



National
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ASSISTANT DEPUTY MINISTER (INFRASTRUCTURE AND ENVIRONMENT)



Former Blair Rifle Range Public Information Session UXO Clearance of Select Forested Areas 21 February 2023

Presented by: Debbie Nicholls, P.Eng, ing, Project Manager
Directorate of Contaminated Sites (DCS)

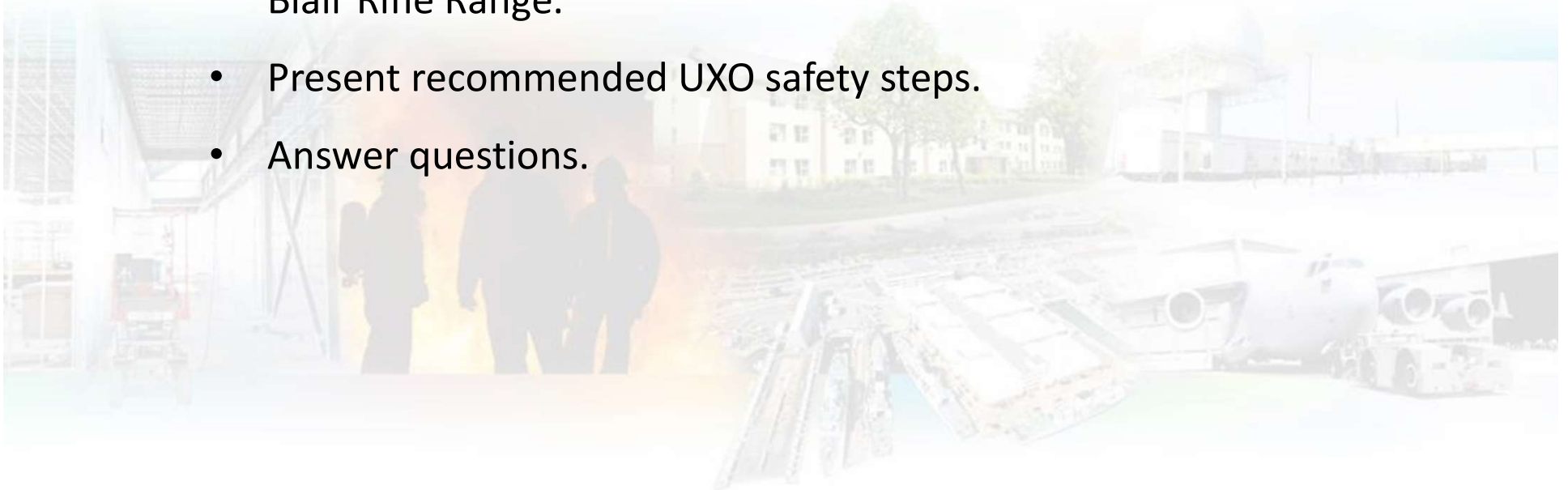


Canada



Meeting Objectives

- Explain how the Department of National Defence (DND) manages Unexploded Explosive Ordnance (UXO) responsibilities on legacy sites.
- Discuss historical and future UXO related work at the former Blair Rifle Range.
- Present recommended UXO safety steps.
- Answer questions.





UXO Project Team

DND

- Mrs. Debbie Nicholls, P.Eng, ing (UXO project Manager)
- Mr. James Lightfoot (UXO Expert)
- Matt Pozza (Geophysicist)

NOTRA (UXO contractor)

- Sean Davies, P. Eng (Notra Project & Quality Manager)
- Wolfgang Kaske (UXO Project Lead)
- Stephen Burns (Quality Manager)
- Dennis Gamble (Senior Geophysicist)
- Ben Churchill (Field Geophysicist)
- Max Kuehling (H & S Director)
- Field and technical staff

CMHC & Province of BC

- DND's UXO team is working in collaboration with representatives from CMHC and the Province of BC.



UXO Background Information

What are UXO?

- Unexploded Explosive Ordnance (UXO) are old military munitions that were prepared for action but did not explode or function as intended.

What is a Legacy Site?

- A site that was owned, leased, or used by the military that DND no longer owns.

What is a UXO Legacy Site?

- An area where the presence of UXO is either suspected or confirmed, and may have resulted from the following:
 - ✓ military training
 - ✓ munitions production and testing
 - ✓ aircraft crashes and shipwrecks





DND's UXO Legacy Site Program

DND is committed to ensuring former military training sites are safe for Canadians. Through its UXO Legacy Site Program, created in 2005, DND is working to reduce UXO risks at former military sites across Canada.

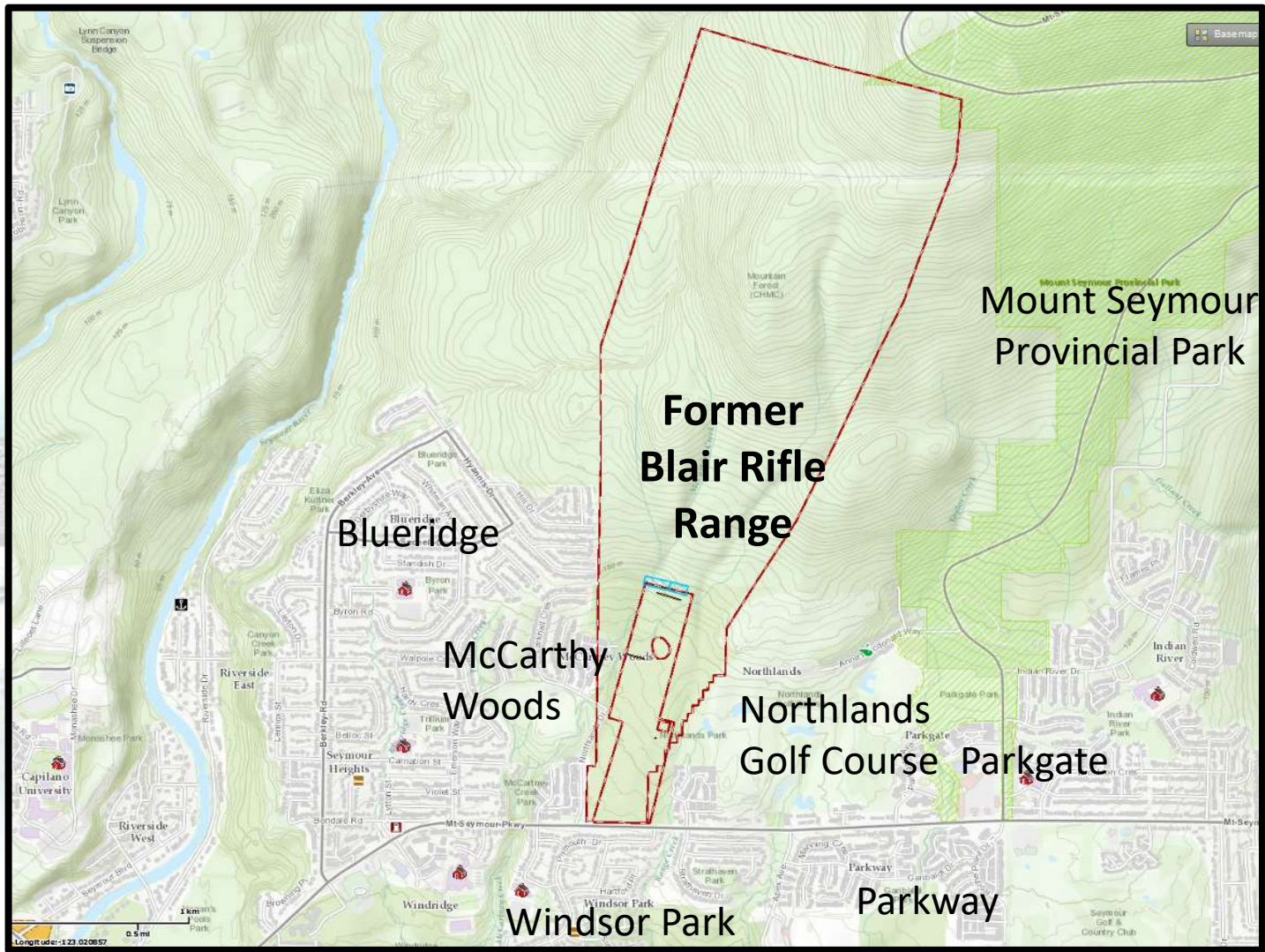
UXO Legacy Site Management Process:

- Step 1: Historical Records Review (HRR)
- Step 2: UXO Site Visit Program
- Step 3: UXO Risk Assessment
- Step 4: UXO Risk Mitigation
 - ✓ UXO Survey
 - ✓ UXO Removal
 - ✓ UXO Risk Communication / Outreach





Former Blair Rifle Range (Blair Range)





Blair Range - History

Year	Military Document Summary
1929	DND acquired property from District of North Vancouver (DNV)
1931-1960	Property used for rifle & small arms
1945	Request for grenade range denied
1968	Land declared surplus & transferred to the Canada Mortgage and Housing Corporation (CMHC)
1977	DND performs visual & detector aided clearance near northern target area – no indication of grenades, mortars or other munitions.
1995	CMHC undertakes environmental investigations – no mortar or grenade scrap found.

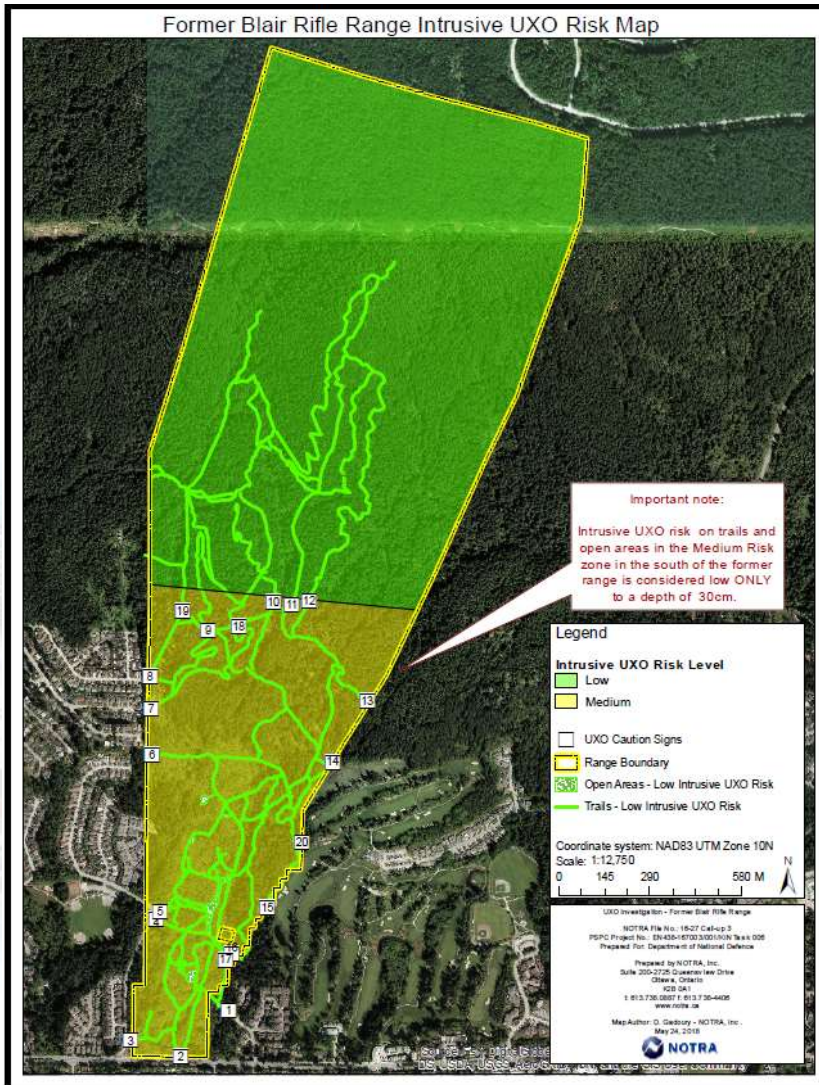


Blair Range - UXO Activities

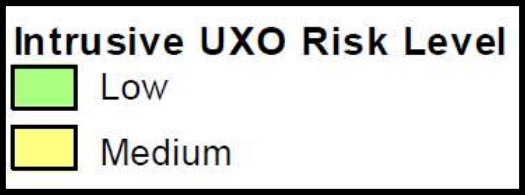
Year	DND's UXO Legacy Site Activities Since 2005
2005-2010	Blair identified as a potential UXO Legacy Site (1 of 1000s).
2015-2016	Historical review completed & site prioritized for further action.
Mid-2017	Site visit performed to validate & expand existing information.
Fall 2017	Initial risk assessment developed. Site survey work recommended.
Early 2018	Precautionary UXO survey done to confirm types of munitions used at the site. Use of munitions with high explosives confirmed.
March 2018	Risk assessment is updated based on findings from precautionary UXO survey. UXO risk management plan (public communications & UXO removal from trails/open areas) developed.
Spring 2018	UXO risk management plan implemented - UXO removal performed within high-use zones such as trails and open areas (biking, party areas, etc.). UXO caution signs installed on trails.
Summer 2018	UXO risk assessment updated.
2023	Returning to clear UXO from forested areas.



Blair Range – 2018 Intrusive UXO Risk Map

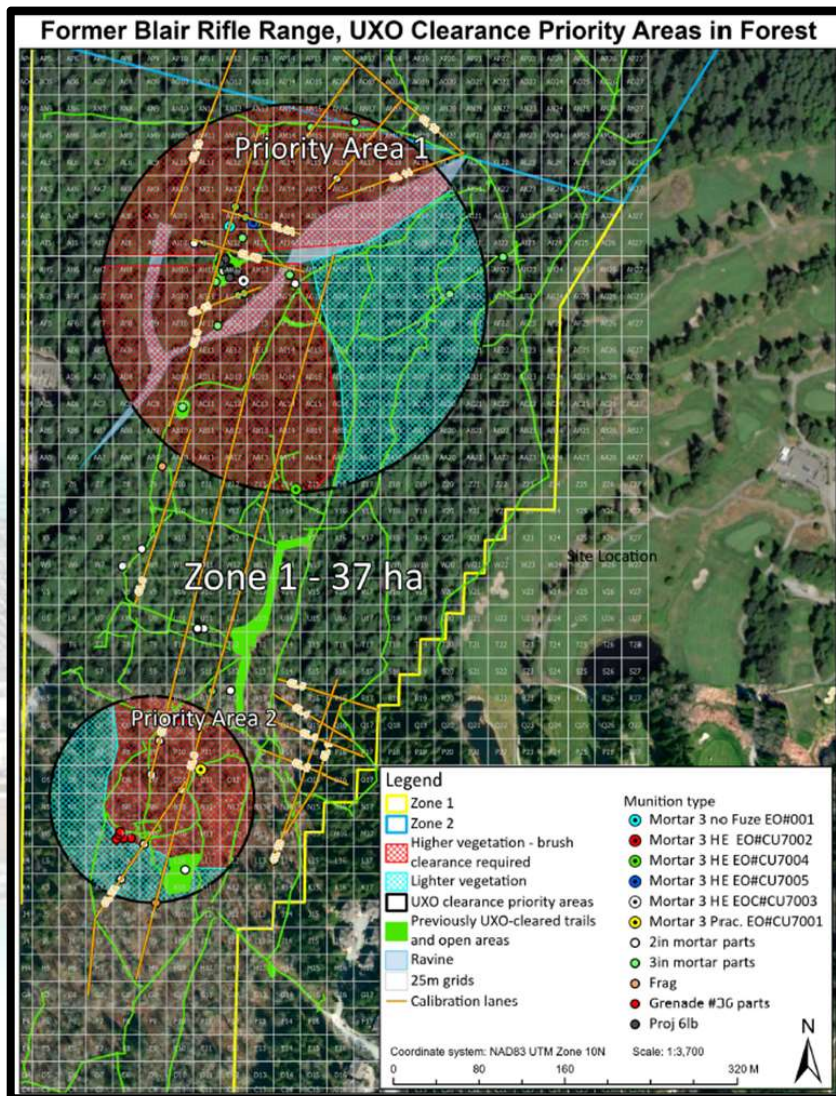


Trails and open areas remain safe for community use. Residents should stay on marked trails and refrain from digging or making campfires in the area.





Blair Range – 2023 UXO Removal (Objectives)



Project Start: 22 Feb 2023
Duration: 6 weeks
Follow-on work: Fall 2023 (dates TBD)

Objectives:

- Clear potential impact areas of munition items/UXO to a depth of 30-45 cm (note deeper items removed when visible).
- Verify/replace UXO caution signs.

Scope

- Remove UXO in priority areas/ potential impact zones. Priority area sizes subject to change based on findings.

Exclusions:

- All trails & open areas cleared in 2018 are excluded; they are considered complete.



Blair Range – UXO Removal (Methodology)

Methodology:

- Detector Aided Clearance (DAC):
Using handheld detectors, a gridded section of forest (around trees) is scanned & anomalies are hand dug and removed from the ground. Quality assurance/control performed to ensure completeness.
- Brush removal required in areas with dense vegetation. Hazardous tree removal only if required.
- Suspicious items are destroyed on-site or removed by Canadian Armed Forces EOD team for off-site disposal.



Types of items found in 2018:

- 3-inch mortars (HE)
- 2-inch mortars (smoke, illumination)
- 38 mm projectiles (illumination)
- 6-pounder practice rounds (solid metal)
- Grenades





Blair Range – UXO Removal (Communication)

Communication:

- In the event a dangerous item is found and needs to be disposed of by detonation, the community will be advised via:
 - A. E-mail notification sent out by DND to interested parties (please forward e-mail address to UXOCanada@forces.gc.ca – subject Blair Info).
 - B. Updates to local media (community paper or radio).
 - C. Door to door (if a house is included in the safety template – rare occurrence for those bordering the range).

Trail closure:

- Trails will remain open to the public with temporary local closures for safety reasons, in case of disposals.
- Signs will indicate UXO work is being undertaken.
- During disposals – safety personnel may ask the public to refrain from entering a specific area / use a detour.



Practicing UXO Safety

- Even with recent survey and removal work, UXO may still be present on the property.
- As with all former military sites, we encourage you to continue to use good judgement and caution when visiting the property.
- Stay on designated trails and refrain from digging or making campfires in the area.

If you see something that looks like it may be UXO, please follow these steps:



Don't touch it.



Turn around and leave the area
the same way you came in.



Call 911 or local police.

If you have any questions about DND's UXO
activities at the former Blair Rifle Range,
please contact us at
UXOCanada@forces.gc.ca.



UXO Caution Sign





Additional Information

UXO Website:

- General: www.Canada.ca/UXO-Safety
- Blair Rifle Range: www.Canada.ca/Blair-UXO-Safety

UXO Contact E-mail:

- UXOCanada@forces.gc.ca





Questions ?

