

Archaeological Resource Management and Available Tools



Archaeology Branch, Integrated Resource Operations Division

Paula Thorogood, A/Director- Operations

Whistler, September 15, 2022



Addressing Common Concerns

- Confidence: providing good advice to residents
 - Is there a risk to protected sites? Are permits required?
 - Is an assessment recommended? What options do property owners have?
- Understanding what tools are available to support archaeological resource management
- Ensuring municipal projects comply with Heritage Conservation Act
- Challenges
 - Costs
 - Timing
 - Managing expectations
 - Sustainable practices



Discussion Topics

Roles and
Responsibilities

The Heritage
Conservation Act

Archaeological
Studies

HCA Permitting &
Indigenous
Consultation

Provincial tools &
Recommendations

FAQs

Acronyms



- **AIA** (Archaeological Impact Assessment)
- **PFR** (Preliminary Field Reconnaissance)
- **HCA** (Heritage Conservation Act)
- **S12.2** (inspection/investigation – permit to look for sites)
- **S12.4** (permit to alter sites)

- **RAAD** (Remote Access to Archaeological Data)
- **PARL** (Provincial Archaeological Report Library)
- **APTS** (Archaeological Permit Tracking System)

- **CMT** (Culturally Modified Tree)
- **IO** (Inventory Officer); **PO** (Project Officer)

Roles & Responsibilities





Function of the Archaeology Branch (1)

- Administers the *Heritage Conservation Act*
 - Transformative changes to the HCA are presently being considered
- Maintains the **Provincial Heritage Register** and distributes archaeological site information (RAAD – Remote Access to Archaeological Data; PARL – Provincial Archaeological Report Library; Archaeological Information Requests)
 - July 2022: 60,000 sites in PHR
- Determines if permits can be issued to identify and assess archaeological sites (Section 12.2), and allows development to take place within protected sites (Section 12.4)
- Reviews qualifications of professional archaeologists



Function of the Archaeology Branch (2)

- Supports local government, provincial agencies, and other stakeholders regarding land-use decisions and arch resource management
- Assists Compliance & Enforcement with investigations into alleged contraventions to the HCA
- Supports treaty negotiations, G2G agreements, and reconciliation initiatives on behalf of the Province
- Develops and enhances policy for archaeological resource management
- Oversees RISC (Resource Inventory Standards Course)



Role of Local Government

- **KEY ROLE:** Provides information to landowners regarding compliance with the HCA through building permit process / development applications;
- Notifies proponents when development plans overlap with protected archaeological sites
- Official Community Plans
- Reports any contraventions through the **Natural Resource Violation Report** line: <https://www.for.gov.bc.ca/hen/nrv/report.htm>; 1 877-952-7277, (Option 2), or #7277 on a cellphone
- May have specific bylaws to which proponents also have to adhere
- **Could also be proponents as well for any LG developments**



Project Planning: Archaeology

- Access RAAD
- Consider archaeology at the design stage;
- Apply for HCA permits well in advance
 - recommend engaging with First Nations when creating HCA permit application prior to application submission
- Multi-assessment permits – how they work
- Costs
 - Establish scope for RFPs and obtain good, consistent bids in a competitive bid process.
 - Costs are increased by work stoppages due to unanticipated finds
 - Unanticipated permit requirements can create project delays



Cost of unplanned impacts

The costs of managing unplanned impacts can be **high**:

- First Nations culture history
- First Nations leadership and management time and effort to resolve, usually not funded
- Project delay costs while archaeological studies are completed
- Negative media coverage
- Charges under the *Heritage Conservation Act*
- Hiring archaeologists on an emergency basis

What activities can impact a site?

Excavating

Capping

Paving

Grubbing /
Clearing

Stripping

Blading

Levelling

Hydrovacing

Landscaping

Planting

Flooding

Erosion

The Heritage Conservation Act (HCA)

Archaeological sites are protected from impacts without a permit by provisions of the HCA

When proponents impact the land, they are responsible for avoiding or mitigating any impact on protected sites

HCA permit applications with the potential to impact aboriginal rights or title are referred to First Nations prior to the decision whether to issue the permit; early engagement by proponents/permit holders is encouraged

Legislated Archaeological Site Protection

Protection

- Automatic (S12.1)
- Designation (S9 and S11)
- Agreements with First Nations (S4)

Compliance and Enforcement

- Remedies (S34)
- Penalties (S36)

Permitting

- Inspection (S12.2)
- Site Alteration (S12.4)

HCA: Automatic Protection of Sites

Site types automatically protected by the HCA (Selected)

- Localities containing physical evidence of human use or activity predating 1846
- Burial places with historic or archaeological value
- Aboriginal rock carvings or paintings
- Heritage wrecks



Courtesy of Simon Fraser
University Museum of
Anthropology and Ethnology

Of special note, automatic protection:

- applies equally to Crown and private land
- applies to unknown as well as recorded sites
- is not noted on the Land Title

Site Boundaries are Approximate

- Definitions:
 - Arbitrary (extent of study area, e.g., individual property)
 - Observed (defined through presence of archaeological materials; subsurface testing)
 - Natural (based on defined landforms)
- Site boundaries may extend beyond what is visible on the surface
- Old site boundaries may be **inaccurate** (e.g., incorrectly plotted)
- Province has a backlog of **unprocessed site updates**



Comparing Archaeological Studies

Archaeological Overview
Assessments (AOAs)

Preliminary Field Reviews
(PFRs)

Archaeological Impact
Assessments (AIAs)

Study Type	Description	Pros	Cons	Comments
Desktop Archaeological Overview Assessment	<ul style="list-style-type: none"> •Location-specific review of nearby sites, cultural and environmental variables to determine likelihood as-yet unrecorded sites are present. •generally limited to less than 10,000 ha 	<ul style="list-style-type: none"> •Relatively cheap and fast way to learn whether a location has potential for sites, and if so, how much assessment may be required •Analyzes local data to predict archaeological potential; intended to be field tested. 	<ul style="list-style-type: none"> •Not suitable for large areas. • No review as to qualifications nor recommendations. •Quality dependent on the expertise and prudence of the author(s). Results not shared. 	<ul style="list-style-type: none"> •Benefits from regional expertise and indigenous input.
Geographic Information System (GIS) based AOA	<ul style="list-style-type: none"> •Geospatial analysis of known cultural and environmental variables to predict the location of archaeological sites within a region •Typically generated for broad regions, to support land-use planning into the future. 	<ul style="list-style-type: none"> •Covers hundreds of hectares and provide a “heat map” of the potential locations of sites. •AOAs can be shared with RAAD users. •Predictive performance can be evaluated •Can be applied to multiple developments within the scope of the original project area. 	<ul style="list-style-type: none"> •Relies on archaeological survey data. •Bias towards well-studied areas and the most visible site types. •Older models may not incorporate indigenous perspective •Models may become outdated as technology advances and new sites are identified. •Model development takes significant resources 	<ul style="list-style-type: none"> •AOAs evaluated on background research, data, methods, and predictive performance •Informed Contributors Layer developed in 2020 •2021 Guidelines under development; Heritage Investigation Permits will be required, to support provincial consultation and sharing results via PARL

Study Type	Description	Pros	Cons	Comments
Preliminary Field Reconnaissance (PFR)	<p>Intended to be part of an AOA</p> <p>No permit required</p> <p>Determine the need for and scope of additional archaeological work</p> <p>Limited data collection (to surface visibility)</p>	<p>Lower Cost</p> <p>No formal training requirements</p> <p>Can identify some site types (e.g., culturally modified trees)</p>	<p>Limited in scope to what can be seen on the surface (no testing);</p> <p>No oversight of qualifications or deliverables</p> <p>Artifact collection not authorised</p>	<p>Suggested report deliverables</p> <p>site forms are requested</p>
Archaeological Impact Assessment (AIA)	<p>Permitted assessment</p> <p>Identify and evaluate archaeological sites</p> <p>Data collection, analysis and assessment with management recommendations</p>	<p>In-depth study to identify and assess archaeological sites to truly understand possible risks or impacts</p> <p>Artifact collection is authorised</p>	<p>Higher cost</p> <p>Professional archaeologists and technicians</p> <p>Schedule</p>	<p>Required deliverables include study area shapefiles, site forms, and reports</p>



Preliminary Study: Initial Steps

- Archaeological Overview Assessment (AOA)
 - Desktop study to determine if a project will affect an area with archaeological sites or archaeological potential
- Preliminary Field Reconnaissance (PFR) – (Component of AOA)
 - To ascertain if an area has archaeological potential or not, and narrow down areas of potential
 - Walking and Looking only!
 - No land disturbance permitted
- Pros and Cons

Example of AOA Model



- Areas of potential are defined based on the known relationship between archaeological sites and elements of the terrain

Illustration of proposed Model:

- CMT: Predictive model
- Non-CMT: Predictive model
- Informed Contributors Layer: observed

Requirements and recommendations: Potential vs. known sites



- How are areas of potential defined?
- What an archaeological potential model does (and does not) do
- Working within an area of archaeological potential vs. a site

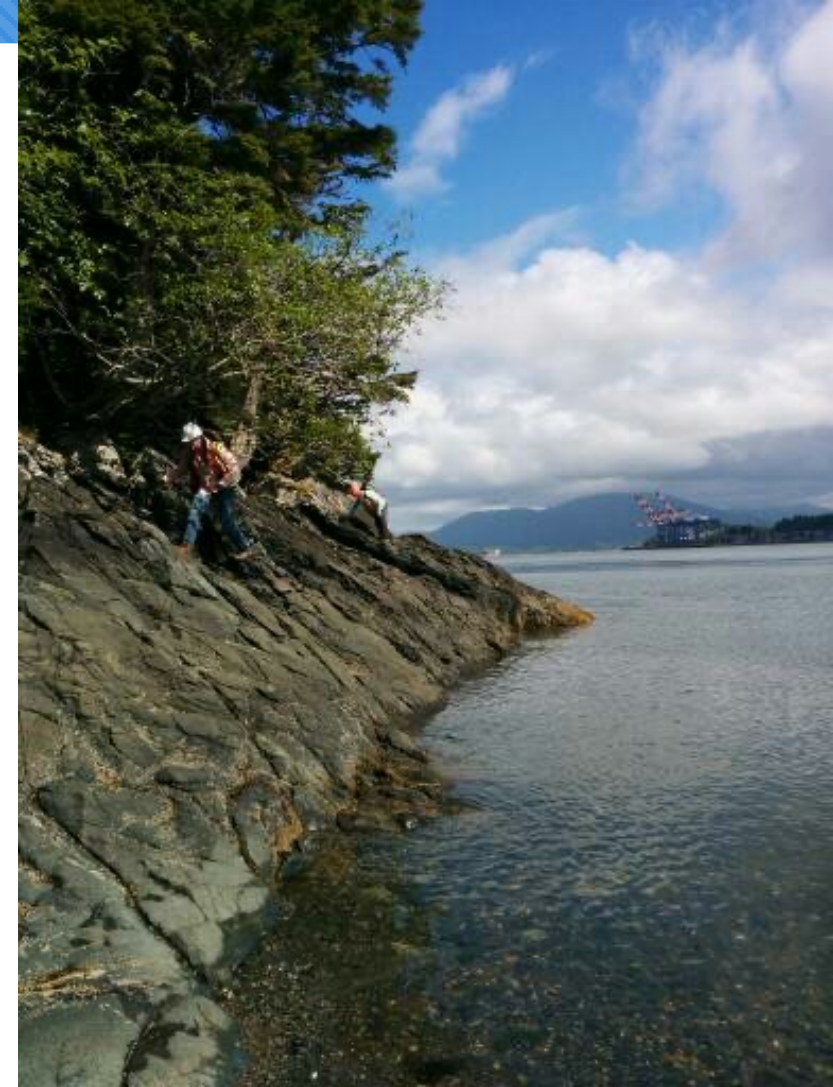


Archaeological Impact Assessments

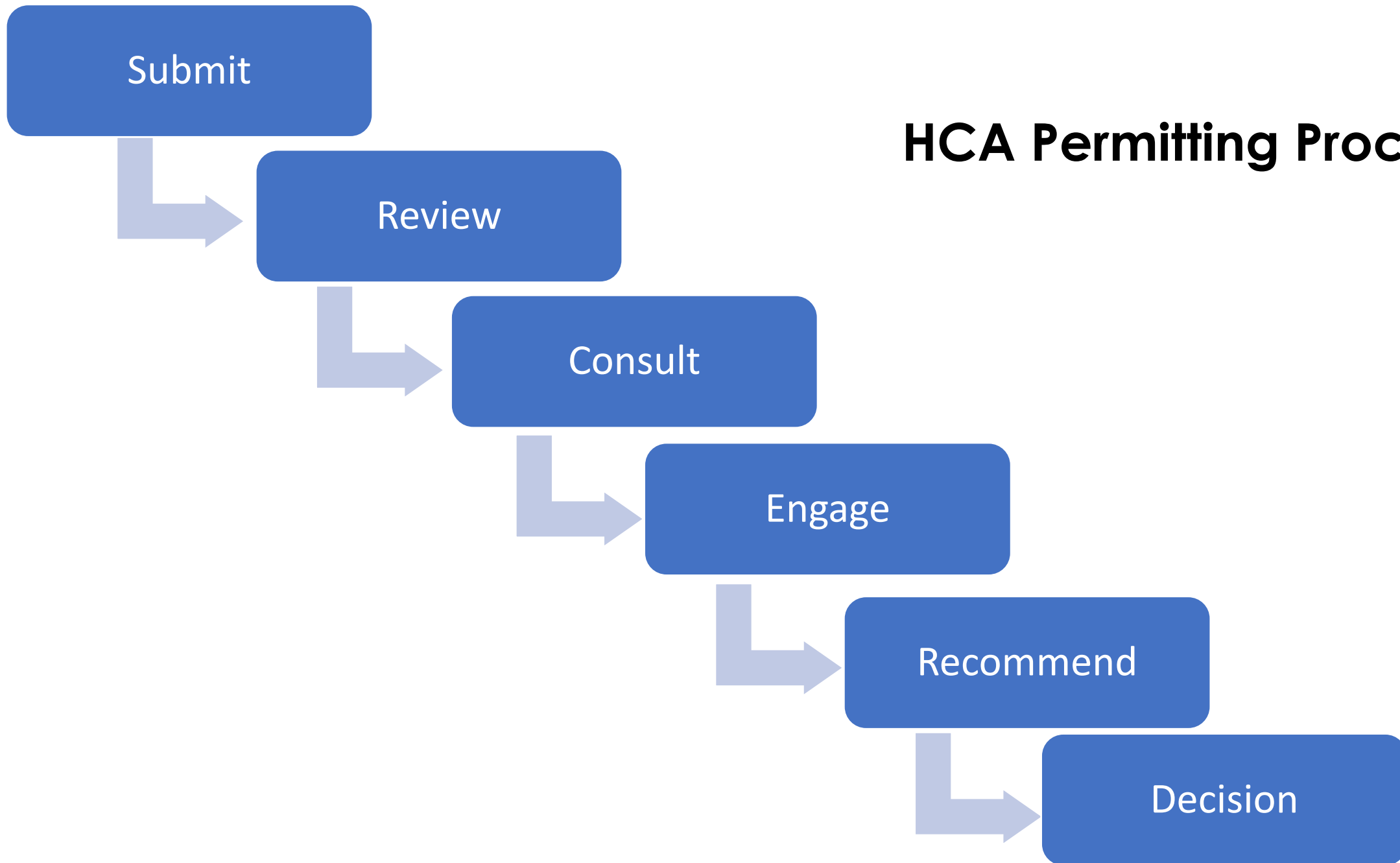
- Requires HCA S12.2 Permit (issued to archaeologists)
- Gathers information about the scope, nature, and significance of any sites in conflict with the development footprint
- Provides **site management recommendations**
- Supports any applications for a **S12.4 alteration permit**
- **Deliverables:**
 - Interim (optional) and final reporting
 - Maps
 - Site forms/records
 - Spatial data
 - Submit cultural material, notes, photographs to repository

HCA Permit Types

- **S12.2 Inspection permit:** Information gathering
 - Issued to archaeologist.
 - Identify and assess sites through survey and subsurface testing.
 - Generally low impact to the landscape, rights and title
- **S12.2 Investigation permit:** Research
 - Issued to researchers, archaeologists
- **S12.4 Alteration permit:**
 - Issued to developer, possibly archaeologist.
 - Authorizes alterations to a site
 - Branch confirms impacts to site are well-understood (and minimised)



HCA Permitting Process

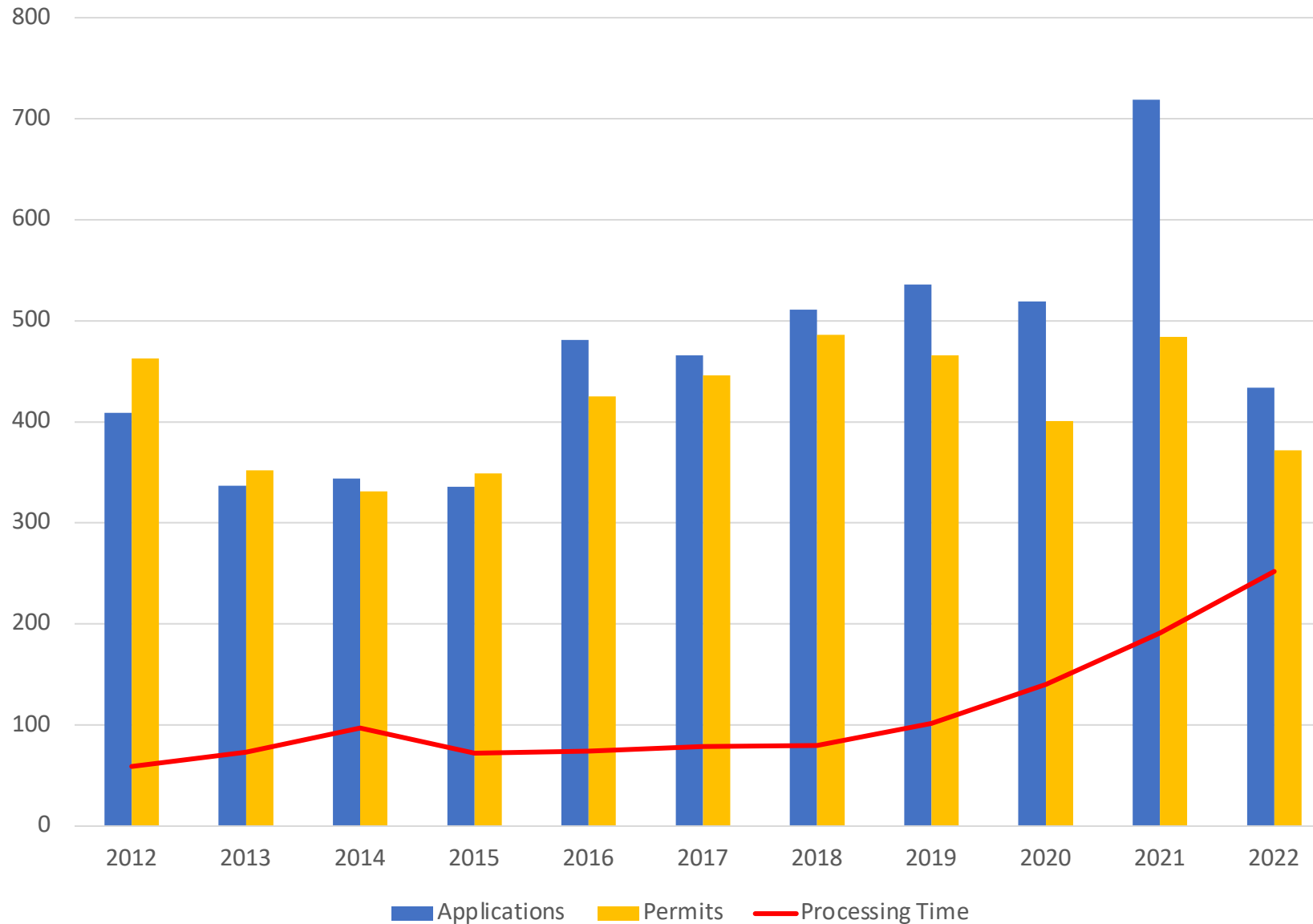




Indigenous Engagement

- Preferences:
 - Transactional vs. Strategic/Broader Engagement
 - Archaeological service providers and repositories
- Early Engagement – stronger relationships; supports agile planning
- Requirements: Treatment of ancestral remains, archaeological methods
- Consistent administration under HCA
- Overlapping territories

History of Permitting*



Notes on Consultation

- 204 Nations
- ~360 Organizations
- ~40% have specialised processes
- Impacts affecting HCA referrals (COVID, natural disasters)
- Increased engagement for HCA referrals

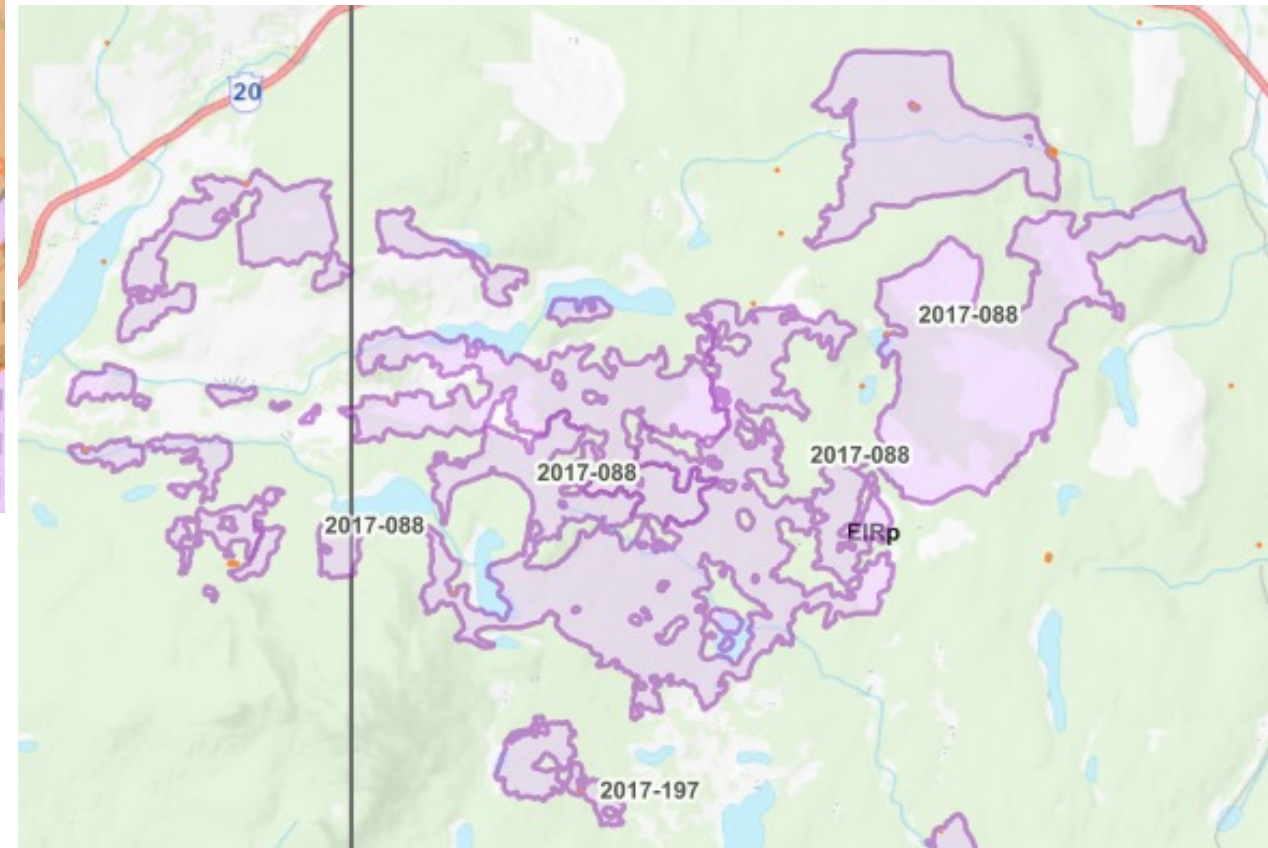
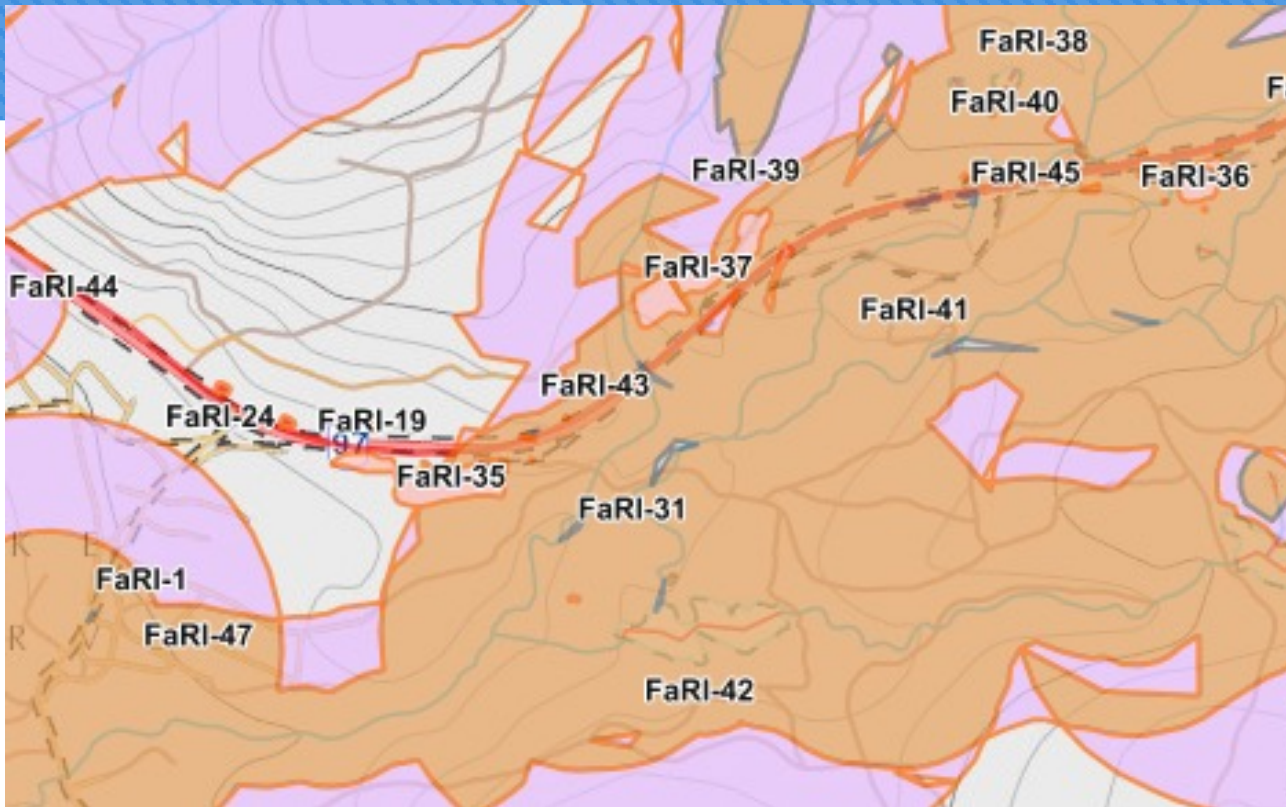
New applications only (not amendments)



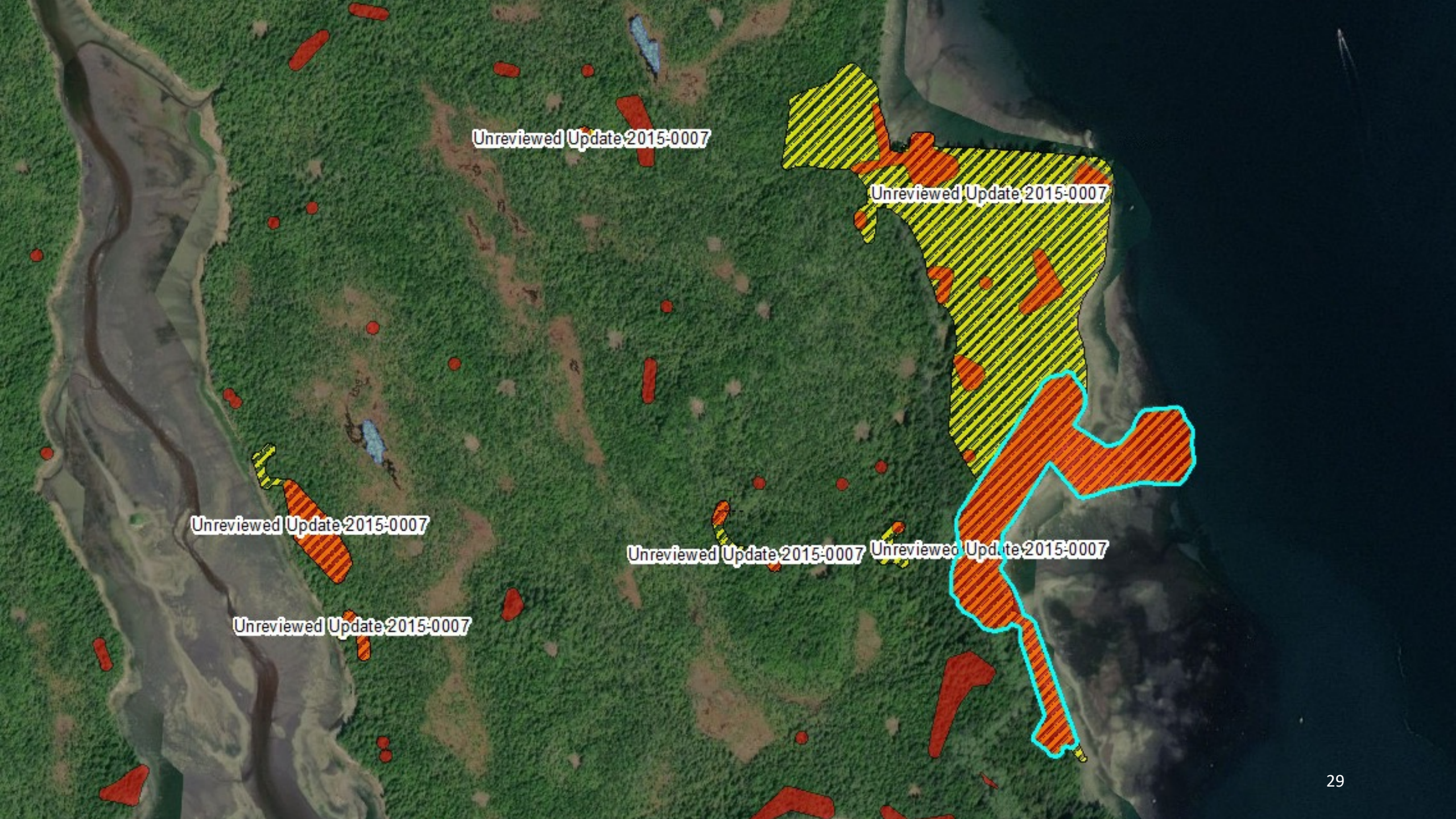
Provincial Tools

- Sharing provincial data to inform land-use decisions and provide advice,
 - Non-archaeologists are accessing data
 - Known gaps in provincial data
- RAAD – Remote Access to Archaeological Data
 - Known sites, previous assessments, and GIS-based AOAs
- “3-Box letter”
- Education and engagement
- [Archaeological Resource Management Handbook for Local Governments](#)
- [Heritage Issues for Planners and Officials](#)
- Evolution of provincial processes – maintaining website

RAAD



- AOA's
- Distribution of sites
- Permitted Studies



Unreviewed Update 2015-0007

Unreviewed Update 2015-0007

Unreviewed Update 2015-0007

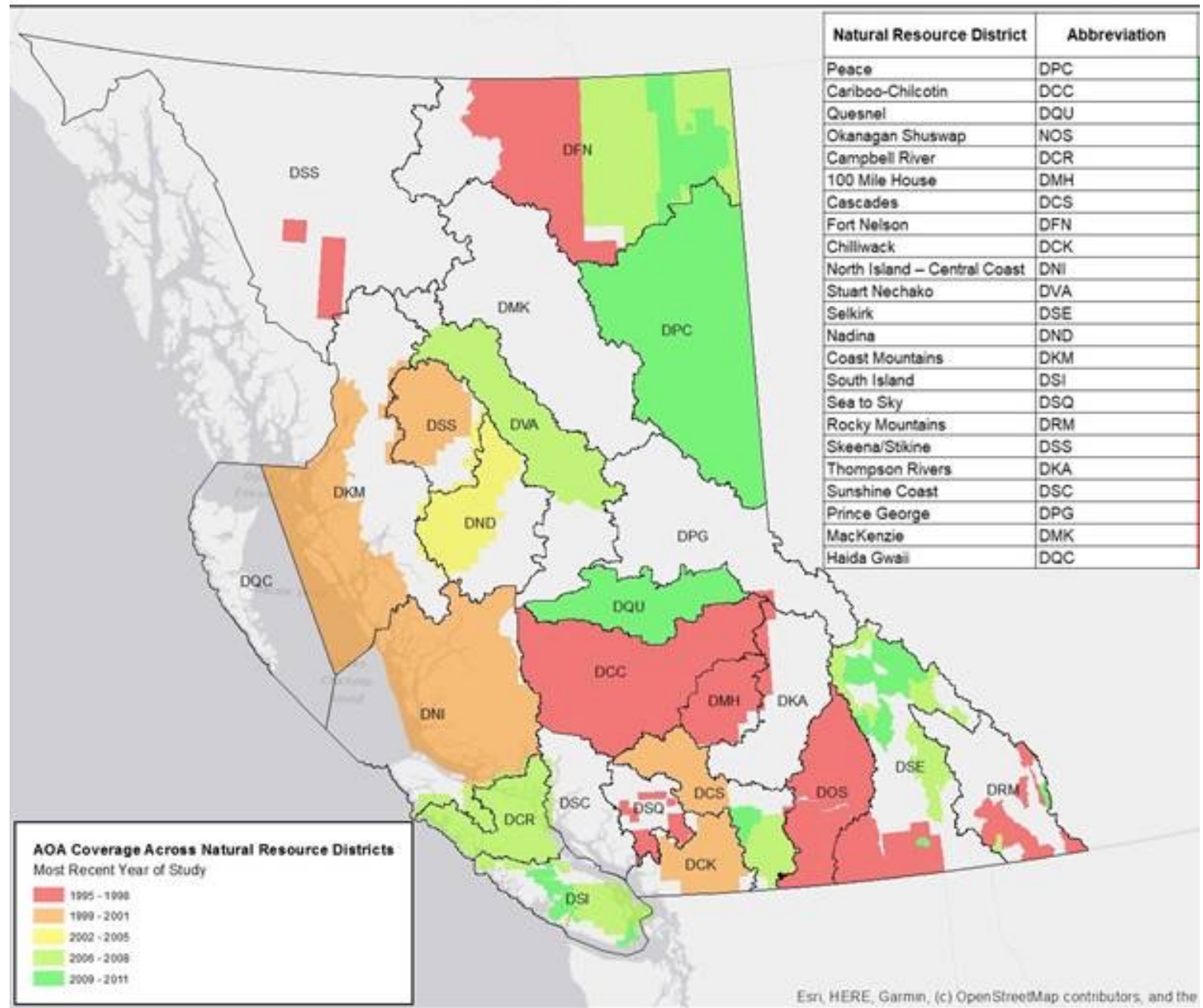
Unreviewed Update 2015-0007

Unreviewed Update 2015-0007

Unreviewed Update 2015-0007

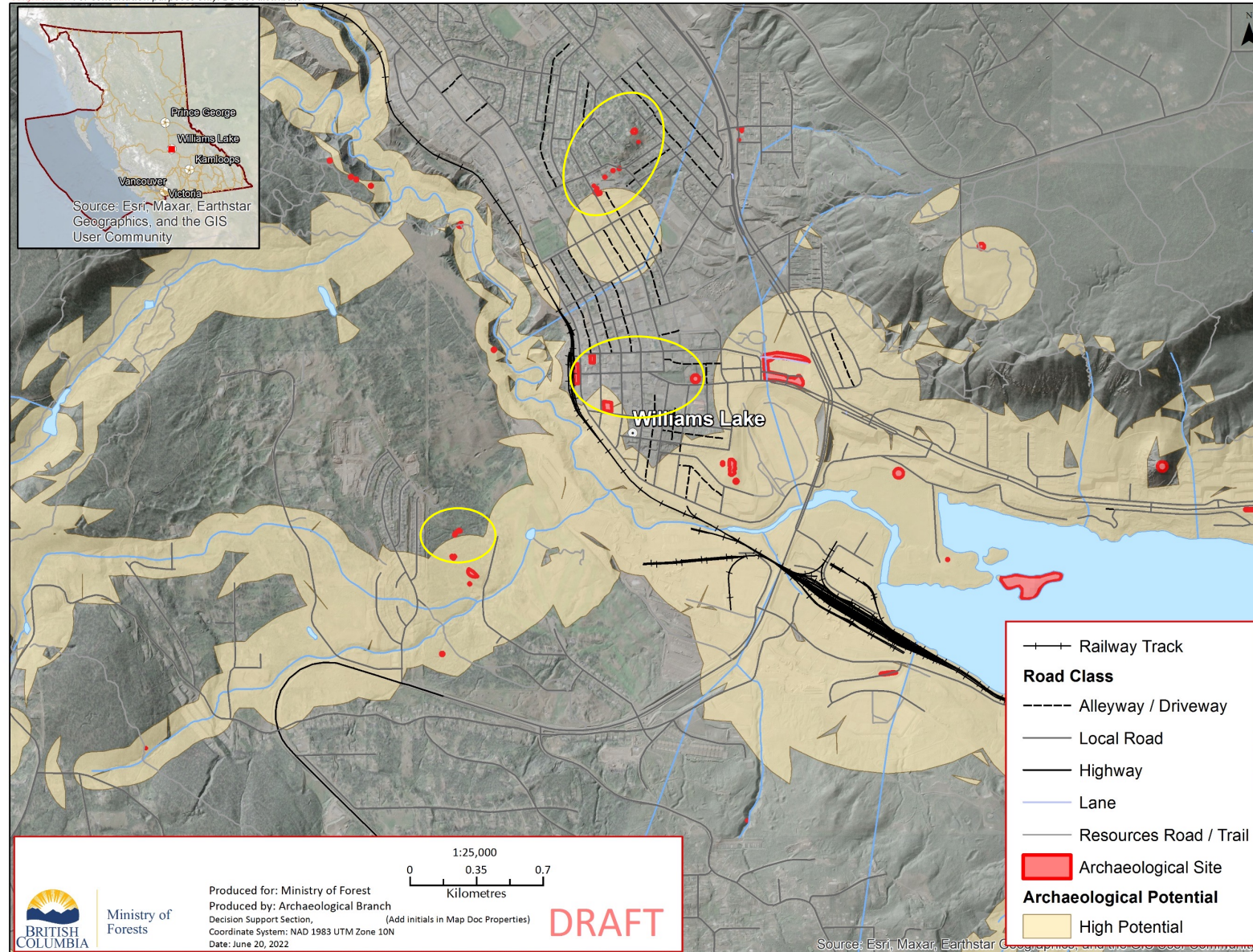
Advantages and Challenges of AOA's

- Provincial coverage
- Older AOA's:
 - Don't consider Indigenous Perspective
 - Don't reflect advancements (technology, assessments)
- Predictive tool: not absolute
- Subject to review and refinement

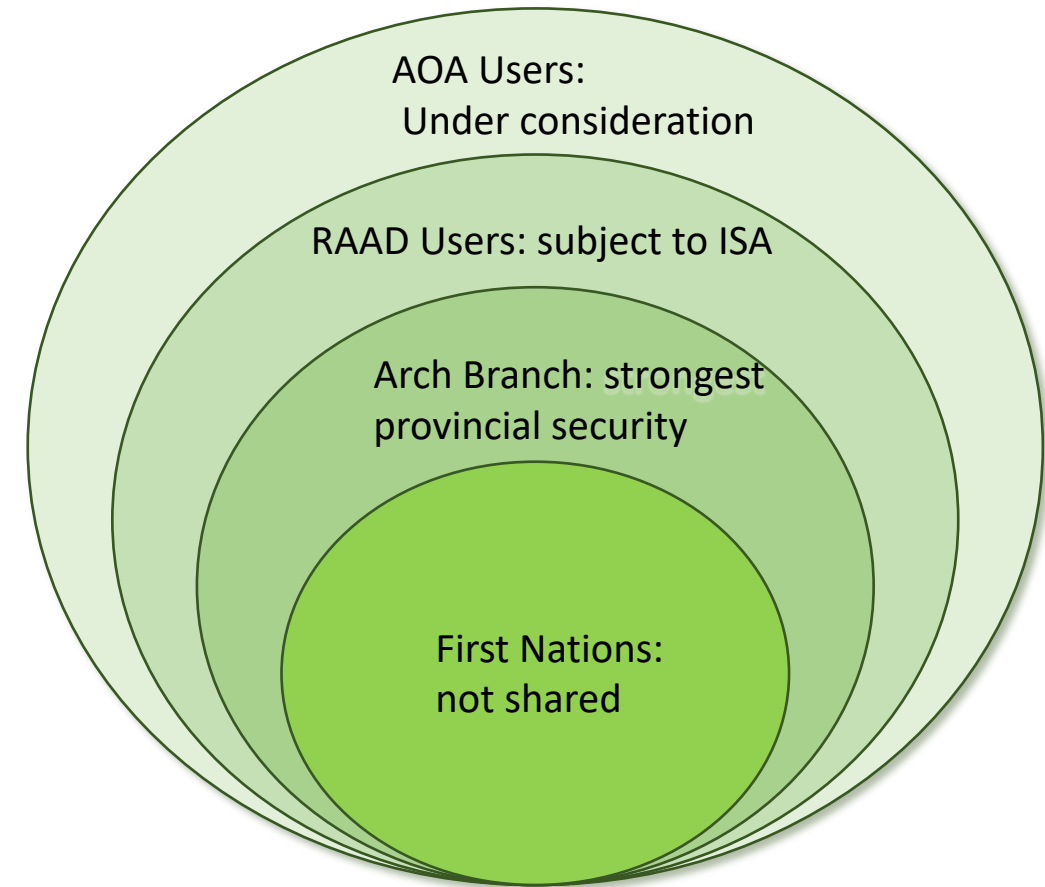
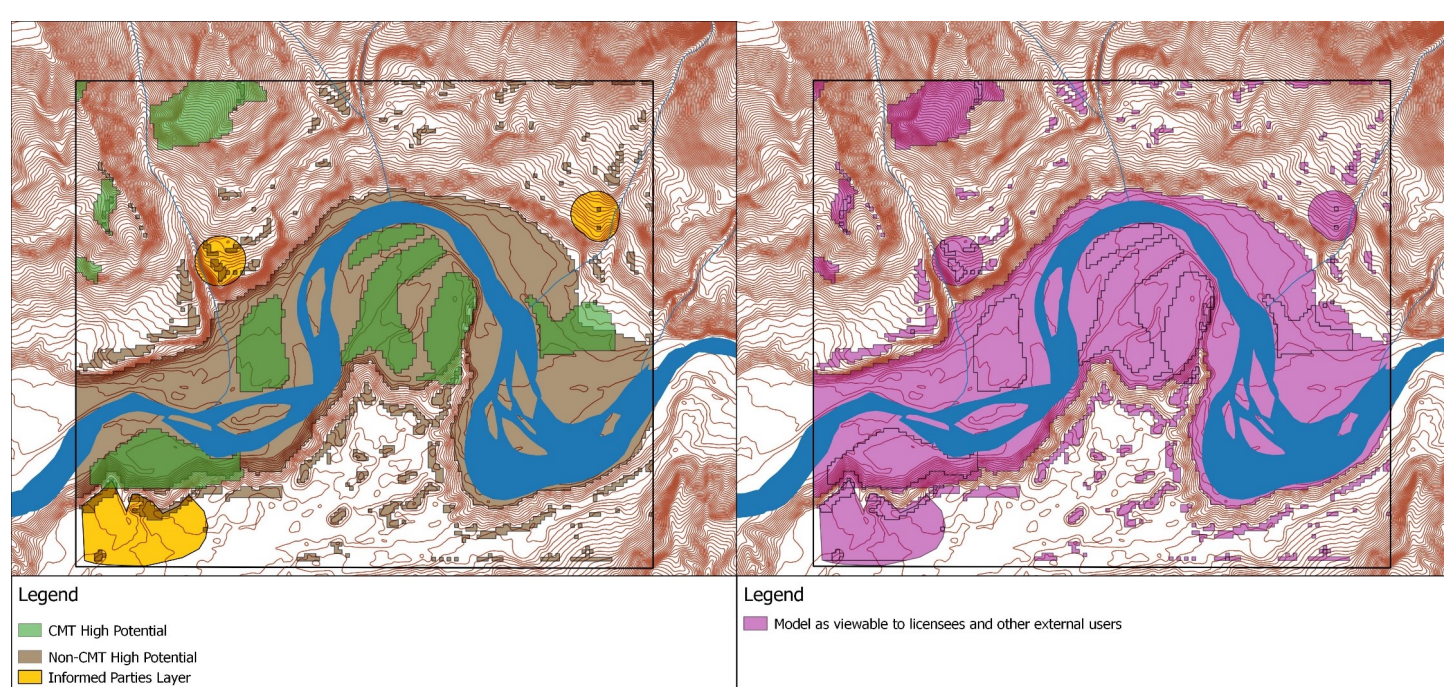


Actual AOA Model

Confidential: For consultation purposes only. Do not distribute.



ICL: Security and Sensitivity



The Province acknowledges ICL data may be sensitive. For this reason, four rings of permission have been developed

YOUR CONTACT INFORMATION

* I have read and accept the information request [Terms and Conditions](#)

☐ Yes ☐ No

* Name

* Email Address

* I am a:

* My Affiliation / Company

* Address

* City

* Province

* Postal Code

* Phone Number (###-###-####)

YOUR INFORMATION REQUEST

*1. What information are you requesting? (select and complete one):

☐ I request information and advice about archaeological sites on the properties described below (In the text box below, include the Parcel Identifier (PID), street address, and the legal description if available. If you have maps, please upload them to the File Attachments section near the end of the form.):

☐ Other (describe below):

*2. Why do you require this information? (select and complete one)

☐ I am a representative of the seller or prospective purchaser of the properties described above. The properties described above are currently listed for sale.

☐ I am the property owner of the properties described above. I require the information because (describe below):

☐ Other (describe below):

*3. Who will have access to this information, including third party access? (select one)

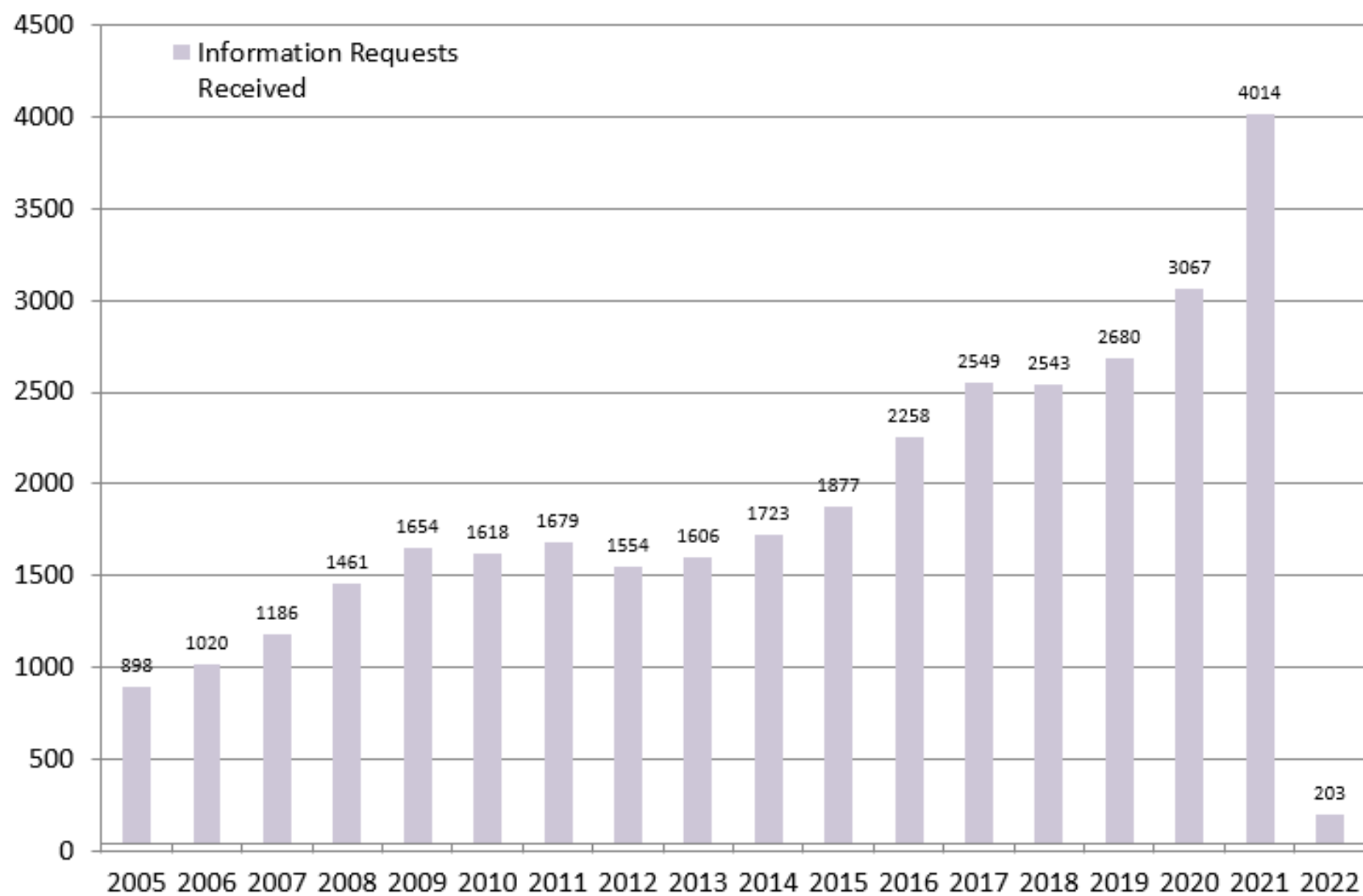
☐ I will not share this information with anyone.

☐ The following person(s) may have access to this information (Include the person's full name and relationship to you below. If you would like them to be copied on our email reply containing property information, please also include their email address):

Information requests



Archaeological Information Requests Received (January 2005 - January 2022)



Archaeological sites are the physical remains of past human activity. There are over 50,000 known archaeological sites in British Columbia representing thousands of years of human history. The *Heritage Conservation Act (HCA)* recognizes the historical, cultural, scientific, spiritual, and educational value of archaeological sites to First Nations, local communities, and the public. Archaeological sites on both public and private land are protected under the HCA and must not be altered or damaged without a permit issued by the Province of British Columbia's Archaeology Branch.

Receipt of this form indicates that your local government has reviewed the records of the Archaeology Branch to determine whether your proposed activities are likely to impact a protected archaeological site. By identifying overlaps with archaeological sites early in the planning and development process, appropriate and timely steps can be taken that support an efficient development process. You should be aware that there are limitations concerning this review; please read the Provincial disclaimer¹ below.

Your property or project area falls into the selected category:

☐ **Direct overlap with protected archaeological site:** _____

Provincial records indicate that an archaeological site protected under the HCA is recorded within your property or project area.

- Your proposed activities may impact the protected archaeological site.
- You must obtain a site alteration permit issued by the Archaeology Branch before impacting the site.
- Completing an application for alteration permit usually requires archaeological expertise. You may consider engaging an eligible consulting archaeologist (see page 2) to confirm the results of this review and assist you in establishing permit requirements with the Archaeology Branch.
- Disturbance of a protected archaeological site without an alteration permit is a contravention of the HCA and may result in substantial fines and development delays.
- The archaeological site impact management and permit process is summarized on page 2. If you have questions about the process, contact the Archaeology Branch.

☐ **Direct overlap with an area of high archaeological potential**

Provincial records indicate your property or project area has high potential to contain an archaeological site protected under the HCA, either because the area has been previously assessed for potential or there is a known archaeological site within 50 m that may extend beyond its recorded boundaries.

- Your proposed activities may impact an unrecorded archaeological site. Archaeological sites are protected under the HCA, even if they have not yet been identified and recorded.
- Disturbance of a protected archaeological site without a permit is a contravention of the HCA. Accidental discovery of an unknown archaeological site during development requires activities to be halted until permit requirements have been established; this may result in significant development delays.
- To avoid the possibility of unauthorized archaeological site impacts and development delays, you may wish to engage an eligible consulting archaeologist (see page 2) to determine in advance whether your activities are likely to impact an unrecorded protected archaeological site.
- The archaeological site impact management and permit process that you will need to follow if an archaeological site is encountered before or during development activities is summarized on page 2. If you have questions about the process, contact the Archaeology Branch.

☐ **No identified overlap with archaeological sites or areas of high archaeological potential**

Provincial records do not indicate known archaeological sites or areas of high archaeological potential within your property or project area.

- Provincial records may be incomplete with regard to archaeological potential in your area.
- There is always a possibility for unrecorded archaeological sites to exist. Archaeological sites are protected under the HCA, even if they have not yet been identified and recorded.
- If an archaeological site is encountered, development activities must be halted and the Archaeology Branch contacted for direction (250-953-3334).

¹ **Provincial Disclaimer:** The Archaeology Branch of the Province of BC is responsible for the administration of the *Heritage Conservation Act*. It is not administered by municipal or regional governments. In completing this form, municipal and regional government staff rely on information provided by the Province of BC. Any questions regarding this document should be directed to the Archaeology Branch or to an eligible consulting archaeologist. The information in this document is based on a search of Provincial records. There are archaeological sites in BC that are unknown and not recorded in these records. The Province makes no representations or warranties with respect to the accuracy or completeness of this information. Persons relying upon it do so at their own risk.

Local Government notification letter



This letter is available online to show you the three categories a project area would fall into:

1. Direct overlap with protected site;
2. Direct overlap with an area of high potential; and
3. No identified overlap.



What services the Arch Branch can offer

- **If not subject to local government processes**, we can respond to Information Requests;
- Administer HCA permit applications and permits; including Indigenous Consultation
- Oversight of Provincial Heritage Register and related systems (RAAD)
- Review and approval of GIS-based AOAs (and submission to RAAD)
- Provide advice on appropriate archaeological methods for unique circumstances;
- Develop provincial policy and process



Additional Resources via Heritage Branch

- Under the Local Government Act and Vancouver Charter, local governments have several tools for heritage conservation:
 - **Community heritage register (CHR)** - officially lists properties that the local government identifies as having heritage value or character;
 - **Heritage designation (HD)** – legal protection by municipal bylaw; changes may require a heritage alteration permit;
 - **Heritage revitalization agreement (HRA)** – legal protection by agreement between local government and property owner; may vary bylaws or land use permits;
 - **Designation of a heritage conservation area (HCA)** in an Official Community Plan – legal protection in Official Community Plan; changes may require a heritage alteration permit.

FAQs

Who can hold an HCA permit?

- Archaeologists hold S12.2 permits;
- Developers and/or archaeologists may hold S12.4

How long does it take to get an HCA permit?

- Will provide data as of 14Sept22

How much does an HCA permit cost?

- Permit is free but developer to pay for archaeological services
- Generally, reporting and analysis takes 4x longer than fieldwork

FAQs

What is the Province doing to address delays?

- Refining processes and tools (e.g., business applications, new templates)
- Increasing staffing – two new teams added to the Branch since 2020; Branch has more than doubled in size
- **Long-term view to build better capacity and sustainable, service-oriented approach**

Should my municipality hire our own archaeologist?

- It depends on their proposed role

FAQs

What can I do to expedite permits?

- Obtain letters of support to address the Province's Duty to Consult
- If letters of support are infeasible, attempt to reach out in advance to advise about the proposed project and establish communication
- Work with the archaeologist to balance a flexible yet informative permit, that either complies with current approaches or clearly outlines deviations

Why is it so hard to schedule work?

- Supply of qualified consulting archaeologists is exceeding demand. Certain large projects should finish soon, and the supply issues for major projects also impact archaeological studies.

FAQs

What does an HCA permit authorise?

- Permits will include specific scope and methods (e.g., excavate basement to depth of 7 feet)
- Generally provides for archaeological studies, collection of cultural material, and outlines whether impacts to archaeological sites are authorised
- Permits do not authorise access to private property
- Independent of other permit types (provincial jurisdiction; local government legislation; First Nation-issued permits)

FAQs

How do I select an archaeologist?

- Local directory and BCAPA
- Recommend multiple quotes and comparable bids; ensure archaeologists are eligible to hold permits

How are Indigenous governments involved?

- Recommend engagement prior to application process (development planning; preferred archaeologists; additional concerns beyond provincial records)
- HCA permits are referred to all affected indigenous governments

Can I commission an AOA?

- Yes! Budget will include Indigenous engagement and applying for an HCA permit

FAQs

How do I get access to Systems?

- Sign an Information Sharing Agreement
- Enroll with local government credentials – more information on our webpage

Where can I learn more about the proposed HCA changes?

- The Branch will post updates on our dedicated webpage
- Write EngageHCA@gov.bc.ca



Conclusion: Takeaways

- Local governments play an integral role to support good land use decisions that comply with the HCA: best opportunity to advise private property owners of their responsibilities
 - Arch Branch has developed tools to support information-sharing at an appropriate level
- There are different kinds of assessments and permits that may be appropriate
- Apply for HCA permits early – work with qualified, eligible archaeologists to determine appropriate scope and methods
- Establish relationships with affected Indigenous Governments to support planning and processes



Addressing Common Concerns

- Confidence in providing good advice to residents
 - Is there a risk to protected sites? Are permits required?
 - Is an assessment recommended? What options do property owners have?
- Understanding what tools are available to support archaeological resource management
- Ensuring municipal projects comply with Heritage Conservation Act
- Challenges
 - Costs
 - Timing
 - Managing expectations
 - Sustainable practices

Contact information

- **Strategic initiatives, general engagement:**
ArchPolicy.Engagement@gov.bc.ca
- **HCA Permit Specific Questions:**
archpermitapp@gov.bc.ca
- **Site Inventory queries:** archsiteform@gov.bc.ca
- **Archaeological information requests**, please complete a Data Request (<https://www.archdatarequest.nrs.gov.bc.ca/>) or send any follow up questions to archdatarequest@gov.bc.ca
- **Systems and other queries:**
archaeology@gov.bc.ca