

ROCKY FLATS STEWARDSHIP COUNCIL
Monday, January 26, 2015, 8:30 AM – 11:30 AM
Rocky Mountain Metropolitan Airport, Terminal Building, Mount Evans Room
11755 Airport Way, Broomfield, Colorado

Board members in attendance: Mark McGoff (Director, Arvada), Sandra McDonald (Alternate, Arvada), Lisa Morzel (Director, City of Boulder), Tim Plass (Alternate, City of Boulder), Carl Castillo (Alternate, City of Boulder), Megan Davis (Alternate, Boulder County), Sharon Tessier (Alternate, Broomfield), David Allen (Alternate, Broomfield), Laura Weinberg (Director, Golden), Pat O’Connell (Alternate, Jefferson County), Joyce Downing (Director, Northglenn), Shelley Stanley (Alternate, Northglenn), Chris Hansen (Alternate, Superior), Emily Hunt (Alternate, Thornton), Bob Briggs (Director, Westminster), Mary Fabisiak (Alternate, Westminster), Cathy Shugarts (Alternate, Westminster), Jeannette Hillery (League of Women Voters), Roman Kohler (Rocky Flats Homesteaders), Arthur Widdowfield (Director, Rocky Flats Institute & Museum), Ann Lockhart (Alternate, Rocky Flats Institute & Museum), Nancy Newell (citizen).

Stewardship Council staff members and consultants in attendance: David Abelson (Executive Director), Barb Vander Wall (Seter & Vander Wall, P.C), Rik Getty (Technical Program Manager), Erin Rogers (consultant).

Attendees: Josh Schlossberg (freelance reporter), Josh Zaffos (High County News), Mike DiPardo (citizen), Bonnie Graham Reed (citizen), Marian Whitney (citizen), LeRoy Moore (Rocky Mountain Peace & Justice Center), Judith Mohling (Rocky Mountain Peace & Justice Center), Robert Del Tredici (Atomic Photographers Guild), Jan Stevenson (Walnut Creek HOA), Pat Hay (citizen/Arvada), Ramon Parish (citizen/Superior), Dale Simpson (Energy Employee Advocate), Michelle Gabrieloff-Parish (citizen/Superior), Alesya Casse (citizen), Erik Sween (citizen), Marc Roberson (citizen), Ted Ziegler (citizen), Nancy McNally (citizen/Westminster), Harvey Nichols (citizen), Art Burmeister (citizen), W. Gale Biggs (citizen), Anne Fenerty (citizen), Mickey Harlow (citizen/Arvada), Shirley Garcia (City & County Broomfield), Hannah Mullen (Rep. Perlmutter), Jeremy Rodriguez (Rep. Perlmutter), Stuart Feinhor (Rep. Polis), Ezra Sackett (Rep. Polis), Karen Reed (DOE-LM), Gwen Hooten (DOE-LM), Bob Darr (SN3), Jody Nelson (SN3), John Boylan (SN3), David Wood (SN3), Linda Kaiser (SN3), Jim Rada (CO Water Quality Control), Gordon Pierce (CDPHE), Carl Spreng (CDPHE), Walter Avramenko (CDPHE), Vera Moritz (EPA), David Lucas (USFWS), USFWS burn staff

Note: SN3 is the new name for Stoller, the Legacy Management contractor

Convene/Agenda Review

Chair Joyce Downing convened the meeting at 8:38 a.m. The first order of business was introductions of Board members and the audience. She then announced that the agenda was being modified to add a public comment session for those comments related to the proposed burn at Rocky Flats would occur prior to the burn briefing as USFWS would be in attendance at that

time. She noted that the Executive Committee had reviewed agenda at their meeting, and that there had been quite a bit of discussion about it. She said some citizens also attended, and noted that these meetings are open to anyone wishing to attend.

Election of Stewardship Council Officers for 2014

The next item was the election of officers for 2015. The board must elect a Chair, Vice Chair, and Secretary/Treasurer each year. As provided in the bylaws, the terms commence starting at this meeting. There are no limitations as to the number of terms one can serve.

Prior to the meeting, three people had expressed an interest in serving as officers for 2015. These were Jeannette Hillery as Secretary/Treasurer, Lisa Morzel as Vice Chair, and Joyce Downing as Chair. Joyce asked if any other directors were interested in being considered for one of the positions. No one replied. Lisa Morzel encouraged people to participate in Executive Committee, and noted that the time commitment was not large. Bob Briggs moved to close the discussion and approve Joyce Downing as Chair, Lisa Morzel as Vice Chair and Jeannette Hillery as Secretary/Treasurer. The motion was seconded by Roman Kohler. The motion passed 14-0.

Consent Agenda

Chris Hanson moved to approve the October 27, 2014 Board minutes and the checks. The motion was seconded Jeannette Hillery. The motion to accept the minutes and checks passed 14-0.

Approval 2015 Meeting Dates and Notice Provisions Resolution

Each year the Board is required to adopt a resolution establishing the meeting dates for the given year. The Board identified the following meeting schedule for 2015:

January 26 (fourth Monday of the month)
April 6 (first Monday of the month)
June 1 (first Monday of the month)
September 14 (second Monday of the month)
October 26 (fourth Monday of the month)

Lisa Morzel moved to approve the resolution and meeting notice provisions. The motion was seconded by Chris Hanson. The motion passed 14-0.

Approve letter to Colorado Congressional Delegation (re)introducing the Rocky Flats Stewardship Council

At the October meeting, the Board agreed to write the Colorado Congressional Delegation reintroducing the Rocky Flats Stewardship Council. The letter was vetted with the executive committee and reflects its input and edits.

David Allen commented that the third paragraph was lacking information about the Board's role in reviewing monitoring data from post closure activities, including water quality aspects. He suggested adding wording to the effect of 'reviewing continued testing and monitoring to ensure that the site remains safe for public health and environment' and to remove 'refuge management'. David Abelson pointed out that the language in the letter was copied from the Board's mission statement. Emily Hunt suggested adding a paragraph below the third one to accommodate David's suggestion. David Abelson said he would draft this new paragraph based on this discussion, and add it before sending the letter.

Roman Kohler moved to approve the letter as modified. The motion was seconded by Lisa Morzel. The motion passed 14-0.

Executive Director's Report

David Abelson began his update by acknowledging and welcoming the many members of the public who were in attendance at this meeting.

He moved on to an update regarding benefits for former Rocky Flats workers. He noted that staff members from U.S. Representatives Perlmutter and Polis offices were in the audience. He reported that, along with Senator Udall and U.S. Representative Whitfield from Kentucky, the two Congressmen successfully introduced an amendment to the 2015 Defense Authorization Act mandating the creation of an independent advisory board to increase transparency and ensure benefits applications are reviewed accurately and expeditiously. They have been working on this issue for the past few years. David noted that this was a very important achievement.

David announced that the Board's required Triennial Review was complete, and thanked everyone for getting their tasks done early.

David moved on to an update on the Board's involvement in the discussions related to a planned prescribed burn at Rocky Flats. He noted a significant amount of increased community concern and engagement, all directed towards questions and concerns about contamination levels on the Refuge and the corresponding effects of fire on human health. He said that the governments of Superior, Arvada and Northglenn had drafted letters opposing the burn; those letters were circulated to the Board prior to the meeting. David noted some upcoming opportunities for cities and counties to engage the Colorado congressional delegation in Washington, DC. He said that there had not been many issues recently that required this kind of engagement with the delegation, and encouraged the governments to raise any concerns directly at this time. David also noted that Dan Ashe, Director of USFWS, was very approachable and was also someone to whom the governments could express any concerns. He said he was leaving the next day for meetings in Washington, DC with both DOE-LM Director Dave Geiser and staff from the Congressional delegation, and would carry the Board's message. David noted that there had been some Congressional staff changes so his trip provides a good opportunity to meet the new staff.

David reported that the Board's Quarterly financial report would be distributed soon.

Barb Vander Wall, the Board's attorney, circulated the annual Oaths of Office for Board Members. She asked that people let her know if there were any errors or questions. She said Members could either have the person sitting next to them witness their signatures and give them back to her at the meeting, or they could return it to the office later.

Public Comment

The next item on the agenda was a public comment session for items not related to the proposed prescribed burn.

Mickey Harlow began by summarizing her background with Rocky Flats issues, noting her involvement in overseeing closure, and having a water quality background. She read a statement regarding the importance for the Stewardship Council to begin questioning information provided by CDPHE, EPA and DOE related to the engineered treatment systems for groundwater contaminated plumes. Mickey quoted Judge Finesilver's charge of responsibility to the Special Citizen Grand Jury 89-2 convened August 1, 1989, to hear the facts in the Rocky Flats Case regarding Nuclear Crimes at the Rocky Flats Nuclear Weapons Plant. She asked the members of the Council to begin questioning whether the information provided to them by the CDPHE, EPA and DOE related to the engineered treatment systems for groundwater, contaminated plumes, onsite monitoring and management are designed and performing removal of contamination and meeting onsite water quality standards.

She also discussed her position that, because of impacts on Woman Creek Reservoir, the dams at Rocky Flats should not be removed. She said local governments should bring legal action to stop this from happening. Next, she addressed her concerns regarding surface water standards being used at the site. She questioned both the use of the drinking water standard and a rolling average methodology. Mickey also submitted the following comment to be posted on the Stewardship Council website (see http://rockyflatssc.org/public_comment/Harlow%20012715.pdf)

Ted Ziegler spoke next, and introduced himself as a former safety representative at Rocky Flats. He said he was working with Terrie Barrie next month and would be able to provide documentation of Rocky Flats correspondence related to safety and contamination during and after his 13 years there. He said he got the 'brush-off' from DOE regarding his information. Lisa Morzel asked him to elaborate. He said he began working at the site in 1982 and was a Union steward, appointed to represent safety issues. He retired in 1995. He said he did not have enough resources to be able to share the information he had. Lisa asked what resources he needed. He said he had hard copies of documents, but could not make enough copies to share. Lisa asked who Terrie Barrie was. Ted said she was a highly recommended advocate from the Alliance of Nuclear Worker Advocacy Groups. Tim Plass asked Ted to provide his information to the Board before its next meeting. Ted said he would coordinate with Roman Kohler. Tim also suggested scanning the documents as a way to work with limited resources.

Paula Elofson-Gardine submitted the following comment to the Stewardship Council for posting on the website (see http://rockyflatssc.org/public_comment/Gardine%20012715.pdf)

DOE Quarterly Update

George Squibb began the review of activities that took place during the third quarter of 2014. Activities included surface water monitoring, groundwater monitoring, ecological monitoring, and site operations (inspections, maintenance, etc.). All reports available on the Rocky Flats website.

He began with a quick review of the regulatory requirements for quarterly monitoring and reporting at Rocky Flats. This program is detailed in the Rocky Flats Legacy Management Agreement (RFLMA) and was designed to document that the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedy continues to be protective.

The primary goal is protection of surface water. Response actions were developed under the final remedy in order to meet this goal. The response actions include the following requirements:

- Maintain two landfill covers
- Maintain four groundwater treatment systems
- Conduct surface water and groundwater monitoring
- Manage physical controls
 - Signage
 - Restricted access
- Manage institutional controls
 - No building construction or occupation
 - Restrictions on excavation and soil disturbance
 - No consumption or agricultural use of surface water
 - No groundwater wells except for monitoring
- Protect the landfill covers and engineered remedy components

Surface Water – George Squibb

George began by displaying a map of the monitoring locations onsite and what they monitor for. He then summarized quarterly performance monitoring at the landfills.

At the Original Landfill (OLF), which is located on Woman Creek, all sampling results met water quality standards during the quarter. At the Present Landfill (PLF), the routine quarterly sampling result for arsenic was 15.0 µg/L, which was above the RFLMA standard of 10 µg/L. This result triggered increased sampling frequency (monthly) per RFLMA evaluation protocols. The first monthly sampling result (August 19, 2014) was 6.8 µg/L (back below the RFLMA standard). Sampling frequency reverted back to quarterly per RFLMA protocols.

George next spoke about Point of Evaluation (POE) and Point of Compliance (POC) monitoring. All RFLMA POE and POC analyte concentrations remained below reporting levels throughout the third quarter

David Allen asked about the exceedance of the 30-day average at WALPOC. George said that the investigation included a geochemical study was currently under review and would be

released in early spring. Mickey Harlow said that a uranium speciation report was supposed to be completed at the end of 2014 and asked why it had not been completed. George said that some of this information is reported routinely. The information she was referring to will be included in the geochemical report that he just mentioned. Anne Fenerty asked if there was a fence around the site. George said there was one, however it was not required. He said there were also signs in place. Ted Ziegler said that he was concerned about construction of the Candelas neighborhood because they were building right up to the fence line. He said he had also seen evidence of trespassing in that area. George noted that the area he was referring to was part of the Wildlife Refuge. Another citizen asked about other contamination that resulted from spraying or trench burials. George explained that years of documentation shows the extent of contamination onsite and the site monitors areas where it is found. A citizen asked if the so-called 'bathtub ring' in the ponds was being evaluated. George said it was just made up of minerals, and had been there since closure. Another citizen asked for clarification of the purpose of the fence as an institutional control. Carl Spreng (CDPHE) explained that institutional controls only apply to the Central Operable Unit (COU) to protect the treatment systems, not the Refuge, and that the information can be found in several locations online. George added that extensive study determined that workers with an ongoing presence onsite are safe, so even though trespassing is illegal, it would not be unsafe. Another attendee asked about what would happen if kids from Candelas climbed over the fence into the COU and tampered with monitoring systems, and whether the site would lose the ability to know if contamination was being released. George explained that all of the structures were locked and that staff receives automated texts if anything malfunctions, so any disturbance would be known right away. Someone asked what the fence and signs looked like. George said the fences are four-strand barbwire, and that the signs read 'no trespassing', and 'government property'. An audience member stated that the signs should explain why people should stay off site, and that there should be a better fence. George noted that the signs are spaced so that one is always visible from every location. A citizen asked about the possibility of prairie dogs bringing contamination up from the subsurface. George explained that the site has a prairie dog monitoring program, and that any contamination would be found. None has been seen so far.

Groundwater – John Boylan

The third quarter is a light RFLMA sampling quarter. Statistical evaluation of the results will be presented in the Annual Report. John also displayed a map of all of the groundwater monitoring locations. Non-RFLMA monitoring included the treatment systems. At the Solar Ponds Plume Treatment System (SPPTS), microcell and lagoon testing continued. Air stripper maintenance was performed at the Mound Site Plume Treatment System (MSPTS).

At the East Trenches Plume Treatment System (ETPTS), ZVI media was sampled to support disposition. Air stripper maintenance was also conducted, as well as sampling to confirm performance. Work also continued on the ETPTS reconfiguration project work:

- Drained ZVI-filled treatment cells
- Removed ZVI
- Began converting treatment cells for future purposes (influent batch tank, effluent tank)
- Sampled ZVI to support waste disposition

- Began electrical work, construction of air-stripper enclosure
 - Poor-quality soils led to extensive over-excavation, preparation of subgrade soils, minor redesign of enclosure foundation
- Project scheduled to be completed in January 2015

At the SPPTS, several activities took place:

- Continued microcell tests
- Continued pilot-scale lagoon tests (including sampling)
- Maintained pumps, solar/battery power facility
- Worked to improve flow through original treatment cells
- Added plumbing to allow tests of microcells using effluent from pilot-scale lagoons

Mickey Harlow asked if the site could measure VOC's via telemetry. John said they cannot. He said that recent samples have shown that all VOC's are being treated effectively except TCE. Also, turning up the blower in the treatment system brought TCE below the standard.

Site Operations -- Linda Kaiser

Quarterly sign inspections are required as a physical control under RFLMA. All signs were found to be in good condition.

At the OLF, three monthly inspections were performed, as well as weekly inspections of those areas where recent slumping or cracking had been noted. Eight settlement monuments and seven inclinometers were monitored. No significant cracking was noted within the landfill boundaries during the third quarter. Gradual slumping was noted on the east side of the East Perimeter Channel, outside of the landfill boundary. Cracks were filled as required by the monitoring and maintenance plan. Berms were re-graded where necessary, to restore appropriate berm height and to repair damaged berm outfalls.

The ongoing geotechnical engineering review related to the OLF included the evaluation of documents, design concepts, and mitigation procedures related to the OLF. The review did not identify any factors, conditions, or changes in conditions that suggest the current approach is any less valid now than when implemented. Also, the design of the East Perimeter Channel Reconfiguration project was revised, and there was one quarterly inspection of the Present Landfill (PLF).

Mickey Harlow asked whether the engineering report was available to the public. Linda said it was attached to the Quarterly report. Mickey also asked if, after berm work was completed, the area had been reseeded. Linda said it was, and they used coconut matting. Anne Fenerty said when the OLF cap was being discussed, the original plans called for a RCRA closure with a 6 foot-deep cap. She asked what was being done to keep the cover from cracking, sliding and releasing contamination. Linda said that they looked at slope stability as part of a 2008 geotechnical review, and the conclusion was that no large scale sliding was occurring, only some minor movement. A current re-evaluation confirms these findings. Anne asked if the site feels comfortable about the stability of the landfill. Linda said they do. Gale Biggs asked whether

major flood scenarios had been looked at. George said that under the 1,000 year flood scenarios, no significant problems were expected.

Ecology – Jody Nelson

3rd quarter ecology activities included:

- Preble's meadow jumping mouse mitigation monitoring
- Wetland mitigation monitoring
- Revegetation monitoring
- Weed mapping
- Vegetation mapping
- Prairie dog surveying
- Nest box surveying
- Forb nursery monitoring
- Photopoint monitoring
- Herbicide applications (approximately 60 acres treated)

Shelley Stanley asked which weeds were targeted with herbicides. Jody mentioned diffuse knapweed, jointed goat grass, and thistle. He said that biological controls work well, but not on large areas. Tim Plass asked if the site was using any pesticides that contain neonicotinoids, which have been shown to have negative effects on bee populations. Jody was not sure and said he would look into it.

Chris Hanson asked if Jody anticipated the migration of prairie dogs into the COU. Jody said that a couple years after closure, a handful of prairie dogs came across fence, near the southeast corner of the COU. They died in the plague and never came back. He said that it was pretty unlikely they would come back. Chris asked what would be done if they did come back. Jody said that since they cannot be allowed on landfills or areas with buried foundations, the site would consult with the regulators and the Division of Wildlife to make a plan for removal. Mickey Harlow asked if the weeds onsite were Class A or Class B. Jody said they used to have Class A weeds, but now they were all Class B.

Opening Comments: Prescribed Fire at Rocky Flats

USFWS has signaled its intent to conduct a prescribed fire on 700 acres in the southern portion of the Rocky Flats National Wildlife Refuge. Chair Downing asked David Lucas, USFWS Refuge Manager, for a very quick summary of the agency's plans relating to the proposed burn. David said that last summer, USFWS was asked about their plans at Rocky Flats for this year. They mentioned activities related to a prescribed burn, as well as developing plans for visitor facilities. The area being discussed for the burn is approximately 700 acres in the southern portion of the Refuge. He said the agency has policies and procedures in place to conduct the burn safely. He added that they are conducting enhanced public outreach because this fire will be the first they plan on conducting at Rocky Flats.

Public Comment: Prescribed Fire at Rocky Flats

Michelle Gabrieloff-Parish, a resident of Rock Creek in Superior, said she was at the meeting because she was concerned about the burn. She was concerned about the possible uptake in plants of uranium, plutonium, arsenic and beryllium, and potential distribution of these contaminants during a fire. She said she was also concerned about the bare ground left after the fire, combined with high winds, spreading additional contamination. She expressed her thanks to Arvada, Superior, and the Stewardship Council for opposing the burn. She said that she understood the need to manage the prairie, but asked that USFWS please take into special consideration the surrounding community and history of the site. She asked that they look at options instead of fire. She added that she hoped the agency had seen the petition opposing the burn.

Harvey Nichols, a retired biology professor from CU-Boulder, spoke next. He said he performed a study of airborne particles at the site, and that the air sampling equipment was not suited for this purpose. He said they found plutonium-contaminated snowfall, and got an admission from Rockwell about routine small emissions of particles through HEPA filters that were suitable for inhalation. He said that in light of immense half life and health risk of plutonium, he encouraged the Board to reach out to some of the scientists that the site and regulators dismiss as critics. He said former DOE official John Rampe argued that there was no uptake of plutonium in plants, and that was false. Mr. Nichols said that many sources, including EPA, showed uptake. He stated that before the last burn at Rocky Flats, Lisa Morzel had requested testing of plants and that DOE had refused. Carl Spreng also said there were no health implications from operations. Mr. Nichols said that Tim Rhedar with EPA asked to come to his class to clear up misinformation, and that the class 'took him apart'. Nichols said that before any fire is planned, there must be vegetation sampling, as well as proper air sampling equipment. He argued that lack of funding could not be an issue, because they could ask Congress for funding. He suggested that the site look into insect controls, and using goats. According to his own data calculations, there are 5 million plutonium particles in the burn area.

Gale Biggs spoke next. He said that even though a burn would meet regulatory requirements, it would not protect human health. He said that in the past, the air monitors were not able to measure the size of particles coming off site. He added that ductwork, stacks, and equipment onsite were not calibrated. He said that site operators were not getting correct air flow information. Mr. Biggs brought up fugitive emissions vs. stack emissions. He said that employees estimated that 60-90% of site emissions were fugitive. He also referred to the Health Advisory Panel findings, which said that the most dangerous pathway was air. He said that they need to develop a monitor that can accurately measure airborne plutonium before any burn is scheduled.

Mark McGoff noted that the Stewardship Council had already taken a position in opposition to the burn, so he questioned why this was the forum being used for this discussion. Joyce explained that the Board had requested additional information. Tim Plass added the information and discussion was still valuable for Board members to hear. Megan Davis said that it would be helpful to know what other public forums were planned. Bob Briggs asked if the comment limit

was supposed to be three minutes. Chair Downing asked everyone to please be cognizant of time.

Anne Fenerty said that she appreciated the Stewardship Council coming out against the burn. She said people came to this meeting because of concerns with the proposed burn.

Briefing/Discussion on USFWS' Plans to Conduct a Prescribed Fire at Rocky Flats

David Lucas began his presentation on the 'South Woman Creek Prescribed Burn'. He started out by noting that most wildfires are started by humans. He displayed a photo of an area that burned in 2002 in the Rock Creek drainage. The fire was started by a cigarette thrown from a vehicle on Highway 128. He then showed a photo of the same area six months later, which demonstrated how quickly the area was restored.

The Rocky Mountain Arsenal (RMA) Complex within USFWS also manages Rocky Flats. David explained that 12 USFWS employees work in the RMA complex. He then reviewed the 'RMA Doctrine'. The doctrine states: 'We do things well, we do things safely, and we treat everyone with respect. It also requires that management decisions based on:

1. Sound science and best professional judgment;
2. Following all laws & regulations; and
3. Working with appropriate stakeholders

David reviewed the contents of the Rocky Flats National Refuge Act of 2001. Among the 'Purposes' of the Refuge are:

- Restoring and preserving native ecosystems
- Providing habitat for, and population management of, native plants and migratory and resident wildlife

Sec. 3178 of the Refuge Act also required development of a Comprehensive Conservation Plan (CCP). This plan and its corresponding Environmental Impact Statement included substantial involvement from the public, the State and local governments. David provided an excerpt from CCP for management of xeric tallgrass prairie (p. 78):

- Use prescribed fire in conjunction with other restoration tools such as grazing, mowing, herbicides and biological controls to simulate natural processes that once existed at Rocky Flats.
- Suppress all wildfires.
- Use prescribed fire in areas identified in Figure 18. Prescribed fire may be used in grassland areas at a frequency of 5 to 7 years (riparian areas 5 to 10 years). These can occur for two years in a row but not less frequently than once every 10 to 12 years. Burn areas will average about 200 to 500 acres per year of both xeric and mixed grasslands and portions of riparian communities across the site.

- Monitor ecological conditions before and after the application of any specific restoration tool.

David reviewed the goals for the prescribed burn:

- Plan and complete a safe prescribed burn
- Emulate (simulate) historic fire occurrence in the Rocky Flats grasslands to improve heterogeneity of plant species and reduce the spread of invasive weeds
- Reduce light fuel loads along the Refuge's southern boundary to prevent the risk of wildfire and private property loss
- Indirect Benefits = emergency management planning; training for RMA & local cooperators

David said that USFWS follows Federal Wildland Fire Policy. The Fire Management Plan for the RMF District says that all wildfire is suppressed; prescribed fire can be utilized to reduce hazardous fuels and to help achieve resource management goals as defined in land management plans; and that RMA fire crews will coordinate on any suppression occurring on DOE lands. He mentioned that some areas have recommended 5-7 year fire intervals, and some say 'not less frequently' than 10-12 years.

Prior to the burn, the agency will develop a Prescribed Fire Plan. This plan will be prepared and reviewed by staff at an appropriate experience level and approved by the agency administrator. All relevant regulations will be followed, and these include NEPA, NHPA, ESA, and other applicable regulations (i.e., CDPHE smoke permit). USFWS also requires that there be contingency resources onsite on all burns.

He then reviewed the history of fires at Rocky Flats since 1995. There have been 12 fires, with the largest burning between 300 and 999 acres. He also discussed various alternatives to fire (grazing, mowing, herbicide), and which goals would be accomplished by each (emulating historic conditions, improving species heterogeneity, reducing invasive species, reducing fuel load). He noted that the agency believed that grazing was also off the table because of public concerns about contaminated animals/euthanization. He added that the USFWS is considering additional options (e.g., increased mowing; smaller burn unit; burning Section 16 lands; etc.)

David said that because this would be the first prescribed burn conducted by the USFWS at the Refuge, the USFWS, DOE, CDPHE, and EPA would conduct greater public outreach on why we burn, how we burn, and why it is safe to burn. He said that a formal communications plan had been developed. As part of this, they plan to conduct an open house in March 2015 near the Refuge where the general public can visit to learn about the USFWS fire program, prescribed fire, and the specifics of the 2015 burn. He added that the smoke management permit for this burn requires the USFWS notify the public at least 24 hours but no more than 120 hours before planned ignition.

He concluded by saying that the USFWS manages over 500 million acres, including many controversial sites with similar issues. He said that the bottom line was that they were in a

planning process right now, and still making decisions. He said one of the primary reasons for the timing of the fire is the status of the Candelas development. He said that they can burn safely when houses are there, but that it is easier to do before they are constructed. Public notification will include a press release and reverse 911 for neighbors. He said they will be working with meteorologists to make sure the smoke plume will avoid neighborhoods. He said there is a video on their Facebook page (<https://www.facebook.com/RMANationalWildlifeRefuge>) that people can watch. He added that on the day of the burn, they start with a test burn, and the burn will be completed by 4 pm.

Carl Spreng (CDPHE) next spoke about the role of the State with respect to the burn. The State will confirm the protectiveness of the remedy. They will also provide information to the USFWS about contaminant levels in soil, exposure pathways and previous burns. Finally, they will review and approve the smoke management permit.

The protectiveness of the remedy is defined in the following ways:

- Notice of Intent: "...no hazardous substances, pollutants, or contaminants occur in the Peripheral OU above levels that allow for unlimited use and unrestricted exposure."
- CAD/ROD: Emissions from a fire, even a scenario involving a fire in the 903 Pad area, will be much lower than those requiring further action.

Carl showed a map of the southern area of the Refuge with associated contaminant levels depicted. Carl noted that 32 samples from 28 locations had been previously collected, and except for one sample, average concentrations were essentially at background levels. The one elevated level was 4.6 pCi/g. Upon resampling of that location, the sample was at background. Carl also introduced Gordon Pierce, who was available for more specific questions.

Board Questions

Tim Plass asked if the fire management plan included any outreach to local governments. David Lucas said it would be a press release only, but commented on the need to build relationships and to ensure better communications in future. Tim said that local governments did not have input into the Fire Management Plan, and suggested that be corrected. David Lucas noted that there was no formal rule-making or public hearing for this decision. He said that his agency values public input and will be talking about the plans for burning. However, the legal construct was already put in place that instructs the agency to carry out burns on the Refuge (Refuge Act). Tim asked if there is an opportunity to influence how the fire is done. David said there was, and it needs to be taken in the context of the complete discussion and decision. Megan Davis commented that from David's presentation, it appears that grazing is off the table. She said she would like to have a dialogue about this issue. David said something like grazing would take a long time to set up, so would not be a near term decision.

Lisa Morzel asked how the proposed burn area was determined. David said they looked at physical conditions such as physical barriers. He added that they should be able to do the full 700 acres in one day in excellent conditions. He said they were considering adding Section 16 to the

burn area as well because it is also in bad shape. Lisa asked if there would be any air quality monitoring, or attempts to establish baseline air quality levels. David said that CDPHE was considering monitoring during the burn. He added that they are the experts in monitoring, not the USFWS. Lisa noted that the Stewardship Council members represent about 900,000 citizens, and took a unanimous position opposing the burn due to public concern about the impacts of contamination on human health. She said they take their roles as stewards very seriously, and she hopes that the USFWS will take the input in a constructive way and look at alternatives.

David Allen asked Carl if the smoke permit would be required if Colorado was not a non-attainment area for ozone. Gordon Pierce answered that a permit would still be required. The permit says if levels are high, the burn cannot happen. He added that monitors in this area were removed because the levels were so low.

Chris Hanson followed up on David Lucas' grazing comments and asked why animals would need to be euthanized after grazing. David said he expected there would be public controversy and this might be demanded. Chris asked what the next steps were before the burn could take place. David said all they needed to do was to complete their internal documentation. Megan Davis asked what would happen if the COU were affected during the fire. David said that contingency planning was very important. In this event, the burn would be declared a wildfire. They will be coordinating with DOE. He added that in this habitat it would be pretty quick suppression effort. He said they are more concerned about it going south, not toward the COU.

David Abelson asked at what point USFWS' plan goes into execution phase, or shifts from a proposal to a plan. David Lucas said that there will be a 'go-no go' decision closer to the event. David Abelson asked about other options being considered and how they might come into play. David Lucas said that the decision to utilize prescribed burns was made in 2005. He first heard there was some opposition in October. He said he would love clarification about why there seems to be a change in opinion from what was discussed in 2005. David Abelson said he recalls that local governments largely though not unanimously supported the CCP in 2005, through some raised concern about using fire as management tool. David Lucas said that since concentrations are at background levels, it is his opinion that the opposition seems somewhat arbitrary in terms of the science.

Laura Weinberg asked what the timeframe for the burn was. David Lucas said they would look at when good conditions become available, such as snow melt and grass drying out. They are looking at mid-March through April. He said they do not want the grass to get too green either because it will not burn well. She asked if the air permit has dates for which it is valid. He said the permit is for March 1-October 31. Mary Fabisiak asked David to explain what he meant about the vegetation being in bad shape, and whether this can be quantified. He said there was no specific way to quantify. David was asked how close to the south Refuge boundary the fire would go. He said that a 30-foot fire break would be mowed in this area. He was then asked if this fire break could be made larger. He said it was possible. He added that the smoke permit has wind direction restrictions; they cannot burn if wind is from N, NW, or NE.

Cathy Shugarts asked if there were any plans to protect water quality by preventing erosion after the fire. David said that in spring grasses grow back in weeks, so there are no requirements for

erosion plans. He clarified that a wildfire would burn deeper, cause worse conditions and may require erosion control in affected areas.

Megan Davis asked if they were going to host any public meetings about the fire. David said they were just planning to go out and talk to people who are interested.

Public Comment

Harvey Nichols referred to CDPHE monitoring during the fire, and said he was told that a couple weeks would be enough time to massage the data. He said Carl Spreng had previously commented that plutonium was no more of a threat to health than dry cleaning fluid, and asked if that was still his position. Carl said that comment was taken out of context while he was attempting to explain the risk assessment process. David Lucas said he found Mr. Nichols' comments offensive.

Mickey Harlow thanked David Lucas for answering all of her questions, and that she found it to be very helpful and forthright. A woman in the audience brought up the topic of using goats as an alternative to burning and wanted to get a show of hands in support of grazing as an option. Chair Downing said that was not necessary.

David Lucas was asked if there were plans for burning other areas within the Refuge. He said that some areas on the western side have not yet burned recently, and probably needs it every couple of years.

Another audience member asked if budgetary restrictions were the reason they were not testing intake of plants. She said this is what would show whether the burn would be safe. David Lucas explained that this had already been done, but what people had been hearing earlier in the meeting was that some members of the public did not accept the results.

Jeannette asked whether it was correct that deer and elk autopsies at Rocky Flats had shown no contamination issues. David said that was correct.

Mickey Harlow asked if USGS does any sampling now or if they could. Lisa Morzel said she could check with people. Carl Spreng said that there had been lots of uptake studies, many of them by CSU.

Another citizen spoke up to thank the Stewardship Council and the USFWS. She asked how personnel would protect themselves during the fire. David said that nothing special is required, because the land is not use-restricted. They will be wearing normal wildland fire gear. The National Wildlife Refuge regional fire coordinator has been involved in planning and all safety concerns have already been brainstormed. He said there are numerous checklists and procedures, and assured everyone that they will not put people in harms way. He added that cost is not a restraint. He said the Refuge will burn either way, so they are working to make it happen under optimal conditions.

Judith Mohling asked if they use fuel to get the fire burning, and how they know which plants will come back. David said that they use diesel or regular gas to start the fire. In terms of fire effects, the US Forest Service provides information about species reaction to fire. He said most of the area is grasses, and the root systems will not be burned, so in a week to 10 days, they will see some growth. For the more susceptible areas (around creeks, cottonwoods, etc) they will be doing protection around them. Willows will re-sprout if burned.

Updates/Big Picture Review

Lisa Morzel suggested that the Board forward its position statement regarding the burn to Congressman Perlmutter. David Abelson said it has been previously forwarded to his staff. Tim Plass suggested that the Board also meet to convey the message in person. David Allen asked whether the concerns of the Board were still same as they were in October when the letter was written. Laura Weinberg noted that the Board has received more information, and had heard from the USFWS. She did not think some of the concerns from the letter, notably the supplemental information requests, were still relevant. David Abelson suggested that he could draft a letter conveying the Board's position, as well as reflecting the current status of information they have received. It was discussed that the motion could charge the Executive Committee to work with David to write and send the letter, prior to official approval of the letter at next meeting. Laura Weinberg suggested that the letter clarify that the Board still believes that public outreach has not been sufficient, and that alternatives have not been fully explained. David clarified that he would only include the actual position paragraph of the letter, and would send it out to the Board for comment. Emily Hunt requested that the Board review the CCP for the Rocky Flats Refuge, since it was now nearly 10 years old. Lisa Morzel said she was going to make a second motion about this. Megan Davis noted that the CCP would also come up with regard to other issues at Refuge. David Allen said that the Board needed to be clear about the basis of its opposition to the burn.

Lisa Morzel moved that David Abelson and the Executive Committee amend the Board's October letter so that it reflects the current discussion, and send it to the Congressional delegation. Also, the Executive Committee is tasked with meeting with the Congressional delegation to discuss these issues. The motion was seconded by Chris Hanson. The motion passed 12-0.

Lisa Morzel moved that the Board review the CCP and address whether any revisions are needed. The motion was seconded by Jeannette Hillery. The motion passed 12-0.

David Abelson said he would send out a copy of the CCP to Board members. He said he thought the plan was written for a 15-year period, extending through 2020. He said the plans were developed within the overall framework of the Refuge lands fitting into the areas surrounding the site. Tim Plass asked that they also review the Fire Management Plan.

Note: Shortly after this meeting USFWS announced it would not conduct a prescribed fire at the Rocky Flats National Wildlife Refuge in 2015. Accordingly, the aforementioned letter to the Colorado delegation was placed on hold as was a meeting with the Colorado delegation.

April 6, 2015

Potential Business Items

- None

Potential Briefing Items

- Continue discussing proposed prescribed fire at Rocky Flats
- Begin discussing goals for Rocky Flats visitor's center
- DOE pictorial history of Rocky Flats

June 1, 2015

Potential Business Items

- Receive 2014 audit

Potential Briefing Items

- DOE quarterly update
- Overview of post-closure management (what DOE says and why)
- Continue discussing Rocky Flats visitor's center
- Prescribed fire outcomes (as necessary)

Issues to watch:

- Wright Water Engineers Uranium report
- AMP sampling

Member Updates

Murph Widdowfield announced that the Rocky Flats Institute and Museum has put together a bus trip to tour the Trinity site on April 4, which is the only day it is open all year. The cost is \$60 for a 4-day trip, bus transportation, 3 nights lodging, and entry fees to museums. He has sign-up forms available and there is a \$200 deposit due with the rest being paid by mid-March. He said he would email the information to David Abelson.

Lisa Morzel said that the City of Boulder is considering planning a trip to Washington, DC in March to meet with the USFWS. She said anyone could contact her if interested.

The meeting was adjourned at 12:40 p.m.

Respectfully submitted by Erin Rogers.