Spokane River
Geographic Response Plan - Update
Geographic Response Plans

- More than just Oil Spill Response Strategies
- Designed for the initial/emergency phase of a response but contain information that can be used throughout a response
- 27 such plans in the Northwest, including 19 in Washington State
- Number of plans will grow!
Spokane River GRP - Update

• Joint Effort between EPA, Washington, & Idaho

• First Update to plan, published in Feb 2006

• Workshop & Public Meeting in Spokane in June 2009

• Field Work: Summer 2009 to Spring 2010
Draft Updated Spokane River GRP

- Made available for Public Comment on May 15th
- Comments will be compiled at the end of this month
- Final Plan will hopefully be released by mid-July along with a responsiveness summary for comments submitted but not incorporated into the final version of the plan
Spokane River GRP

Provides coverage of the greater Spokane River subbasin, downstream of the Post Falls Dam in Idaho, through and beyond the city of Spokane, to the Spokane arm of Lake Roosevelt

- 76 miles of the Spokane River
- Over 7 miles of Spring Creek
- 1/2 mile of Chamokane Creek (aka Tshimikain Creek)
- 21 miles of the Little Spokane River
- 1/4 mile of Dartford Creek,
- 1/4 mile of Dragoon Creek
- 5 miles of Marshall Creek
- Over 7 miles of Latah Creek (aka Hangman Creek)
About the Spokane River GRP
Spokane River GRP - Update

Currently Published Version: February 2006, 175 Pages

Existing Plan Chapters & Appendices:

- Chapter 1 – Introduction
- Chapter 2 – Site Description
- Chapter 3 – Reference Maps
- Chapter 4 – General Protection/Collection Strategies
- Chapter 5 – Shoreline Countermeasures
- Chapter 6 – Sensitive Resource/Wildlife Flight Restriction Information
- Chapter 7 – Logistical Information
- Appendix A – Protection Techniques
- Appendix B – Geographic Response Plan Contributors
- Appendix C – Geographic Response Plan Comments/Corrections/Suggestions
Spokane River GRP - Update

Draft Updated Version: May 2011, 250 Pages

Updated Plan Chapters & Appendices:
• Chapter 1 - Introduction
• Chapter 2 - Site Description
• Chapter 3 - Reserved
• Chapter 4 - Response Strategies & Priorities (& Appendices 4A, 4B, & 4C)
• Chapter 5 - Shoreline Information
• Chapter 6 - Resources at Risk (& Appendix 6A)
• Chapter 7 - Logistical Information
• Appendix A - Protection Techniques
• Appendix B - GRP Contributors
• Appendix C - GRP Comments, Corrections, Suggestions
Page Count Comparison – Existing vs. Updated

- **GRP (Total)**
  - Old: 175
  - New: 250

- **Chapter 4**
  - Old: 126
  - New: 181

- **Other Chapters**
  - **Cover**: Old: 1, New: 2
  - **Contents**: Old: 2, New: 3
  - **Chapter 1**: Old: 4, New: 6
  - **Chapter 2**: Old: 3, New: 5
  - **Chapter 3**: Old: 2, New: 3
  - **Chapter 5**: Old: 5, New: 7
  - **Appendix A**: Old: 1, New: 2
  - **Appendix B**: Old: 1, New: 2
  - **Appendix C**: Old: 1, New: 2
  - **Blank Pages**: Old: 2, New: 3
Simple Rewrite

Movement away from “protection” type language that sets up unrealistic expectations of what the GRP and GRP strategies can & cannot do.
Chapter 2 – Site Description

Rewritten, Content Updated

• Site Description, Physical Features, Hydrology, Climate, Risk Assessment, and References updated, expanded, and rewritten.

• Hydrology of the area described by Water Resource Inventory Area rather than Rivers & Creeks alone

• Risk Assessment greatly expanded, and used to identify potential oil spill source points (Spill Origin Points)
Chapter 3 (Reserved)

- Chapter re-titled “Reserve”
- Reference Map in Chapter 3 relocated to Area Maps in Chapter 4
- Outdated Reference Maps in Chapter 3 of many of the GRPs conflict with information in Chapter 4
- Better to have all area & sector maps in one Chapter
Chapter 4 – Response Strategies & Priorities

- **Existing Plan** - 52 Response Strategies
  26,750ft of boom

- **Updated Plan** - 58 Response Strategies
  26,550ft of boom

- 16 Response Strategies Added
  (including six dam notification strategies)

- 10 strategies were removed,

- 29 strategies changed in some way

- 13 strategies unchanged.
Chapter 4 – Response Strategies & Priorities

Rewritten & Reformatted

• Chapter Overview rewritten in a style similar to that found in the Outer Coast GRP.

• Area reference map in (old) Chapter 3 moved into section for Area Maps in (new) Chapter 4.

• Added area maps showing Dam, Response Strategy, Staging Area, Boat Launch, & Spill Origin Point Locations

• General response priorities added along with information on historical river velocity ranges

• Priority tables updated to reflect response priorities from locations at or near potential spill origin points, rather than priorities based on sector.
Chapter 4 – Response Strategies & Priorities

• Spill Origin Points derived from the risk assessment in Chapter 2
• Sector Maps are contained in a separate section rather than being intermingled with response strategy information
• Response matrices have their own section now; strategies listed in alpha-numeric order
• The “resources protected” heading in the matrices of the existing version has been changed to “resources at risk.”
• Detailed 2-Page strategy information provided in Appendix 4A
• Detailed 2-Page Staging Area information provided in Appendix 4B
• Detailed 2-Page Boat Launch information provided in Appendix 4C
Appendix 4A – Response Strategies

Spokane River

Site Lat/Long: N47 793255, W 117 53338

Strategy Objective: Deflection – Deflect oil moving downstream on the Spokane River away from river right

Implementation: On river right at Spokane House boat launch, secure end of 450ft length of boom to shore near downstream side of dock. Using workboat, tow remaining boom end downstream to mid-river and anchor in place. Ensure deflection angle is appropriate for stream flow/conditions - cascade boom configuration may be required. Use line & anchoring systems as needed to keep boom secure in river. Use anchor posts, existing structures, or trees to secure boom to bank.

Site Safety Note: Slippery banks when wet or icy; trip & fall hazards; uneven surfaces; parking lot/pedestrian hazards; water hazard.

Staging Area: Spokane House Parking Area (near 14400 N Shoemaker Lane, Nine Mile Falls, WA)

Field Notes: Notify Spokane County Fire Dispatch before implementation (509-465-5066 or 509-290-5239)

Resources Targeted: Downstream habitat; freshwater wildlife

Watercourse Description: River below a dam - Spokane River - Width 550ft - Depth (no information)

Suggested Equipment

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 ft</td>
<td>1/2&quot; all-braded propylene line with safety clips</td>
</tr>
<tr>
<td>450 ft</td>
<td>B3 – River Boom, or other appropriate type (9 x 50 ft)</td>
</tr>
<tr>
<td>1 each</td>
<td>Workboat</td>
</tr>
<tr>
<td>1 each</td>
<td>Shore-side anchoring post</td>
</tr>
<tr>
<td>1 each</td>
<td>Post driver</td>
</tr>
<tr>
<td>5 each</td>
<td>Anchor systems (anchor, lines, floats)</td>
</tr>
<tr>
<td>1 each</td>
<td>Towing braid (appropriately sized for boom)</td>
</tr>
</tbody>
</table>

Suggested Personnel

1. Supervisor
2. Laborers
3. Boat Operator

Status: Visited and Not Tested 10/2005

Driving Directions:
- Take Exit 281 on Interstate 90 in Spokane
- Travel North on Division Street (Hwy 2/Hwy 395) - (Note 13’3” Height Restriction)
- After approximately 4.4 Miles turn left onto W Francis Avenue (Hwy 291)
- After 3.1 Miles stay right onto W 9 Mile Road (Hwy 291)
- After 6.8 Miles turn left onto N Shoemaker Lane
- After 0.4 Miles you have reached the Spokane House Boat Launch
- Stage in Parking Area – Ensure River Side Park Manager has been notified

Spokane River Geographic Response Plan
Appendix 4B – Staging Areas
Appendix 4C – Boat Launch Locations
Chapter 5 – Shoreline Countermeasures

Simple Changes

Countermeasures Matrices for oils provided in 2-page format so it is easier to select the matrix for a particular oil type and easier to read.
Chapter 6 – Resources at Risk

Rewritten & Reformatted

• Chapter includes summary information on Natural, Cultural, and Economic Resources at Risk (Sensitive Resources)

• Content of Chapter made more general in nature, consistent with purpose of GRPs, but detailed enough to support initial EU functions after UC established

• Appendix 6A provides listing of Economic Resources at Risk
Appendix 6A – Economic Resources at Risk

Spokane River Geographic Response Plan
Socio-Economic Resources at Risk

A. Critical Infrastructure

### A1 - Drinking Water Intakes

<table>
<thead>
<tr>
<th>Name</th>
<th>Location/Address</th>
<th>Lat/Long</th>
<th>Contact</th>
<th>Phone</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

### A2 - Energy/Power Generation Water Intakes [Lock & Dams Included]

<table>
<thead>
<tr>
<th>Name</th>
<th>Location/Address</th>
<th>Lat/Long</th>
<th>Contact</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Falls Dam</td>
<td>Spokane River (RM104.1), Post Falls, ID</td>
<td>47.706687, -116.9463382</td>
<td>Avista Utilities</td>
<td>(509) 434-4624</td>
</tr>
<tr>
<td>Upper Falls Dam</td>
<td>Spokane River (RME0.2), Spokane, WA</td>
<td>47.691763, -117.3288000</td>
<td>City of Spokane</td>
<td>(509) 627-7600</td>
</tr>
<tr>
<td>Upper Falls Dam</td>
<td>Spokane River (RME0), Spokane, WA</td>
<td>47.662728, -117.415041</td>
<td>Avista Utilities</td>
<td>(509) 434-4624</td>
</tr>
<tr>
<td>Monroe Street Dam</td>
<td>Spokane River (RM4), Spokane, WA</td>
<td>47.661605, -117.420388</td>
<td>AVSE Utilities</td>
<td>(509) 434-4624</td>
</tr>
<tr>
<td>Nine Mile Falls Dam</td>
<td>Spokane River (RM51B), Deer Park, WA</td>
<td>47.774406, -117.3437176</td>
<td>Avista Utilities</td>
<td>(509) 434-4624</td>
</tr>
<tr>
<td>Long Lake Dam</td>
<td>Spokane River (RM31), Tumtum, WA</td>
<td>47.837185, -117.339162</td>
<td>Avista Utilities</td>
<td>(509) 434-4624</td>
</tr>
<tr>
<td>Little Falls Dam</td>
<td>Spokane River (RM30), Spokane Reservation, WA</td>
<td>47.839766, -117.018181</td>
<td>Avista Utilities</td>
<td>(509) 434-4624</td>
</tr>
</tbody>
</table>

### A3 - Federal or State Water Projects or Irrigation Channels for Agriculture

<table>
<thead>
<tr>
<th>Name</th>
<th>Location/Address</th>
<th>Lat/Long</th>
<th>Contact</th>
<th>Phone</th>
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</thead>
<tbody>
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</tbody>
</table>
Chapter 7 – Logistical Information

Rewritten & Reformatted

- Logistical Resource Categories Expanded

- Contact information in existing plan relocated, as appropriate, into Spill Response Contact Sheet near beginning of plan

- Additional information on logistical resources can be added to categories as it is discovered

- Update format and categories should make maintenance of chapter more manageable
Chapter 7 - Logistical Categories

- Aircraft Support - Helicopters & Fixed Wing
- Airports & Air Fields
- Ambulance Services (Air & Ground)
- Boat Cleaning Facilities
- Command Posts (Fixed & Mobile)
- Communications
- Cultural Resource Support
- Environmental & Conservation Organizations
- Fire Departments
- Food Services/Catering
- Hospitals & Medical Centers
- Hotels/Motels, Berthing Accommodations

- Marinas, Ports, Docks
- Military Bases/Installations
- Office Equipment Supply & Rental
- Oil Spill Response Contractors
- Outdoor Recreation Groups, Companies, & Organizations
- Park Facilities
- Rental Equipment - Industrial/Commercial
- Response Equipment Cache Locations
- River Guides
- Security Services
- Support Personnel - Local/Emergency
- Tribal Resources
- Transportation
- Wildlife Rehab Facilities & Cleaning
Appendix A – Protection Techniques

No Significant Changes

• Re-typed & touched up, but no substantial changes were made to text or format
Appendix B – Original Contributors

No Significant Changes

- Re-typed but no substantial changes were made to text or format
Appendix C – Comments/Corrections/Suggestions

No Significant Changes

- Re-typed and Comment Form re-crafted, but no substantial changes were made to text or format
- Use of RRT/NWAC comment page promoted
Draft Updated Spokane River GRP

- Comments will be compiled at the end of this month
- Final Plan will hopefully be released by mid-July
- Responsiveness Summary will be provided for comments submitted but not incorporated into the final version of the plan
- The draft plan is posted on Ecology’s Web Site at: http://www.ecy.wa.gov/programs/spills/preparedness/GRP/Spokane.html
GRP Work Continues...

Active Ecology GRP Projects and Priorities
• Lower Columbia River GRP Update
• Grays Harbor GRP Update
• Skykomish portion of WRIA 7
• Ecology’s GRP Database Upgrade by ESRI

Upcoming Ecology GRP Projects
• Middle Columbia River GRP Update
• Snohomish portion of WRIA 7
• Update of all GRP Chapters not recently updated
• Creation of Addendum to Chapter 4
Ecology GRP Contacts...

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Thank You!