

APPENDIX A – MUSSELHELL TMDL PROJECT AREA DATA

LIST OF TABLES

Table A-1: Musselshell TMDL Project Area <i>E. coli</i> Sampling Data and Impairment Determination	A-3
Table A-2: Musselshell TMDL Project Area Flow Data	A-7
Table A-3: North Fork Musselshell River Silvicultural Activities 1997-2004	A-12
Table A-4: North Fork of the Musselshell River USFS Reported Wildland Fires 1995-2015	A-15

This appendix contains four data tables. **Table A-1** contains all the data DEQ used to assess each of the waterbodies for attainment of the *E. coli* water quality standards. **Table A-2** includes surface water flow data collected in conjunction with water column nutrient data for all the stream sampling locations discussed in the Musselshell River TMDL. Nutrient data are not included in this appendix, as the TMDL was written solely for *E. coli* impairments. **Table A-3** contains silvicultural data from 1997-2004. This data was used periodically throughout the TMDL document and identifies the silvicultural practices that have taken place in select watersheds in the TMDL project area. **Table A-4** contains wildland fire data from 1995-2015. This data was used to define any potential impact to water quality in watershed where there were significant wildland fires.

All tables are included to aid readers in finding data more easily. Note that bolded values are those that exceeded the water quality criteria. Also, where no value is given, no data was collected.

The following codes appear in some of the tables:

- “<” symbols indicate non-detect samples where the detection limit is populated as the value
- E = Estimated flow measurement

Table A-1: Musselshell TMDL Project Area <i>E. coli</i> Sampling Data and Impairment Determination							
Station Name	Sample Collection Date	Station ID	<i>E. coli</i> Result Value (cfu/100ml) (LRL = 1cfu/100ml)	Geometric Mean (cfu/100ml)	Is the Geometric Mean > 126 cfu/100mL?	Are at least 10% of the total samples > 252 cfu/100mL?	Impairment Determination
Big Coulee Creek	7/26/2016	M24BIGCC01	1299.7	-	insufficient data	YES (1/2 = 50%)	Impaired
	7/28/2016		248.1				
	9/27/2016		488.4	-	insufficient data	YES (2/2 = 100%)	
	9/29/2016		488.4				
Fish Creek	7/26/2016	M24FISHC09	13	-	insufficient data	YES (1/2 = 50%)	Impaired
	7/28/2016		1413.6				
	9/27/2016		461.1	-	insufficient data	YES (2/2 = 100%)	
	9/29/2016		1119.9				
Fords Creek, East Fork to mouth	9/28/2016	M26FORDC01	1732.9		insufficient data	YES (1/1 = 100%)	Impaired
Half Breed Creek	7/26/2016	M24HLFBC02	980.4	-	insufficient data	YES (2/2 = 100%)	Impaired
	7/28/2016	M24HLFBC03	461.1				
	9/27/2016		240	-	insufficient data	NO (0/2 = 0%)	
	9/29/2016		218.7				
McDonald Creek	7/27/2016	M26MCDLC01	275.5	-	insufficient data	YES (1/1 = 100%)	Impaired
	9/28/2016	M26MCDLC09	770.1	-			

Table A-1: Musselshell TMDL Project Area <i>E. coli</i> Sampling Data and Impairment Determination							
	9/28/2016	M26MCDLC01	129.6		insufficient data	YES (1/3 = 33.3%)	
	9/28/2016	M26MCDLC06	85.7				
South Fork McDonald Creek	9/28/2016	M26MCSFC01	160.7	-	insufficient data	YES (1/2 = 50%)	Impaired
	9/28/2016	M26MCSFC02	307.6				
American Fork	7/26/2016	M24AMERF01	613.1	-	insufficient data	YES (1/2 = 50%)	Impaired
	7/28/2016		203.5				
North Fork Musselshell River, Bair Reservoir to mouth	7/26/2016	M24MSNF06	98.3	-	insufficient data	YES (1/2 = 50%)	Impaired
	7/28/2016		325.5				
Musselshell River, Flatwillow Creek to Fort Peck Reservoir (MT40C003_010)	8/10/2015	M28MUSSR01	41.4	51.11	NO	NO (0/5 = 0%)	Impaired
	8/11/2015		75.9				
	8/12/2015		35.4				
	8/17/2015		79.8				
	8/18/2015		39.3				
	7/27/2016		461.1	-	insufficient data	YES (1/1 = 100%)	
	9/27/2016	M24MUSSR04	109.5	-	insufficient data	NO (0/2 = 0%)	
	9/29/2016		22.1				
Musselshell River, Deadman's Basin Canal to HUC Boundary Near Roundup (MT40A001_020)	8/10/2015	M24MUSSR04	72.8	52.04	NO	YES (2/15 = 13.3%)	Impaired
	8/11/2015		18.5				
	8/12/2015		53.7				
	8/17/2015		69.7				
	8/18/2015		344.8				
	8/10/2015	M24MUSSR05	38.1				
	8/11/2015		26.6				
	8/12/2015		14.5				
	8/17/2015		33.6				

Table A-1: Musselshell TMDL Project Area <i>E. coli</i> Sampling Data and Impairment Determination								
	8/18/2015	M24MUSSR06	248.1					
	8/10/2015		21.1					
	8/11/2015		10.8					
	8/12/2015		46.8					
	8/17/2015		88.8					
	8/18/2015		275.5					
	7/26/2016	M24MUSSR06	10.6	-	insufficient data	No		
	7/28/2016		24.2					
	7/26/2016	M24MUSSR04	18.7					
	7/28/2016		20.2					
	7/26/2016	M24MUSSR05	15.2					
	7/28/2016		25.7					
	7/26/2016	M24MUSSR08	11.6	-	insufficient data	No		
	9/27/2016		13.4					
	9/27/2016	M24MUSSR06	14.4					
	9/29/2016		35					
Musselshell River, North and South Fork confluence to Deadman's Basin Canal (MT40A001_010)	7/13/2015	M24MUSSR10	62	186.65	YES	YES (4/15 = 26.7%)	Impaired	
	7/14/2015							410.6
	7/15/2015							488.4
	7/20/2015							98.5
	7/21/2015							185
	7/13/2015	M24MUSSR03	76.8	163.54	YES			
	7/14/2015							129.6
	7/15/2015							127.4
	7/20/2015							238.2
	7/21/2015							387.3

Table A-1: Musselshell TMDL Project Area <i>E. coli</i> Sampling Data and Impairment Determination							
	7/13/2015	M24MUSSR09	46.5	107.83	NO		
	7/14/2015		98.3				
	7/15/2015		225.4				
	7/20/2015		46				
	7/21/2015		307.6				
	7/26/2016	M24MUSSR09	7.4	-	insufficient data	NO (0/4 = 0%)	
	7/28/2016		15.5				
	7/26/2016	M24MUSSR10	43.7				
	7/28/2016		95.9				

- Indicates that insufficient data were available to calculate a geometric mean
BOLD values indicate exceedance of the water quality standard

Table A-2: Musselshell TMDL Project Area Flow Data				
Org ID	Station (Site) Name	Site ID	Activity Date and Time	Flow (cfs)
MDEQ_WQ_WQX	Trail Creek near headwaters	M24TRILC04	7/13/2015 17:30	0.05
MDEQ_WQ_WQX	Trail Creek just upstream FS Road 2019 crossing	M24TRILC03	7/13/2015 16:25	0.85
MDEQ_WQ_WQX	Trail Creek just upstream FS Road 2019 crossing	M24TRILC03	8/3/2015 15:05	0.52
MDEQ_WQ_WQX	Trail Creek just upstream FS Road 2019 crossing	M24TRILC03	8/31/2015 11:52	0.27
MDEQ_WQ_WQX	Trail Creek	M24TRILC05	8/4/2015 9:11	0.62
MDEQ_WQ_WQX	Trail Creek	M24TRILC05	9/1/2015 8:50	0.14
MDEQ_WQ_WQX	Trail Creek	M24TRILC05	7/8/2016 9:13	0.04
MDEQ_WQ_WQX	Trail Creek	M24TRILC05	7/25/2016 11:50	0.25
MDEQ_WQ_WQX	Trail Creek just upstream of the mouth	M24TRILC02	8/3/2015 12:10	1.67
MDEQ_WQ_WQX	Trail Creek just upstream of the mouth	M24TRILC02	8/31/2015 16:13	1
MDEQ_WQ_WQX	Trail Creek just upstream of the mouth	M24TRILC02	7/7/2016 14:13	0.04
MDEQ_WQ_WQX	Trail Creek just upstream of the mouth	M24TRILC02	7/26/2016 7:59	0.08
MDEQ_WQ_WQX	Trail Creek just upstream of the mouth	M24TRILC02	8/29/2016 13:30	0.1
MDEQ_WQ_WQX	Musselshell River North Fork just downstream Trail Creek confluence	M24MSNF08	8/3/2015 13:20	36.99
MDEQ_WQ_WQX	Musselshell River North Fork just downstream Trail Creek confluence	M24MSNF08	8/31/2015 16:53	16.8
MDEQ_WQ_WQX	Musselshell River North Fork just downstream Trail Creek confluence	M24MSNF08	7/7/2016 9:12	26.99
MDEQ_WQ_WQX	Musselshell River North Fork just downstream Trail Creek confluence	M24MSNF08	7/26/2016 12:00	42.85
MDEQ_WQ_WQX	Musselshell River North Fork at Forest Rd crossing near Cooper Creek	M24MSNF07	7/13/2015 13:23	57.87
MDEQ_WQ_WQX	Musselshell River North Fork at Forest Rd crossing near Cooper Creek	M24MSNF07	8/4/2015 10:09	40.49
MDEQ_WQ_WQX	Musselshell River North Fork at Forest Rd crossing near Cooper Creek	M24MSNF07	9/1/2015 9:43	19.81
MDEQ_WQ_WQX	Musselshell River North Fork at Hwy 12 crossing	M24MSNF06	7/13/2015 16:26	29.67

Table A-2: Musselshell TMDL Project Area Flow Data				
Org ID	Station (Site) Name	Site ID	Activity Date and Time	Flow (cfs)
MDEQ_WQ_WQX	Musselshell River North Fork at Hwy 12 crossing	M24MSNF06	8/4/2015 11:18	21.23
MDEQ_WQ_WQX	Musselshell River North Fork at Hwy 12 crossing	M24MSNF06	8/1/2016 13:30	2.56
MDEQ_WQ_WQX	Musselshell River North Fork near mouth	M24MSNF09	8/4/2015 15:00	22.21
MDEQ_WQ_WQX	Musselshell River North Fork near mouth	M24MSNF09	9/1/2015 12:44	4.91
MDEQ_WQ_WQX	Musselshell River North Fork near mouth	M24MSNF09	7/7/2016 16:15	5.72
MDEQ_WQ_WQX	Musselshell River North Fork near mouth	M24MSNF09	8/29/2016 15:00	8.96
MDEQ_WQ_WQX	Fish Creek at Hwy 191 crossing	M24FISHC11	7/16/2015 8:46	5.98
MDEQ_WQ_WQX	Fish Creek at Hwy 191 crossing	M24FISHC11	8/5/2015 14:50	5.18
MDEQ_WQ_WQX	Fish Creek at Hwy 191 crossing	M24FISHC11	9/2/2015 13:17	1.38
MDEQ_WQ_WQX	Fish Creek at Hwy 191 crossing	M24FISHC11	8/4/2016 12:05	0.25
MDEQ_WQ_WQX	Fish Creek at county road 12E102SC crossing	M24FISHC03	8/5/2015 11:39	4.65
MDEQ_WQ_WQX	Fish Creek at county road 12E102SC crossing	M24FISHC03	9/2/2015 10:52	1.27
MDEQ_WQ_WQX	Fish Creek at Taber Road crossing below Simmons Creek	M24FISHC10	7/14/2015 18:15	5
MDEQ_WQ_WQX	Fish Creek at Taber Road crossing below Simmons Creek	M24FISHC10	9/21/2015 13:01	6.57
MDEQ_WQ_WQX	Fish Creek at Hwy 300 crossing	M24FISHC09	7/14/2015 19:03	
MDEQ_WQ_WQX	Fish Creek at Hwy 300 crossing	M24FISHC09	8/7/2015 8:58	5.6
MDEQ_WQ_WQX	Fish Creek at Hwy 300 crossing	M24FISHC09	9/21/2015 14:10	5.18
MDEQ_WQ_WQX	Fish Creek at Hwy 300 crossing	M24FISHC09	7/15/2016 8:23	1.23
MDEQ_WQ_WQX	Fish Creek at Hwy 300 crossing	M24FISHC09	8/2/2016 15:00	1
MDEQ_WQ_WQX	Big Coulee Creek at Big Coulee Road crossing	M24BIGCC03	7/14/2015 14:35	2
MDEQ_WQ_WQX	Big Coulee Creek at Big Coulee Road crossing	M24BIGCC03	7/11/2016 15:13	0.05
MDEQ_WQ_WQX	Big Coulee Creek at Harms Road crossing	M24BIGCC04	7/14/2015 12:57	1.74
MDEQ_WQ_WQX	Big Coulee Creek at Harms Road crossing	M24BIGCC04	8/7/2015 11:47	1.31
MDEQ_WQ_WQX	Big Coulee Creek at Harms Road crossing	M24BIGCC04	9/21/2015 15:00	1.66
MDEQ_WQ_WQX	Big Coulee Creek at Harms Road crossing	M24BIGCC04	7/11/2016 17:12	0.66
MDEQ_WQ_WQX	Big Coulee Creek at Harms Road crossing	M24BIGCC04	9/19/2016 14:36	0.97

Table A-2: Musselshell TMDL Project Area Flow Data				
Org ID	Station (Site) Name	Site ID	Activity Date and Time	Flow (cfs)
MDEQ_WQ_WQX	Big Coulee Creek at Cushman Road crossing	M24BIGCC05	7/14/2015 11:51	0.71
MDEQ_WQ_WQX	Big Coulee Creek at Cushman Road crossing	M24BIGCC05	8/7/2015 10:55	0.7
MDEQ_WQ_WQX	Big Coulee Creek at Cushman Road crossing	M24BIGCC05	9/21/2015 16:01	0.95
MDEQ_WQ_WQX	Big Coulee Creek at Cushman Road crossing	M24BIGCC05	7/11/2016 18:38	0
MDEQ_WQ_WQX	Big Coulee Creek at Cushman Road crossing	M24BIGCC05	8/4/2016 8:15	0
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	8/5/2015 16:34	0.47
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	7/14/2015 10:25	0.69
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	8/28/2015 16:20	0.27
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	9/21/2015 16:50	1
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	7/11/2016 20:04	0.85
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	8/3/2016 7:58	0.5
MDEQ_WQ_WQX	Big Coulee Creek near mouth	M24BIGCC01	8/30/2016 13:06	0.03
R8MONTWQ	Painted Robe Creek 1.5 miles above Jansen Road crossing	PTRB-01A	9/29/2010 12:30	0.1
MDEQ_WQ_WQX	Painted Robe Creek at lower crossing on Painted Robe Road	M24PTRBC05	7/21/2015 13:28	0.2
MDEQ_WQ_WQX	Painted Robe Creek at lower crossing on Painted Robe Road	M24PTRBC05	8/18/2015 11:23	1
MDEQ_WQ_WQX	Painted Robe Creek at lower crossing on Painted Robe Road	M24PTRBC05	9/22/2015 9:10	0
R8MONTWQ	Painted Robe Creek at Buffalo Road crossing and Hwy 3	PTRB-02	9/29/2010 15:30	0.75
MDEQ_WQ_WQX	Painted Robe Creek at Hwy 3 crossing	M24PTRBC04	7/21/2015 12:36	0
MDEQ_WQ_WQX	Painted Robe Creek at Buffalo Way crossing	M24PTRBC07	7/21/2015 14:56	0
MDEQ_WQ_WQX	Painted Robe Creek at Buffalo Way crossing	M24PTRBC07	8/18/2015 10:40	0
MDEQ_WQ_WQX	Painted Robe Creek at Buffalo Way crossing	M24PTRBC07	9/22/2015 8:30	0
MDEQ_WQ_WQX	Painted Robe Creek about 2.5 miles upstream from mouth	M24PTRBC01	8/11/2015 10:28	0.02

Table A-2: Musselshell TMDL Project Area Flow Data				
Org ID	Station (Site) Name	Site ID	Activity Date and Time	Flow (cfs)
R8MONTWQ	Painted Robe Creek at Three Pines Road crossing near mouth	PTRB-03	9/29/2010 17:15	0.36
MDEQ_WQ_WQX	Painted Robe Creek near mouth at Three Pines Rd crossing	M24PTRBC02	7/21/2015 11:28	0.07
MDEQ_WQ_WQX	Painted Robe Creek near mouth at Three Pines Rd crossing	M24PTRBC02	9/21/2015 17:47	0.5
MDEQ_WQ_WQX	Painted Robe Creek near mouth at Three Pines Rd crossing	M24PTRBC02	7/14/2016 12:56	0.02
MDEQ_WQ_WQX	Painted Robe Creek near mouth at Three Pines Rd crossing	M24PTRBC02	8/3/2016 9:00	0
MDEQ_WQ_WQX	Painted Robe Creek near mouth at Three Pines Rd crossing	M24PTRBC02	9/19/2016 15:48	0
MDEQ_WQ_WQX	Half Breed Creek at Johnny's Coal Rd	M24HLFBC03	7/14/2016 17:56	0.22
MDEQ_WQ_WQX	Half Breed Creek at Johnny's Coal Rd	M24HLFBC03	7/21/2015 9:03	0.65
MDEQ_WQ_WQX	Half Breed Creek at Johnny's Coal Rd	M24HLFBC03	8/18/2015 8:14	0.36
MDEQ_WQ_WQX	Half Breed Creek at Johnny's Coal Rd	M24HLFBC03	9/22/2015 10:30	0.37
MDEQ_WQ_WQX	Half Breed Creek at Johnny's Coal Rd	M24HLFBC03	8/2/2016 18:25	0.41
MDEQ_WQ_WQX	Half Breed Creek at Johnny's Coal Rd	M24HLFBC03	8/30/2016 15:00	0.04
MDEQ_WQ_WQX	Half Breed Creek at Hwy 87 crossing	M24HLFBC04	7/21/2015 10:03	0.8
MDEQ_WQ_WQX	Half Breed Creek at Hwy 87 crossing	M24HLFBC04	8/18/2015 8:50	1.0
MDEQ_WQ_WQX	Half Breed Creek at Hwy 87 crossing	M24HLFBC04	9/22/2015 11:11	0.8
MDEQ_WQ_WQX	Half Breed Creek about 80 yards above mouth	M24HLFBC02	7/15/2016 8:42	0.2
MDEQ_WQ_WQX	Half Breed Creek about 80 yards above mouth	M24HLFBC02	7/21/2015 7:50	0.8
MDEQ_WQ_WQX	Half Breed Creek about 80 yards above mouth	M24HLFBC02	8/11/2015 16:03	0.4
MDEQ_WQ_WQX	Half Breed Creek about 80 yards above mouth	M24HLFBC02	9/22/2015 12:14	0.7
MDEQ_WQ_WQX	Half Breed Creek about 80 yards above mouth	M24HLFBC02	8/3/2016 11:43	1.0
MDEQ_WQ_WQX	Half Breed Creek about 80 yards above mouth	M24HLFBC02	8/29/2016 15:45	
MDEQ_WQ_WQX	North Willow Creek downstream Griffith Road crossing	M25WILNC11	7/22/2015 9:08	0.0

Table A-2: Musselshell TMDL Project Area Flow Data				
Org ID	Station (Site) Name	Site ID	Activity Date and Time	Flow (cfs)
MDEQ_WQ_WQX	North Willow Creek downstream Griffith Road crossing	M25WILNC11	7/13/2016 18:59	1.0
MDEQ_WQ_WQX	North Willow Creek downstream Griffith Road crossing	M25WILNC11	8/1/2016 19:11	0.0
MDEQ_WQ_WQX	North Willow Creek at Fourmile Road crossing	M25WILNC07	7/22/2015 11:35	0.0
MDEQ_WQ_WQX	North Willow Creek at Fourmile Road crossing	M25WILNC07	8/12/2015 15:27	0.0
MDEQ_WQ_WQX	North Willow Creek at Fourmile Road crossing	M25WILNC07	9/22/2015 17:18	0.3
MDEQ_WQ_WQX	North Willow Creek at Fourmile Road crossing	M25WILNC07	7/13/2016 13:12	0.0
MDEQ_WQ_WQX	North Willow Creek at Fourmile Road crossing	M25WILNC07	8/1/2016 16:42	0.0
MDEQ_WQ_WQX	North Willow Creek at Fourmile Road crossing	M25WILNC07	8/31/2016 11:03	1.0
MDEQ_WQ_WQX	North Willow Creek at Hwy 500 crossing near mouth	M25WILNC06	7/22/2015 14:10	0.0
MDEQ_WQ_WQX	North Willow Creek at Hwy 500 crossing near mouth	M25WILNC06	8/12/2015 12:14	0.0
MDEQ_WQ_WQX	North Willow Creek at Hwy 500 crossing near mouth	M25WILNC06	9/24/2015 11:24	0.0
MDEQ_WQ_WQX	North Willow Creek at Hwy 500 crossing near mouth	M25WILNC06	7/13/2016 17:01	0.1
MDEQ_WQ_WQX	North Willow Creek at Hwy 500 crossing near mouth	M25WILNC06	8/2/2016 10:53	0.0
MDEQ_WQ_WQX	North Willow Creek at Hwy 500 crossing near mouth	M25WILNC06	9/21/2016 9:17	0.0

Table A-3: North Fork Musselshell River Silvicultural Activities 1997-2004				
Administrative District	Sale Name	Activity	Date Complete	Acres
Judith Ranger District	DEAD CLYDE	Salvage Cut (intermediate treatment, not regeneration)	January 1, 1998	8
Judith Ranger District	DEAD CLYDE	Stand Clearcut (EA/RH/FH)	February 1, 1998	10
Judith Ranger District	DEADHORSE CREEK RHR SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	October 22, 2015	15.9
Judith Ranger District	HOOVER	Group Selection Cut (UA/RH/FH)	October 1, 1997	44
Judith Ranger District	HOOVER	Improvement Cut	October 1, 1997	56
Musselshell Ranger District		Salvage Cut (intermediate treatment, not regeneration)	August 25, 2011	37
Musselshell Ranger District	CROSSWINDS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	September 1, 1997	33
Musselshell Ranger District	CROSSWINDS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	September 1, 1997	32
Musselshell Ranger District	CROSSWINDS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	September 1, 1997	37
Musselshell Ranger District	CROSSWINDS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	September 1, 1997	40
Musselshell Ranger District	CROSSWINDS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	September 1, 1997	18
Musselshell Ranger District	CROSSWINDS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	September 1, 1997	18

Musselshell Ranger District	DEAD CLYDE	Stand Clearcut (EA/RH/FH)	February 1, 1998	7
Musselshell Ranger District	DEADHORSE CREEK RHR SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	November 16, 2015	27
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	July 1, 1997	6
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	5
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	8
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	13
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	13
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	4
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	5
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	5
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	9
Musselshell Ranger District	FOOTHILLS SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 1997	5
Musselshell Ranger District	HENSLEY	Group Selection Cut (UA/RH/FH)	August 1, 2000	24
Musselshell Ranger District	HENSLEY	Group Selection Cut (UA/RH/FH)	October 1, 2003	28
Musselshell Ranger District	HENSLEY	Group Selection Cut (UA/RH/FH)	September 1, 2004	25
Musselshell Ranger District	SPRING BASIN	Two-aged Seed-tree Seed and Removal Cut (w/res) (2A/RH/FH)	January 1, 1998	21
Musselshell Ranger District	SPRING BASIN	Seed-tree Seed Cut (with and without leave trees) (EA/RH/NFH)	January 1, 1998	10

Musselshell Ranger District	SPRING BASIN	Two-aged Seed-tree Seed and Removal Cut (w/res) (2A/RH/FH)	January 1, 1998	18
Musselshell Ranger District	SPRING BASIN	Seed-tree Seed Cut (with and without leave trees) (EA/RH/NFH)	January 1, 1998	4
Musselshell Ranger District	SPRING BASIN	Seed-tree Seed Cut (with and without leave trees) (EA/RH/NFH)	January 1, 1998	7
Musselshell Ranger District	SPRING BASIN	Two-aged Seed-tree Seed and Removal Cut (w/res) (2A/RH/FH)	January 1, 1998	10
Musselshell Ranger District	SPRING BASIN	Seed-tree Seed Cut (with and without leave trees) (EA/RH/NFH)	February 1, 1998	17
Musselshell Ranger District	SPRING BASIN	Seed-tree Seed Cut (with and without leave trees) (EA/RH/NFH)	June 1, 1998	25
Musselshell Ranger District	SPRING BASIN	Seed-tree Seed Cut (with and without leave trees) (EA/RH/NFH)	June 1, 1998	10
Musselshell Ranger District	SPRING BASIN	Two-aged Seed-tree Seed and Removal Cut (w/res) (2A/RH/FH)	July 1, 2004	16
Musselshell Ranger District	SPRING BASIN	Two-aged Seed-tree Seed and Removal Cut (w/res) (2A/RH/FH)	July 1, 2004	22
Musselshell Ranger District	WHITETAIL SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	August 23, 2011	28
White Sulphur Springs Ranger District	POWERLINE SALVAGE	Salvage Cut (intermediate treatment, not regeneration)	December 1, 2003	3

Table A-4: North Fork of the Musselshell River USFS Reported Wildland Fires 1995- 2015				
National Forest	Fire Name	Fire Cause	Containment Date	Fire Size
Lewis & Clark National Forest	ANT PARK #6	Lightning	1995-09-04	0.1
Lewis & Clark National Forest	ANT PARK #8	Lightning	1995-09-04	0.1
Lewis & Clark National Forest	BASIN	Lightning	2004-09-01	2
Lewis & Clark National Forest	CHECKERBOARD	Lightning	2007-07-07	0.1
Lewis & Clark National Forest	CHECKERBOARD CREEK,	Lightning	1992-06-13	0.1
Lewis & Clark National Forest	COOPER CREEK	Lightning	2002-07-26	13
Lewis & Clark National Forest	CROSS CREEK	Lightning	1996-07-10	0.5
Lewis & Clark National Forest	FLAGSTAFF	Lightning	1993-05-04	0.1
Lewis & Clark National Forest	FRIEZ	Lightning	2006-07-03	0.2
Lewis & Clark National Forest	GREEN CANYON	Lightning	1994-08-06	3
Lewis & Clark National Forest	HOOVER	Lightning	1999-08-19	0.3
Lewis & Clark National Forest	HOOVER	Lightning	2005-07-15	0.1
Lewis & Clark National Forest	HOOVER GATE	Lightning	2006-08-10	0.1
Lewis & Clark National Forest	HOOVER SPRINGS	Lightning	2012-07-23	0.5
Lewis & Clark National Forest	JAMISON TRIAL	Lightning	1996-07-03	0.1
Lewis & Clark National Forest	KENTS GULCH	Lightning	1994-07-22	0.1
Lewis & Clark National Forest	KENTS GULCH	Lightning	2011-09-03	0.25
Lewis & Clark National Forest	LION CREEK	Lightning	2003-08-14	0.1
Lewis & Clark National Forest	LION CREEK	Lightning	2005-07-16	0.1
Lewis & Clark National Forest	LIONS	Lightning	2011-07-31	0.5
Lewis & Clark National Forest	LIONS	Lightning	2015-09-06	0.1
Lewis & Clark National Forest	LOST FORK	Miscellaneous	2001-10-05	2338
Lewis & Clark National Forest	MILL CREEK	Campfire	2011-10-03	0.25
Lewis & Clark National Forest	MILL LION	Equipment Use	1994-08-24	0.1
Lewis & Clark National Forest	MOUNT HOWE	Lightning	2012-08-10	0.1
Lewis & Clark National Forest	MUDDY MTN	Lightning	1994-08-10	0.1
Lewis & Clark National Forest	ORCUTT GULCH	Lightning	2002-06-29	0.1
Lewis & Clark National Forest	PASTURE GULCH	Lightning	2001-08-05	0.1
Lewis & Clark National Forest	POWER LINE	Miscellaneous	1999-10-31	2
Lewis & Clark National Forest	SPRING CREEK	Miscellaneous	2007-08-01	0.5

Table A-4: North Fork of the Musselshell River USFS Reported Wildland Fires 1995- 2015				
Lewis & Clark National Forest	SPRING CREEK	Miscellaneous	2010-09-24	0.1
Lewis & Clark National Forest	SPRING CREEK	Debris Burning	2012-07-11	0.5
Lewis & Clark National Forest	SPRING CREEK	Lightning	2015-09-13	0.1
Lewis & Clark National Forest	SPRING CREEK EAST	Lightning	2001-08-05	0.3
Lewis & Clark National Forest	STOHR CREEK	Lightning	1999-07-21	0.1
Lewis & Clark National Forest	TRAIL CREEK	Lightning	1996-08-17	0.1
Lewis & Clark National Forest	TRAIL CREEK	Lightning	1998-09-23	0.1
Lewis & Clark National Forest	TRAIL CREEK	Debris Burning	2004-07-01	0.01