RCRA - CERCLA Nexus

REGULATIONS AND OREGON CASE STUDY

2022 ASTSWMO Joint Hazardous Waste and Materials Management Training

August 24, 2022 - Jeannette Acomb, Oregon Department of Environmental Quality

Overview

- Regulatory definitions
- Differences
- Coordination between programs

- Oregon Case Study
  - Regulatory
  - Restoration

Definitions - RCRA

Resource Conservation and Recovery Act

- Established in 1976
- Controls hazardous waste from “Cradle to grave”
- Corrective action - 1984

Goals

- Protect human health and environment
- Conserve energy and natural resources
- Reduce waste generated

Definitions - CERCLA

Comprehensive Environmental Response, Compensation and Liabilities Act

- Established by U.S. Congress in 1980
- As an outcome of toxic waste dumps
- Known as “Superfund’

Goals

- Clean up to protect human health and environment
- Make responsible parties pay for cleanup
- Involve communities in the process
- Return site to productive use

What are the differences?

RCRA – remediation of sites currently in-use

- manage solid and hazardous wastes
- known owners and operators
- State authorized RCRA, with EPA oversite

CERCLA – remediation of abandoned, or non-operating sites

- manage hazardous substances
- unknown owners and operators
- Federal authority

Different Terminology

RCRA	CERCLA
Facility Assessment	Preliminary assessment/Site investigation
	Listing on National Priorities List
Facility Investigation	Remedial investigation
Corrective Measures Study	Feasibility study
	Record of Decision
Corrective Measures Implementation	Remedial action
	Long-term operation/Monitoring
Corrective Actions Completed	Delete from NPL

Coordination between RCRA CA/ Closure and CERCLA Site Activities

EPA's Memo discusses three areas

1. Acceptance of decisions made by other remedial programs
2. Deferral of activities and coordination among programs
3. Coordination of specific standards and requirements

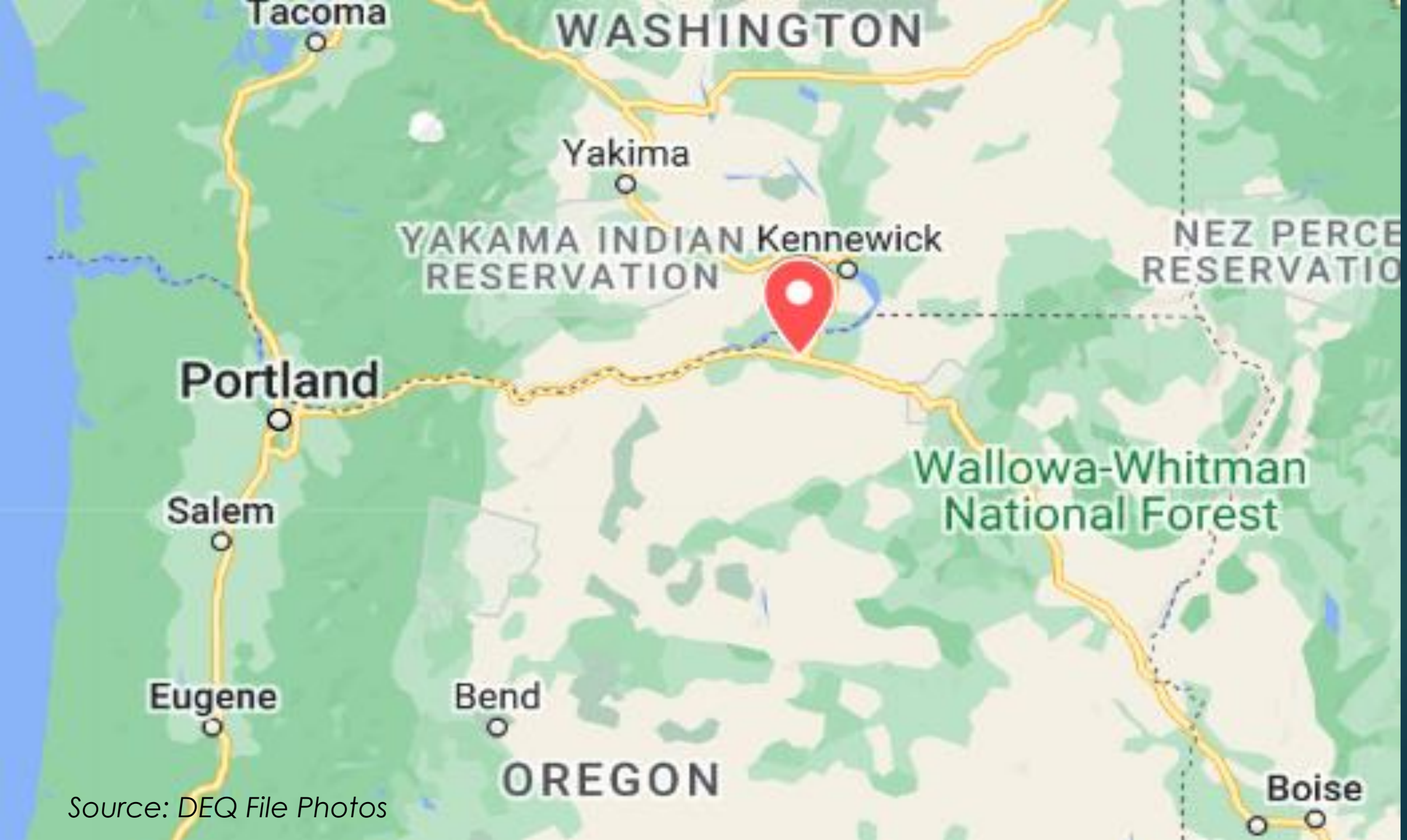
Several other approaches:

- Craft decisions so cleanup responsibilities are divided
- Establish timing sequences in decision documents

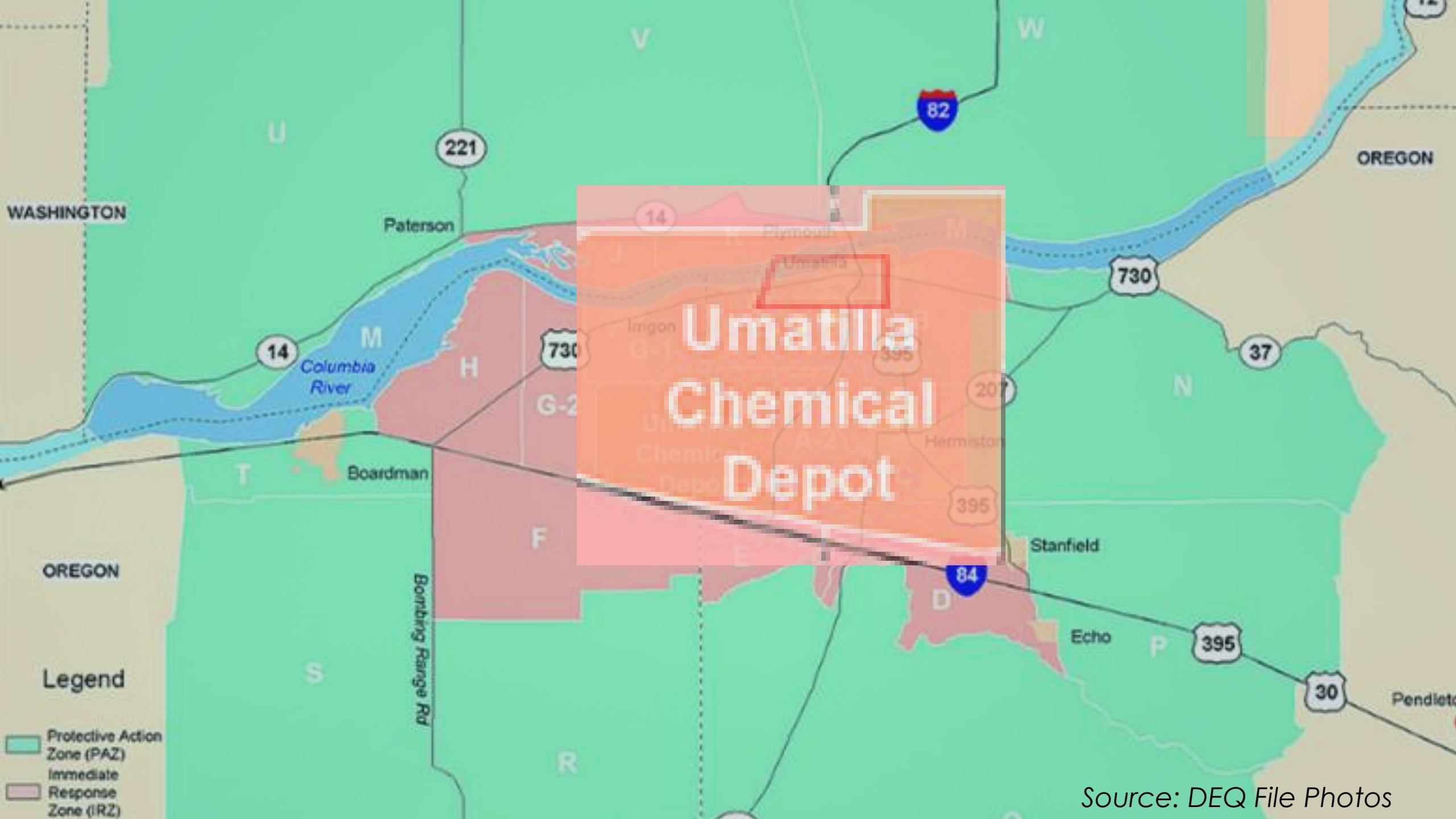
Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities

Umatilla Chemical Depot

OREGON CASE STUDY



Source: DEQ File Photos



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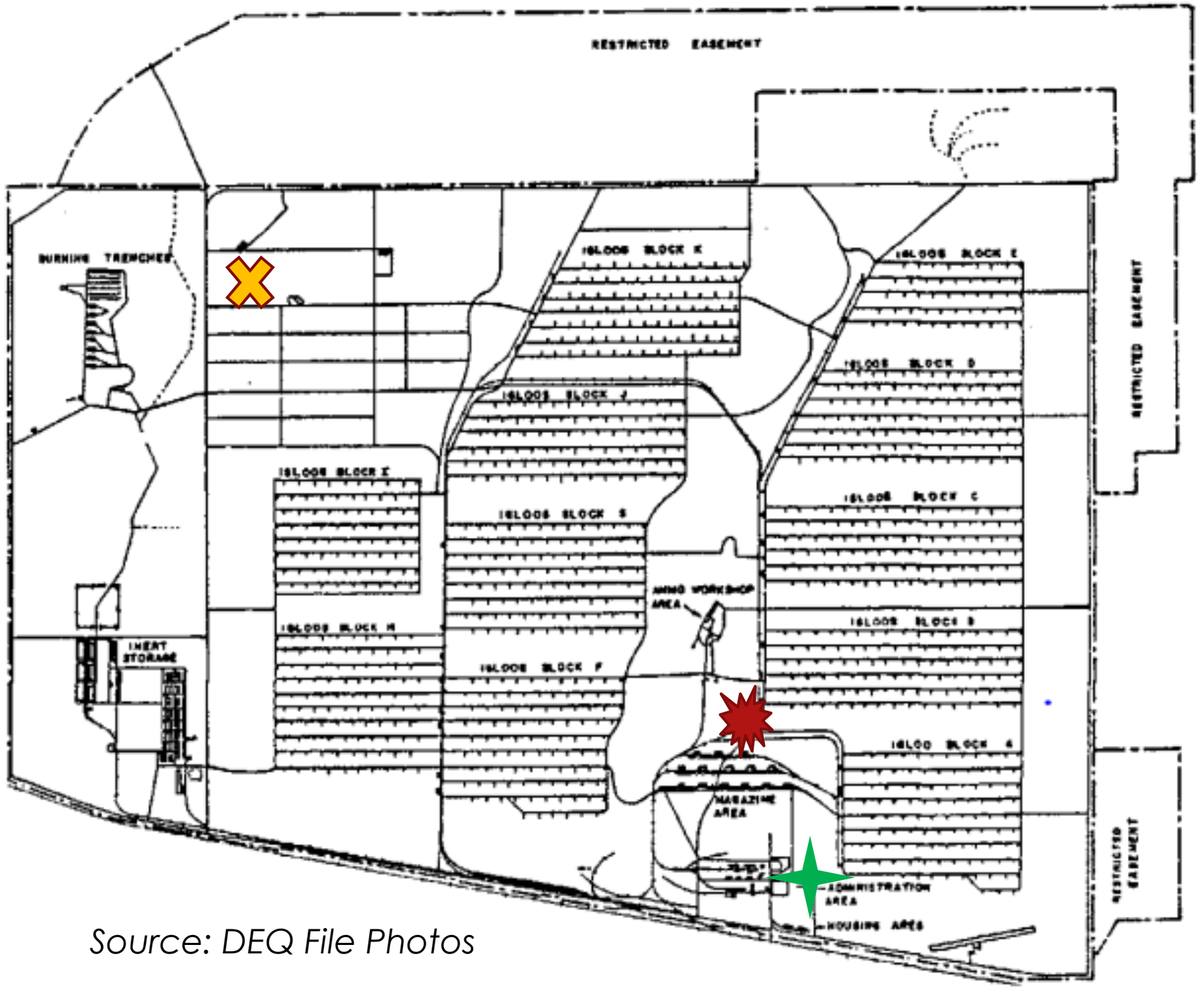
1960's Layout

- Administration/ Housing
- Magazine area
- Burning trenches
- Igloo Storage



Source: DEQ File Photos

Depot Igloo Storage

Source: DEQ Photos

Depot's Current Site Elements

RCRA Storage permit – Closure activities

- Two igloos, storage building and **SWMUs**

CERCLA cleanup

- Record of Decision
  - Clear all munitions and explosive components
  - Solid waste management units – Ammunition Demolition Activity

RCRA – CERCLA Nexus

Shared authorities

- Similar goals
- EPA guidance – not duplicate efforts
- Depot = federal facilities agreement

Remediation continues

- Solid waste management units of OB/OD
- Ammunition demolition area or ADA
- Ground water treatment & monitoring

Analyte Metals	CERCLA Approved Remediation Level for Human Health (mg\kg) Industrial Soil	RCRA Closure Performance Standards (mg/kg) Industrial Soil
Antimony	820	Not Listed
Arsenic	15	1.7
Barium	3300	Not Listed
Beryllium	8.1	200
Cadmium	213	510
Chromium (total)	40	170
Cobalt	25	Not Listed
Copper	Not listed	41000
Lead	500	800
Manganese	Not listed	23000
Mercury	Not Listed	310
Nickel	Not Listed	20000
Silver	Not Listed	5100
Thallium	160	Not Listed

Closure

- 1993 United Nations banned all use/storage chemical weapons
- 2004-2011 Furnace incineration of all weapons
- 2012 Depot officially closed
- 2015 transfer of property began to local control

Umatilla Chemical Agent Disposal Facility

History

2001 – Disposal facility was completed

2004 – Army began weapons destruction Sept 8

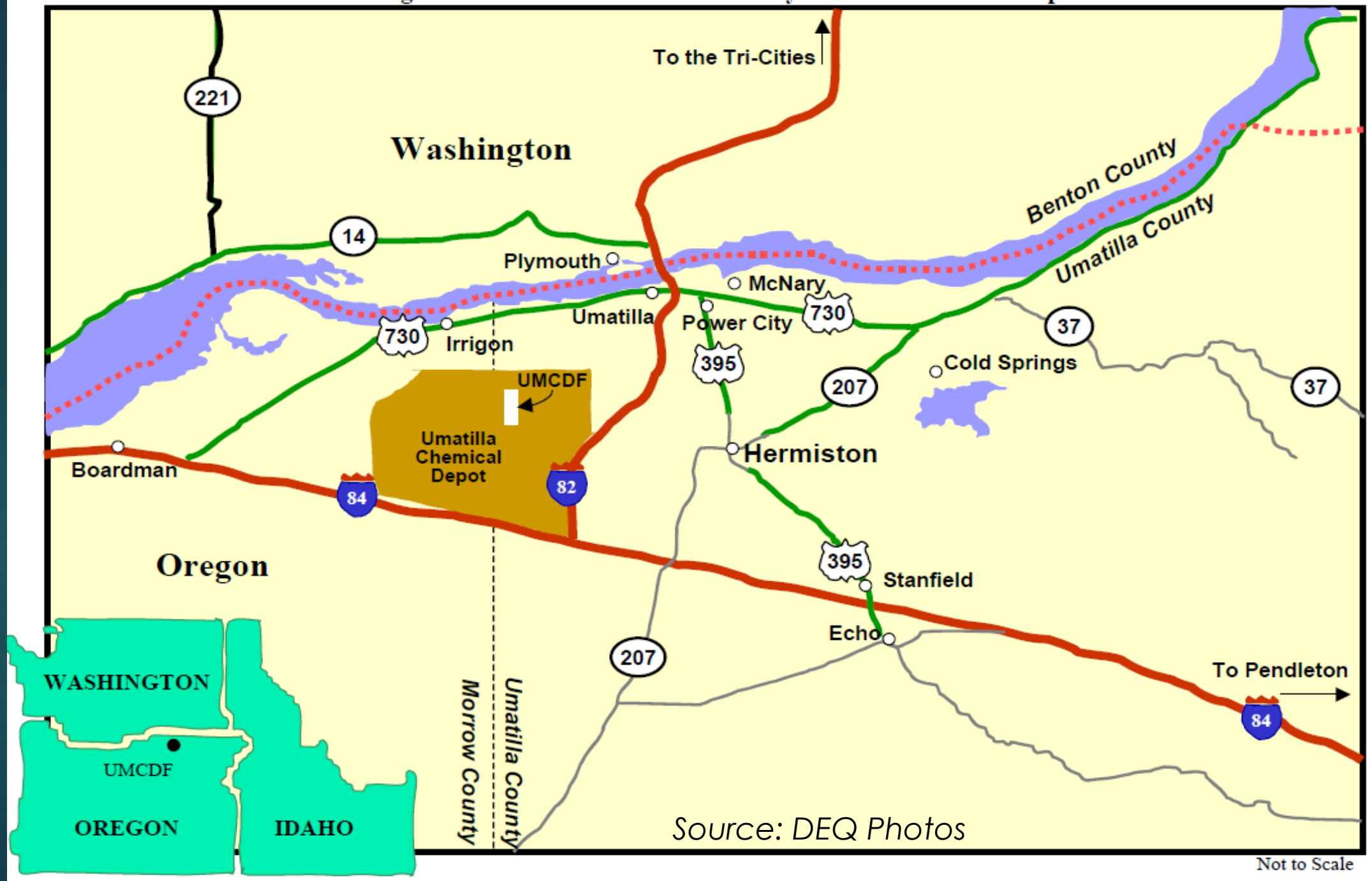
2011 – Completed disposal Oct 25

2012-13 – Closure and redevelopment began Aug

Destroyed

- 220,604 munitions and
- 7,434,000 lbs containerized mustard gas and nerve agents

Figure 1-1. Location of the U.S. Army Umatilla Chemical Depot



Source: DEQ Photos

Destruction of Incinerator

Source: DEQ Photos

14 weeks later

Source: DEQ Photos

Set World Record

Poured 24 igloos in 24 hours on Sept. 24, 1941

Source: Library of Congress

Celebration Party for World Record

Source: Library of Congress/fsa.8c22730/

Housing Shortage

SOURCE: LIBRARY OF CONGRESS/fsa.8c22762/ and fsa.8c22746/

Workman Family Housing

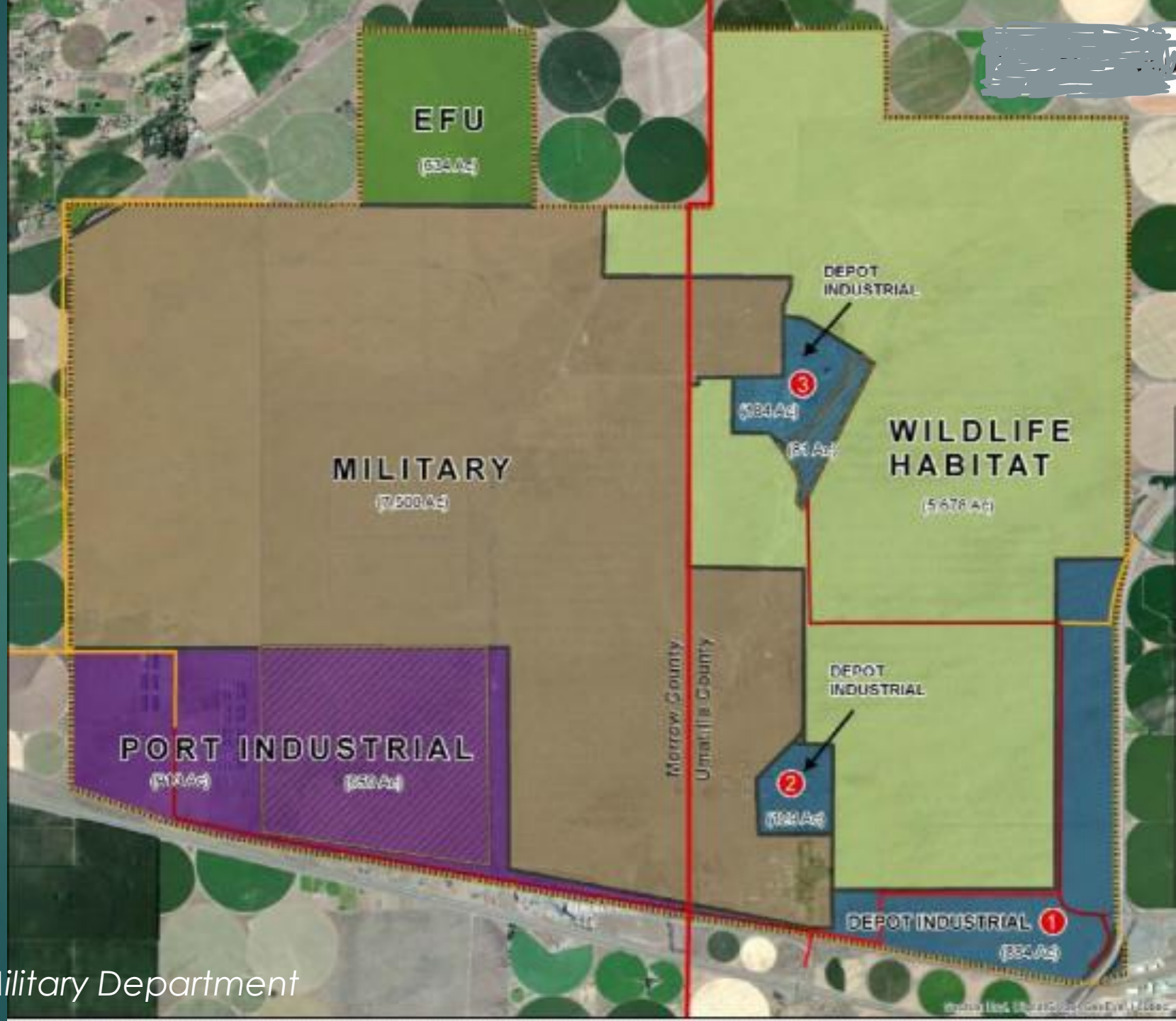
Source: Library of Congress/fsa.8c22739

Delivering Supplies

SOURCE: LIBRARY OF CONGRESS/fsa.8c22762/ and fsa.8c22756/

Restoration Projects

- Restore land to Tribal community
- Transfer land to local development authority
- Restores nature preserve



Source: Oregon Military Department

Protecting nature preserve

Source: DEQ Photos

Restoring Wildlife

Burrowing Owls

Source: :https://www.myoregon.gov/2020/06/08/burrowing-owls-find-unique-nests-at-camp-umatilla/

Questions?

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Source: DEQ Pronghorn Photo