

An aerial photograph of a residential neighborhood, likely in Ashland, Oregon. The image shows a grid of streets with houses and trees. The text is overlaid on the image.

Ashland/NSP Lakefront Superfund Site

**Community Acceptance
Criteria Workshop**

Project Background

- ◆ 1989
Contamination found
- ◆ 1994 – 2005 Remedial
Investigations DNR, NSPW, EPA
- ◆ 2007 EPA approves final Remedial
Investigation Report

Where We are Today

- ◆ Remedial Investigation Completed
- ◆ Educating public on remedial options
- ◆ Asking for ideas from the community regarding final use of properties

What Next?

- ◆ Feasibility Study
 - Review and Comment
 - Approval
- ◆ Proposed Plan
 - Community Acceptance
 - State/Support Agency Acceptance
- ◆ Record of Decision

Detailed Analysis Criteria

- ◆ overall protection of human health and the environment;
- ◆ compliance with ARARs (local, State and Federal requirements);
- ◆ long-term effectiveness and permanence;
- ◆ reduction of toxicity, mobility, or volume;
- ◆ short-term effectiveness;
- ◆ implementability;
- ◆ cost;
- ◆ State acceptance; and
- ◆ community acceptance.

Impacted Area Areas

- ◆ Upper bluff, NSPW property, filled ravine
- ◆ Copper Falls aquifer
- ◆ Kreher Park, including the
 - RR corridor
 - former wastewater treatment plant
- ◆ Sediments



Present

Upper Bluff

- ◆ NSPW properties, Our Lady of the Lake Church/School, adjacent private residences
- ◆ Filled ravine from NSPW property to seep area

RI Results – Upper Bluff

- ◆ Free product tars/oils at the base of the ravine
- ◆ Some remnants of MGP structures still exist and contain MGP wastes
- ◆ Soils and groundwater impacted
- ◆ All shallow impacts on NSPW property

Copper Falls Aquifer

- ◆ Interbedded sand and gravel
- ◆ 30 – 200 feet in depth
- ◆ Source for water at artesian wells
- ◆ Overlain by approximately 30 feet of clay/silt (Miller Creek Formation)

RI Results - Copper Falls Aquifer

- ◆ Free product mass
 - 30 – 70 feet depth
 - A dissolved phase plume extends north to the shoreline

Kreher Park

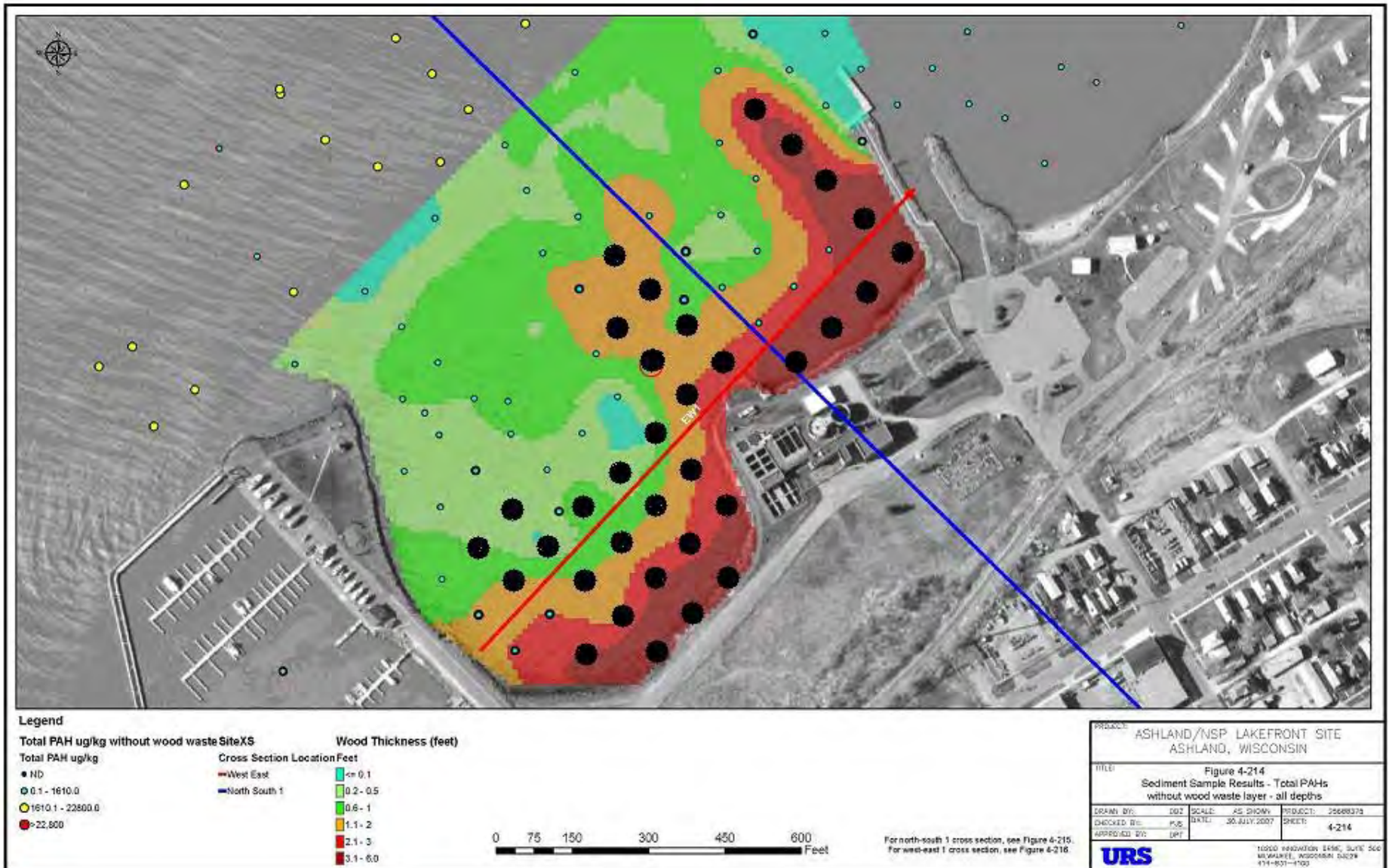
- ◆ Lakebed fill
 - wood waste from former lumber mill operations and
 - solid waste/demolition debris
- ◆ Includes
 - seep area
 - waste tar dump
 - tank car siding and
 - former wastewater treatment plant
- ◆ Seep area is outfall from clay tile pipe

RI Results – Kreher Park

- ◆ Soils and groundwater impacted
- ◆ Tars/oils exist as free product in areas
- ◆ Seep and waste tar dump areas
- ◆ Hydraulically connected to the filled ravine and lake/sediments

Sediments

- ◆ Contaminated sediments between the Marina and the Prentice Ave. boat landing extending out from the shoreline approximately 300 feet.
- ◆ Much covered with wood waste layer



RI Results - Sediments

- ◆ Approximately 10 acres including free product
- ◆ Most covered with wood waste
- ◆ Sediment disturbance causes slicks










Potential Technologies

- ◆ Soils
- ◆ Groundwater
- ◆ Sediments

Upper Bluff Soils

- ◆ Excavation
- ◆ Capping/Containment
- ◆ Above, augmented with chemical/bio enhancement

Copper Falls Groundwater

- ◆ Monitored Natural Attenuation
 - ◆ Free Product Removal
 - ◆ Groundwater Pump and treat
 - ◆ Above, augmented with chemical/bio enhancement
- 
- A decorative silhouette of a mountain range in shades of teal, located at the bottom right of the slide.

Kreher Park Soils and Groundwater

- ◆ Excavation
- ◆ Capping/Containment

- ◆ Monitored Natural Attenuation
- ◆ Free Product Removal
- ◆ Groundwater Pump and treat

- ◆ Chemical/bio enhancement

Sediments

- ◆ Monitored natural recovery
- ◆ Capping
 - Thin Cap
 - CDF
- ◆ Removal
 - Dry Dredge
 - Wet Dredge

Soils Excavation

◆ Short Term Impacts

- Noise
- Truck Traffic
- Odors
- Local Disruption

◆ Long Term Outcomes

- Removal of contaminants
- Open to future use

Soils Capping/Containment

◆ Short Term Impacts

- Noise
- Truck Traffic
- Local Disruption

◆ Long Term Outcomes

- Contaminants stay in place
- Limits future use

Groundwater Pump and Treat

◆ Short term Impacts

- Construction noise
- Infrastructure placement
- Long term operation

◆ Long Term Outcomes

- Removes contaminant mass
- Cleans up aquifer the quickest

Sediment Capping

- ◆ Short Term Impacts
 - Noise
 - Truck Traffic
 - Local Disruption
- ◆ Long Term Outcomes
 - Contaminants stay in place
 - Limits future use
 - Not Permanent



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Sediment Removal (wet dredging)

◆ Short Term Impacts

- Noise
- Truck or Barge Traffic
- Odors
- Local Disruption

◆ Long Term Outcomes

- Permanent Removal of contaminants
- Open to future use







Dry Dredging

- ◆ Short Term Impacts
 - Noise
 - Truck or Barge Traffic
 - Odors
 - Local Disruption
- ◆ Long Term Outcomes
 - Permanent Removal of contaminants
 - Open to future use
 - More control during removal



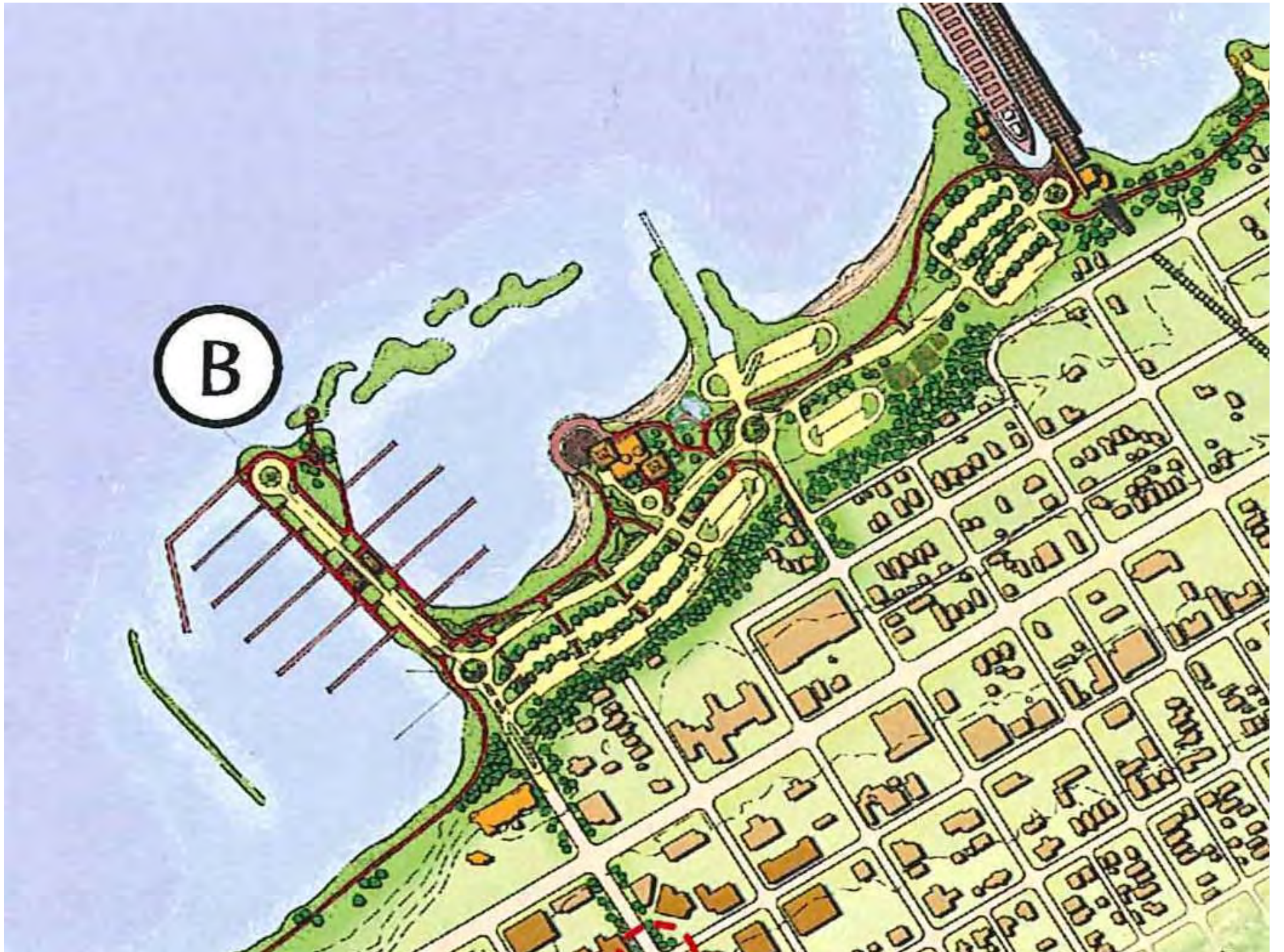






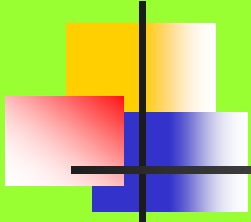






Superfund Process

Past Steps



- 1989 "Discovery" of possibly toxic waste
- 1994-2001 State investigation and feasibility studies
- 1998-2000 Superfund preliminary assessment
- 2000 Nominated for National Priorities List
- 2002 Added to National Priorities List
- 2003-2007 Additional site investigations & report

Superfund Process

Next Step: Feasibility Study

- Develop & screen possible remedies for lake sediment , park & ravine soils and groundwater (based on nine criteria)
- Public meeting & hearing on proposed remedies
- EPA Decision: clean-up remedies selected



Superfund Process

After Remedies Are Selected

- Legal order to implement remedies
- Engineering design of remedies
- Conduct additional treatability studies, if needed
- Construct/implement remedies
- Complete clean-up/treatment processes
- Delete from National Priorities List



The Nine Criteria

Required

- Protection of public health & the environment
- Compliance with state, federal & local laws

Achieve the Best Balance

- Reduction of toxicity, mobility or volume of contaminants
- Long-term effectiveness or permanence
- Short-term effectiveness or time required for implementation
- Implementability or ease of accomplishing the remedy
- Financial cost
- Acceptability to state government
- **Community acceptability**



Tonight's Focus: Community Acceptability

Defined by Citizens

- Characteristics of a clean-up that the area community most prefers.
- Characteristics not already covered by the other eight required Superfund criteria.

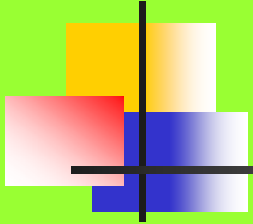


Answer the Question

What outcomes or characteristics would make a cleanup remedy most acceptable to you?

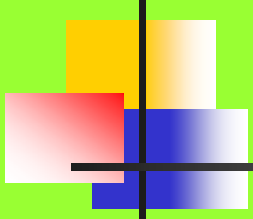
Note: Do not duplicate the other eight EPA criteria.

Examples



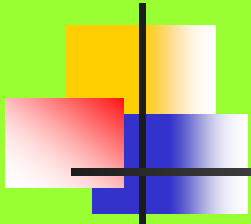
- be most consistent with waterfront plan.
- most enhance nearshore fish habitat.
- least disrupt tourism traffic & activities.

Don't Duplicate the Other 8 Criteria



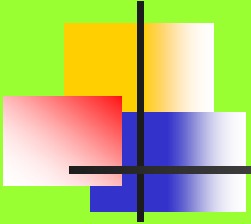
- be most cost-effective.
- remove the most toxic material.
- best protect the environment.
- leave the lowest risk to public health.

Tell Us What You Think



- Divide into small groups.
- Silently write your answers on Post-It cards.
 - List one characteristic per card. Write 3-5 word phrase in large, block letters on each card. Leave one inch on bottom of card for adding colored dots later.
 - Indicate your preference: most, least or optimum.
- Round robin briefly state one answer.
- Facilitators will post your answers on easel and ask if others need clarification to understand.
- Do not post duplicate answers.
- Group answers around common themes/subjects.

Example Card



be most consistent
with waterfront
plan.



1" Leave space for adding dots later