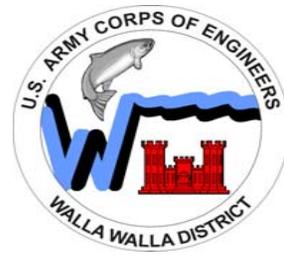




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Public Information Meeting

Lower Snake River Navigation Maintenance

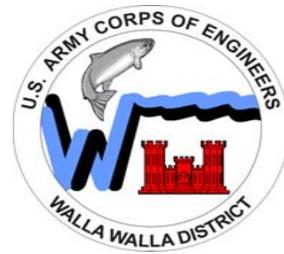
*Lower Snake & Clearwater Rivers
Washington & Idaho*

Draft Environmental Impact Statement



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Meeting Agenda

- **Opening Remarks – Lt. Col. Randy Glaeser**
- **Formal Presentation – Jack Sands**
- **Questions & Answers – Technical Panel**
- **Closing Remarks – Jack Sands**



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United States
Environmental Protection Agency
Region 10



Lower Snake River
Navigation Maintenance

DRAFT

*Lower Snake and Clearwater Rivers,
Washington and Idaho*

Environmental
Impact Statement



March 2005



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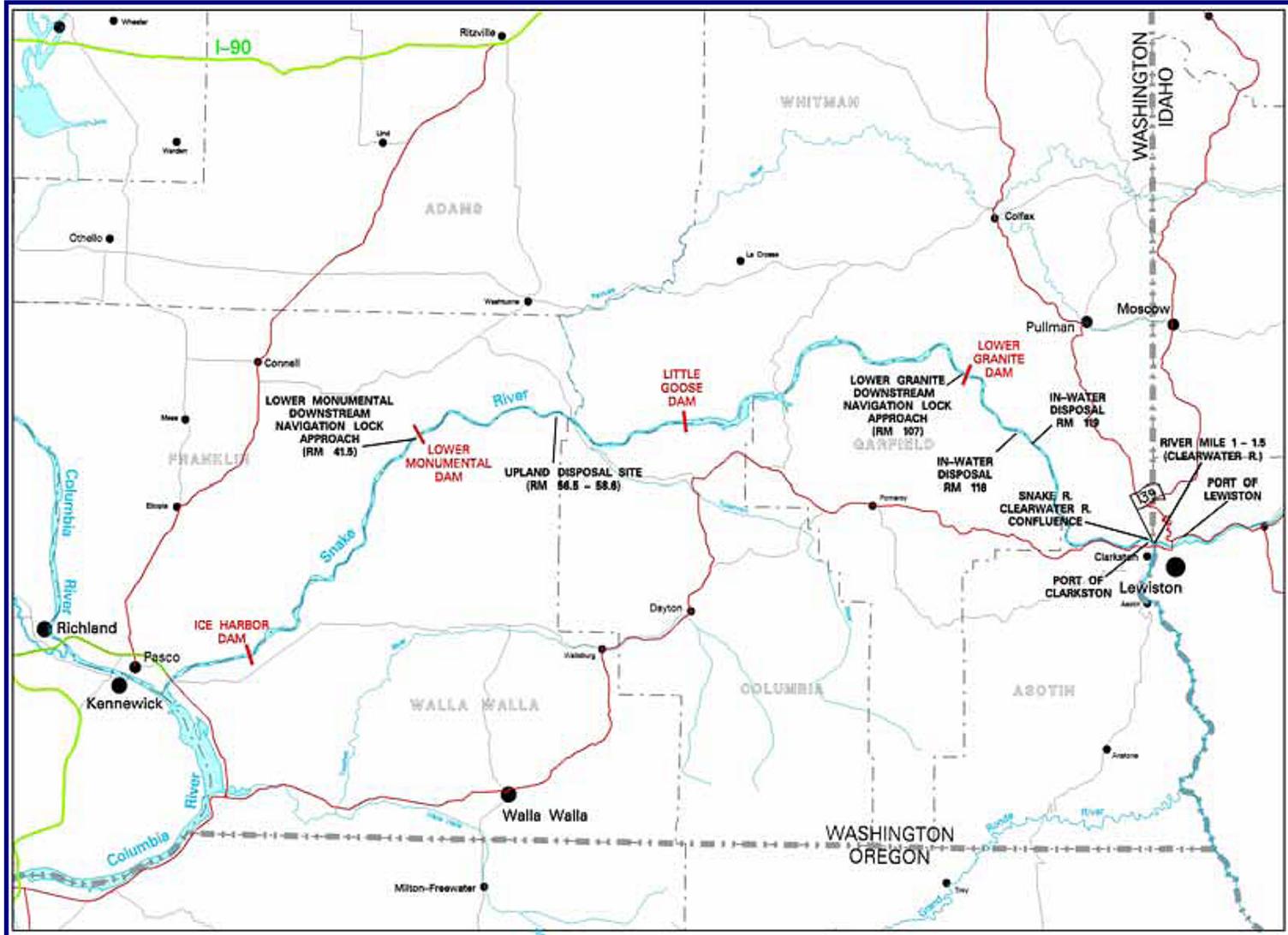
Proposed Action

Routine maintenance in the near-term in the federal navigation channel and certain public port berthing areas in the lower Snake & Clearwater Rivers in Washington & Idaho.



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Purpose

To provide a 14-foot depth throughout the designated federal navigation channel and restore access to selected port berthing areas.

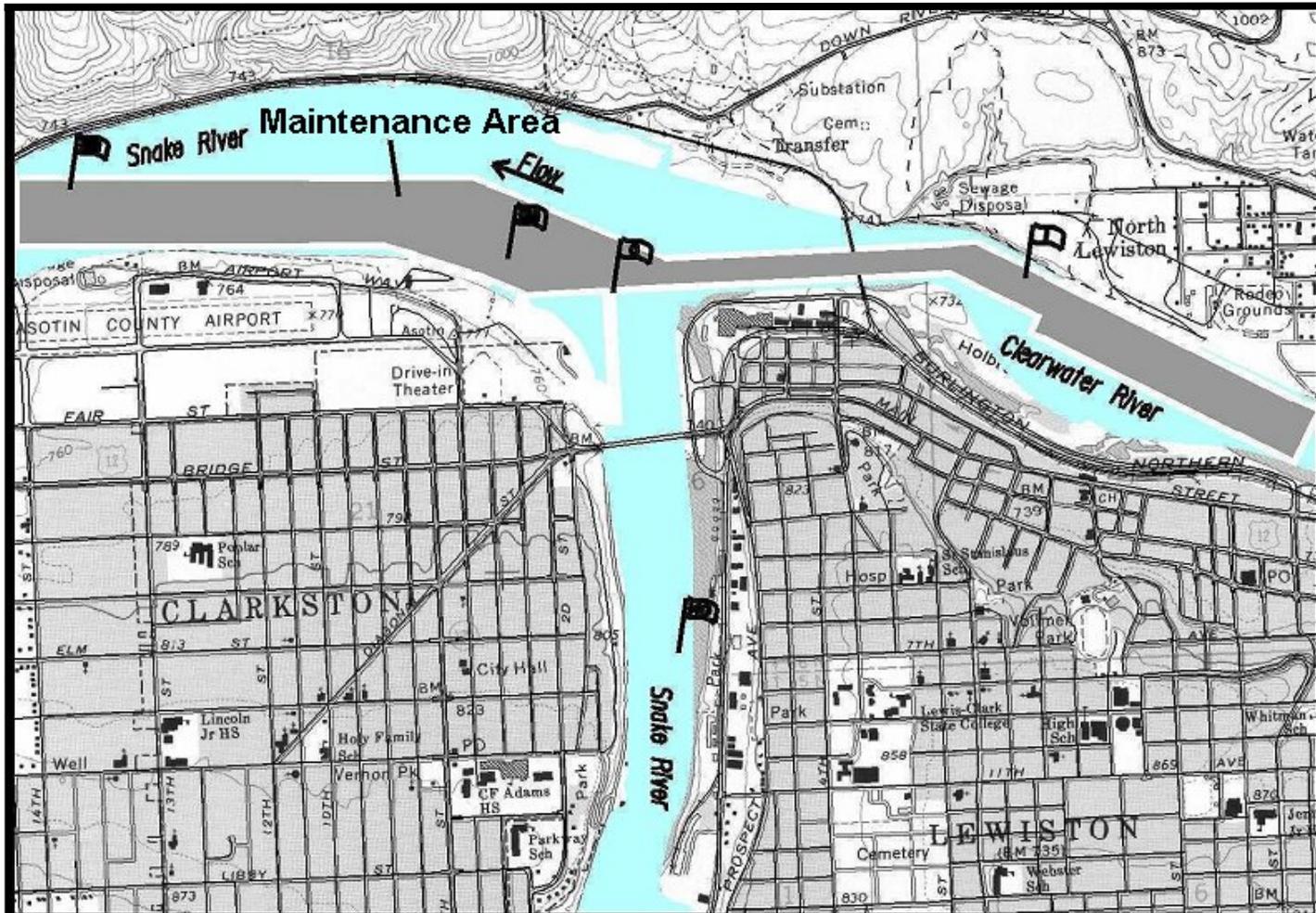


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Snake and Clearwater Rivers Confluence Area



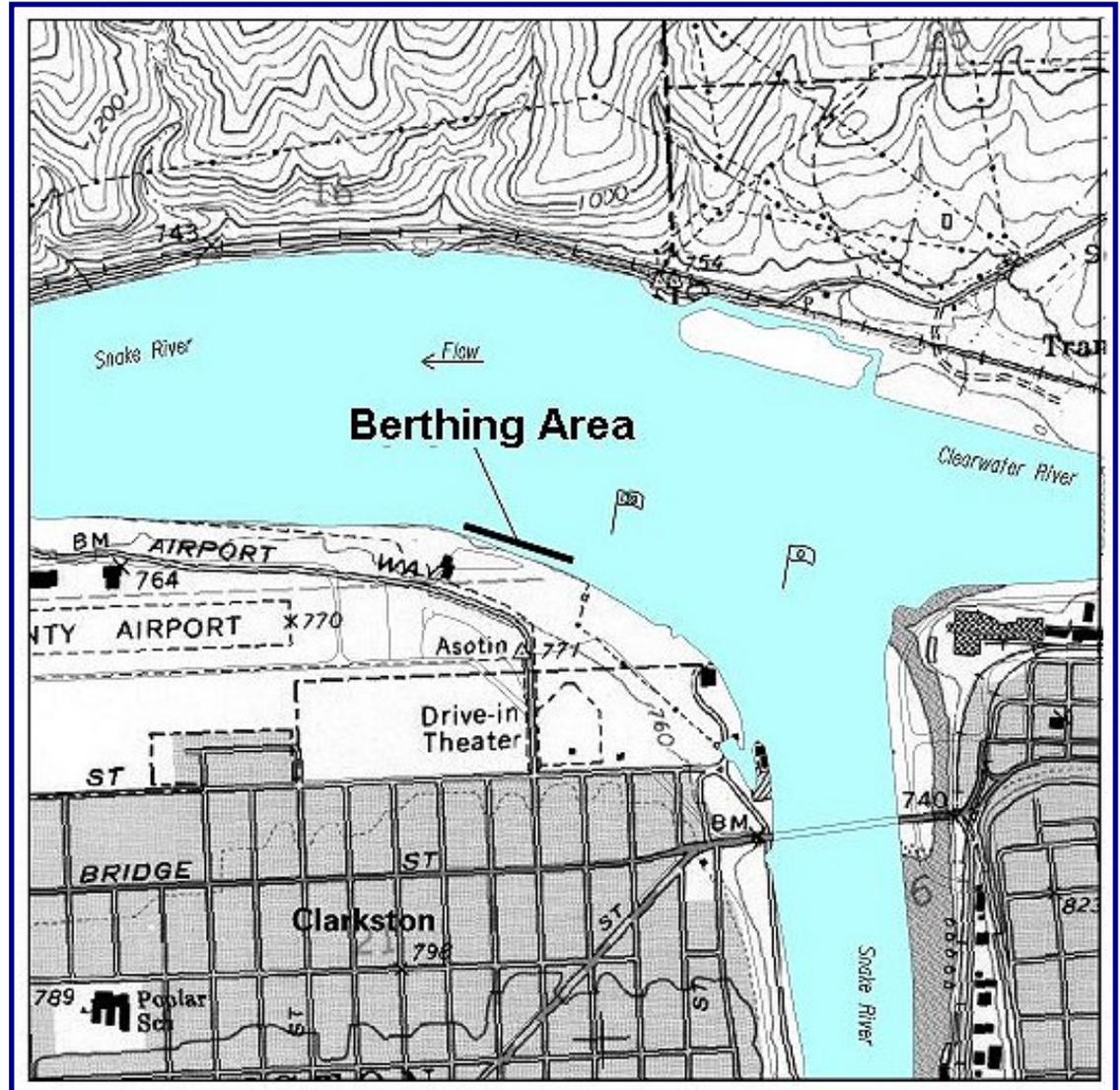


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Port of Clarkston Site



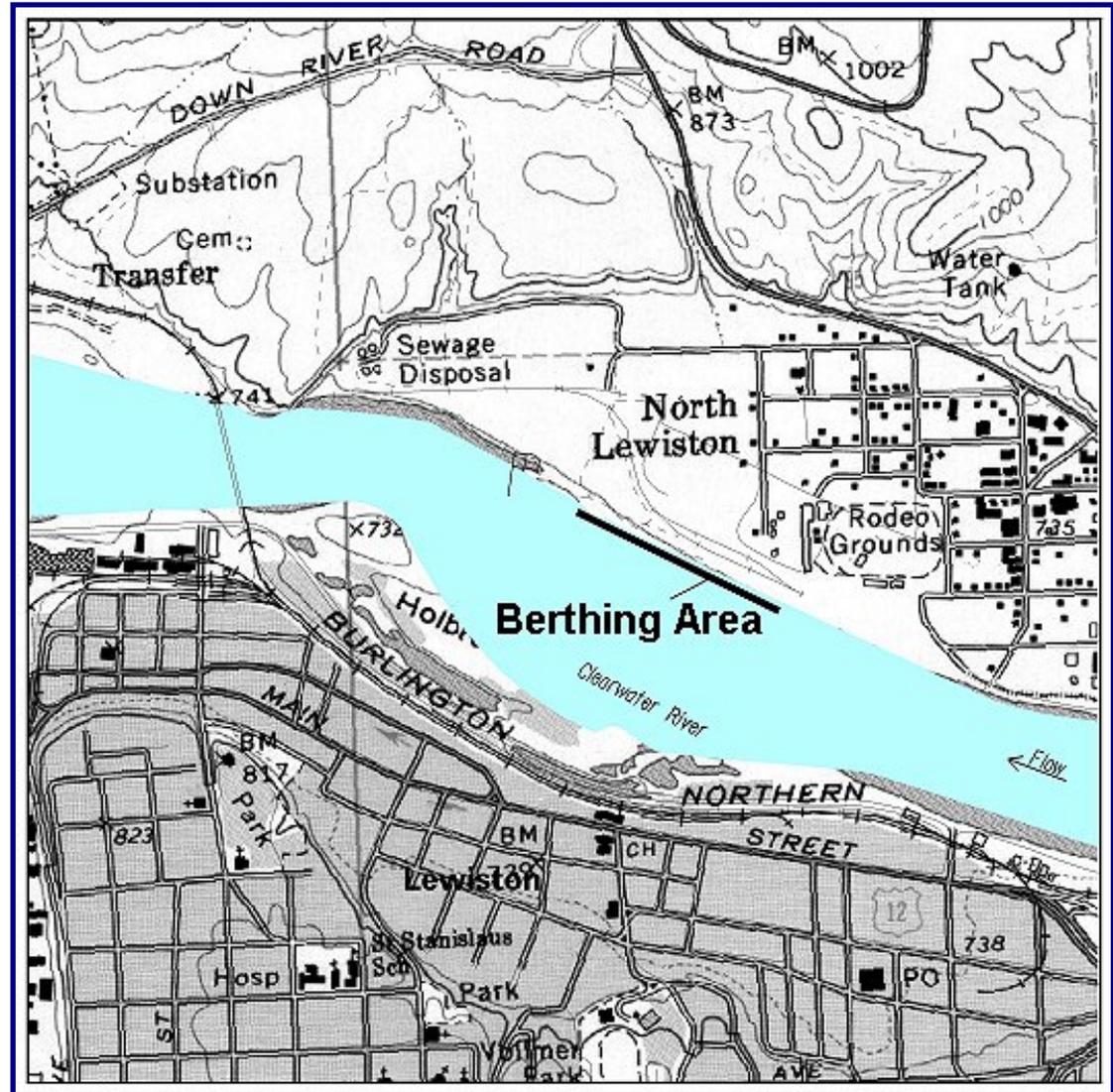


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Port of Lewiston Site



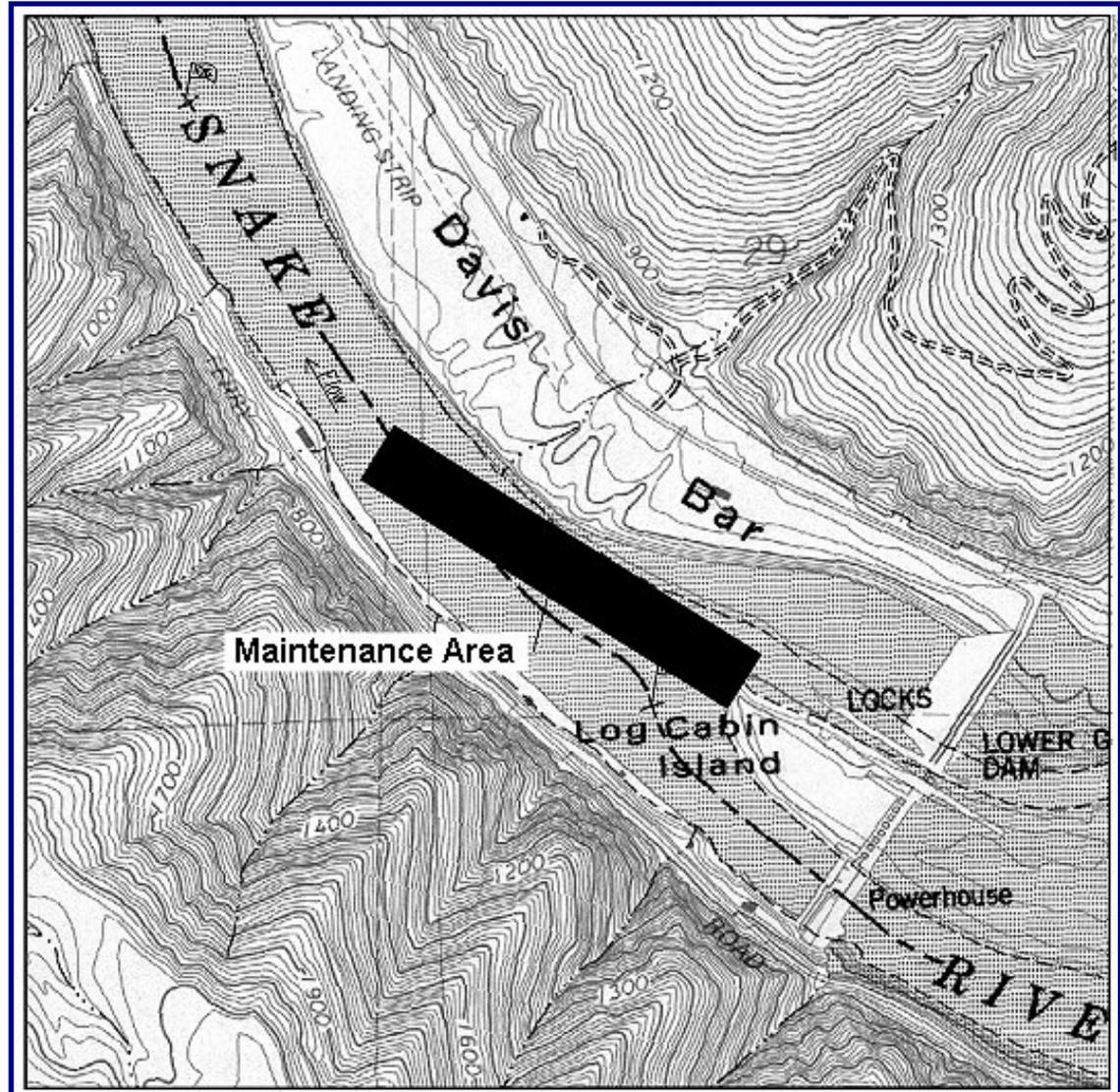


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Lower Granite Dam Navigation Lock Site



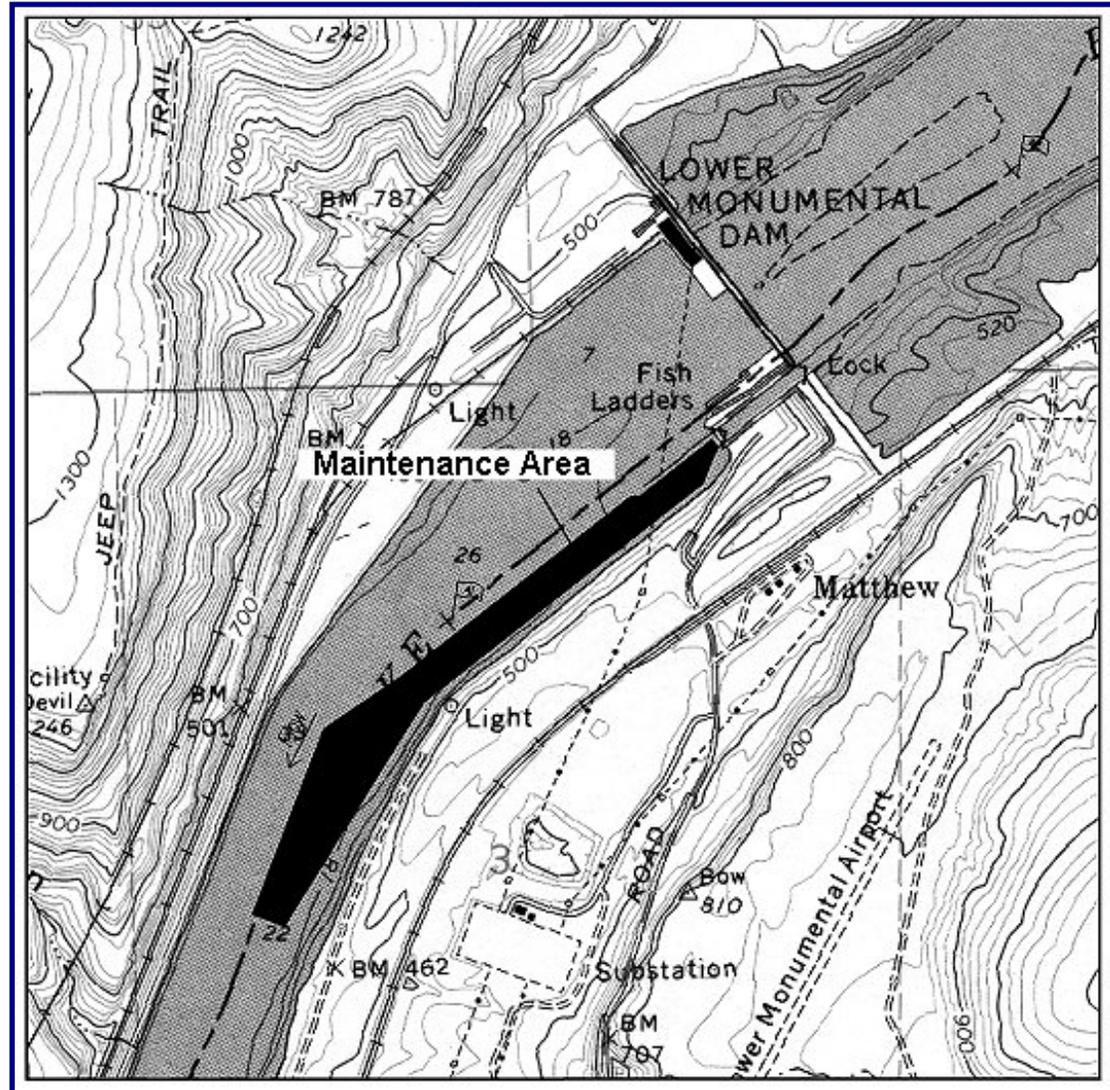


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Lower
Monumental
Dam Navigation
Lock Site





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Initial Alternatives Considered

- No Action
- Sediment Reduction
- Maintenance Dredging with Beneficial Use of Dredged Material
- Maintenance Dredging with Traditional In-water Disposal



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Initial Alternatives Considered (cont'd)

- Navigation Objective Reservoir Operation
- Navigation Objective Reservoir Operation With High-spot Dredging
- Drawdown/Sediment Flushing
- Drawdown/Sediment Flushing & Dredging



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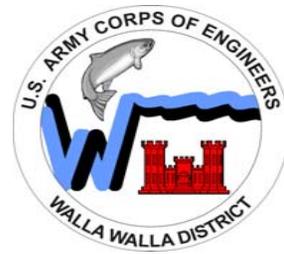
Screening Criteria

- Must be implementable within near future following spring 2005 runoff.
- Must provide results/benefits immediately following implementation.
- Must provide 14-foot depth throughout the designated navigation channel & restore access to selected port berthing areas.



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Alternatives Evaluated Further

1. No Action
2. Maintenance Dredging with Beneficial Use of Dredged Material
3. Maintenance Dredging with Traditional In-water Disposal
4. Navigation Objective Reservoir Operation with High-spot Dredging
5. Drawdown/Sediment Flushing & Dredging



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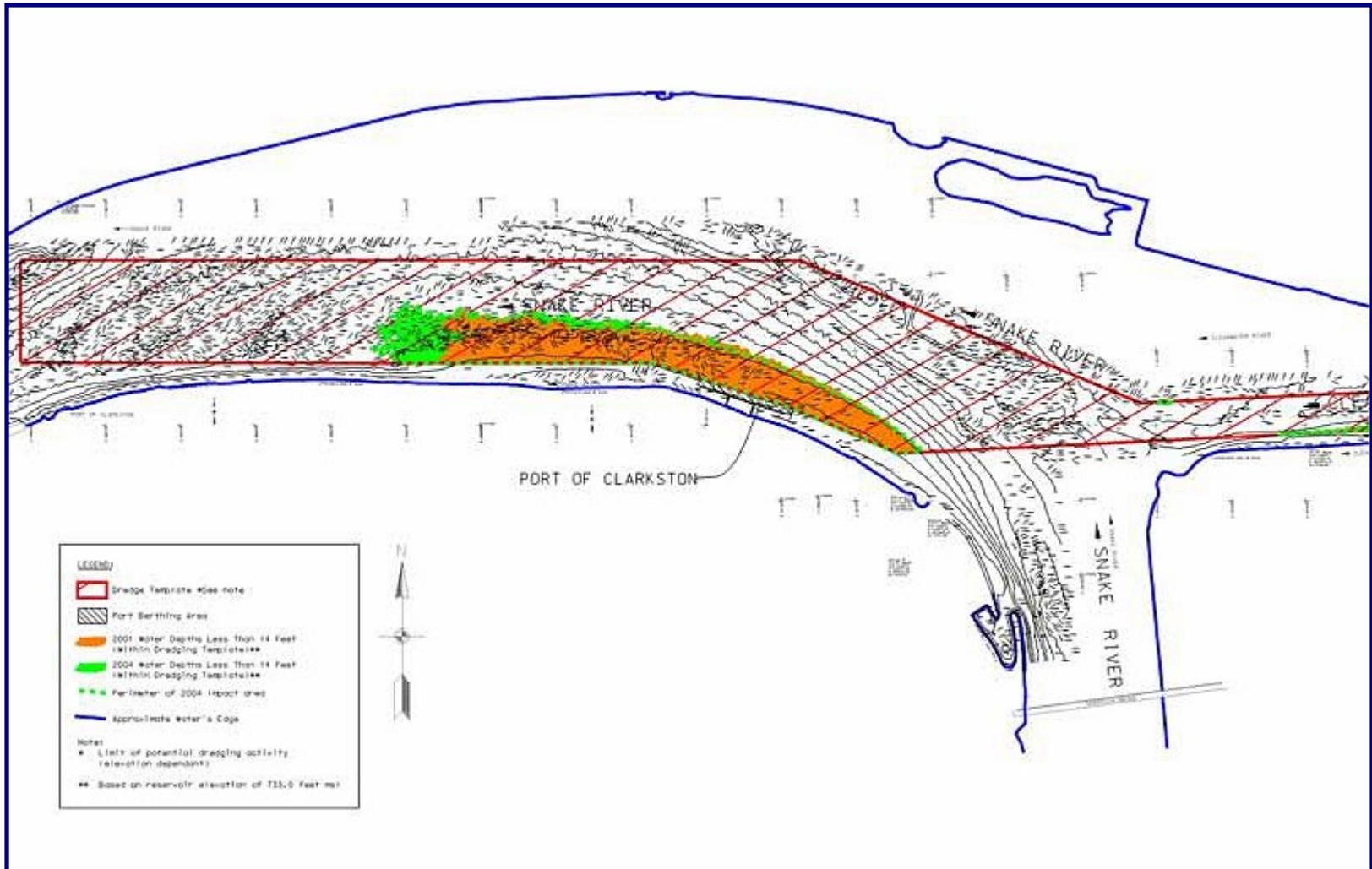
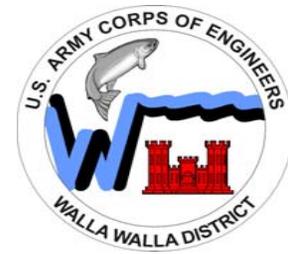
1. No Action Features

- No change from recent operations
- No maintenance of channel or port facilities
- Potential for continued deviation from minimum operating pool during juvenile salmon outmigration



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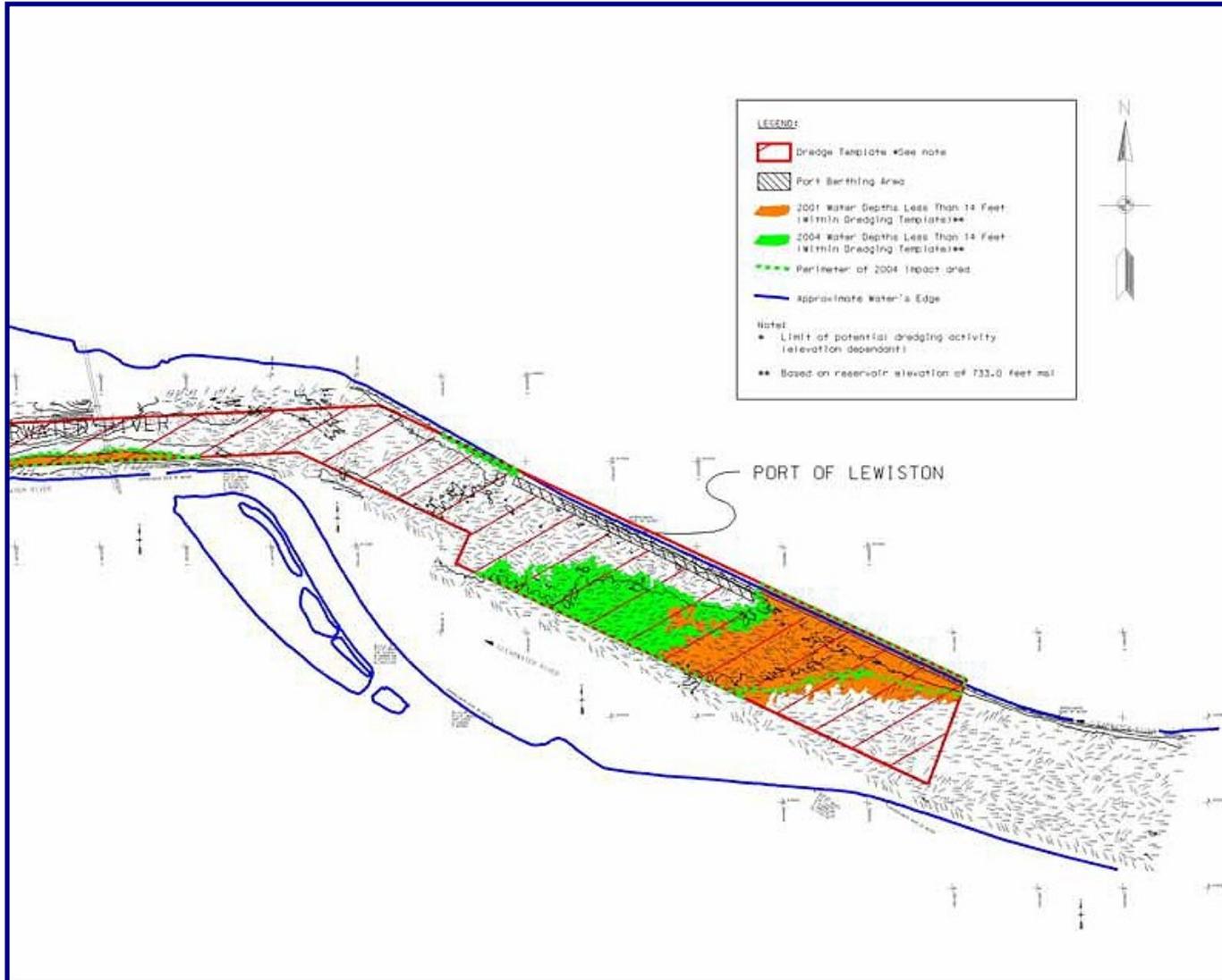
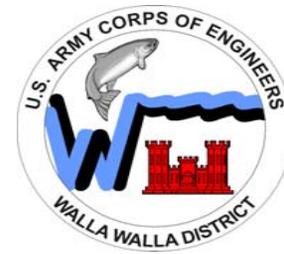
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1. No Action

Environmental Impacts

- Adverse effects to aquatic habitat from grounding of barges, potential spilling of cargo
- Shippers may light load, reducing economic efficiency
- Hinders long-term economic planning
- Potentially unsafe navigation conditions



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2. Maintenance Dredging with Beneficial Use of Dredged Material

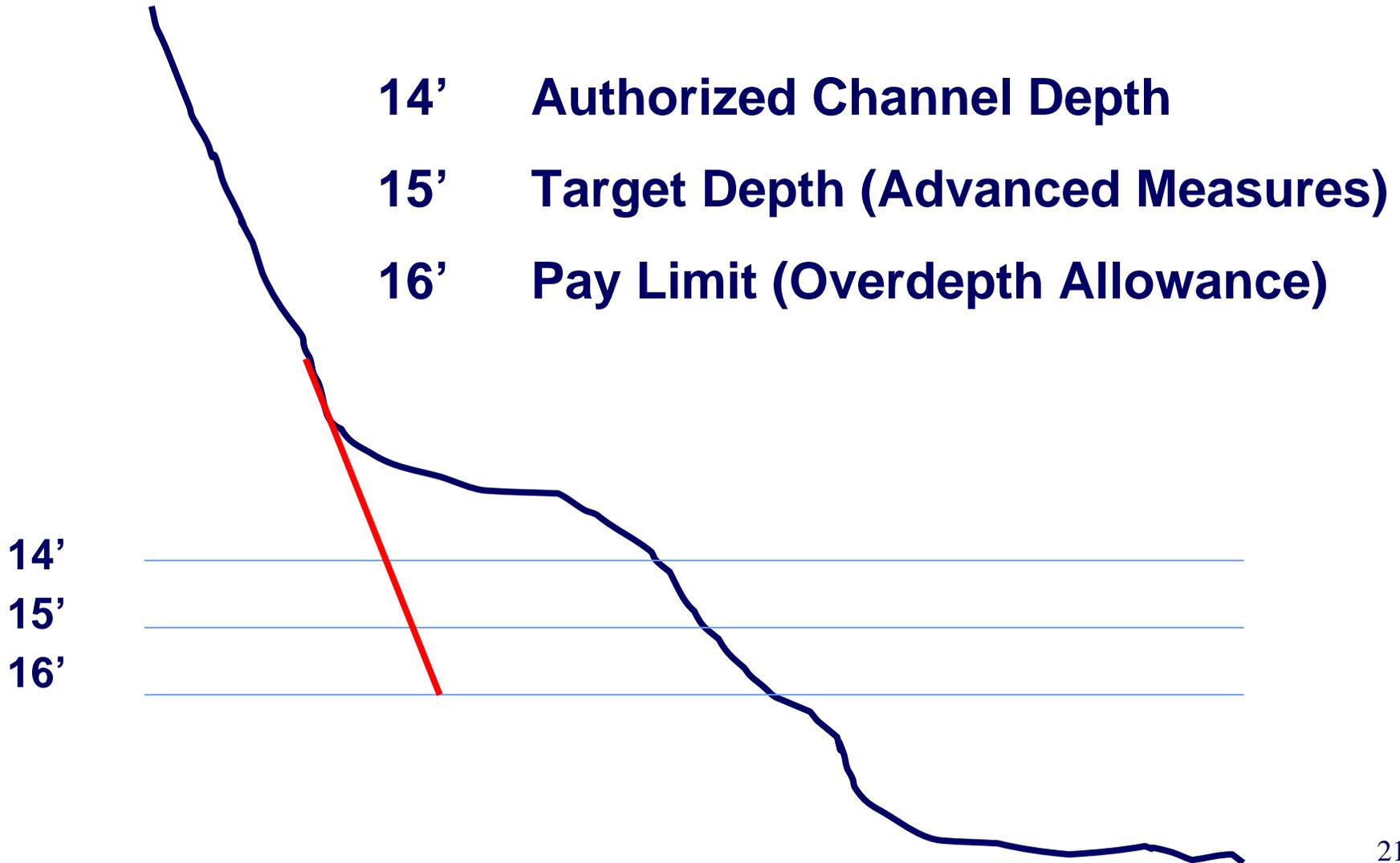
Features

- Dredge up to 450,000 cubic yards
- Dispose in-water at River Mile 116 to create higher quality resting/rearing habitat for juvenile salmon



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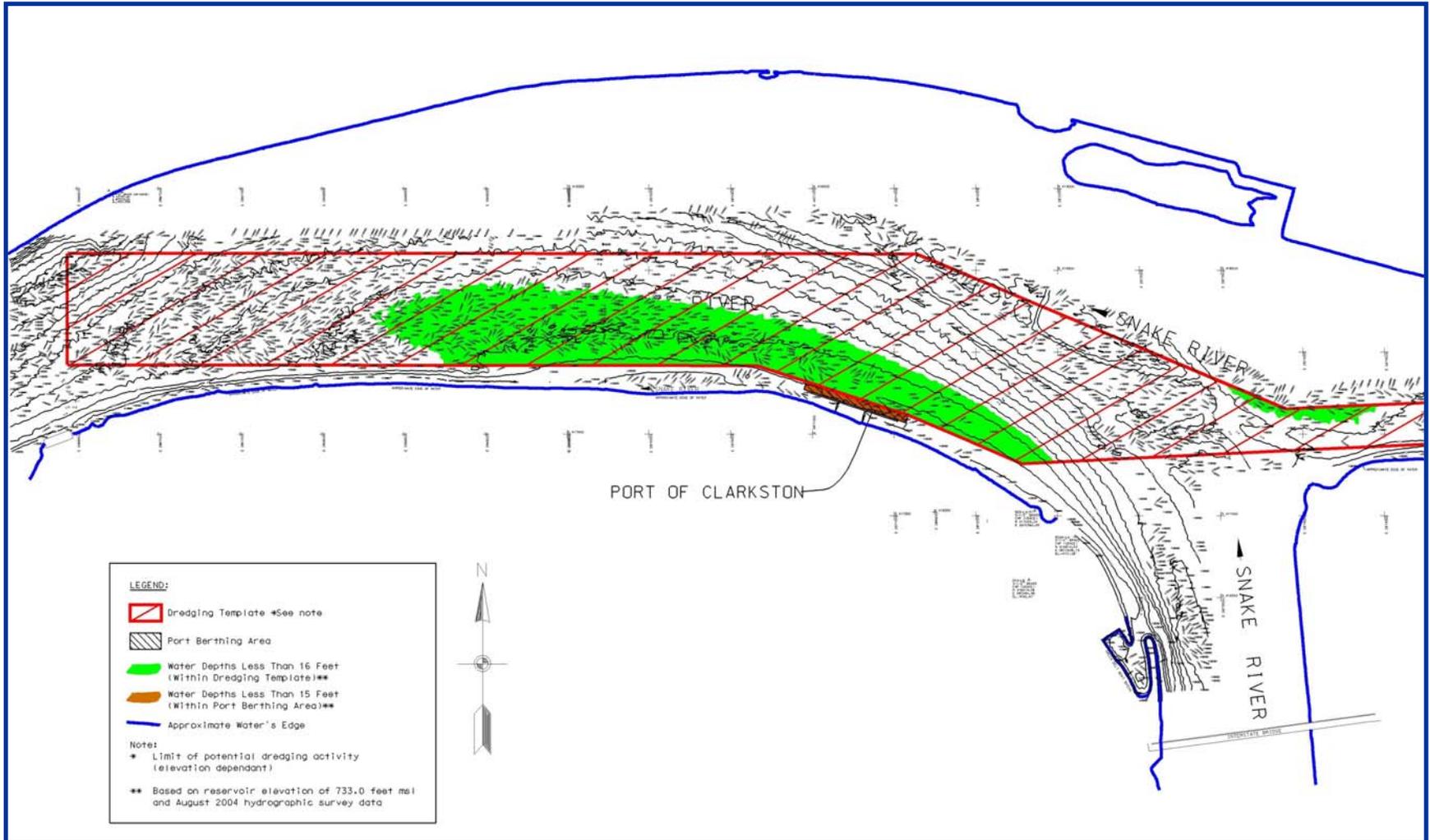
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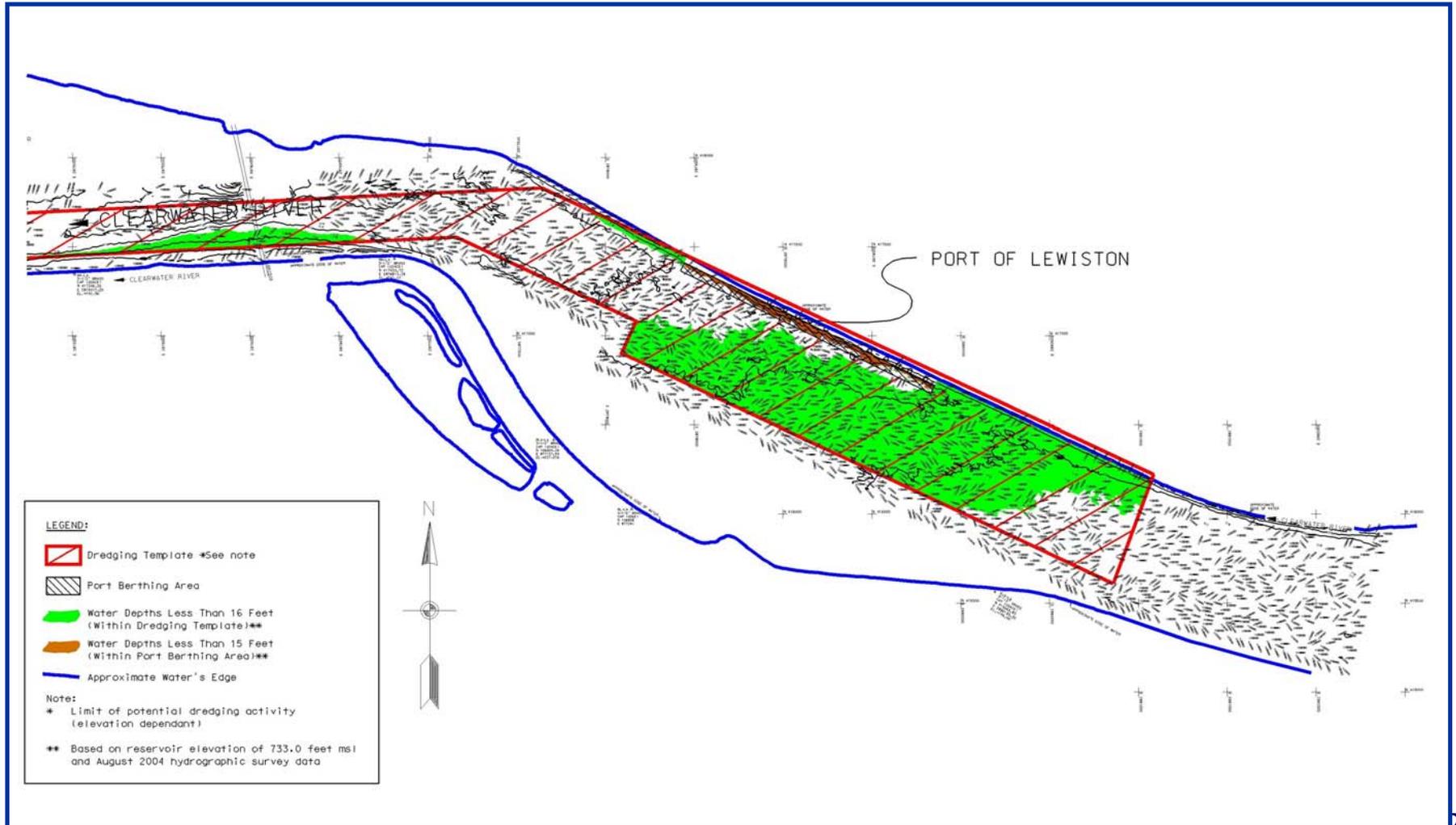
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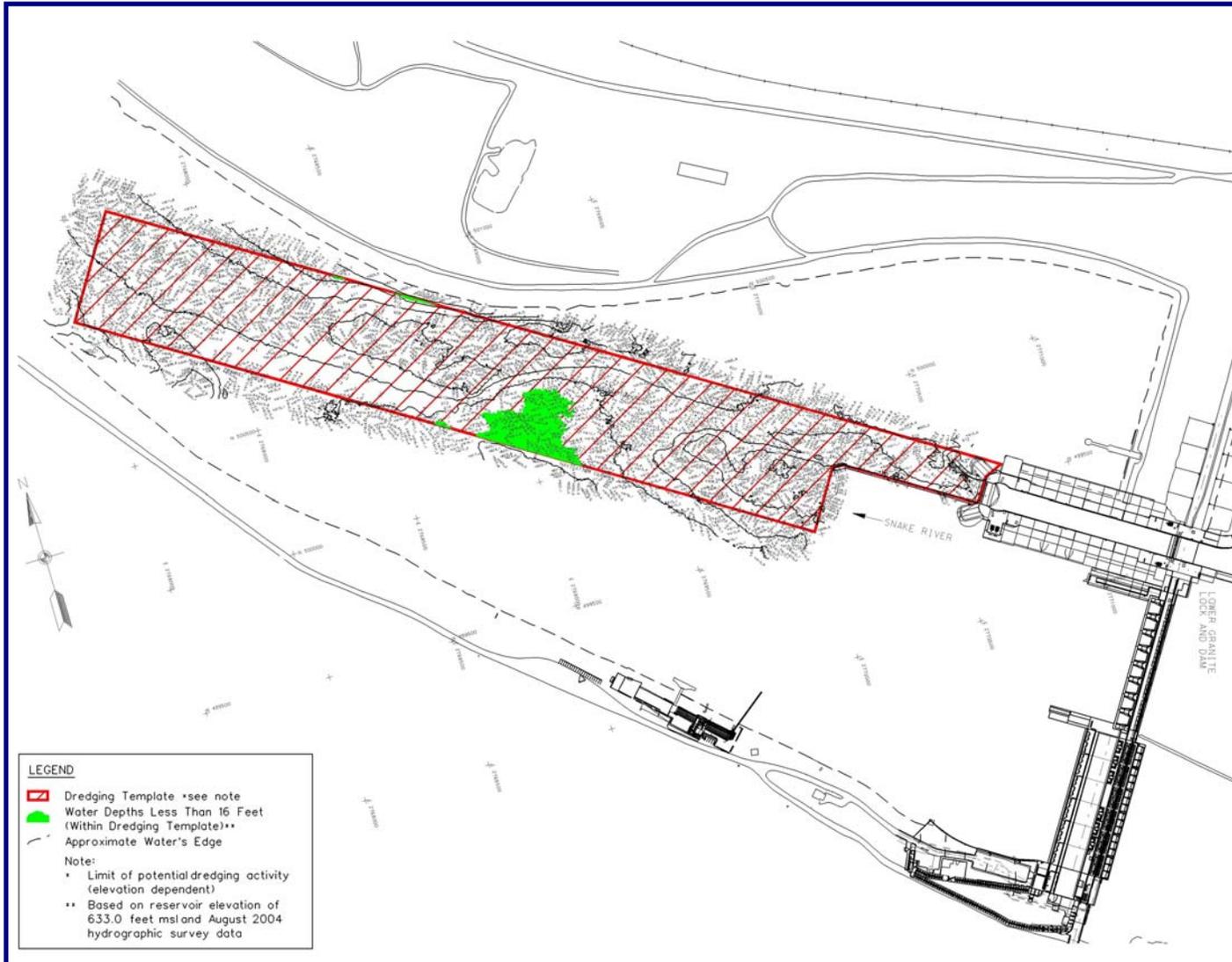
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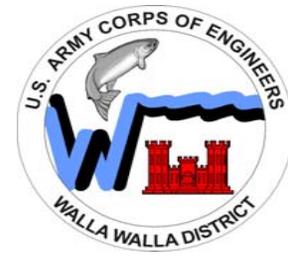
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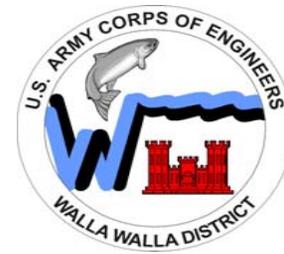
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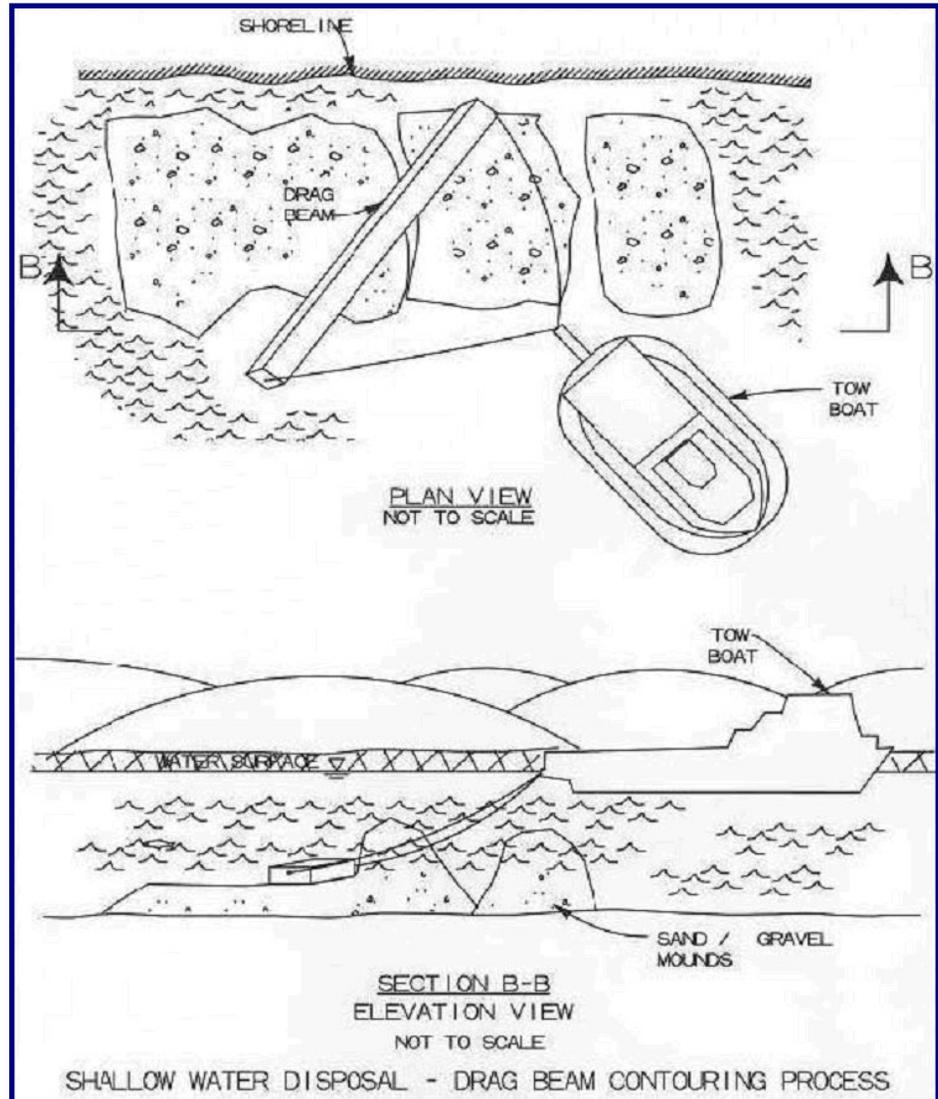


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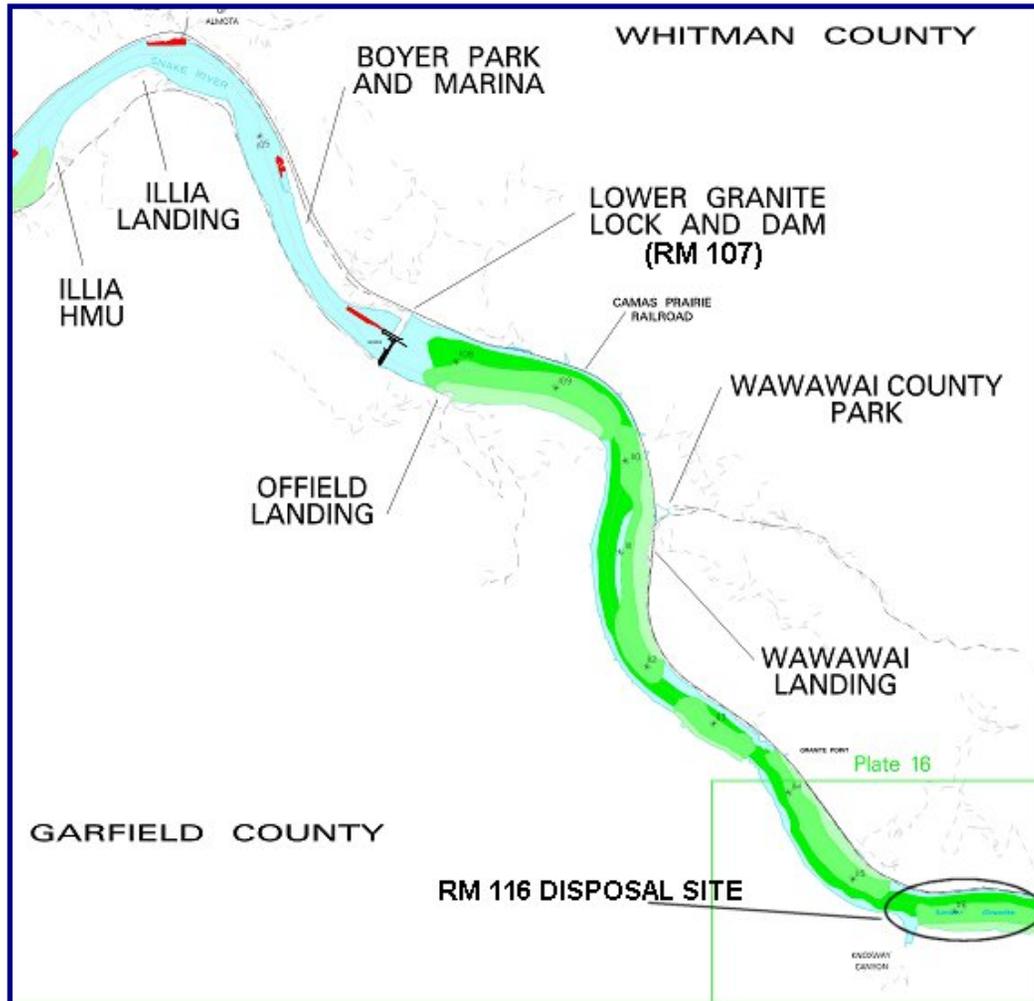
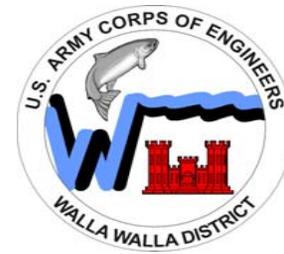
Smoothing the
Placed Sediment –
*the Drag Beam
Contouring Process*





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2. Maintenance Dredging with Beneficial Use of Dredged Material Environmental Impacts

- Adverse effect on fish habitat at dredging sites
- Would create about 3.7 acres of higher quality resting/rearing habitat for juvenile salmon
- Short-term adverse effects on water quality during dredging and disposal operation



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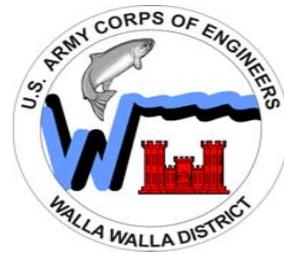
3. Maintenance Dredging with Traditional In-water Disposal Features

- Dredge up to 450,000 cubic yards
- Dispose in-water to create lesser-quality resting/rearing habitat for juvenile salmon

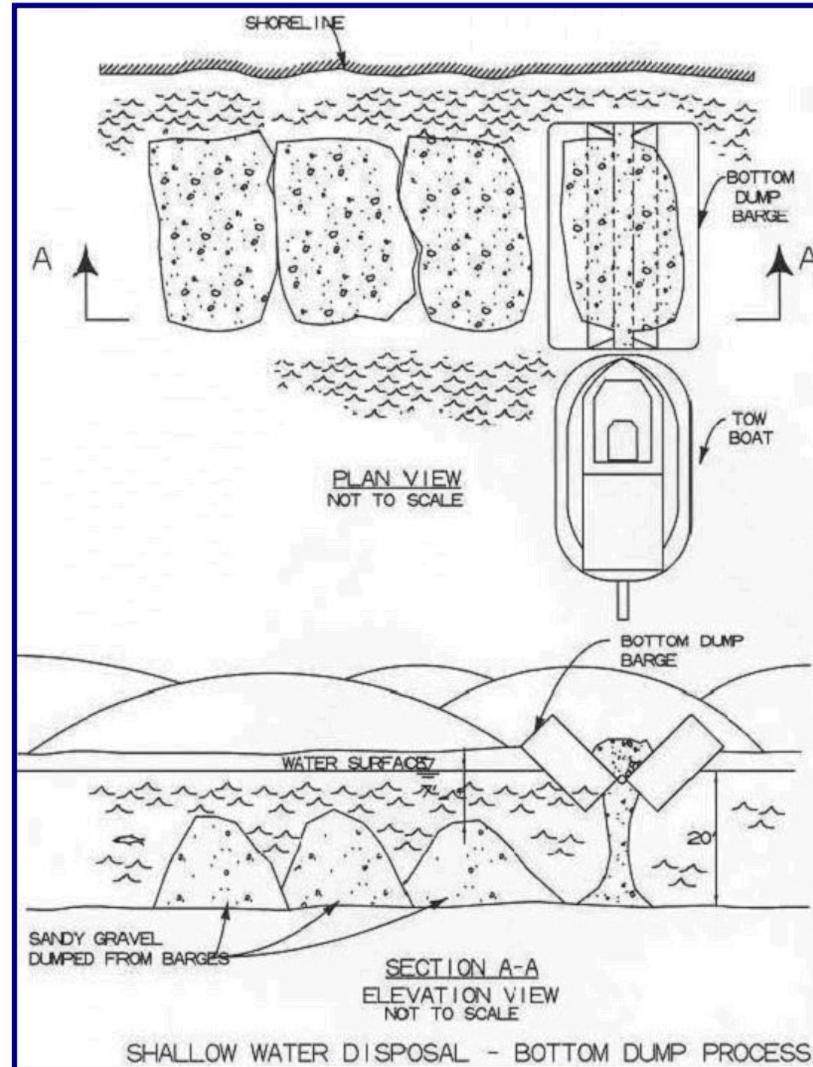


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Sediment Placement
using
Bottom Dump Barge
(no reshaping)





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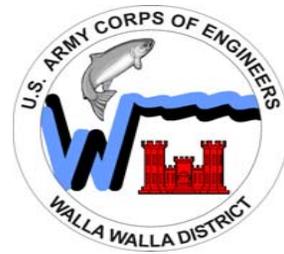
3. Maintenance Dredging with Traditional In-water Disposal Environmental Impacts

- Impacts of dredging similar to Alternative 2
- Would create about 16 acres of lesser quality resting/rearing habitat for juvenile salmon
- Impacts to water quality similar to Alternative 2



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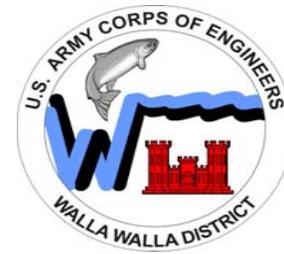
4. Navigation Objective Reservoir Operation/High-spot Dredging Features

- Operate pool elevation year-round to provide 14-foot depth in most areas
- Dredge remaining high spots (Lower Granite reservoir)
- Dispose in-water at River Mile 119 to create higher quality resting/rearing habitat juvenile salmon

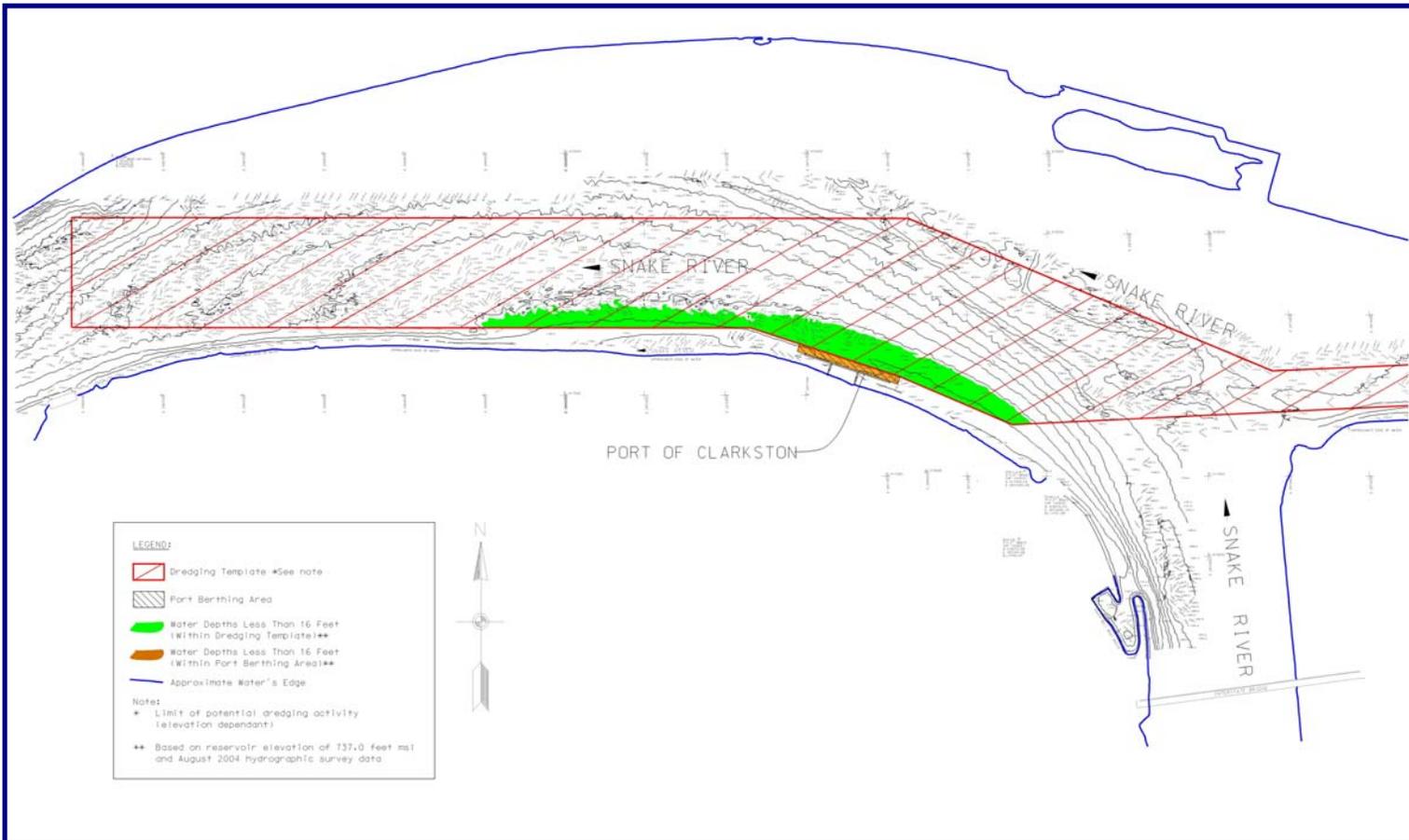


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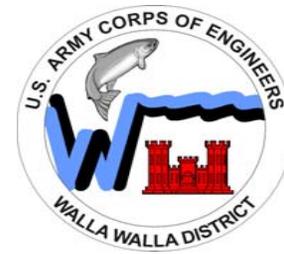


High Spots to be Dredged (Clarkston Area)

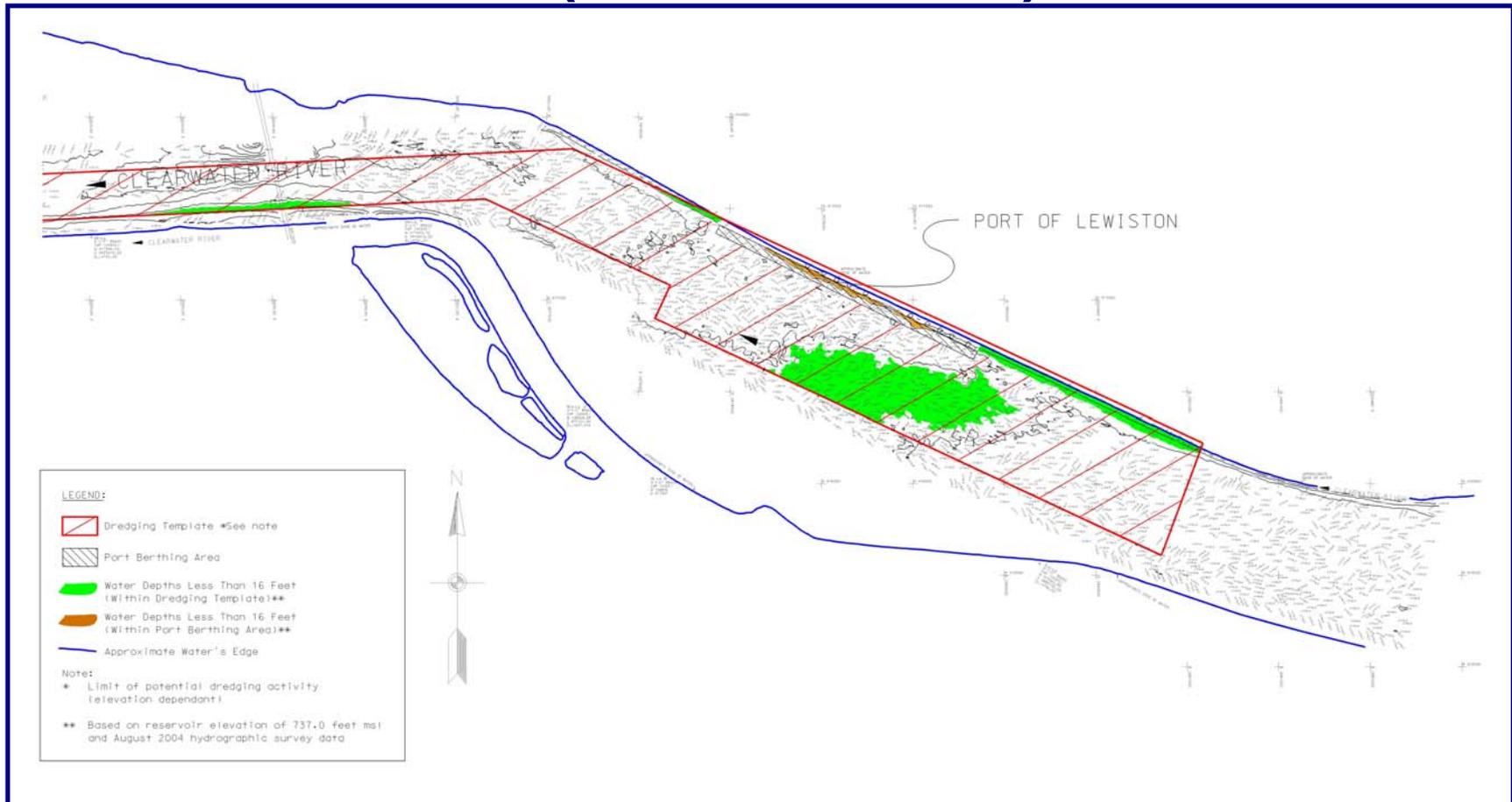




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High Spots to be Dredged (Lewiston Area)



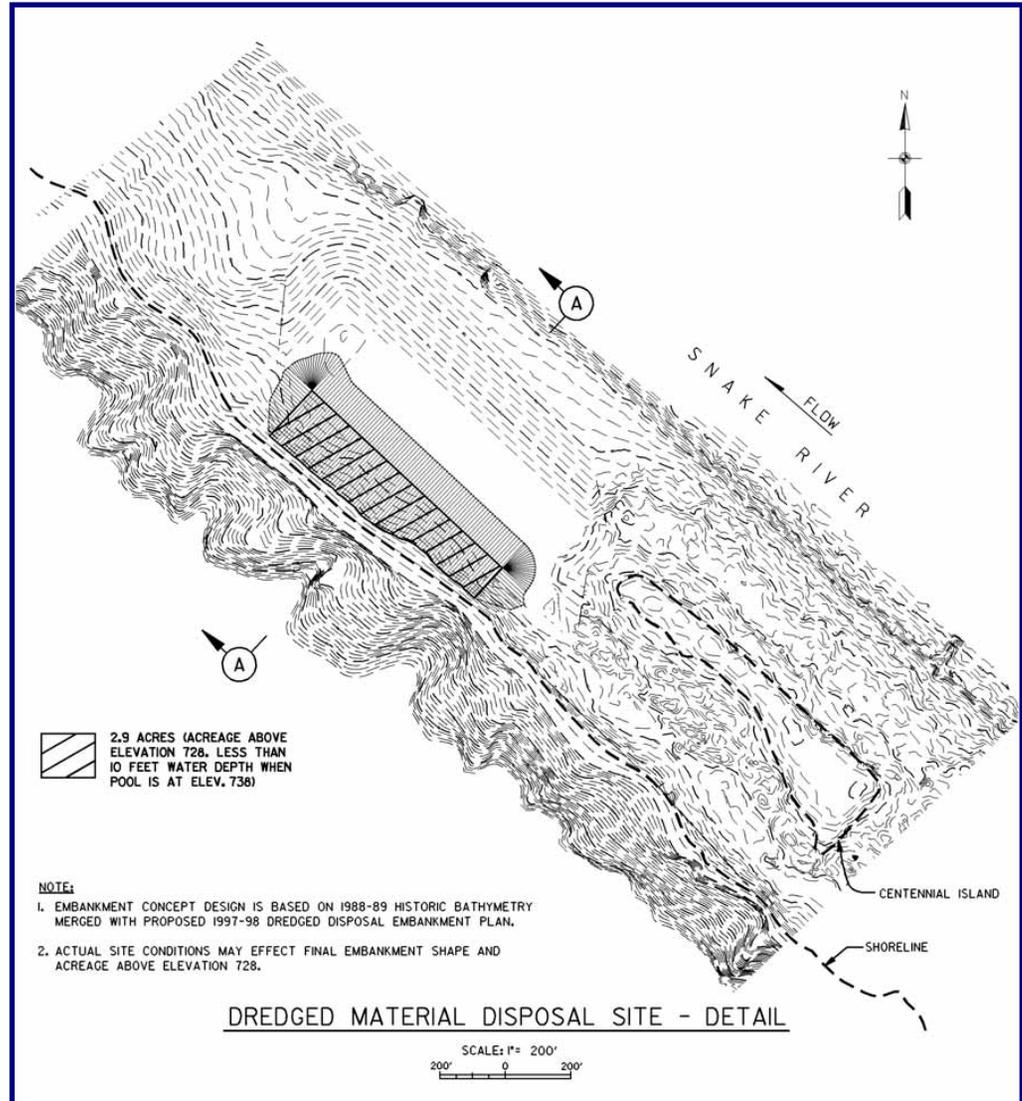


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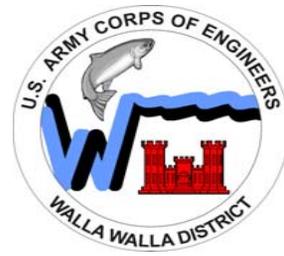
Disposal at Centennial Island (River Mile 119)





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4. Navigation Objective Reservoir Operation/High-spot Dredging Environmental Impacts

- May have minor adverse effect on juvenile salmon from operating above minimum operating pool during the outmigration season
- Would create about 2.9 acres of higher quality resting/rearing habitat for juvenile salmon
- Short-term adverse effects on water quality during dredging and disposal operations



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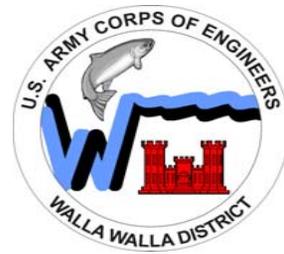
5. Drawdown/Sediment Flushing & Dredging Features

- Draw down Lower Granite reservoir in spring to flush sediment
- During the following winter in-water work window, dredge remaining high spots in confluence area, and navigation lock approaches
- Dispose in-water at River Mile 116 or 119 to create higher quality resting/rearing habitat for juvenile salmon



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5. Drawdown/Sediment Flushing & Dredging Environmental Impacts

- Adverse impacts to water quality during drawdown
- Adverse impacts to infrastructure from drawdown
- Shoreline erosion during drawdown
- Short-term adverse effects on water quality during dredging and disposal
- Could create 2 to 3 acres of higher quality resting/rearing habitat for juvenile salmon



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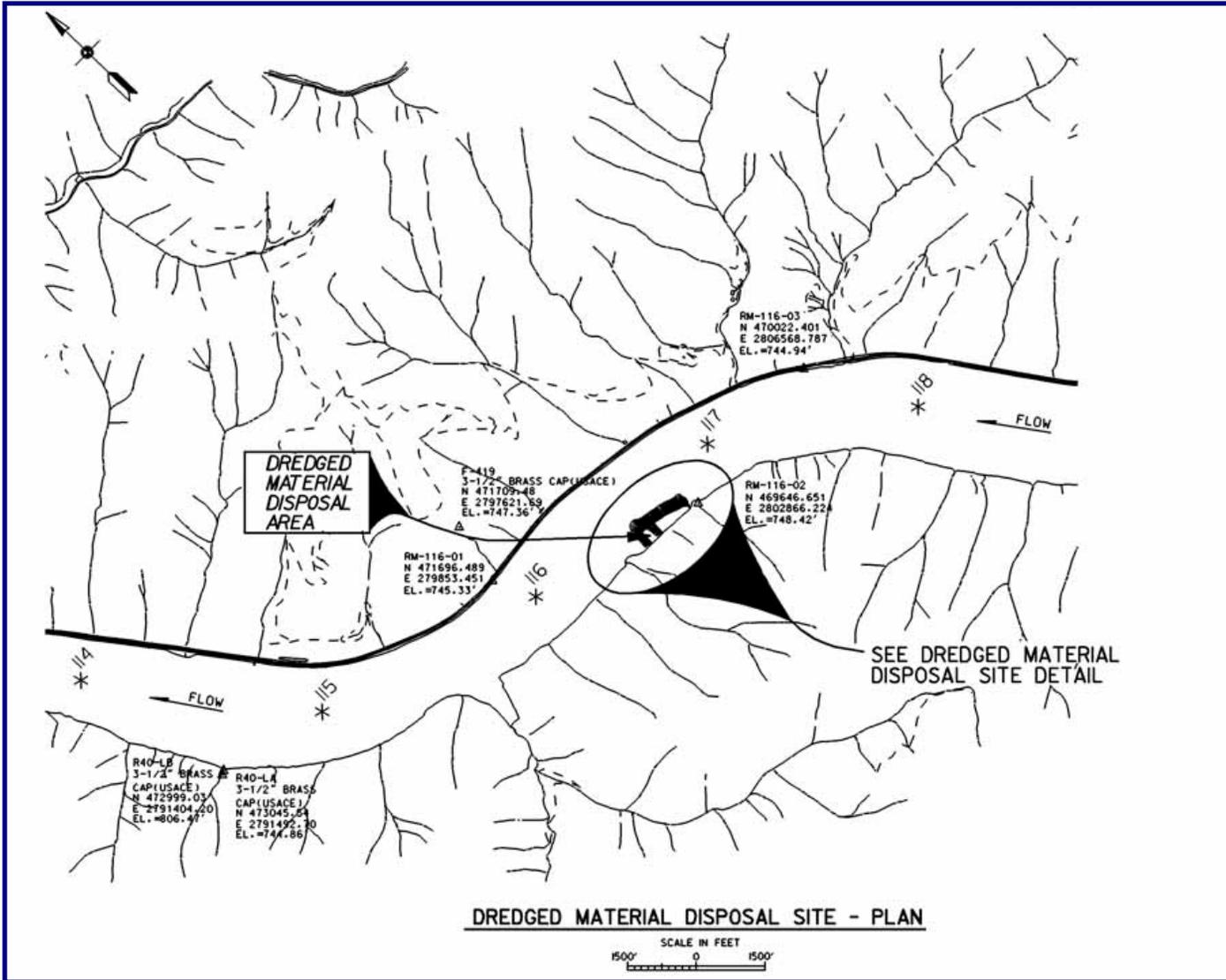
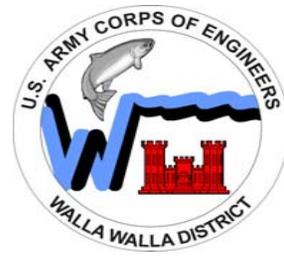
Preferred Alternative

2. Maintenance Dredging with Beneficial Use of Dredged Material



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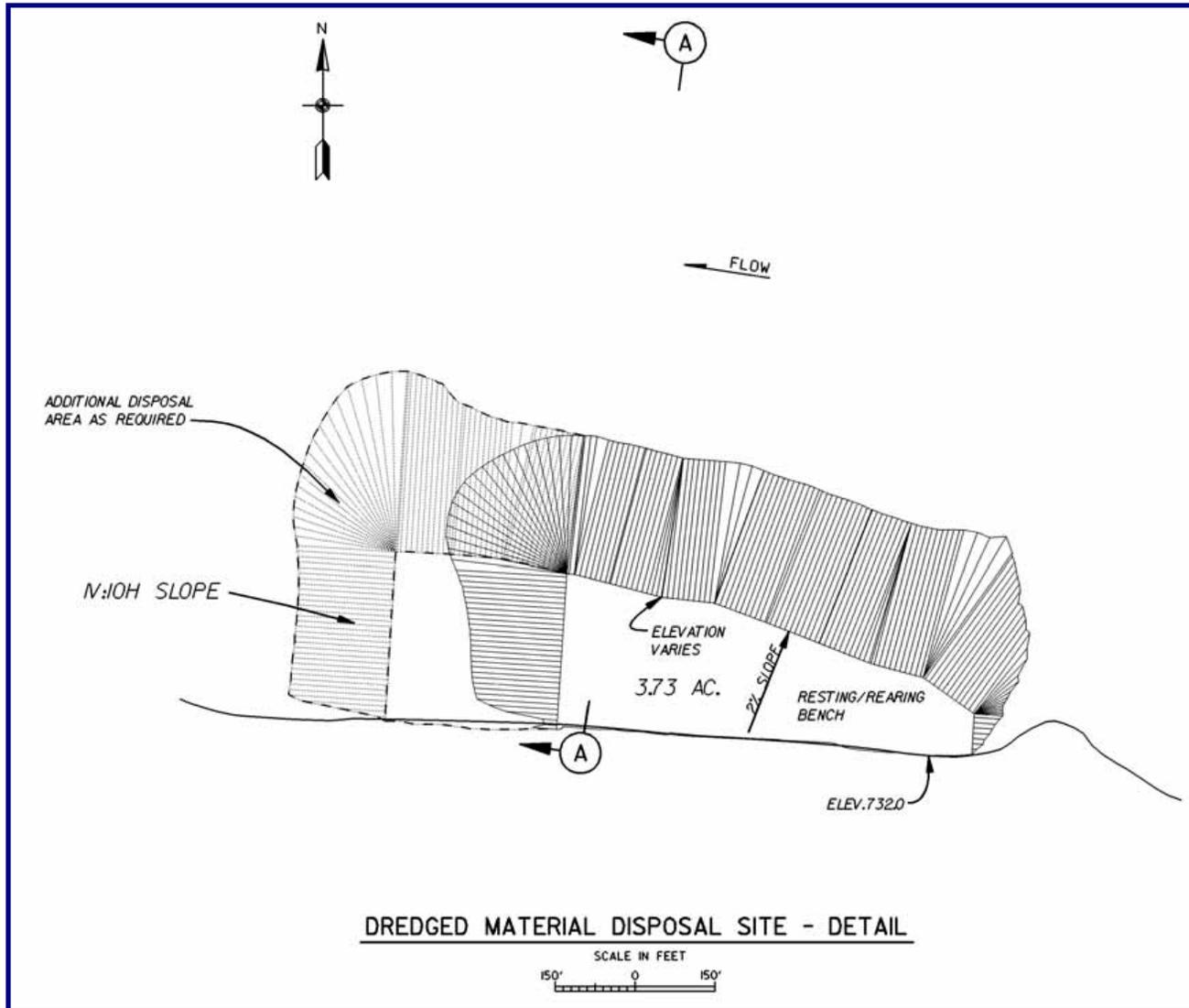
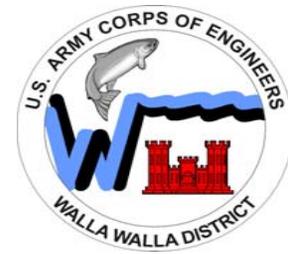
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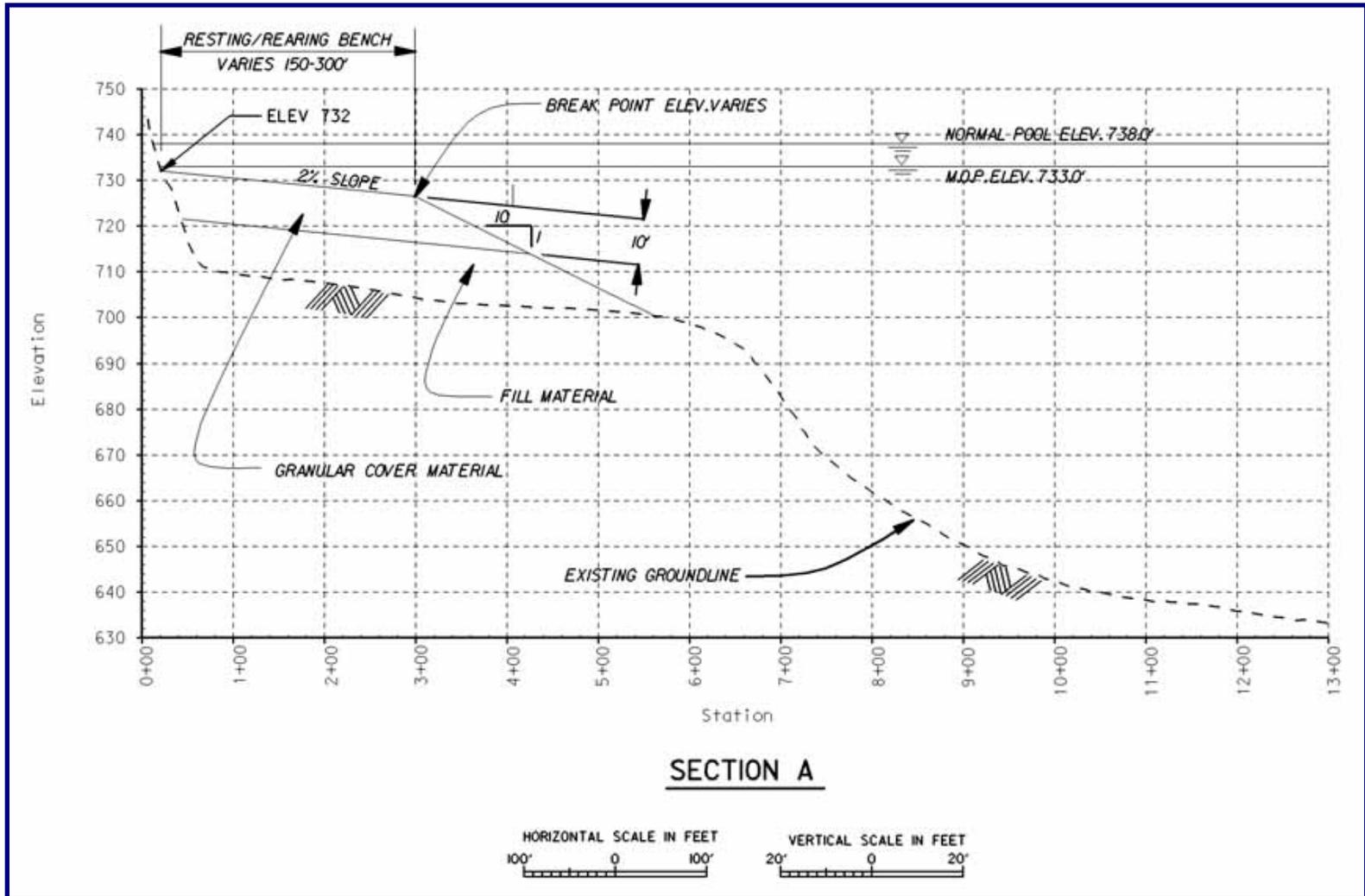
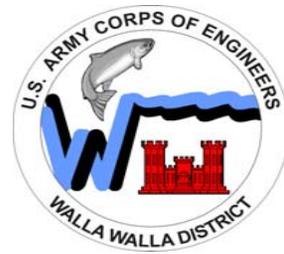
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Schedule

Notice of Intent	31 Jan 05
Draft EIS Notice of Availability	11 March 05
Public Hearing	25 April 05
End of comment period	25 April 05
Final EIS Notice of Availability	June 05
Record of Decision	July 05



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Questions

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