

Proposed Willamette Cove Upland Cleanup

Oregon DEQ

May 13, 2020

Portland Harbor Community Advisory Group

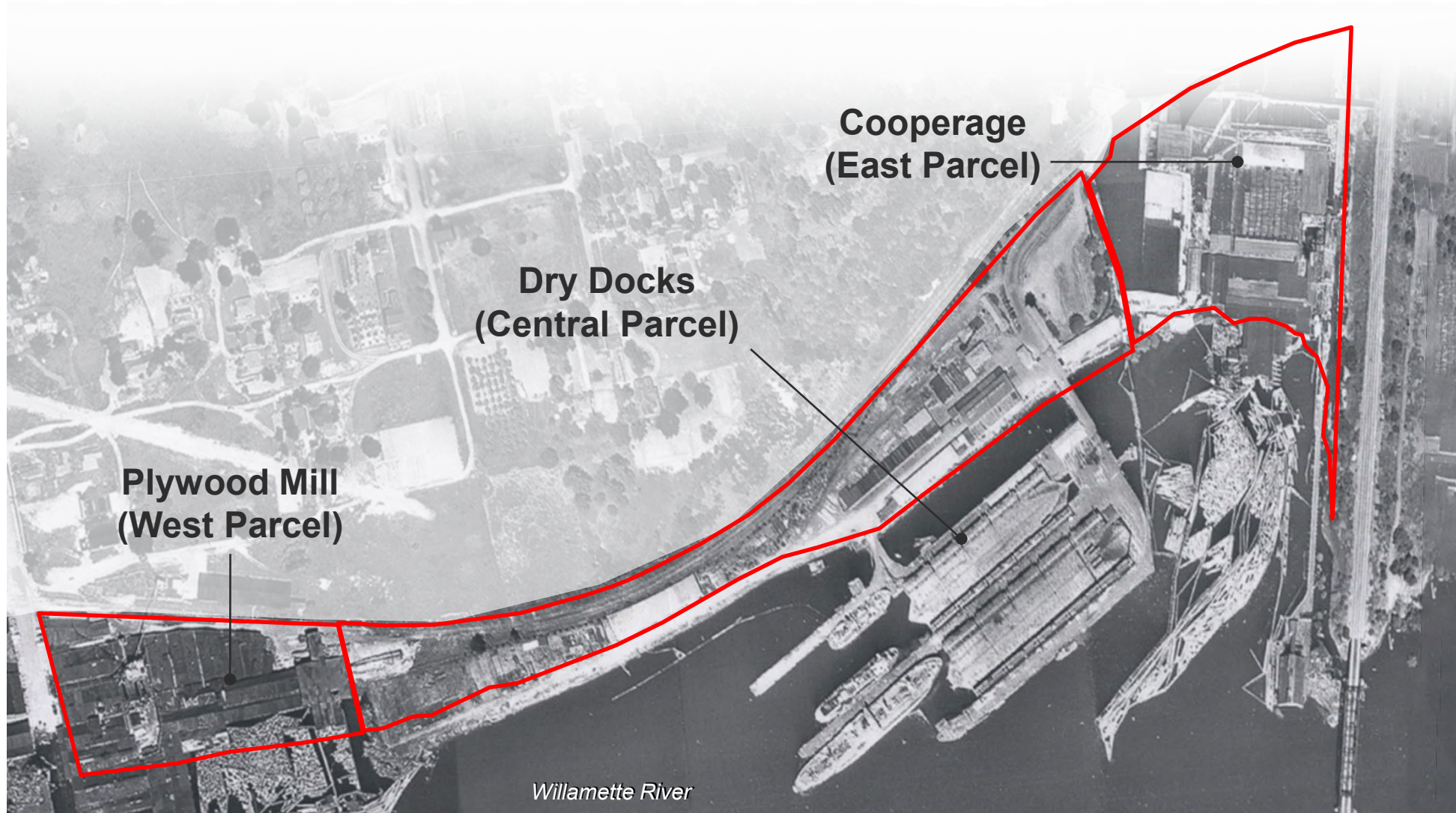
Takeaways

- DEQ has proposed a cleanup plan for the upland portion of the Willamette Cove site
- This action is separate from in-water work overseen by EPA under Superfund
- We are currently accepting comments on the plan, through the end of June
- Comments can be submitted multiple ways

Topics

- What is the problem?
- DEQ versus EPA responsibilities
- Status of upland work
- Upland cleanup proposal
- How to comment, get more info
- What's next

Willamette Cove - Past



1934 aerial

Peak industrial operations

Willamette River

Willamette Cove - Today

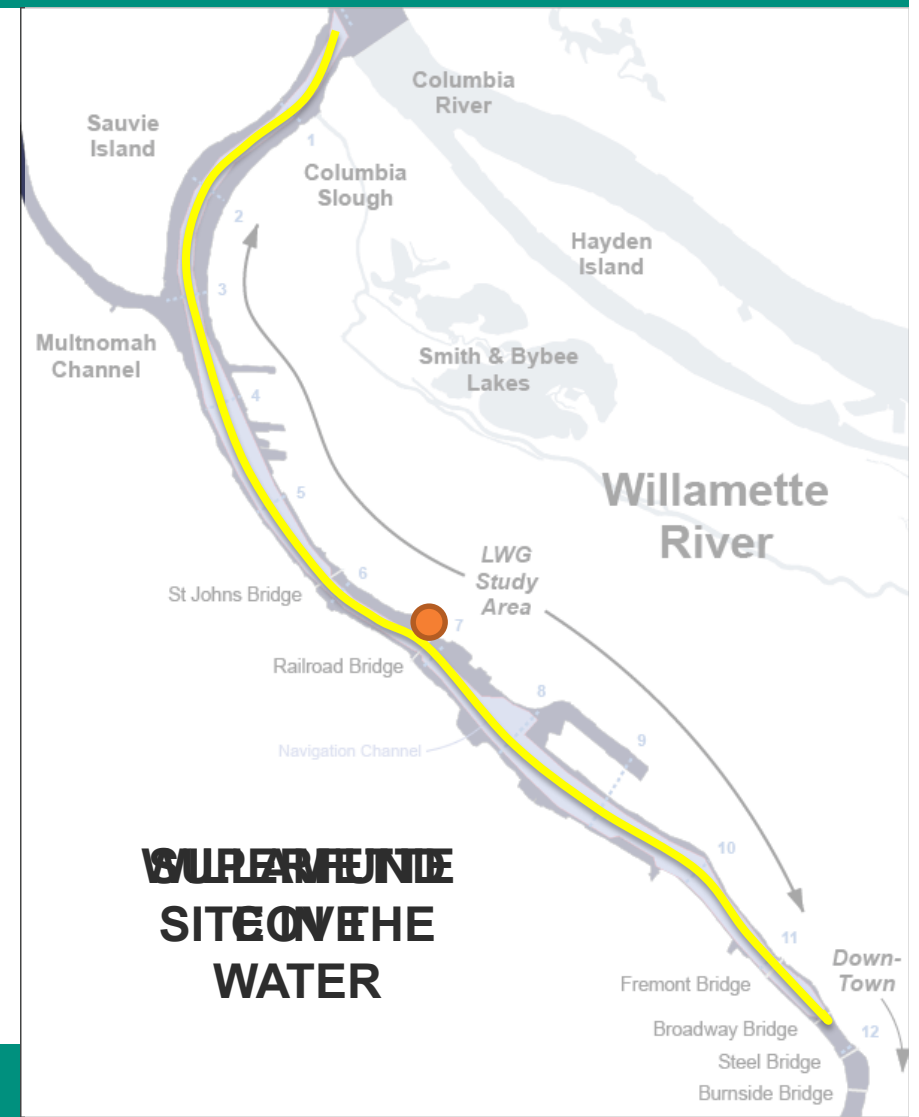


Problem is...

- Extensive upland, riverbank, and in-water contamination
- Contaminants including dioxins, metals, and PCBs
- Location of the site on the Willamette River within the Portland Harbor Superfund Site

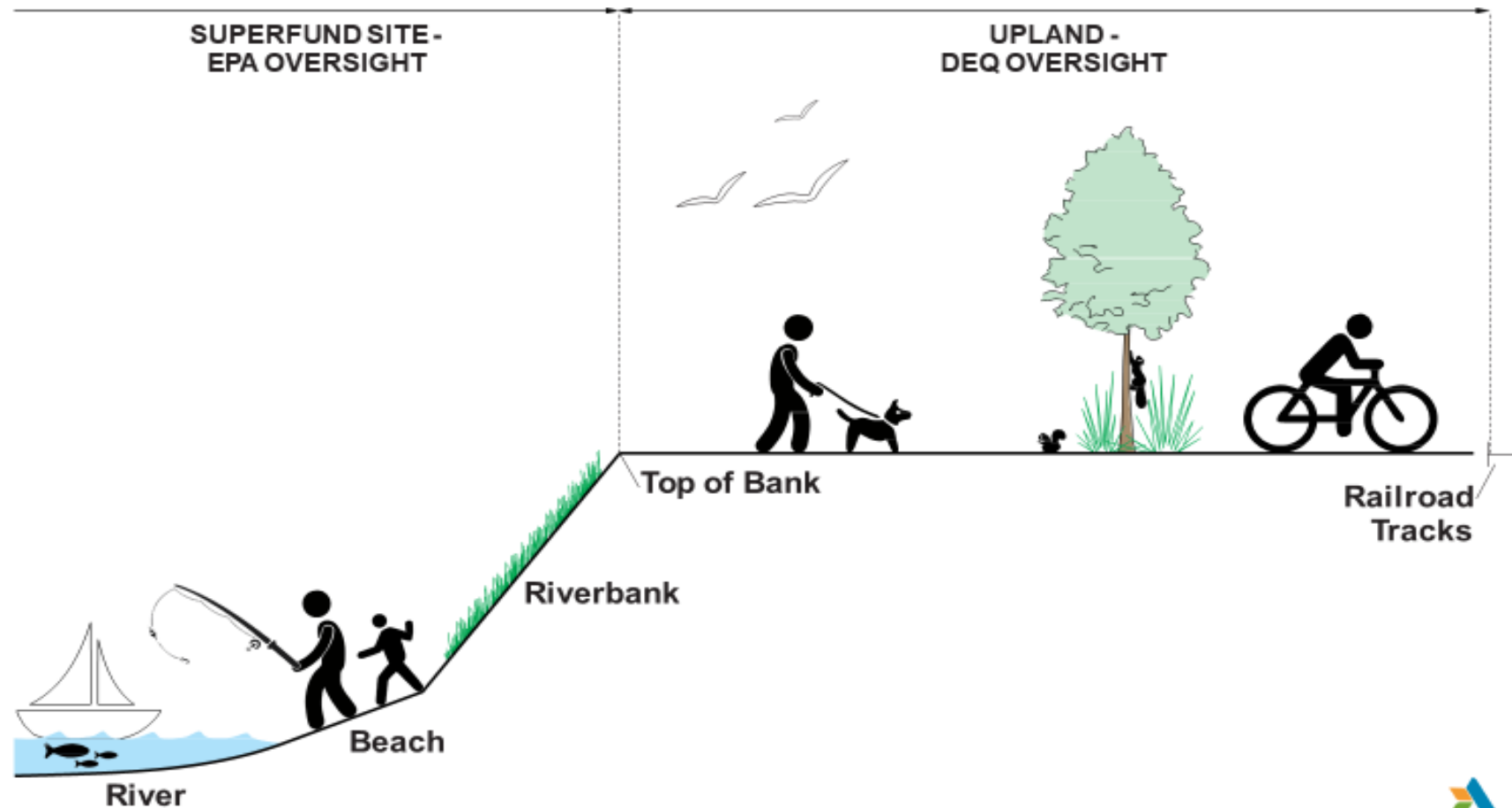
Regulatory oversight

- Site is located in the heart of Portland Harbor
- EPA is in charge of in-water and riverbank cleanup
- **DEQ responsible for upland cleanup**



EPA vs. DEQ responsibilities

Willamette Cove Schematic



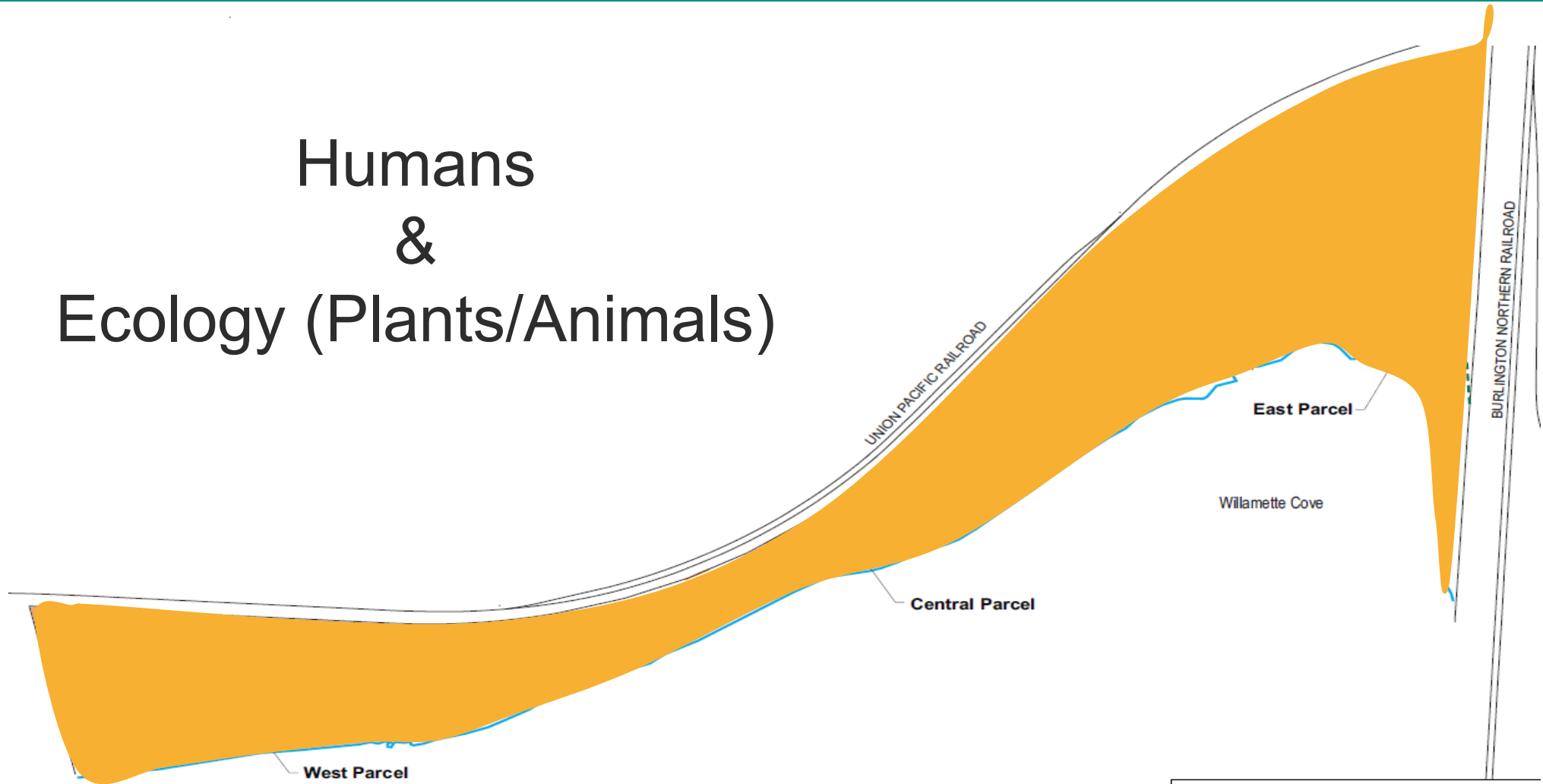


Upland work so far...

- ✓ Characterized environmental contamination
- ✓ Evaluated risk to humans and animals/plants, based on future use identified by site owner
- ✓ Partial (hot spot) cleanup in 2015/2016
- ✓ Proposed cleanup plan

Unacceptable Risk Site-Wide

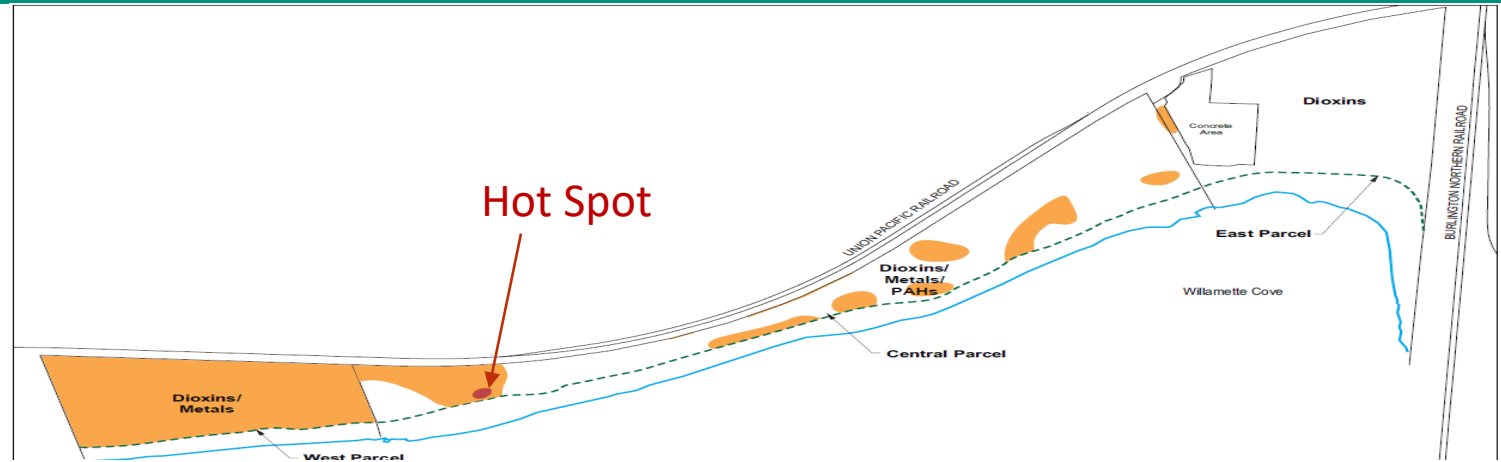
Humans
&
Ecology (Plants/Animals)



Hot spot areas present a very high risk

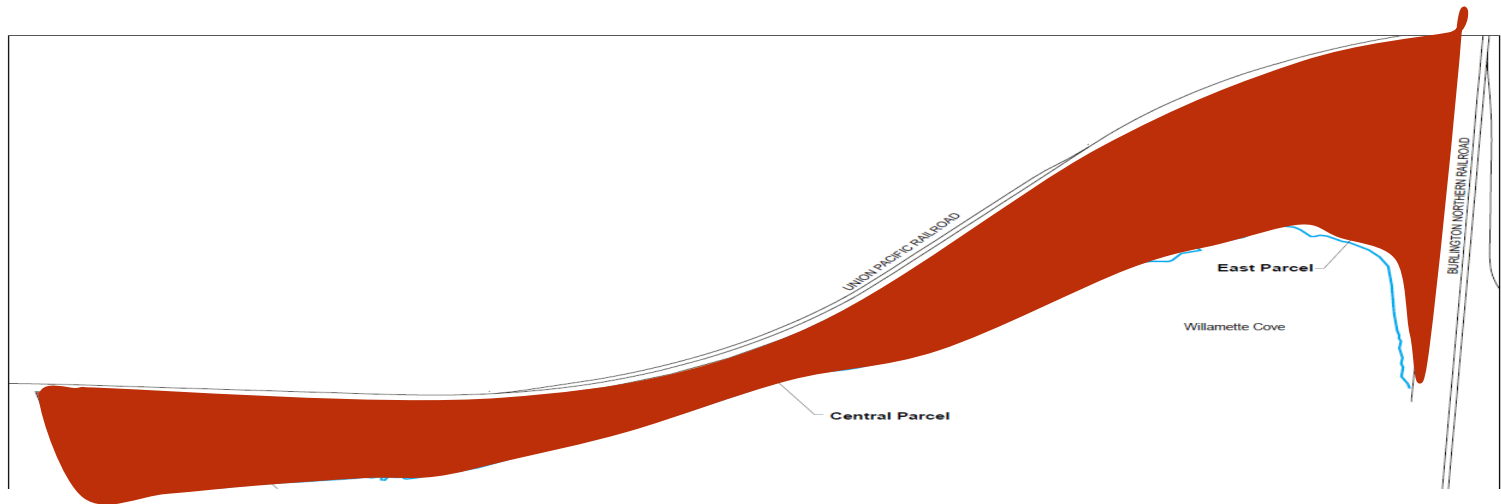
Humans

- Reduced area after removal actions



Ecology

- Site-wide for dioxins
- Focused areas for other contaminants



Who's exposed to contamination at Willamette Cove

People:



Plants & Animals:



Health Risk and Future Use

- **Risk = Exposure** to contamination & **toxicity** of contamination.
- If either **exposure or toxicity is removed**, there is **no risk** to people or wildlife.
- The **entire upland** area of Willamette Cove has soil contamination that presents an **unacceptable risk** to human health and wildlife. Some areas (hot spots) present a very high risk.
- A **cleanup is necessary** to reduce risk and protect human health, wildlife, and the environment.



How did DEQ get to cleanup plan?

- Approval of Port/Metro Feasibility Study
- Consideration of many remedial technologies, both traditional and non-traditional



Cleanup options considered

- Traditional methods
 - Excavation and offsite disposal
 - Capping with or without consolidation
- Other options
 - Chemical treatment
 - Bioremediation
 - Thermal remediation



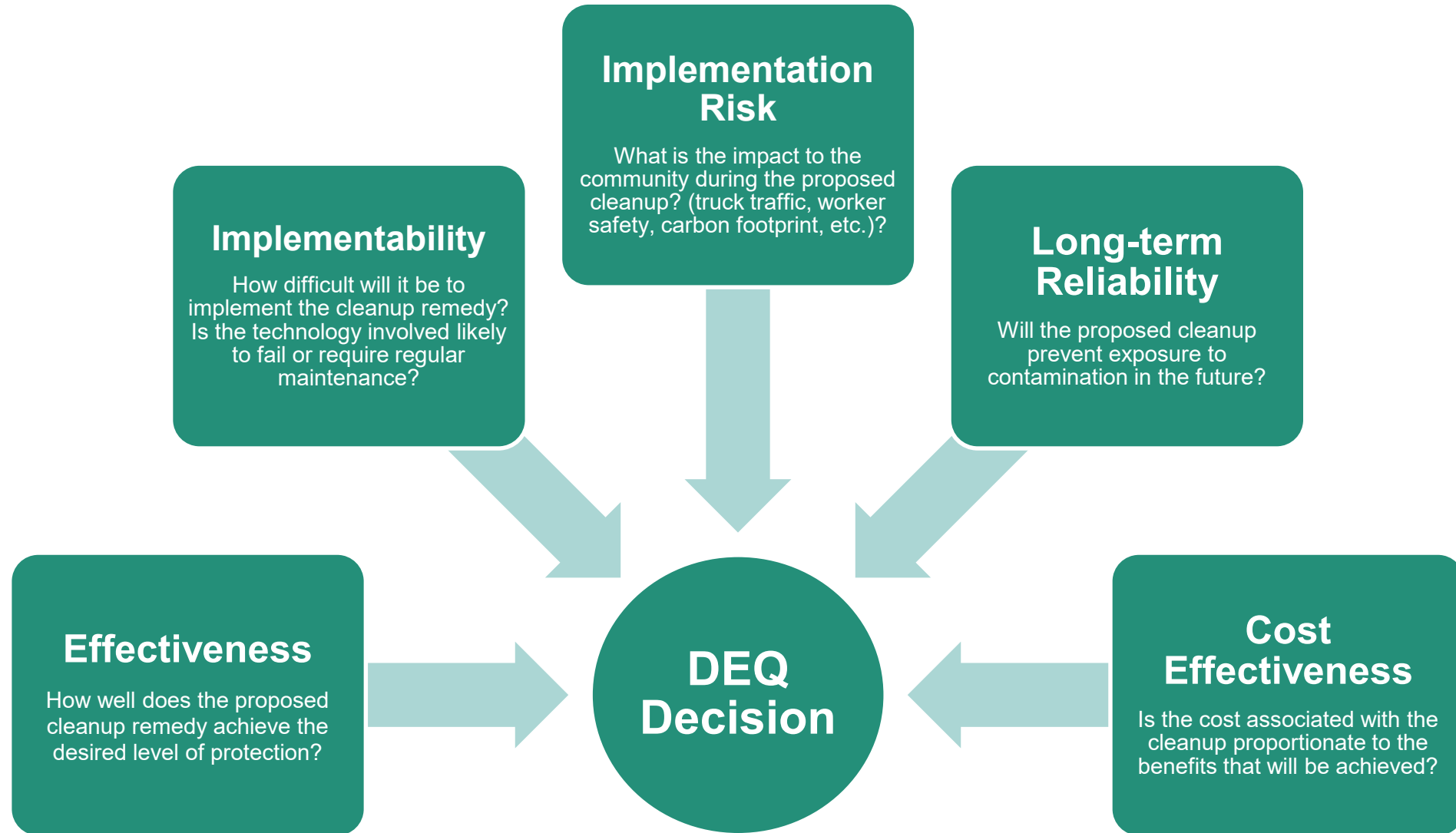
Challenges

- Multiple contaminants resistant to treatment methods (dioxins, metals, PCBs)
- Very low cleanup standards, notably for dioxins (low parts per trillion range)
- Need to minimize impacts to neighborhoods and carbon footprint of cleanup to the extent possible



Regulatory Considerations for Selecting a Cleanup

Proposed cleanups that are protective are evaluated against the following factors:



Soil Cleanup Proposal

- **Protect** future recreational/park users, construction workers, the houseless, plants and animals by:



– *Removal* of hotspots for human health*



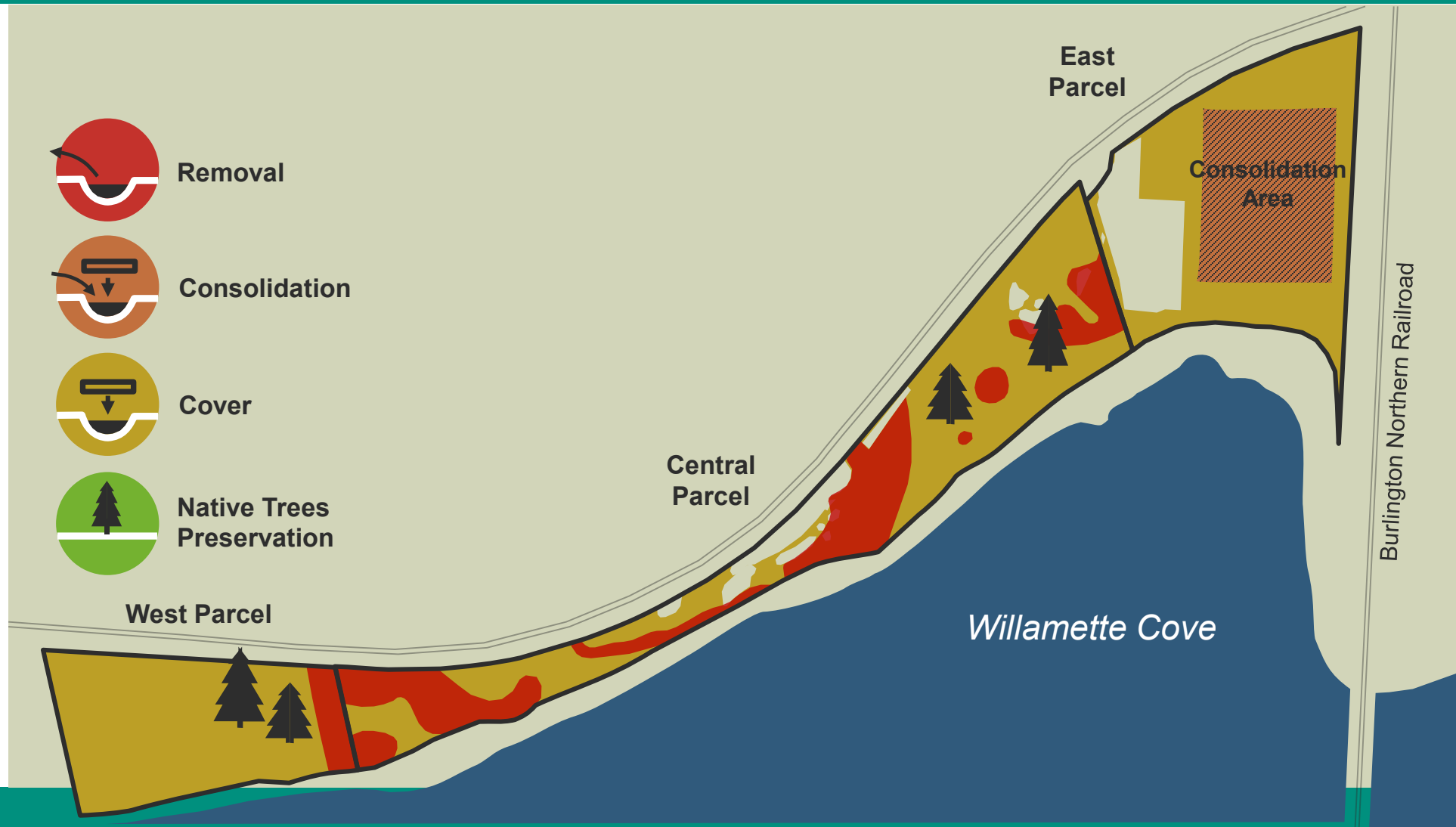
– *Consolidate and cap* majority of remaining contaminated soil



– *Place* clean soil cover as needed

- Long-term monitoring and maintenance

Cleanup Concept

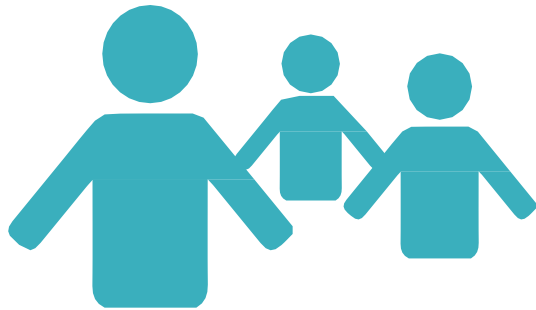


Hot Spot Removal



- Excavate and offsite landfill disposal

Human Health



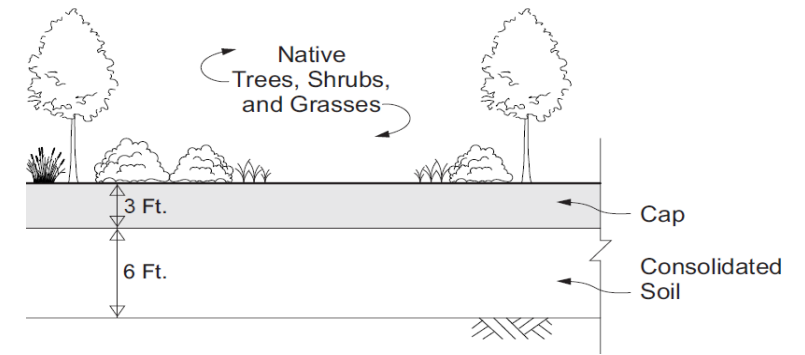
Ecological
non-dioxin/furan (i.e., metals)



Consolidation and Cap



- Excavate/consolidate remaining soil contamination:
 - Human health risk
 - Majority of ecological risk



- Engineered Cap:
 - 3-foot minimum thickness (e.g., rock and soil)
 - Park features could be used (such as path/platform)
 - Design support planned park
 - Long-term resiliency (e.g., storms, floods, seismic)

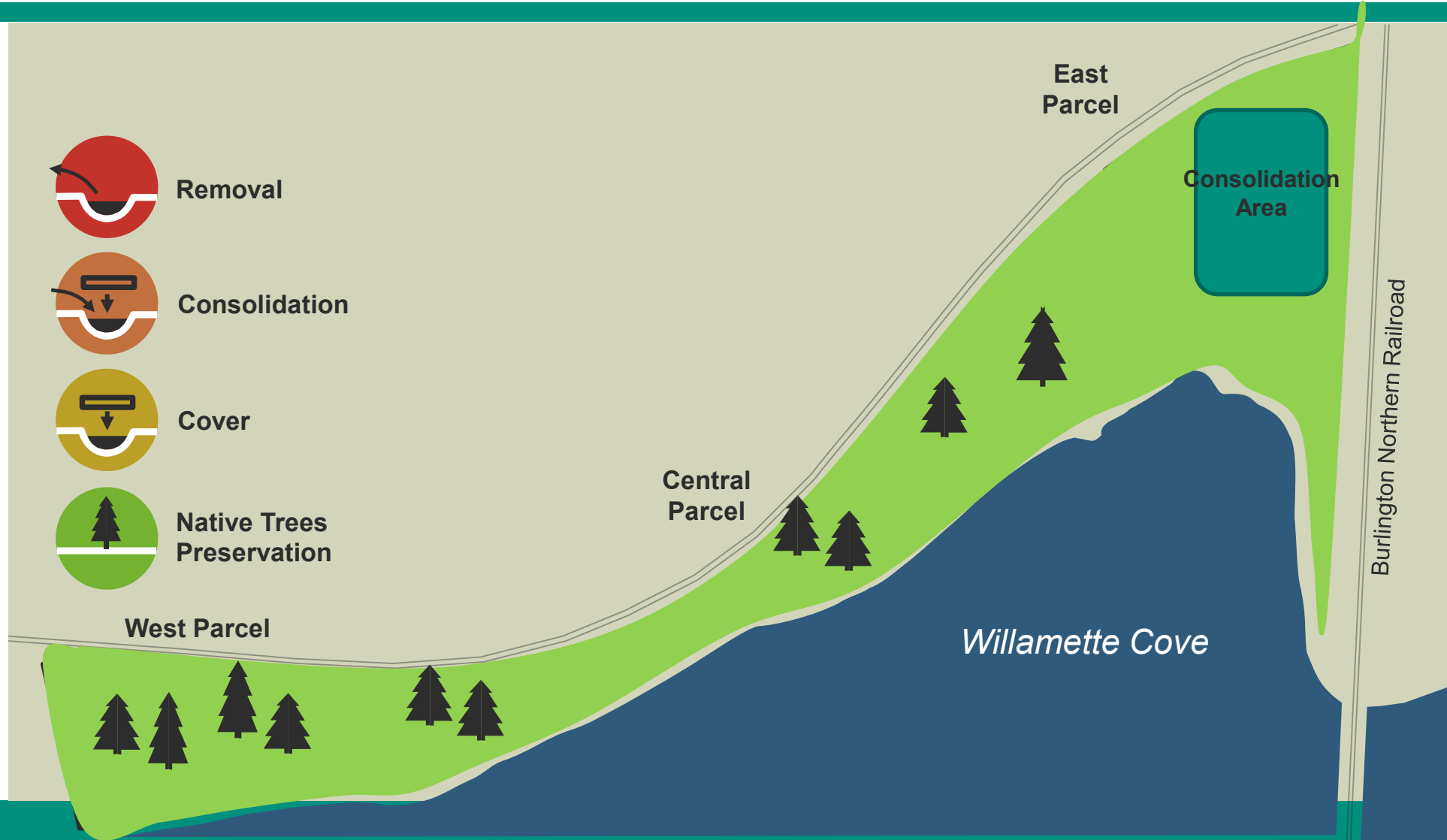
Soil Covers



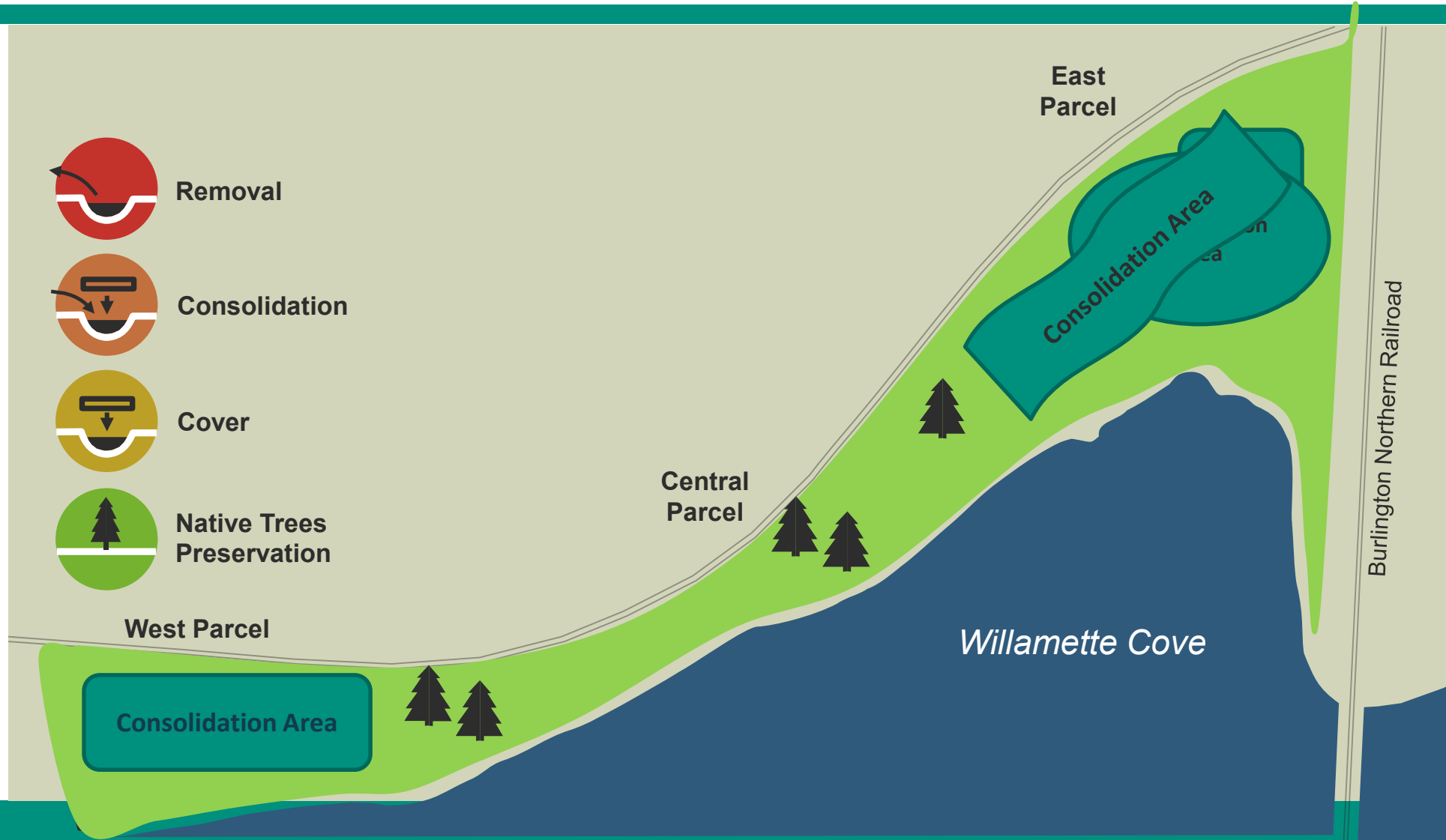
- Cover site with clean soil
 - Thickness based on ecological risk left, if any
 - Minimum 1-foot topsoil to support plant growth



Cleanup Concept – Hybrid Approach

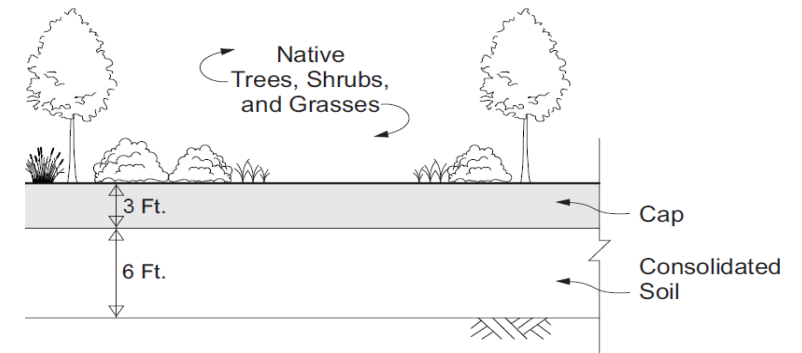


Consolidation Location & Shape TBD



Next Steps: Remedial Design

- Remedial Design Sampling (site-wide and comprehensive)
 - Refine areas/volumes for onsite and offsite placement
- Engineers will design Consolidation Area (including location and shape) based on:
 - Pre-design sampling results
 - Size constraints
 - Riverbank cleanup
 - Design fits park infrastructure
 - Long-term resiliency (e.g., storms, floods, seismic, geotech)



Proposed Cleanup Restores Site

- Excavation (Remove Sources)
 - Human health hotspots (and more) removed offsite
 - Remaining human health risk (and more) excavated and consolidated
- Caps and Covers (Remove/Reduce Exposure)
 - Engineered Barriers
 - Topsoil cover low ecological risk
- Protects humans (park users, campers, construction workers) and plants/animals

UPLAND WILLAMETTE COVE ENVIRONMENTAL CLEANUP

FEASIBILITY STUDY April 2019

Metro and the Port of Portland submitted a report about potential cleanup options to DEQ. You can find it online: <https://go.usa.gov/xEJwh>



PUBLIC COMMENT March-June 2020

Make your voice heard!
Submit public comment on DEQ's recommended cleanup plan.



REVIEW COMMENTS Summer 2020

DEQ will consider all comments received during the public comment period.



REMEDIAL DESIGN

Detailed engineering plans are developed that present how the cleanup will be conducted.



WE NEED TO HEAR FROM YOU!



REPORT ON CLEANUP OPTIONS Early 2020

DEQ will issue a Staff Report about the recommended plan for cleanup at the upland portion of the Willamette Cove.



PUBLIC MEETINGS March-June 2020

DEQ will host several informative meetings during the public comment period. Come find out about the site history, the proposed cleanup and how to provide comments.



FINAL DECISION Summer 2020

After evaluating comments and making any changes to the proposed cleanup, DEQ will issue a Record of Decision (ROD). This documents DEQ's final decision on how the site will be cleaned up.



REMEDIAL ACTION

Cleanup is conducted following the plans and specifications presented in the Remedial Design.

For information about Willamette Cove, including how to provide comments on the proposed cleanup, please visit: <https://go.usa.gov/xddNF>



Who's Who?

Upland Willamette Cove Environmental Cleanup Project Partners

Get more info

- **DEQ website:** <https://go.usa.gov/xddNF>
 - Fact sheet, executive summary, public notice (English/Spanish/Vietnamese/Russian)
- **DEQ presentation at the Portland Harbor CAG**
 - May 13, 2020
- **Environmental Cleanup Site Information database**
 - ECSI ID: 2066
- **Contact DEQ**
 - **Erin McDonnell:** 503-229-6900 or McDonnell.Erin@deq.state.or.us

Public Comment

- Public comment now through August 31
- Three ways to submit comments:
 - **Email:** WillCoveUpland@state.or.us
 - **Mail:** Erin McDonnell, DEQ
 - **Public meetings**

Copies of this presentation available from DEQ.

Questions?



State of Oregon
Department of Environmental Quality