

# CAMP BONNEVILLE MILITARY RESERVATION



**RAU 3 Central Impact Target Area**

## CONTACTS & INFORMATION

### Comments accepted:

August 16 - September 18, 2017

### Online public comment form:

<http://wt.ecology.commentinput.com/?id=HcfpK>

### Or mail to:

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Toxics Cleanup Program  
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Phone: (360) 407-6487  
Email: [Ronnie.Johnson@ecy.wa.gov](mailto:Ronnie.Johnson@ecy.wa.gov)

### Document Review Locations:

WSU Vancouver Reading Room  
14204 NE Salmon Creek Avenue  
Vancouver, WA (360) 546-9680

WA Department of Ecology  
300 Desmond Drive SE  
Lacey, WA 98503  
By appointment only:  
Contact Carol Dorn, (360) 407-7224  
or [Carol.Dorn@ecy.wa.gov](mailto:Carol.Dorn@ecy.wa.gov)

### Cleanup Website:

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=11670>

FSID#: 69965472 or CSID#: 11670

To request ADA accommodation or materials in a format for the visually impaired, call Ecology at 360-407-7170, Relay Service 711, or TTY 877-833-6341.

## Proposed Changes to Cleanup

The Department of Ecology (Ecology) is asking for your comments on proposed changes to Cleanup Action Plans (CAP) for two Remedial Action Units (RAU) at the Camp Bonneville Military Reservation site. These RAUs are called RAU 2A, “Small Arms Ranges” and RAU 3, “Site-wide Munitions”. This fact sheet provides information about Camp Bonneville, proposed changes to the cleanup and how you can send your comments.

## We want to hear from you!

Ecology will accept comments from August 16 to September 18, 2017. See the box on the left for details about where to review documents and how to submit comments. A public meeting will be held if at least 10 people request one during the comment period. Requests can be made to Ecology by contacting Ecology’s project contact (see contact on left).

## Cleanup continues at Camp Bonneville

Camp Bonneville is located five miles northeast of the city of Vancouver, in Clark County, WA. The site covers almost 4,000 acres of primarily forested land that was owned by the U.S. Army and leased from the State Department of Natural Resources. It was used from 1910 to 1995 for firing range practice and other military training, after which all military operations ended.

Camp Bonneville’s history as a military facility for more than 80 years resulted in contamination that includes, in part, explosives and unexploded ordnance that are collectively referred to as “munitions of explosive concern” (MEC), munitions fragments, and soils with lead contamination. Investigations and cleanup have been ongoing to assess and remove contamination from munitions and other hazardous substances. This cleanup will help to prepare the site for future reuse.



In 2012, cleanup management and property ownership of the Camp Bonneville site was transferred back to Clark County through an Amended Prospective Purchase Consent Decree. The county may develop a regional park and a wilderness conservation area on portions of the property after Ecology determines the environmental cleanup is complete.

For cleanup purposes, Camp Bonneville has been divided into five RAUs. These units are primarily grouped by the nature of the particular contamination, not by physical boundaries. The RAUs for the site include:

**RAU 1** consists of 20 sites where hazardous substances (other than military ammunitions) have been located. Cleanup is complete.

**RAU 2A** covers 21 small arms ranges. **The proposed amended CAP for RAU 2A is the subject of this public notice.** Cleanup of this area is in progress, with work remaining at small arms ranges including RAU 2A-16 and RAU 2A-21.

**RAU 2B** consists of two demolition areas where ammunitions were either burned or detonated. Cleanup is complete.

**RAU 2C** covers a landfill area which was also used to burn or detonate ammunitions. The soil removal is complete, and groundwater investigations and monitoring continues.

**RAU 3** includes the entire site where munitions (including unexploded) may still remain. **The proposed amended CAP for RAU 3 is the subject of this public notice.** Phases 1 and 2 of cleanup have been completed. Phase 3 of cleanup is underway.

Cleanup actions at the site are guided by the 2012 Amended Prospective Purchase Consent Decree. More information about the site history is available on the project webpage.

## Proposed changes to the cleanup action plans.

The proposed changes to the RAU 2A CAP and RAU 3 CAP include the following (figures on pages 3 and 4 show location details.).



### RAU 2A Small Arms Ranges, areas 16 and 21

Excavation and removal of soil is complete at the small arms ranges as described in the Final RAU 2A CAP; however, confirmation sampling and visual observations in **RAU 2A** show:

- Lead-impacted fill soil remains at the “1,000-inch Rifle Range and Machine Gun Range,” a 1.8 acre area designated as RAU 2A-16 that was constructed over lead-impacted fill soil.
- Lead slugs remain at the heavily wooded overshoot area adjacent to the Field Fire Ranges No. 1 and No. 2, a 6.2 acre area designated as RAU 2A-21.

Proposed changes to the RAU 2A CAP include partial excavation and/or covering the lead-contaminated soil with a geotextile fabric and one foot of clean soil, depending on results from lead leachability tests. These tests will determine the likelihood of lead contamination washing or draining from the soil into ground or surface water.

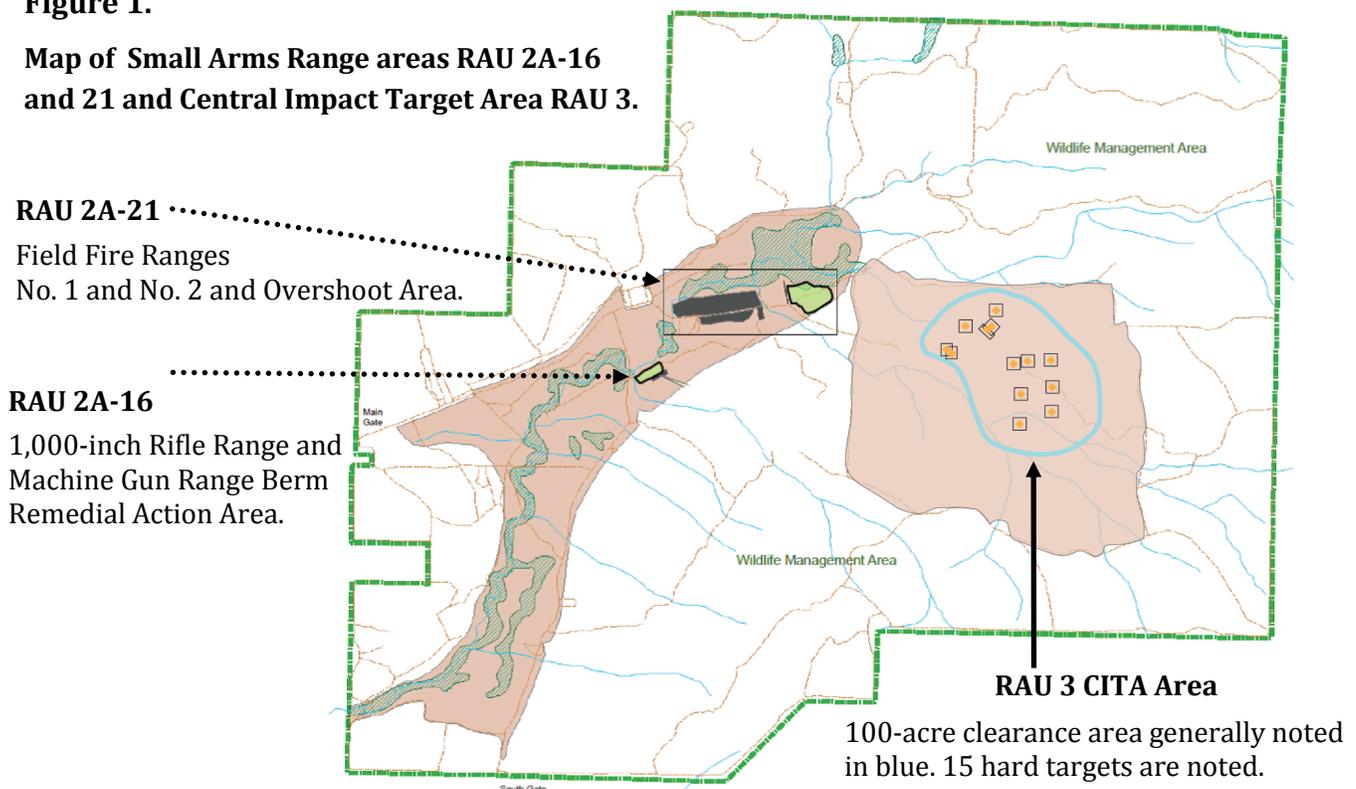
### RAU 3 Central Impact Target Area (CITA)

The proposed change to the **RAU 3 CAP** is within the area called the CITA. Proposed changes to this CAP are listed on page 5 and generally include:

- Surface-only MEC removal of 100 acres within the artillery practice areas and surrounding borders. This changes cleanup from the removal of subsurface MEC to a depth of 14 inches over 10 acres .
- Adding regular inspection of the cleared area for munitions that could potentially surface due to severe rain storms or deep winter frost.

**Figure 1.**

**Map of Small Arms Range areas RAU 2A-16 and 21 and Central Impact Target Area RAU 3.**



The figures below show areas where soils may be capped to cover lead contamination. RAU 2A-21 covers 6.2 acres and area RAU 2A-16 covers 1.8 acres.



Figure 2: Lead Slug overshoot area at RAU 2A-21

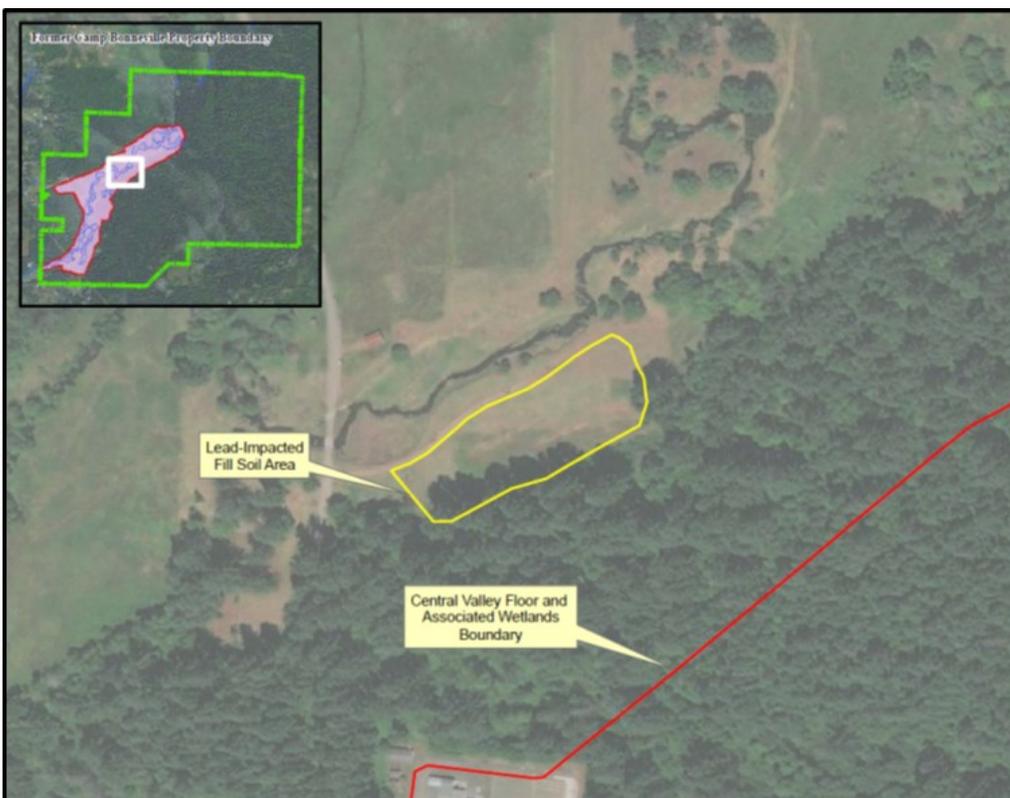


Figure 3: Lead contaminated soil at RAU 2A-16

<b>RAU 3 Task Feature</b>	<b>Cleanup Actions in 2010 RAU 3 CAP*</b>	<b>Proposed Amended Cleanup Action</b>	<b>RAU 3 Action detail</b>
Initial acreage to be cleared for MEC* without added step-out for clearance (if need).	10 acres	100 acres	Vegetation removal and surface-only MEC clearance that encompasses the 15 hard-target areas and previous MEC finding areas that were not in the 2010 CAP. Includes step-out for added surface clearance as needed to assure that removal is complete.
Depth of clearance	14 inches (Depth of Frost)	Surface Clearance	Regular inspections to remove MEC that may resurface.
Institutional Controls: annual and severe-storm surface inspections for MEC with removal if found	No	Yes	Add institutional controls requiring annual surface MEC inspection and after severe rain storms to minimize potential risks from 14-inch winter frost depth in the clearance area.
Institutional Controls: fence and signage, access restriction	Yes	Yes	No change
Step-out procedure	Yes	Yes	No change

\*MEC means munitions of explosive concern. CAP means Cleanup Action Plan

## SEPA Determination

State Environmental Policy Act checklists were completed for the two CAPs. A mitigated determination of non-significance were made for RAU 2A in 2007 and for RAU 3 in 2009, each with a determination that the proposed cleanup will not have a significant adverse environmental impact. These determinations cover the cleanup actions begin proposed and are therefore adopted. This information is available at: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2216>

## What happens next?

Following the public comment period, Ecology will review and consider all comments received. The draft amended CAPs may be modified based on your comments. If future documents on the Site are developed, you will be notified of additional public comment periods. For information about other Ecology public comment periods, meetings, and other actions, please visit

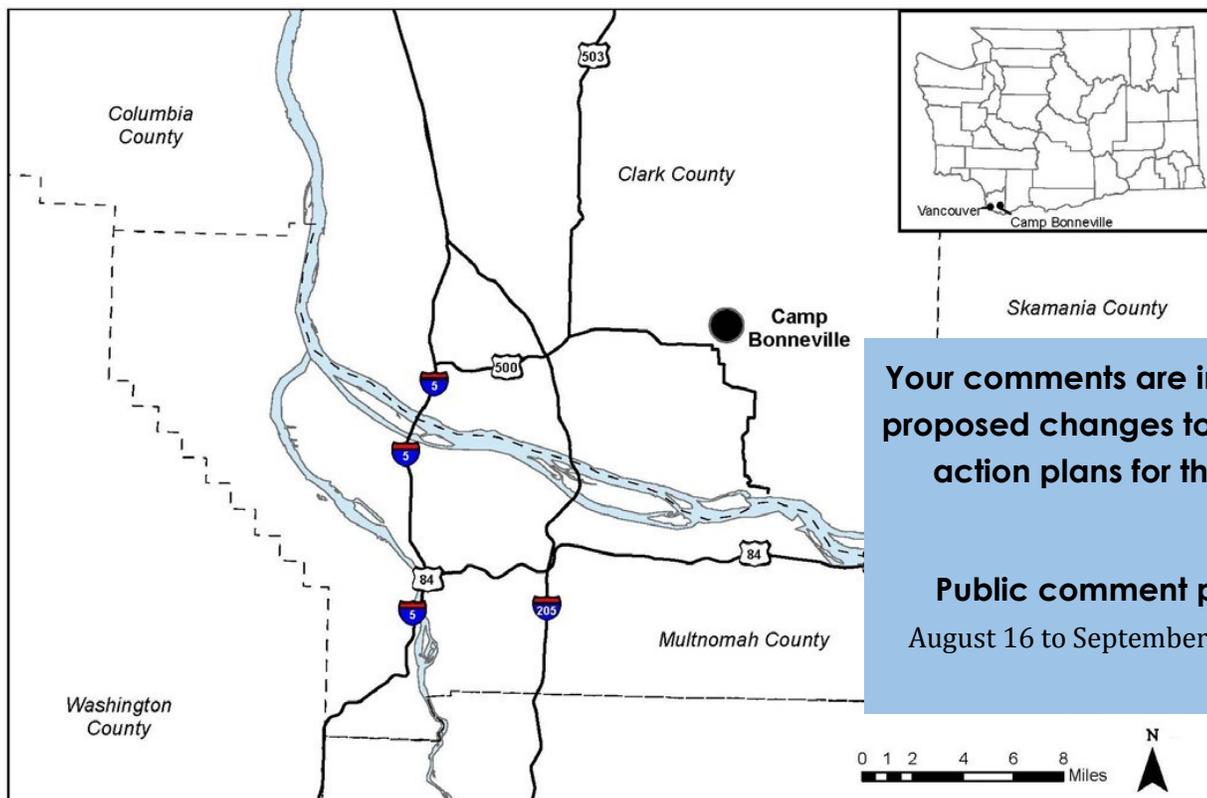
- Ecology public events calendar at: <https://fortress.wa.gov/ecy/publiccalendar/>
- Ecology Site Register at: [http://www.ecy.wa.gov/programs/tcp/pub\\_inv/pub\\_inv2.html](http://www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html)



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## Cleanup at Camp Bonneville Military Reservation Site



**Your comments are invited on proposed changes to cleanup action plans for this site.**

**Public comment period**  
August 16 to September 18, 2017