Strategy Number 1 Wildish Bridge Area



Response Objectives:

- Protection
- Collection

Critical Resources to be Protected:

• Western Pond Turtle habitat in side channels near boom placement area.

Location:

- Wildish Bridge area is located north of Eugene approximately 0.75 miles north of Wildish sand & gravel operations.
- 44° 07' 02"N / 123° 04' 37"W
- USGS River Mile 5.0; Measured River Mile 1.4

Description of Response Tactics:

• Deploy 200 feet and 450 feet of 4x6 solid containment boom across side channel inlets on south bank of river to protect Western Pond Turtle habitat from spilled product.

- Deploy 950 feet of 4x6 solid containment boom (approximately 2,000 feet down river of protection boom) at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

- Closest river access points are Armitage State Park boat ramp on the south bank and the Coburg Access boat ramp on the north bank located 1.7 miles up river or east of the boom placement area (USGS river mile 7.2 or measured river mile 3.1). These boat ramps are large and well maintained.
- The north bank can be easily accessed from a dirt road that leads to the north side of the river (Take Coburg Road north of the town of Coburg and head south on Coburg Bottom Loop, continue straight on Funke Road and near end of Funke Road head west on a dirt road for access to one boom placement area or head straight to access the north bank farther east).
- Access to the south bank can be achieved behind the sand and gravel operations.

Staging Areas:

- Armitage State Park and the McKenzie Watershed Council office at Armitage Park is a good equipment staging area with ample space for equipment, boat ramps, parking, electricity, water, and restrooms. Armitage State Park is 1.7 miles from boom placement area via boat and 1.9 miles via vehicle (Locke Road to Coburg Road and north to Armitage State Park).
- Closest equipment warehouse is Lane County Public Works and Lane County Sheriff's Office facilities at 3040 North Delta Highway (approximately 1.75 miles south of boom placement area).

Equipment Needs:

1,600 feet solid containment boom (w/4-5 tow bridles)

Boom Deployment Equipment and 9 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

500 feet sorbent boom (shoreline protection)

500 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection) and decon area

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

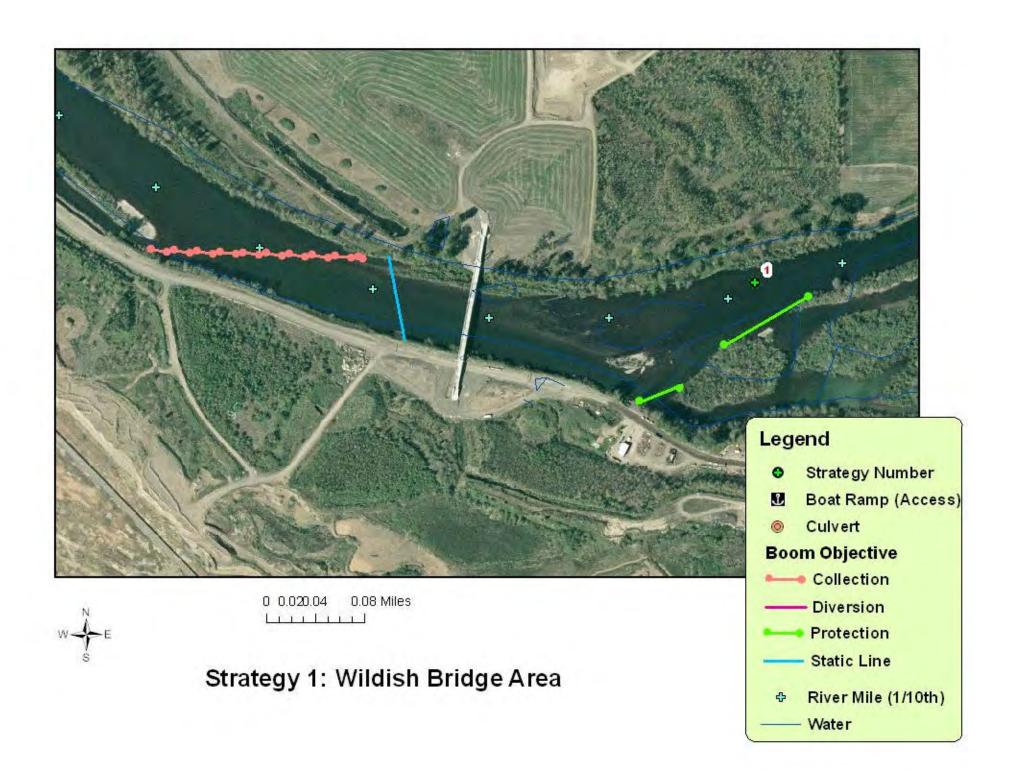
Pressure washer w/pump

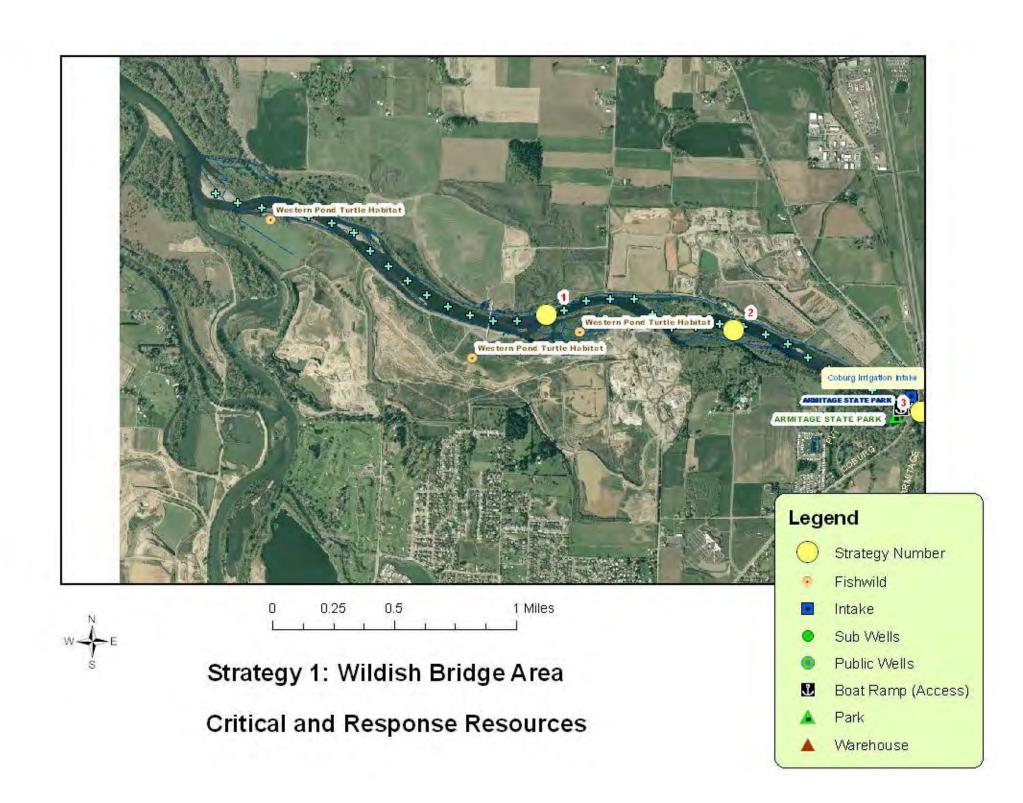
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

13,000 feet of Rope (3/8" poly rope)

- 1.4 m/sec during high flow
- No data on depth
- River width = 300-325 feet
- No data on river bottom material.





Strategy Number 2Sand and Gravel Quarry Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Western Pond Turtle habitat in side channels down river of boom placement area.

Location:

- The Sand and Gravel Quarry area is located north of Eugene approximately one mile at the end of Locke Road behind the sand and gravel operations.
- 44° 07' 00"N / 123° 03' 45"W
- USGS River Mile 6.1; Measured River Mile 2.3

Description of Response Tactics:

• Deploy 950 feet of 4x6 solid containment boom at an angled of 22-30 degrees SE from the spilled product collection and recovery area (north bank).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

Access Areas:

- Closest river access points are Armitage State Park boat ramp on the south bank and the Coburg Access boat ramp on the north bank located 0.8 miles up river or east of the boom placement area (USGS river mile 7.2 or measured river mile 3.1). These boat ramps are large and well maintained.
- The north bank can be easily accessed from an access road that parallels the river and leads to a farmhouse.
- Access to the south bank can be achieved behind the sand and gravel operations.

Staging Areas:

- Armitage State Park and the McKenzie Watershed Council office at Armitage Park is a good equipment staging area with ample space for equipment, boat ramps, parking, electricity, water, and restrooms. Armitage State Park is 0.8 miles from boom placement area via boat and 1.9 miles via vehicle (Locke Road to Coburg Road and north to Armitage State Park).
- Closest equipment warehouse is U.S. Bureau of Land Management (BLM) office at 2890 Chad Drive (approximately 2.1 miles south of boom placement area).

Equipment Needs:

950 feet solid containment boom (w/1-2 tow bridles)

Boom Deployment Equipment and 9 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection) and decon area

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

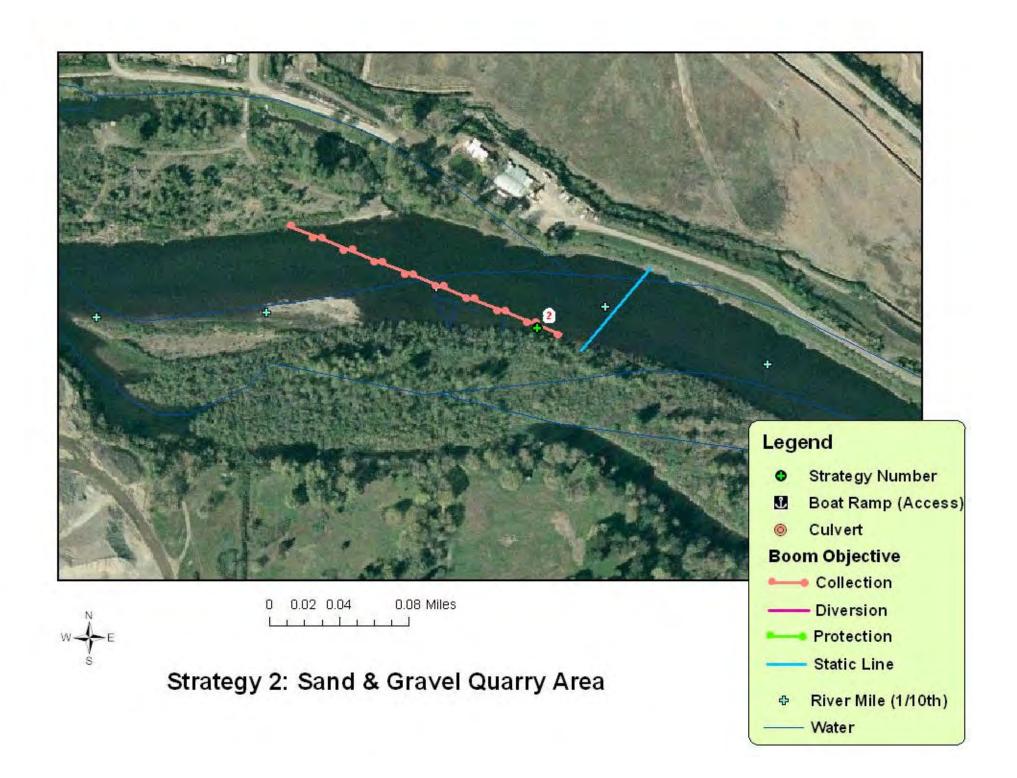
Pressure washer w/pump

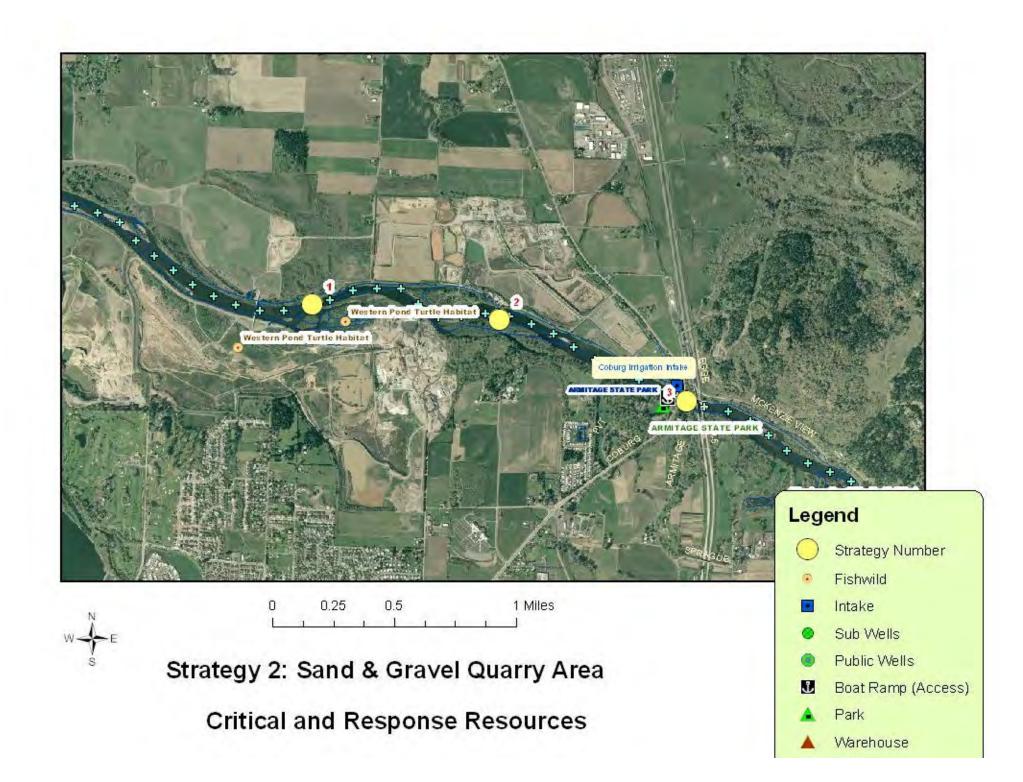
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

13,000 feet of Rope (3/8" poly rope)

- 1.9 m/sec during high flow
- No data on depth
- River width = 250-300 feet
- No data on river bottom material.





Strategy Number 3 Armitage State Park Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

- Large surface water intake for Coburg irrigation channel on north bank near Coburg Road bridge.
- Western Pond Turtle habitat in side channels down river of boom placement area.

Location:

- Armitage State Park area is located beneath and west of the I-5 Spores Bridge over the McKenzie River. Take Coburg Road north from Eugene to Armitage State Park (south bank of McKenzie River).
- 44° 06' 45"N / 123° 02' 46"W
- USGS River Mile 7.2; Measured River Mile 3.1

Description of Response Tactics:

High Flow Strategy

• Deploy 100 feet of 4x6 solid containment boom across Coburg irrigation channel intake to protect intake from spilled product.

- Deploy 600 feet of 4x6 solid containment boom at an angle of 22-30 degrees SW from the spilled product collection and recovery area (nouth bank west side of Coburg Rd Bridge). Spill collection area is at large boat ramp site (Coburg Access) beneath bridge.
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

Low Flow Strategy

- Deploy 100 feet of 4x6 solid containment boom across Coburg irrigation channel intake to protect intake from spilled product.
- Deploy 800 feet of 4x6 solid containment boom at an angle of 22-30 degrees SE from the spilled product collection and recovery area (south bank at Armitage County Park boat ramp), contour boom around small gravel bars.
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

Access Areas:

- Closest river access points are Armitage State Park boat ramp on the south bank and the Coburg Access boat ramp on the north bank within the boom placement area. These boat ramps are large and well maintained.
- The north bank can be easily accessed from Coburg Road and the Coburg Access boat ramp under bridge.
- Access to the south bank is easy at Armitage State Park boat ramp.

Staging Areas:

- Armitage State Park and the McKenzie Watershed Council office at Armitage Park is a good equipment staging area with ample space for equipment, boat ramps, parking, electricity, water, and restrooms.
- Closest equipment warehouse is U.S. Bureau of Land Management (BLM) office at 2890 Chad Drive (approximately 2.1 miles south of boom placement area).

Equipment Needs:

900 feet solid containment boom (w/3-4 tow bridles)

Boom Deployment Equipment and 9 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

500 feet sorbent boom (shoreline protection)

500 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection) and decon area

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

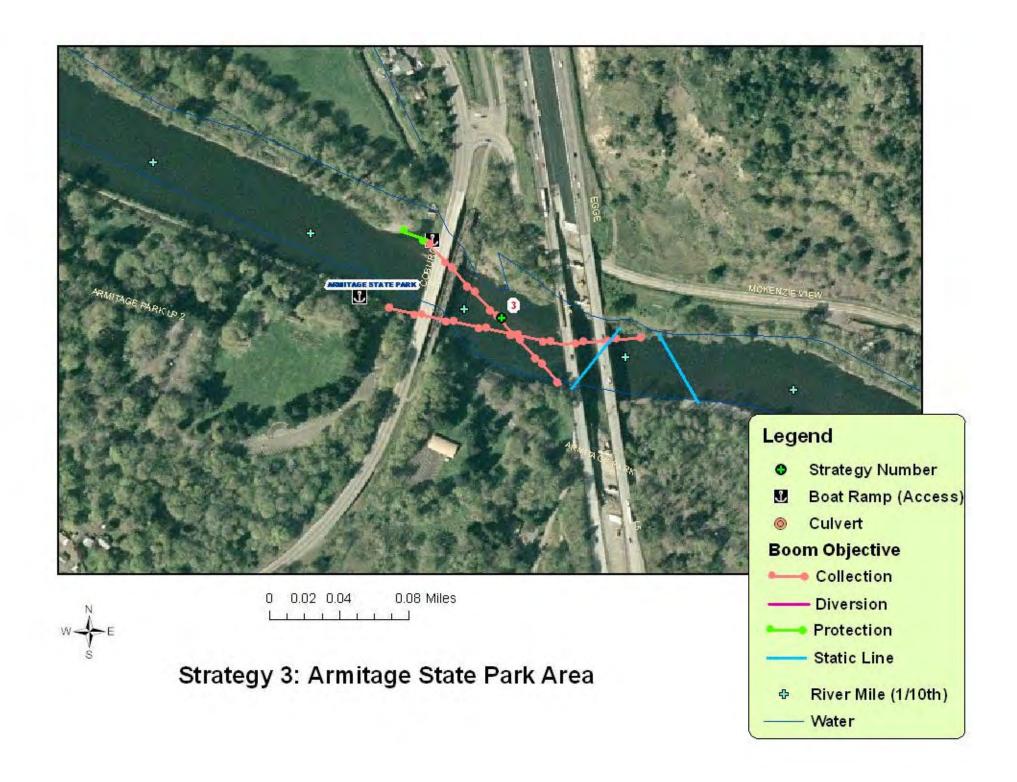
Pressure washer w/pump

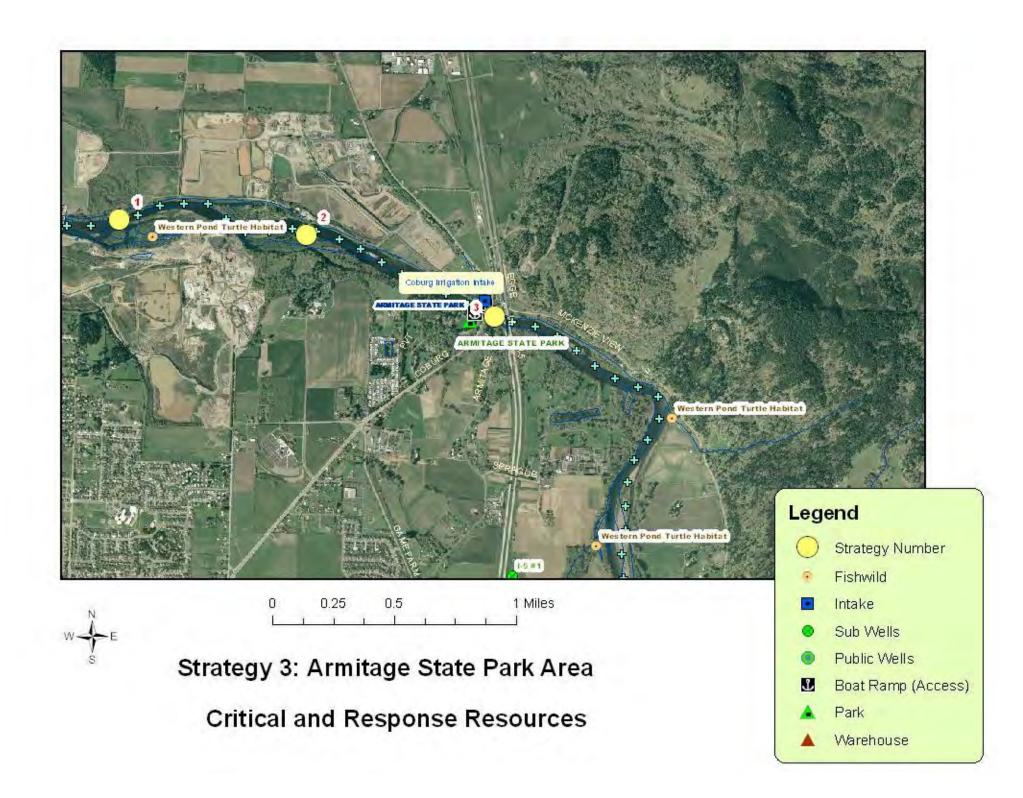
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

13,000 feet of Rope (3/8" poly rope)

- 1.3 m/sec during high flow
- River width = 200-250 feet





Strategy Number 4 Deadmond Ferry Landing Area



Response Objectives:

- Diversion/Collection
- Collection

Critical Resources to be Protected:

• Western Pond Turtle habitat in side channels down river of boom placement area.

Location:

- Deadmond Ferry Landing area is located west of Interstate 5 approximately one mile by taking Beltline Road east to Gateway Street, head north 0.1 miles to Deadmond Ferry Road and follow that 1.1 miles to the boat ramp.
- 44° 05' 29"N / 123° 01' 27"W
- USGS River Mile 9.4; Measured River Mile 5.4

Description of Response Tactics:

• Deploy 700 feet of 4x6 solid containment boom at an angled of 22-30 degrees NE from the spilled product collection and recovery area (south bank near Deadmond Ferry Landing).

- Deploy 900 feet of 4x6 solid containment boom as secondary containment (if needed) at an angled of 22-30 degrees NE from the spilled product collection and recovery area (south bank).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

- Closest river access point is Deadmond Ferry Landing boat ramp located within the boom placement area (USGS river mile 9.5 or measured river mile 5.5). However, this is a very primitive and limited boat ramp and may not be usable with larger boats.
- The closest up river access point is Harvest Landing or Rodakowski Landing Boat Ramp located 2.8 miles east of the boom placement area via boat (USGS river mile 12.3 or measured river mile 8.2).
- The closest down river access point is Armitage State Park located 2.3 miles west of boom placement area via boat (USGS river mile 7.2 or measured river mile 3.1).
- The north bank can be accessed off of McKenzie View Drive (milepost 2.1).
- Access to the south bank is easy at Deadmond Ferry Landing and behind farmhouses and a BPA power line access road.

Staging Areas:

- Deadmond Ferry Landing and adjacent farmland may provide some space for staging equipment.
- Oregon State Police equipment facility at 3620 Gateway Street may have space to stage equipment.
- Springfield Fire Station 5 at 2705 Pheasant Blvd has some space for staging equipment.
- Armitage State Park and the McKenzie Watershed Office at Armitage Park is a good equipment staging area with ample space for equipment, boat ramps, parking, electricity, water, and restrooms. Armitage State Park is 2.3 miles from boom placement area via boat and 3.4 miles via vehicle (Deadmond Ferry Rd to Gateway St, head north (Gateway turns into Coburg Rd) and follow Coburg rd to State Park).
- Closest equipment warehouse is Oregon State Police at 3620 Gateway Street (approximately 1.1 miles west of boom placement area).

Equipment Needs:

700 feet solid containment boom (w/1-2 tow bridles) – additional 900 feet if deploy secondary collection Boom Deployment Equipment and 7 buoys (+9 buoys – 2^{nd} boom)

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection) $(x^2 - 2^{nd} boom)$

400 feet solid containment boom (shoreline protection) $(x^2 - 2^{nd} boom)$

200 feet x 50 feet of Poly sheeting (shoreline protection) and decon area $(x^2 - 2^{nd} boom)$

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 boat (minimal due to boat ramp)

Decon equipment

Pressure washer w/pump

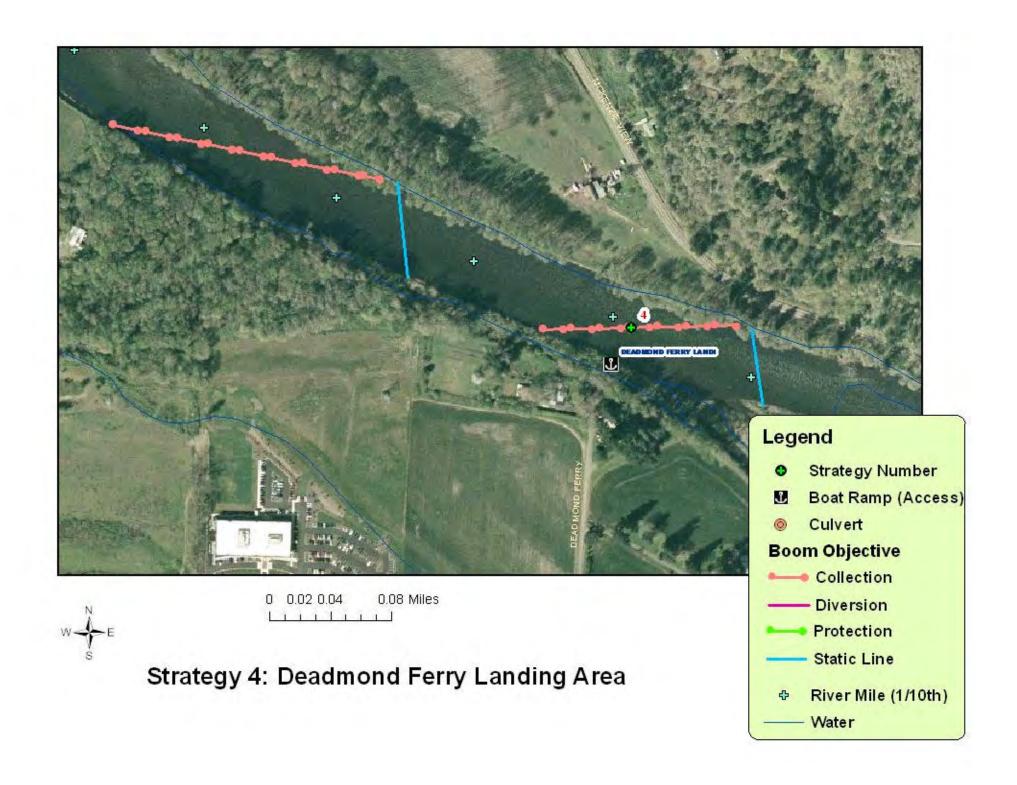
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

14,000 feet of Rope (3/8" poly rope)

Watercourse Description:

• River width = 300-325 feet





Strategy Number 5 Harvest Lane Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

- Spawning gravels (1 redd)
- Western Pond Turtle Habitat
- Rainbow Water District/SUB Chase wellfield

Location:

- Harvest Lane area is located north of Hayden Bridge Road approximately 0.5 miles. Take Hayden Bridge Road to Harvest Lane and follow it north until the road "T", turn right to get to the boat ramp or left to get to western most boom placement area.
- 44° 04' 40"N / 123° 00' 29"W
- USGS River Mile 11.5; Measured River Mile 7.5

Description of Response Tactics:

- Deploy 500 feet of 4x6 solid containment boom across side channel inlet on south bank (250 feet down river of Harvest Landing) to protect Western Pond Turtle habitat.
- Deploy 900 feet of 4x6 solid containment boom along south bank and angle to divert spilled product away from the Chase well field.
- Deploy 1000 feet of 4x6 solid containment boom (approximately 3,000 feet down river of Harvest Landing) at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest river access point is Harvest Landing Boat Ramp located immediately up river of the boom placement area (USGS river mile 12.3 or measured river mile 8.2).
- Closest down river access is Deadmond Ferry Landing boat ramp located 2.0 miles west of the boom placement area via boat (USGS river mile 9.5 or measured river mile 5.5).
- The boom placement area is accessible along north bank by taking McKenzie View Drive to a private road at milepost 3.3 to the south. Follow the private road to the north bank area.
- Access to the south bank is difficult (except at western most anchor point for protection boom) due to the island and dense stands of trees.

Staging Areas:

- Harvest Landing boat ramp can be used as staging area and has limited facilities (i.e., restrooms)
- EWEB's OrAqua property is a good staging area with large amounts of open space and vacant buildings and warehouses. The property is fenced with a locked gate (not shown on map). The property does not have water, electricity, or restrooms and is located 2.4 miles from the boom placement area (Hayden Bridge Road east to Marcola Road, then head north across Hayden Bridge, first driveway on left after stop light).
- Closest equipment warehouse is Springfield Fire Station 4 at 1475 5th Street (approximately 2.0 miles south of boom placement area).

Equipment Needs:

2,400 feet solid containment boom (w/14-15 tow bridles)

Boom Deployment Equipment and 9 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

Pressure washer w/pump

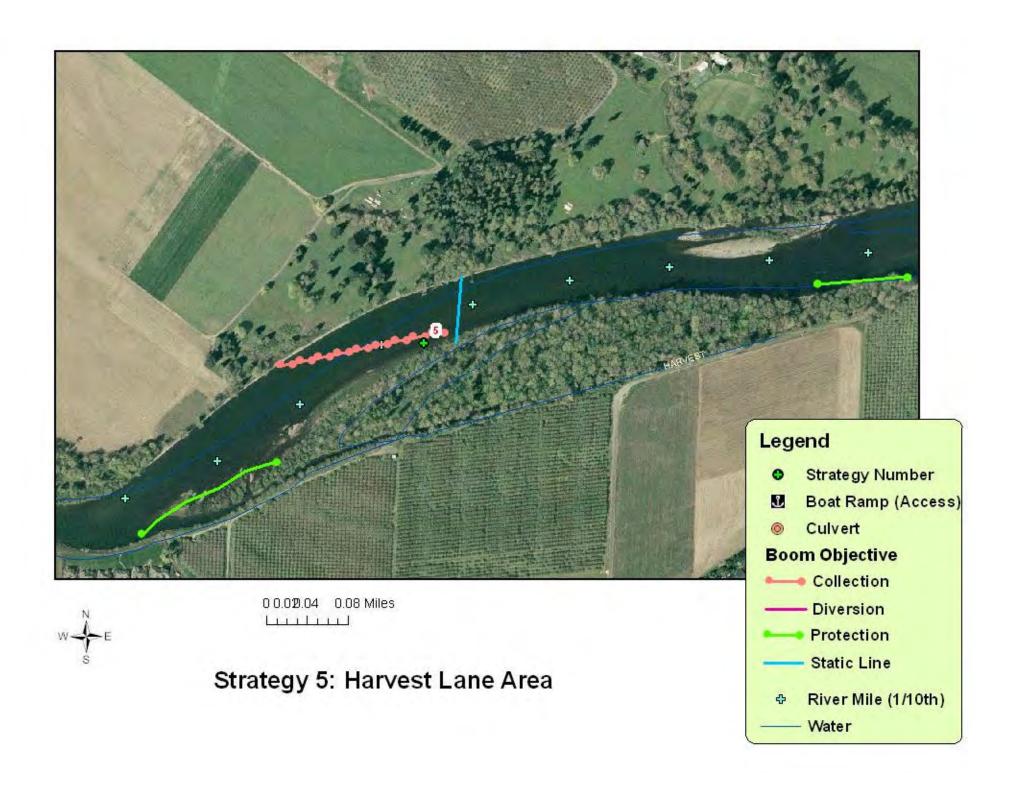
3-4 Decon waste pools within containment berm

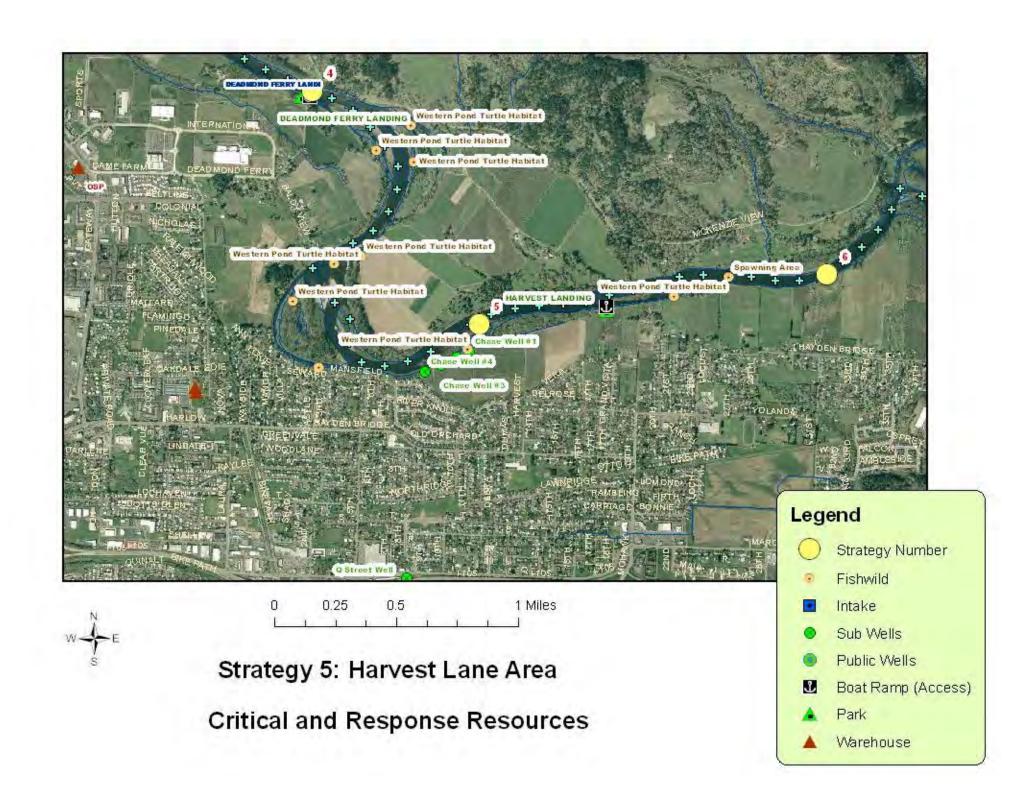
Oil Recovery Drum Skimmer (product recovery)

14,000 feet of Rope (3/8" poly rope)

Watercourse Description:

• River width = 250- 325 feet





Strategy Number 6 Mohawk River Confluence Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Spawning gravels (1 redd).

Location:

- Located north of Hayden Bridge Road approximately 0.5 miles between 34th and 35th Streets (behind residents).
- 44° 05' 00"N / 122° 58' 34"W
- USGS River Mile 13.5; Measured River Mile 9.4

Description of Response Tactics:

- Deploy 650 feet of 4x6 solid containment boom (approximately 3,000 feet down river of Harvest Landing) at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

- Closest down river access point is Harvest Lane Boat Ramp (1.25 miles) located at USGS river mile 12.3 or measured river mile 8.2.
- Closest up river access is Hayden Bridge Landing boat ramp (1.2 miles) located at USGS river mile 14.7 or measured river mile 10.7.
- The boom placement area is accessible along the south bank through farm field dirt roads. North bank may be difficult unless anchor boom at area behind residence.

Staging Areas:

- Hayden Bridge Landing could be used as a staging area associated with the boat ramp. It has sufficient parking area, but lacks other facilities (restrooms, shelter, water, electricity, etc.).
- Harvest Lane boat ramp can be used as staging area and has limited facilities (i.e., restrooms)
- EWEB's OrAqua property is a good staging area with large amounts of open space and vacant buildings and warehouses. The property is fenced with a locked gate (not shown on map). The property does not have water, electricity, or restrooms and is located 0.25 miles north of Hayden Bridge Landing boat ramp off of Marcola Road.
- Closest equipment warehouse is EWEB Hayden Bridge Filtration Plant (approximately 1.45 miles).

Equipment Needs:

650 feet solid containment boom (w/7-8 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection) and decon area

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

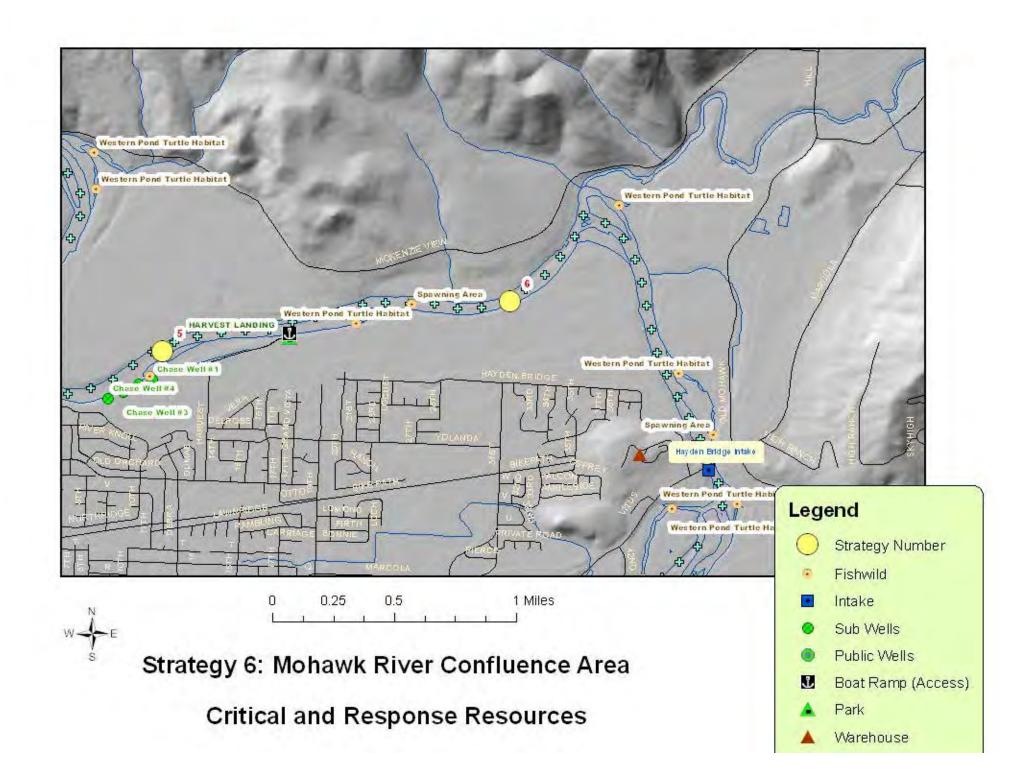
2-3 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

6,000 feet of Rope (3/8" poly rope)

- 1.3 m/s flow during high flow
- No data on depth
- River width = 200-250 feet
- No data on river bottom material.





Strategy Number 7 Hayden Bridge Area



Response Objectives:

- Protection
- Collection

Critical Resources to be Protected:

- EWEB Hayden Bridge Intake.
- Western pond turtle habitat in side channel along north bank of river.

Location:

- In Springfield, Marcola Road at Hayden Bridge.
- 44° 04' 19"N / 122° 57' 47"W
- USGS River Mile 14.8; Measured River Mile 10.8

Description of Response Tactics:

• Setup 4-inch PVC pipe with ends capped in front of EWEB intake (U-shaped) to keep boom away from intake structure. Deploy 100 feet of 4x6 solid containment boom in front of EWEB intake and PVC pipe to intake.

- Deploy 100 feet of 4x6 solid containment boom along north bank across inlet to side channel to protect Western Pond Turtle habitat.
- Deploy 700 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank near Hayden Bridge boat ramp).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest access is Hayden Bridge Landing boat ramp located within the boom placement area.
- The boom placement area is easily accessible via boat ramp and EWEB intake structure on south bank and OrAqua intake structure on north bank.

Staging Areas:

- Hayden Bridge Landing could be used as a staging area associated with the boat ramp. It has sufficient parking area, but lacks other facilities (restrooms, shelter, water, electricity, etc.).
- EWEB's OrAqua property is a good staging area with large amounts of open space and vacant buildings and warehouses. The property is fenced with a locked gate (not shown on map). The property does not have water, electricity, or restrooms and is located 0.25 miles north of Hayden Bridge Landing boat ramp off of Marcola Road.
- Closest equipment warehouses are EWEB Hayden Bridge Filtration Plant and Rainbow Water District (approximately 0.25 and 0.75 miles, respectively).

Equipment Needs:

900 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

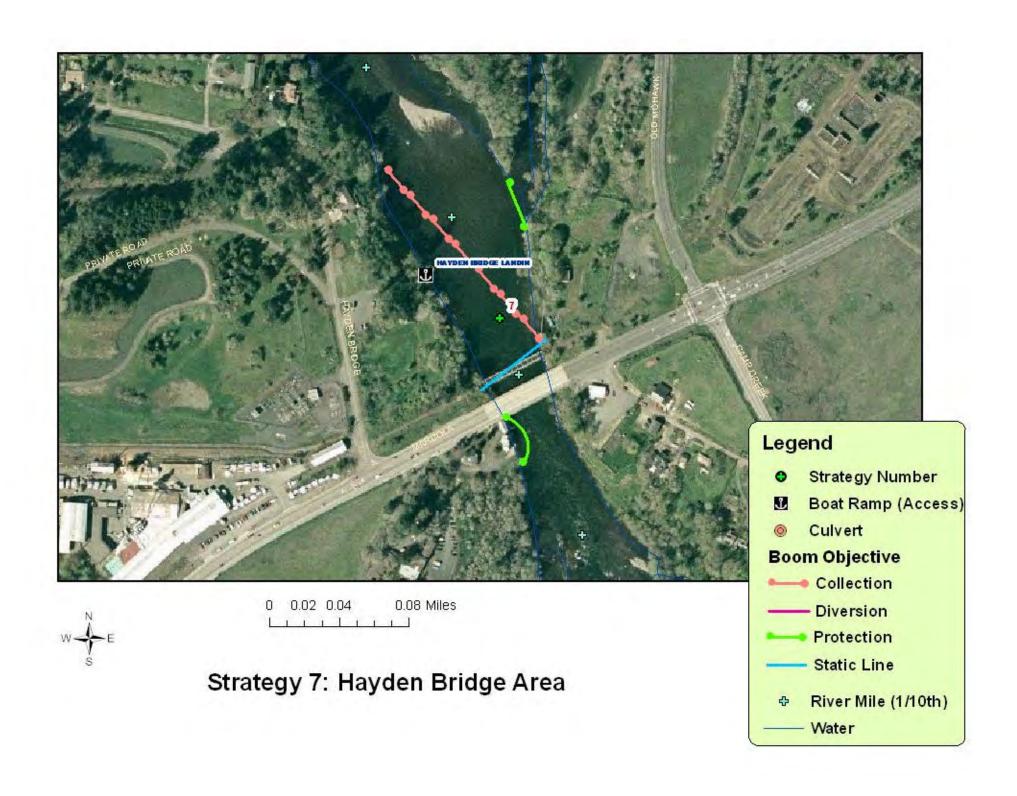
Pressure washer w/pump

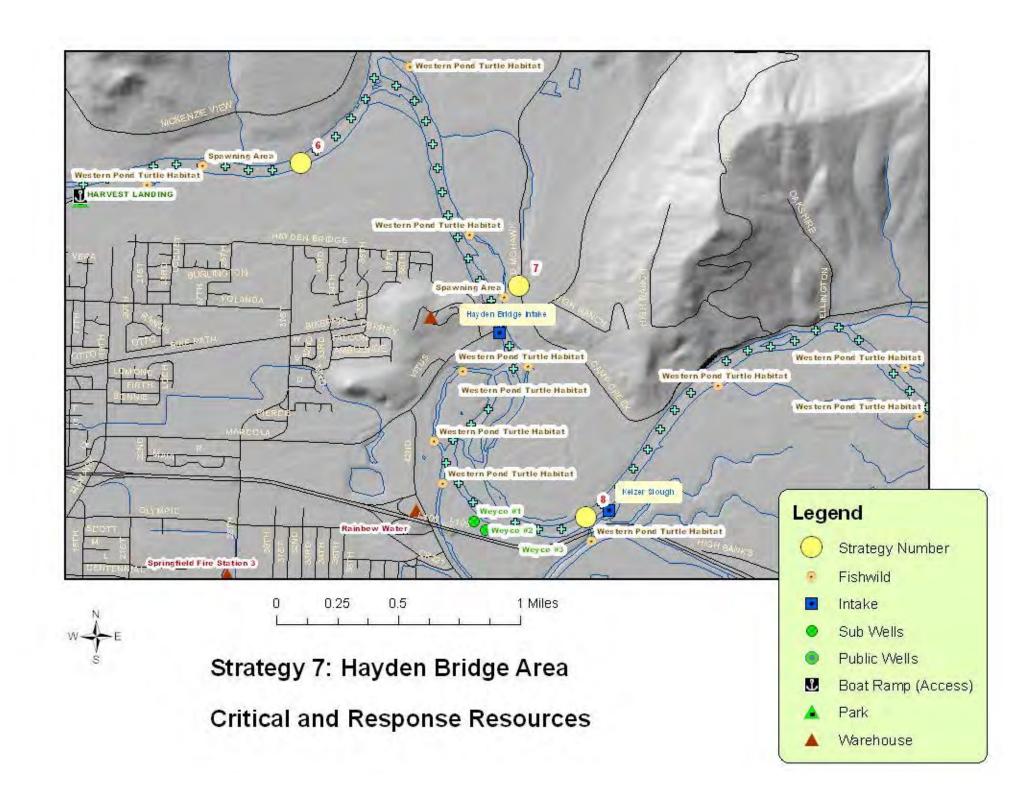
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

8,000 feet of Rope (3/8" poly rope)

- 1.3 m/s flow during high flow
- No data on depth
- River width = 225-350 feet
- No data on river bottom material.





Strategy Number 9 Cedar Creek Confluence Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

• Western pond turtle habitat in Cedar Creek area along south bank of river.

Location:

- Cedar Creek Confluence Area is located north of Springfield city limits 0.25 miles. Can access via a skid road along the north side of the river. Also Bonneville Power (BPA) power lines run through this area and may have maintenance roads associated with these power lines (north and south banks). Access the south bank by taking High Banks Road (north at stop light from Hwy 126) east 0.75 miles until the road turns sharply to the south. At this point, go straight into a private drive (behind a barn); follow north and cross Cedar Creek. A maintenance road for a BPA substation is off of High Banks Road approximately 635 feet west of sharp turn to the south. Boom placement area is behind residences to the northwest or directly north of BPA substation.
- 44° 04' 01"N / 122° 55' 34"W
- River Mile: 17.7 (USGS) or 14.2 (Measured)

Description of Response Tactics:

- Deploy 300 feet of 4x6 solid containment boom at bend in river from south bank to Big Island to protect side channel and critical habitat.
- Deploy 200 feet of 4x6 solid containment boom along south bank across the confluence with Cedar Creek to protect critical habitat in confluence area.

- Deploy 500 feet of 4x6 solid containment boom at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank in front of residences).
- Deploy 800 feet of 4x6 solid containment boom at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank 300 feet east of Cedar Creek Confluence).
- At product collection and recovery areas protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

- Closest access is Bellinger Landing boat ramp @ USGS river mile 18.9 or measured river mile 15.3 on north bank of river (upriver 1.1 miles from boom placement area).
- Closest downriver access is Hayden Bridge Landing boat ramp @ USGS river mile 14.7 or measured river mile 10.7 on south bank of river (immediately west of Hayden Bridge). Boat ramp is 3.5 miles downriver by boat from boom placement area.
- Access to boom placement area is possible along north bank via a skid road. Access to south bank for
 oil collection is possible via a private road with a bridge over Cedar Creek off of High Banks Road
 and/or via a BPA substation and power line maintenance road also off of High banks Road (see
 description under "Location").

Staging Areas:

- Bellinger Landing could be used as a staging area associated with the boat ramp, but does not have significant space.
- Hayden Bridge Landing could be used as a staging area associated with the boat ramp. It has sufficient parking area, but lacks other facilities (restrooms, shelter, water, electricity, etc.)
- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, shelters, electricity, water, and access to the river. However, it is located approximately 7.75 miles by road from the boom placement area (not shown on map).
- EWEB's OrAqua property is a good staging area with large amounts of open space and vacant buildings and warehouses. The property is fenced with a locked gate (not shown on map). The property does not have water, electricity, or restrooms and is located 0.25 miles north of Hayden Bridge Landing boat ramp off of Marcola Road.
- The farmer's field located along the south bank could also be used to stage equipment.
- Nearest equipment warehouse is the Springfield Fire & Life Safety Station #2 (~ 2.75 miles south at 4765 Main Street).

Equipment Needs:

1,800 feet solid containment boom (w/15-16 tow bridles)

Boom Deployment Equipment and 13 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

300 feet x 50 feet of Poly sheeting (shoreline protection) and decon area

20 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

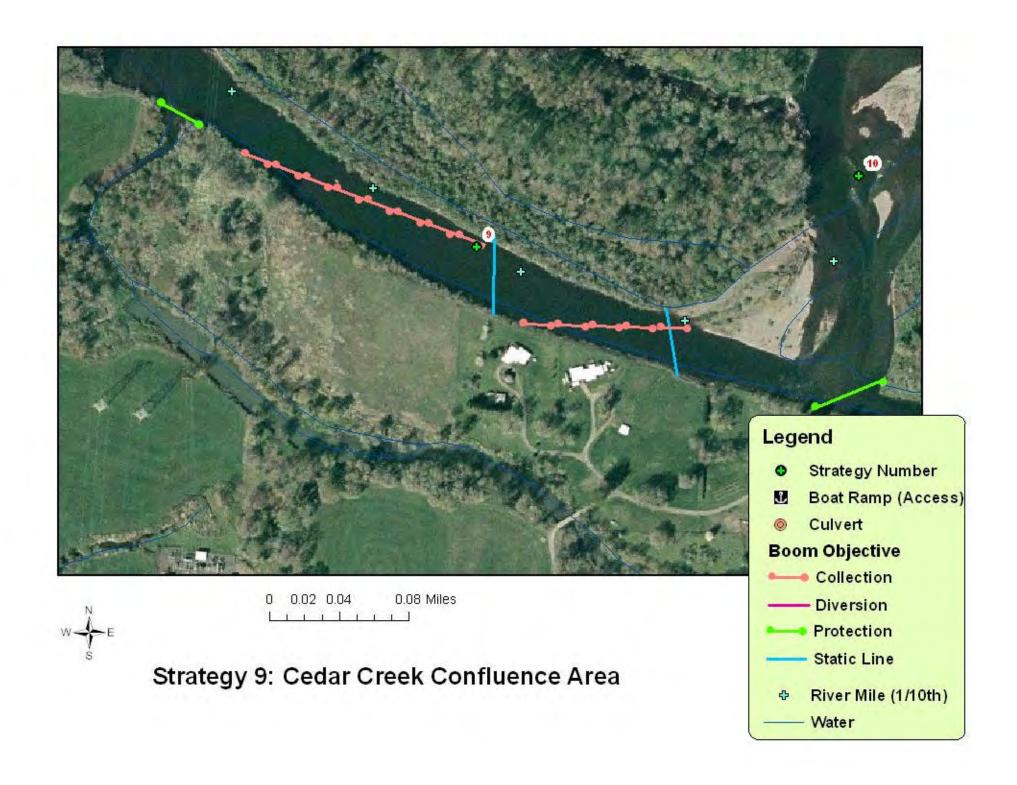
4-5 Decon waste pools within containment berm

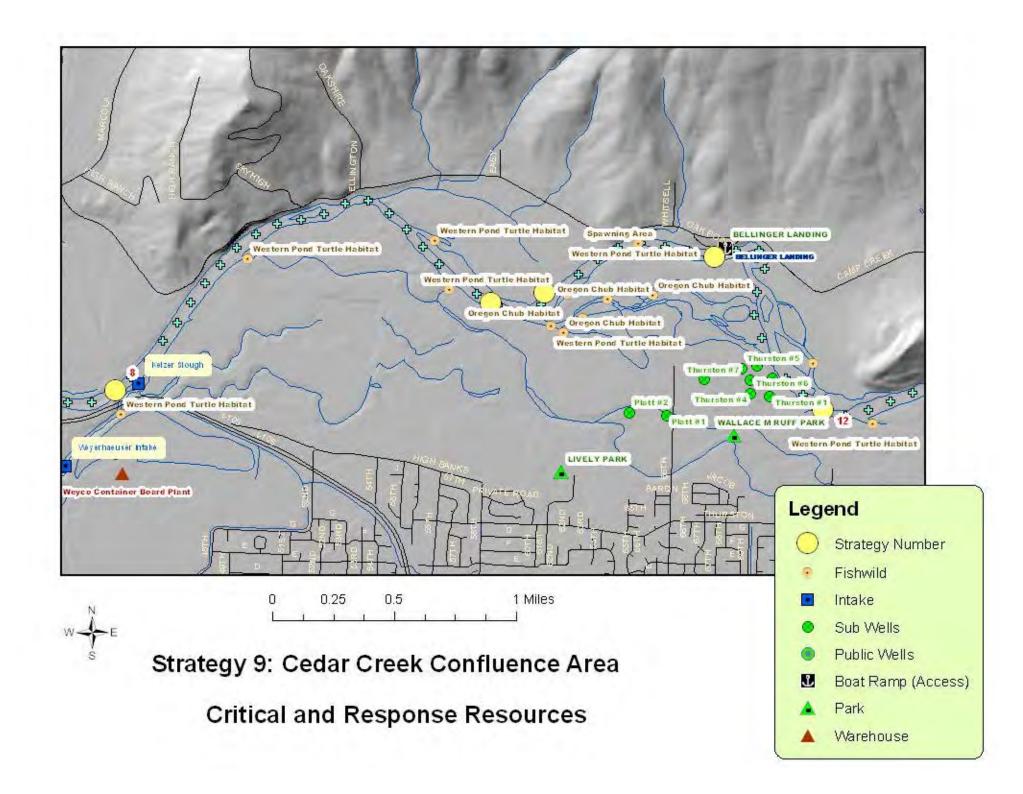
Oil Recovery Drum Skimmer (product recovery)

15,000 feet of Rope (3/8" poly rope)

- Watercourse Description:

 1.7 m/s flow during high flow
 - River width = 200-225 feet





Strategy Number 10 Big Island Area



Response Objectives:

Protection

Critical Resources to be Protected:

- Western pond turtle habitat in side channels along south bank of river.
- Oregon chub habitat in side channels along south bank.

Location:

- Big Island Area is located north of Springfield 0.5 miles. Can access area via residences along north bank. There is limited access to the area from the south bank. May be able to access western most boom site by taking High Banks Road (north at stop light from Hwy 126) and follow it east 0.75 miles until the road turns sharply to the south. At this point, go straight into a private drive that runs behind a barn then heads north and crosses Cedar Creek. Boom area is behind residences.
- 44° 04' 04"N / 122° 55' 06"W
- River Mile: 18.1 (USGS) or 14.6 (Measured)

Description of Response Tactics:

• Deploy 200 feet of 4x6 solid containment boom along the south bank across the eastern most side channel to Big Island. Boom is used to protect side channel and prevent spilled product from impacting critical habitat. Boom will have to be placed by boat due to lack of good access to south bank.

- Closest access is Bellinger Landing boat ramp @ USGS river mile 18.9 or measured river mile 15.3 on north bank of river (upriver 0.7 miles from boom placement area).
- Closest downriver access is Hayden Bridge Landing boat ramp @ USGS river mile 14.7 or measured river mile 10.7 on south bank of river (immediately west of Hayden Bridge). Boat ramp is 3.9 miles downriver by boat from boom placement area Route by vehicle from boom placement area is 3.0 miles by taking Camp Creek Rd west to stop light and head South on Marcola Rd. Cross the river and take first right or west on Hayden Bridge Rd go 500 feet to Hayden Bridge Landing boat ramp on north side of road.
- Access for boom placement area is possible along north bank behind houses. Limited access from south bank to western most boom area.

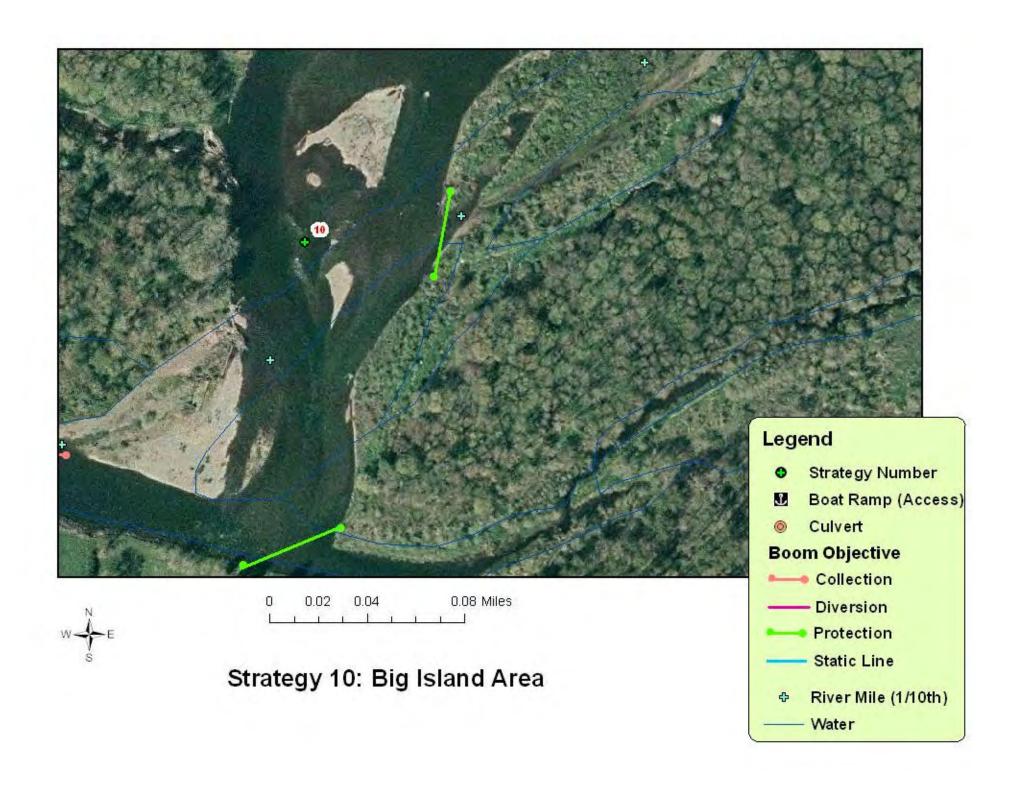
Staging Areas:

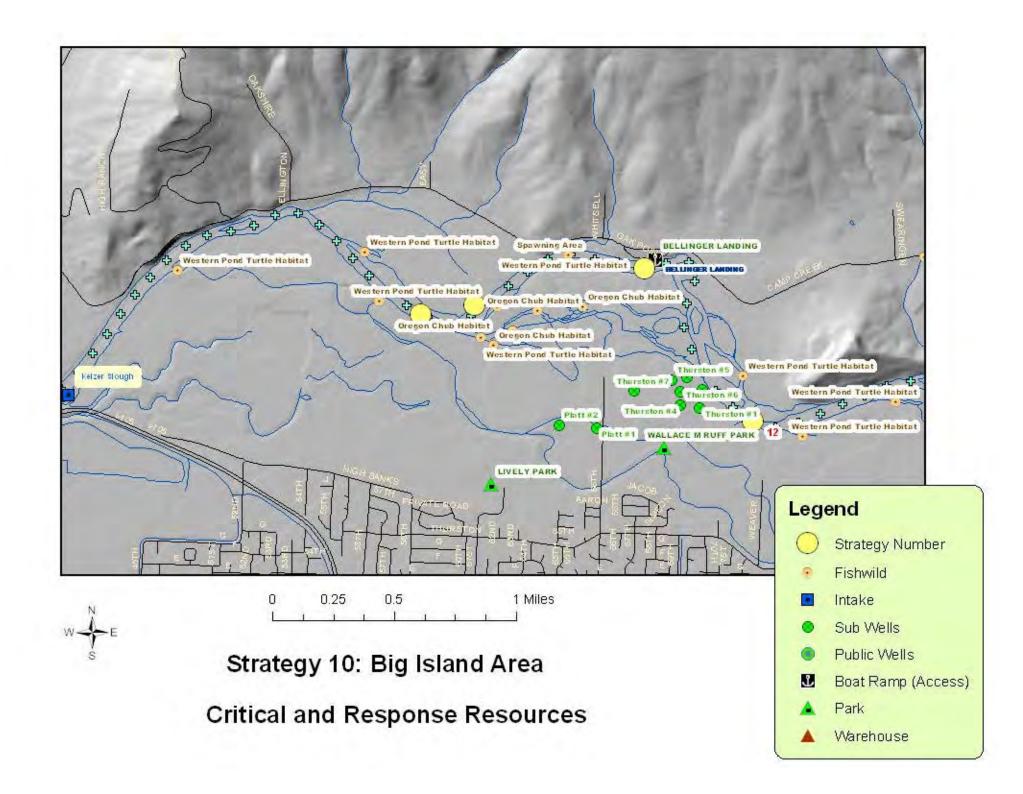
- Bellinger Landing could be used as a staging area associated with the boat ramp, but does not have significant space.
- Hayden Bridge Landing could be used as a staging area associated with the boat ramp. It has sufficient parking area, but lacks other facilities (restrooms, shelter, water, electricity, etc.)
- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, shelters, electricity, water, and access to the river. It is located approximately 6.25 miles by road from the boom placement area (not shown on map).
- EWEB's OrAqua property is a good staging area with large amounts of open space and vacant buildings and warehouses. The property is fenced with a locked gate (not shown on map). The property does not have water, electricity, or restrooms and is located 0.25 miles north of Hayden Bridge Landing boat ramp off of Marcola Road.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #1 (~ 2.75 miles east at 37814 Camp Creek Road).

Equipment Needs:

200 feet solid containment boom (w/1-2 tow bridles) Multiple fence posts w/hammer for anchoring boom 1 Jet boat to set boom 200 feet of rope (3/8" poly rope)

- 1.7 m/s flow during high flow
- No data on depth
- River width = 200-225 feet
- Sand, gravel and cobble bottom.





Strategy Number 11 Bellinger Landing



Response Objectives:

Collection

Critical Resources to be Protected:

- Western pond turtle habitat in side channels along south and north banks of river.
- Oregon chub habitat in side channels along south bank.

Location:

- Bellinger Landing area is located north of Springfield 0.75 miles with access from the north bank of the McKenzie River off of Camp Creek Road. Take Marcola Road across the McKenzie River (Hayden Bridge) to Camp Creek Road (1st stop light after crossing Hayden Bridge). Go east on Camp Creek Road to Oak Pont Road. Take a right and follow to Bellinger Landing boat ramp.
- 44° 04' 10"N / 122° 54' 27"W
- River Mile: 18.8 (USGS) or 15.2 (Measured)

Description of Response Tactics:

- Deploy 600 feet of 4x6 solid containment boom (approximately 300 feet down river of Bellinger Landing boat ramp) at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage unit.

- Closest access is Bellinger Landing boat ramp @ USGS river mile 18.9 or measured river mile 15.3 on north bank of river (adjacent and upriver from boom placement area).
- Closest downriver access is Hayden Bridge Landing boat ramp @ USGS river mile 14.7 or measured river mile 10.7 on south bank of river (immediately west of Hayden Bridge). Route by vehicle from boom placement area is 3.5 miles by taking Camp Creek Rd west to stop light and head South on Marcola Rd. Cross the river and take first right or west on Hayden Bridge Rd go 500 feet to Hayden Bridge Landing boat ramp on north side of road.
- Access for boom placement area is possible along north bank behind houses. Good access to collection areas for vac truck or other product removal equipment.

Staging Areas:

- Bellinger Landing could be used as a staging area associated with the boat ramp, but does not have significant space.
- Hayden Bridge Landing could be used as a staging area associated with the boat ramp. It has sufficient parking area, but lacks other facilities (restrooms, shelter, water, electricity, etc.)
- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, shelters, electricity, water, and access to the river. It is located approximately 5.75 miles by road from the boom placement area (not shown on map).
- EWEB's OrAqua property is a good staging area with large amounts of open space and vacant buildings and warehouses. The property is fenced with a locked gate (not shown on map). The property does not have water, electricity, or restrooms and is located 0.25 miles north of Hayden Bridge Landing boat ramp off of Marcola Road.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #1 (~ 2.2 miles east at 37814 Camp Creek Road).

Equipment Needs:

600 feet solid containment boom (w/6-7 tow bridles)

Boom Deployment Equipment and 6 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for

boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

Pressure washer w/pump

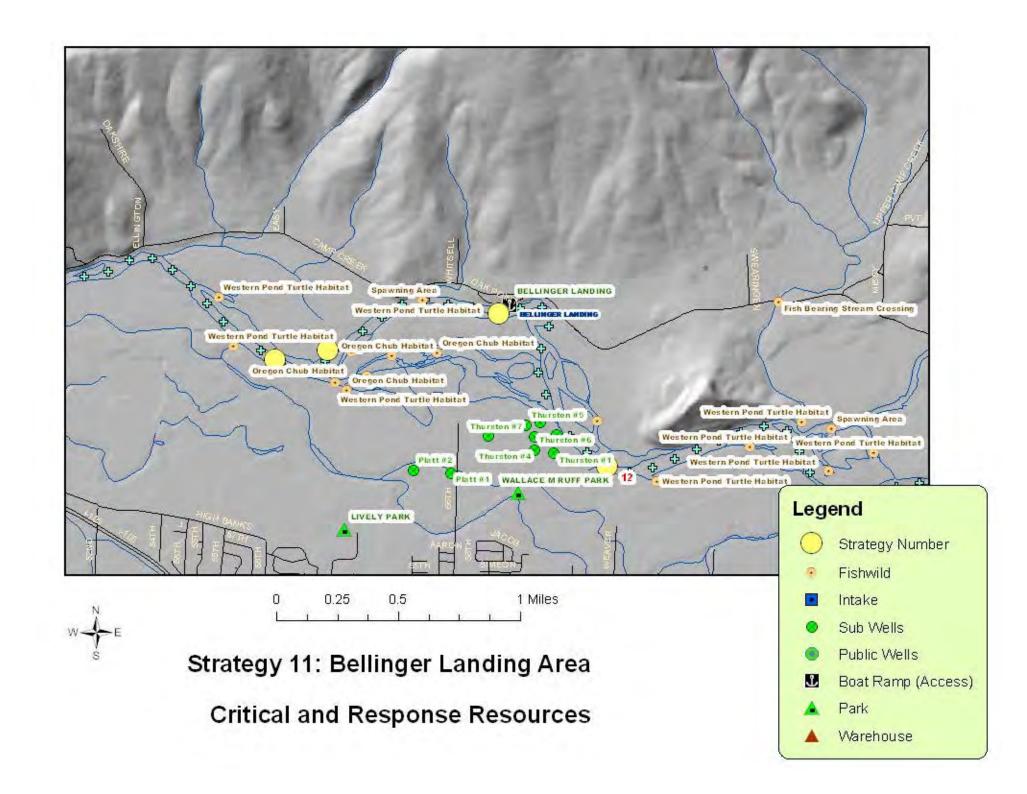
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

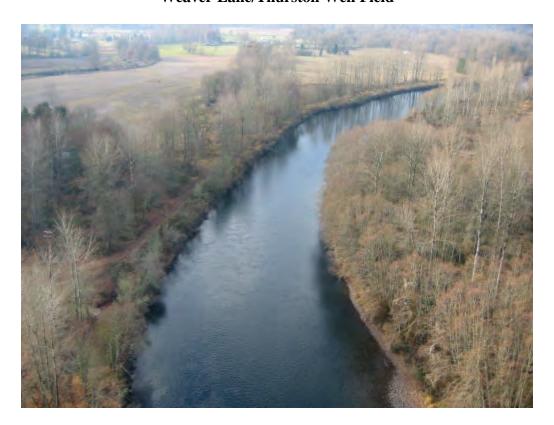
6,000 feet of Rope (3/8" poly rope)

- 1.5 m/s flow during high flow
- No data on depth
- River width = 150-200 feet
- Sand, gravel and cobble bottom





Strategy Number 12 Weaver Lane/Thurston Well Field



Response Objectives:

Protection

Critical Resources to be Protected:

- SUB Thurston Well Field
- Western pond turtle habitat in side channels along south and north banks of river.
- Oregon chub habitat in side channels along south bank.

Location:

- Weaver Lane/Thurston Well Field area is located north of Springfield 0.6 miles. Take Thurston Road to Weaver Lane and go North on Weaver Lane approx. 2000 feet to farm house and follow dirt road north and west from farm.
- 44° 03' 40"N / 122° 53' 57"W
- River Mile: 19.8 (USGS) or 16.2 (Measured)

Description of Response Tactics:

- Deploy 1,200 feet of 4x6 solid containment boom along south bank to protect bank from impacts of spill. May want to cascade 200-foot sections of boom or place one long 1,200-foot section along bank. May be easier to place boom by pulling with boat from Bellinger Landing boat ramp rather than setting from road along south bank.
- Deploy approximately 1,200 feet of sorbent boom in front of hard boom to collect spilled product.
- Shut down SUB well field.
- Monitor and protect shoreline with sorbent boom/pads and poly sheeting.

- Closest downriver access is Bellinger Landing @ USGS river mile 18.9 or measured river mile 15.3 on north bank of river (approximately 1 river mile downstream from boom placement area). It is a 10.1-mile drive from boom placement area to Bellinger Landing by taking Weaver Lane to Thurston Rd, east on Thurston Rd to McKenzie Hwy, east on McKenzie Hwy across Hendricks Bridge, left on Millican, to Camp Creek Rd, go west on Camp Creek Rd and take a left at Oak Point to boat ramp.
- Hendricks Park Boat Ramp (located immediately east of Hendricks Bridge on north bank of river)
 @ USGS river mile 24.0 or measured river mile 20.1 (approximately 4 river miles upstream from boom placement area).
- Good access for boom placement area via dirt road along south bank from Weaver Lane.

Staging Areas:

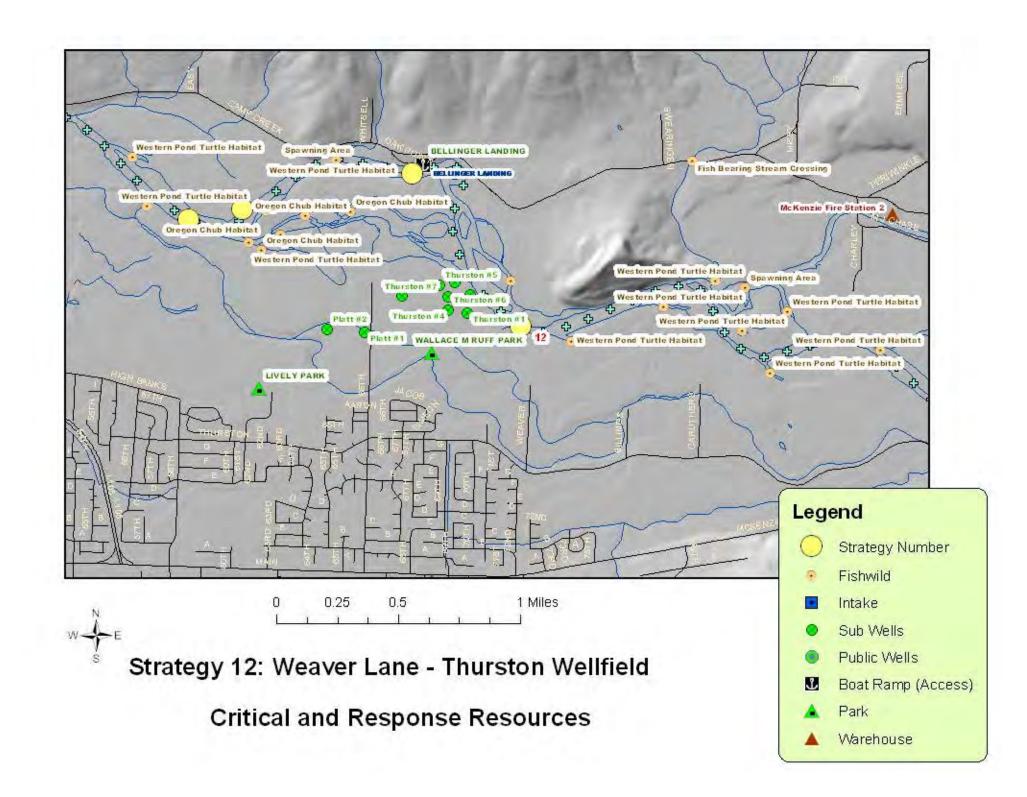
- Farm field and SUB well field area offer primitive equipment staging areas (no electricity, water, shelter, etc.).
- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities and access to the river. It is located approximately 4.25 miles by road and 4 miles via river from the boom placement area.
- Wallace McRuff Park is located on 66th Street approximately 0.75 miles from the boom placement area, but does not have adequate space and is primitive.
- Bellinger Landing could be used as a staging area associated with the boat ramp, but does not have significant space.
- Nearest equipment warehouse is Springfield Fire & Life Safety, Station #1 (~ 1.5 miles south at 6853 Main Street in Springfield).

Equipment Needs:

1200 feet 4x6 solid containment boom (6-8 towing bridles)
1200 feet sorbent boom (placed in front of hard boom)
6,000 Feet 14,000 feet of Rope (3/8" poly rope)
Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)
300 feet x 50 feet of Poly sheeting for shoreline protection
10 bales sorbent pads

- 1.4 m/s flow during high flow
- No data on depth
- River width = 225-275 feet
- Sand, gravel and cobble bottom.





Strategy Number 13 Hendricks Bridge Area



Response Objectives:

- Diversion
- Protection
- Collection

Critical Resources to be Protected:

- Head gates/intake to Cedar Creek.
- Small spawning area (1 redd) @ USGS River Mile 23.9.
- Western pond turtle habitat in side channels along south bank of river.

Location:

- Hendricks Bridge located east of Springfield 3.2 miles
- 44° 03' 22"N / 122° 49' 44"W
- Highway 126E Milepost 11.4

Description of Response Tactics:

• Block highway drains on Hendricks Bridge (if vehicle spill on bridge).

- Deploy four 300-foot sections of 4x6 solid containment boom across four channels leading to a slough area along the southern bank to protect habitat and head gate or intake structure.
- If source of spilled product is up river of Hendricks Bridge, deploy 800 feet of 4x6 solid containment boom on north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (boat ramp area on north bank).
- If source of spilled product is Hendricks Bridge area, deploy 1,000 feet of 4x6 solid containment boom on north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (private residence on north bank).
- At product collection and recovery areas protect shoreline with additional solid containment

- Hendricks Park Boat Ramp (located immediately east of Hendricks Bridge on north bank of river).
- Closest downriver access is Bellinger Landing @ River Mile 18.9 on north side of river (approximately 5 river miles downstream from bridge).

Staging Areas:

- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities and access to the river.
- Nearest equipment warehouse is McKenzie Fire & Rescue Walterville Station (~ ¼ mile north of bridge, west side of Hwy 126).

Equipment Needs:

2,000 (upriver spill) or 2,200 (bridge spill) feet solid containment boom (w/22-26 tow bridles)

Boom Deployment Equipment and 8-10 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

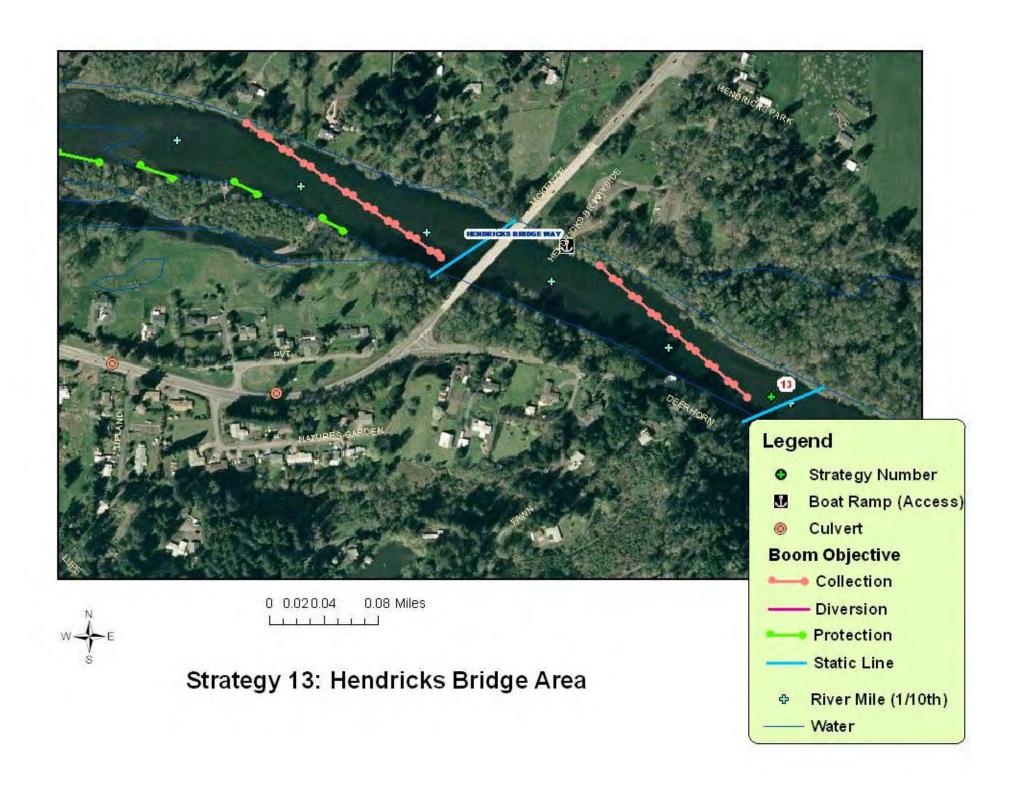
Pressure washer w/pump

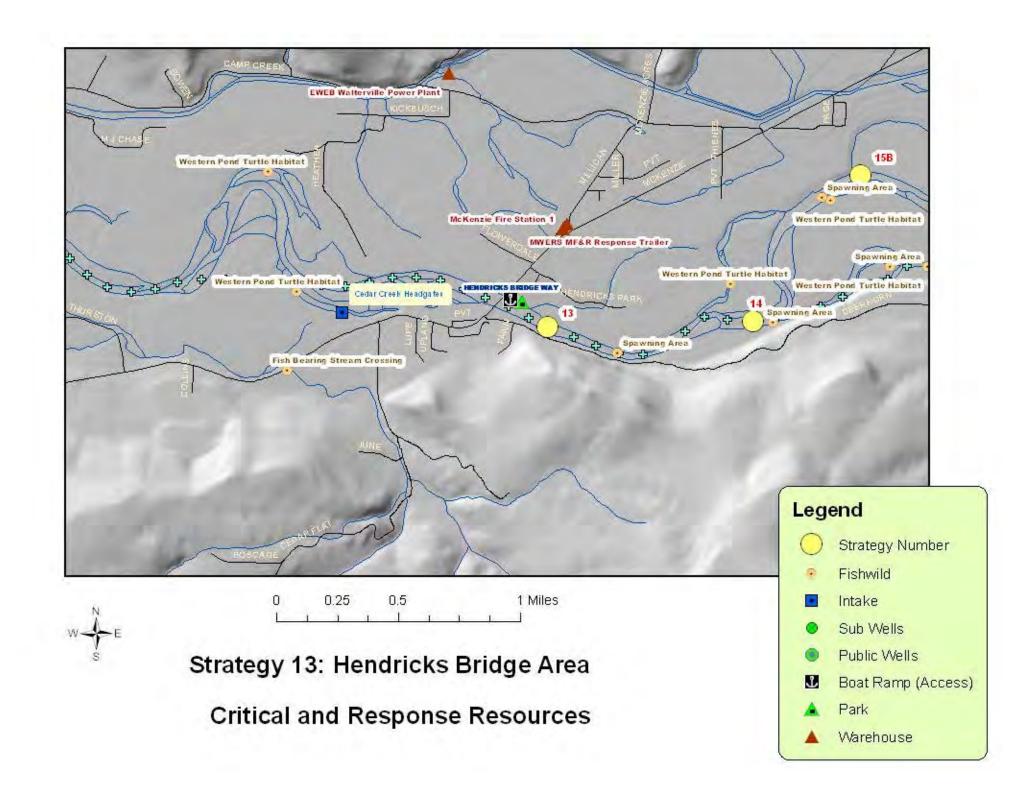
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

13.000 – 17,000 feet of Rope (3/8" poly rope)

- 0.7 m/s flow during high flow
- No data on depth
- River width = 250-300 feet
- Sand, gravel and cobble bottom.





Strategy Number 15A East End McNutt Island Area



Response Objectives:

- Collection
- Diversion

Critical Resources to be Protected:

- Western pond turtle habitat in side channels.
- Spawning gravels.

Location:

- Located approximately 0.75 miles southeast of Walterville at east end of McNutt Island.
- 44° 03' 43"N / 122° 47' 01"W
- Near (due south 4,500 feet) McKenzie Highway mile post 13.75.
- USGS River Mile 26.6; Measured River Mile 22.6

Description of Response Tactics:

- Deploy 100 feet of 4x6 solid containment boom in front of EWEB intake and PVC pipe to intake.
- Deploy 400 and 750 feet of 4x6 solid containment boom from the south bank (behind residence) at an angle of 28-33 degrees NW to divert spilled product into north channel around McNutt Island.

- Deploy 850 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (natural collection area on north bank).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest down river access point is Hendricks Bridge Boat Ramp (2.5 miles) located at USGS river mile 24.1 or measured river mile 20.1.
- Closest up river access is Emerich Landing boat ramp (1 mile) located at USGS river mile 27.5 or measured river mile 23.6.
- The boom placement area is accessible along the south bank by taking Dearhorn Drive east 2.8 miles from McKenzie Highway (turnoff is immediately south of Hendricks bridge) then turning north into residence driveway. Boom placement area is behind residence.
- The boom placement area is accessible along the north bank by going south off McKenzie Hwy between milepost 13.75 and 14, cross a bridge over EWEB's Walterville Canal and follow 0.8 miles to north bank (collection boom area is 800 feet east on dirt road that parallels river).

Staging Areas:

- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, water, electricity and access to the river. It is located approximately 3 miles by road to south bank, 3.4 miles by road to north bank, and 2.5 miles via river from the boom placement area.
- Farm fields on both north and south banks could be used for equipment staging.
- Closest equipment warehouse is McKenzie Fire & Rescue Station #2 (approximately 3 miles).

Equipment Needs:

2,000 feet solid containment boom (w/20-24 tow bridles)

Boom Deployment Equipment and 20 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection &decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

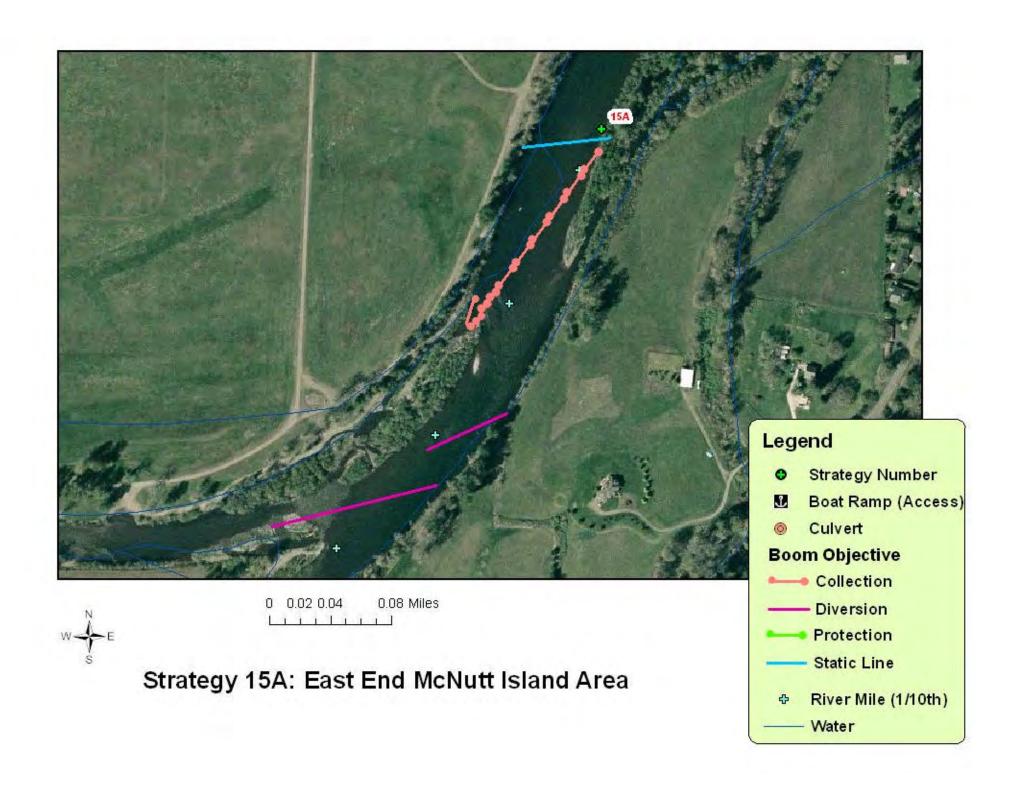
Pressure washer w/pump

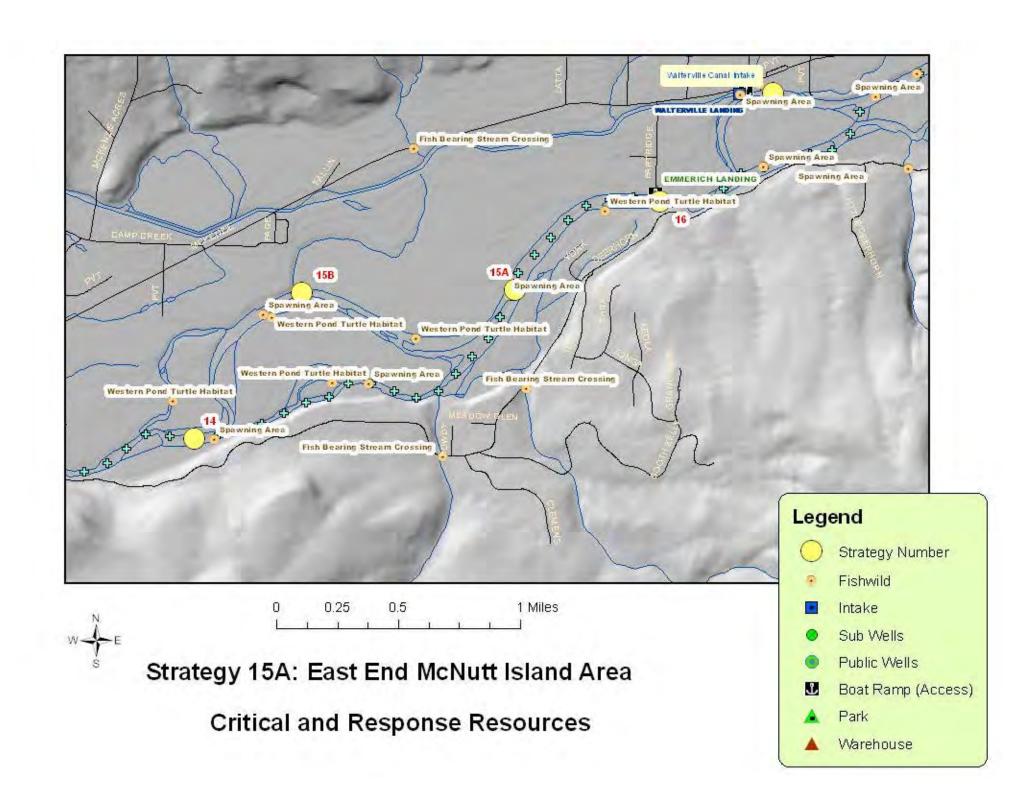
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

9,000 feet of Rope (3/8" poly rope)

- 0.8 m/s flow during high flow
- No data on depth
- River width = 250-350 feet
- No data on river bottom materials.





Strategy Number 15B North Channel McNutt Island Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

- Western pond turtle habitat in side channels.
- Spawning gravels.

Location:

- Located approximately 0.75 miles southeast of Walterville at east end of McNutt Island.
- 44° 03' 51"N / 122° 47' 59"W
- Near (due south 1,800 feet) McKenzie Highway milepost 13.0.
- Measured River Mile 22.1

Description of Response Tactics:

• Deploy 500 feet of 4x6 solid containment boom along north bank across inlet to side channel to protect critical habitat. Appears to be natural collection area on downriver end of protection boom (on island), assess area for potential recovery and collection operations.

- Deploy 300 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank east of residence).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest down river access point is Hendricks Bridge Boat Ramp (2 miles) located at USGS river mile 24.1 or measured river mile 20.1.
- Closest up river access is Emerich Landing boat ramp (1.5 miles) located at USGS river mile 27.5 or measured river mile 23.6.
- The boom placement area is not accessible along the south bank (McNutt Island) unless by boat.
- The boom placement area is accessible along the north bank by taking Walterville Road east off McKenzie Hwy at milepost 12.75, take first or second right or south and follow to north bank beyond residences (collection boom area is approximately 900 feet east on dirt road that parallels river, not sure if parallel dirt road crosses Rawhide Creek).

Staging Areas:

- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, water, electricity and access to the river. It is located approximately 1.75 miles by road to north bank, and 2.0 miles via river from the boom placement area.
- Farm fields on north bank could be used for equipment staging.
- Closest equipment warehouse is McKenzie Fire & Rescue Station #2 (approximately 1.5 miles).

Equipment Needs:

800 feet solid containment boom (w/4-5 tow bridles)

Boom Deployment Equipment and 3 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection &decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

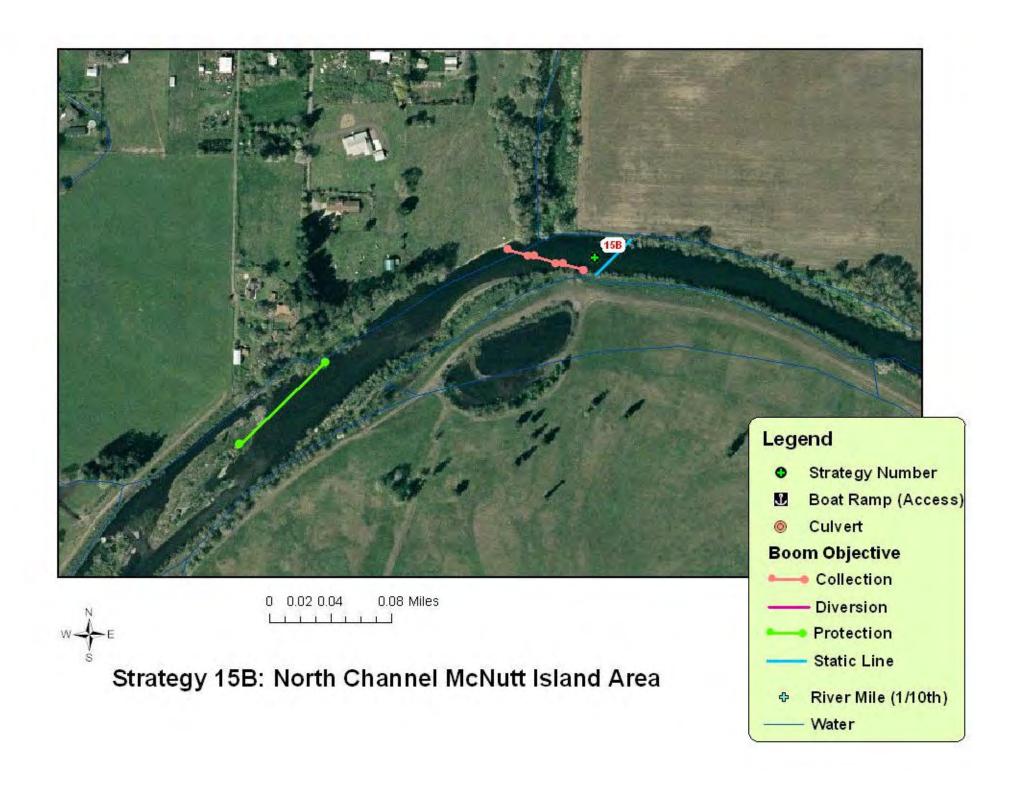
Pressure washer w/pump

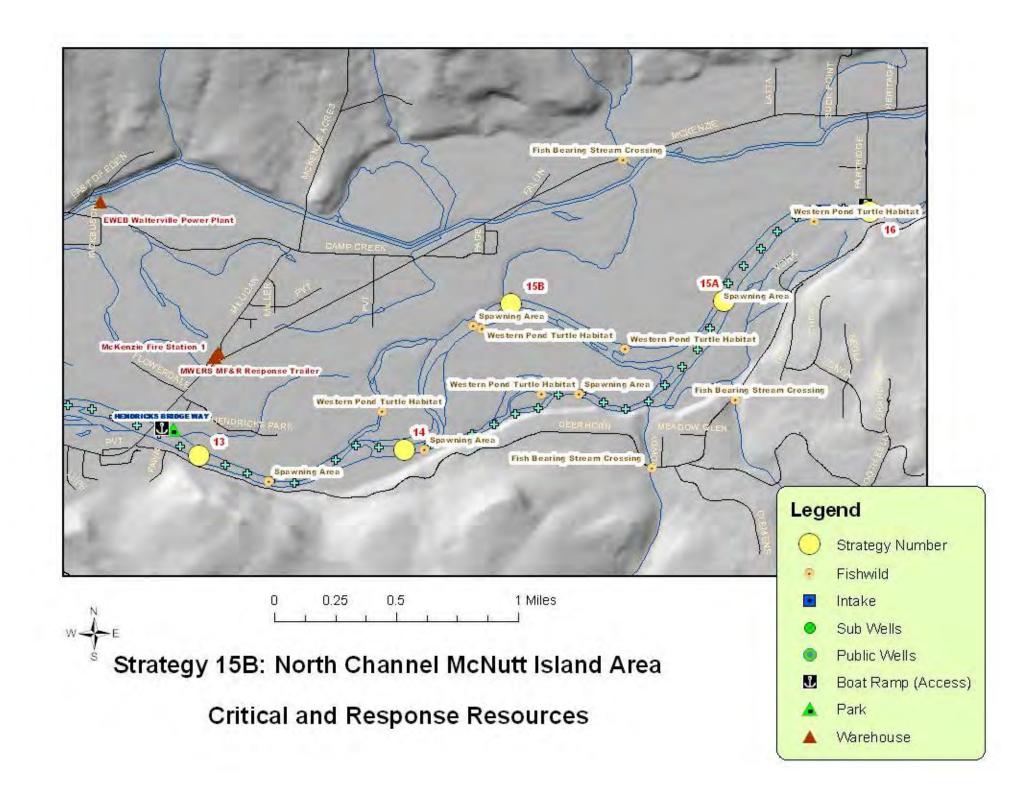
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

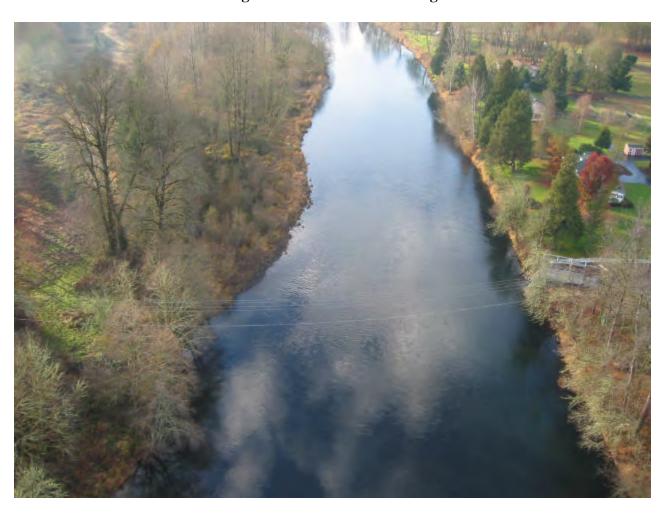
3,000 feet of Rope (3/8" poly rope)

- 0.7 m/s flow during high flow
- River width = 125-175 feet
- No data on river bottom materials.





Strategy Number 16 Partridge Drive/Emmerich Landing Area



Response Objectives:

- Collection
- Diversion

Critical Resources to be Protected:

- Western pond turtle habitat in side channel along south bank of river.
- Spawning gravels (7 redds) down river from boom placement area.

Location:

- Emmerich landing area is located 1.25 miles east of Walterville at the end of Partridge Drive off of the McKenzie Highway.
- 44° 04' 12"N / 122° 46' 14"W
- 2000 feet south of McKenzie Highway between milepost 14.5 and 15.75 at end of Partridge Drive.
- River Mile: 27.5 (USGS) or 23.6 (Measured)

Description of Response Tactics:

• Deploy 450 feet of 4x6 solid containment boom from south bank at an angle of 28-34 degrees NW to divert spilled product toward natural collection area on north bank.

- Deploy 450 feet of 4x6 solid containment boom at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 650 feet downriver from Emmerich Landing behind residence).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest access is Emmerich Landing boat ramp within boom placement area. Boat ramp is somewhat primitive.
- Closest down river access point is Hendricks Bridge Boat Ramp (3.5 miles) located at USGS river mile 24.1 or measured river mile 20.1.
- Easy access to boom placement area is possible along north bank at Emmerich landing area and behind houses. Good access to collection areas for vac truck or other product removal equipment.
- Access to south bank area is possible via dirt roads off of Dearhorn Road, although some areas along south bank are overgrown with trees and vegetation.

Staging Areas:

- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, shelters, electricity, water, and access to the river. It is located approximately 3.6 miles by road from the boom placement area, or 3.5 miles by boat.
- Walterville Landing has some space for staging equipment, however use of boat ramp to move equipment by boat down river may be a problem due to presence of in-river structures (EWEB's chevron structures to divert flow into the Walterville Canal).
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #2 (3.3 west at 38929 McKenzie Highway).

Equipment Needs:

900 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 5 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

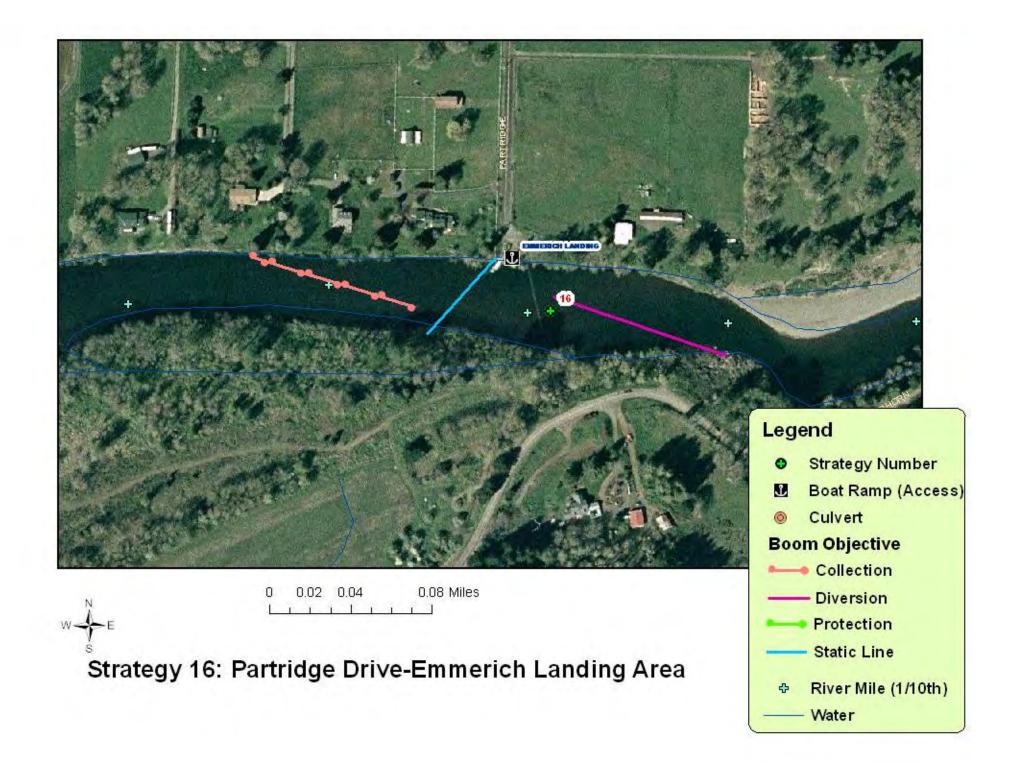
5,000 feet of Rope (3/8" poly rope)

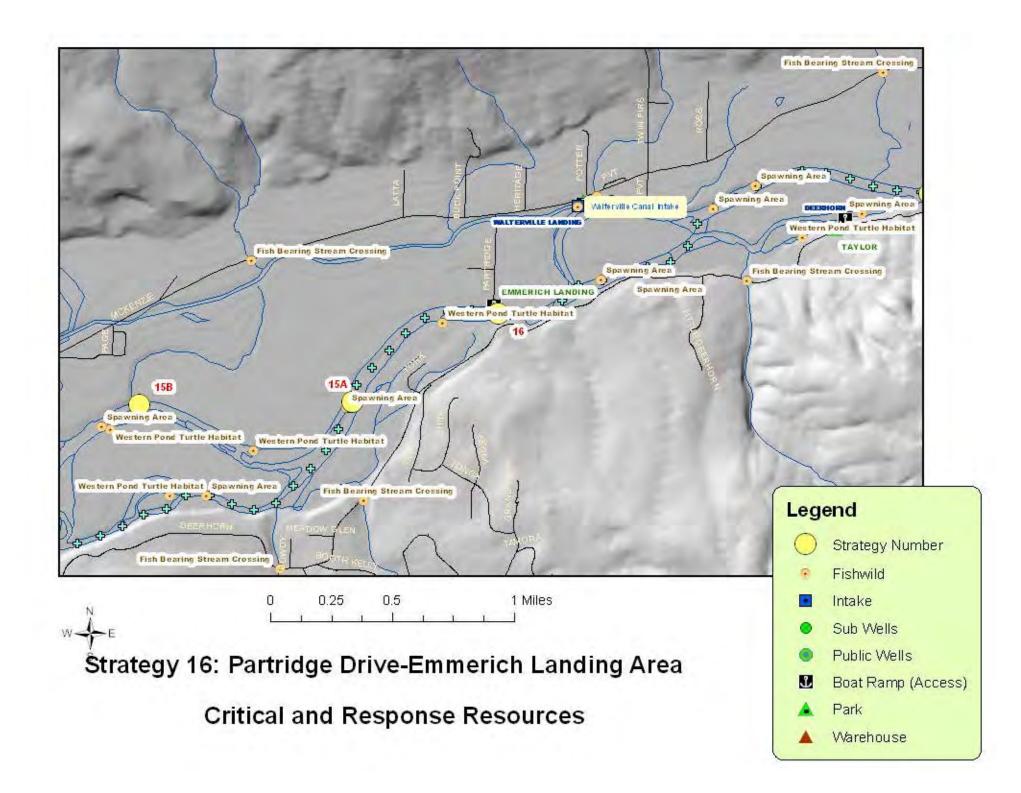
Watercourse Description:

- 1.3 m/s flow during high flow
- River width = 150-200 feet; Bottom material = gravel and cobbles

Strategy 16

Rev 3/12/05





<u>Strategy Number 17</u> Walterville Landing/Waterville Canal Head Gates Area





Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

- EWEB Walterville power canal intake.
- Numerous spawning gravels down river and up river from boom placement area.
- Western pond turtle habitat in side channels along south channel.

Location:

- Walterville Landing area is located 1.75 miles east of Walterville adjacent and south of the McKenzie Highway.
- 44° 04' 36"N / 122° 45' 46"W
- McKenzie Highway milepost 15.
- River Mile: 28.3 (USGS) or 24.4 (Measured)

Description of Response Tactics:

- Deploy 200 feet of 4x6 solid containment boom along south bank across a small channel that separates Goat Island into two islands to protect spawning areas and western pond turtle habitat in south channel.
- Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ Walterville Landing).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- Closest access is Walterville Landing boat ramp within boom placement area. Walterville
 Landing has good access to spill collection area for vac truck or other product removal
 equipment.
- Closest up river access point is Dot's Landing boat ramp 2.5 miles east on McKenzie Highway or 2.7 miles by boat at USGS river mile 31.3 or measured river mile 26.9.
- Dearhorn boat ramp is also located along the south bank of the south channel.
- Access to north bank area is accessible at various areas behind residences located along the river. South bank is not accessible (Goat Island).

Staging Areas:

- Hendricks Park is an ideal staging area with open space, parking areas, bathroom facilities, shelters, electricity, water, and access to the river. It is located approximately 3.6 miles by road from the boom placement area, or 3.5 miles by boat.
- Walterville Landing has some space for staging equipment and is at the scene of boom placement area.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #2 (3.3 miles west at 38929 McKenzie Highway).

Equipment Needs:

700 feet solid containment boom (w/5-6 tow bridles) Boom Deployment Equipment and 5 buoys Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

Pressure washer w/pump

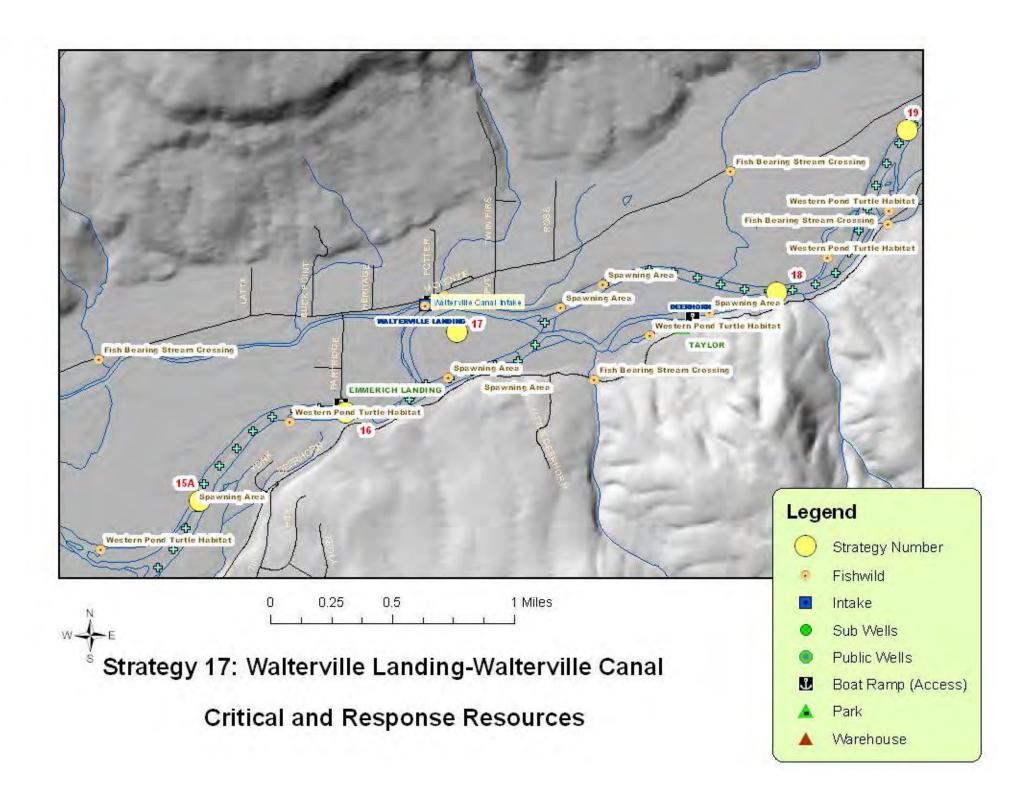
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

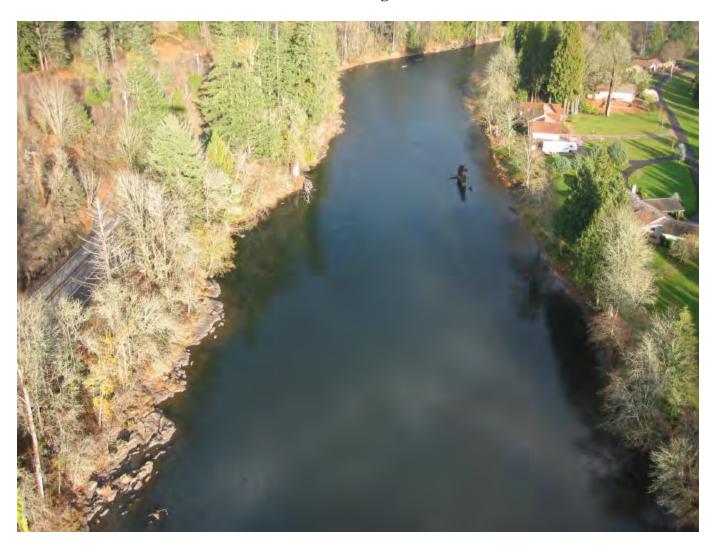
6,000 feet of Rope (3/8" poly rope)

- 0.9 m/s flow during high flow
- No data on depth
- River width = 175-200 feet
- No data on river bottom material.





Strategy Number 20 Dot's Landing Area



Response Objectives:

Collection

Critical Resources to be Protected:

- Western pond turtle habitat in side channels along the south channel.
- Spawning area west of boom placement area.

Location:

- Dot's Landing area is located 1.9 miles west of Leaburg adjacent and south of McKenzie Highway at milepost 17.5.
- 44° 05' 29"N / 122° 43' 05"W
- River Mile: 31.3 (USGS) or 26.9 (Measured)

Description of Response Tactics:

• Deploy 600 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 400 feet down river of Dot's Landing).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- Closest access point is Dot's Landing boat ramp (north bank of river) at boom placement and product recovery area.
- Deerhorn Park boat ramp is located up river (along south bank) approximately 0.3 miles via boat at USGS river mile 31.6 or measured river mile 27.2.
- Down river access is possible at Walterville Landing boat ramp (north bank of north channel around Goat is land) at 2.3 miles west of the boom placement area via boat (or 2.1 miles by vehicle).
- Deerhorn boat ramp is also located down river along the south bank of the south channel around Goat Island approximately 1.3 miles via boat and 1.5 miles by vehicle off of Deerhorn Road.
- Access to north bank area is easily accessible at Dot's Landing. South bank is readily accessible from yards behind residences next to golf course.

Staging Areas:

- Deerhorn Park is the closest staging area with ample space, boat launch, and restrooms.
- EWEB's Leaburg powerhouse complex (1.6 miles east on McKenzie Highway) is a potential equipment staging area that has open space to stage equipment, a nearby park for further staging, cabins for office space, water, electricity, and restrooms.
- Walterville Landing has some space for staging equipment and is a newly improved boat ramp.
- Nearest equipment warehouse is EWEB's Leaburg Powerhouse (1.6 miles east on McKenzie Highway).
- McKenzie Fire & Rescue Station #3 equipment warehouse and potential staging area is located in Leaburg at 42870 McKenzie Highway, approximately 2.5 miles east of the boom placement area.

Watercourse Description:

- 1.2 m/s flow during high flow
- River width = 200-225 feet

Equipment Needs:

600 feet solid containment boom (w/6-7 tow bridles)

Boom Deployment Equipment and 6 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

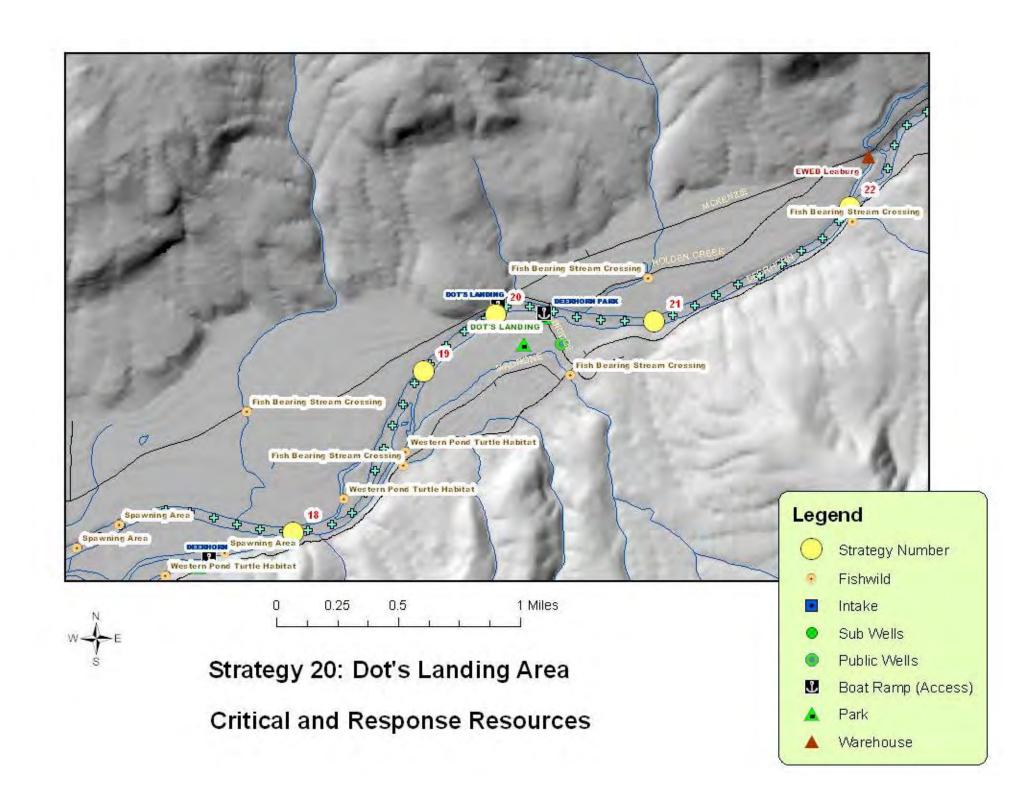
Pressure washer w/pump

3-4 Decon waste pools within containment berm

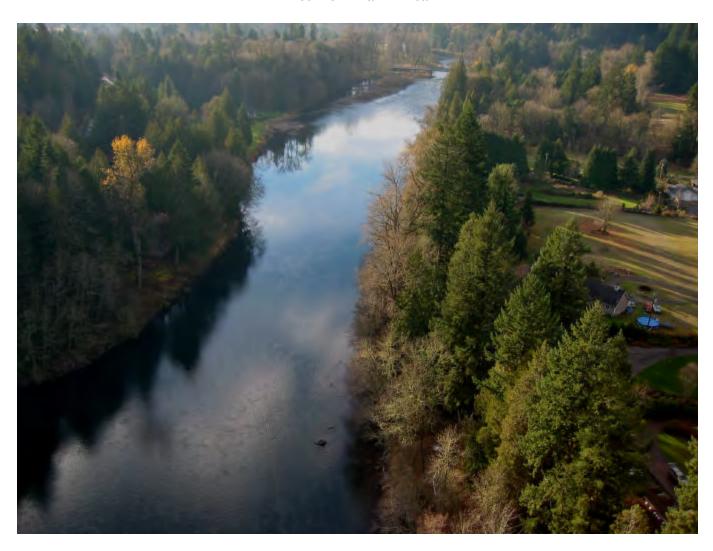
Oil Recovery Drum Skimmer (product recovery)

7,000 feet of Rope (3/8" poly rope)





Strategy Number 21 Deerhorn Park Area



Response Objectives:

Collection

Critical Resources to be Protected:

- Western pond turtle habitat in side channels along the south channel.
- Spawning area west of boom placement area.

Location:

- Deerhorn Park area is located 1.6 miles west of Leaburg and south of McKenzie Highway (mile post 18.75) on Holden Creek Lane.
- 44° 05' 28"N / 122° 42' 24"W
- River Mile: 31.9 (USGS) or 27.5 (Measured)

Description of Response Tactics:

• Deploy 500 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank behind residence).

- Deploy 700 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (south bank behind residence).
- At product collection and recovery areas (north and south banks) protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest down river access point is Deerhorn Park boat ramp, located along south bank approximately 0.3 miles via boat at USGS river mile 31.6 or measured river mile 27.2.
- Dot's Landing boat ramp is also located down river and is on the north bank adjacent to the McKenzie Highway (0.6 miles via boat).
- The closest up river boat ramp is Leaburg Landing located approximately 1.8 miles via boat at USGS river mile 33.7 or measured river mile 29.3 from the boom placement area.
- Access to north bank area is easily accessible behind residential properties by taking residential driveways off of Holden Creek Lane.
- South bank is readily accessible from yards behind residences off of Dearhorn Road.

Staging Areas:

- Deerhorn Park is the closest staging area with ample space, boat launch, and restrooms.
- EWEB's Leaburg powerhouse complex (1.2 miles east via Holden Creek Lane) is a potential equipment staging area that has open space to stage equipment, a nearby park for further staging, cabins for office space, water, electricity, and restrooms.
- Nearest equipment warehouse is EWEB's Leaburg Powerhouse (1.2 miles east via Holden Creek Lane to McKenzie Highway).
- McKenzie Fire & Rescue Station #3 equipment warehouse and potential staging area is located in Leaburg at 42870 McKenzie Highway, approximately 2 miles east of the boom placement area.

Watercourse Description:

- 1.2 m/s flow during high flow
- River width = 175-300 feet

Equipment Needs:

1,200 feet solid containment boom (w/12-13 tow bridles)

Boom Deployment Equipment and 12 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

400 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

20 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

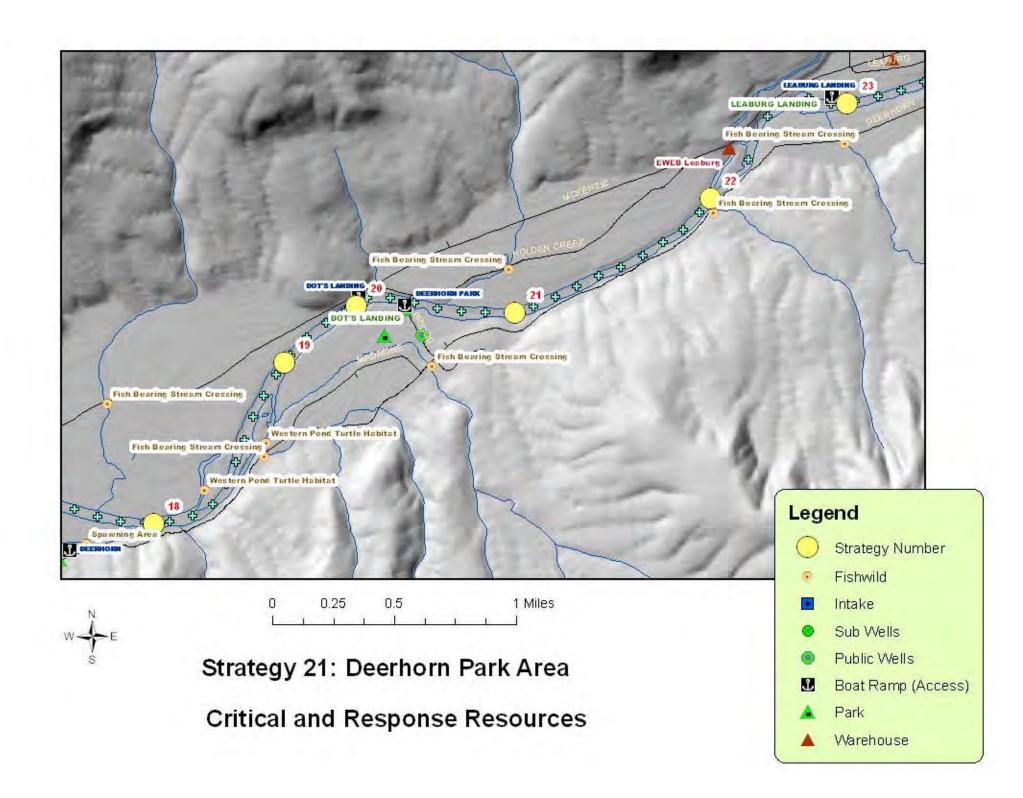
2-Decon equipment

2-Pressure washer w/pump

4-5 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 22 EWEB Leaburg Power Canal Tailrace



Response Objectives:

Collection

Critical Resources to be Protected:

• Spawning area in EWEB tailrace and west of boom placement area.

Location:

- EWEB Leaburg Power Canal Tailrace area is located 0.75 miles west of Leaburg and south of McKenzie Highway (mile post 18.75) on Holden Creek Lane.
- 44° 05' 54"N / 122° 41' 21"W
- River Mile: 33.1 (USGS) or 28.6 (Measured)

- Contact EWEB Leaburg power canal operations (344-8723) and request that canal be shut down to allow collection of product along north bank of McKenzie River without influence from confluence with power canal.
- Deploy 450 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ EWEB spillway return channel).

- Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ EWEB tailrace).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- Closest down river access point is Deerhorn Park boat ramp, located along south bank approximately 1.4 miles via boat at USGS river mile 31.6 or measured river mile 27.2.
- Dot's Landing boat ramp is also located down river and is on the north bank adjacent to the McKenzie Highway (1.7 miles via boat).
- The closest up river boat ramp is Leaburg Landing located approximately 0.7 miles via boat at USGS river mile 33.7 or measured river mile 29.3 from the boom placement area.
- Access to north bank area is easily accessible behind residential property by taking the first
 residential driveway off of Holden Creek Lane (south side) when coming from the east (or last
 residential driveway on south side of road when coming from the west).
- South bank is readily accessible off of Dearhorn Road.

Staging Areas:

- Deerhorn Park is the closest staging area with ample space, boat launch, and restrooms.
- EWEB's Leaburg powerhouse complex located adjacent to the boom placement area is a potential equipment staging area that has open space to stage equipment, a nearby park for further staging, cabins for office space, water, electricity, and restrooms.
- Nearest equipment warehouse is EWEB's Leaburg Powerhouse (adjacent to boom placement area).
- McKenzie Fire & Rescue Station #3 equipment warehouse and potential staging area is located in Leaburg at 42870 McKenzie Highway, approximately 1.2 miles east of the boom placement area.

Watercourse Description:

- 1.3 m/s flow during high flow
- River width = 200-250 feet

Equipment Needs:

950 feet solid containment boom (w/9-10 tow bridles)

Boom Deployment Equipment and 10 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

20 bales sorbent pads

Compressor

Chemical Pump

Generator

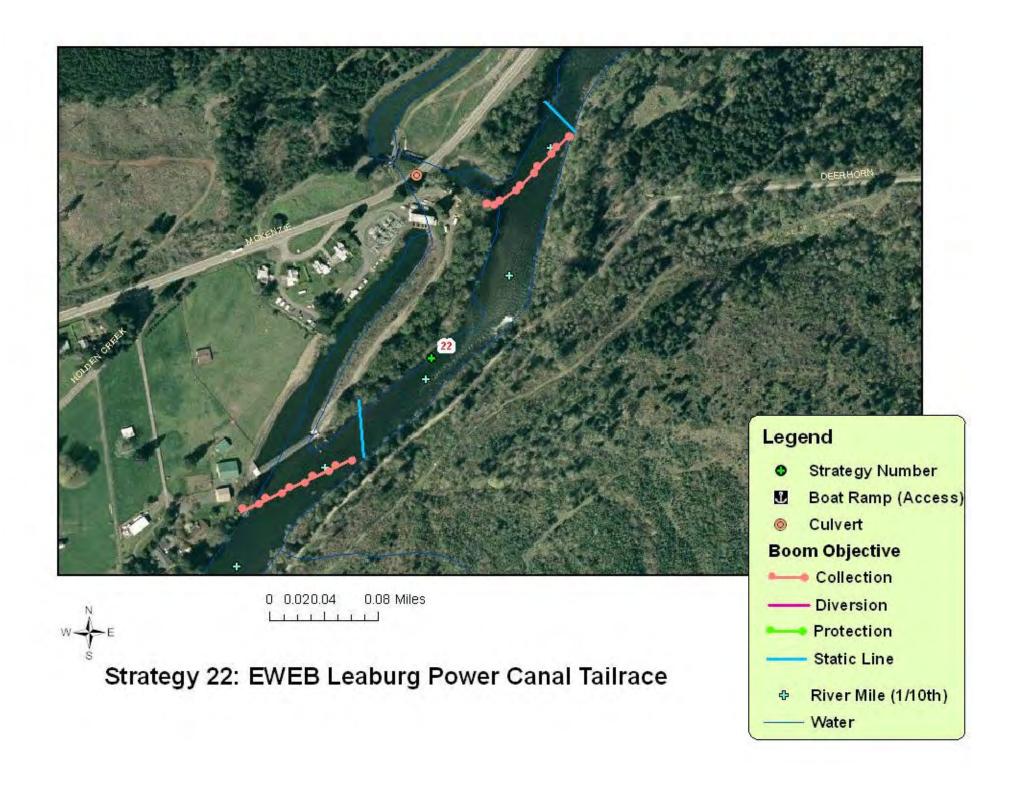
1 Jet boat

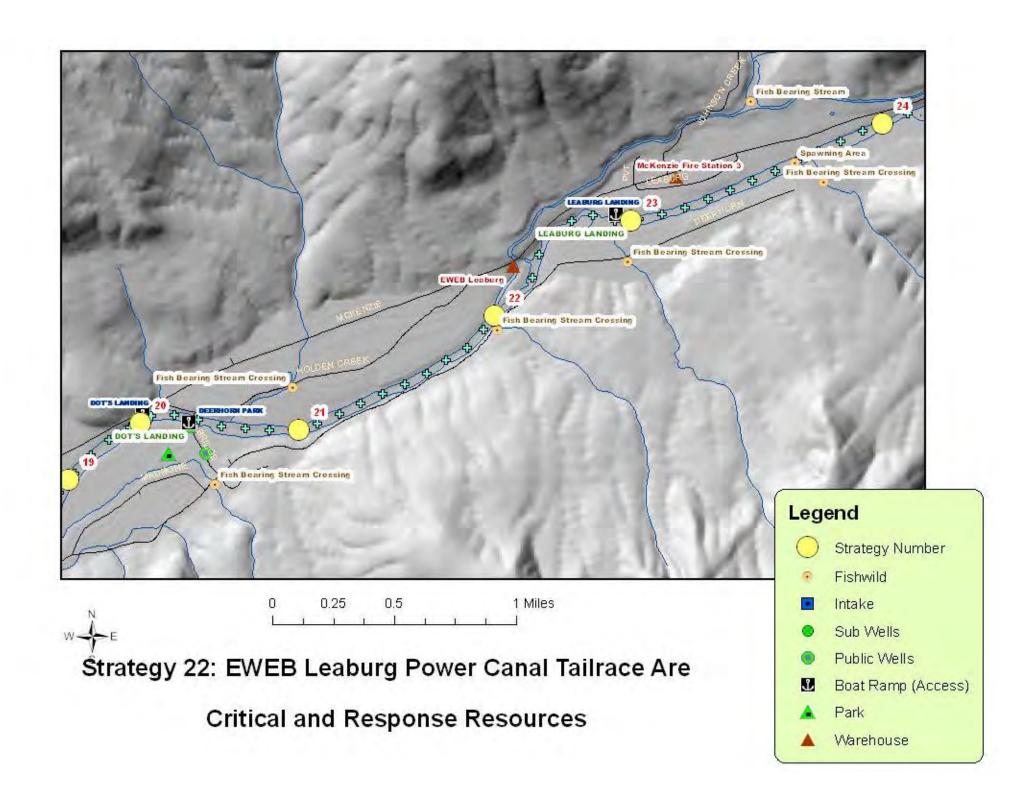
Decon equipment

Pressure washer w/pump

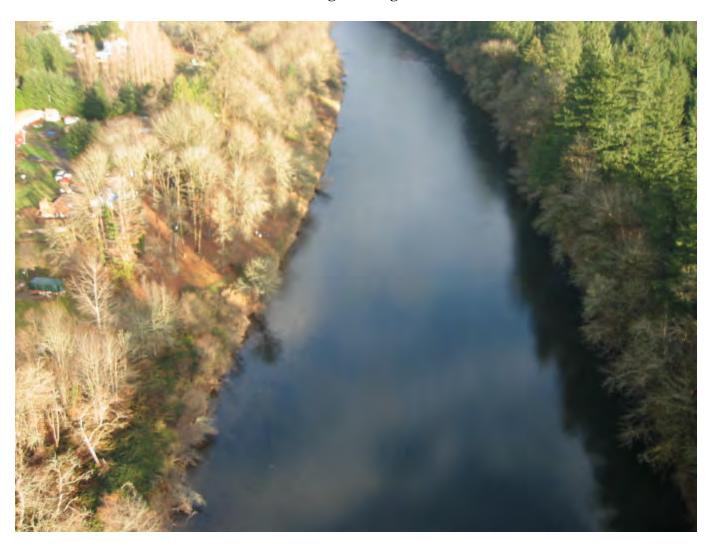
4-5 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 23 Leaburg Landing Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Spawning areas west of boom placement area.

Location:

- Leaburg Landing area is located in Leaburg (west end of town) and south of McKenzie Highway (mile post 19.7) approximately 500 feet.
- 44° 06' 15"N / 122° 40' 46"W
- River Mile: 33.7 (USGS) or 29.3 (Measured)

Description of Response Tactics:

• Deploy 600 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ Leaburg Landing boat ramp).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest boat ramp is Leaburg Landing located at the boom placement area.
- Closest down river access point is Deerhorn Park boat ramp, located along south bank approximately 2.1 miles via boat at USGS river mile 31.6 or measured river mile 27.2.
- Dot's Landing boat ramp is also located down river and is on the north bank adjacent to the McKenzie Highway (2.4 miles via boat).
- Lower Greenwood boat ramp is located up river approximately 1.7 miles via boat at USGS river mile 35.4 or measured river mile 31.0.
- Access to north bank area is easily accessible at the Leaburg Landing boat ramp.
- South bank is not readily accessible, but there may be limited access behind some scattered residences off of Dearhorn Road.

Staging Areas:

- McKenzie Fire & Rescue Station #3 equipment warehouse and potential staging area is located in Leaburg at 42870 McKenzie Highway, approximately 0.3 miles east of the boom placement area.
- EWEB's Leaburg powerhouse complex 0.6 miles west of boom placement area is a potential equipment staging area that has open space to stage equipment, a nearby park for further staging, cabins for office space, water, electricity, and restrooms.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #3.

Watercourse Description:

- 1.4 m/s flow during high flow
- River width = 225-275 feet
- No data on river bottom material.

Equipment Needs:

600 feet solid containment boom (w/6-7 tow bridles)

Boom Deployment Equipment and 6 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & deconarea)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

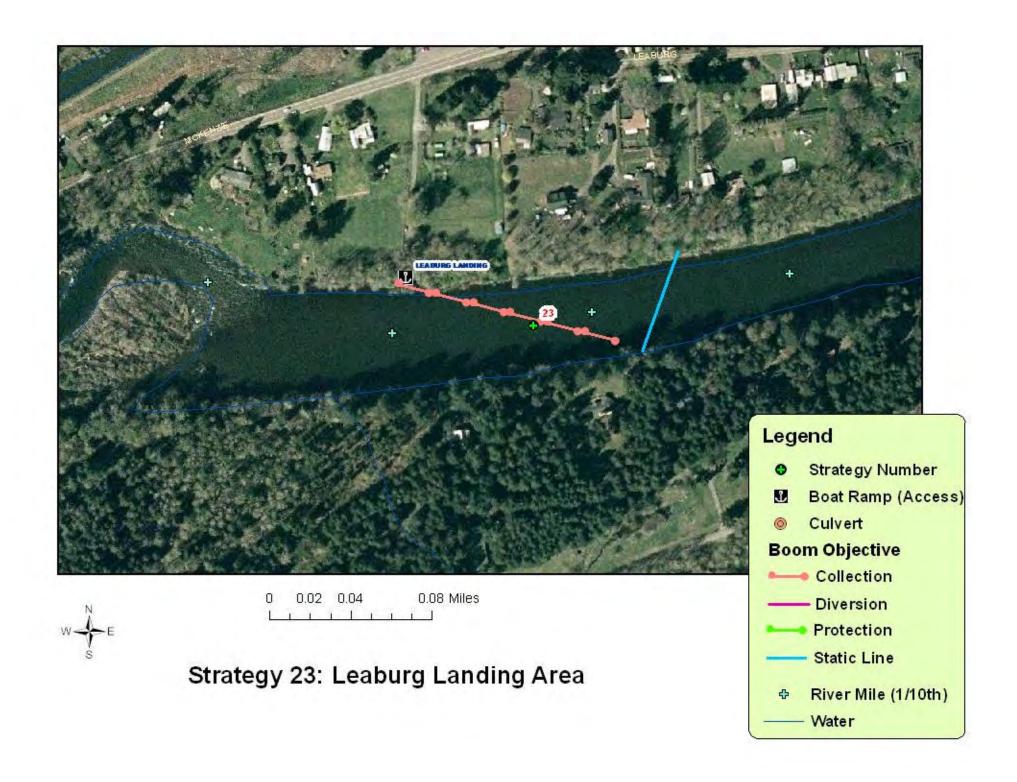
1 Jet boat

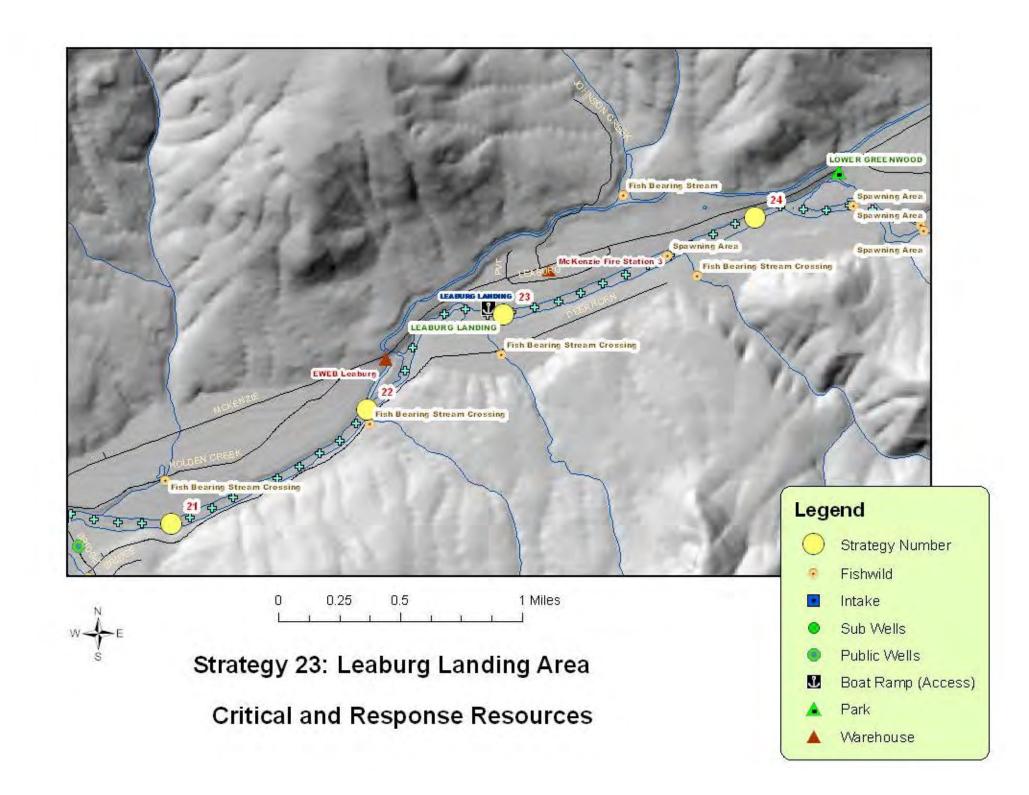
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 25 Lower Greenwood Boat Ramp Area



Response Objectives:

- Collection
- Diversion

Critical Resources to be Protected:

• Multiple spawning areas west of boom placement area.

Location:

- Lower Greenwood Boat Ramp area is located 1.5 miles east of Leaburg on Greenwood Drive. Take McKenzie Highway to milepost 21.35 and head south on Greenwood Driver for approximately 0.35 miles, then head south on private driveway to river.
- 44° 06' 39"N / 122° 38' 32"W
- River Mile: 35.9 (USGS) or 31.3 (Measured)

- Deploy 100 feet of 4x6 solid containment boom from south bank at an angle of 28-34 degrees NW to divert spilled material toward natural collection area in pool along north bank.
- Deploy 450 feet of 4x6 solid containment boom from south bank across side channel/pool to a small rock outcrop/island to divert spilled product toward collection area.
- Deploy 300 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE (anchor up river end of boom at small rock outcrop/island area) from the spilled product collection and recovery area (north bank behind residence at natural collection area in pool).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is Lower Greenwood boat ramp located approximately 0.3 miles west of the boom placement area via boat at USGS river mile 35.6 or measured river mile 31.0.
- The closest up river access point is Greenwood Landing approximately 0.9 miles east at USGS river mile 36.8 or measured river mile 32.2.
- Access to north bank area accessible from behind residential property off of Greenwood Driver (south of McKenzie Highway milepost 21.4).
- South bank is not readily accessible by land.

Staging Areas:

- McKenzie Fish Hatchery equipment warehouse at 43863 Greer Road has ample space for staging equipment, as well as water, electricity, office space, and enclosed storage areas. The hatchery is located approximately 0.6 miles east of the boom placement area (Greenwood Drive east to Greer road).
- McKenzie Fire & Rescue Station #3 equipment warehouse and potential staging area is located in Leaburg at 42870 McKenzie Highway, approximately 1.9 miles west of the boom placement area.
- EWEB's Leaburg powerhouse complex 2.7 miles west of boom placement area is a potential equipment staging area that has open space to stage equipment, a nearby park for further staging, cabins for office space, water, electricity, and restrooms.
- Nearest equipment warehouse is McKenzie Fish Hatchery.

Watercourse Description:

- 0.3 m/s flow during high flow
- River width = 75-700 feet

Equipment Needs:

900 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

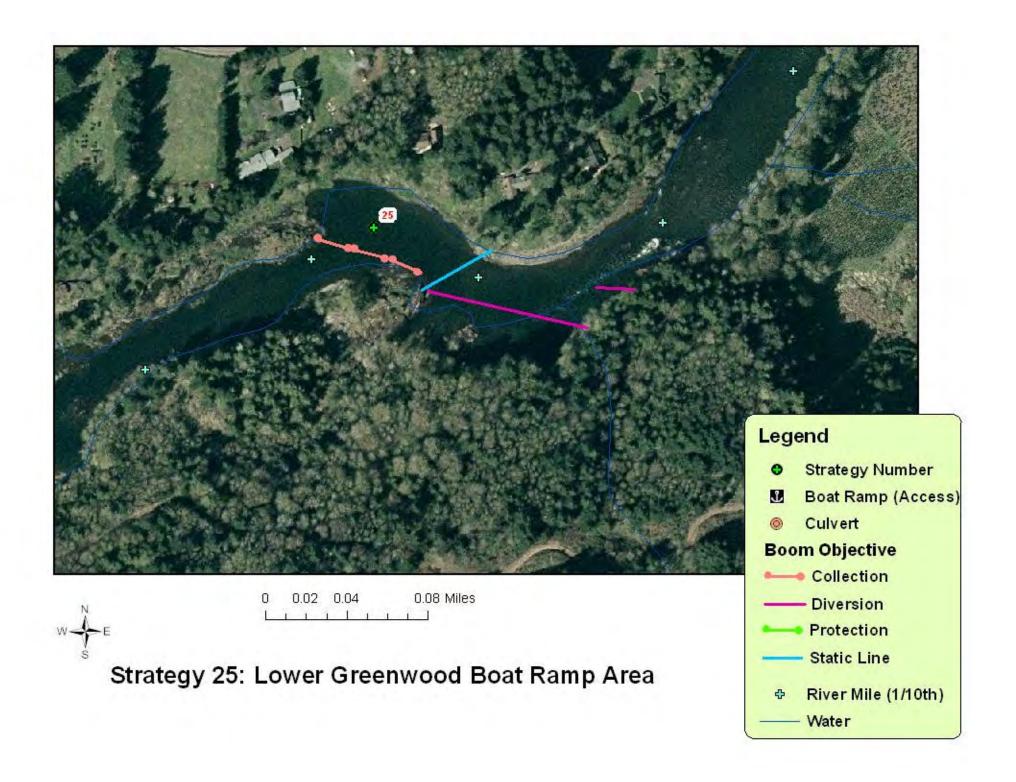
1 Jet boat

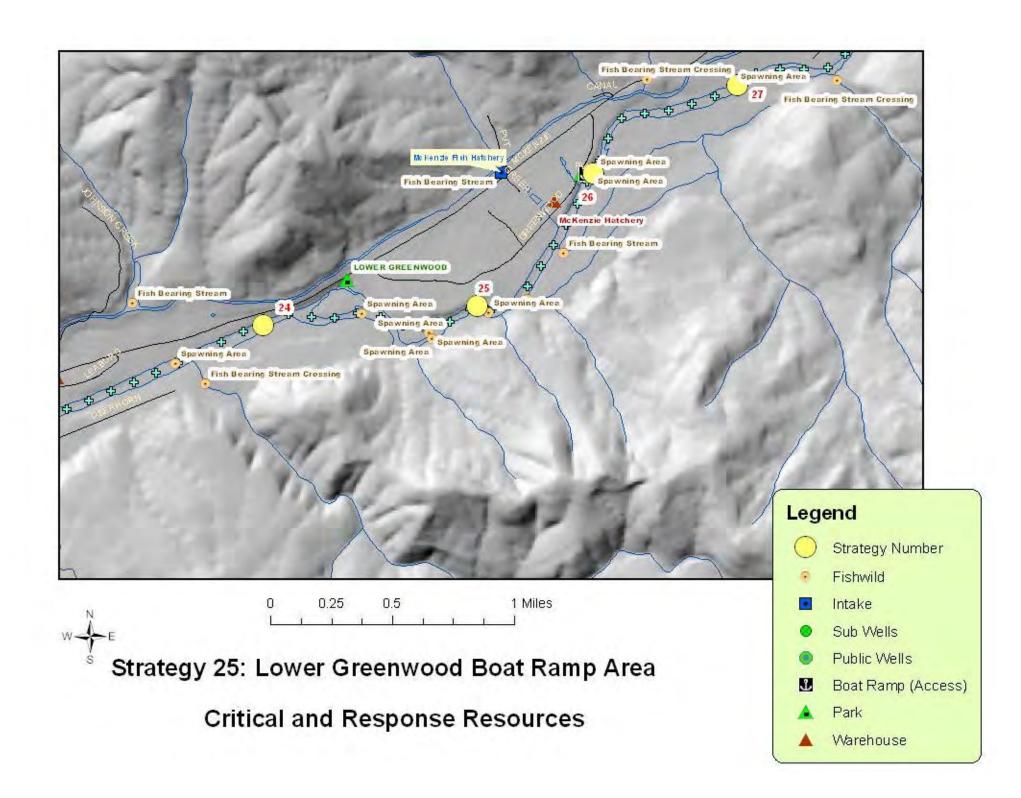
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 26 Greenwood Landing Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Spawning areas west and east of boom placement area.

Location:

- Greenwood Landing area is located 2.2 miles east of Leaburg on Greenwood Drive. Take McKenzie Highway east from Leaburg to milepost 21.35 and head south on Greenwood Driver for approximately 1.1 miles to boat ramp.
- 44° 07' 12"N / 122° 37' 50"W
- River Mile: 36.8 (USGS) or 32.2 (Measured)

Description of Response Tactics:

• Deploy 350 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 250 feet down river from Greenburg Landing boat ramp).

 At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest river access point is Greenwood Landing boat ramp located at the boom placement area at USGS river mile 36.8 or measured river mile 32.2.
- A second boat ramp, Lower Greenwood boat ramp, is located approximately 1.2 miles west or down river of the boom placement area via boat at USGS river mile 35.6 or measured river mile 31.0.
- There are no other river access areas up river between the boom placement area and the Leaburg Dam.
- The north bank is readily accessible at the Greenwood Landing boat ramp area.
- South bank is not as easily accessible by land, but may be achieved through a farmer's field.

Staging Areas:

- McKenzie Fish Hatchery equipment warehouse at 43863 Greer Road has ample space for staging equipment, as well as water, electricity, office space, and enclosed storage areas. The hatchery is located approximately 0.6 miles east of the boom placement area (Greenwood Drive east to Greer road).
- McKenzie Fire & Rescue Station #3 equipment warehouse and potential staging area is located in Leaburg at 42870 McKenzie Highway, approximately 1.9 miles west of the boom placement area.
- EWEB's Leaburg powerhouse complex 2.7 miles west of boom placement area is a potential equipment staging area that has open space to stage equipment, a nearby park for further staging, cabins for office space, water, electricity, and restrooms.
- Nearest equipment warehouse is McKenzie Fish Hatchery.

Watercourse Description:

- 1.5 m/s flow during high flow
- River width = 75-200 feet

Equipment Needs:

350 feet solid containment boom (w/4-5 tow bridles)

Boom Deployment Equipment and 4 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

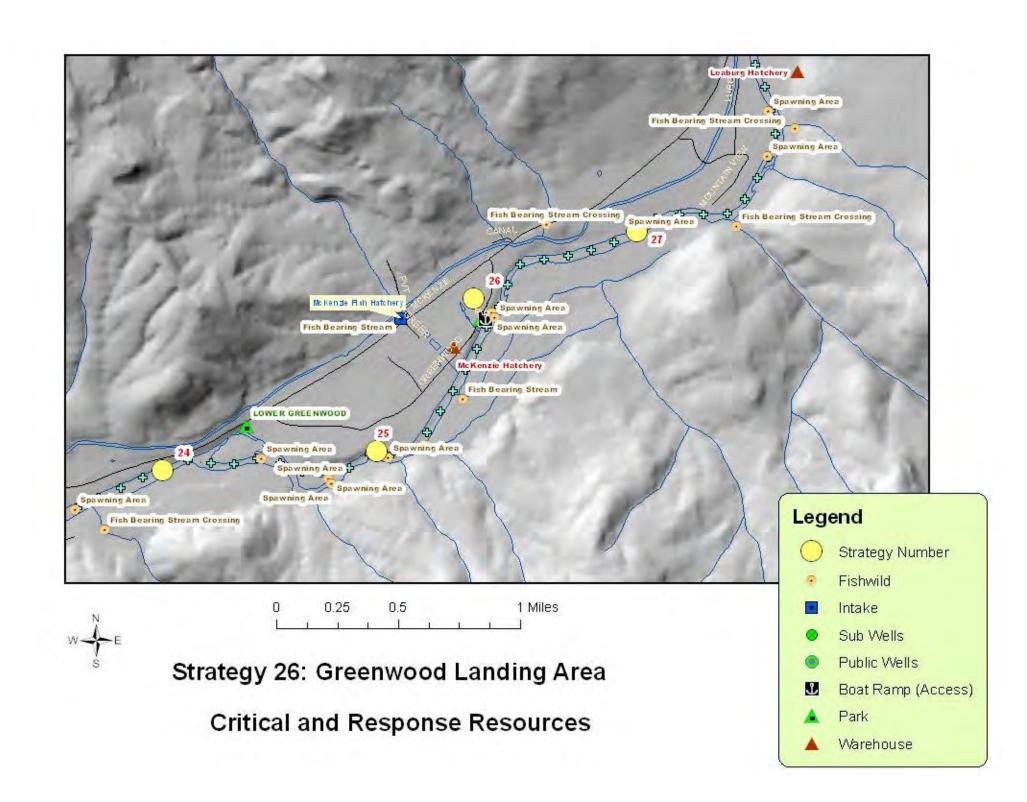
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 27 Greenwood Landing/Below Leaburg Dam



Response Objectives:

• Collection

Critical Resources to be Protected:

• Spawning areas west and east of boom placement area.

Location:

- Greenwood Landing/Below Leaburg Dam area is located 2.9 miles east of Leaburg or 1.1 miles west of Leaburg Dam off of McKenzie Highway. Take McKenzie Highway to milepost 23.0 and head south on private road that has bridge over Leaburg Canal. Follow private road south approximately 850 feet to the river.
- 44° 07' 29"N / 122° 37' 16"W
- River Mile: 37.5 (USGS) or 32.9 (Measured)

- Deploy 700 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank near Leaburg Channel).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- The closest river access point is Greenwood Landing boat ramp located at the boom placement area at USGS river mile 36.8 or measured river mile 32.2.
- A second boat ramp, Lower Greenwood boat ramp, is located approximately 1.2 miles west or down river of the boom placement area via boat at USGS river mile 35.6 or measured river mile 31.0.
- There are no other river access areas up river between the boom placement area and the Leaburg Dam.
- The north bank is accessible via a private road through farm fields. Trees line the river making access via land a little more difficult.
- South bank is accessible via dirt road through residence with access to farm fields behind residence. Trees line river along bank making access via land a little difficult.

Staging Areas:

- McKenzie Fish Hatchery equipment warehouse at 43863 Greer Road has ample space for staging equipment, as well as water, electricity, office space, and enclosed storage areas. The hatchery is located approximately 1.2 miles west of the boom placement area (McKenzie Hwy to Greenwood Drive west to Greer road).
- EWEB Waterboard Park boat ramp is located 1.2 miles east of the boom placement area and has ample space to stage equipment, but lacks electricity, water and other facilities.
- Leaburg Fish Hatchery equipment warehouse and potential staging area is located 1.2 miles east (next to EWEB's Waterboard Park) of the boom placement area.
- Nearest equipment warehouse is McKenzie Fish Hatchery at 43863 Greer Road.

Watercourse Description:

- 1.2 m/s flow during high flow
- River width = 200-250 feet

Equipment Needs:

700 feet solid containment boom (w/7-8 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

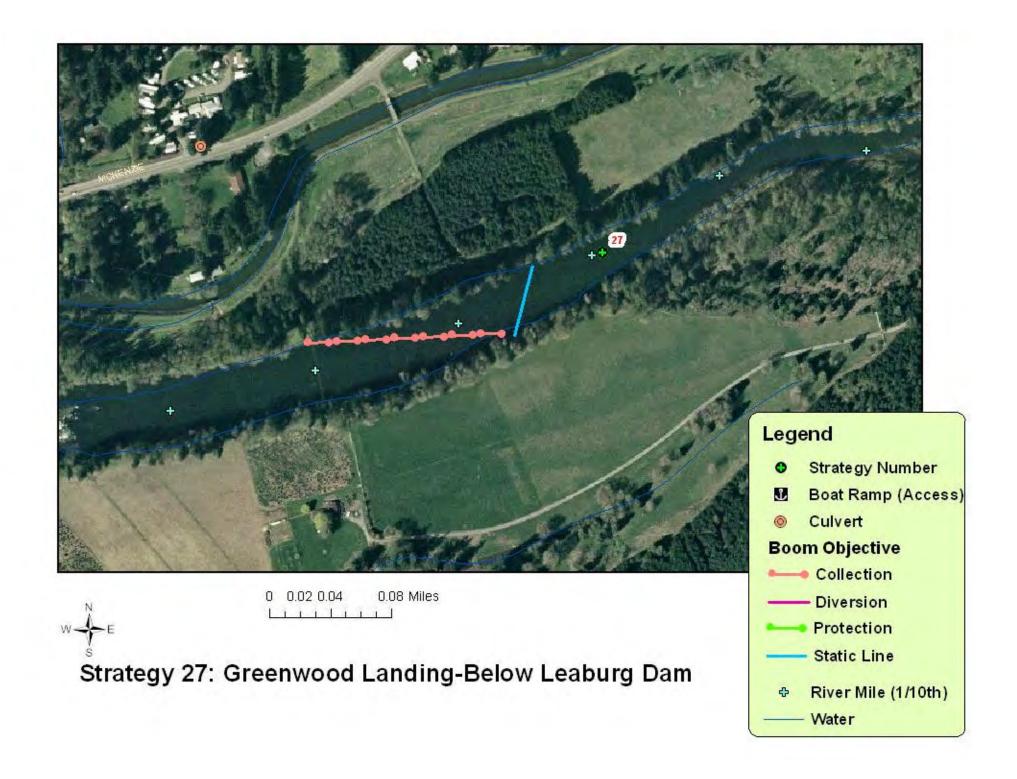
1 Jet boat

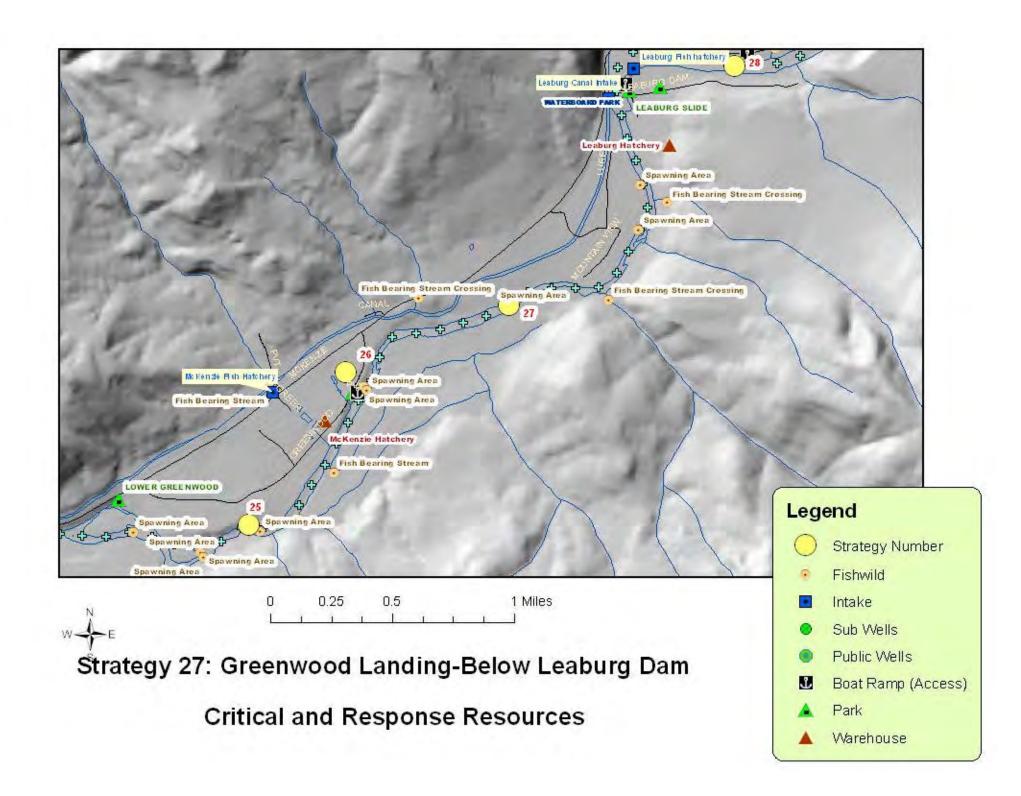
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 28 Leaburg Dam Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

- Leaburg fish hatchery intake.
- EWEB Leaburg power canal intake.
- Spawning areas below dam.

Location:

- Leaburg Dam area is located adjacent and west of Vida off of the McKenzie Highway.
- 44° 08' 25"N / 122° 36' 21"W
- River Mile: 39.2 (USGS) or 34.7 (Measured)

Description of Response Tactics:

• Deploy 150 feet of 4x6 solid containment boom in front of the Leaburg fish hatchery intake structure (south bank) to protect this intake from spilled material. Setup 4-inch PVC pipe with ends capped in front of hatchery intake (U-shaped) to keep boom away from intake structure. Sorbent boom should be placed in front of the hard boom for extra protection and some product recovery.

- Deploy 1,200 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 700 feet down river of Ike's Landing boat ramp).
- A second collection boom should be setup to remove residual product prior to dam and Leaburg power canal intake. Deploy 600 feet of 4x6 solid containment boom from south bank at an angle of 28-34 degrees NW from the spilled product collection and recovery area (south bank at Waterboard park boat ramp).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- The closest river access points are Ike's Landing boat ramp on the north bank at McKenzie Highway milepost 24.7 and Waterboard Park boat ramp on the south bank just east of the Leaburg Dam. Both boat ramps are located within the boom placement area at USGS river mile 39.2 or measured river mile 34.7.
- The north bank is easily accessible off of McKenzie Highway and the Ike's Landing boat ramp. Traffic is a concern since the north bank is adjacent to the highway.
- South bank is easily accessible at the Waterboard Park area as well as behind residential properties located off of Leaburg Dam Road.

Staging Areas:

- EWEB Waterboard Park boat ramp is located within the boom placement area and has ample space to stage equipment, but lacks electricity, water and other facilities.
- Leaburg Fish Hatchery equipment warehouse and potential staging area is located adjacent and south of the boom placement area, just below the dam along the south bank.
- Nearest equipment warehouse is Leaburg Fish Hatchery.

Watercourse Description:

- 0.5 m/s flow during high flow
- River width = 275-750 feet
- Sand, silt, and gravel

Equipment Needs:

1,950 feet solid containment boom (w/20-22 tow bridles)

Boom Deployment Equipment and 18 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

500 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

300 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

30 bales sorbent pads

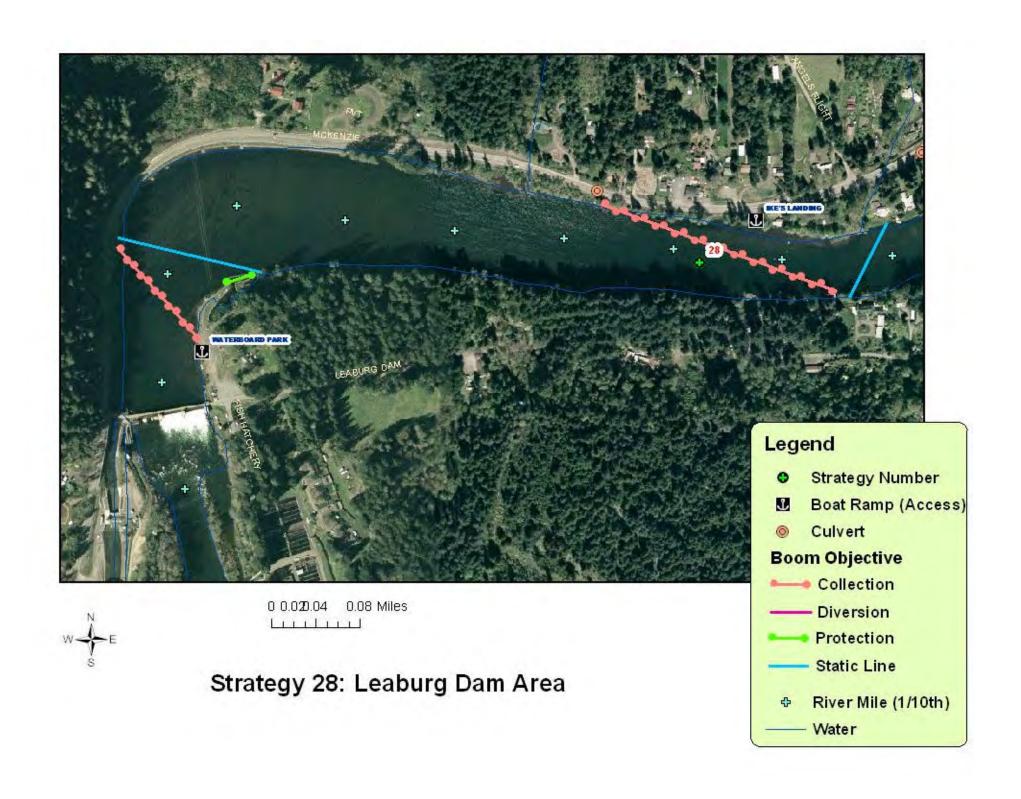
Compressor

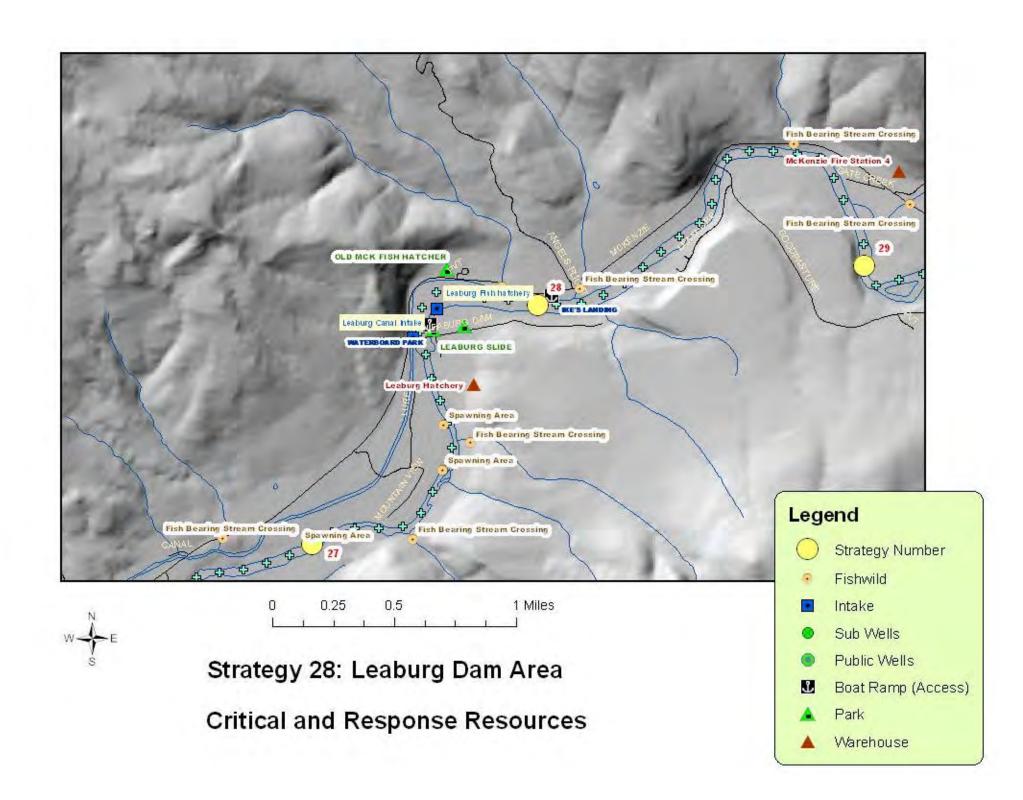
Chemical Pump

Generator

- 2 Jet boats
- 2-Decon equipment
- 2-Pressure washer w/pump
- 4-5 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 30 Confluence Tom's Creek Area



Response Objectives:

Collection

Critical Resources to be Protected:

• No critical resources in vicinity of area.

Location:

- Confluence Tom's Creek area is locate east of Vida 0.6 miles. Take McKenzie Highway to milepost 27.4 and head south approximately 400 feet on a private dirt road through an orchard to the north bank of the river.
- 44° 08' 18"N / 122° 33' 27"W
- River Mile: 42.5 (USGS) or 37.9 (Measured)

- Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank behind residence).
- Deploy 800 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank behind residence).

• At product collection and recovery areas protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is Ike's Landing boat ramp on the north bank at McKenzie Highway at milepost 24.7 approximately 2.7 miles via land or 3.2 miles via boat from boom placement area (USGS river mile 39.2 or measured river mile 34.7).
- The closest up river access point is Helfrich Landing boat ramp is approximately 1.4 miles east via boat of the boom placement area, about 0.25 miles south of McKenzie Highway at milepost 28.7 (USGS river mile 44.0 or measured river mile 39.3).
- The north bank is easily accessible off of McKenzie Highway via a private dirt road through an orchard.
- South bank is easily accessible behind residential properties.

Staging Areas:

- McKenzie Fire & Rescue Station #4 located 0.45 miles west of boom placement area in Vida at 45625 N. Gate Creek Road is the closest staging area with some space to store equipment.
- Helfrich Landing is located 1.5 miles east of boom placement area and has some area for staging equipment and has restrooms and other facilities.
- EWEB Waterboard Park boat ramp is located 3.5 miles west of the boom placement area and has ample space to stage equipment, but lacks electricity, water and other facilities.
- Leaburg Fish Hatchery equipment warehouse and potential staging area is located adjacent and south of EWEB's Waterboard Park, just below the dam along the south bank.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #4 at 45625 N. Gate Creek Road.

Watercourse Description:

• River width = 200-250 feet

Equipment Needs:

1,300 feet solid containment boom (w/13-14 tow bridles)

Boom Deployment Equipment and 13 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

20 bales sorbent pads

Compressor

Chemical Pump

Generator

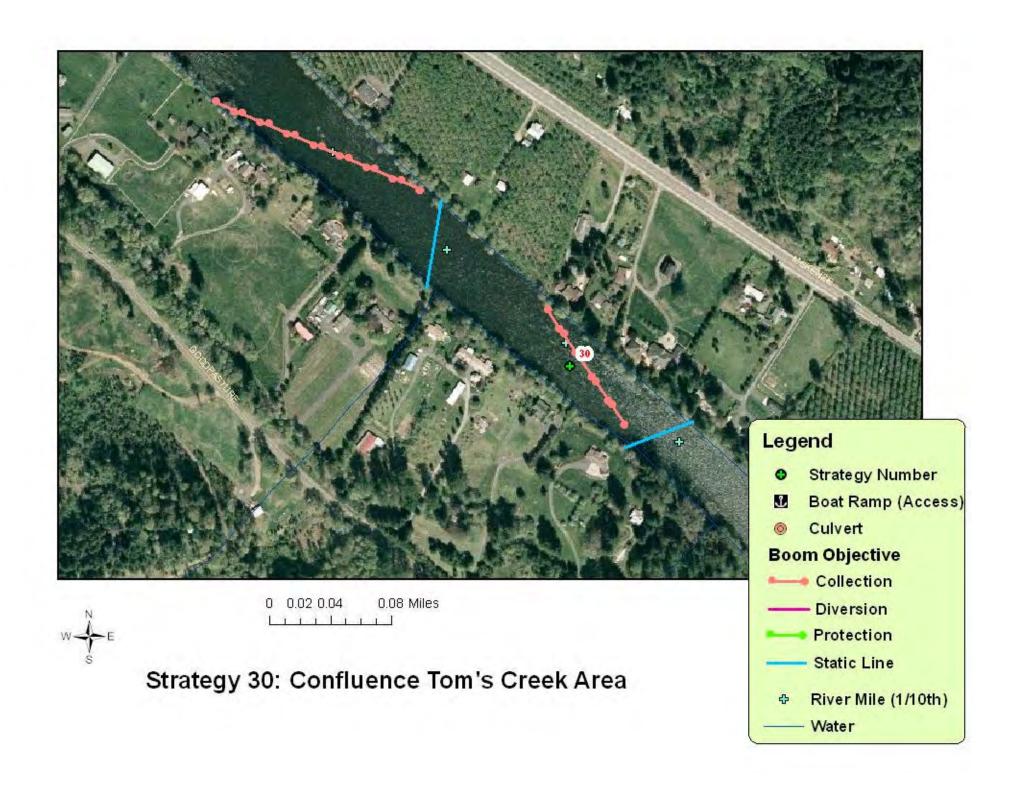
1 Jet boat

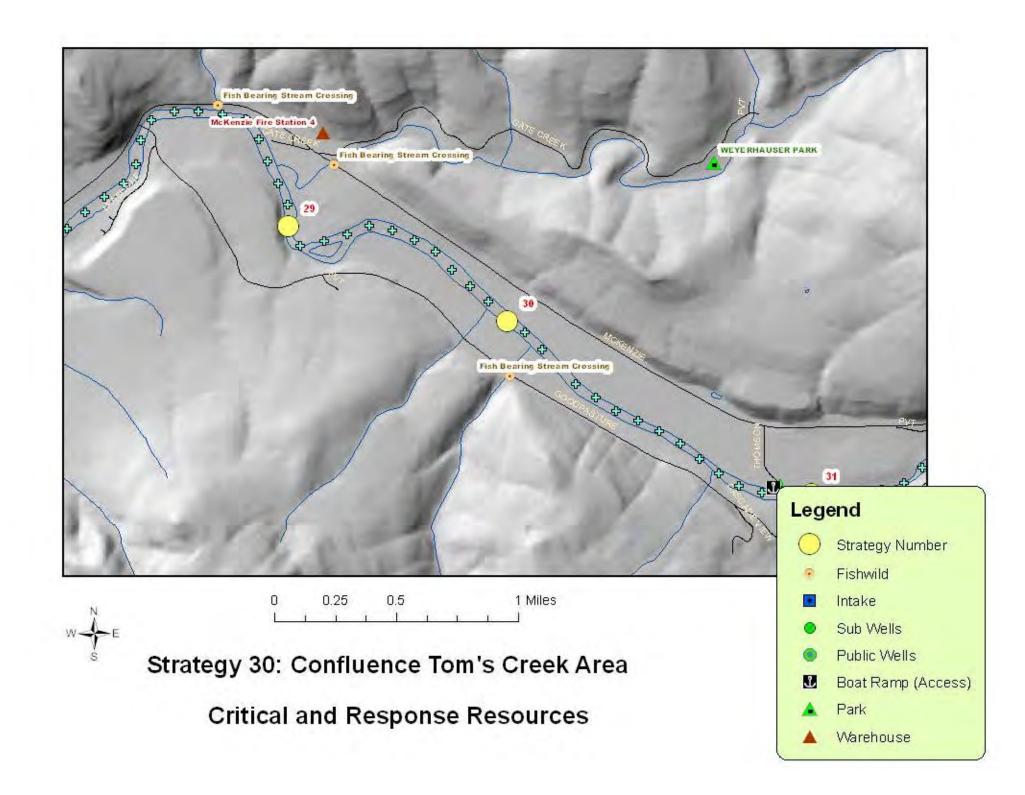
2-Decon equipment

2-Pressure washer w/pump

4-5 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 32 Ben & Kay Dorris State Park Area



Response Objectives:

Collection

Critical Resources to be Protected:

• No critical resources in vicinity of area.

Location:

- Ben & Kay Dorris State Park area is located east of Vida 2.6 miles. Take McKenzie Highway to turn-off to Ben & Kay Dorris State Park (milepost 29.2) and follow road southeast approximately 0.25 miles to boat ramp.
- 44° 07' 53"N / 122° 31 02"W
- River Mile: 44.9 (USGS) or 40.2 (Measured)

Description of Response Tactics:

• Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ Ben & Kay Dorris State Park boat ramp).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest river access point is at Ben & Kay Dorris State Park within the boom placement area (USGS river mile 44.9 or measured river mile 40.2).
- The closest down river access point is Helfrich Landing boat ramp approximately 0.8 miles via boat from the boom placement area (USGS river mile 44.1 or measured river mile 39.4).
- The north bank is easily accessible off of McKenzie Highway via road to Ben & Kay Dorris State Park boat ramp.
- South bank may be accessible from Marten Rapids Park off of Goodpasture Road, however thick stand of trees may prevent land access to south bank.

Staging Areas:

- Ben & Kay Dorris State Park located at the boom placement area appears to be a good equipment staging area with ample space, boat ramp, restroom facilities, and water.
- Helfrich Landing is located 1.1 miles west of the boom placement area off of McKenzie highway on Thompson Lane and has some area for staging equipment and has restrooms and other facilities.
- McKenzie Fire & Rescue Station #4 located 2.6 miles west of boom placement area in Vida at 45625 N. Gate Creek Road has some space to store equipment.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #4 at 45625 N. Gate Creek Road.

Watercourse Description:

- No data on flow
- River width = 200-225 feet
- No data on river bottom material

Equipment Needs:

500 feet solid containment boom (w/5-6 tow bridles)

Boom Deployment Equipment and 5 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

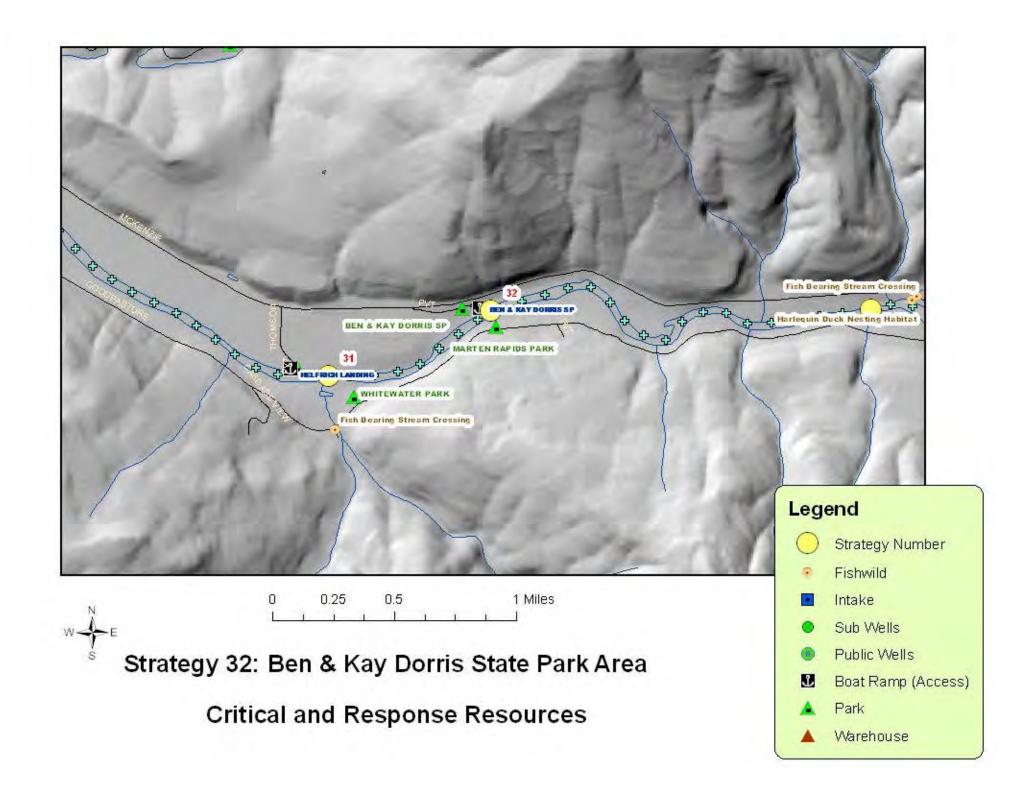
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 34 Rennie's Landing Area



Response Objectives:

- Diversion
- Collection

Critical Resources to be Protected:

• Harlequin duck nesting area located in the Bear Creek confluence area down river of boom placement area.

Location:

- Rennie's landing area is located approximately 2 miles west of Nimrod. Take McKenzie Highway to milepost turnoff to Rennie's landing at milepost 32.25.
- 44° 07' 26"N / 122° 28 00"W
- River Mile: 47.8 (USGS) or 43.2 (Measured)

Description of Response Tactics:

- Deploy 250 feet of 4x6 solid containment boom from south bank across inlet to side channel to divert spilled product around island via north channel.
- Deploy 650 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ Rennie's Landing boat ramp).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest access point is Rennie's Landing boat ramp located within the boom placement area at USGS river mile 47.8 or measured river mile 43.2.
- The closest up river access point is at Silver Creek Landing located approximately 1.8 miles via boat from the boom placement area (USGS river mile 49.8 or measured river mile 45.2).
- The closest down river access point is at Ben & Kay Dorris State Park located approximately 2 miles east via boat from the boom placement area (USGS river mile 44.9 or measured river mile 40.2).
- The north bank is close to the McKenzie Highway (200 feet south) and may be accessible by land, however a stand of trees between the river and the highway may make it difficult.
- South bank does not appear accessible via land due to dense stand of trees between the river and Goodpasture Road.

Staging Areas:

- Ben & Kay Dorris State Park located 2.75 miles west of the boom placement area appears to be a good equipment staging area with ample space, boat ramp, restroom facilities, and water.
- McKenzie Fire & Rescue Station #5 located 2.25 miles east of boom placement area in Nimrod at 49243 McKenzie Highway has some space to store equipment.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #5 at 49243 McKenzie Highway.

Watercourse Description:

• River width = 200-250 feet

Equipment Needs:

900 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

Pressure washer w/pump

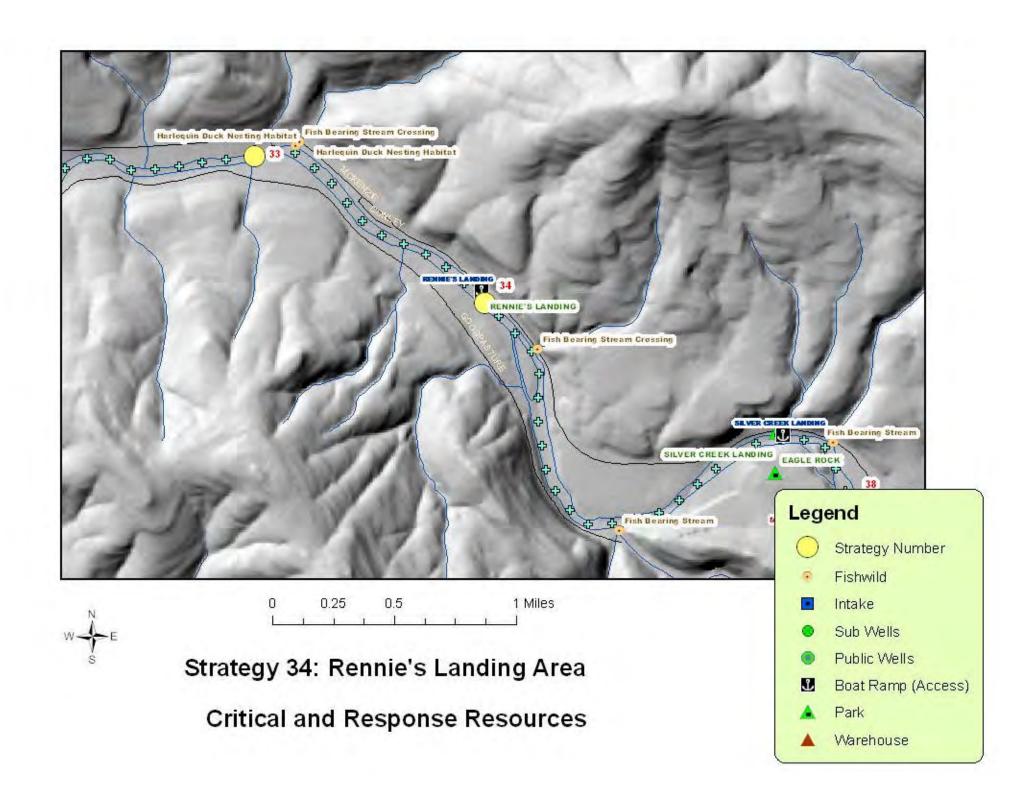
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

9,000 feet of Rope (3/8" poly rope)

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Strategy Number 38 Eagle Rock Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Harlequin duck nesting area located in the Bear Creek confluence area down river of boom placement area.

Location:

- Eagle Rock area is located in Nimrod behind the Eagle Rock Lodge, approximately 500 feet south of McKenzie Highway milepost 34.4.
- 44° 06' 46"N / 122° 26 10"W
- River Mile: 50.3 (USGS) or 45.7 (Measured)

Description of Response Tactics:

• Deploy 600 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank @ Eagle Rick Lodge area).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is at Silver Creek Landing located approximately 0.5 miles west via boat from the boom placement area (USGS river mile 49.8 or measured river mile 45.2).
- The closest up river access point is at Nimrod Landing located approximately 1.1 miles east via boat from the boom placement area (USGS river mile 51.4 or measured river mile 46.8) on the south bank.
- The north bank is assessable behind the eagle Rock Lodge.
- South bank does not appear accessible via land due to dense stand of trees along river and steep terrain.

Staging Areas:

- McKenzie Fire & Rescue Station #5 located 0.2 miles east of boom placement area in Nimrod at 49243 McKenzie Highway has some space to store equipment.
- Clover Point County Park (e.g., County Parcel) is located 0.5 miles east of the boom placement area in Nimrod and may have space to store equipment, but lacks in facilities.
- Nimrod landing is located 1.1 miles from the boom placement area on the south bank of the river and has some space for staging equipment, boat ramp, and restrooms.
- HJ Morton State Park is located 3.25 miles east off of McKenzie Highway and has ample space to stage equipment, restrooms, and water.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #5 at 49243 McKenzie Highway.

Watercourse Description:

- No data on flow
- River width = 225-350 feet
- No data on river bottom material

Equipment Needs:

600 feet solid containment boom (w/6-7 tow bridles)

Boom Deployment Equipment and 6 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

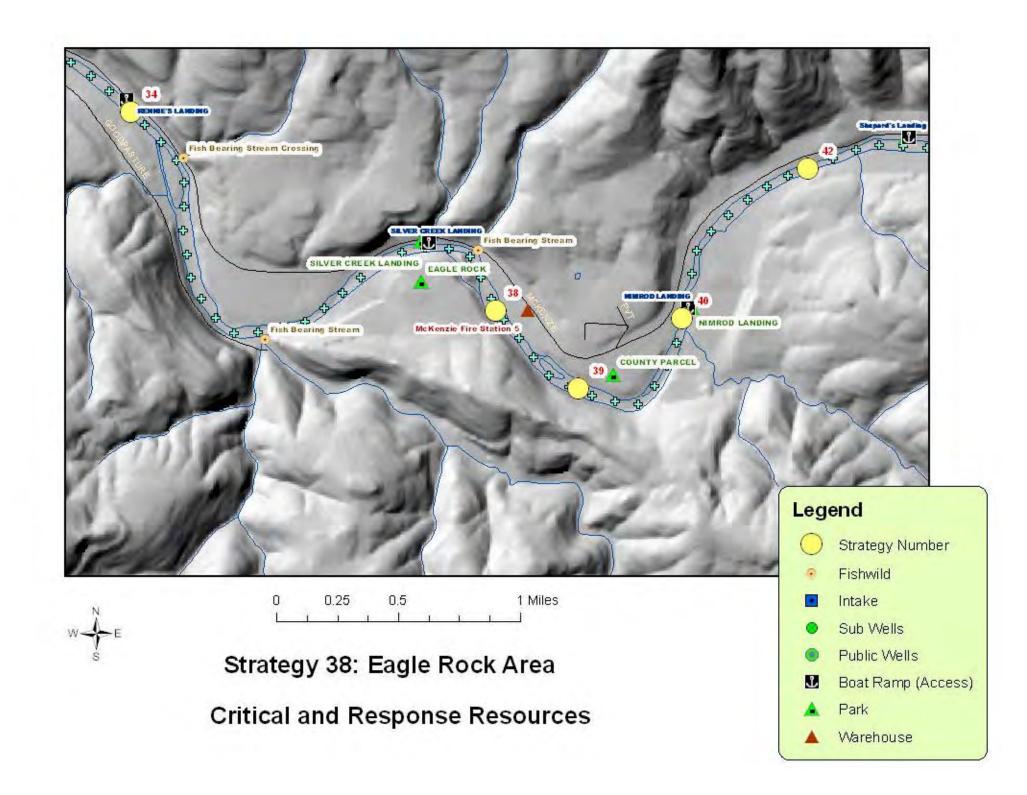
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 39 Nimrod Area



Response Objectives:

- Diversion
- Collection

Critical Resources to be Protected:

• Harlequin duck nesting area located in the Bear Creek confluence area down river of boom placement area.

Location:

- Nimrod area is located in Nimrod, approximately 600 feet south of McKenzie Highway milepost 34.8.
- 44° 06' 29"N / 122° 25 45"W
- River Mile: 50.8 (USGS) or 46.2 (Measured)

Description of Response Tactics:

• Deploy 400 feet of 4x6 solid containment boom from south bank across south channel to divert spilled product around island via the north channel.

- Deploy 700 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank behind residence).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- The closest down river access point is at Silver Creek Landing located approximately 1.0 mile west via boat from the boom placement area (USGS river mile 49.8 or measured river mile 45.2).
- The closest up river access point is at Nimrod Landing located approximately 0.6 miles east via boat from the boom placement area (USGS river mile 51.4 or measured river mile 46.8) on the south bank.
- The north bank is assessable behind residential properties (i.e., use private drives to gain access).
- South bank does not appear accessible via land due to dense stand of trees along river and steep terrain.

Staging Areas:

- McKenzie Fire & Rescue Station #5 located 0.5 miles west of boom placement area in Nimrod at 49243 McKenzie Highway has some space to store equipment.
- Clover Point County Park (e.g., County Parcel) is located adjacent and east of the boom placement area in Nimrod and may have space to store equipment, but lacks in facilities.
- Nimrod landing is located 0.6 miles from the boom placement area on the south bank of the river and has some space for staging equipment, boat ramp, and restrooms.
- HJ Morton State Park is located 2.75 miles east off of McKenzie Highway and has ample space to stage equipment, restrooms, and water.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #5 at 49243 McKenzie Highway.

Watercourse Description:

• River width = 275-375 feet

Equipment Needs:

1,100 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

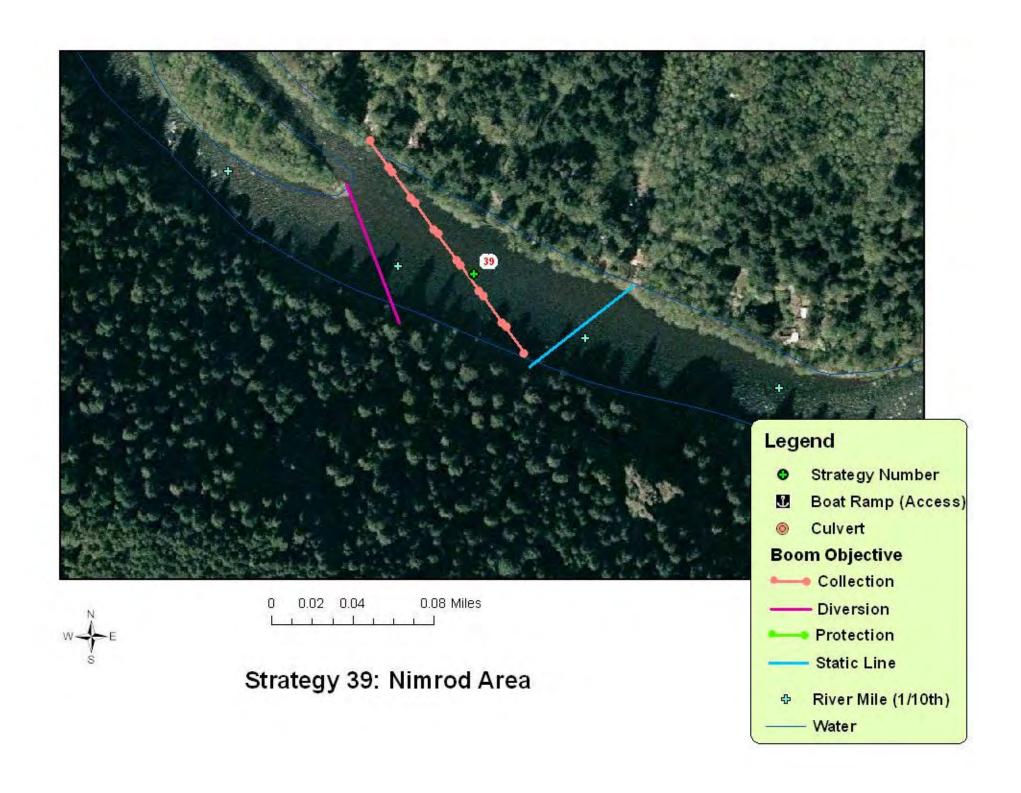
1 Jet boat

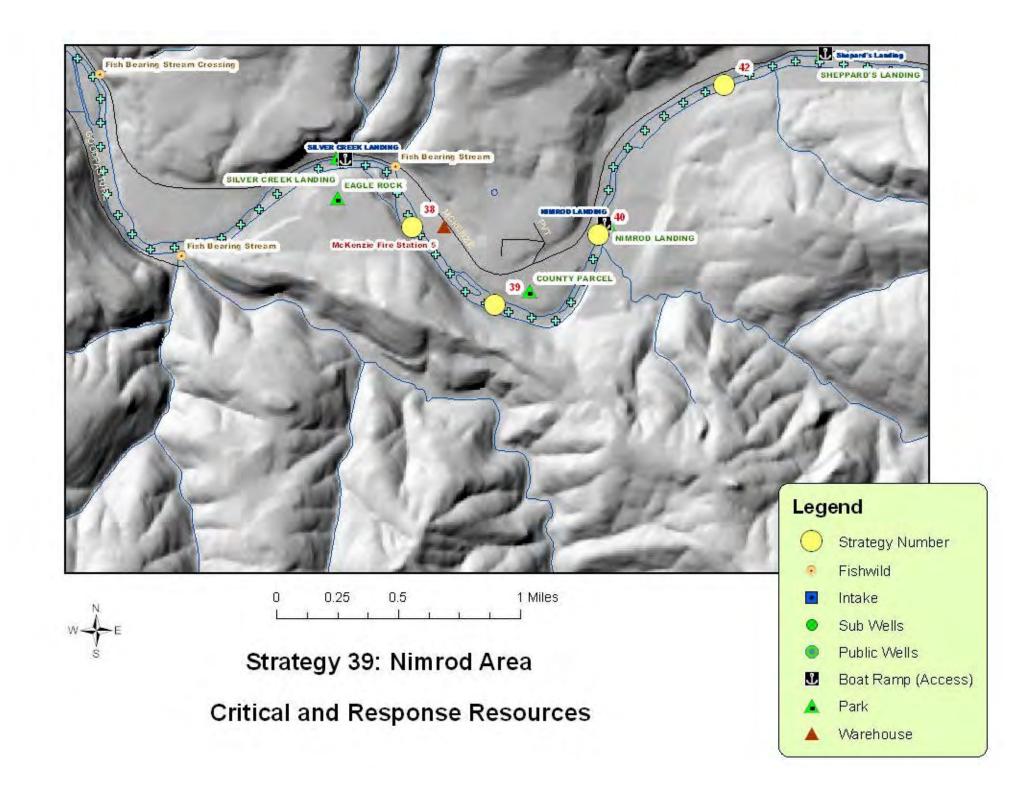
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 40 Nimrod Landing Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Harlequin duck nesting area located in the Bear Creek confluence area down river of boom placement area.

Location:

- Nimrod Landing area is located in east end Nimrod at the bridge near McKenzie Highway milepost 35.3.
- 44° 06' 46"N / 122° 25 13"W
- River Mile: 51.4 (USGS) or 46.8 (Measured)

- Deploy 600 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank 400 feet down river from Nimrod Landing boat ramp). Up river "C" line anchor point at bridge on north bank.
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- The closest down river access point is at Silver Creek Landing located approximately 1.6 miles west via boat from the boom placement area (USGS river mile 49.8 or measured river mile 45.2).
- The closest up river access point is at Nimrod Landing located within the boom placement area (USGS river mile 51.4 or measured river mile 46.8) on the south bank.
- The north bank is assessable at the bridge that crosses the McKenzie River.
- South bank may be accessible via the Nimrod landing, however the production collection point is west of the boat ramp in an area with a dense stand of trees.

Staging Areas:

- McKenzie Fire & Rescue Station #5 located 0.8 miles west of boom placement area in Nimrod at 49243 McKenzie Highway has some space to store equipment.
- Clover Point County Park (e.g., County Parcel) is located 0.3 miles west of the boom placement area in Nimrod and may have space to store equipment, but lacks in facilities.
- Nimrod landing is located within the boom placement area on the south bank of the river and has some space for staging equipment, boat ramp, and restrooms.
- HJ Morton State Park is located 2.4 miles east off of McKenzie Highway and has ample space to stage equipment, restrooms, and water.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #5 at 49243 McKenzie Highway.

Watercourse Description:

• River width = 125-175 feet

Equipment Needs:

900 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 7 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

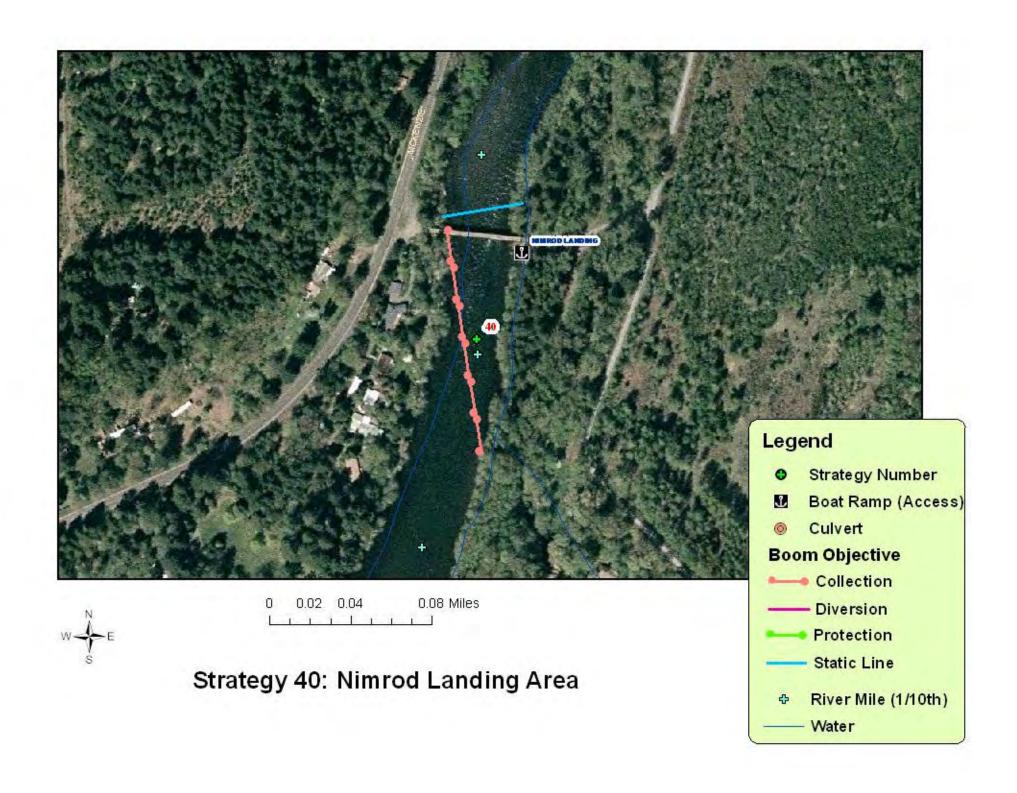
Pressure washer w/pump

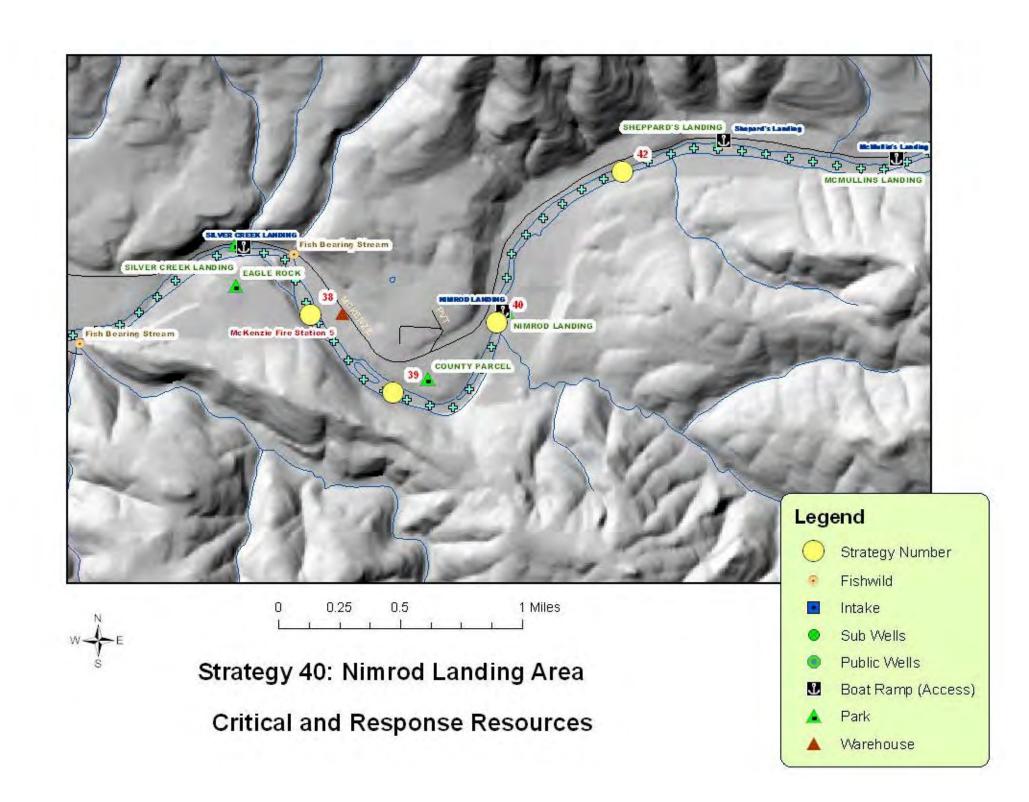
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

8,000 feet of Rope (3/8" poly rope)

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Strategy Number 42 Shepard's Landing Area



Response Objectives:

- Diversion
- Collection

Critical Resources to be Protected:

• No critical resources are located in vicinity of response strategy area.

Location:

- Shepard's Landing area is located in east end of Nimrod near McKenzie Highway milepost 35.8.
- 44° 07' 09"N / 122° 24 56"W
- River Mile: 52.0 (USGS) or 47.4 (Measured)

- Deploy 400 feet of 4x6 solid containment boom from south bank at an angle of 28-34 degrees NW to divert product toward collection area on south bank.
- Deploy 800 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is at Nimrod Landing located 0.6 miles via boat west of the boom placement area (USGS river mile 51.4 or measured river mile 46.8) on the south bank.
- The closest up river access point is at Sheppard's Landing on north bank of the river, approximately 0.6 miles via boat east of boom placement area (USGS river mile 52.6 or measured river mile 48.0).
- The north bank is assessable behind residential properties between the McKenzie Highway and the river.
- South bank may be via a dirt logging road that parallels the river, although there is a stand of trees between the river and the dirt road that may make access via land a little difficult.

Staging Areas:

- McKenzie Fire & Rescue Station #5 located 1.4 miles west of boom placement area in Nimrod at 49243 McKenzie Highway has some space to store equipment.
- Clover Point County Park (e.g., County Parcel) is located 0.9 miles west of the boom placement area in Nimrod and may have space to store equipment, but lacks in facilities.
- Nimrod landing is located 0.7 miles west of the boom placement area on the south bank of the river and has some space for staging equipment, boat ramp, and restrooms.
- HJ Morton State Park is located 1.8 miles east off of McKenzie Highway and has ample space to stage equipment, restrooms, and water.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #5 at 49243 McKenzie Highway.

Watercourse Description:

- No data on flow
- River width = 250-300 feet
- No data on river bottom material

Equipment Needs:

1,200 feet solid containment boom (w/8-9 tow bridles)

Boom Deployment Equipment and 8 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

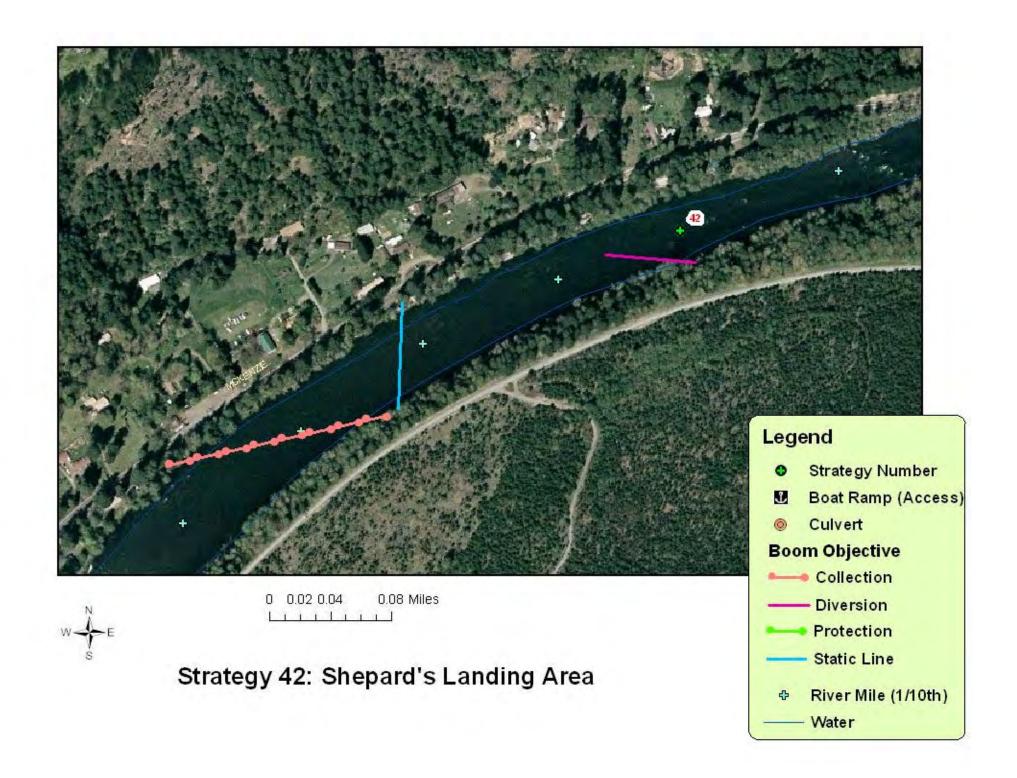
1 Jet boat

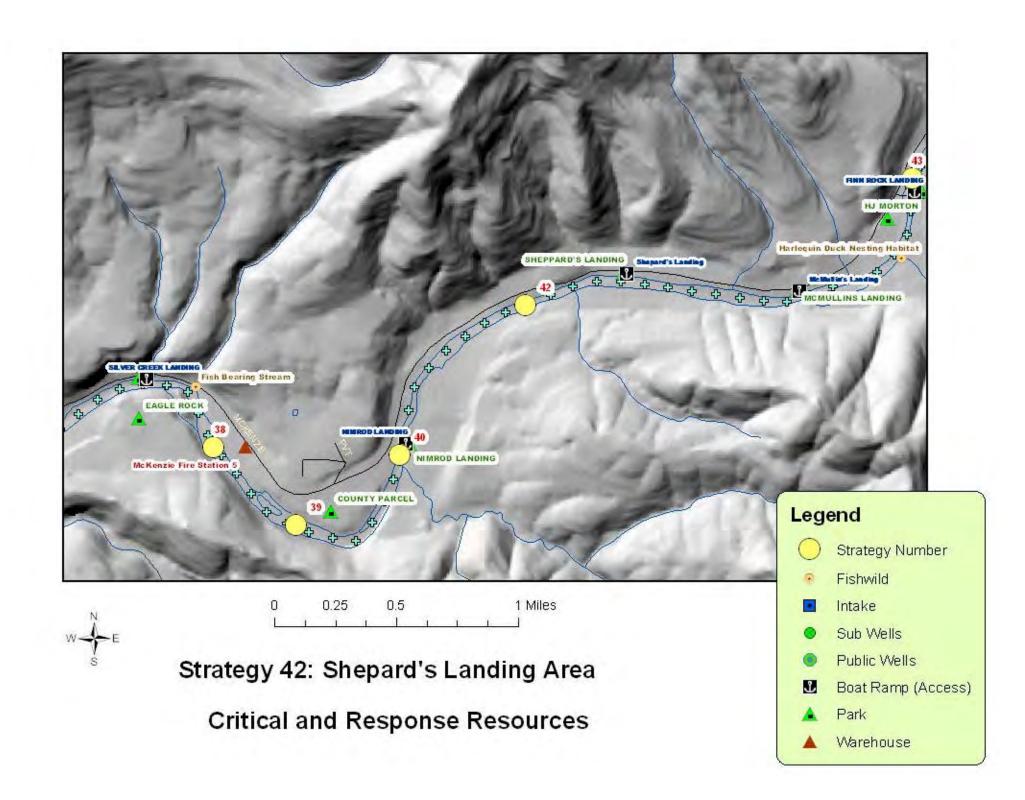
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 43 Finn Rock Landing Area



Response Objectives:

- Diversion
- Protection
- Collection

Critical Resources to be Protected:

• Harlequin Duck nesting area down river of boom placement area at confluence with Quartz Creek.

Location:

- Finn Rock Landing area is located 2.0 miles east of Nimrod at the Quartz Creek Bridge (McKenzie Highway milepost 37.9).
- 44° 07' 43"N / 122° 22' 44"W
- River Mile: 54.0 (USGS) or 49.6 (Measured)

Description of Response Tactics:

• Deploy 150 feet of 4x6 solid containment boom from south bank at an angle of 28-34 degrees NW to divert spilled product toward collection boom and collection area on north bank.

- Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 250 feet up river of bridge at natural collection point).
- Deploy 200 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 200 feet down river from primary collection boom/area) to act as secondary collection point.
- Deploy 250 feet of 4x6 solid containment boom along north bank shoreline to protect side channels from residual product (immediately downriver from bridge).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- The closest river access point is Finn Rock Landing boat ramp located within the boom placement area on the south bank just east of Quartz Creek Bridge (USGS river mile 54.0 or measured river mile 49.6).
- The closest down river access point is at McMullin's Landing on the north bank of the river, approximately 0.7 miles west via boat from the boom placement area (USGS river mile 53.3 or measured river mile 48.8). However, McMullin's Landing is a fairly primitive boat ramp.
- Sheppard's Landing is the next closest down river boat ramp on north bank of the river located approximately 1.6 miles via boat west of boom placement area (USGS river mile 52.6 or measured river mile 48.0).
- The north bank is assessable in area of the bridge and along the McKenzie Highway. Although in some places there is not a lot of room between the highway and the river.
- South bank is assessable at Finn Rick Landing (east of bridge).

Staging Areas:

- Finn Rock Landing located within the boom placement area has some space for equipment storage, two large boat ramps, and restrooms.
- HJ Morton State Park is located 0.3 miles west off of McKenzie Highway and has ample space to stage equipment, restrooms, and water.
- The U.S. Forest Service has a large warehouse and storage property near the former Blue River Ranger Station in Blue River. This is an ideal location for staging equipment. The area has ample space, empty warehouse building, and nearby offices. The USFS warehouse is located 3.2 miles east of the boom placement area off of Blue River Road (just north of the former Blue River Ranger Station).
- Blue River Community Park is located 3.5 miles east of the boom placement area along the east bank of the Blue River. The park has ample space for staging equipment and appears to have restrooms, structures and other facilities. Take Rose Street in Blue River north to the park.
- McKenzie Fire & Rescue Station #5 located 3.4 miles west of boom placement area in Nimrod at 49243 McKenzie Highway has some space to store equipment.
- Nearest equipment warehouse is McKenzie Fire & Rescue Station #5 at 49243 McKenzie Highway.

Watercourse Description:

- No data on flow
- No data on depth
- River width = 175-200 feet

Equipment Needs:

1,100 feet solid containment boom (w/7-8 tow bridles)

Boom Deployment Equipment and 5 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

300 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

12 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

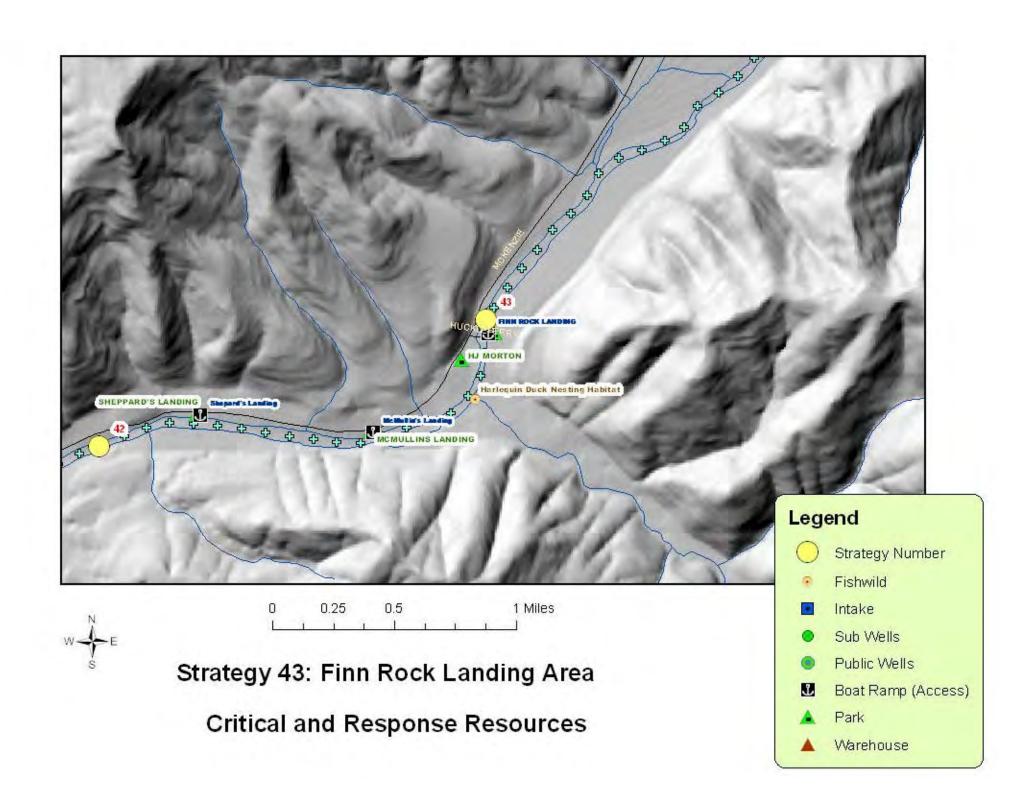
Decon equipment

Pressure washer w/pump

3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 44 Blue River Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Harlequin Duck nesting area down river of boom placement area at confluence with Quartz Creek.

Location:

- Blue River area is located in Blue River approximately 0.4 miles west of the confluence with the Blue River (McKenzie Highway milepost 40.1).
- 44° 09' 08"N / 122° 21' 12"W
- River Mile: 56.2 (USGS) or 51.7 (Measured)

- Deploy 600 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (collection area in small side channel). Place an additional 150 feet of 4x6 solid containment boom as a "U" within side channel to enhance product collection.
- Deploy 250 feet of 46 solid containment boom across mouth of small side channel (from north bank to island, down river of main collection and recovery area) to collection residual spilled product.

At product collection and recovery areas protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest up river access point is at Forest Glen Landing boat ramp on the north bank of the river, approximately 0.9 miles east via boat (take north channel east of confluence with Blue River) from the boom placement area (USGS river mile 57.1 or measured river mile 52.5).
- The closest down river access point is Finn Rock Landing boat ramp located 2.2 miles via boat from the boom placement area on the south bank just east of Quartz Creek Bridge (USGS river mile 54.0 or measured river mile 49.6).
- The north bank is assessable behind buildings and residences along the McKenzie Highway. A turnout off the highway is located immediately east of the boom placement area and provides access to the river.
- South bank is not easily assessable via land.

Staging Areas:

- The U.S. Forest Service has a large warehouse and storage property near the former Blue River Ranger Station in Blue River. This is an ideal location for staging equipment. The area has ample space, empty warehouse building, and nearby offices. The USFS warehouse is located 1.1 miles northeast of the boom placement area off of Blue River Road (just north of the former Blue River Ranger Station).
- Blue River Community Park is located 1.1 miles northeast of the boom placement area along the east bank of the Blue River. The park has ample space for staging equipment and appears to have restrooms, structures and other facilities. Take Rose Street in Blue River north to the park.
- Forest Glen Landing located 0.9 miles east of the boom placement area has some space for equipment storage, three boat ramps, and restrooms.
- Nearest equipment warehouse is US Army Corps of Engineers Blue River Dam intake tower (which has limited spill response supplies) located north of the dam spill gate.

Watercourse Description:

River width = 200-350 feet

Equipment Needs:

1.000 feet solid containment boom (w/9-10 tow bridles)

Boom Deployment Equipment and 6 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

300 feet sorbent boom (shoreline protection)

100 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

20 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

Decon equipment

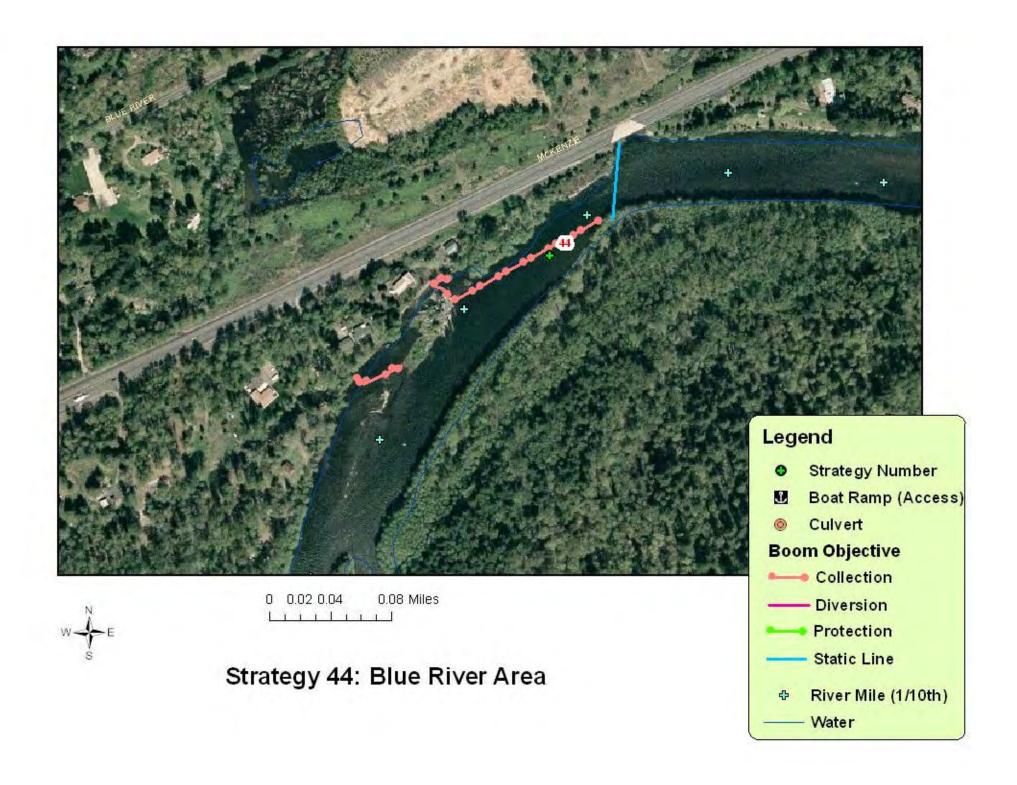
Pressure washer w/pump

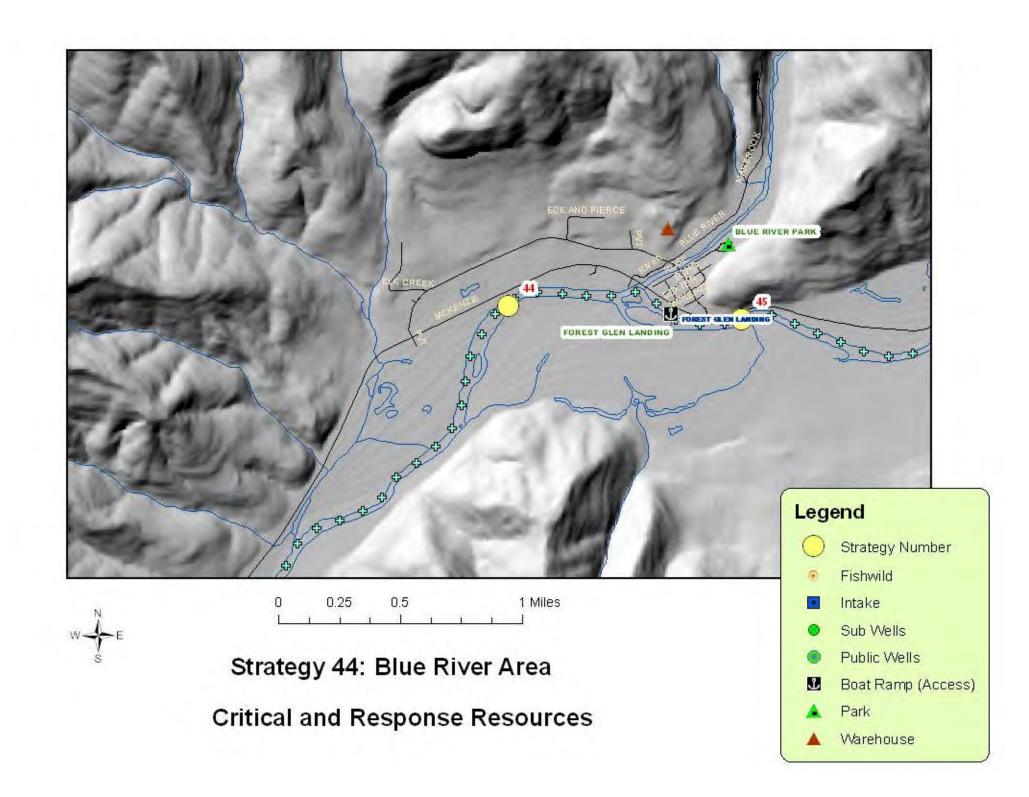
3-4 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

8,000 feet of Rope (3/8" poly rope)

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Strategy Number 45Forest Glen Landing/Blue River Area



Response Objectives:

- Diversion
- Collection

Critical Resources to be Protected:

• No critical resources are within vicinity of this response strategy area.

Location:

- Forest Glen Landing/Blue River area is located in Blue River approximately 0.2 miles east of the confluence with the Blue River (McKenzie Highway milepost 41).
- 44° 09' 06"N / 122° 20' 17"W
- River Mile: 57.3 (USGS) or 52.6 (Measured)

Description of Response Tactics:

- Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 1,400 up river from island).
- Deploy 600 feet of 4x6 solid containment boom from south bank at an angle of 28-34 degrees to east end of island to divert spilled product into north channel around island.
- Deploy 100 feet of 4x6 solid containment boom from south bank of north channel (at east end of island) at an angle of 28-34 degrees to divert spilled product toward collection boom.

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- Deploy 300 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank 400 down river from Forest Glen Landing).
- At product collection and recovery areas protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

- The closest river access point is at Forest Glen Landing boat ramp on the north bank of the river within the boom placement area (USGS river mile 57.1 or measured river mile 52.5).
- The closest down river access point is Finn Rock Landing boat ramp located 3.3 miles via boat from the boom placement area on the south bank just east of Quartz Creek Bridge (USGS river mile 54.0 or measured river mile 49.6).
- The north bank is assessable from the Forest Glen Landing area, behind buildings or residences, and from the McKenzie Highway.
- South bank is not easily assessable via land.

Staging Areas:

- The U.S. Forest Service has a large warehouse and storage property near the former Blue River Ranger Station in Blue River. This is an ideal location for staging equipment. The area has ample space, empty warehouse building, and nearby offices. The USFS warehouse is located 0.6 miles north of the boom placement area off of Blue River Road (just north of the former Blue River Ranger Station).
- Blue River Community Park is located 0.5 miles north of the boom placement area along the east bank of the Blue River. The park has ample space for staging equipment and appears to have restrooms, structures and other facilities. Take Rose Street in Blue River north to the park.
- Forest Glen Landing is located within the boom placement area has some space for equipment storage, three boat ramps, and restrooms.
- Nearest equipment warehouse is US Army Corps of Engineers Blue River Dam intake tower (which has some limited spill response supplies) located north or dam spill gate.

Watercourse Description:

• River width = 100-250 feet

Equipment Needs:

1,500 feet solid containment boom (w/11-12 tow bridles)

Boom Deployment Equipment and 8 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

400 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

24 bales sorbent pads

Compressor

Chemical Pump

Generator

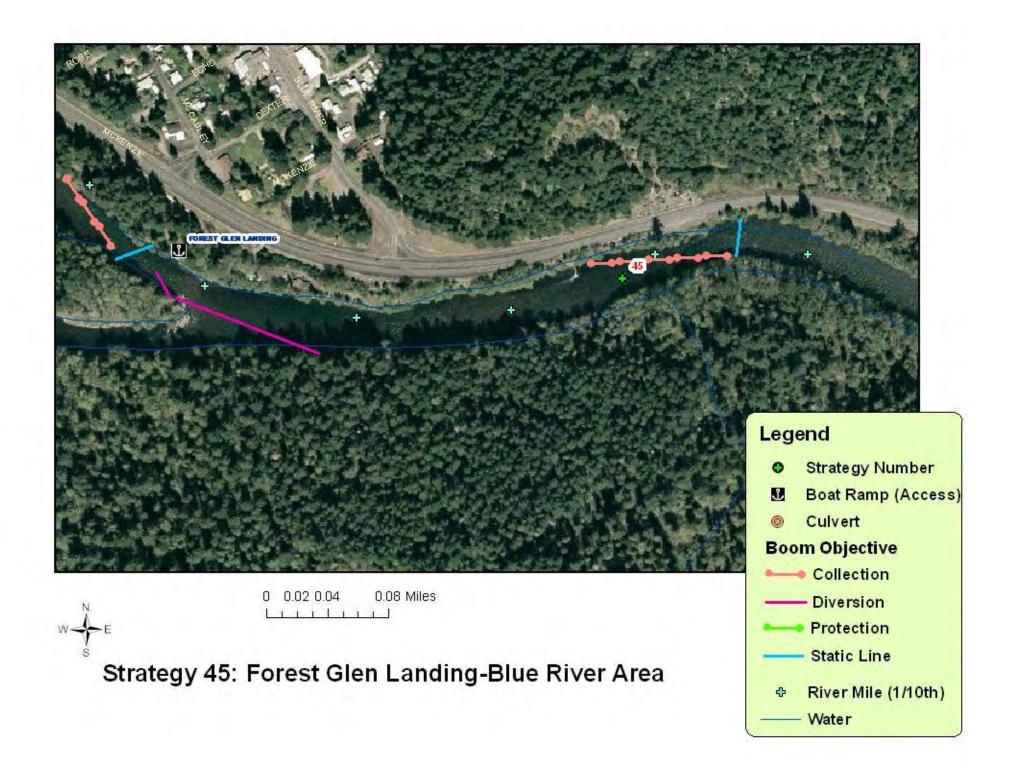
2 Jet boat

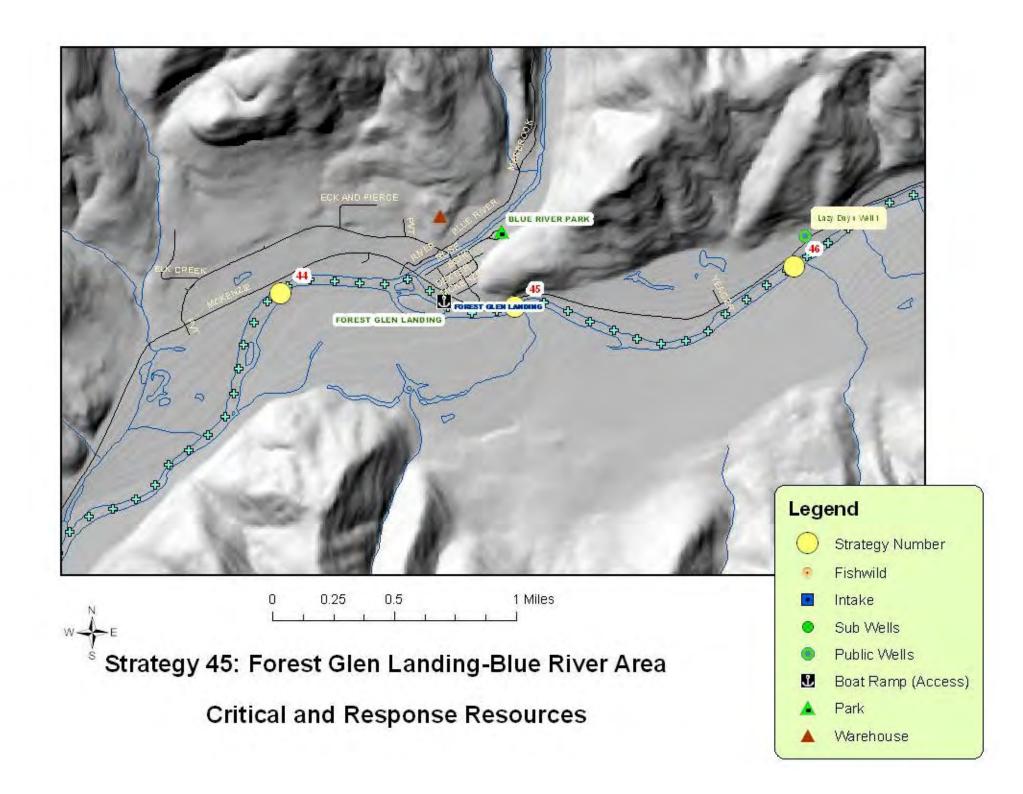
2-Decon equipment

2-Pressure washer w/pump

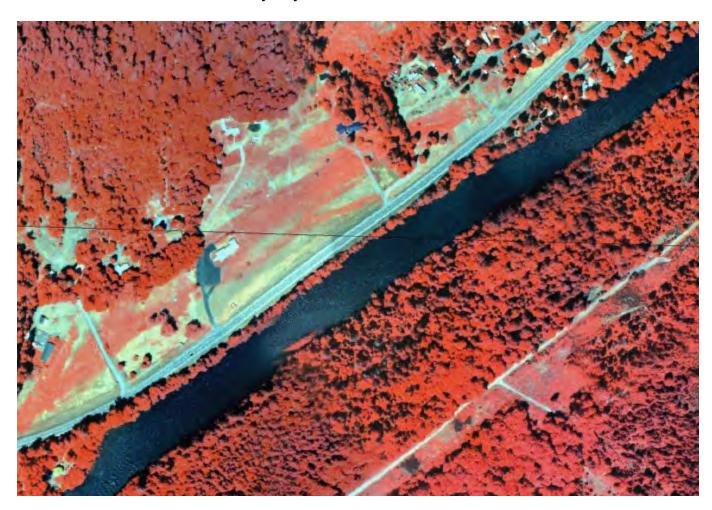
4-5 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 46 Lazy Days Mobile Home Park Area



Response Objectives:

Collection

Critical Resources to be Protected:

• Lazy Days community has a shallow well located near the river, which may be influenced by the river.

Location:

- Lazy Days Mobile Home Park area is located east of Blue River approximately 1.1 miles (McKenzie Highway milepost 42.2).
- 44° 09' 15"N / 122° 18' 42"W
- River Mile: 58.4 (USGS) or 53.8 (Measured)

- Deploy 1,000 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank across from mobile home park).
- If needed, deploy 800 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank parallel to up river collection boom) to collect residual product.

• At product collection and recovery areas protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is at Forest Glen Landing boat ramp on the north bank of the river approximately 1.3 miles west via boat from the boom placement area (USGS river mile 57.1 or measured river mile 52.5).
- The closest up river access point is Hamlin Landing boat ramp located 1.6 miles east via boat from the boom placement area (USGS river mile 60.0 or measured river mile 55.4).
- The north bank is assessable from the McKenzie Highway, although there is not much room between the highway and the north bank of the river.
- South bank is not easily assessable via land.

Staging Areas:

- The U.S. Forest Service has a large warehouse and storage property near the former Blue River Ranger Station in Blue River. This is an ideal location for staging equipment. The area has ample space, empty warehouse building, and nearby offices. The USFS warehouse is located 1.7 miles west of the boom placement area off of Blue River Road (just north of the former Blue River Ranger Station).
- Blue River Community Park is located 1.6 miles west of the boom placement area along the east bank of the Blue River. The park has ample space for staging equipment and appears to have restrooms, structures and other facilities. Take Rose Street in Blue River north to the park.
- Forest Glen Landing is located 1.3 miles west of the boom placement area and has some space for equipment storage, three boat ramps, and restrooms.
- Nearest equipment warehouse is US Army Corps of Engineers Blue River Dam intake tower (which has some limited spill response supplies) located north or dam spill gate.

Watercourse Description:

• River width = 200-225 feet

Equipment Needs:

1,800 feet solid containment boom (w/18-19 tow bridles)

Boom Deployment Equipment and 18 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

400 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

200 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

24 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

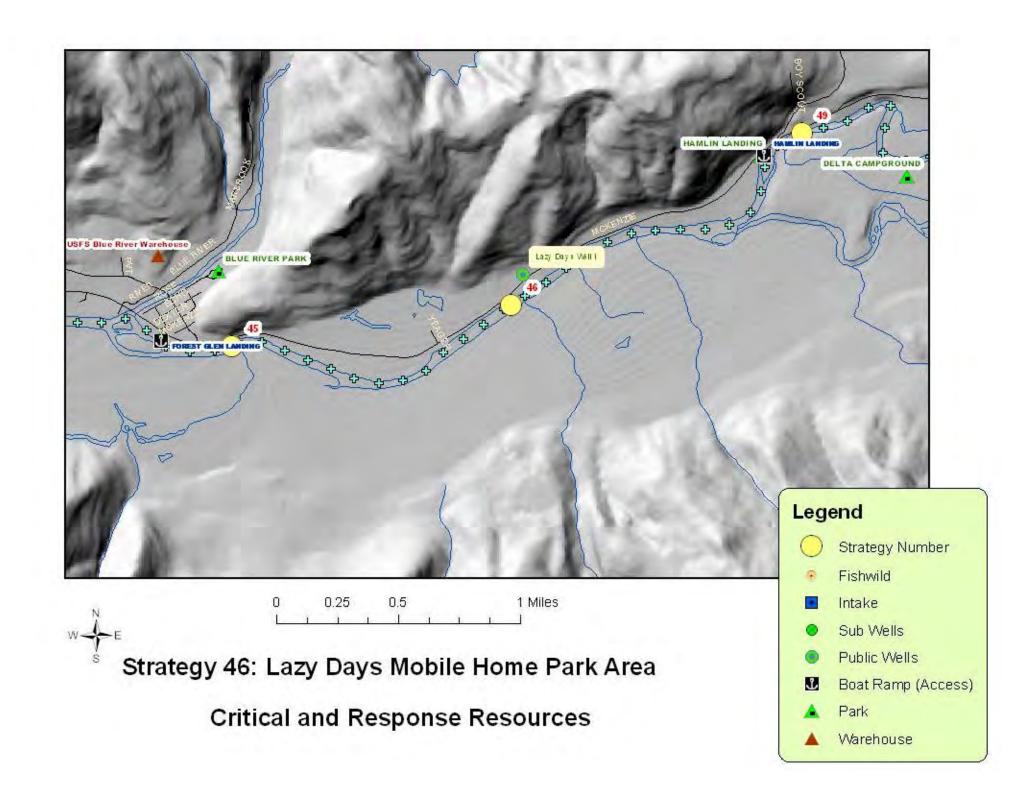
Decon equipment

Pressure washer w/pump

4-5 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)





Strategy Number 50 Delta Campground Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

• Side channels that cut through near delta Campground and provide critical fish habitat.

Location:

- The Delta Campground area is located west of Rainbow approximately 2.4 miles (McKenzie Highway milepost 44.8).
- 44° 09' 48"N / 122° 15' 38"W
- River Mile: 61.5 (USGS) or 56.7 (Measured)

Description of Response Tactics:

- Deploy 200 feet of 4x6 solid containment boom along south bank across inlet to side channel (1/4 mile down river from collection area) protect critical habitat and divert spilled product to north channel around island.
- Deploy 500 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees SE from the spilled product collection and recovery area (north bank after bend in river).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is Hamlin Landing boat ramp located 1.3 miles west of the boom placement area via boat (USGS river mile 60.0 or measured river mile 55.4).
- The closest up river access point is at Rainbow Landing boat ramp on the north bank of the river off of McKenzie River Drive at the Belknap Bridge. This boat ramp is located approximately 2.8 miles east via boat from the boom placement area (USGS river mile 64.3 or measured river mile 59.5).
- A private boat ramp is located 1.9 miles east or up river of the boom placement area near the Steel Bridge to Dearborn Island (measured river mile 58.6).
- The north bank is assessable from the McKenzie Highway, although there is not much room between the highway and the north bank of the river.
- South bank is not easily assessable via land.

Staging Areas:

- Delta Campground is a good potential equipment staging area with ample space, water, and restroom facilities. Delta Campground is located 1.4 miles west from the boom placement area by taking the McKenzie Highway east to Bruckart bridge, cross over the river and take the first right and follow road to campground.
- The US Corps of Engineers Cougar Dam facility is a good location for staging equipment. The Cougar Dam facility has ample space to stage equipment, restrooms, electricity, water, office space, and other facilities. The Cougar Dam facility is located 3.3 miles south of the boom placement area (take McKenzie Highway east to Bruckart Bridge and follow the signs to the bottom of Cougar Dam).
- Nearest equipment warehouse is US Army Corps of Engineers Cougar Dam powerhouse located below the dam along the South Fork of the McKenzie River.

Watercourse Description:

- No data on flow
- River width = 125-150 feet

Equipment Needs:

700 feet solid containment boom (w/7-8 tow bridles)

Boom Deployment Equipment and 5 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

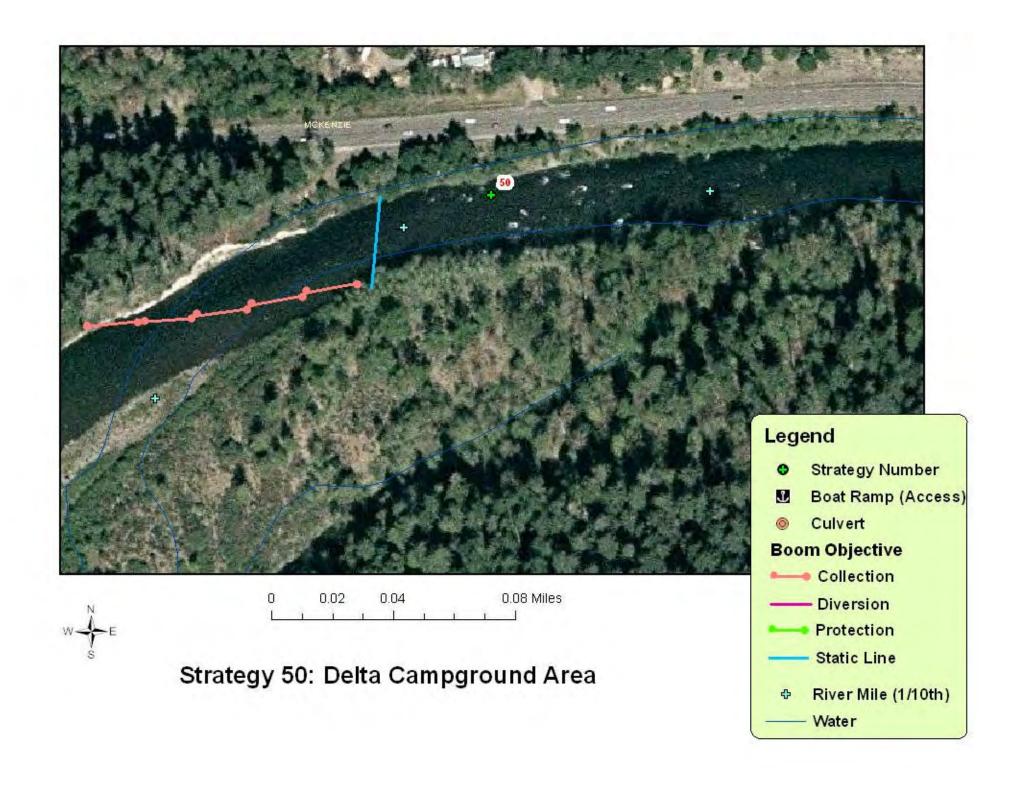
Decon equipment

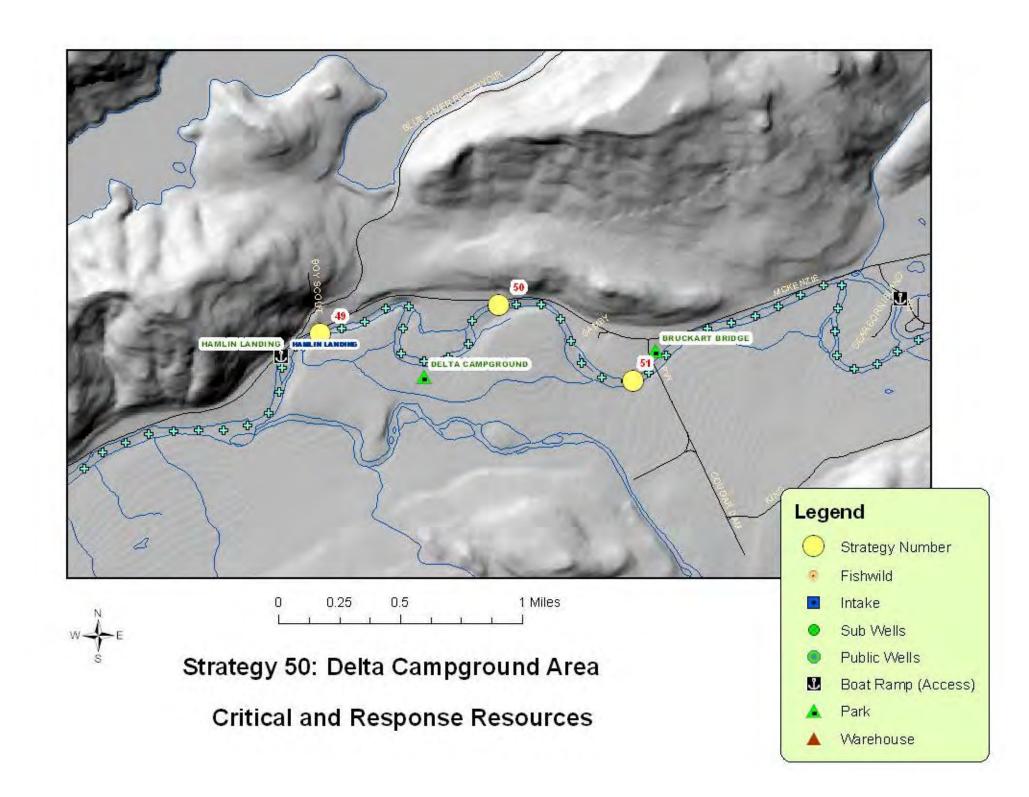
Pressure washer w/pump

3-4 Decon waste pools within containment berm

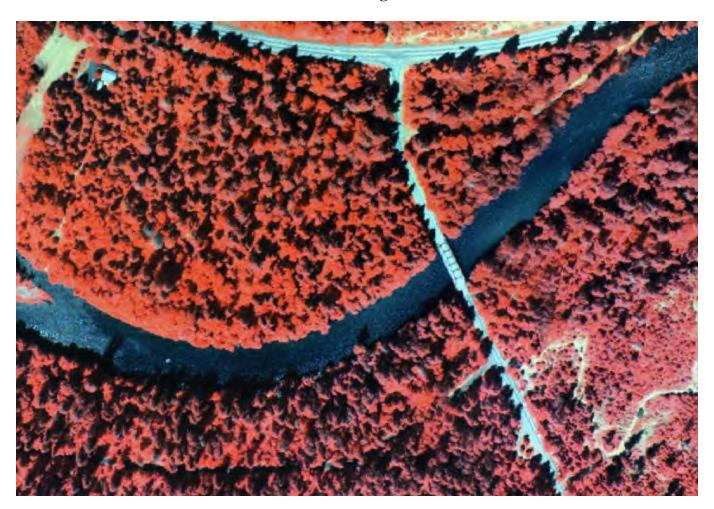
Oil Recovery Drum Skimmer (product recovery)

5,000 feet of Rope (3/8" poly rope)





Strategy Number 51 Bruckart Bridge Area



Response Objectives:

- Collection
- Protection

Critical Resources to be Protected:

• Side channels that cut through near delta Campground and provide critical fish habitat.

Location:

- The Bruckart Bridge area is located west of Rainbow approximately 1.8 miles (McKenzie Highway milepost 45.25).
- 44° 10' 04"N / 122° 16' 12"W
- River Mile: 62.1 (USGS) or 57.3 (Measured)

Description of Response Tactics:

- Deploy 100 feet of 4x6 solid containment boom along south bank across inlet to side channel (650 feet down river from collection area) to 0.25 miles west of Bruckart Bridge to keep spill from entering channel that cuts through Delta Campground area.
- Deploy 550 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NE from the spilled product collection and recovery area (south bank 800 feet down river of Bruckart Bridge).

• At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into waste pools or other temporary storage units.

Access Areas:

- The closest down river access point is Hamlin Landing boat ramp located 1.9 miles west of the boom placement area via boat (USGS river mile 60.0 or measured river mile 55.4).
- The closest up river access point is at Rainbow Landing boat ramp on the north bank of the river off of McKenzie River Drive at the Belknap Bridge. This boat ramp is located approximately 2.2 miles east via boat from the boom placement area (USGS river mile 64.3 or measured river mile 59.5).
- A private boat ramp is located 1.3 miles east or up river of the boom placement area near the Steel Bridge to Dearborn Island (measured river mile 58.6).
- The north bank is may be assessable from the Bruckart Bridge area, but has a dense stand of trees which may prevent vehicle access.
- South bank may be accessible via the road to Delta Campground, but there is a dense stand of trees between the road and the south bank of the river, which may prevent vehicle access to spill collection area.

Staging Areas:

- Delta Campground is a good potential equipment staging area with ample space, water, and restroom facilities. Delta Campground is located 0.6 miles west from the boom placement area by taking.
- The US Corps of Engineers Cougar Dam facility is a good location for staging equipment. The Cougar Dam facility has ample space to stage equipment, restrooms, electricity, water, office space, and other facilities. The Cougar Dam facility is located 2.6 miles south of the boom placement area (take Bruckart Bridge and follow the signs to the bottom of Cougar Dam).
- Nearest equipment warehouse is US Army Corps of Engineers Cougar Dam powerhouse located below the dam along the South Fork of the McKenzie River.

Watercourse Description:

• River width = 125-200 feet

Equipment Needs:

650 feet solid containment boom (w/7-8 tow bridles)

Boom Deployment Equipment and 6 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

200 feet sorbent boom (shoreline protection)

200 feet solid containment boom (shoreline protection)

100 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

8 bales sorbent pads

Compressor

Chemical Pump

1 Jet boat

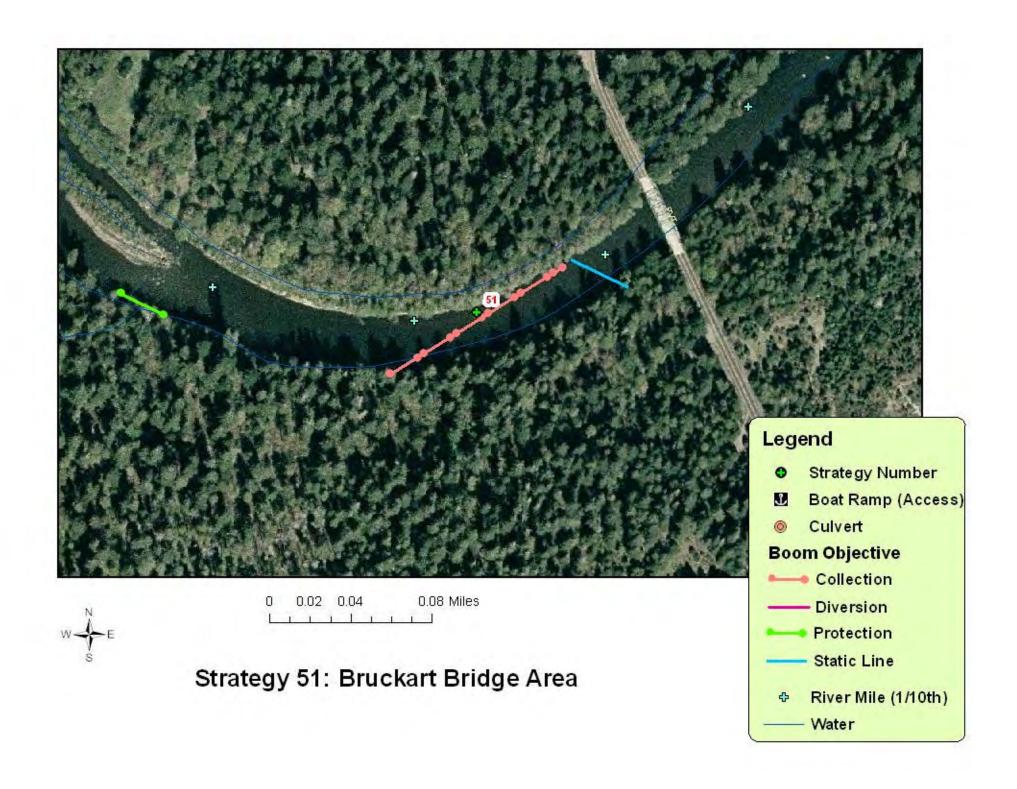
Decon equipment

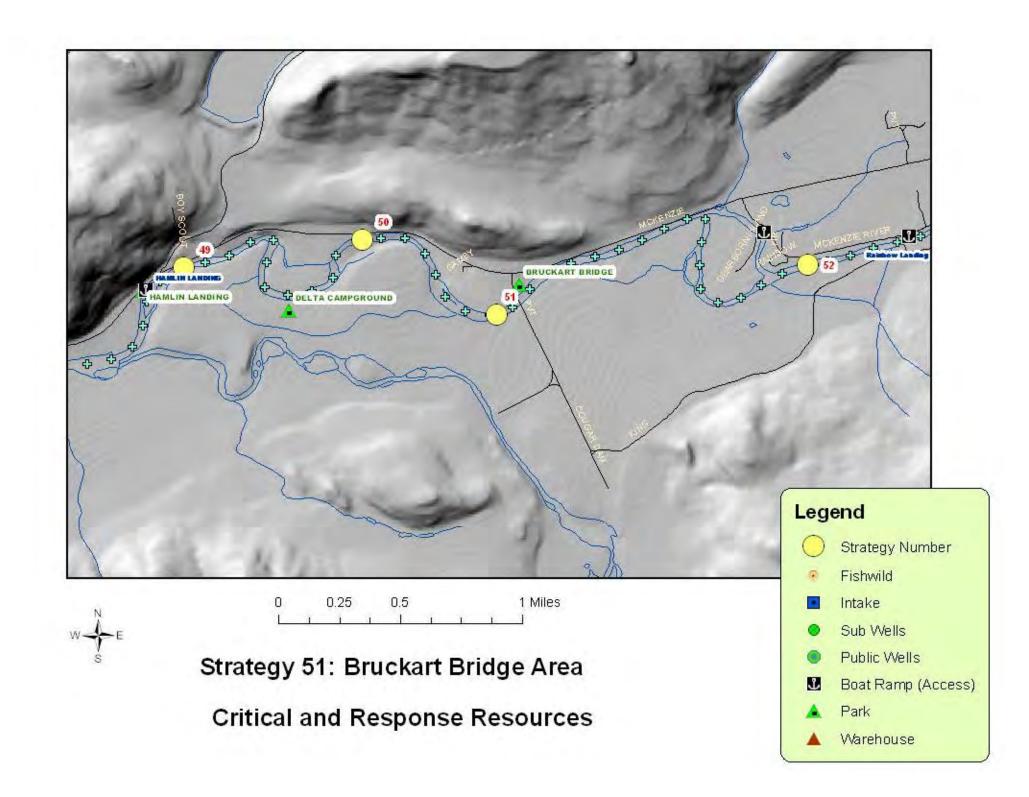
Pressure washer w/pump

3-4 Decon waste pools within containment berm

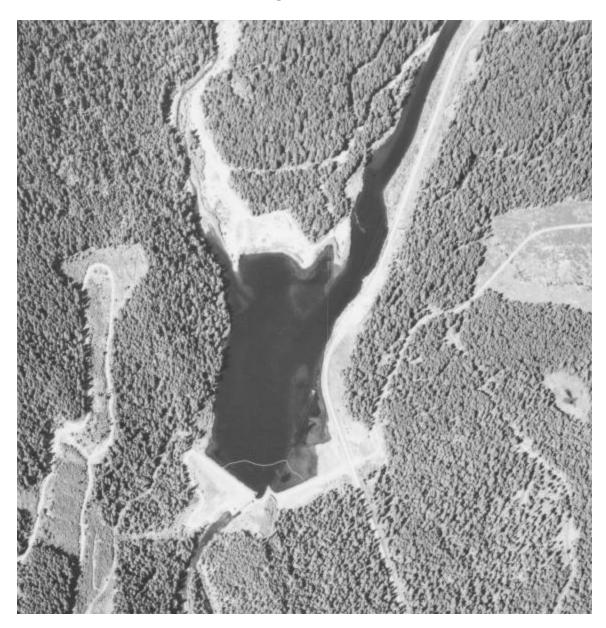
Oil Recovery Drum Skimmer (product recovery)

6,000 feet of Rope (3/8" poly rope)





<u>Strategy Number 58</u> Trailbridge Reservoir Area



Response Objectives:

Collection

Critical Resources to be Protected:

- Spawning gravels below Trailbridge Dam.
- Bull Trout habitat areas below Trailbridge Dam.

Location:

- The Trailbridge Reservoir area is located in the upper portion of the McKenzie Watershed approximately 7 miles south of Clear Lake and 7.5 miles north of Belnap Hot Springs.
- 44° 16' 43"N / 122° 02' 41"W
- River Mile: 82.3 (USGS) or 77.8 (Measured)

Description of Response Tactics:

- Deploy 400 feet of 4x6 solid containment boom from north bank at an angle of 22-30 degrees NE from the spilled product collection and recovery area (north bank 900 feet down river from Carmen Powerhouse Bridge).
- Deploy 500 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NW from the spilled product collection and recovery area (south bank up river of Sweetwater Creek).
- Deploy 700 feet of 4x6 solid containment boom from south bank at an angle of 22-30 degrees NW from the spilled product collection and recovery area (south bank main reservoir).
- At product collection and recovery area protect shoreline with additional solid containment boom, sorbent boom/pads and poly sheeting. Collect product with oil recovery skimmer and pump into

Access Areas:

- The closest down river access point is Trail Bridge campground boat ramp located withing the boom placement area.
- The east bank is easily accessible from the McKenzie Highway, although in some areas there is little space between the reservoir and the highway.
- The west bank is assessable via the access road to the reservoir and Trail Bridge campground.

Staging Areas:

- Trail Bridge Campground is a good potential equipment staging area with ample space, water, boat ramp, and restroom facilities. Trail Bridge Campground is located within the boom placement area off of McKenzie Highway (mile post 49.8).
- EWEB Carmen-Smith generation plant area is a good staging area with space for equipment, office, electricity, water, and restrooms. It is located on the north end of the boom placement area.
- Nearest equipment warehouse is the EWEB Carmen-Smith generation facility located at the north end of the boom placement area.

Watercourse Description:

• River width = 125-900 feet

Equipment Needs:

1,600 fe et solid containment boom (w/16-17 tow bridles)

Boom Deployment Equipment and 16 buoys

Multiple Fence Posts w/hammer (used to anchor A, B, & C lines for boom deployment)

600 feet sorbent boom (shoreline protection)

600 feet solid containment boom (shoreline protection)

300 feet x 50 feet of Poly sheeting (shoreline protection & decon area)

36 bales sorbent pads

Compressor

Chemical Pump

Generator

1 Jet boat

2-Decon equipment

2-Pressure washer w/pump

5-6 Decon waste pools within containment berm

Oil Recovery Drum Skimmer (product recovery)

10,000 feet of Rope (3/8" poly rope)



