P.O. Box 17670 Boulder, CO 80308-0670 www.rockyflatssc.org (303) 412-1200

Jefferson County ~ Boulder County ~ City and County of Broomfield ~ City of Arvada ~ City of Boulder City of Golden ~ City of Northglenn ~ City of Thornton ~ City of Westminster ~ Town of Superior League of Women Voters ~ Rocky Flats Cold War Museum ~ Rocky Flats Homesteaders Kim Griffiths

### **Board of Directors Meeting – Agenda Monday, June 3, 2019, 8:30 – 11:00 AM**

Rocky Mountain Metropolitan Airport, Terminal Building, Mount Evans Room 11755 Airport Way, Broomfield, Colorado

8:30 AM	Convene/Introductions/Agenda Review
---------	-------------------------------------

8:35 AM <u>Public Comment</u>: Comments are limited to the Consent Agenda and non-agenda items

### 8:45 AM Business Items

- 1. Consent Agenda
  - o Approval of meeting minutes and checks
- 2. Executive Director's Report

### 8:50 AM Receive Stewardship Council 2018 Financial Audit (briefing memo attached)

- o The Board will be briefed on the results of the audit.
- o No material problems were found, and the Stewardship Council was found to be in compliance with all applicable laws and regulations.

### **Action item: Approve Motion Accepting Stewardship Council 2018 Financial Audit**

### 9:00 AM Host DOE Annual Meeting (briefing memo attached)

- o DOE will brief on site activities for calendar year 2018.
- ODE has posted the report on its website and will provide a summary of its activities to the Stewardship Council.
- O Activities included surface water monitoring, groundwater monitoring, ecological monitoring, and site operations (inspections, maintenance, etc.).

Public Comment on DOE Briefing: Comments must focus on DOE's briefing.

10:30 AM Oil and Gas Resolution (briefing memo attached)

o The Board will consider the proposed oil and gas resolution.

### **Action Item: Consider oil and gas resolution**

Board Roundtable – Big Picture/Additional Questions/Issue Identification

Adjourn

<u>Upcoming Meetings</u>: September 9, October 28

### **Business Items**

- April 1, 2019, draft board meeting minutes
- List of Stewardship Council checks

### 2018 Financial Audit

- Cover memo
- Draft financial audit

### ROCKY FLATS STEWARDSHIP COUNCIL Monday, April 1, 2019, 8:30 – 11:30 a.m.

### Rocky Mountain Metropolitan Airport, Terminal Building, Mount Evans Room 11755 Airport Way, Broomfield, Colorado

Board members: Matt Jones (Director, Boulder County), Summer Laws (Alternate, Boulder County), Lisa Morzel (Director, Boulder), Mike Shelton (Director, Broomfield), David Allen (Alternate, Broomfield), Jim Dale (Director, Golden), Libby Szabo (Director, Jefferson County), Pat O'Connell (Alternate, Jefferson County), Joyce Downing (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Sophie Porcelli (Alternate, Northglenn), Mark Lacis (Director, Superior), Ken Lish (Alternate, Superior), Jan Kulmann (Director, Thornton), James Boswell (Alternate, Thornton), Kathryn Skulley (Director, Westminster), David DeMott (Alternate, Westminster), Lindie Aragon (Alternate, Westminster), Jeannette Hillery (Director, League of Women Voters), Linda Porter (Alternate, League of Women Voters), Murph Widdowfield (Director, Rocky Flats Cold War Museum), Ken Freiberg (Alternate, Rocky Flats Cold War Museum), Kathleen Bacheller (Alternate, Rocky Flats Homesteaders), Kim Griffiths

<u>Stewardship Council staff and consultants</u>: David Abelson (Executive Director), Barb Vander Wall (Seter & Vander Wall, P.C.), Melissa Weakley (Technical Program Manager), Sandy Thomas

Attendees: Ryan Hanson (Sen. Gardner), Scott Surovchak (DOE-LM), Andy Keim (DOE-LM), Vera Moritz (EPA), Lindsay Masters (CDPHE), Bob Darr (Navarro), Laura Hubbard (Broomfield), Cathy Shugarts (Westminster), Christine Hawley (WCRA), Trae Nance (WCRA), Bonnie Graham-Reed, Ted Ziegler, Heather Sparr-Hoornaert, Mickey Harlow, June LeCrone, Terri Urbanowski, Jane Cates, Lynn Segal, Mary Lonergan, Deborah Gard, Robert Hada, Carl Spreng, Pat Killian, Rod Killian, Mike Holden, Max Dodson, Linda Hladik, Bob Fiehweg, James Duncan.

Convene/Agenda Review: Chair Joyce Downing opened the meeting at 8:30 a.m.

Public comment on Consent Agenda and Non-Agenda Items: June LeCrone, representing the League of Women Voters of Jefferson County, read a letter supporting the Leyden Rock Homeowners Association in addressing the Association's concerns regarding the Jefferson Parkway construction activities. The League supports the homeowners' request for prior independent soil sampling, dust control, air monitoring before and during construction, and a plan to stop construction during high wind conditions and requests that the Stewardship Council support this request. Bonnie Graham-Reed commented that her concern is that there is no air monitoring at Rocky Flats, that the risk is plutonium in the sediment. She also voiced support for prohibition of fracking because of plutonium at the buildings in place at Rocky Flats. Ted Ziegler informed the Stewardship Council that he continues to request independent testing for all contaminants that may be at the plant site. He also voiced his support of the prohibition of fracking on the site. Lynn Segal stated that she is concerned that the Standley Lake sediment may contain particulates that will enter the atmosphere and expose the population to hot particles, which may have multi-generational effects. She also voiced opposition to the Jefferson Parkway.

Mike Shelton stated that the concerns may be taken back to each member's government. Lisa Morzel stated that the Stewardship Council is not involved with the Jefferson Parkway and that it is a separate entity. Libby Szabo encouraged concerned citizens to attend the Parkway Authority meetings held the third Thursday of the month.

David Abelson asked the public to email their comments and he will post them on the Stewardship Council website.

#### **Business Items:**

Consent Agenda: Approval of Minutes and Checks: Mark Lacis said his name was wrong on page 5. Matt Jones said the word "no" should be struck from his comment on page 5. Libby Szabo's comment about the 2018 election was attributed to 2016. Jim Dale said his name was missing from the list of attendees. Jeannette Hillary motioned to accept the minutes with those changes noted; Lisa Morzel seconded the motion. The motion was approved 13-0.

<u>Executive Director's Report:</u> David Abelson started by welcoming the new Board members: Kathryn Skulley (Westminster), David DeMott (Westminster), James Boswell (Thornton), Lindie Aragon (Westminster) and Ken Freiberg (Rocky Flats Cold War Museum).

David next noted that the 2018 audit will be presented at the June 3<sup>rd</sup> meeting. He said that while an audit is not required by the DOE grant or state law, annually the Stewardship Council contracts for an audit to ensure that the finances are being conducted in accordance with the applicable laws and regulations. David next mentioned the annual local government dues, noting most had been received.

Regarding the petition to unseal the Rocky Flats Grand Jury documents, David mentioned that the state of Colorado weighed in with the Department of Justice in support of the release of the documents.

Finally, David turned to the Jefferson Parkway. As background, David said that in 2007, the Board agreed that the Stewardship Council would not be the venue to debate whether or not to build the Jefferson Parkway. Questions about contaminant levels along the 300' right-of-way could be examined here, just as the Board has examined questions about contamination on off-site lands. That information, the Board members felt, could be used when discussing the Parkway in the appropriate venues. Importantly, the 300' right-of-way along Indiana was transferred after the Board agreed to those ground rules so the land is no longer federal property. Superior and Golden sued to stop the transfer but lost in the 10<sup>th</sup> Circuit. David said that given the 12 years that has passed since the agreement was adopted, he wants to make sure that this Board agrees with this process moving forward. He also asked whether there was an interest in a Board briefing on contamination along that part of the Refuge.

Lisa Morzel and Libby Szabo voiced support for maintaining that agreement. Others agreed. Libby mentioned that the RFP for the Parkway will include a requirement for additional testing along the 300' right-of-way. After additional discussion, David noted that the additional testing obviated for now any briefing on contamination along the right-of-way.

Briefing on the FLAP Grant Soil Monitoring: Pat O'Connell with Jefferson County briefed the Board on the status of the Sampling and Analysis Plan (SAP) for soil sampling of the areas north and east of the Rocky Flats Refuge to be adopted by six local governments. This plan will be funded by the federal DOT Federal Land Access Program (FLAP). Pat stated that the last update on the SAP plan was December 18, 2018, and can be found on Jefferson County's Open Space web page. Approximately 17 soil samples will be taken at the two crossings at Indiana and 8 samples will be taken on 1 - 2 acres surrounding the area. The soil samples will be from 0" - 2" and would take 1 - 2 days to collect. The analyses will take about 1 - 2 months, and when the analytics are complete, the results will be provided to the six participating

governments. He stated that Broomfield and Jefferson County will be giving a presentation on the SAP, and that the fieldwork should be completed by May 19th.

Matt Jones asked if the sampling is big enough to be representative. Lisa Morzel commented that the soil sample depth should be deeper, and that there are not enough sampled acres for confirmation that there are no radionuclides. She wants the public to trust the results.

Libby Szabo stated that when residents of Jefferson County came and requested testing two years ago, and Jefferson County agreed, the group stated that it would accept the results. Jeanette Hillery and Mark Lacis echoed Lisa Morzel's concerns that the soil sampling was not deep enough to be sufficient.

Responding to a question about the US Fish and Wildlife Service testing along the trails, David Abelson stated that there was initial testing on the trails; as the trails are moved, there will be testing of the new trails. There will be comparisons of the previous sampling, the present samples, and the samples of the new trails. Mark Lacis asked if the results would be available to the public, and David thought they would be.

Mark Lacis stated that the DOE did soil sampling from 1991 - 2005, and has not done soil sampling since. David Abelson said Mark's understanding is correct, and noted that USFWS sampled prior to acquiring the lands that now comprise the Refuge. Mark Lacis suggested that it would be good to have a map to superimpose the testing done over the years and compare the results.

Ken Lish stated that he read the plan and the soil samples were to be consistent with past data collected. The Board continued to discuss the concern that the sampling did not go deep enough. Pat O'Connell stated that the group wanted to compare apples to apples, and that was the depth of the last soil testing.

David Allen stated that Indiana Street is a windblown area, and there is no data to suggest deeper contamination. The testing is to make sure the results are consistent. Libby Szabo stated that if the results come back differently than the initial testing, then sampling should go deeper, but presently she supports the apples to apples concept.

Lisa Morzel commented on the staff materials. She stated that Section 16 Boulder be included on the map as it is part of Rocky Flats. David Abelson stated that the old maps do not show Section 16 as that property was not part of the federal site. Adding to the challenge is DOE will not provide the coordinates of some of the key components of Rocky Flats, making it difficult for the member governments to merge old and new data on maps. Lindsay Masters told the group that they have a map of the site on the CDPHE website.

**Board Discussion of Oil and Gas Development at Rocky Flats**: David Abelson began the discussion by explaining that the executive committee agreed to structure the conversation in a step-wise process:

- 1. Discuss the Board's interests and identify areas of agreement
- 2. Review, edit as necessary, and approve the questions to DOE, CDPHE, EPA and USFWS
- 3. Review the proposed motion submitted by the Town of Superior, and the depth of support of this motion
- 4. If there is support for the motion, then take up the motion (as is or as modified) and vote

Mike Shelton opened the discussion by stating that Broomfield City Council is reticent to move a fracking resolution forward now. He questions why we are looking at conclusions when there are still so many unanswered questions, and that after we get the answers, we can move forward with the motion. He is concerned that the public may think that Stewardship Council has authority when it is just symbolic.

Lisa Morzel stated that if the Stewardship Council is not unanimous, it should not move forward. She suggested that the Stewardship Council look at its mission statement, and discuss whether the mission statement needs to be changed. Ken Lish agreed with Lisa. Jan Kuhlman stated that Thornton is also not ready to take a position. She thinks that the questions have to be answered first. She does agree that professionally it makes sense for no drilling under the COU. Ken Lish also stated that it should include no drilling under the COU.

Lisa Morzel said that according to a peer review paper there are many fault structures on the site. Boulder continues to request that all mineral rights be acquired and permanently removed. Boulder supports the motion. David DeMott stated that Westminster is not ready to take a position. Jim Dale stated that Golden is also opposed to mineral exploration on and under Rocky Flats. Jeanette Hillery stated that the concern is public health and safety and that all mineral rights around the site be retired.

The group reviewed the proposed questions to the various governmental entities. Lisa Morzel requested that the definition of drilling, No. 3., include seismic injection. Mark Lacis stated that questions about vibrations dust impact and the remedy protection include dust generated by traffic and trucks.

Lisa Morzel stated that she is concerned about the North Walnut Creek slump as it relates to question 14. David Abelson suggested that the questions include ownership, the purchase of the minerals, and an additional act by Congress as part of settling the claims. He sees these as a separate set of questions. Lisa Morzel stated that the first question should be what does the government own. What else is under the surface, how are the minerals to be identified, and who owns them.

Matt Jones stated that the Stewardship Council should pursue the questions, and give a time frame for answers. Matt wanted to make it crystal clear and add the word "under" to No. 3. Mark Lacis stated that the words "on or under lands in close proximity" needs to be added. Libby Szabo stated that there are many questions, and that the Stewardship Council should get the answers before making any conclusions.

Stewardship Council then discussed who the letter should be sent to. They agreed to include COGCC and CDPHE in the letter. David Demott wants to let all agencies know that the questions are important to them. David Abelson told the Board that they tried to sort the questions out for the separate agencies, but there was overlap, and the Executive Board decided to send all questions to all agencies.

It was agreed that the Executive Committee would take today's discussion and work on the questions.

Mark Lacis then discussed his motion with the Board. He stated that he hoped the members would take the motion to individual groups for discussion; that he received no comments about his proposed motion; that the motion was site specific and only pertains to Rocky Flats, that the information in the motion was sourced from the Rocky Flats fact sheet and history, and that paragraphs 1 - 4 of the motion are verbatum from the site. He discussed that he believes that there is an urgency to approve the motion because it may take a while to get answers to the Board's questions. He stated that the motion is narrow and reasonable in scope.

Lisa Morzel stated that she thinks the motion should be passed, and that the questions are separate from the motion. She stated that the Board can pass a motion with a super majority, agrees to table the motion for now, but believes it needs to be passed in two months.

David DeMott stated that he wants authority from his council to pass the motion. Jim Dale stated that he thinks the motion is very reasonable. Mike Shelton stated that passing the motion is a symbolic act, and he would rather be proactive about getting answers to the questions first. He does not believe that the motion needs to be passed quickly. If the state bill is passed, the Stewardship Council does not need to act. SB 181 gives authority to the local governements. He stated that they cannot force agencies to answer the questions, but that a respectful relationship with the agencies will help to get the questions answered.

Libby Szabo stated that the Board was being negligent if it did not try to get answers to the questions. Mark Lacis said that he is not suggesting that they do not get answers, but that it is a good time to pass the motion. He agreed that the Board's decisions are symbolic, but that they do carry weight. Mike Shelton said he did not see any questions in the motion, that the motion will not alleviate concerns.

The Board continued to discuss whether to get answers to the questions before passing the motion. The Board agreed to table the motion until the June meeting, and to approve the questions to the agencies with the changes. It was agreed that the Colorado federal delegation would be cc'd as well as the state legislators and governor.

The Board then continued to discuss the questions to the agencies. Matt Jones stated there are too many questions. Mike Shelton suggested combining questions. Ken Lish said that the letter should ask the agencies to address all questions instead of passing them on. There was agreement that the agencies should be a given deadline to respond. Lisa Morzel stated that she would like to see answers by May 15th.

Matt Jones moved to go with the questions as discussed -- bold the sentence "answer the questions you can," and provide a deadline of May 15, cc the federal legislators, state legislators, governor and COGC. Jim Dale seconded Matt's comments.

The Board agreed to table the motion until June 3rd, and for board members to bring back to the executive committee what changes their governments would like to see made to the motion. David Abelson stated he would work on the revisions to the questions, and get a redline to all by April 22nd.

<u>Big Picture:</u> Mike Shelton reminded everyone of the April 23rd meeting on the Parkway. Murph Widdowfield stated they are raising money to put artifacts in storage and are looking at receiving private funds.

**Board Roundtable:** David Abelson reviewed the proposed topics for the June 3 meeting. The Board agreed to continue discussing oil and gas development, as well as receive the 2018 financial audit and hear from DOE about its quarterly report.

The meeting was adjourned at 11:30 a.m.

Prepared by Sandy Thomas

### Rocky Flats Stewardship Council Check Detail 2019

March 13 through May 17, 2019

Туре	Num	Date	Name	Account	Paid Amount	Original Amount
Check		03/31/2019		CASH-Wells Fargo-Operating		-3.50
				Admin Services-Misc Services	-3.50	3.50
TOTAL					-3.50	3.50
Check	1972	04/07/2019	Century Link	CASH-Wells Fargo-Operating		-26.39
				Telecommunications	-26.39	26.39
TOTAL					-26.39	26.39
Bill Pmt -Check	1973	04/07/2019	Blue Sky Bistro	CASH-Wells Fargo-Operating		-300.00
Bill	3461	04/01/2019		Misc Expense-Local Government	-300.00	300.00
TOTAL					-300.00	300.00
Bill Pmt -Check	1974	04/07/2019	Crescent Strategies, LLC	CASH-Wells Fargo-Operating		-8,180.62
Bill	3/31/19 Billing	03/31/2019		Personnel - Contract TRAVEL-Local	-7,750.00 -48.37	7,750.00 48.37
				Postage	-15.99	15.99
				Telecommunications Supplies	-116.26 -50.00	116.26 50.00
				Meeting Expense	-200.00	200.00
TOTAL					-8,180.62	8,180.62
Bill Pmt -Check	1975	04/07/2019	Jennifer A. Bohn	CASH-Wells Fargo-Operating		-361.00
Bill	19-21	03/31/2019		Accounting Fees	-361.00	361.00
TOTAL					-361.00	361.00
Bill Pmt -Check	1976	04/07/2019	Seter & Vander Wall, P.C.	CASH-Wells Fargo-Operating		-242.70
Bill	78156	03/31/2019		Attorney Fees	-242.70	242.70
TOTAL					-242.70	242.70
Bill Pmt -Check	1977	05/09/2019	The Hartford	CASH-Wells Fargo-Operating		-500.00
Bill	11599945	04/18/2019		Insurance	-500.00	500.00
TOTAL					-500.00	500.00
Bill Pmt -Check	1978	05/09/2019	Seter & Vander Wall, P.C.	CASH-Wells Fargo-Operating		-1,927.74
Bill	78431	04/30/2019		Attorney Fees	-1,927.74	1,927.74
TOTAL					-1,927.74	1,927.74
Bill Pmt -Check	1979	05/09/2019	Jennifer A. Bohn	CASH-Wells Fargo-Operating		-598.50
Bill	19-31	04/30/2019		Accounting Fees	-598.50	598.50
TOTAL					-598.50	598.50
Bill Pmt -Check	1980	05/09/2019	HUB International	CASH-Wells Fargo-Operating		-2,967.76
Bill	2019Quote	05/08/2019		Insurance	-2,967.76	2,967.76
TOTAL					-2,967.76	2,967.76
Bill Pmt -Check	1981	05/09/2019	Fiscal Focus Partners, LLC	CASH-Wells Fargo-Operating		-4,000.00
Bill	1166	04/08/2019		Annual Audit	-4,000.00	4,000.00
TOTAL					-4,000.00	4,000.00
Bill Pmt -Check	1982	05/09/2019	Crescent Strategies, LLC	CASH-Wells Fargo-Operating		-8,054.69
Bill	4/30/19 Billing	04/30/2019		Personnel - Contract	-7,750.00	7,750.00
				TRAVEL-Local Postage	-81.20 -15.99	81.20 15.99
TOTAL				Telecommunications	-207.50	207.50
TOTAL					-8,054.69	8,054.69
Check	1983	05/09/2019	VOID	CASH-Wells Fargo-Operating		0.00

Page 1

8:27 AM 05/17/19

### Rocky Flats Stewardship Council Check Detail 2019

March 13 through May 17, 2019

Туре	Num	Date	Name	Account	Paid Amount	Original Amount
TOTAL					0.00	0.00
Check	1984	05/09/2019	Century Link	CASH-Wells Fargo-Operating		-26.95
				Telecommunications	-26.95	26.95
TOTAL					-26.95	26.95

P.O. Box 17670 Boulder, CO 80308-0670 www.rockyflatssc.org

(303) 412-1200

Jefferson County ~ Boulder County ~ City and County of Broomfield ~ City of Arvada ~ City of Boulder City of Golden ~ City of Northglenn ~ City of Thornton ~ City of Westminster ~ Town of Superior League of Women Voters ~ Rocky Flats Cold War Museum ~ Rocky Flats Homesteaders Kim Griffiths

#### **MEMORANDUM**

TO: Board

FROM: David Abelson

**SUBJECT:** 2018 Stewardship Council Financial Audit

**DATE:** May 20, 2019

Attached for your review is Fiscal Focus Partners' draft 2018 financial audit of the Rocky Flats Stewardship Council. They did not find any material deficiencies and issued a clean audit.

The Stewardship Council is not required by either state law or the DOE grant to secure an audit. However, an independent audit is an important check that confirms both the Board and staff are managing the finances in accordance with applicable laws and regulations.

Eric Barnes will present the audit to the Board and will be prepared to answer your questions. The Stewardship Council will need to formally accept the audit at the meeting.

Action Item: Approve motion accepting Stewardship Council's 2018 audit

# Rocky Flats Stewardship Council FINANCIAL STATEMENTS With Independent Auditor's Report December 31, 2018

### **BASIC FINANCIAL STATEMENTS**

### **December 31, 2018**

Independent auditor's report	
Basic financial statements:	
Government-wide financial statements:	
Statement of net position	
Statement of activities	2
Fund financial statements:	
Balance sheet – governmental fund	3
Statement of revenues, expenditures, and changes in fund balance – governmental fund	4
Reconciliation of the statement of revenues, expenditures, and changes in fund balance of governmental funds to the statement of activities	
Statement of revenues, expenditures, and changes in fund balance – budget and actual – general fund	
Notes to financial statements	

### STATEMENT OF NET POSITION

**December 31, 2018** 

	Activities Activities		
ASSETS			
Cash and cash equivalents	\$	192,947	
Grant receivable		3,879	
Total assets		196,826	
LIABILITIES			
Accounts payable		10,561	
Total liabilities		10,561	
NET POSITION			
Unrestricted		186,265	
Total net position	\$	186,265	

## ROCKY FLATS STEWARDSHIP COUNCIL STATEMENT OF ACTIVITIES

For the Year Ended December 31, 2018

			Program Reven	ue	Reve Chang	Expense) enue and ges in Net osition
Functions/Programs	Expenses	Charges for Services	Operating Grants and Contributions	Capital Grants and Contributions		rnmental tivities
Primary government	\$ 137,041	\$ -	\$ 145,165	\$ -	\$	8,124
Total primary government	\$ 137,041	\$ -	\$ 145,165	\$ -		8,124
	General revenu	ues:				
	Interest incom	ie				42
	Total gene	eral revenues				42
	Change in net	position				8,166
	Net position - b	peginning				178,099
	Net position - e	ending			\$	186,265

### BALANCE SHEET GOVERNMENTAL FUND

**December 31, 2018** 

			0	Total
	Ger	neral Fund		ernmental Funds
ASSETS				
Cash and cash equivalents	\$	192,947	\$	192,947
Other receivable		3,879		3,879
Total assets		196,826		196,826
LIABILITIES AND FUND BALANCES				
LIABILITIES				
Accounts payable		10,561		10,561
Total liabilities		10,561		10,561
Total nasmatos		10,001		10,001
FUND BALANCES				
Unassigned:				
General government		186,265		186,265
Total fund balances		186,265		186,265
Total liabilities and fund balances	\$	196,826		
Net position of governmental activities			\$	186,265

### STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE GOVERNMENTAL FUND

### For the Year Ended December 31, 2018

	F: Gov	al General und and ernmental Funds
REVENUES		
Grants	\$	135,165
Contributions from local governments		10,000
Interest income		42
Total revenues		145,207
EXPENDITURES General government		
Annual audit		4,000
Accounting fees		4,883
Attorney fees		14,819
Administrative service		80
Insurance		3,886
Local government		1,500
Meeting expense		33
Personnel - contract		95,763
Postage		530
Printing		90
Subscriptions/membership dues		2,226
Supplies		89
Telecommunications		2,341
Travel - local		1,410
Travel - out of state		5,281
Total expenditures		136,931
Net change in fund balances		8,276
Fund balances - beginning		177,989
Fund balances - ending	\$	186,265

### RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES

### For the Year Ended December 31, 2018

Amounts reported for governmental activities in the statement of activities are different because:

Net change in fund balances - total governmental funds:	\$	8,276
Governmental funds report capital outlays as expenditures. In the statement of activities capital outlay is not reported as an expenditue. However, the statement of activities will report as depreciation expet the allocation of the cost of any depreciable asset over the estimate useful life of the asset.	ense	
Depreciation expense	· ·	(110)
Change in net position of governmental activities	\$	8,166

### STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE - BUDGET AND ACTUAL - GENERAL FUND

### For the Year Ended December 31, 2018

	•	nal and Final Budget	 Actual	Fina Fa	ance with al Budget avorable favorable)
Revenues					
U.S. Department of Energy - Office of Legacy Management	\$	139,000	\$ 135,165	\$	(3,835)
Contributions from local governments		10,000	10,000		(7.400)
Carry over - Rocky Flats Coalition of Local Governments		7,100	-		(7,100)
Interest income		150 100	 42		42
Total revenues		156,100	 145,207		(10,893)
Expenditures					
General government					
Personnel		93,000	95,763		(2,763)
Travel		6,700	6,691		9
Equipment		500	-		500
Supplies		1,200	122		1,078
Contractual		40,100	25,282		14,818
Insurance		4,000	3,886		114
Postage		1,500	530		970
Printing		2,000	90		1,910
Subscriptions/membership dues		2,400	2,226		174
Telecomunications		2,700	2,341		359
Website		2,000	 		2,000
Total expenditures		156,100	 136,931		19,169
Net change in fund balance		-	8,276		8,276
Fund balance - beginning of year		177,989	177,989		
Fund balance - end of year	\$	177,989	\$ 186,265	\$	8,276

#### **NOTES TO FINANCIAL STATEMENTS**

**December 31, 2018** 

### Note 1 - Summary of significant accounting policies

#### A. Reporting entity

The Rocky Flats Stewardship Council (Council) was organized on February 13, 2006 through an Intergovernmental Agreement (IGA) by and among the following governments: the City and County of Broomfield, the Counties of Jefferson and Boulder, the Cities of Arvada, Boulder, Golden, Northglenn, Thornton, and Westminster, and the Town of Superior. All jurisdictions are located adjacent to or near the former U.S. Department of Energy's Rocky Flats weapons plant. All jurisdictions are permanent parties, with continuous representation on the Board of Directors. The Council was organized as the successor organization to the Rocky Flats Coalition of Local Governments (Coalition), also formed through an IGA, which concluded its existence shortly following the organization of the Council, having fulfilled its purpose in connection with the closure of the Rocky Flats Site.

The Council was formed for the purpose of overseeing all post-closure Rocky Flats activities. The legislative and administrative power of the Council is vested with a Board of Directors not to exceed 14 voting members. Members are community stakeholder representatives, selected by the remaining Board of Directors upon application, and have a right to appoint a Director to the Board.

Under the terms of the IGA, the status of the Council is to be reviewed periodically by the local governments which are parties to the agreement to determine whether the Council will continue in existence. Also under the terms of the IGA, the Council is established as an "enterprise", as defined by Article X, Section 20 of the Colorado constitution, commonly referred to as the Taxpayer's Bill of Rights, or Tabor (Note 5).

The Council has no employees and all operations and administrative functions are contracted.

The Council follows the Governmental Accounting Standards Board (GASB) accounting pronouncements which provide guidance for determining which governmental activities, organizations and functions should be included within the financial reporting entity. GASB pronouncements set forth the financial accountability of a governmental organization's elected governing body as the basic criterion for including a possible component governmental organization in a primary government's legal entity. Financial accountability includes, but is not limited to, appointment of a voting majority of the organization's governing body, ability to impose its will on the organization, a potential for the organization to provide specific financial benefits or burdens and fiscal dependency.

### NOTES TO FINANCIAL STATEMENTS (continued) December 31, 2018

As of December 31, 2018, no component unit has been identified as reportable to the Council, nor is the Council a component unit of any other primary governmental entity.

### B. Government-wide and fund financial statements

The government-wide financial statements include the statement of net position and the statement of activities. These financial statements include all of the activities of the Council. Both statements distinguish between governmental activities, which normally are supported by taxes and intergovernmental revenue, and business-type activities, which rely to a significant extent on fees and charges for support.

The statement of net position reports all financial and capital resources of the Council. The difference between the assets and liabilities of the Council is reported as net position.

The statement of activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include 1) charges to customers or applicants who purchase, use, or directly benefit from goods, services or privileges provided by a given function or segment, and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as general revenues.

Separate financial statements are provided for governmental funds. Major individual governmental funds are reported as separate columns in the fund financial statements.

### C. Measurement focus, basis of accounting and financial statement presentation

The government-wide financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Expenditures for property and equipment are shown as increases in assets.

Governmental fund financial statements are reported using the *current financial* resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the government considers revenues to be available if they are

# NOTES TO FINANCIAL STATEMENTS (continued) December 31, 2018

collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting.

Eligible grant receipts and interest associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenues of the current fiscal period. Other revenue items are considered to be measurable and available only when the Council receives cash.

The government reports the following major governmental fund:

The general fund is the Council's primary operating fund. It accounts for all financial resources of the general government.

When both restricted and unrestricted resources are available for use, it is the Council's policy to use restricted resources first, then unrestricted resources as they are needed.

### D. Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires Council management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

### E. Assets, liabilities, and fund equity

### 1. Deposits and investments

The Council's cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with maturities of three months or less.

#### 2. Capital assets

Capital assets, which include furniture and equipment, are reported in the government-wide financial statements. Capital assets are defined by the Council as assets with an initial, individual cost of more than \$250. Such assets are recorded at historical cost if purchased or constructed. Donated capital assets are recorded at estimated fair market value at the date of donation.

The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend the life of the asset are not capitalized. Improvements are capitalized and depreciated over the remaining useful lives

# NOTES TO FINANCIAL STATEMENTS (continued) December 31, 2018

of the related fixed assets, as applicable. Depreciation expense is computed using the straight-line method for all assets, based on the estimated useful lives of the assets, estimated at 3 years.

### 3. Fund equity

Fund balance for governmental funds should be reported in classifications that comprise a hierarchy based on the extent to which the government is bound to honor constraints on the specific purposes for which spending can occur. Governmental funds report up to five classifications of fund balance: nonspendable, restricted, committed, assigned, and unassigned. Because circumstances differ among governments, not every government or every governmental fund will present all of these components. The following classifications describe the relative strength of spending constraints:

Non-spendable fund balance – The portion of fund balance that cannot be spent because it is either not in spendable form (such as inventory) or is legally or contractually required to be maintained intact.

Restricted fund balance – The portion of fund balance constrained to being used for a specific purpose by external parties (such as grantors or bondholders), constitutional provisions or enabling legislation.

Committed fund balance – The portion of fund balance constrained for specific purposes according to limitations imposed by the Council's highest level of decision making authority, the Board of Directors, prior to the end of the current fiscal year. The constraint may be removed or changed only through formal action of the Board of Directors.

Assigned fund balance – The portion of fund balance that is constrained by the government's intent to be used for specific purposes, but is neither restricted nor committed. Intent is expressed by the Board of Directors to be used for a specific purpose. Constraints imposed on the use of assigned amounts are more easily removed or modified than those imposed on amounts that are classified as committed.

Unassigned fund balance – The residual portion of fund balance that does not meet any of the above criteria.

If more than one classification of fund balance is available for use when an expenditure is incurred, it is the Council's policy to use the most restrictive classification first.

# NOTES TO FINANCIAL STATEMENTS (continued) December 31, 2018

### F. Budgetary information

Annual budgets are adopted on a basis consistent with generally accepted accounting principles for all governmental funds. In accordance with the Colorado State Budget Law, the Council's Board of Directors follows these procedures in establishing the budgetary data reflected in the financial statements:

- 1. On or before October 15, the Board prepares a proposed operating budget for each fund, based on their respective basis of accounting, for the fiscal year commencing the following January 1. The operating budget includes proposed expenditures and the means of financing them.
- 2. After considering comments received, the Board approves the budget. The budget is formally adopted by resolution, published, and filed with the state.
- 3. Before December 31, the expenditures are appropriated for the ensuing year. The appropriation is at the total fund level and lapses at year-end.

### Note 2 – Cash and Investments

Cash and investments as of December 31, 2018 are classified in the accompanying statements as follows:

Statement of net position:

Cash and cash equivalents

\$192,947

#### Deposits with Financial Institutions

Colorado statutes require that the Council use eligible public depositories as defined by the Colorado Public Deposit Protection Act (the Act). Under the Act, amounts on deposit in excess of federal insurance levels must be collateralized. The eligible collateral is determined by the Act and allows the institution to create a single collateral pool for all public funds. The pool is to be maintained by another institution or held in trust for all the uninsured public deposits as a group. The market value of the collateral must be at least equal to 102% of the aggregate uninsured deposits.

The State Regulatory Commissions for banks and financial services are required by Statute to monitor the naming of eligible depositories and reporting of the uninsured deposits and assets maintained in the collateral pools.

At December 31, 2018, all of the Council's deposits were covered by insurance provided by the federal government. The Council was not subject to custodial credit risk at December 31, 2018.

### NOTES TO FINANCIAL STATEMENTS (continued) December 31, 2018

The Council's cash deposits at December 31, 2018 are as follows:

	Carrying	Bank
	Balance	Balance
Deposits with financial institutions	\$ 192,947	\$ 192,947
Total cash and cash equivalents	\$ 192,947	\$ 192,947

### Investments

The Council has not adopted a formal investment policy, however, the Council follows state statutes regarding investments. Colorado revised statutes limit investment maturities to five years or less unless formally approved by the Board of Directors. Such actions are generally associated with a debt service reserve or sinking fund requirements.

Colorado statutes specify investment instruments meeting defined rating and risk criteria in which local governments may invest which include:

- Obligations of the United States, certain U.S. government agencies securities and securities of the World Bank
- General obligation and revenue bonds of U.S. local government entities
- Bankers' acceptance of certain banks
- Commercial paper
- Local government investment pools
- Guaranteed investment contracts
- Written repurchase agreements and certain reverse repurchase agreements collateralized by certain authorized securities
- Certain money market funds

As of December 31, 2018, the Council had no investments.

### Note 3 – Capital Assets

An analysis of the changes in capital assets for the year ended December 31, 2018 follows:

	Balance 12/31/17 Additions		Dele	etions	llance 31/18	
Capital assets being depreciated:						
Furniture and equipment	\$	780	\$ 	\$	338	\$ 442
Total capital assets		780	-		338	442
Accumulated depreciation		(670)	(110)		338	(442)
Capital assets, net	\$	110	\$ (110)	\$		\$ -

### NOTES TO FINANCIAL STATEMENTS (continued) December 31, 2018

### Note 4 – Net position

The Council has net position consisting of three components – net investment in capital assets, restricted, and unrestricted.

Net investment in capital assets consists of capital assets, net of accumulated depreciation. As of December 31, 2018, the Council had no net investment in capital assets.

Restricted assets include net position that are restricted for use either externally imposed by creditors, grantors, contributors, or laws and regulations of other governments or imposed by law through constitutional provisions or enabling legislation. As of December 31, 2018, the Council had no restricted net position.

### Note 5 - Risk management

The Council is exposed to various risks of loss related to torts, thefts of, damage to, or destruction of assets, errors or omissions, injuries to personnel, or natural disasters. The Council maintains commercial insurance for all risks of loss. Settled claims have not exceeded the commercial insurance coverage limits in any of the past three years.

### Note 6 - Concentration

The Council receives the majority of its funding through a grant from the U.S. Department of Energy (DOE). The DOE grant has a current expiration date of February 28, 2022.

### Note 7 - Tax, spending and debt limitation

Article X, Section 20 of the Colorado Constitution, referred to as the Taxpayer's Bill of Rights (TABOR), contains tax, spending, revenue, and debt limitations which apply to the State of Colorado and all local governments.

Spending and revenue limits are determined based on the prior year's Fiscal Year Spending adjusted for allowable increases based upon inflation and local growth. Fiscal Year Spending is generally defined as expenditures plus reserve increases with certain exceptions. Revenue in excess of the Fiscal Year Spending limit must be refunded unless the voters approve retention of such revenue.

As an enterprise (Note 1), management believes that the Council is exempt from the provisions of TABOR. However, TABOR is complex and subject to interpretation. Ultimate implementation may depend upon litigation and legislative guidance.

\*\*\*\*

### **DOE Annual Report Briefing**

- Cover memo
- Excerpts of the annual report

### Oil and Gas Discussion

- Cover memo
- Proposed resolution
- USFWS response to questions

P.O. Box 17670 Boulder, CO 80308-0670 www.rockyflatssc.org

(303) 412-1200

Jefferson County ~ Boulder County ~ City and County of Broomfield ~ City of Arvada ~ City of Boulder City of Golden ~ City of Northglenn ~ City of Thornton ~ City of Westminster ~ Town of Superior League of Women Voters ~ Rocky Flats Cold War Museum ~ Rocky Flats Homesteaders Kim Griffiths

#### **MEMORANDUM**

TO: Stewardship Council Board of Directors
FROM: Melissa Weakley and David Abelson
SUBJECT: DOE's 2018 Annual Report Briefing

**DATE:** May 13, 2019

DOE will present an overview its 2018 Annual Report of Site Surveillance and Maintenance Activities, which can accessed here: <a href="https://www.lm.doe.gov/Rocky\_Flats\_Archive.pdf#2018ann">https://www.lm.doe.gov/Rocky\_Flats\_Archive.pdf#2018ann</a>. Annual Report highlights are included below.

- Site-Wide: The annual site-wide inspection was conducted on April 5, 2018.
  - o No evidence of violations of the institutional or physical controls was observed.
  - o No evidence of adverse biological conditions was noted.
  - o Minor depressions around former building areas were noted (none appeared significant).
- **Present Landfill (PLF)**: Per the RFLMA, the PLF was inspected quarterly (March, May, August, and November), with an additional weather-related inspection in September.
  - o No significant issues were observed.
- Original Landfill (OLF): Per the RFLMA, the OLF was inspected monthly. Two additional weatherrelated inspections (i.e. after significant precipitation events) were conducted in May and September. The OLF was also monitored weekly as a Best Management Practice.
  - No slumping at the OLF hillside was observed. Minor cracking was observed above Berm 4 (within the waste footprint) and Berm 5 (outside the waste footprint). Soil from the 2017 slump remains in place as a temporary stabilizing measure (see attached DOE Figure 1).
  - Minor maintenance of the OLF cover was conducted throughout the year as needed to fill small cracks and erosion gullies.
  - Soil samples were collected in the eastern and western supporting hillsides of the OLF to support the slope stability design. The OLF geotechnical evaluation was updated with the new data, and a final slope stabilization method was selected. The design includes controlling infiltration, installing tieback anchors, and diverting groundwater by installing additional subsurface groundwater collection trenches.
- North Walnut Creek Slump (NWCS): The NWCS, located on the hillside east of the Solar Ponds Plume Treatment System (SPPTS), was monitored monthly (see attached DOE Figure 6).
  - o Slope creep continued through 2018, with greater movement during wetter periods.
  - o The NWCS scarp line was regraded in February and August.
  - A geotechnical slope stability evaluation was completed; additional data collection is required to finalize the recommendation for stabilization.

- Solar Ponds Plume Treatment System (SPPTS): The SPPTS continued to treat nitrate effectively via the full-scale, interim lagoon constructed in 2016.
  - Effluent concentrations of nitrate met RFLMA standards throughout the year. Upgrades were completed on the test lagoon in late 2018 to convert it to the long-term nitrate treatment component for the SPPTS.
  - The lagoon also continued to reduce uranium concentrations. The subject matter expert contracted in 2017 to evaluate and recommend further evaluations of approaches to uranium treatment by the SPPTS completed testing. Uranium treatment at the SPPTS will be the subject of bench-scale and full-scale tests, with design and construction in 2019–2021.
- East Trenches Plume Treatment System (ETPTS): The ETPTS now treats water from both the East Trenches and the Mound Site.
  - o Effluent concentrations met all applicable RFLMA standards throughout the year.
- **Groundwater Monitoring:** All 88 RFLMA monitoring locations were sampled during the 2<sup>nd</sup> quarter.
  - One Area of Concern (AOC) well (AOC well 10304, in the south-central portion of the COU) entered a reportable condition for trichloroethene (TCE). The concentrations of TCE in this well in the 2<sup>nd</sup> and 4<sup>th</sup> quarters (**26 ug/L** and **5.43 ug/L**, respectively) were above the RFLMA standard for TCE (**2.5 ug/L**). This well is susceptible to reportable TCE concentrations following periods of heavy precipitation in preceding years. To track potential impacts to surface water quality, AOC well 10304 and Woman Creek location SW10200 will be sampled concurrently in the 2<sup>nd</sup> quarter of 2019 and, if necessary, during future monitoring events until this reportable condition is terminated.
- Surface Water Monitoring: 92 samples from 8 gaging stations and 11 grab sampling locations (see Figure 4) were collected and analyzed.
  - Uranium: The 30-day average uranium concentrations in the 1<sup>st</sup> and 2<sup>nd</sup> quarters (18 ug/L) exceeded the RFLMA water quality standard (16.8 ug/L) at RFLMA Point of Compliance (POC) monitoring location WALPOC (see attached DOE Figure 3), which is a reportable condition triggering consultation with the RFLMA regulatory agencies. The 12-month rolling average uranium concentration at WALPOC (13.3 ug/L) remained below the RFLMA standard.
  - Plutonium: The 12-month rolling average concentrations from June–December (0.159 pCi/L) at RFLMA Point of Evaluation (POE) monitoring location SW027 (see attached DOE Figure 3) were above the RFLMA standard (0.15 pCi/L), which is a reportable event. Due to low flow, however, the 12-month rolling average values include results from only a single composite sample collected on May 3–4, 2018.

#### **Attachments**

2018 Annual Report Cover Page, Table of Contents, and Abbreviations Overview of 2018 Contact Records (Table 1) OLF Slump Areas 2015-2017 North Walnut Creek Slump Water Routing Schematic Historical and Post-Closure Contaminant Concentration Figures

- Plutonium
- Americium
- Uranium
- Nitrate
- Plutonium/Americium Ratios



Annual Report of Site
Surveillance and Maintenance
Activities at the
Rocky Flats Site, Colorado

Calendar Year 2018

**Overview** 

**April 2019** 



### **Contents**

Abbre	eviations		ii					
Execu	Executive Summary							
1.0		tion						
2.0		and Scope						
		Contact Records						
		ces						
		Figure						
Figur	e 1. Rocl	ky Flats Site, Colorado	2					
		Table						
Table	1. Actio	ons Approved by the RFLMA Parties	6					
		Appendixes						
Appe	ndix A	Hydrologic Data						
	ndix B	Water Quality Data						
	ndix C	Landfill Inspection Forms, Fourth Quarter CY 2018						
	ndix D	Data Evaluation Flowcharts Reproduced from the RFLMA						
	ndix E	2018 RFLMA Contact Records and Written Correspondence						

### **Abbreviations**

AOC Area of Concern

BMP best management practice

CAD/ROD Corrective Action Decision/Record of Decision

CDPHE Colorado Department of Public Health and Environment

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

(also known as "Superfund")

COU Central Operable Unit

CR contact record
CY calendar year

DOE U.S. Department of Energy

EPA U.S. Environmental Protection Agency

EPC East Perimeter Channel
ESSD East Subsurface Drain

ETPTS East Trenches Plume Treatment System

FR Federal Register

ft feet

GWI groundwater intercept
ICs institutional controls

LM Office of Legacy Management

MSPCS Mound Site Plume Collection System
NOIPD Notice of Intent for Partial Deletion

NPL National Priorities List

NWCS North Walnut Creek Slump

OLF Original Landfill

OLF M&M U.S. Department of Energy Rocky Flats Site, Original Landfill Monitoring and

Maintenance Plan

OU operable unit

PLF Present Landfill

PLF M&M Present Landfill Monitoring and Maintenance Plan and Post-Closure Plan,

U.S. Department of Energy Rocky Flats, Colorado, Site

POC Point of Compliance
POE Point of Evaluation

POU Peripheral Operable Unit

RCRA Resource Conservation and Recovery Act

RFCA Final Rocky Flats Cleanup Agreement

RFLMA Rocky Flats Legacy Management Agreement

RFSOG Rocky Flats Site Operations Guide

SPPTS Solar Ponds Plume Treatment System

TCE trichloroethene

USFWS U.S. Fish and Wildlife Service

Table 1. Actions Approved by the RFLMA Parties

Activity	Status as of December 31, 2018	CR No.	Approval Date
OLF geotechnical investigation work	Actions Implemented. The geotechnical investigation activities described in this CR were completed in the summer of 2018. This investigation is part of the larger OLF stabilization project completion of which is expected in 2019–2020.	2018-01	02/07/2018
Minor modifications to the OLF inspection form	Actions Ongoing. Approval of this CR allowed use of a modified inspection form for OLF inspections. Use of the modified inspection form began after approval of the CR. The OLF M&M Plan should be revised to adopt the modified form in 2020, after long-term hillside stabilization measures are in place at the landfill.	2018-02	02/20/2018
Posting written correspondence and attached guidelines	Actions Ongoing. This CR discusses the process agreed to by the RFLMA parties to post written correspondence to the LM website and to determine when use of previously approved Soil Disturbance Review Plans is appropriate. Because it discusses a process and not specific actions, actions relating to this CR will be considered ongoing until that time when it is determined no longer necessary by the parties.	2018-03	06/04/2018
Reportable condition for uranium at WALPOC	<b>Evaluation Ongoing.</b> The reportable condition for the 30-day average for uranium at WALPOC began in February 2018 and ended in April 2018. In accordance with CR 2018-04, a split sample was collected by the CDPHE. The CR also specified high-resolution uranium analysis of select samples; the analysis will be performed in early 2019.	2018-04	03/22/2018
Minor modifications to RFLMA Attachment 2, "Legacy Management Requirements"	Actions Implemented. The RFLMA Attachment 2 modifications discussed in CR 2018-05 were approved by CDPHE and EPA on December 4, 2018. The modified Attachment 2 to RFLMA was posted to the LM website and stakeholders were notified of the posting on December 17, 2018. The 2018 modifications also incorporated minor modifications to RFLMA Attachment 2, which were approved previously via CR 2014-02, CR 2014-07, and CR 2015-04.	2018-05	12/04/2018
NWCS 2017 maintenance	Actions Implemented. The project activities described in CR 2017-03 were conducted from early spring 2017 through the end of 2017. The bulk of field activities for the geotechnical drilling portion of the project were completed in December 2017; however, three inclinometers were installed as a field change in early January 2018. This field change was approved by CDPHE in late December 2017 (Field Change Concurrence 121917). This project is part of the larger NWCS slope stabilization effort scheduled for completion in 2022–2023.	2017-03	3/27/2017
Notification of maintenance activities at OLF Berms 6 and 7	In January 2018, LM provided a briefing to the RFLMA Parties describing the maintenance actions to be conducted at the OLF on Berms 6 and 7. Notification of this briefing (Notification 020818) was documented as written correspondence and was posted on the LM webpage in connection with CR 2015-06. This notification was for information only and did not require approval by the RFLMA Parties.	2015-06	

Table 1. Actions Approved by RFLMA Parties (continued)

Activity	Status as of December 31, 2018	CR No.	Approval Date
Reportable condition at the OLF	Actions Implemented. The initial repair to the slump on the east side of the OLF was completed in January 2015. Subsequent slope movement in 2016 and 2017 prompted additional evaluation, repairs, and installation of both permanent and temporary groundwater diversion measures in an effort to reduce slumping during the design and implementation of permanent stabilization measures. The comprehensive slope stabilization evaluation at OLF continued through 2017. A final stabilization design is anticipated to be implemented in 2019–2020. This reportable condition will remain open until the RFLMA Parties determine that the reportable condition no longer exists. In October 2018, LM provided a briefing to the RFLMA Parties on the progress of the long-term OLF stabilization project. Notification of this briefing (Notification 110618) was documented as written correspondence and was posted on the LM webpage in connection with CR 2013-02. This notification was for information only and did not require approval by the RFLMA Parties.	2013-02	10/21/2013

#### Notes:

Actions Implemented means that the original activities (e.g., installation of wells, treatment system upgrades) authorized by the approved CR have been completed and installation of erosion controls, reseeding, or both, are in progress or completed. This designation does not necessarily signify that the larger project (i.e., follow-on actions or data evaluation) that may be authorized by different CRs has been completed. For example, if a CR approved the installation of piezometers for collection of water level measurements, the Actions Implemented designation simply means that the piezometers were installed, not that data collection or evaluation of data for the project is complete.

Actions Ongoing means that the original activities (e.g., installation of wells, treatment system upgrades) authorized by the approved CR are in progress.

Evaluation Ongoing typically applies to CRs documenting reportable conditions. This designation means that the actions (e.g., additional sampling, mitigating actions) included in the plan and schedule for the evaluation of the approved CR for the reportable condition are still in progress.

#### Abbreviations:

AOC = Area of Concern
No. = number
POE = Point of Evaluation
WALPOC = Walnut Creek Point of Compliance

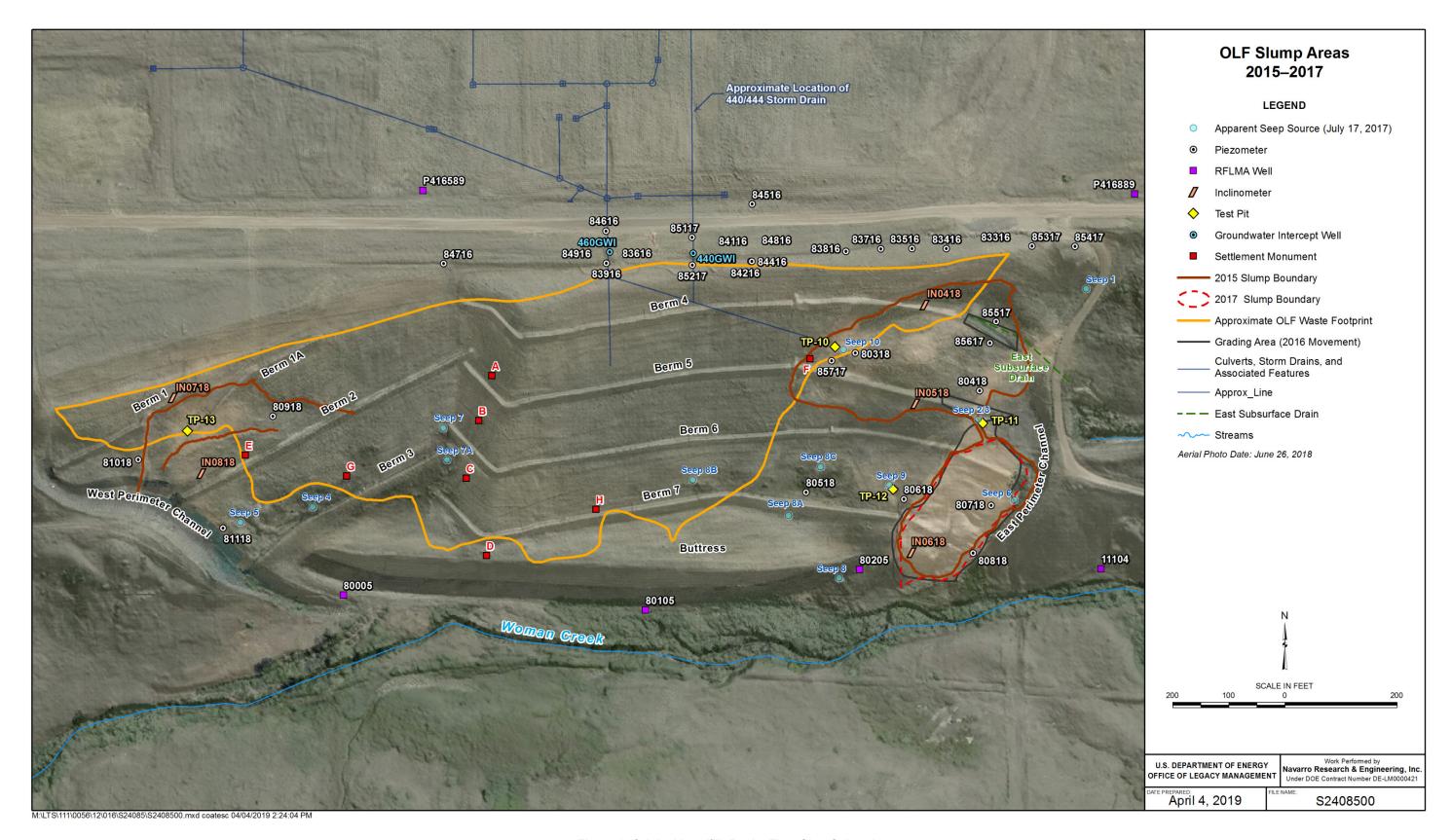


Figure 1. Original Landfill, Rocky Flats Site, Colorado

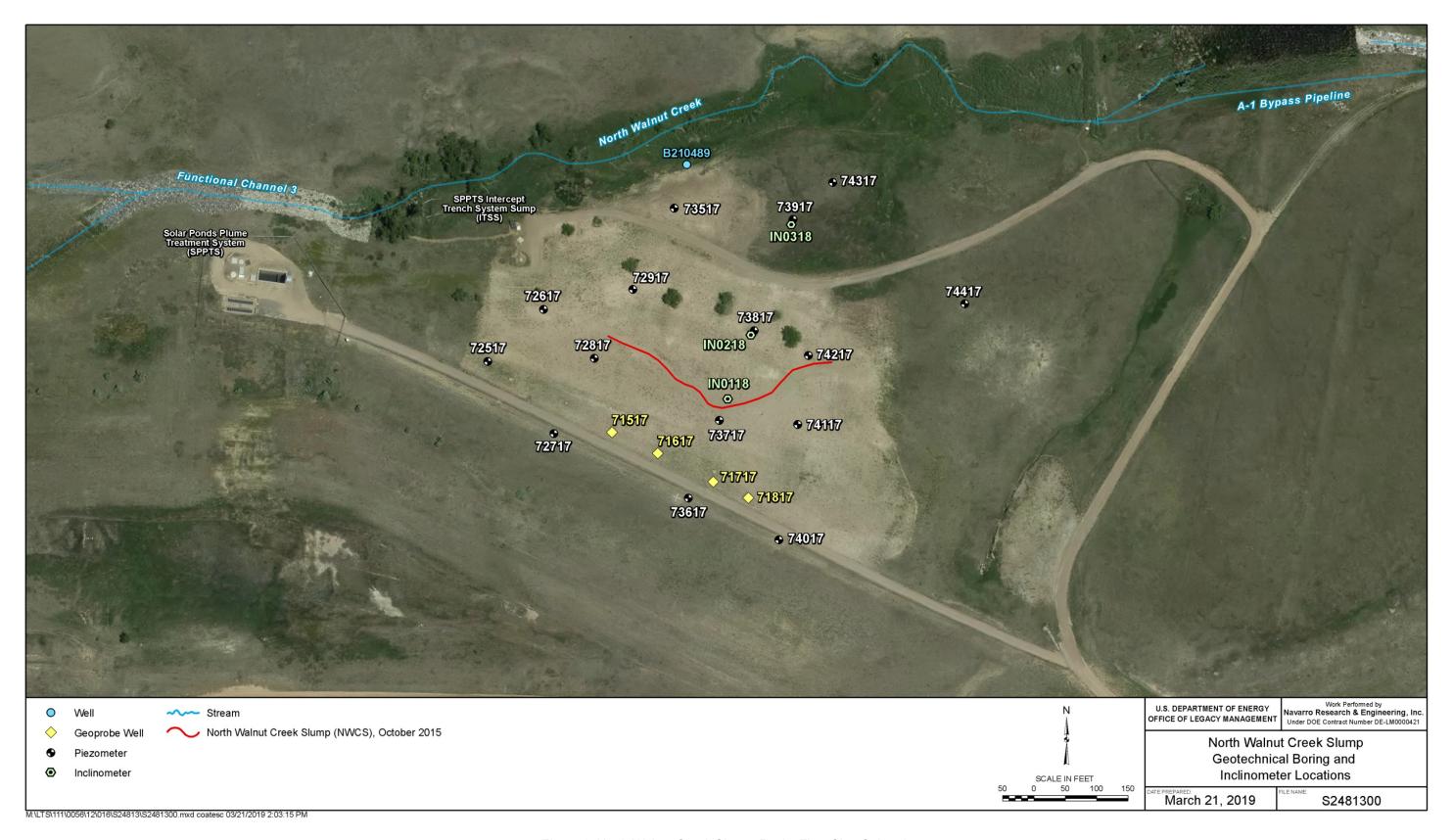


Figure 6. North Walnut Creek Slump, Rocky Flats Site, Colorado

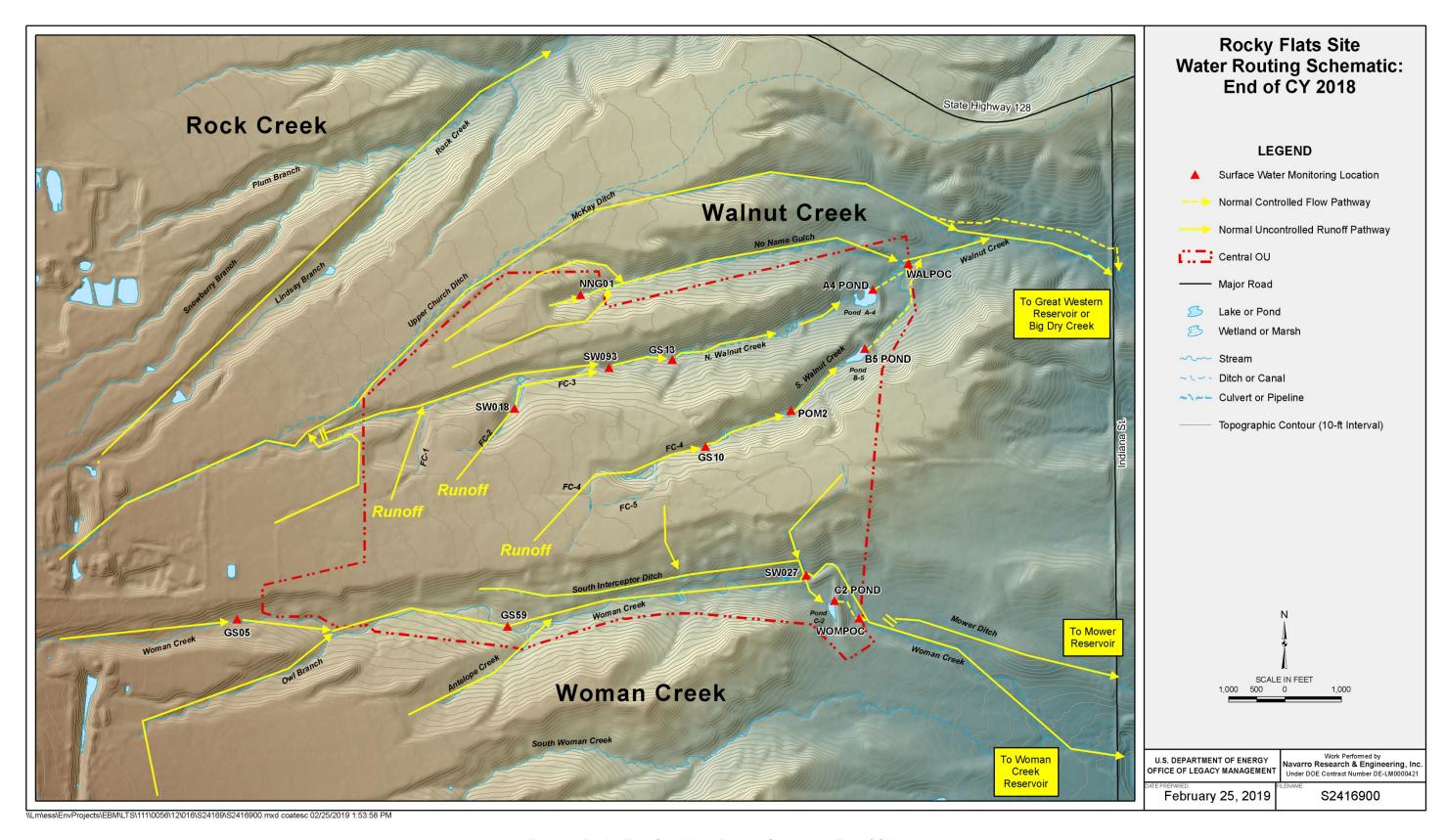
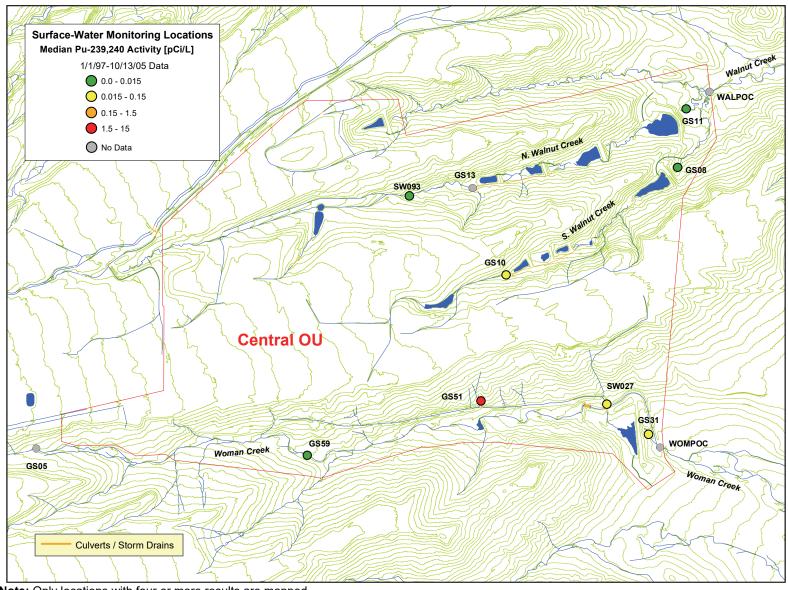


Figure 3. Rocky Flats Site Water Routing Schematic: End of CY 2018



Note: Only locations with four or more results are mapped.

Figure 90. Median Plutonium Concentrations for January 1, 1997 – October 13, 2005

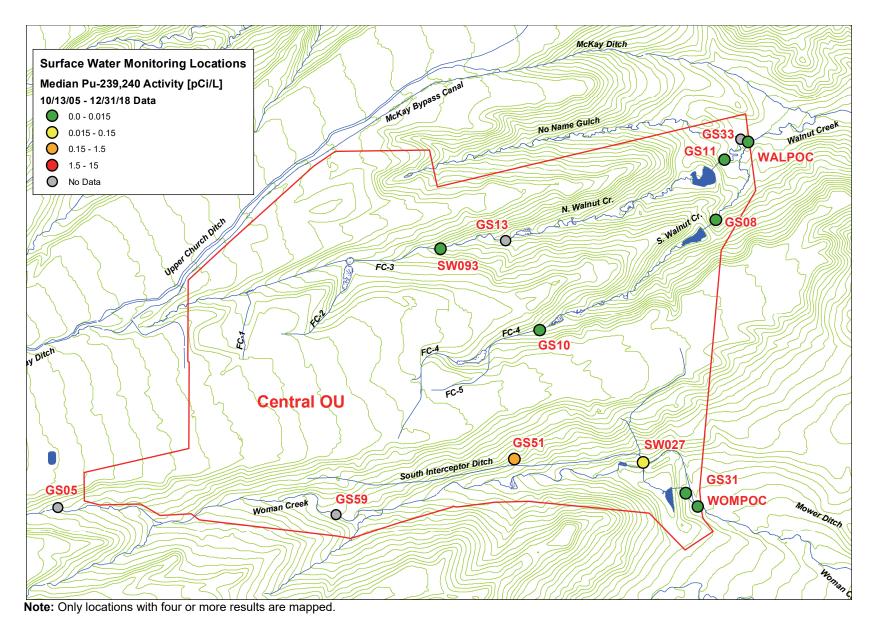
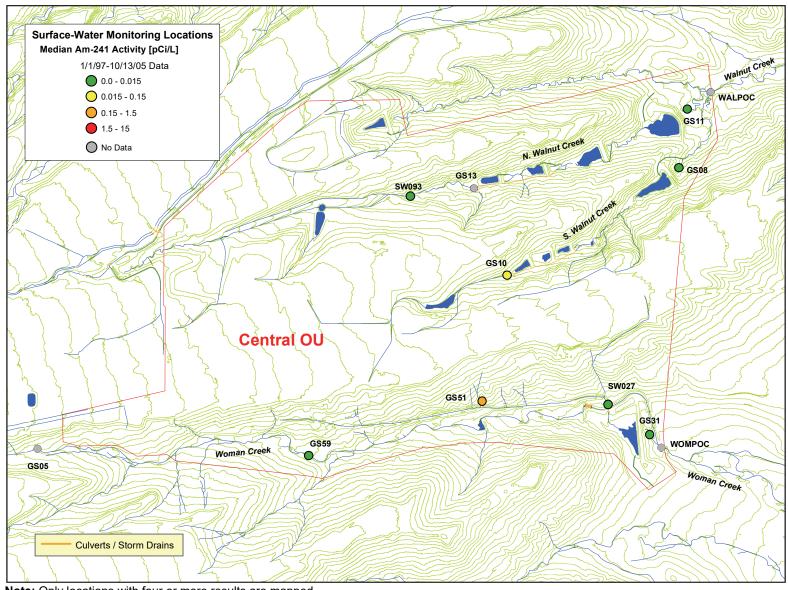


Figure 91. Postclosure Median Plutonium Concentrations



Note: Only locations with four or more results are mapped.

Figure 92. Median Americium Concentrations for January 1, 1997 – October 13, 2005

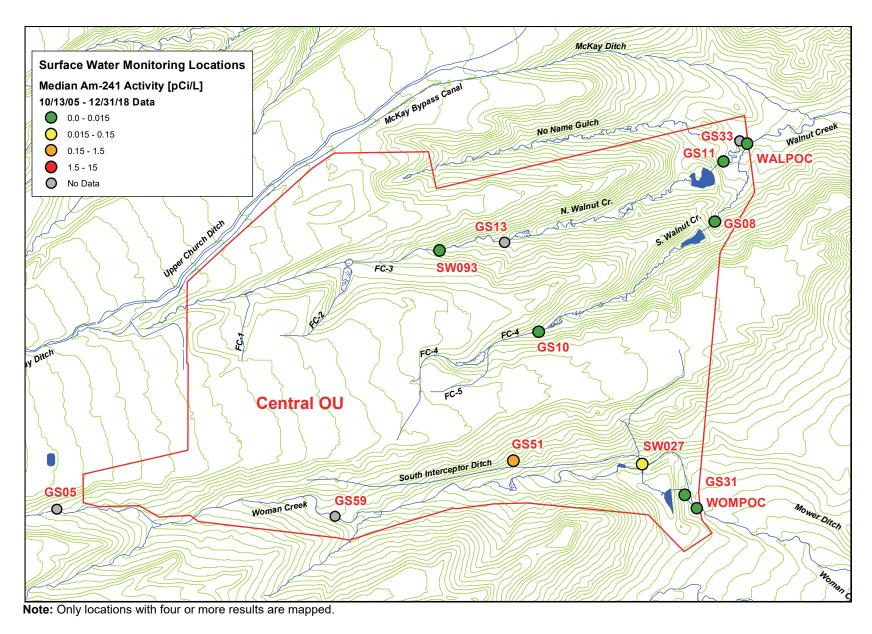
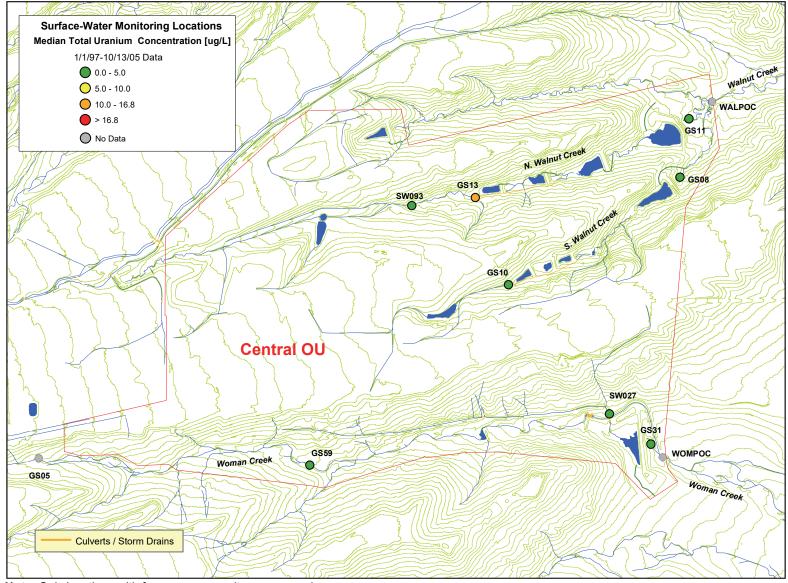


Figure 93. Postclosure Median Americium Concentrations



Note: Only locations with four or more results are mapped.

Figure 94. Median Uranium Concentrations for January 1, 1997 – October 13, 2005

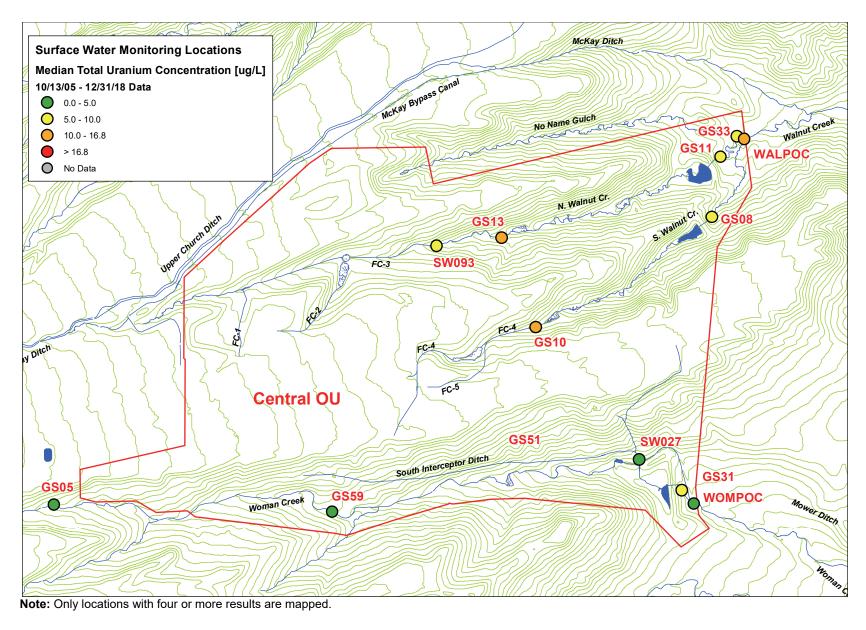


Figure 95. Postclosure Median Uranium Concentrations

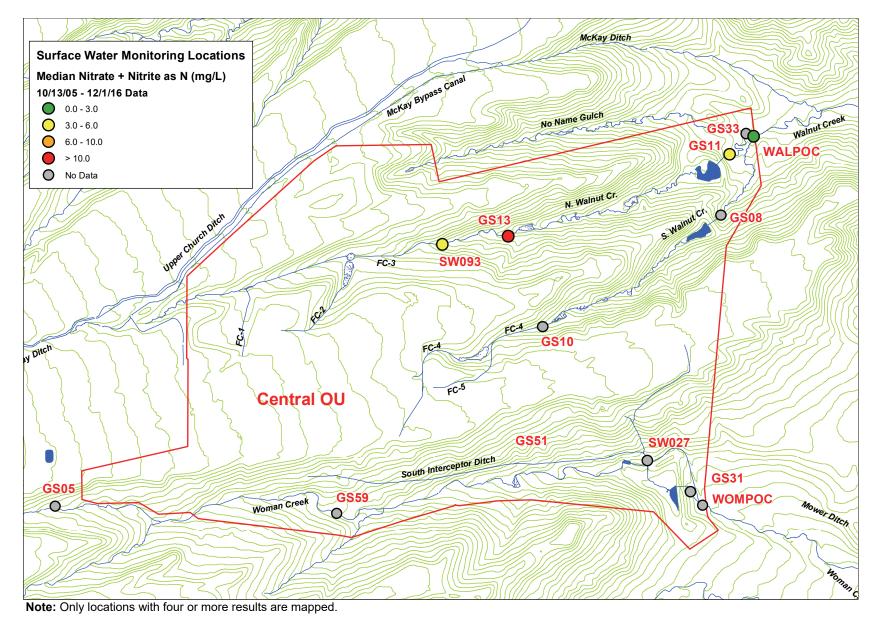


Figure 96. Postclosure Median Nitrate + Nitrite as Nitrogen Concentrations (October 13, 2005 – December 1, 2016)

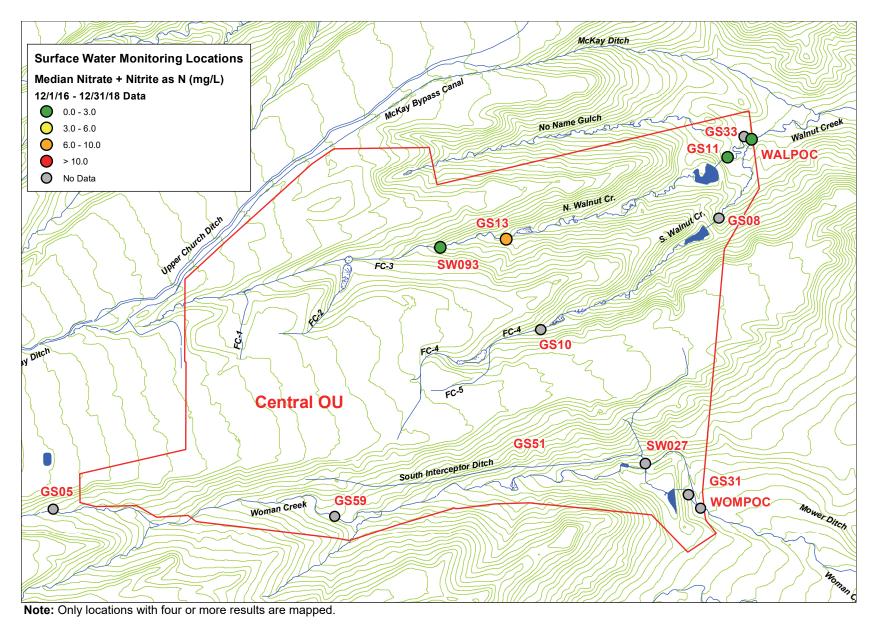


Figure 97. Postclosure Median Nitrate + Nitrite as Nitrogen Concentrations (December 1, 2016– December 31, 2018)

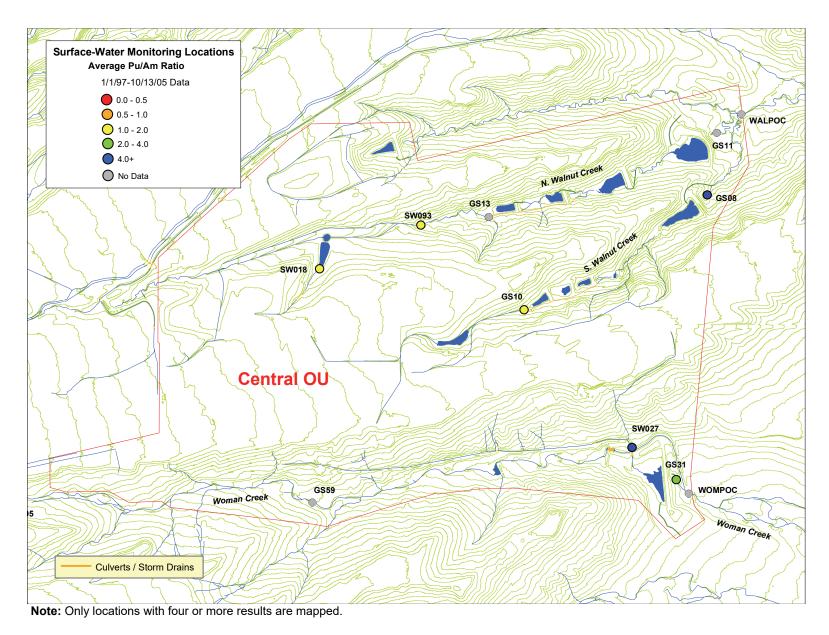


Figure 98. Average Plutonium/Americium Ratios for January 1, 1997 – October 13, 2005

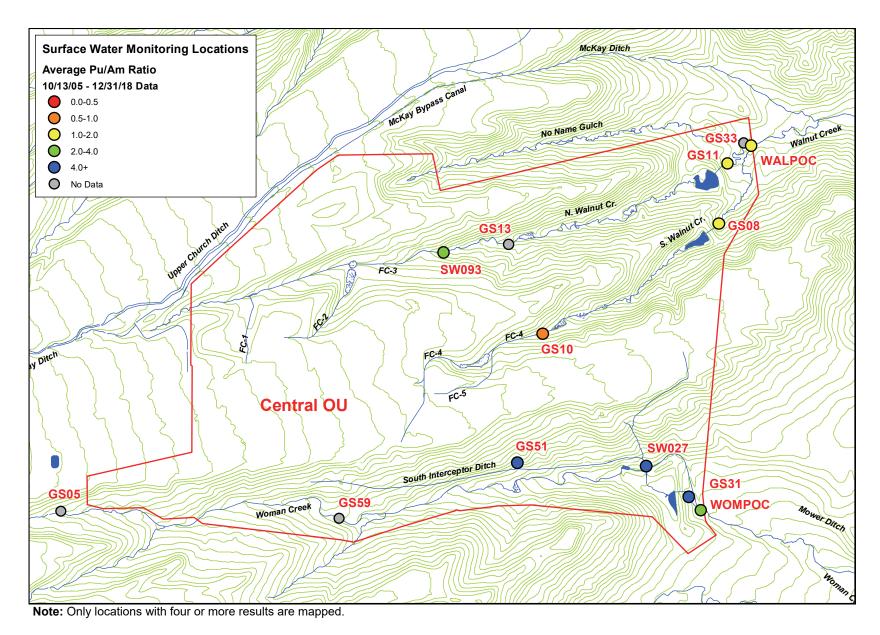


Figure 99. Postclosure Average Plutonium/Americium Ratios

### ROCKY FLATS STEWARDSHIP COUNCIL

P.O. Box 17670 Boulder, CO 80308-0670 www.rockyflatssc.org

(303) 412-1200

Jefferson County ~ Boulder County ~ City and County of Broomfield ~ City of Arvada ~ City of Boulder City of Golden ~ City of Northglenn ~ City of Thornton ~ City of Westminster ~ Town of Superior League of Women Voters ~ Rocky Flats Cold War Museum ~ Rocky Flats Homesteaders Kim Griffiths

#### **MEMORANDUM**

TO: Board of Directors FROM: David Abelson

**SUBJECT:** Oil and Gas discussion

**DATE:** May 23, 2019

The goal for this meeting is to finalize the Board's position on the proposed oil and gas resolution. From the actions of governments and conversations I have had with members, there appears to be support for the resolution. That support, however, is not unanimous.

Jefferson County has offered amended language for the Title and BE IT RESOLVED.

#### <u>Jefferson County's Proposed Language</u>:

Title: "Motion Regarding Concerns Related to Oil and Gas Exploration and/or Production On and Under Rocky Flats"

"BE IT RESOLVED, that the Board of Directors of the Rocky Flats Stewardship Council cautions local governments, permitting agencies, and oil and gas operators to consider the unique conditions related to Rocky Flats when considering oil and gas exploration and production, including hydraulic fracturing, on and under Rocky Flats and/or on or under land adjacent to Rocky Flats."

#### **Agency Responses to Questions**

USFWS responded to the written questions the Board posed. (See attached) The operative section is at the end—namely, the agency would support acquisition of additional mineral rights. That tactic, you'll recall, was introduced by Boulder at the outset of the Board's discussion with the goal of providing a long-term solution.

**Action Item: Consider Oil and Gas Resolution** 

## ROCKY FLATS STEWARDSHIP COUNCIL

P.O. Box 17670 Boulder, CO 80308-0670 www.rockyflatssc.org (303) 412-1200

Jefferson County ~ Boulder County ~ City and County of Broomfield ~ City of Arvada ~ City of Boulder City of Golden ~ City of Northglenn ~ City of Thornton ~ City of Westminster ~ Town of Superior League of Women Voters ~ Rocky Flats Cold War Museum ~ Rocky Flats Homesteaders Kim Griffiths

### Motion to Oppose Oil and Gas Exploration, Production, and Hydraulic Fracturing On and Under Rocky Flats

WHEREAS, local governments and citizen organizations in the vicinity of Rocky Flats remain committed to ensuring the cleanup remedy continues to protect human health and the environment, both on-site and on lands adjacent to Rocky Flats. This interest is broad and not limited to oil and gas development; and

WHEREAS, in November 2018, applications were filed with the Colorado Oil and Gas Conservation Commission to develop oil and gas minerals located under Rocky Flats, raising a number of technical and legal questions heretofore not addressed by federal and state agencies; and

WHEREAS, cleanup did not eliminate all risk. Remaining contamination includes radioactive materials, chemical solvent wastes and heavy metal wastes; and

WHEREAS, the lands under the Department of Energy's jurisdiction (known as the Central Operable Unit) remain on the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Superfund list; and

WHEREAS, cleanup did not anticipate all of the risks related to oil and gas exploration and production on and under Rocky Flats, including the impacts on public health and safety; and

WHEREAS, in order to protect the cleanup remedy and in turn public and environmental health, the restrictive notice on file with Jefferson County prohibits excavation, drilling, and other intrusive activities below a depth of three feet without prior regulatory review and approval pursuant to the Soil Disturbance Review Plan in the Rocky Flats Legacy Management Agreement Attachment 2; and

WHEREAS, activities at Rocky Flats or on lands adjacent to Rocky Flats must continue to protect the cleanup remedy. That includes protecting the groundwater treatment systems, landfills, and water quality monitoring systems, as well as not negatively altering or changing the surface and subsurface geology and hydrology, or otherwise creating pathways that do not currently exist; and

WHEREAS, development of oil and gas resources at Rocky Flats and/or on or under lands in close proximity to Rocky Flats raises a number of questions about the potential impacts on the long-term effectiveness of the cleanup remedy; and

WHEREAS, on April 5, 2019, the Rocky Flats Stewardship Council forwarded to federal and state agencies questions about the potential impacts of and legal requirements governing oil and gas development at Rocky Flats and/or on or under lands in close proximity to Rocky Flats. Those questions are attached and incorporated into this motion; and

WHEREAS, answers to questions about the impact of oil and gas development on the Rocky Flats cleanup remain unknown at this time.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Rocky Flats Stewardship Council opposes oil and gas exploration and production, including hydraulic fracturing, on and under Rocky Flats and/or on or under land adjacent to Rocky Flats until the impacts to the cleanup remedy and, in turn, human health and the environment are known and mitigated to the satisfaction of the Stewardship Council members.

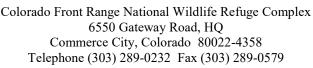
APPROVED AND ADOPTED THE	3, 2019.
	ROCKY FLATS STEWARDSHIP COUNCIL
	CI.
	Chair
ATTEST;	
Secretary	
J	

ADDDOVED AND ADODTED THE



### United States Department of the Interior

#### FISH AND WILDLIFE SERVICE





May 23, 2019

Ms. Joyce Downing Rocky Flats Stewardship Council P.O. Box 17670 Boulder, CO 80308-0670

Dear Ms. Downing:

Thank you for your letter dated April 5, 2019 regarding the proposal by Highlands Natural Resources Group to develop oil and gas resource around and beneath the Rocky Flats National Wildlife Refuge. I have responded to your questions specific to the U.S. Fish and Wildlife Service in the order they occur in your letter:

- On October 31, 2018, I became aware of this proposal and I immediately notified Mr. Abelson of this request. On November 15, 2018, the applicant withdrew all aspects of this proposal. The rapid coordination that occurred at all levels of government on this proposal was remarkable.
- There continues to be misunderstandings by the public on the current land status of the historic "Rocky Flats." Please help us in educating the public that the Rocky Flats National Wildlife Refuge administrative boundary presently includes lands with no relationship to the historic "Rocky Flats."
- It is important to recognize that Highlands Natural Resources Group did not request surface occupancy of Refuge lands (see 50 CFR § 29.80). Any surface access to the Rocky Flats National Wildlife Refuge is governed by U.S. Department of the Interior regulations (50 CFR §§ 29.31-29.220) and likely differs from U.S. Department of Energy regulations.
- The Rocky Flats National Wildlife Refuge (Refuge) includes a mixture of subsurface mineral rights. With the exception of the current mining activities on the western boundary of the Refuge, it is our belief that all rights to coal and aggregate minerals

within the administrative boundary of the Refuge are vested with the United States. Mixed ownership of fluid minerals remains.

• Regulations for management of oil and gas activities are contained at 50 CFR §§ 29.31-29.220. Service Manual Part 612 outlines the agency's policies on this matter. Where mineral rights to lands in wildlife refuge areas are vested in the United States, the provisions of 43 CFR § 3101.3–3, § 3109.4, § 3201.1–6 and §3501.2–2 govern. It is likely that our regulations differ from those of the U.S. Department of Energy.

In the past, there has been debate over the acquisition of outstanding mineral rights beneath the Refuge. Section 3179 of the Rocky Flats National Wildlife Refuge Act of 2001 (Public Law 107-107) discusses private property rights. The Refuge's Comprehensive Conservation Plan discusses outstanding minerals and any expected impacts with the exercise of these mineral rights. In 2012, a collaborative effort extinguished several existing mineral leases and acquired multiple privately owned mineral rights. These minerals are vested in the United States allowing the Refuge to expand by 756 acres. The U.S. Fish and Wildlife Service supports additional efforts by the Rocky Flats Stewardship Council to acquire remaining outstanding mineral rights beneath the Rocky Flats National Wildlife Refuge.

I appreciate your continued interest in the Refuge and please do not hesitate to contact me with any further questions.

Sincerely,

David Lucas Refuge Manger

# **Appendix**

- Meeting Protocols Acronym List

## ROCKY FLATS STEWARDSHIP COUNCIL

P.O. Box 17670 Boulder, CO 80308-0670 www.rockyflatssc.org (303) 412-1200

Jefferson County ~ Boulder County ~ City and County of Broomfield ~ City of Arvada ~ City of Boulder City of Golden ~ City of Northglenn ~ City of Thornton ~ City of Westminster ~ Town of Superior League of Women Voters ~ Rocky Flats Cold War Museum ~ Rocky Flats Homesteaders Kim Griffiths

### **Rocky Flats Stewardship Council – Meeting Overview and Protocols**

The central purpose of the meeting of the Rocky Flats Stewardship Council Board of Directors is for the Board and public to learn about current site activities and monitoring results, to be briefed on any issues or challenges DOE and the regulatory agencies are facing, and other issues that come before the Board. The Board reserves time at each meeting to address governance-related issues. Those issues are identified in the meeting agenda, and could include the budget, work plan, minutes, and related items.

All meetings of the Board of Directors are open to the public. From time to time, and in accordance with § 24-6-402(4), Colorado Revised Statutes, the Board may go into executive session. Public notice of the executive session is provided in the meeting agenda.

<u>Public Engagement Protocols</u>: Time is allotted at each meeting for the public to address the Board of Directors and presenters. The following procedures apply to all meetings of the Board of Directors. The Chair reserves the right to modify these procedures.

- 1. <u>Public comment periods</u>: The public comment periods are identified on the meeting agenda. The goal is to have two public comment periods—one near the start of the meeting and another near the end. The public comment periods are not a Q&A with the Board.
- 2. <u>Time limit</u>: The Board requests that comments be to the point. If individual comments are too long and/or if there are a number of people who wish to speak, the Chair reserves the right to enact a time limit.
- 3. <u>Additional public comment</u>: As time allows, and as called on by the Chair, the public is allowed to ask questions or express an opinion during presentations. The Board will have the first opportunity to ask questions or make comments.

<u>No personal attacks</u>: All people speaking at the meeting must refrain from personal attacks and address the issues at hand.

<u>Public Comment on Stewardship Council Website</u>: The Stewardship Council website includes a section for public comment. To have your comment posted, you must email a copy of your comments to David Abelson (<u>dabelson@rockyflatssc.org</u>).

<u>Noise</u>: In order to help reduce background noise, sidebar and backroom conversations should be taken into the hall.

To be added to the Stewardship Council's email distribution list, please email David Abelson (dabelson@rockyflatssc.org).

Acronym or Term	Means	Definition
Alpha radiation		A type of radiation that is not very penetrating and can be blocked by materials such as human skin or paper or one inch of air. Alpha radiation presents its greatest risk when it is inhaled or ingested. Plutonium, the radioactive material of greatest concern at Rocky Flats, produces this type of radiation.
Am	americium	A man-made radioactive element that is a byproduct of plutonium (Pu) production. Am emits gamma radiation, which can penetrate many types of protective shielding. During the production era at Rocky Flats, Am was chemically separated from Pu to reduce personnel exposures.
AME	Actinide Migration Evaluation	An exhaustive, years-long study by independent researchers who studied how actinides such as plutonium, americium, and uranium move through the soil and water at Rocky Flats.
АМР	Adaptive Management Plan	Additional water quality sampling and analysis that DOE is conducting, beyond the normal environmental assessments, to inform decisions regarding future breaches of remaining dams.
AOC well	Area of Concern well	A particular type of groundwater well.
В	boron	An inorganic compound that has been found in some surface water and groundwater samples at Rocky Flats.
Ве	beryllium	A very strong and lightweight metal that was used at Rocky Flats in the manufacture of nuclear weapons. Exposure to beryllium is now known to cause respiratory disease in those persons sensitive to it.
Beta radiation		A type of radiation that is more penetrating than alpha (but less penetrating than gamma). Beta particles can be stopped after traveling through 10 feet of air or a thin layer of glass or metal. Some forms of uranium emit beta radiation.
ВМР	Best Management Practices	A term used to describe actions taken by DOE that are not required by regulation but warrant action.
BZ	Buffer Zone	The portion of the Rocky Flats site that was added during production to provide a "buffer" between the neighboring communities and the industrial portion of Rocky Flats. The buffer zone covered approximately 6,100 acres. Most of the buffer zone lands now make up the Rocky Flats National Wildlife Refuge.
CAD/ROD	Corrective Action Decision/Record of Decision	The complete final plan for cleanup and closure for Rocky Flats. The Federal/State laws that governed the cleanup at Rocky Flats required a document of this sort.
ССР	Comprehensive Conservation Plan	The refuge plan adopted by the U.S. Fish and Wildlife Service in 2007.
CDPHE	Colorado Department of Public Health and Environment	The state agency that regulates Rocky Flats.

Acronym or Term	Means	Definition
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	Federal legislation that governs the Rocky Flats cleanup. Also known as the Superfund Act.
cfs	cubic feet per second	A volumetric measure of water flow.
COC	Contaminant of Concern	A hazardous or radioactive substance that is present at Rocky Flats.
COU	Central Operable Unit	A CERCLA term used to describe the DOE-retained lands (about 1,300 acres) at Rocky Flats. The COU overlays the former Industrial Area (where manufacturing activities took place) and contains all engineered elements of the remedy (two landfills and four groundwater treatment systems) and areas of residual subsurface contamination.
CR	Contact Record	A regulatory procedure where CDPHE reviews a proposed action by DOE and either approves the proposal as is or requires changes to the proposal before approval. CRs apply to a wide range of activities performed by DOE. After approval, the CR is posted on the DOE-Legacy Management (LM) website and the public is notified via email.
Cr	chromium	Potentially toxic metal used at Rocky Flats.
CRA	Comprehensive Risk Assessment	A series of analyses that assess human health risks and risks to the environment (flora and fauna).
D&D	decontamination and decommissioning	The process of cleaning up and tearing down buildings and other structures.
DG	Discharge Gallery	The location where the treated effluent of the Solar Ponds Plume Treatment System (defined below) empties into North Walnut Creek.
DOE	U.S. Department of Energy	The federal agency that manages portions of Rocky Flats. The site office is the Office of Legacy Management (LM).
EA	Environmental Assessment	A study required by NEPA (defined below) when a federal agency proposes an action that could impact the environment. The agency is responsible for conducting the analysis to determine what, if any, impacts to the environment might occur due to a proposed action.
EIS	Environmental Impact Statement	An evaluation that is undertaken by a government agency when it is determined, via the EA, that a proposed action by the agency may have significant impacts to the environment.
EPA	U.S. Environmental Protection Agency	The federal agency that regulates Rocky Flats activities.
EEOICPA	Energy Employees Occupational Illness Compensation Program Act	An act passed by Congress in 2000 to compensate sick nuclear weapons workers and certain survivors.

Acronym or Term	Means	Definition
ETPTS	East Trenches Plume	The treatment system near the location of the East Waste
	Treatment System	Disposal Trenches. This system treats groundwater emanating
	,	from the trenches that is contaminated with organic solvents.
		Treated effluent flows into South Walnut Creek.
FC	functional channel	Man-made stream channels constructed during cleanup to help
		direct water flow.
FACA	Federal Advisory Committee	The federal law that regulates federal advisory boards. The law
	Act	requires balanced membership and open meetings with
		published Federal Register meeting dates.
<b>Gamma Radiation</b>		The most penetrating type of radiation at Rocky Flats. Thick,
		dense shielding is necessary to protect against gamma rays.
		Americium (Am) is a strong gamma emitter.
GAO	Government Accountability Office	Congressional investigative office that reports to Congress.
g	gram	A metric unit of mass.
gpm	gallons per minute	A volumetric measure of water flow.
GWIS	Groundwater Intercept	A below-ground system that directs contaminated groundwater
	System	toward the Solar Ponds Plume and East Trenches Plume
		Treatment Systems.
IA	Industrial Area	The central core of Rocky Flats where all manufacturing activities
		took place. The IA covered 385 of Rocky Flats's 6,500 acres.
IC	Institutional Control	Administrative and legal controls employed to protect the
		integrity of the remedies in place and minimize the potential for
		human exposure to residual contamination.
IGA	intergovernmental	A cooperative agreement between local governments that
	agreement	establishes the framework of the Stewardship Council.
IHSS	Individual Hazardous	A name given during cleanup to a discrete area of known or
	Substance Site	suspected contamination. There were formerly over two hundred
		IHSSs at Rocky Flats.
ITPH	interceptor trench pump	The location where contaminated groundwater collected by the
	house	interceptor trench is pumped to either the Solar Ponds Plume
		Treatment System or the East Trenches Plume Treatment System.
L	liter	Metric measure of volume (slightly larger than a quart).
LANL	Los Alamos National	One of the US government's premier research institutions located
	Laboratory	near Santa Fe, NM. LANL is continuing to conduct highly
		specialized water analysis for Rocky Flats. Using sophisticated
		techniques, LANL is able to determine the percentages of both
		naturally occurring and man-made uranium, which helps to
		inform water quality decisions.
LHSU	lower hydrostratigraphic	Hydrogeological term for deep unweathered bedrock that is
	unit	hydraulically isolated from the upper hydrostratigraphic unit (see
		UHSU). Data show that site COCs have not contaminated the
		LHSU.
LM	Legacy Management	DOE office responsible for overseeing activities at closed sites.

Acronym or Term	Means	Definition
LMPIP	Legacy Management Public Involvement Plan	A plan that follows DOE and EPA guidance on public participation and outlines the methods of public involvement and communication used to inform the public of site conditions and activities. It was previously known as the Post-Closure Public Involvement Plan (PCPIP).
O&M/OM&M	Operations, monitoring, and maintenance	Term that describes ongoing activities at Rocky Flats.
MOU	Memorandum of Understanding	The formal agreement between EPA and CDPHE specifying that CDPHE is the lead post-closure regulatory agency with EPA providing assistance when needed.
MSPTS	Mound Site Plume Treatment System	The remediation system in place that is designed to treat groundwater contaminated with organic solvents emanating from the Mound Site (a portion of Rocky Flats where waste barrels were buried). Treated effluent flows into South Walnut Creek.
NEPA	National Environmental Policy Act	Federal legislation that requires the federal government to perform analyses of environmental consequences of major projects or activities.
nitrates		Contaminant of concern originating from Solar Ponds wastes.  Nitrates have been detected in the North Walnut Creek drainage.  Nitrates are very soluble in water and move readily through the aquatic environment.
Np	neptunium	A man-made radioactive isotope that is a by-product of nuclear reactors and plutonium production.
NPL	National Priorities List	A list of Superfund sites. The refuge lands were de-listed from the NPL, while the DOE-retained lands are still on the NPL because of residual groundwater contamination and associated remediation activities.
NWCS	North Walnut Creek Slump	Slumping observed on the hillside east of the Solar Ponds Plume Treatment System.
OLF	Original Landfill	Hillside dumping area of about 20 acres that was used from 1951 to 1968. The OLF underwent remediation with the addition of a soil cap and groundwater monitoring locations.
OU	Operable Unit	A distinct area within a cleanup site. These areas may address geographic areas, specific problems, or medium (e.g., groundwater, soil) where a specific action is required.
PCE	perchloroethylene (a.k.a. tetrachloroethylene)	A volatile organic solvent used in past operations at Rocky Flats.
pCi/g	picocuries per gram	A unit of radioactivity in soil.
pCi/L	picocuries per liter	A unit of radioactivity in water. CDPHE's regulatory limit for Pu and Am in surface water at Rocky Flats is 0.15 pCi/L. This standard is 100 times stricter than the EPA's drinking water standard.
PLF	Present Landfill	Landfill constructed in 1968 to replace the OLF. During site remediation, the PLF was closed under RCRA regulations with an extensive cap and monitoring system.

Acronym or Term	Means	Definition
РМЈМ	Preble's Meadow Jumping Mouse	A species of mouse found along the Front Range that is on the endangered species list. There are several areas in the Refuge and COU that provide adequate habitat for the mouse, usually found in drainages. Any operations that are planned in potential mouse habitat are strictly controlled.
POC	Point of Compliance (surface water)	A surface water monitoring location at Rocky Flats where contaminant concentrations must be in compliance with federal and state standards for hazardous constituents. Violations of water quality standards at the points of compliance could result in DOE receiving financial penalties.
POE	Point of Evaluation (surface water)	A surface water monitoring location at Rocky Flats where water quality is monitored. There are no financial penalties associated with water quality exceedances at these locations, but DOE may be required to develop a plan of action to improve the water quality.
POU	Peripheral Operable Unit	A CERCLA term used to describe the 4,800-acre area surrounding the Central Operable Unit.
Pu	plutonium	A metallic substance that was fabricated to form the core, or "trigger", of a nuclear weapon. Formation of these triggers was the primary production mission of the Rocky Flats site. There are different forms of plutonium, called isotopes. Each isotope is known by a different number, such as plutonium 239 (Pu-239) and plutonium 241 (Pu-241). Pu-239 is the primary radioactive COC at Rocky Flats.
RCRA	Resource Conservation and Recovery Act	Federal law regulating hazardous waste. In Colorado, EPA delegates to CDPHE the authority to regulate hazardous wastes.
RFCA	Rocky Flats Cleanup Agreement	The regulatory agreement that governed cleanup activities. DOE, EPA, and CDPHE were signatories.
RFCAB	Rocky Flats Citizen Advisory Board	The group formed as part of DOE's site-specific advisory board network. The RFCAB provided community feedback to DOE on a wide variety of Rocky Flats issues from 1993 through regulatory closure in 2006.
RFCLOG	Rocky Flats Coalition of Local Governments	The predecessor organization of the Rocky Flats Stewardship Council.
RFETS	Rocky Flats Environmental Technology Site	The moniker for Rocky Flats during cleanup years.
RFLMA	Rocky Flats Legacy Management Agreement	The post-cleanup regulatory agreement between DOE, CDPHE, and EPA that governs site activities. The CDPHE has the lead regulatory role, with support from EPA as required.
RFNWR	Rocky Flats National Wildlife Refuge	The 4,000 acres of Rocky Flats where unrestricted use is allowed. This land is now a wildlife refuge.
RFSOG	Rocky Flats Site Operations Guide	The nuts-and-bolt guide for post-closure site activities performed by DOE and its contractors.

Acronym or Term	Means	Definition
RSAL	Radionuclide Soil Action Level	Concentration of radionuclide in soil above which remedial action should be considered so that people are not exposure to radiation doses above permitted levels.
SEP	Solar Evaporation Ponds	An area of Rocky Flats used in the 1950s to hold excess wastewater generated during manufacturing operations.  Wastewater that could not be treated in the onsite treatment plant was sent to open-air holding ponds where solar energy was utilized to evaporate and concentrate the waste. The original SEPs were unlined, and substantial quantities of uranium and nitrates made their way into groundwater. As a result, the Solar Ponds Plume Treatment System was constructed to treat contaminated groundwater before it emerged as surface water in North Walnut Creek.
SID	South Interceptor Ditch	A water feature designed to intercept runoff from the southern portion of the COU. The SID flows from west to east into Pond C-2. Woman Creek water does not enter Pond C-2, but is diverted around Pond C-2 through the Woman Creek Diversion Canal.
SPPTS	Solar Ponds Plume Treatment System	Engineered system designed to treat groundwater contaminated with uranium and nitrates. The nitrates originate from the former solar evaporation ponds, which had high levels of nitric acid. The uranium is primarily naturally occurring. Effluent from the SPPTS flows into North Walnut Creek.
SVOCs	semi-volatile organic compounds	Organic compounds that are not as volatile as solvent-related VOCs. SVOCs are found in many environmental media at Rocky Flats. They are found in materials like oil, coal, asphalt, and tar.
TCE	trichloroethylene	A volatile organic compound used as a solvent in past site operations. TCE is also a degradation product of PCE.
U	uranium	Naturally occurring radioactive element. There were two primary isotopes of U used during production activities. The first was enriched U, which contained a very high percentage (>90%) of U-235 and was used in nuclear weapons. The second isotope was U-238, also known as depleted uranium. U-238 has low levels of radioactivity.
ug/L or μg/L	micrograms per liter	A unit of contaminant concentration in water.
UHSU	upper hydrostratigraphic unit	A hydrogeological term describing the surficial materials and weathered bedrock found at Rocky Flats. The UHSU is hydraulically isolated from the lower hydrostratigraphic unit (see LHSU). Groundwater in some UHSU areas of Rocky Flats is contaminated with site-related COCs, while groundwater in other UHSU areas is not impacted. All groundwater in the UHSU emerges to surface water before it leaves Rocky Flats.
USFWS	United States Fish & Wildlife Service	The agency within the US Department of the Interior that is responsible for maintaining the nation-wide system of wildlife refuges, among other duties. The regional office is responsible for the RFNWR.

Acronym or Term	Means	Definition
VOC	volatile organic compound	These compounds include cleaning solvents that were used in the manufacturing operations at Rocky Flats. The VOCs used at Rocky Flats include carbon tetrachloride (often called carbon tet), trichloroethene (TCE), perchloroethylene (PCE), and methylene chloride.
WCRA (or "the Authority")	Woman Creek Reservoir Authority	The group composed the cities of Westminster, Northglenn, and Thornton. These cities use Standley Lake as part of their drinking water supply network. Surface water from Rocky Flats formerly flowed through Woman Creek to Standley Lake, but the Woman Creek Reservoir was constructed to sever that connection. The Authority has an operations agreement with DOE to manage the Woman Creek Reservoir.
wqcc	Water Quality Control Commission	State board within CDPHE tasked with overseeing water quality issues throughout the state. DOE has petitioned the WQCC several times in the last few years regarding water quality issues.
WRW	Wildlife Refuge Worker	User scenario on which exposure risks are calculated.
ZVI	zero valent iron	A type of fine iron particles formerly used to treat VOCs in the ETPTS and MSPTS.