	<u>-Apr-14</u>
date (if applicable)	<u>-Apr-15</u>

Does the program involve access to personally identifiable information for research or statistical purposes? If yes, please explain.

For example: you will be disclosing information to PhD students so they can conduct research.

ease check this box if the related Research Agreement (RA) is attached.

You require assistance completing an RA please contact a PCT advisor.

Will a personal information bank (PIB) result from this initiative?

A personal information bank means a collection of personal information that is organized or retrievable by the name of an individual or by an identifying number, symbol, or other particular assigned to an individual. Under section 69 (2) of FOIPPA, this information is required to be published in the PID, which is maintained and published by PCT.

If yes, please complete the fields in the table below by deleting the descriptive text in the right-hand column and replacing it with your own.

sonal Information Bank – Required Information				
<u>scription</u>	rsonal contact information of branch staff			
	case of emergency			
mary ministry/government agency	ADMIN			
olved				
other ministries/government	ne			
encies and public bodies involved				
siness contact title	fice Manager, Administration Services			
siness contact telephone number	<u>0-555-5555</u>			

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aco oncuro	Darte 6	and 7	are attached	unsigned to	your submitte	AID DIA
ise ensure	r arts o	ana ,	are attached	unsigned to	your submitte	or in

Part 6 - PCT Comments and Signatures

This PIA is based on a review of the material provided to PCT as of the date below.	If, in future any
substantive changes are made to the scope of this PIA, the ministry will have to	complete a PIA
Update and submit it to PCT.	

Privacy Advisor Privacy, Compliance and Training Branch Ministry of Finance	Signature	Date
Director or Manager Privacy, Compliance and Training Branch Corporate Information and Records Management Office Ministry of Finance (if Personal Information is involved in this initiative)	Signature	Date
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Part 7 - Program Area Comments and Signatures

Corrine Roesler		November 14, 2019
Program Manager	Signature	Date
Eileen Padgett or Nick Corcoran		
Ministry Contact Responsible for Security (Signature not required unless MISO has been involved.)	Signature	Date
Assistant Deputy Minister or Designate (if Personal Information is involved in this initiative)	Signature	Date
Executive Director or equivalent (if no Personal Information is involved in this initiative)	Signature	Date
nal copy of this PIA (with all applicable signa nplete the process. PCT is the designated of		
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PCT will publish the ministry name, business contact details and a brief summary of the PIA to the Personal Information Directory (PID) as required by section 69(2) of FOIPPA. If you have any questions, please contact your privacy advisor at PCT or call the Privacy and Access Helpline at 250 356-1851.

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