

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Silvertip Pipeline Spill



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Region VIII**

**Subject:** SITREP # 09 July 29, 2011  
Silvertip Pipeline Oil Spill Response  
Billings, Montana Latitude: 45° 39' 25.57" Longitude: 108° 44' 54.35"



**Reporting Period:** 0700 hours 07/27/11 to 0700 hours 07/29/11 (72 hour Op Period)

USEPA Concurrence	Finance Section	Deputy I/C	Operations
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## Introduction

An EPA On-Scene Coordinator (OSC) has been directing and overseeing cleanup activities since arriving at the site. EPA and U.S. Fish and Wildlife Service personnel conducted aerial assessments and reported seeing bank deposits and small pooling of oil in backwaters and slow water at intermittent points along both the north and south banks of the Yellowstone River. Shoreline assessment is ongoing to determine effective strategies for recovering the oil. Sorbent boom deployment is ongoing and where possible other oil recovery and containment approaches are being implemented.

### 1.1 Background Information

<b>D.O. Number:</b>		<b>Action Memo Date:</b>	
<b>Response Authority:</b>	OPA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	PRP	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	7/2/11	<b>Start Date:</b>	7/2/11
<b>RCRIS ID:</b>			
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#: E11809</b>		<b>Reimbursable Account</b>	

### 1.2 Preliminary Site Inspection and Response Activities

EPA consulted with, and brought in technical experts from the U.S. Fish and Wildlife Service, the Bureau of Land Management, and the Department of Transportation to assist with an assessment of the impacted areas downstream. The assessments conducted by air, in adjacent shorelines, and on the water, when possible, determined that there were continuous moderate to heavy impacts along at least one of the shorelines over the first 20 miles downstream of the spill site. Beyond this area and downstream of Lockwood, MT, the impacts were more sporadic and less heavily oiled as the distance from the spill site decreased and efforts were made to conduct aerial reconnaissance as far as Glendive, MT to confirm there was not recoverable oil further downstream. As the water receded in the initial days after the pipeline break, response crews focused their initial efforts on recovering free product oil in the floodplain and in lowland areas that had been inundated and were safely accessible. The primary methods of cleanup were sorbent materials and vacuum trucks. Containment with booms in the main channel was nearly impossible due to the rapidly flowing river and concerns about boat safety. As the water receded, the crews were able to address recoverable oil pockets on the islands in the main channel and preliminary shoreline cleanup and assessment technique (SCAT) teams were able to provide treatment recommendations to the crews for publically accessible and heavily oiled areas near the spill site. Since then, a more comprehensive SCAT effort has emerged and found numerous flood debris piles with moderate to heavy oil within the main channel. Efforts were underway to begin addressing these flood debris piles as the water levels decreased and crews had access to more areas within the river via boats.

### Incident Objective

The following incident objectives and command emphasis are taken from the IAP for the Operational Period 13. For July 27, 2011, at 0730 to July 29, 2011, at 0730.

#### General Response Objectives

1. Ensure the safety of the responders.
2. Execute the safe disposal, treatment and remediation of agricultural products.
3. Monitor the source of the spill.
4. Characterize and assess the impact to maximize the protection of public health and welfare.
5. Define impacted areas.
6. Contain and recover spilled material.
7. Develop and execute a remediation work plan for impacted areas.

8. Manage a coordinated response effort.
9. Execute Wildlife Plan to recover and rehabilitate injured wildlife.
10. Keep stakeholders and public informed of response activities (Residential, Commercial, Agricultural, and Tribal). Increase general media availability and access to field and command operations within safety and property constraints.

## **2.0 Background**

On July 6, 2011 EPA issued an administrative order to ExxonMobil instructing the oil company to provide information on the circumstance of the spill, conduct appropriate recovery and remediation actions, and perform ongoing environmental sampling. The order required ExxonMobil to provide a Workplan under Paragraph VI. ExxonMobil submitted the required Workplan documents or revisions to those documents on July 19, 2011. Those documents are now being reviewed by EPA, the State of Montana, and other agency partners.

## **3.0 Current Operations**

### Operations

ExxonMobil had approximately 883 personnel working the spill. There were 13 persons from EPA, 6 from the USCG Strike Team and 3 START contractors.

Division A personnel were deployed from the Riverside Park and the Duck Creek staging areas. On shore operations continued along the river bank and the shallow backwaters behind the islands. Air boats were used to retrieve oiled debris and to set sorbent boom and pads. Operations continued on islands in A12 and A21.

Division B personnel were deployed from the Billings Flying Club and the Duck Creek staging areas. On shore operations continued along the river bank. Jet-boats were used for accessing contaminated island areas and for maintenance of sorbent booms on the water. Operations continued on the island in B1/B2.

An S61 heavy lift helicopter was used to move equipment out to the islands and to retrieve bagged debris.

Cleanup work continued in the interior of one oiled residence in Division A.

ERT continued to act as liaison between SCAT and Operations to help insure that cleanup recommendations were followed in the field. ERT observed cleanup operations while working on a joint EPA/Exxon team to resolve issues with extent of cleanup of oiled vegetation and woody debris piles, primarily in Division A and B. ERT also observed and commented on several cleanup issues on private property in Division C. ERT continued to participate on the Technical Advisory Group in the ICP to assist with determination of possible oil cleanup/treatment methods.

Three USCG Strike team personnel were deployed as field observers in Division A & B to monitor the cleanup effort. Three continued to support the SCAT teams.

The wildlife rehab was maintained for the rescue of oiled birds. Some oiled amphibians were cleaned.

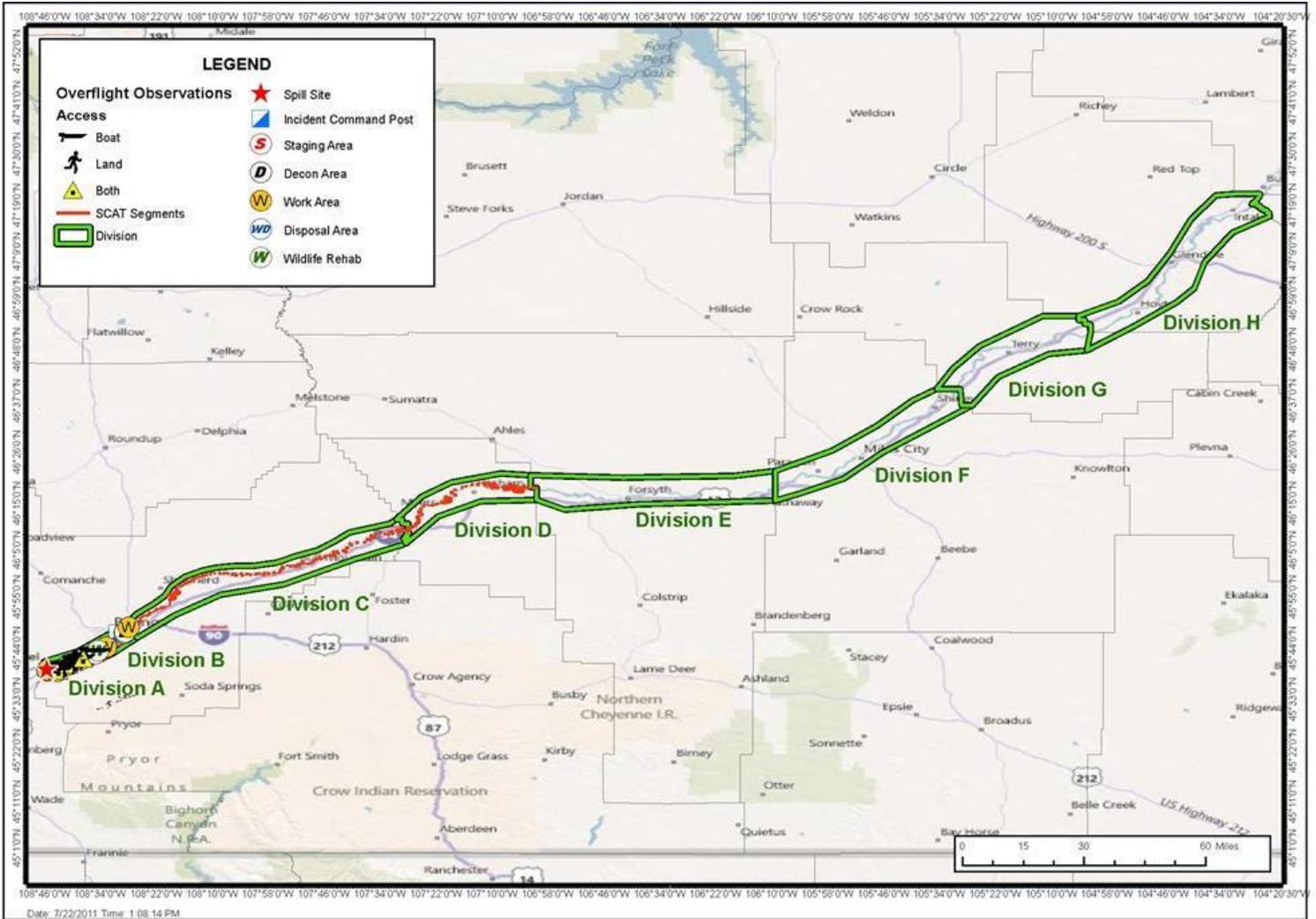
River water levels continue to drop. However water volume and speed continued to present a danger to operations on the water.

SCAT was completed in Division A except where homeowners had denied access. SCAT surveys continued to be performed in Division B. SCAT actions continued in Division C.

Daily helicopter over-flights were conducted to view river operations as well as to look for oiled and/or nesting wildlife.

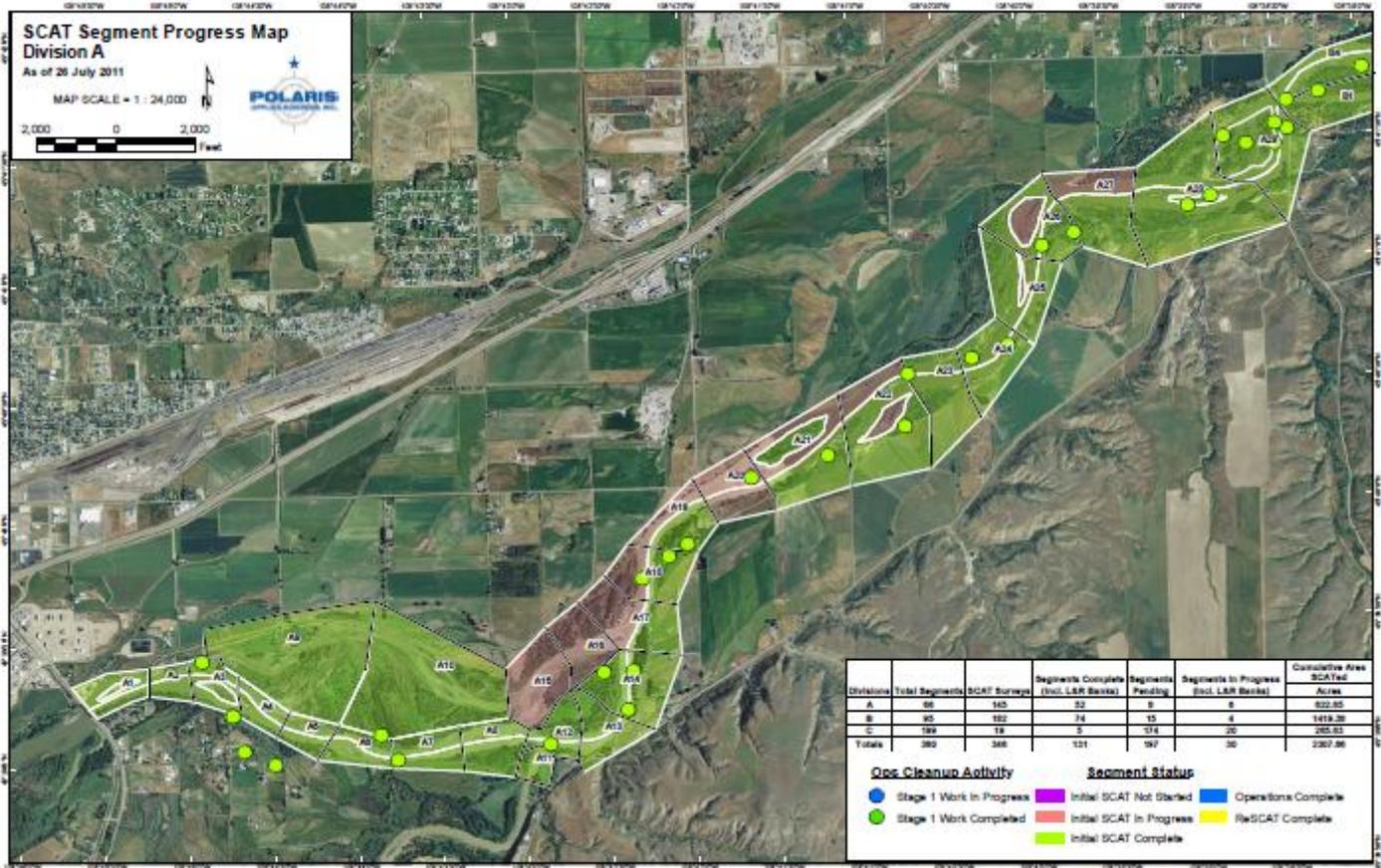
EPA continued to interact with concerned citizens.

# 7-28 Silvertip Pipeline Incident Work Areas Overview

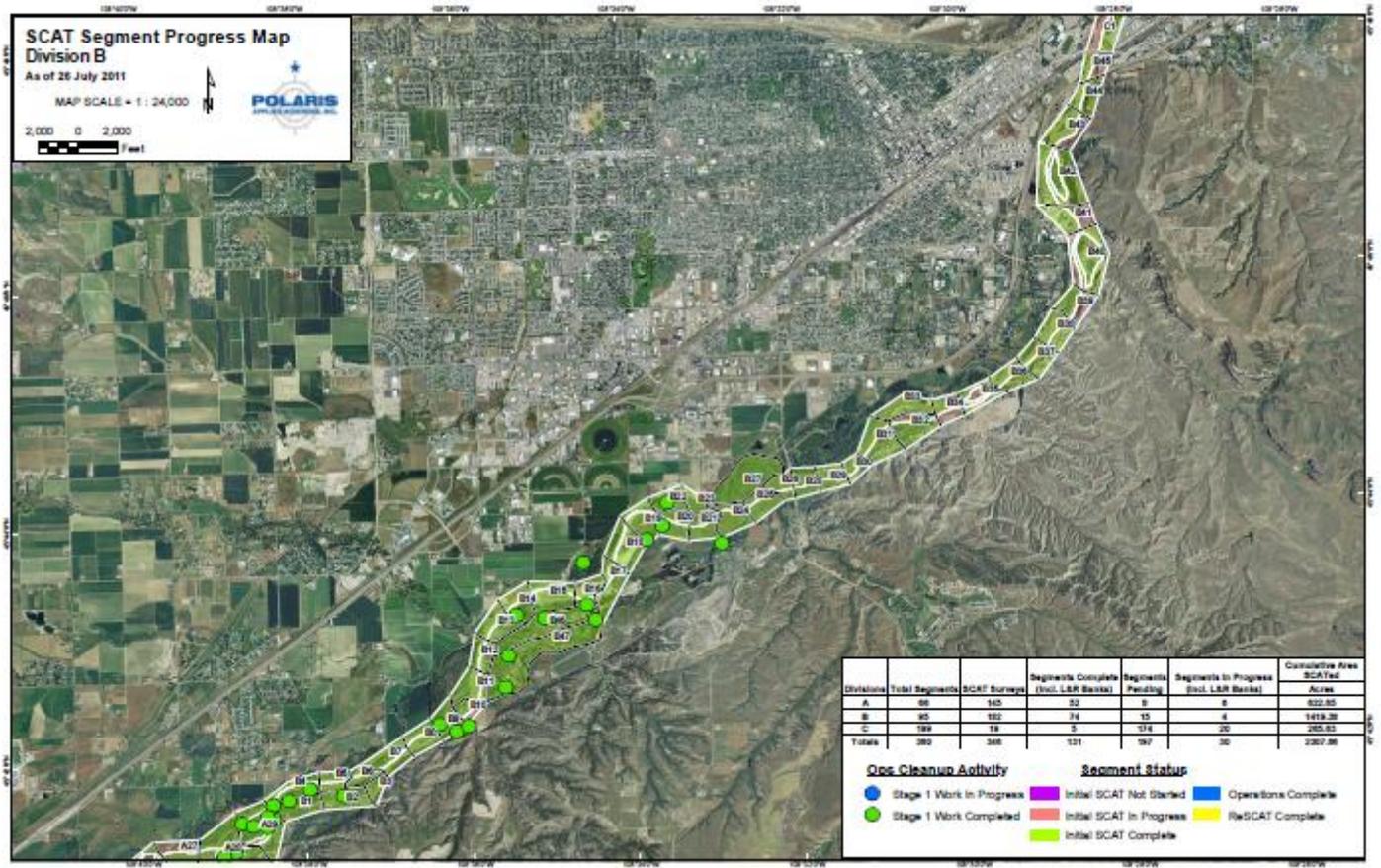


\*Maps are being updated at this time.

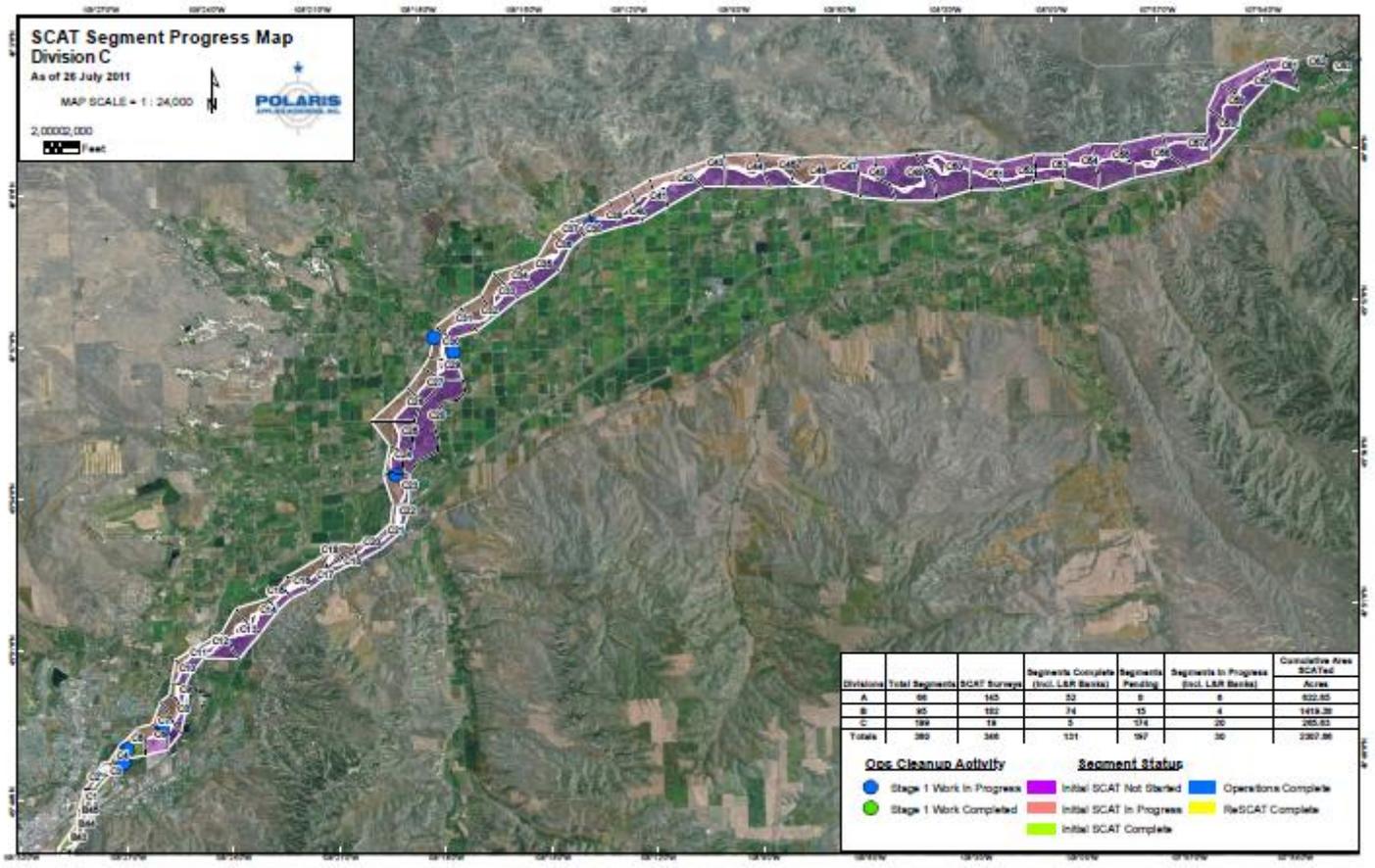
# 7.28.2011 Division A – SCAT Segment Progress Map



# 7.28.2011 Division B – SCAT Segment Progress Map



# 7.28.2011 Div. C - SCAT Segment Progress Map



## SCAT Monitoring Data (7-28 )

SCAT Monitoring Data (as of July 26, 2011)								
Work Area	SCAT Surveys Conducted	No Oil Observed	Oil Impact, miles <1>				Total Oil Impacts	Total Surveyed
			Very Light	Light	Moderate	Heavy		
A	151	18.51	3.39	6.98	14.76	1.14	26.27	44.78
B	188	31.46	21.13	21.42	4.22	0.07	46.84	78.30
C	32	7.20	6.84	0.85	0.47	0.00	8.16	15.36
D	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	371	57.17	31.36	29.25	19.45	1.21	81.27	138.44

Comments: <1> Represents miles of impacted areas observed during completed SCATS  
<2> Segments evaluated include only partial shorelines in each segments pending boat access due to unsafe river Conditions.

## 7-28 SCAT Areas Surveyed

Divisions	Total Segments	SCAT Surveys	Segments Complete (Incl. L&R Banks)	Segments Pending	Segments In Progress (Incl. L&R Banks)	Cumulative Area SCATed
						Acres
A	66	145	52	8	6	622.65
B	95	182	74	15	4	1481.68
C	199	19	5	109	85	373.82
Totals	360	346	131	132	95	2478.15

## START and CTEH Samples

LATEST UPDATE: 07/28/11 12:00			Date: 07/25/11		Date: 07/26/11		Date: 07/27/11		Date: 07/28/11		TOTAL COLL'TED TO DATE:	
			EPA	Exxon Mobil	EPA	Exxon Mobil						
Water	Well	Surface	1	12					0	9	12	78
		Drinking	0	2	0	1	0	2	0	4	22	76
		Irrigation									4	27
Soil			0	7			0	11			69	18
Sediment								4	0		31	0
Air			0	9	0	8	0	9			6	242
Product			0	3							4	3
Total			1	33	0	9	0	22	4	13	148	444
EPA % Confirmation			3		0		0		31		33	

## 4.0 Environmental Unit Activities

- Tribal Coordination
  - The PRFA with the Crow Nation was signed on 7/28/11.
  - Crow Nation identified Mr. Myron Shield as their Tribal Coordinator and signatory. Mr. Shield will be EPA's primary point of contact for the Crow Nation. OSC Wagner informed Mr. Shield of the two culturally sensitive areas identified during this operating period.
  - Crow Nation members began sensitive area identification on 7/28/11
  - Crow Nation member identified island A21 as culturally sensitive area. Tribal monitors will be on scene with the operations crew to advise on areas not to be cut.
  - Division A-12 was identified as a culturally sensitive area. SCAT and Ops are aware. No operations being performed here at this time.
  - Dale Old Horn, Crow Nation Leader provided cultural awareness training on 7/26 and 7/27. The presentations were well attended. In all, an estimated 100 persons attended.
- Technical Advisory Committee
  - The Technical Advisory Committee proposed native dust as a fixative for debris piles far inland. This CTR is being passed up to Unified Command
  - Technical Advisory Committee is working on a proposal to modify the Site boundaries due to recent findings that aerial anomalies in Division G were confirmed not to be oil. Agricultural Fact Sheet
  - The EU drafted a Fact Sheet regarding agricultural lands. The target audience is for citizens who have large areas of agricultural lands which may be contaminated. Subject matter experts were brought in to advise. The matter is complicated because different recommendations exist for fall planting, spring planting, annual crops, perennial crops, and crop rotation. Mr. Neil Fehring, a certified agronomist, agreed to draft guidelines. These guidelines will be peer-reviewed by crop scientists from MDEQ, MSU, and USDA.
  - The Agricultural subcommittee reviewed the modifications to the livestock recommendations. These are final-final draft and will be presented for concurrence on 7/29/11.
- OSC Wagner coordinated with State Historic Preservation Officer (SHPO) Dr Wilmoth. EPA explained the activities occurring to meet the Tribal cultural concerns. Dr. Wilmoth was satisfied with this work being performed. EPA also informed Dr. Wilmoth that EPA does not yet have an architectural historian on site. OSC Towle has been pursuing several options without success. Dr. Wilmoth agreed that a private architectural historian could fulfill this role, but a Delegation of Authority must be issued. EMoP does have an architectural historian on scene to meet the company's obligation.
- START collected downstream sediment samples at 4 locations on 7/29/11. One additional sample in Area C is planned for the next operational period.
- EPA continues to coordinate with Montana agencies daily including, but not limited to MDEQ, Montana Fish, Wildlife & Parks, and Montana DCNR, the Crow Tribal Nation, and the Governor's appointee for Burial Grounds.

## 5.0 Additional Operations

FWS continues to maintain a presence at the Incident Command Post as Deputy Branch Director for Wildlife Operations, and started working with Planning and Operations for READs to recon areas where operations are planned for the near future. FWS attended the Technical Advisory Committee, and Environmental Unit meetings, as well as assisting the Natural Resources Damage Assessment (NRDA) team.

FWS collected 3 woodhouse toads and cleaned and released them, in Division B. FWS observed stretches of stained vegetation, in Division C.

Throughout the day, white pelicans, Canada geese, common mergansers, great blue herons, and cormorants were observed during the shoreline surveys, but no behavioral abnormalities or visible oiling was noted.

## 6.0 Response Metrics

All progress metrics in this are as reported by ExxonMobil unless otherwise indicated.

### Boom/Sorbent Report (7-26, 7-27, 7-28 data)

	Staged	Assigned
Boom Available (ft)	41,180/41,280/40,880	43,816/42,816/42,816
Sorbent Rolls	13,680/13,104/12,672	12,816/13,392/13,824
Sorbent Pads	2,115/2,098/2,086	2,504/2,521/2,533
Boom	100/100/100	600/600/600
Viscous Sweep	10,401/10,401/10,401	6,270/6,270/6,270

\*No Change

### Estimated Soil and Debris Waste Tracking (7-21 data)\*

Waste Stream	Recovered	Disposed	Stored
Oily Liquids (bbls)	1104	942	162
Oily Solids (yd <sup>3</sup> )	2212	905	1307

## 7.0 Situation Unit: Activities for Next Reporting Period

The next reporting period (SITREP #8) will cover July 30, 2011 0700 to August 1, 2011 0700.

## 8.0 Liaison/ Public Information Officer

### 8.0 Liaison/ Public Information Officer

EPA held a media availability session conference call July 27, 2011. EPA, MDEQ and MT Fish Wildlife and Parks provided updates of current issues and cleanup activities. There were approximately 8 media outlets present. The next media call is scheduled for Friday, July 29.

July 28, 2011 a media tour was provided for 2 local television stations (KULR and KTVQ) and one local news reporter from the Billings Gazette for a story focusing on the hiring and training of local Montanans to assist with the cleanup. Those interviewed were a couple of local Montanans who'd been trained and employed to work on the oil spill.

July 28, 2011 EPA held its first elected officials conference call. EPA, MDEQ, Montana Ag Extension, the local Farm Services Agency and ExxonMobil representative were present to provide an update of current issues and cleanup activities. The next media availability session conference call will be on July 27.

Please visit <http://www.epa.gov/yellowstoneriverspill> for the latest information, data, and maps.

## 9.0 Finance Section

The current FPN ceiling is \$2 Million. Approximately 99.66% of the ceiling (\$2,000,000) has been expended or obligated through July 27, 2011. The latest estimated burn rate is \$31,736 per day. These cost summaries reflect only EPA-funded expenditures for the incident.

### FPN E11809 - Silvertip Pipeline Oil Spill As of: 07/28/2011

<b>START Contractor (Ceiling)</b>	<b>Est.Exp.</b>	<b>Est Burn Rate (Latest Daily)</b>
R8, R6, R10 START - \$620,000* Sampl'g,Comm, Resp.Support	\$620,000	\$5,967
<b>Response Contractor Sub-Totals</b>	<b>\$620,000</b>	<b>\$5,967</b>
<b>EPA Funded Costs:</b>		
<b>Total EPA Personnel Costs</b>	<b>\$508,284</b>	<b>\$21,392</b>
<b>Pollution Removal Funding Agreements:</b>		
<b>Total Other Agencies (Total \$495,000)**</b>	<b>\$590,000</b>	
<b>Sub-Totals</b>	<b>\$1,718,284</b>	<b>\$27,359</b>
Indirect Cost (16.00%)	\$252,880	\$4,377
<b>Total Est. Oil Spill Cost</b>	<b>\$1,833,380</b>	<b>31,736</b>
Oil Spill Ceiling authorized by USCG	\$2,000,000	
<b>Oil Spill Ceiling Available Balance</b>	<b>\$6,791</b>	
<b>Est. Percentage Spent</b>	<b>99.66%</b>	

\*Pending analytical costs not included.

\*\*Pending PFRAs = + \$355,000

## 10.0 Personnel On Site

Agency/Entity	Numbers Reported 7/28/11*
EPA	19
START	3
NOAA	1
USFWS	4
US DOI	1
USCG	6
BLM	2
<b>Total</b>	<b>36</b>

## **11.0 Additional Information**

For additional information, please refer to: <http://www.epa.gov/yellowstoneriverspill/>

## **12.0 Reporting Schedule**

SITREPs are issued on the first day of the Operational Period and will continue until the UC establishes a different reporting schedule. SitReps are posted to:

[R08\\_Documentation\\_Unit\\_Leader@epa.gov](mailto:R08_Documentation_Unit_Leader@epa.gov)