Lindsey Lake Tanker Truck Spill
Incident Action Plan (IAP)

Operational Period #5
From 2/19/2019 @ 0700
To 2/20/2019 @ 0700

1. Incident Name		2. Operational Period to be covered by IAP (Date/Time)	IAP COVER SHEET
Lindsey Lake Tanker Spill I-84, MP 54	OERS 2019-0334 NRC#1237421	From: 19 Feb 2019 / 0700 To: 20 Feb 2019 / 0700	

3. Approved by Incident Commander(s):

ORG	NAME		
FOSC (EPA)	Jeff Fowlow		2/18/2019
SOSC (DEQ)	Jamie Collins		2/18/2019 / 1710
RP IC	Rob Honsberger		2/18/2019

INCIDENT ACTION PLAN

The items checked below are included in this Incident Action Plan:

- ☒ ICS 202 (Incident Objectives)
- ☒ ICS 202A (Command Direction)
- ☒ ICS 203 (Organization List) – OR – ICS 207-CG (Organization Chart)
- ☒ ICS 204 (Assignment Lists)
- ☒ ICS 205 (Communications Plan)
- ☒ ICS 206 (Medical Plan)
- ☒ ICS 207 (Org Chart)
- ☒ ICS 208 (Site Safety Plan) or Note SSP Location - Revised 17 Feb 2019
- ☒ Map / Chart
- ☒ Weather Forecast / Tides/Currents

Other Attachments

- ☒ ICS 232-OS (Resources at Risk Summary)
- ☒ Sampling and Analysis Plan
- ☒ Waste Management Plan – Revised 18 Feb 2019
- ☒ Inadvertent Discovery Plan for Cultural Resources
- ☐ _____
- ☐ _____
- ☐ _____

4. Prepared by:	**Date/Time**
Ross McMakin - NWFF	18 Feb 2019 / 1530

1. Incident Name:	2. Operational Period: (Date / Time)	INCIDENT OBJECTIVES ICS 202 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Incident Objective(s):

1. Ensure safety of responders and members of the public
2. Manage the response in a coordinated manner
3. Prevent the migration of contamination
4. Contain spilled material using hard and soft boom
5. Recover as much product as safely possible while minimizing environmental, cultural, and economic impacts
6. Keep the public and stakeholders informed
7. Characterize the extent of subsurface contamination and evaluate removal options

4. Operational Period Command Emphasis. (Priorities, Key Discussions/Directions):

1. Continue to use soft and hard boom, and absorbent pads to collect as much spilled material as possible
2. Maintain boom placed in Lindsey Lake and stop the spread of contamination to the lake during flushing operations; reposition as necessary.
3. Use water flushing to wash roadway and drainage ditch to mobilize spilled diesel and use a vacuum-truck to recover fuel
4. Utilize heating unit to assist in melting of impacted snow
5. Complete installation of sparging equipment in Lindsey Lake
6. Excavate impacted snow and transport off-site to NRC disposal facility
7. Continue characterization the extent of contamination and evaluate removal options
8. Notify Unified Command immediately with any of the following critical information:
   a. If there are any rushes or surges of product to the road surface or lake
   b. Sheen is observed outside of the primary containment zone
   c. Contaminated, injured, or dead wildlife
   d. Any responder requires more than simple first-aid treatment
   e. Any wrecks or accidents along the roadway (whether related to the incident or not)
   f. Any VIP, elected officials, or media are observed in or near any of the work areas
   g. Any inadvertent cultural resource/archeological discovery

5. General Situation Awareness (Safety bullets, Weather, etc...):

Full-face respirators must be worn when working in areas where total VOC samples are observed to exceed 10ppm

All workers and people in any areas of contamination must be in at least Level-D PPE and increase to Level-C as necessary.

Workers should dress warmly, and monitor self and peers for symptoms of hypothermia. Given the extra layers of clothing, workers should properly hydrate throughout the day to avoid dehydration.

Roadway surfaces, lake banks, and wetlands are wet, icy and/or covered in snow; there are a number of very slick rocks. Workers should be mindful of very slippery conditions and avoid slips, trips, and falls.

Light flurries are expected throughout the day, but no accumulation is expected.

Exercise safe work practices while working along the highway. Traffic control will take place on both east bound and west bound sides of highway. Work facing traffic whenever possible. Maintain awareness of surroundings at all times. Watch for heavy eqpuipment, do not enter the swing radius of an excavator without eye contact and a signal from the operator.

Approved Site Safety Plan Located at: ICP

6. Prepared By: (PSC)		(Date / Time)
Name: Ross McMakin – NWFF	Signature:	

1. Incident Name:	2. Operational Period (Date / Time)	**ORGANIZATION ASSIGNMENT LIST ICS 203 - EPA**
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. INCIDENT COMMANDER / COMMAND STAFF:	
Incident Commander(s)	Jeffrey Fowlow, EPA Jamie Collins, OR OSC Rob Honsberger, RPIC
Deputy	John Berger, NWFF
Safety Officer	Chuck Carver, NWFF
Information Officer	Mark MacIntyre, EPA Laura Gliem/Jennifer Flynt, OR DEQ

4. AGENCY REPRESENTATIVES:	
OR DOT	Charles Schwarz
OPRD	Mark Stevenson

5. PLANNING SECTION:	
Chief	Matt Magorrian, EPA
Deputy	
Resources Unit	Steve Lemelin, NWFF
Situation Unit	
Environmental Unit	Charles Kennedy, ODEQ
Deputy Environmental	Don Pettit, ODEQ
Demobilization Unit	
Technical Specialist	Faye Walstead-Keelan, EPA Contractor
Technical Specialist	Bryon Alexander, EPA Contractor

6. LOGISTICS SECTION:	
Chief	Ross McMakin - NWFF
Deputy	
a. Support Branch	
Director	
Supply Unit	
Facilities Unit	
Ground Support Unit	
Transportation Unit	
b. Service Branch	
Director	
Communications Unit	
Medical Unit	
Food Unit	

7. OPERATION SECTION:		
Chief		Shiloh McConnel, NWFF
Deputy		
Deputy		
Staging Area Manager		
Branch 1		
Deputy		
Division/Group	A	On-water Ops – Seth Williams
Division/Group	B	South side of Hwy – Alan Dimock
Division/Group	C	South Side of Hwy -
Branch 2		
Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		
Division/Group		
Branch 3		
Director		
Deputy		
Division/Group		
Division/Group		
Division/Group		

8. FINANCE/ADMINISTRATION SECTION:	
Chief	
Time Unit	
Procurement Unit	
Compensation/Claims Unit	
Cost Unit	

NOTES:

9. Prepared By:		(Date / Time)
Name: Ross McMakin - NWFF	Signature:	

1. Incident Name:	2. Operational Period: (Date / Time)	ASSIGNMENT LIST ICS 204 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Branch:	4. Division/Group/Staging:
Division A – On Water	ODOT Weigh Station

5. Operations Personnel:

ICS Position	Name	Affiliation	Contact # (s)
Operations Section Chief:	Shiloh McConnell	NWFF	541-231-2619
Branch Director:			
Division/Group Supervisor/STAM:	Seth Williams	NWFF	541-745-8288

Resources Assigned: **"X" indicates 204a attachment with additional instructions**

Strike Team/Task Force/ Resource Identifier	Leader	Contact Info. #	# of Persons	Reporting Info/Notes/Remarks	
NWFF Technicians	Alex Plawman	541-231-0445	4		

7. Work Assignments:

Check and maintain hard boom in place and deploy more boom if necessary
Check and replace soft boom as necessary
Provide boat transportation as needed to resource trustee representatives (NOAA/USFWS/ODFW) and air monitoring crews
Assist Land Operations Group as needed with flushing and recovery operations

8. Special Instructions:

PFDs are to be worn at all times, while on or within 10' of water (including ice covered water). Crews should be very aware of low water temperatures. Employ the buddy system while on or near the water. Immediately report any sighting of dead or injured fish or wildlife to supervisor, or any cultural or historic artifacts. Reflective vests are required to be worn when on or near the highway. Hard hats must be worn while any over-head operations are ongoing. ***Full-face respirators with Super defender cartridges MUST be worn when working in areas that exceed 10ppm total VOC***

9. Communications (radio and/or phone contact numbers needed for this assignment):

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager
All responders	Channel 1		

Emergency Communications: 911 and Safety Officer: 541-740-3272

10. Prepared by: (RESL) (Date / Time)	11. Reviewed by: (PSC) (Date / Time)	12. Reviewed by: (OPS) (Date / Time)
Name: Ross McMakin – NWFF 19 Feb 1530	Name: Matt Magorrian, USEPA, PSC 2/18/19 @1515	

1. Incident Name:	2. Operational Period: (Date / Time)	ASSIGNMENT LIST ICS 204 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Branch:	4. Division/Group/Staging:
Division B – North side of Hwy	ODOT Weigh Station

5. Operations Personnel:

ICS Position	Name	Affiliation	Contact # (s)
Operations Section Chief:	Shiloh McConnell	NWFF	541-231-2619
Branch Director:			
Division/Group Supervisor/STAM:	Alan Dimock	**NWFF**	971-352-5449

Resources Assigned: **"X" indicates 204a attachment with additional instructions**

Strike Team/Task Force/ Resource Identifier	Leader	Contact Info. #	# of Persons	Reporting Info/Notes/Remarks	
WFS Technicians	Jamie Redon	509-759-5773	7		

7. Work Assignments:

Continue flushing and recovery operations once traffic control has been established in westbound travel lane. Follow OWRD rregulations while drafting water (up to 100,000 gallons) from Lindsey Lake, including use of protective screen to minimize harm to fish and wildlife. Ensure recovery equipment is in place at collection point prior to beginning any flushing operations. Utilize water tender to flush snow, ice, and accumulated diesel fuel from embankment. Simultaneously employ skimmer and/or vacuum truck to recover any fuel or oily water that then accumulates at collection point at Lindsey Lake. Employ best tactics to maximize recovery of oil and minimize recovery of water. Decanting not permitted unless allowed by FOSC. Vacuum truck should be on standby at ODOT weigh station before flushing commences. Transport any diesel fuel or oily water recovered to Baker tank staged at Wyeth Sate Park. If time permits, utilize long-reach crane to recover any stockpiled solid waste (sorbent or sorbent boom) from Lindsey Lake shoreline to waiting tub truck. Dispose of solid waste in accordance with all applicable Federal and State regulations.

Check and maintain soft boom and replace if needed along shoreline.

Complete installation of a cut trench mid-slope, approximately 1-2 feet and fill with absorbent boom.

Utilize additional boat to the lake to assist with on-water recovery of contaminants.

Dig a ditch at the base of the cliff adjacent to the eastbound lanes, approximately 1-foot deep; install absorbent boom to collect melting contamination..

8. Special Instructions:

PFDs are to be worn at all times, while on or within 10' of water (including ice covered water). Crews should be very aware of low water temperatures. Employ the buddy system while on or near the water. Immediately report any sighting of dead or injured fish or wildlife to supervisor. Be cautious of slippery slopes and rocky terrain. ***Full-face respirators with Super defender cartridges MUST be worn when working in areas that exceed 10ppm total VOC***

9. Communications (radio and/or phone contact numbers needed for this assignment):

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager
All responders	Channel 1		

Emergency Communications: 911 and Safety Officer: 541-602-5318

10. Prepared by: (RESL) (Date / Time)	11. Reviewed by: (PSC) (Date / Time)	12. Reviewed by: (OPS) (Date / Time)
Name: Ross McMakin – NWFF 02/18/19 1530	Name: Matt Magorrian, USEPA, PSC 2/18/19 @1515	

1. Incident Name:	2. Operational Period: (Date / Time)	ASSIGNMENT LIST ICS 204 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Branch:	4. Division/Group/Staging:
Division C – South Side of Hwy	ODOT Weigh Station

5. Operations Personnel:

ICS Position	Name	Affiliation	Contact # (s)
Operations Section Chief:	Shiloh McConnell	NWFF	541-231-2619
Branch Director:			
Division/Group Supervisor/STAM:	Clive Bailey	WFS	

Resources Assigned: **"X" indicates 204a attachment with additional instructions**

Strike Team/Task Force/ Resource Identifier	Leader	Contact Info. #	# of Persons	Reporting Info/Notes/Remarks	
Technicians	Clive Bailey		4		

7. Work Assignments:

Maintain a safe work zone at all times. Coordinate with traffic control to ensure safe entrance and exit of vehicles and equipment from the highway.
Utilize excavator and loader to remove impacted snow from the south side shoulder of the highway.
Complete deployment of soft boom along east side of Lindsey Creek
Use sorbent and vac truck to recover liquid product and oily water waste from roadway and shoulder

8. Special Instructions:

PFDs are to be worn at all times, while on or within 10' of water (including ice covered water). Crews should be very aware of low water temperatures. Employ the buddy system while on or near the water. Immediately report any sighting of dead or injured fish or wildlife to supervisor. Be cautious of slippery slopes and rocky terrain. ***Full-face respirators with Super defender cartridges MUST be worn when working in areas that exceed 10ppm total VOC***

9. Communications (radio and/or phone contact numbers needed for this assignment):

Name/Function	Radio: Freq./System/Channel	Phone	Cell/Pager
	Channel 1		

Emergency Communications: 911 and Safety Officer: 541-602-5318

10. Prepared by: (RESL) (Date / Time)	11. Reviewed by: (PSC) (Date / Time)	12. Reviewed by: (OPS) (Date / Time)
Name: Ross McMakin – NWFF 2/18/19 1530	Name: Matt Magorrian, USEPA, PSC 2/18/19 @1515	

INCIDENT RADIO COMMUNICATIONS PLAN

1. Incident Name:	2. Operational Period: (Date / Time)	INCIDENT RADIO COMMUNICATIONS PLAN ICS 205 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Basic Radio Channel Use:

SYSTEM / CACHE	CHANNEL	FUNCTION	FREQUENCY	ASSIGNMENT	REMARKS
Motorola	1	All staff	164.4500	All staff	Keep radio communication short, concise, and professional.

4. Prepared by: (Communications Unit)		(Date / Time)
Name: Ross McMakin – NWFF 2/28/19 1530	Signature:	

ICS 205 – EPA

1. Incident Name:	2. Operational Period: Date / Time)	INCIDENT COMMUNICATIONS PLAN ICS 205A - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Communication Contact List:

NAME	POSITION	PHONE NUMBER	AGENCY / AFFLIATION	EMAIL ADDRESS
Jeff Fowlow	Federal IC	206-225-5582	EPA	Fowlow.jeffrey@epa.gov
Jamie Collins	State IC	541-321-3124	ODEQ	
Rob Honsberger	RP IC	206-856-6679	HydroCon	roberth@hydroconllc.net
John Berger	Dep IC	541-740-4241	NWFF	
Alan Dimock	SO	541-602-5318	NWFF	
Jennifer Flynt	PIO		ODEQ	
Laura Gleim	PIO		ODEQ	
Mark MacIntyre	PIO		EPA	
Scott Smith	LNO		ODEQ	
Matt Magorrian	PSC	206-437-9327	EPA	Magorrian.matthew@epa.gov
Charles Kennedy	ENVL	541-650-2326	ODEQ	
Allison Kinney	ENV	319-936-5369	BergerABAM	
Bryon Alexander	EU Tech	208-970-0564	EPA/E&E	
Faye Walstead-Keelan	EU Tech	503-741-0383	EPA/E&E	
Shiloh McConnell	OPS SC	541-231-2619	NWFF	
Glenn Thor	OPS	541-609-1969	NWFF	
Alex Plawmen	OPS	541-231-0445	NWFF	
Arturo Gutierrez	OPS	509-930-1688	WFS	
Cesar Monroy	OPS	541-243-2977	NWFF	
Charles Schwerz	OPS	503-880-9074	OR DOT	
Chris Daschel	OPS	503-891-4128	HydroCon	
Clive Bailey	OPS	509-985-7570	WFS	
Daniel Holmes	OPS		NRC	
Josh Rairden	OPS	541-453-5896	K&B	
Juan Diaz	OPS	509-406-9118	WFS	
Kevin Rairden	OPS	541-602-9166	K&B	
Robert Jones	OPS		WFS	
Ross McMakin	LSC	541-231-2618	NWFF	
Seth Williams	OPS	541-745-8288	NWFF	
Stan Jensen	OPS		NRC	
Jamie Redom	OPS	509-759-5773	WFS	

4. Prepared by:		(Date / Time)
Name: Ross McMakin – NWFF 2/18/19 1530	Signature:	

1. Incident Name:	2. Operational Period: (Date / Time)	MEDICAL PLAN ICS 206 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Medical Aid Stations:

Name	Location	Contact #	Paramedics On Site (Y/N)
ODOT Weigh Station	ODOT Weigh Station on North side of I-84 just East of the spill site	None	N

4. Transportation:

Ambulance Service	Address	Contact #	Level of Service	
			ALS	BLS
Hood River FD	Hood River, 5 miles East of spill site	911	x	x

5. Hospitals:

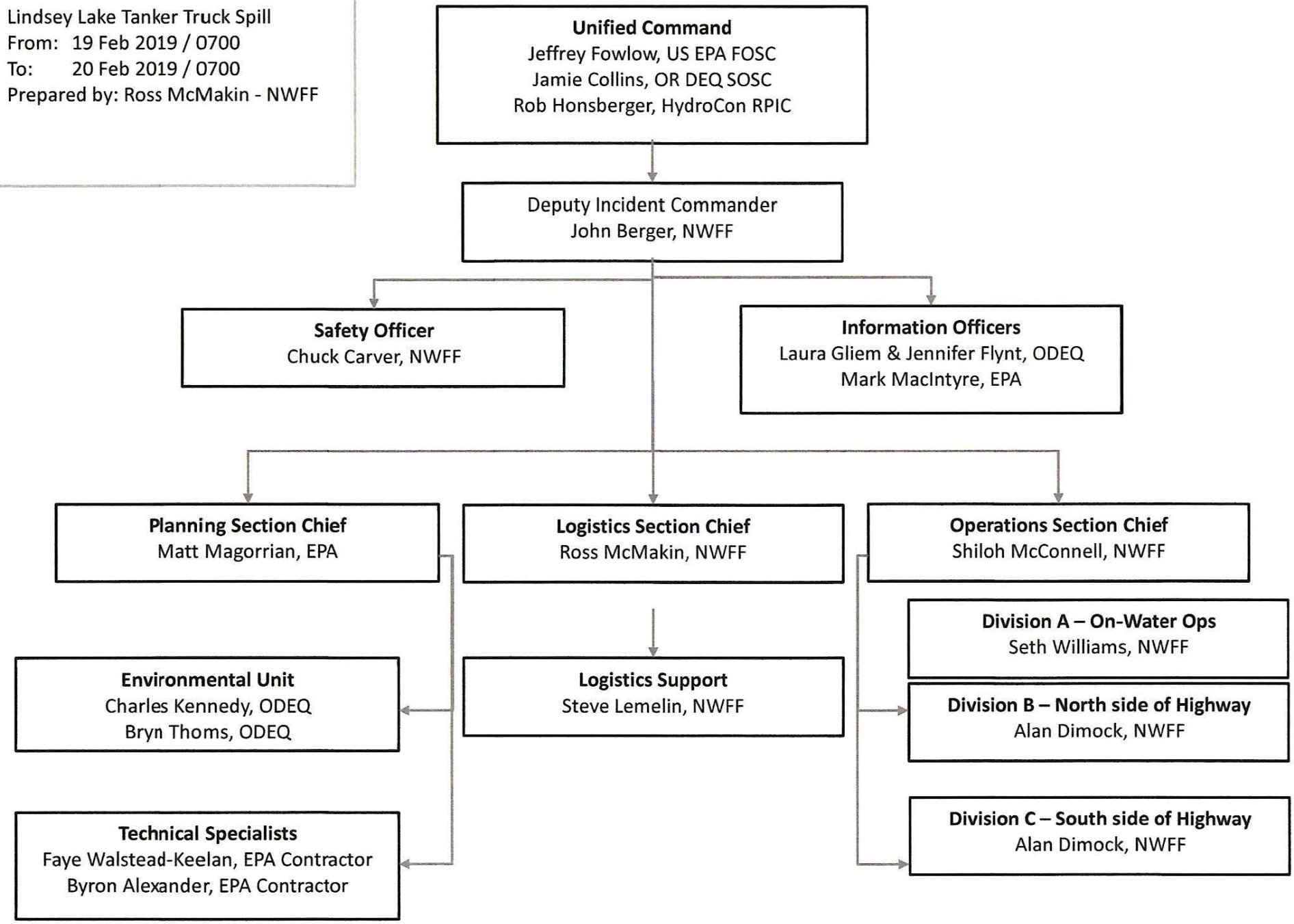
Hospital Name	Address	Contact #	Travel Time		Burn Center (Y/N)	Helipad (Y/N)	Trauma Center (Y/N)
			Air	Ground			
Providence Memorial – Hood River	811 13th Street, Hood River, OR	541-436-4500		x	x	x	x
Mid-Columbia Medical Center	1700 E 19th Street, the Dalles, OR	541-295-1111		x	x	x	x

6. Special Medical Emergency Procedures:

Due to extreme cold and weather conditions, hypothermia is a concern. Dehydration is also a concern so personnel must stay hydrated. In the event a person falls into the water, evacuate them to the ICP immediately, and place them in a warm, dry area; remove wet clothing to prevent progression of hypothermia.

7. Prepared by: (Medical Unit Leader)	(Date / Time)	8. Reviewed by: (Safety Officer)	(Date / Time)
Name: Ross McMakin – NWFF 2/18/19 1530			

ICS-207 ORG CHART
Lindsey Lake Tanker Truck Spill
From: 19 Feb 2019 / 0700
To: 20 Feb 2019 / 0700
Prepared by: Ross McMakin - NWFF



Incident Name:	2. Operational Period: (Date / Time)	DAILY MEETING/ CONFERENCE CALL SCHEDULE ICS 230 - EPA
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Meeting Schedule (Commonly-held meetings are included) :

Date/ Time	Meeting Name	Purpose	Attendees	Location
Daily 7:30am	OPERATIONS Briefing	30-minutes Present the IAP to responders; brief oncoming ops section on daily operations	PSC Facilitates All Command & General Staff, all Operations staff	Viento Park ICP Briefing tent
Daily 10:30am	COMMAND & GENERAL STAFF Meeting	30-minutes UC to provide updates, decisions and management directives to command & General Staff	PSC Facilitates All Command & General staff, SITL	Viento Park ICP Briefing Tent
Daily 1:00pm	TACTICS Meeting	30-minutes Develop plans for the following operational period	PSC Facilitates Operations, Safety, Logistics, Resources, Situation	Viento Park ICP Command Trailer
Daily 4:30pm	PLANNING Meeting	45-minutes Define incident objectives, strategies and tactics, and identify resource needs	PSC Facilitates All Command & General staff, Resources, Situation	Viento Park ICP Briefing Tent

4. Special and Other Meetings:

Daily 3:30pm	All IAP Docs Due	All documents for the IAP are due to ICP	All staff	Magorrian.matthew@epa.gov & Ross_McMakin@nwffenviro.com
Daily 6:00pm	Daily operations terminate	All operations terminate, ICP closes	All staff	N/A

5. Prepared by: (PSC)		(Date / Time)
Name: Ross McMakin – NWFF 2/18/19 1530	Signature:	

1. Incident Name:	2. Operational Period: (Date / Time)	RESOURCES AT RISK SUMMARY ICS 232-OS
Lindsey Lake Tanker Truck Spill	From: 19 Feb 2019 / 0700 to: 20 Feb 2019 / 0700	

3. Environmentally-Sensitive Areas and Wildlife Issues

Overall Objectives of Response – (#1) Safety of public and responders, (#2) Contain and recover diesel fuel against shoreline at seepage point, (#3) Protect wetlands and natural resources in Lindsey Lake and Lindsey Creek, (#4) Prevent fuel from moving into Columbia River

Site #	Priority	Site Name and/or Physical Location	Site Issues
Hwy MP 53.8 Columbia River Mile 158.8	1	Lindsey Lake (AKA Lindsey Pond) Source Control – Install containment boom against shoreline in area of product seepage, line with adsorbent boom to capture oil and keep oil out of lake. Replace sorbent boom as indicated by rate of oil saturation.	**Length: 2,500'** Boom – B2 (Contractor Boom) or equivalent. Sweeps or sorbent boom backing B2 to adsorb oil until small skimmer or vacuum truck can be placed/operated. **Objective:** Containment & Recovery – Keep oil contained to limit impacts to Lindsey Lake. **Resource concerns:** Sensitive nesting species, waterfowl and salmon concentrations and habitat.
B 158.8L	2	Lindsey Lake (Cascade Locks, OR)	**Length:** 300' Boom – B2 (Contractor Boom) or equivalent. Use 100' in "V" shape within Lindsey Lake at culvert through railway levee. Use additional 200' of boom in "V" shape in Columbia River on opposite side of levee as secondary containment for river. **Objective:** Exclusion – Keep oil in Lindsey Lake from reaching Columbia River by blocking outfall/inlet to lake. **Resource concerns:** Sensitive nesting species, waterfowl and salmon concentrations and habitat. **Fish passage must be maintained by keeping boom at distance from passage culvert.**

Narrative

Habitat Concerns: Islands, sloughs and wetlands provide critical resting and feeding areas for wildlife and serve as important rearing areas for resident fish and juvenile salmonids. Various deep and shallow water river habitats support a reported 48 species of freshwater fish including species important to sport fishery such as trout, walleye, bass, sunfish, catfish and sturgeon. Additionally, numerous other small generally shallow water species such as dace, shiner, mosquitofish stickleback and sculpins occur here and serve as important food sources for birds, larger fish and other wildlife. Their occurrence in shallow water makes them more susceptible to the toxic effects of petroleum. Riparian habitats are heavily used by wildlife including river otter, beaver and raccoon.

Wildlife Concerns: This area is located on a major artery of the Pacific Flyway used primarily in October through February. Large numbers of waterfowl present, Pied-billed Grebe, Double-crested Cormorant, Canada Geese, Blue, Green, and Cinnamon Winged Teal, Mallard, Gadwall, Northern Shoveler, Redhead, ring-necked Duck, Lesser Ruddy Duck, Common Merganser, Lesser Scaup, Bufflehead, American Wigeon, Ring-billed Gulls, American Coot, Blue Herons and American White Pelicans are common in Fall. Bald Eagles are in the area and will prey on injured waterfowl. River otters, mink and beaver are present and vulnerable to oil exposure.

Fish Concerns: Sloughs and impoundments are critical rearing habitat for both salmonids and resident fish Adult and juvenile Fall Chinook, Coho and Steelhead runs are passing through the area in September and early October. Overwintering juvenile Coho and Chinook will be using the nearshore and backwater areas.

Threatened & Endangered Species Concerns: Listed stocks include: Upper Columbia River Spring [FE], Snake River Spring, summer, and Fall Chinook [FT], Snake River Sockeye salmon [FE] and upper Columbia River steelhead [FT], Snake River Steelhead [FT]. American White Pelican [SE]

Juvenile coho, winter steelhead, and Redband trout are present in Lindsey Creek which enters Lindsey Lake (pond) at natural delta to west of spill seepage front on bank against the highway.

Report any observations of impacted fish, waterfowl or other wildlife to Operations Section Chief, ODFW (Jon Germond @ 503-947-6088) and USFWS (Mike Szumski @ 541-867-4550) immediately upon discovery.

4. Archaeo-cultural and Socio-economic Issues

Site #	Priority	Site Name and/or Physical Location	Site Issues
N/A	1	Sensitive tribal cultural sites	To be identified through consultation with local tribes and the **Oregon State Historical Preservation Office.** Initial consultations with SHPO and all four Federal treaty tribes with interests in the region indicated no resources are present in the immediate vicinity of the site; see below. Notifications to the tribes and SHPO were made between 2/12/19 and 2/13/19.
B-155.7L and others	1	Tribal fishing sites (numerous along Oregon shoreline) from site to Bonneville Dam	Fishing from scaffolds along the river and use of In-Lieu Sites (such as the Wyeth In-Lieu Site at RM 155.7L) have the potential for impacts from river operations (including boat launching with permission) during the response. CRITFC has been notified and continues on the response in a liaison capacity.

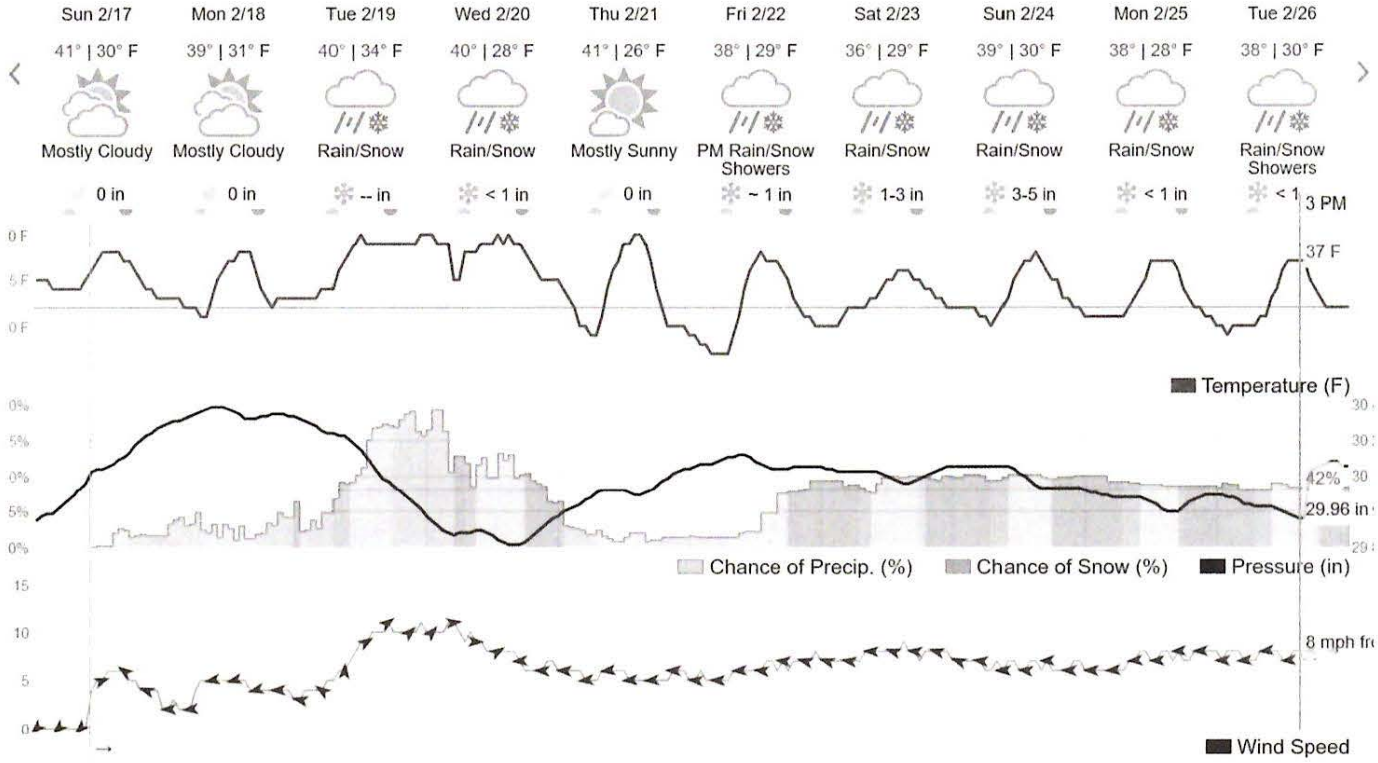
N/A	2	Columbia River Gorge National Scenic Area	Scenic, cultural, recreational, and natural resources. Coordination with CRGNSA initiated. Office closed due to inclement weather, left message with explanation of resource protection efforts and to call back with any questions or information (541-308-1700)
B-145.4-N	2	Bonneville Dam Fishway and USACE assets in area	Fishery resources. Notification to USACE made 2/11/2019
N/A	2	Bonneville State park, Bonneville, OR	Public recreation. Notification to Oregon State Parks made 2/12/2019
B-146.2L-N	2	Cascade Hatchery (Eagle Creek Hatchery) USFWS Facility	Notification to manager ~~503-801-3713~~ (advisory notification completed) 541-867-4550
B-150.8L-N	2	City of Cascade Locks Water Intake	Call Public Works Foreman at 541-386-~~2711~~ 2616 (advisory notification completed via Sheriff's Emergency Line)
N/A	2	Oregon State Parks Department	Contact with OR State Parks made 2/12/2019 (Gary Curtis 541-388-6204)

Narrative

Numerous culturally sensitive areas exist along the shorelines of the region. Tribal notifications have been made and coordination with Columbia River Intertribal Fisheries Commission and the Oregon State Historic Preservation Office is ongoing. Dennis Griffin with OR-SHPO has stated that there are no known archaeological sites in the response area. Advises to proceed, with due caution for unknown resources. See Inadvertent Discovery Plan for Cultural Resources, attached with this document.

5. Prepared by: (Environmental Unit Leader)	**Date/Time**
Don Pettit, Dep EUL	2/14/2019 1500

Weather Report for 2/19/2019



TUESDAY

Sky/weather.....Mostly cloudy in the morning then cloudy.
A chance of rain or snow in the morning,
then rain at times mid to late afternoon.
Snow level near River level in the morning
then rising to 1000 feet by the afternoon.

Chance of pcpn.....80 percent.

Max temperature.....37-40.

Min humidity.....70-80 percent.

Dewpoint.....Lower 30s.

Surface winds.....West to Northwest 2 to 6 mph, increasing
to 6 to 11 mph with gusts to 18 mph in
the afternoon.

Visibility.....6 miles or greater through late afternoon
then 3 to 5 miles. Visibility 3 to 5 miles
also possible in the morning.

EXTENDED OUTLOOK...

TUESDAY NIGHT...Rain. Snow level 1000 feet. Lows around 35. West wind 10 to 15 mph with gusts up to 30 mph. Chance of precipitation 90 percent.

WEDNESDAY...Rain showers. Snow level 1000 feet. Highs around 40. West wind 7 to 12 mph with gusts up to 25 mph. Chance of precipitation 90 percent.

WEDNESDAY NIGHT...Cloudy with a 50 percent chance of snow showers. Lows around 25. West wind 4 to 8 mph, becoming east after midnight.

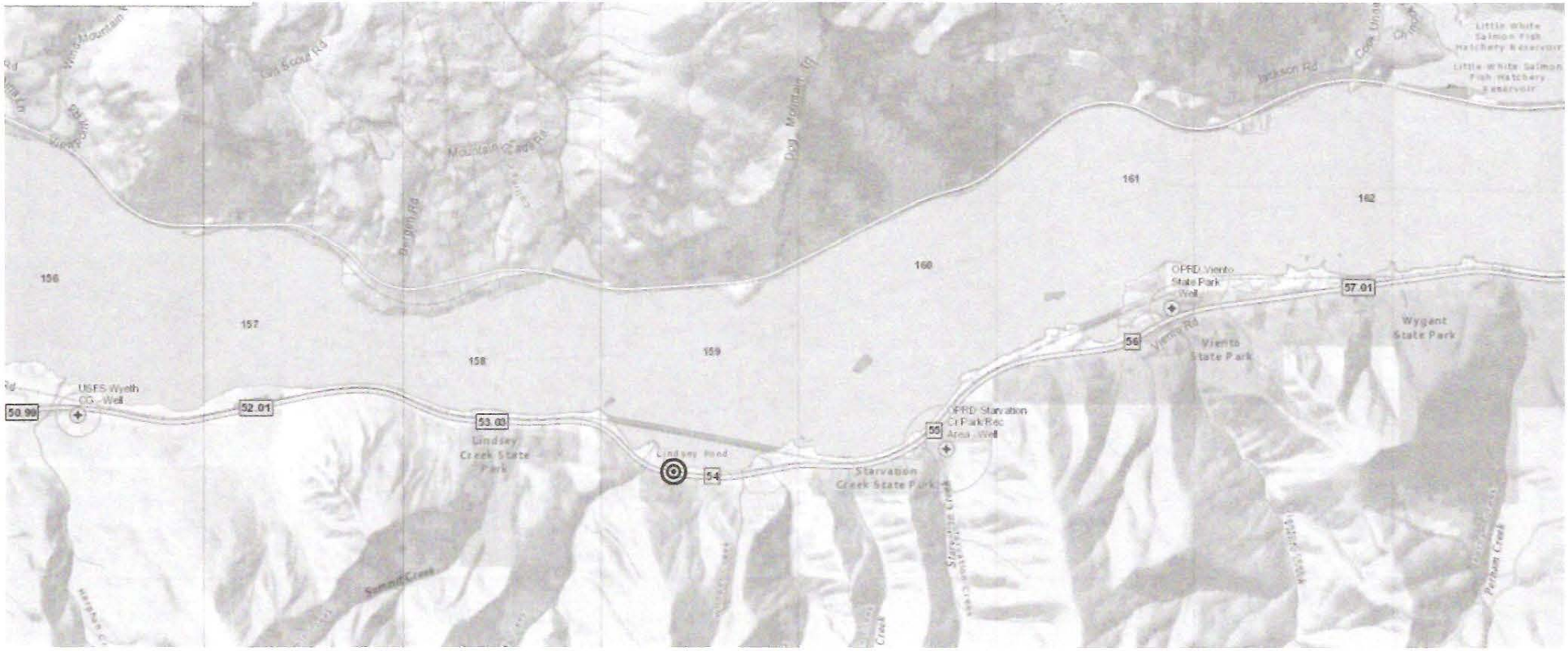
THURSDAY...Partly sunny with a 20 percent chance of rain and snow showers. Highs around 40. Northeast wind 3 to 6 mph.

THURSDAY NIGHT...Partly cloudy. Lows around 25. East wind 2 to 5 mph.

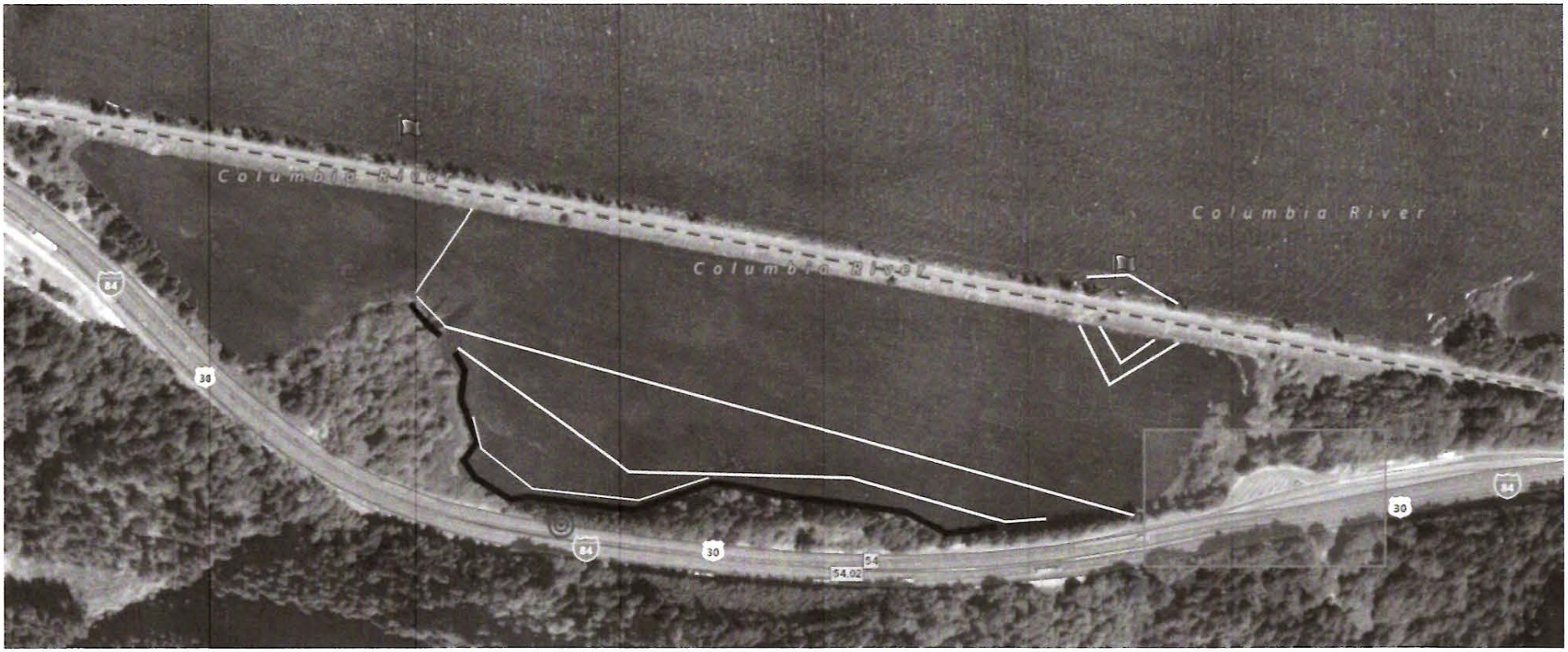
FRIDAY...Partly cloudy with a 20 percent chance of snow. Highs 35 to 40. East wind 5 to 10 mph.

MAP 1 – Lower Columbia River – River Mile 159

Lindsey Lake



MAP 2 – Lower Columbia River – River Mile 159
Lindsey Lake Booming Strategy



Inadvertent Discovery Plan for Cultural Resources

For the duration of the response, or until replaced by an updated version, this plan will be followed to identify, report and protect potential cultural materials which are discovered during the course of emergency response operations being conducted to protect human health and the environment. This does NOT include significant ground disturbing activities involving excavation, dredging, drilling, etc. which would be covered by a project specific plan. This plan also is also not intended to protect sites in areas where cultural resources have already been documented which should have site-specific project plan to protect cultural resources.

This Inadvertent Discovery Plan (IDP) should be followed if cultural materials, including human remains, are encountered during any field or site activities including but not limited to: excavation, berming, under/overflow dam construction, boom deployment, development of staging areas, access paths/routes, or during reconnaissance activities such as SCAT Surveys.

When to stop work:

Construction work or other ground disturbing activities may uncover previously unidentified Native American or Euro-American artifacts. Work must stop when the following types of artifacts and/or features are encountered:

Native American artifacts may include (but are not limited to)-

- Flaked stone tools (arrowheads, knives scrapers etc.);
- Waste flakes that resulted from the construction of flaked stone tools;
- Ground stone tools like mortars and pestles;
- Layers (strata) of discolored earth resulting from fire hearths. May be black, red or mottled brown and often contain discolored cracked rocks or dark soil with broken shell;
- Human remains;
- Historical structural remains- wooden beams, post holes, fish weirs.
- Petroglyphs (carvings in stone) or petrographs (drawings in stone).

Euro-American artifacts may include (but are not limited to)-

- Glass (from bottles, vessels, windows etc.);
- Ceramic (from dinnerware, vessels etc.);
- Metal (nails, drink/food cans, tobacco tins, industrial parts etc.);
- Building materials (bricks, shingles etc.);
- Building remains (foundations, architectural components etc.);
- Old Wooden Posts, pilings, or planks (these may be encountered above or below water);
- Remains of ships or sea-going vessels, marine hardware etc.;
- Old farm equipment may indicate historic resources in the area.
- Even what looks to be old garbage could very well be an important archaeological resource;

When in doubt, call it in!

Protocol for coordination in the event of inadvertent discovery:

- In the event of an inadvertent discovery of items suspected to be cultural materials, including possible human remains, stop all work immediately in the vicinity of the find. Notify your Division/Group Supervisor or Task Force Leader as soon as possible.
- The area should be secured and protected. A 30 meter buffer should be placed around the discovery with work being able to proceed outside of this buffered area unless additional cultural materials are encountered.
- The Operations Section Chief, the Planning Section Chief, the Tribal On-Scene Coordinator (if one has been established within the ICS) and the Liaison Officer are to be notified immediately by the Division/Group Supervisor or Task Force Leader. The Planning Section Chief will direct his staff to notify the State Historic Preservation Office (SHPO) and the US Dept. of the Interior or designated representative (U.S. Fish & Wildlife), if present within the ICS established for the incident.

If possible human remains are encountered, the Oregon State Police, Oregon Commission on Indian Services (CIS), SHPO, and appropriate Tribes will also be notified.

- Oregon State Police: Chris Allori 503-731-4717
- Oregon Commission on Indian Services: Karen Quigley 503- 986-1067
- Appropriate Tribes: As designated by CIS
- SHPO: Dennis Griffin 503-986-0674, John Pouley 503-986-0675, or Matt Diederich 503-986-0577.

- No work may resume within the secured area until consultation with the SHPO has occurred and a professional archaeologist is able to assess the discovery.

- If human remains are encountered, do not disturb them in any way. *Do not call 911*. Do not speak with the media. Secure the location. Do not take Photos. The location should be secured and work will not resume in the area of discovery until all parties involved agree upon a course of action.

- A professional archaeologist may be needed to assess the discovery; they will consult with SHPO and appropriate Tribal Governments to determine an appropriate course of action.

- Archaeological excavations may be required after the emergency response phase of the incident. This is handled on a case by case basis by the professional archaeologist and project manager, in consultation with SHPO and appropriate Tribes.

Proceeding with Construction or other Ground Disturbing Activities

- Construction can proceed only after the proper archaeological inspections have occurred and
- clearance to proceed is obtained. This requires close coordination with SHPO and the Tribes.
- After an inadvertent discovery, some areas may be specified for "**Close Monitoring**" or '**No Work Zones**'.
- Any such areas will be identified by the professional archaeologist, and relayed to the Operations Section Chief and the Planning Section Chief, who will relay to appropriate Division/Group Supervisors and/or Task Force Leaders.

- In coordination with the SHPO or professional archaeologist, the Operations Section Chief will verify these identified areas and be sure that the areas are clearly demarcated in the field, as needed.

Approved:

EPA FOSC: _____ _____ _____

DEQ SOSC: _____ _____ _____

RP IC (Space Age Fuels): _____ _____ _____