Upland/Inland Spill Response: Use of Underflow Dams

The O'BRIEN'S Group

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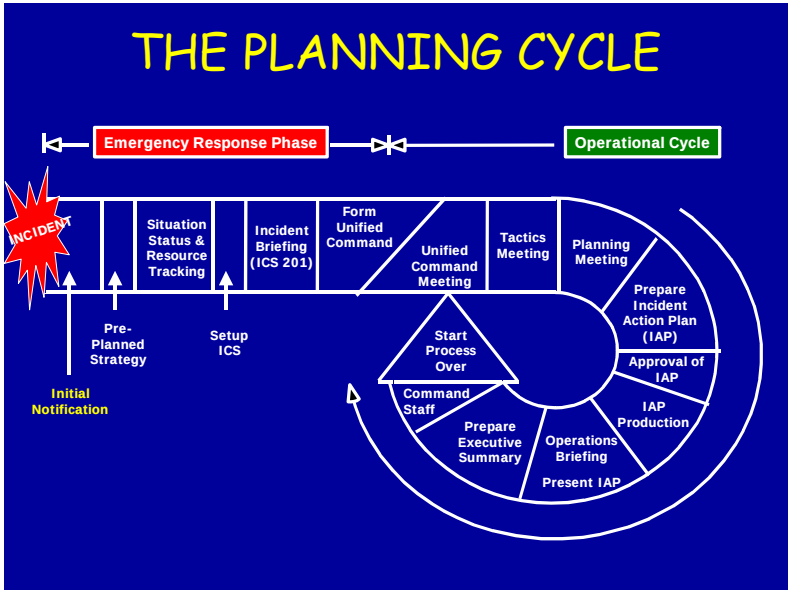
Freshwater Spills Symposium
Portland, Oregon

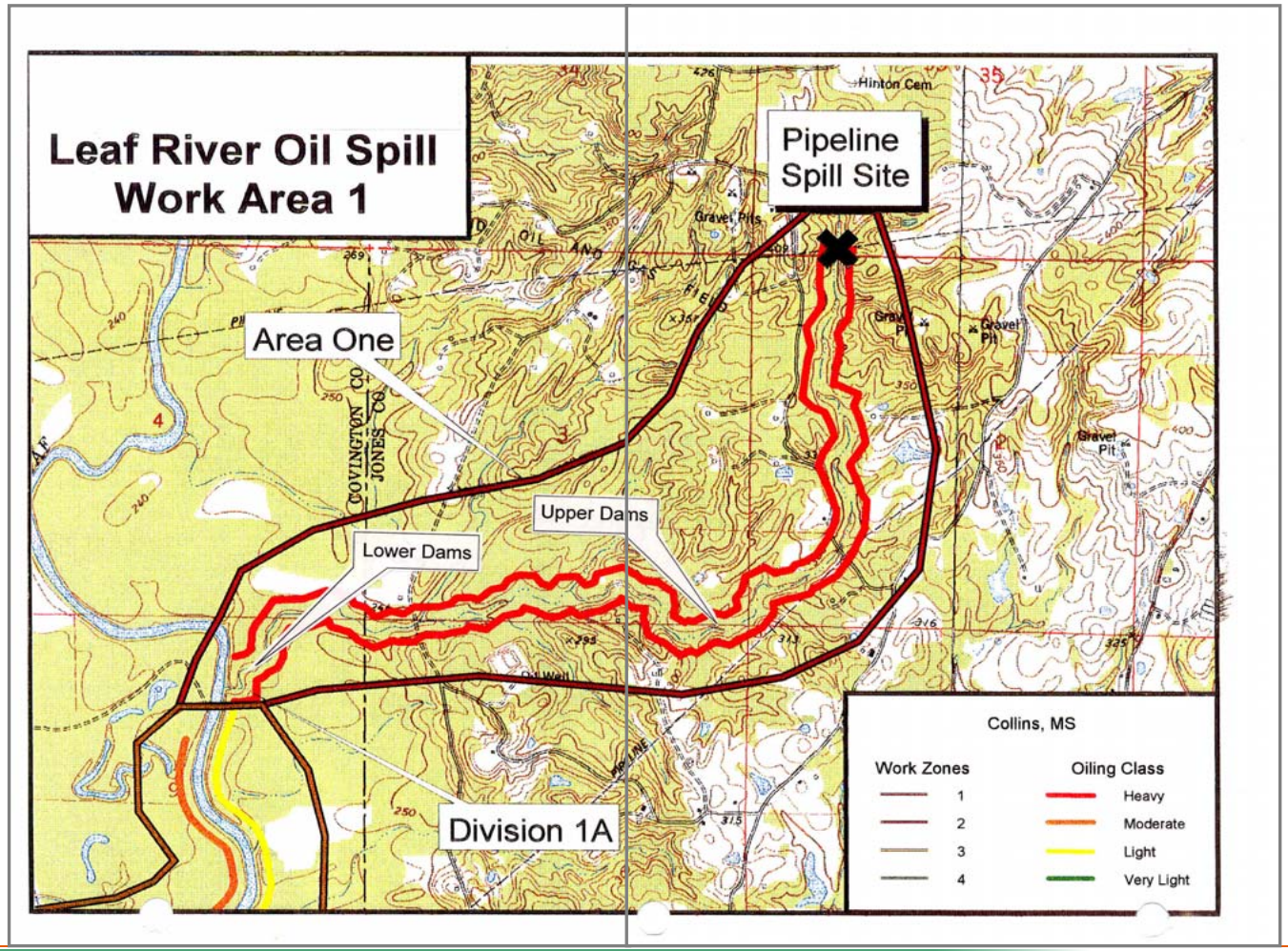
Planning



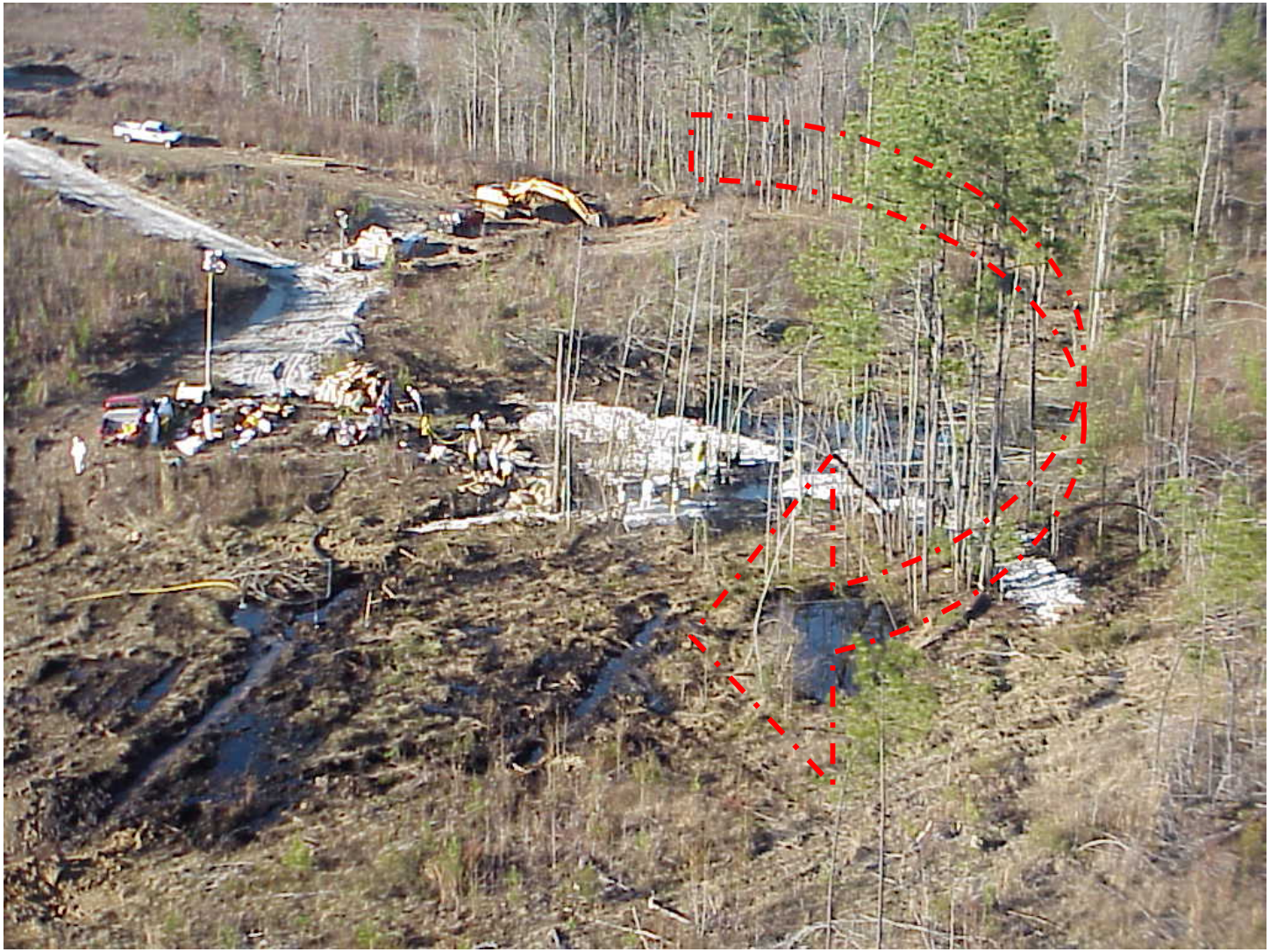
Response Support Planning Cycle

- Current Operations
- Night Operations
- Next Operational Period

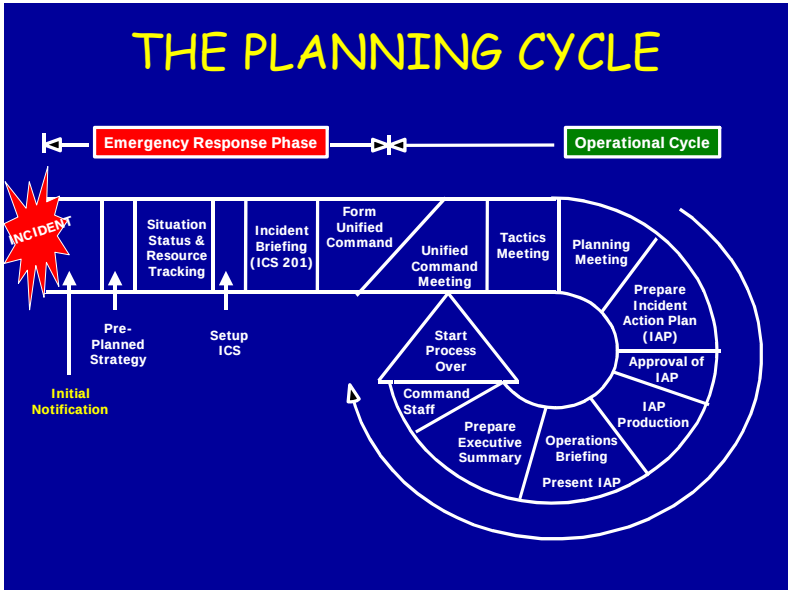
Operational Areas



Area of Concern



Planning for Contingencies



Drivers:

- Resource Availability
- Weather
- Recovery Throughput
- Re-supply

1. Incident Name	2. Operational Period (Date / Time) From:	INCIDENT OBJECTIVES ICS 202-OS

3. Overall Incident Objective(s)

Ensure the Safety of Citizens and Response Personnel
Control the Source of the Spill
Manage a Coordinated Response Effort
Maximize Protection of Environmentally-Sensitive Areas
Contain and Recover Spilled Material
Recover and Rehabilitate Injured Wildlife
Remove Oil from Impacted Areas
Minimize Economic Impacts
Keep Stakeholders and Public Informed of Response Activities

4. Objectives for specified Operational Period

- Remove free oil from river
- Prevent re-oiling of the river
- - - - - - -
- - - - - - -
- -- - - - - -

5. Safety Message for specified Operational Period

Approved Site Safety Plan Located at:

6. Weather **See Attached Weather Sheet**

7. Tides / Currents **See Attached Tide / Current Data**

8. Time of Sunrise **Time of Sunset**

9. Attachments (mark "X" if attached)

☐ Organization List (ICS 203-OS)	☐ Medical Plan (ICS 206-OS)	☐ Resource at Risk Summary (ICS 232-OS)
☐ Assignment List (ICS 204-OS)	☐ Incident Map(s)	☐ _____
☐ Communications List (ICS 205-OS)	☐ Traffic Plan	☐ _____

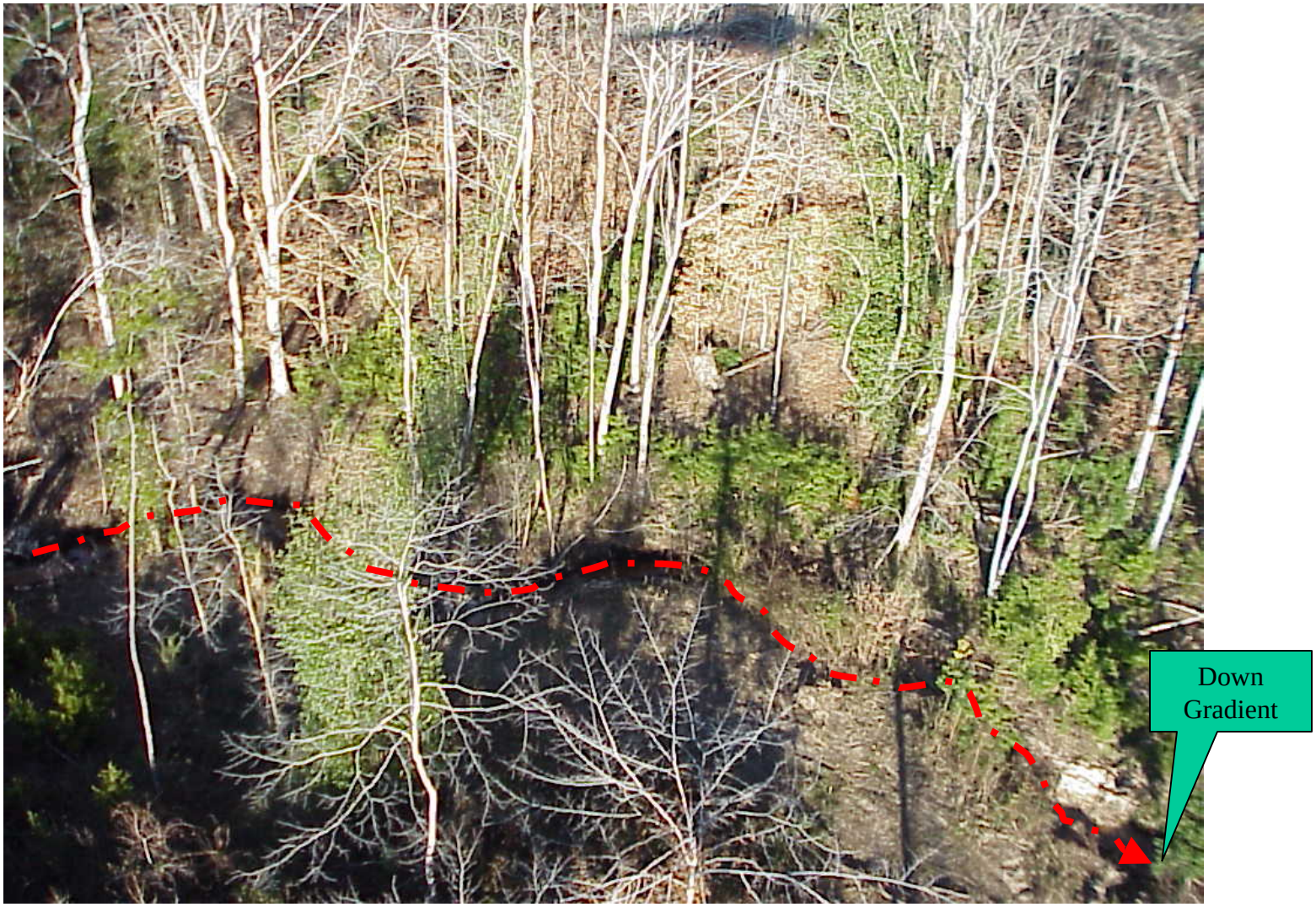
10. Prepared by: (Planning Section Chief) **Date / Time**

Beaver Dam

Upper Marsh Containment / Removal

Upper Dams

Creek



Creek Dams

Creek Outfall

Fourth Quarter 1999

Rainfall Data

COOPID	STATION NAME	ELEM						
228556	SUMRALL	PRCP						

YEARMO	DAY01	DAY02	DAY03	DAY04	DAY05	DAY06	DAY07	DAY08
199910	0	0	0	0	0	0	0	0
199911	1.26"	0	0	0	0	0	0	0
199912	0	0	0	0	.07"	0	0	0
200001	.12"	0	0	2.11"	0	0	0	0

YEARMO	DAY09	DAY10	DAY11	DAY12	DAY13	DAY14	DAY15	DAY16
199910	2.48"	1.90"	.02"	0	0	0	0	0
199911	0	0	0	0	0	0	0	0
199912	0	.05"	0	0	.94"	0	0	0
200001	.65"	1.53"	0	0	0	0	0	0

YEARMO	DAY17	DAY18	DAY19	DAY20	DAY21	DAY22	DAY23	DAY24
199910	0	0	0	.03"	0	0	0	0
199911	0	0	0	.02"	0	0	0	0
199912	0	0	1.27"	0	.94"	0	0	0
200001	0	0	0	.02"	0	0	1.00"	.15"

YEARMO	DAY25	DAY26	DAY27	DAY28	DAY29	DAY30	DAY31	
199910	0	0	0	0	0	0	.36"	
199911	0	.41"	0	0	0	0		
199912	0	0	0	0	0	0	0	
200001	0	0	0	.25"	.22"	0	0	

December 12, 1999 indicates an accumulation of 1.27" of rainfall, oil was first observed in the Leaf River at Highway 84 crossing on December 20, 1999.

January 4, 2000 indicates an accumulation of 2.11 " of rainfall the dams successfully contained the oil and prevented re-oiling of the Leaf River

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199911	0	
199912	0	
200001	0	

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Underflow Dam Pipe Size Chart
(Equivalent Number of Pipes)

Pipe Size (inches)	4" Pipe Size	6" Pipe Size	8" Pipe Size	10" Pipe Size	12' Pipe Size
12" Pipe Size	9 Pipes	4 Pipes	3 Pipes	2 Pipes	1 Pipe
10" Pipe Size	7 Pipes	3 Pipes	2 Pipes	1 Pipes	2 Pipes

(Adapted from TEEX Oil Spill Control School Manual training manual)

Construction Views