Appendix A

Common Concern Statements
and
Comments and Responses
on the Draft EA

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Rocky Flats Draft Environmental Assessment (EA)
Common Concern Statements

Many of the comments received on the Draft EA had similar concerns. Rather than address each comment individually, a Common Concern Statement reflecting the intent of these comments, and a corresponding response, have been generated.

General Comment:

1. **There are uncertainties resulting from an insufficient post-closure period of record for assessing hydrologic conditions at the site. More CERCLA review cycles are needed before breaching the terminal pond dams.**

DOE understands from a portion of the public review comments that:

- A portion of the public would like the dams to remain in place so that the dams could continue to be used to some extent to manage surface water prior to release
- The dams may provide a means to address uncertainty regarding whether water quality fully reflects a relatively stable post-closure hydrologic condition.

DOE recognizes that in a cleanup and closure project of the scope completed at Rocky Flats, some level of uncertainty remains. However, DOE has implemented the features of the selected remedy, and the RFLMA Attachment 2 Legacy Management Requirements provide the approach to respond to unanticipated conditions to assure that the remedy remains protective.

Data from the existing approximately five years of post-closure monitoring results have been considered by DOE in developing the EA. Periodic CERCLA reviews are required to be conducted at least every five years. DOE currently has completed two CERCLA periodic reviews, and the next CERCLA five-year review is required to be completed by September 2012. The purpose of the periodic review is to determine whether the remedial actions remain protective of human health and the environment. The previous reviews have resulted in determination that the remedy remains protective. This means that at a minimum, DOE would have 10 years of post-closure monitoring data and another CERCLA five-year review completed prior to the breach of dams A-4, B-5, and C-2 in the 2018- 2020 timeframe. In addition, RFLMA also ensures continuous review of environmental data to confirm protectiveness. DOE is required to continue to monitor and evaluate data in accordance with RFLMA.

As explained in the Draft EA (Executive Summary 1.1, Section 1.1, Section 5.2, and Appendix B), surface water retention is not required at RFS, and the dams are not a functional part of the final CAD/ROD remedy; therefore, the protective measures identified in the remedy do not rely on the continued existence of the dams. The remedy in place at Rocky Flats neither depends on nor is linked to the presence of the ponds.

DOE has considered that hydrologic conditions are affected by the post-closure conditions of the site and may not reach long-term equilibrium (also referred to in comments on the Draft EA as "stabilization") for some time. Hydrologic equilibrium does not mean hydrological conditions will no longer fluctuate, because these conditions are continuously influenced by factors such as precipitation amount, seasonality of the precipitation, and established vegetation. Rather, equilibrium means that the hydrological conditions have stabilized under the post-closure setting. Influences from features or conditions that were eliminated or removed during site closure (such

as buildings, impervious surfaces, importation of water, sewage treatment plant discharge, and storm water conveyances) are no longer evident, and influences from features that were modified through the closure process (such as the remaining subsurface infrastructure) have been incorporated into the hydrologic system. For example, a subsurface building slab may continue to influence groundwater movement, but in a consistent manner somewhat similar to a localized clay layer. To some extent, the retention ponds formed by the dams also influence local hydrological conditions, which won't reach equilibrium until the water is no longer retained.

The fate and transport of residual contaminants was evaluated in the Remedial Investigation/Feasibility Study (RI/FS). This study, as well as other information, including the results of the Comprehensive Risk Assessment (CRA) portion of the RI/FS, was considered by DOE, EPA, and CDPHE in selection of the final remedy.

CERCLA-required periodic reviews and RFLMA-required monitoring, evaluation, maintenance, and reporting will be conducted regardless of the EA determination. This required monitoring has been and will be conducted as long as required by the CAD/ROD and RFLMA.

2. **There is an inability to fully evaluate the effectiveness of the remedy due to the ongoing construction activities, recent operational changes and future plans for phased modifications at landfills and groundwater treatment systems.**

DOE, EPA, and CDPHE (the RFLMA parties) are the agencies charged with the responsibility to evaluate the effectiveness of the remedy. As discussed in the previous response, effectiveness is determined based on whether the remedy remains protective of human health and the environment. Operation, monitoring, and surveillance of the remedy components have resulted in a number of maintenance actions, including actions involving design and construction to maintain, repair, and/or improve operability or future maintenance of engineered components of the remedy.

Engineered components include four groundwater treatment systems and covers for two closed landfills. These types of activities were anticipated for the selected remedy and were considered in the overall operations and maintenance costs in evaluation of the relative cost-effectiveness of the remedy alternatives.

For modifications conducted at groundwater treatment systems; the goals of these modifications, and the results that have been confirmed via monitoring data, have resulted in improvements in treatment effectiveness. Improving groundwater treatment should not be seen as a reason to postpone removal of the ponds, because the ponds are not relevant to the remedy.

As stated in Section 4.2.6 of the Draft EA, the ponds are well downstream of the groundwater treatment systems (and the associated residual contamination). Groundwater at Rocky Flats is monitored is to ensure the continued protection of surface water quality, and the engineered groundwater treatment systems are relevant to this objective.

The creeks that cross the COU convey much higher volumes of surface water flow than effluent volumes from the treatment systems. The quality of the surface water flowing through a breached dam would be negligibly affected by slight adjustments to the upstream treatment systems, which as stated previously in this response, have resulted in improvements in effluent water quality.

3. **Concern has been expressed regarding the removal of the terminal ponds and the subsequent establishment of new surface water points of compliance (POCs).**

The dams are not part of the CAD/ROD requirements, which is why the NEPA process, rather than the CERCLA process is being used to evaluate the breaching of the dams.

The CAD/ROD and RFLMA acknowledge that the terminal ponds may be removed at some point and anticipate the possible need to designate new POCs. The RFLMA parties have consulted regarding changes to the locations of POCs as well as other changes to RFLMA required monitoring points. A proposed modification to RFLMA Attachment 2 addressing changes to monitoring points has been released for public review and comment. DOE, along with the other RFLMA parties, will consider the public review comments regarding the proposed modification to RFLMA Attachment 2. The proposed changes are subject to regulatory approval under RFLMA paragraph 65.

The decision to breach dams is not dependent on changes to RFLMA monitoring points. Likewise, approval of changes to monitoring points is not dependent on the decision to breach dams, and is being pursued independent of any decision regarding the Proposed Action.

The connection with the POCs is discussed in the Cumulative Section 6.4.3 of the Draft EA.

4. **There is an absence of a contingency plan for containment if water is tested that contains levels of contaminants that are higher than the state standard.**

The ponds are not part of the remedy and were not intended to represent a contingency plan. Regardless of water quality conditions, if a pond must be discharged (for example, due to high water level or concerns about dam integrity), it will be discharged.

Sampling for levels of contaminants is required by RFLMA. DOE has considered whether removal of the terminal pond dams would pose an impact to human health and the environment and whether a contingency plan for surface water containment is a necessary element to conclude a finding of no significant impact (FONSI). Based on extensive monitoring as reported in Sections 4.3.5.2 and 5.2.5.1 of the EA, DOE has concluded that the current requirements under RFLMA used to address this general concern are preferable.

As described in Common Concern Statement #1, at a minimum, DOE would have 10 years of post-closure monitoring data and another CERCLA five-year review completed prior to the breach of dams A-4, B-5, and C-2 in the 2018 to 2020 timeframe. While DOE does not believe that a RFLMA standard would be exceeded at the POC, the RFLMA provides the decision logic for evaluation, reporting, consultation, and mitigation requirements that are based on meeting the remedy goals for protection of human health and the environment. Mitigation plans, if required, are based on the monitoring results and investigation of the possible source(s). DOE staff would continue to report and discuss the ongoing surface water, ground water, and wetland establishment monitoring activities at the RFS to interested parties through formal as well as informal meetings. The information would be available on the DOE website as well. This commitment has been added to Section 6.0 of the EA.

A table (4–17) has been added to Section 4.3.5.3 of the Final EA showing the RFLMA monitoring standard and POC monitoring data for comparison purposes with the point of evaluation (POE) data. This table shows that the RFLMA standards are all being met. Surface water data from POE and POC monitoring have demonstrated that elevated levels of some constituents, in particular uranium, are naturally occurring and are not related to Rocky Flats activities (Section 4.3.5.3 of the EA provides further discussion).

5. **How will any contaminants that may be in the sediment be contained?**

Over the period of the cleanup and closure of Rocky Flats, during activities to deconstruct the facilities and remove residual contamination, it became clear that in certain instances soil contaminated with plutonium and americium was mobilized by erosion. The pond sediments were characterized as part of the closure process. As part of the RCRA closure of the PLF, approximately 18 inches of sediment was excavated from the PLF pond and placed under the PLF closure cover. The other ponds included in this EA did not require remediation. The characterization information and reference documents are identified and discussed in Contact Record 2010-02, which is included in Appendix C of the EA.

When the extensive earth moving and demolition activities to perform cleanup and close the site were completed, levels of these contaminants and their mobilization through erosion processes decreased significantly. Since that time, recontouring of the site and extensive revegetation also serve to reduce erosion.

Some accumulation of sediments has occurred behind the dams, and sediments may be disturbed during construction of the notches to breach the dams and during heavy precipitation events after the dams are breached. However, the construction methods for each dam breach require additional soil to be placed over sediments directly upstream of the location of the breach and for the breaches themselves to be armored against erosion. This would act to immobilize those sediments.

6. **The draft EA states that the dams are no longer needed and breaching would reduce costs and by association taxpayers costs, but no estimates of cost savings were given. What are the annual costs?**

As stated in the public meeting on May 18, 2010, approximately $135,000 per year is budgeted for annual operating and maintenance (O&M) only. The annual O&M cost provided in the public meeting was based on the lifecycle baseline cost estimates prepared in 2007. Table CCS 1–1 (below) provides updated estimates based on actual cost since closure. The estimated dollars shown are in 2010 dollars and are not adjusted for inflation.

Table CCS 1–1: Rocky Flats Pond Operation Estimate 2010–2022

Activity	FY 10 budget	FY 11 budget	FY 12 through FY 19 budget (cost per year)	FY 20 budget	FY 21 budget	FY 22 budget
Pond Operations	$33,000	$26,000	$23,000	$9,000	$0	$0
Water Lease Reporting	$8,000	$8,000	$6,000	$3,000	$3,000	$0
Dam Monitoring and Maintenance	$71,000	$57,000	$54,000	$18,000	$0	$0
Total	**$112,000**	**$91,000**	**$83,000**	**$30,000**	**$3,000**	**$0**

Note: This projection of dam operation and maintenance costs is in FY 10 dollars (rounded to the nearest thousand).
For budgeting purposes the projection includes operation of dams A-4, B-5, and C-2 until 2020. Costs would be lower for 2018-2020 if dams are breached.
Budget assumes breaching of dams PLF and A-3 in 2011.

Although the dams allow surface water to be held, the continued O&M of the earthen dams and management of the retained water also entails uncertainty related to amounts of runoff, timing of high precipitation events, need to discharge for dam safety, and possible need for repairs based on the results of dam inspections and stability monitoring. In particular the cost of major repairs to the dams is not included in these estimates.

7. Why is Terminal Dam C-2 scheduled to be breached earlier than the other two terminal dams? Why not operate the three terminal dams in flow-through state to get additional data on impacts?

Although completing the proposed action in 2011 is a valid option, DOE would complete part of the Proposed Action at a later date as suggested by the public. The timing for breaching of all of the dams was mainly determined based on overall project management, funding availability, expected costs, and public acceptance for breaching related to each of the individual dams.

However, based on public concern statements, DOE has determined that postponing breaching the terminal dams A-4, B-5, and C-2 until the 2018 to 2020 timeframe would best serve to address concerns stated in the comments. Therefore, under the Proposed Action as described in the Final EA, along with dams A-4 and B-5, the C-2 dam would be operated in a flow-through configuration until breaching operations commence.

All direct, indirect, and cumulative impacts would not change from impacts reported in the Draft EA, as the Proposed Action impacts have been assessed assuming the breaching of all dams.

8. What is the risk of exposure to contaminants at RFS?

Based on the public comments, one general underlying concern relates to the level of possible risk of exposure to contaminants that have been identified and are being treated at the RFS and the relation to human health and safety.

Risk is defined as “the probability that an outcome will occur, times the consequence (or level of impact), should that outcome occur”. This means that the question in relation to the RFS

becomes “would the release of contaminants occur, and if it does, what would be the expected outcome?”

The RI/FS, including the results of the CRA, are referenced in this Common Concern Statement, as well as Common Concern Statement #1. The conclusions of the RI/FS were informed by a CRA, which included an evaluation of potential adverse impacts to both human health and the environment. This document can be accessed at the Legacy Management web site: http://www.lm.doe.gov/Rocky_Flats/Regulations.aspx.

Evaluations of the nature and extent of contamination considered soil, groundwater, surface water, sediment, and air. These evaluations were conducted to show the types of analytes of interest (AOIs) remaining in the environmental media and their extent at RFS following the completion of accelerated actions in accordance with the Rocky Flats Cleanup Agreement (RFCA). The RI/FS concluded that institutional and physical controls would represent the best protection of human health and the environment. Institutional controls include legally enforceable and administrative land use restrictions and physical controls including signage to control access and activity within the COU. The actions recommended were then incorporated into the CAD/ROD as acceptance of Alternative 2 from the RI/FS and are part of the RFLMA.

The RI/FS document is extensive, but Table ES.2 of the Executive Summary in the RI/FS provides an analysis of the expected results of the three alternatives presented in the document. In Table ES.2, the columns addressing both Alternatives 1 and 2 are the expected results of the alternative identified in the CAD/ROD. Concerning the CRA, the findings concluded that any alternative that would be ultimately chosen for the final CAD would be protective of human health and the environment, because no unacceptable risks from residual contamination existed after the completion of all planned accelerated actions. Specifically, the CRA stated that:

- The incremental risk to the wildlife refuge worker (WRW) falls within the acceptable range of 1×10^{-6} to 1×10^{-4} cancer risks and an HI (hazard index) of 1 for noncarcinogenic effects.
- There is no significant ecological risk from residual contamination within all environmental media across RFETS.
- Actions at the Present and Original Landfills provide protection of human health and the environment.
- Groundwater actions are operating as designed to remove contamination captured to meet appropriate surface water quality standards at surface water POCs.
- Monitoring of groundwater, surface water, sediment, and ecology provides data to verify that RFETS continues to be protective of human health and the environment. The IMP also includes environmental monitoring of the Present and Original Landfills, the Present Landfill seep treatment system, and the three groundwater treatment systems.

The RI/FS evaluated the WRW exposure over time. The CAD/ROD further stated that:

> "Results of the CRA demonstrate that the risks posed by residual contamination at the site are within the EPA's accepted risk range of 1×10^{-4} to 1×10^{-6} or below. For noncarcinogenic human health effects, all hazard indices are less than 1, and the calculated radiation doses posed by residual contamination are well below the acceptable annual radiation dose of 25 millirem specified in the Colorado Standards for Protection Against Radiation. Residual contamination at Rocky Flats poses no significant risk of adverse effects to ecological receptors."

The CAD/ROD further stated that "Surface water leaving Rocky Flats, downstream of the terminal ponds in each drainage, is suitable for all uses."

Rocky Flats Surface Water Configuration
Draft Environmental Assessment

Comments
DOE Responses

Note: The following table provides a comment/response to comments submitted on the Draft EA, which was posted on the DOE LM website. All comments are direct quotes from the letters received by DOE. Comments are numbered for easy identification and do not represent an assigned hierarchy.

No.	Comment	DOE Response
U.S. Army Corps of Engineers		
1	General comment. Regarding the timing of permit issuance, Nationwide Permit verification letters are valid for a period of two years. Therefore, this office would likely issue two separate permits, as needed for each phase.	Noted. Addressed in Section 6.4.2 and Table ES–1.
Colorado Department of Public Health and Environment		
2	Introduction, 4th paragraph. In the first sentence capitalize "Plant"	Edit made as suggested.
3	Introduction, 3rd sentence in the No Action. Seems to imply that additional sediment sampling is planned.	Changed to: Environmental monitoring would continue in accordance with RFLMA. Note: This was edited in Section 3.2, for the Draft EA, but overlooked in the Summary. This omission has been corrected.
5	Table ES-1, Surface Water. Under "Proposed Action", it would be more straightforward to simply repeat the phrase for construction mitigation in the preceding box rather than say that it is "the same as surface Water Flow".	Edit made as suggested.
6	Section 1.1, 3rd paragraph, 3rd sentence, which states that the "COU consolidates areas that require additional remedial or corrective actions" should be deleted.	The verb tense in this sentence has been changed to reflect the past tense.
7	Section 1.2, 4th paragraph. Last sentence on this page is probably more appropriate for the next paragraph. The new last sentence for the 4th paragraph could be a re-write of the last paragraph in this section "Breaching the dams would not change DOE's obligations to monitor surface water and meet standards as required by RFLMA".	In reading through these paragraphs, we assume that CDPHE meant the 5th paragraph, which begins with "LM is directed by DOE"? The last sentence in this paragraph has been moved to the beginning of the 6th paragraph, as it would fit with either paragraph. The requested repeat of DOE's obligation to monitor was not added to the 5th paragraph, as it is redundant to the last paragraph of this section.

No.	Comment	DOE Response
8	Section 1.2, last paragraph. The last paragraph in this section could be deleted.	This paragraph is intended to summarize the preceding paragraphs and provide the public with a definitive statement. No change made to the text.
9	Section 2.0, 1st paragraph. This paragraph seems extraneous and could be deleted.	Agree that this paragraph is not necessary based on the detailed information provided in Section 2.1.1. Removed as suggested.
10	Section 2.1.1, 2nd paragraph. The paragraph that starts at the end of page 2-1 mentions the risk evaluations for soil and sediment in the RI-FS. It would be useful to show those evaluations for the relevant ponds in this document. It might also be helpful to state here that the purposes for breaching the last 5 dams are similar/same as the first 7.	Added to text at end of this paragraph, "The relevance of the risk evaluation for soil excavation to implement the proposed action is discussed in Section 3.1.7." Also added at end of 3.1.7, "Contact Record 2010-02 includes a summary of the characterization and risk evaluation documentation developed during cleanup and closure of Rocky Flats relevant to the soil excavation work to implement the proposed action." Concerning the purpose and need in relation to breaching the first seven dams discussed, this section is a recap of discussions held internally, and addressing the purpose and need in this section would not be considered appropriate. The relationship with the 2004 EA is discussed in Sections 1.1 and 4.3.5.
11	Section 3.3, last paragraph. Consider revising the last paragraph in this section: "This alternative is ~~really~~ essentially the same as the No Action Alternative in that no dams would be breached in the foreseeable future, and environmental monitoring would continue in accordance with RFLMA. Because this suggestion does not provide a new alternative ~~to consider in~~ for the purposes of this EA, it is not considered further".	"Really" was changed as requested. The second change was addressed in internal comments, and the Draft EA released to the public read "Because this suggestion does not provide a new alternative to this EA, it is not considered further".
12	Section 4.1, 1st paragraph. The first paragraph in this section could be more clearly written: "As previously described in Section 1.1, the RFS is located in northern Jefferson County, Colorado, approximately 16 miles northwest of Denver, between the cities of Golden and Boulder~~, Colorado~~. The RFS originally occupied approximately 6,200 acres. ~~however a~~After site closure, management of the area was split between DOE and the USFWS ~~(the POU)~~. ~~The~~ DOE retained ~~lands (~~the 1,300-acre COU) ~~occupy approximately 1,300 acres~~ while most of the POU became the Rocky Plats Wildlife Refuge under USFWS management."	Made all edits as suggested.

No.	Comment	DOE Response
13	Section 4.1, 3rd paragraph. Might also mention that Section 16 had a producing oil and gas well?	Added to the end of this paragraph: There is also an operating oil and gas well in Section 16.
14	Section 4.3.5, 1st paragraph. Re write: "Within the RFS, 12 retention ponds ~~originally existed~~ were constructed during the period of plant operations to collect surface water runoff. The C-1 Dam was breached in 2004 and dams for six other ponds…."	Change made as suggested.
15	Section 4.3.5.1, North Walnut Creek. The 4th sentence could be revised: "In the normal operational configuration, streamflow passes through former ponds A-1 and A-2 to maintain wetland habitat (water levels in these ~~ponds~~ wetlands are controlled by evaporation or flow-through stoplog structures) and flows to Pond A-3 for retention.	While the wetland habitat is present in the former ponds, these are not delineated wetlands. Changed the wording to say "former ponds", rather than just ponds.
16	Section 4.3.5.3, 2nd paragraph. 4th sentence "The released water is subsequently monitored at a RFLMA POC a short distance downstream of the dams for compliance with applicable standards."	Changed to read "The released water is subsequently monitored for compliance with applicable standards at a RFLMA POC a short distance downstream of the dams."
17	Section 4.3.5.3, General. It would be useful to add a table with POC data so that terminal pond POC data could be compared with Indiana Street POC data.	Data from three POCs at each terminal pond (A-4, B-5, C-2) and the two POCs at Indiana St (GS01, GS03) have been added to a post-closure table that has been prepared for the Final EA (Table 4–17).
18	Section 4.3.5.3, 5th paragraph. The sentence below Table 4-16 needs to be explained, since the average values shown in the table for uranium at GS10 and for uranium and nitrate/nitrite at GS 13 are above standards.	Added to the end of this paragraph: The POE location GS10 showed reportable values for total U for a portion of 2009; as of April 30, 2009, total U concentrations at GS10 have no longer been reportable under the RFLMA threshold. Evaluation has suggested that the reportable values were due to changes in hydrologic conditions, which caused groundwater with naturally occurring U to make up a larger proportion of streamflow at GS10 (DOE 2009b).
19	Section 4.3.6, 3rd paragraph. At the end of the 3rd paragraph, you could add that activities will be shut down during periods of high winds.	This statement is not appropriate for Section 4 (affected environment). However it has been added to Section 6.6 (mitigation) as follows: "Because the RFS is located in an area that can experience extreme wind, construction activities will be stopped, in accordance with RFS health and safety procedures during periods of high wind". Table ES–1 has also been edited to reflect this addition.
20	Section 5.0, 1st paragraph. The first part of the 2nd sentence in the first paragraph seems extraneous: "~~The meaning of impacts or effects is the same, and i~~Impacts are considered in terms of direct (caused by the action), indirect…."	This explanation was inserted into the document to help explain to the public the connection between "impacts and effects", to avoid confusion. No change made to the text.

No.	Comment	DOE Response
21	Section 5.1, 2nd paragraph, 2nd sentence. Sedimentation may not have been an original or major purpose of most of the ponds, but it certainly is a prominent result. The Actinide Migration Evaluation Report remarks on how effective the ponds were at settling out radionuclides.	We are assuming that CDPHE meant Section 5.2. Refer to Common Concern Statement Responses 4 and 5. Ponds are not part of the remedy and are not operated for sedimentation; revegetation and erosion control are implemented to prevent/minimize sediment from reaching the ponds. However, changed the sentence for clarity as follows: (change highlighted). However, the dams are not a part of the final CAD/ROD remedy for RFS and are not designed or operated as sedimentation basins, but because water is retained in the ponds for long periods of time, some sediment carried into the ponds would tend to settle out.
22	Section 5.2.3.2, 1st paragraph. The last sentence evaluates the Proposed Action Alternative, not the No Action Alternative.	Removed the sentence.
23	Section 5.2.5.1, 1st paragraph – Flood Hydrology. The groupings in the 2nd parenthetical section of the 4th sentence in the 1st paragraph would be clearer if some semi-colons were used: "…(current conditions; dams A-3, C-2 and PLF breached; dams A-4 and B-5 breached [all dams breached])."	Changed as follows to clarify: The study evaluated four storm events (2-year 24-hour, 50-year 24-hour, 100-year 6-hour, and 100-year 24 hour) under three configuration scenarios: • Current conditions • Dams A-3, C-2 and PLF breached • Dams A-4 and B-5 breached (all dams breached)
24	Section 5.2.5.2, 2nd paragraph, Surface Water Quality. The phrase, "which comply with State water quality standards", could be added to the end of the 1st sentence of the 2nd paragraph in this section.	Added a separate sentence after the 1st sentence as follows: The RFLMA water quality standards are based on the State's basic and site-specific water quality standards.
25	Section 5.2.5.1, Surface Water Quality. The potential for contaminants to migrate offsite in surface water once these dams are removed is a known concern of downstream cities. This section (and Table 5-2) could anticipate their comments by addressing this potential and then discussing how this potential is mitigated, e.g., 1) the nature of the standard (which reflects the exposure risk) allows averaging over an extended period; 2) upstream monitoring points; 3) decision framework that allows any issues to be quickly assessed and addressed.	Refer to Common Concern Statement Response 4. The institutional controls are discussed in detail in Section 3.1.7, which includes the RFLMA requirements. DOE believes that Table 5–2 is not the appropriate table to address mitigation. However, Table ES–1 is, and reference to institutional controls has been added to the table. Also, in Section 6.5 the following was added to the last paragraph: "Institutional controls under RFLMA as described in Section 3.1.7 would continue to be implemented.

No.	Comment	DOE Response
		The following paragraph was added prior to the last paragraph in Section 5.2.5.1: As stated in Section 4.3.5.3, since physical completion of cleanup and closure activities in October 2005, automated samplers at POCs have collected 140 flow-paced composite samples, and these composite samples consist of more than 7,400 individual grab samples (through the end of 2009). By the time this EA has been completed in 2010, there would be over 200 flow-paced composite samples, and over 10,000 individual grab samples. While analytical results vary according to season, flowrate, and climate, the calculated compliance values at all POCs have remained below the applicable RFLMA standards. Additionally the final paragraph of this section has been edited as follows (changes underlined). Therefore, given the extensive sampling, the data indicate that remedy-related soil and infrastructure removal, revegetation, land configuration, and reductions in runoff have been successful and would continue to result in water quality summary statistics that meet applicable standards. Supporting data and evaluation can be found in the Annual Reports of Site Surveillance and Maintenance Activities (DOE 2008, 2009b). The data in the Annual Reports are extensive and the information provided in the above paragraphs is a synopsis of the surface water quality sampling. The URL address for the Annual Reports is provided in Section 8.0 of this EA. DOE recognizes the public comments focus on water quality and has drafted the following text to be inserted into the Final EA in Section 3.1.7. DOE is aware that because the terminal ponds have been operated in batch-and-release mode for many years, the dams are perceived as features that may be used to mitigate potential impacts to downstream water quality. While the dams allow for holding surface water, the dams require maintenance and inspections. If inspections reveal problems, potentially costly repairs to maintain dam safety may be required. DOE

No.	Comment	DOE Response
		believes the proposed action, implemented in an orderly manner, is appropriate. Also see Common Concern Statement Response 4. DOE inserted the following text at the end of Section 5.2.5.1: Batch-and-release operation is not a requirement of the RFS remedy. In other words, the remedy is adequately protective of human health and the environment without reliance on the continued existence of the remaining dams and ponds. The RFLMA water quality standards are based on the State's water quality standards for all use classifications. These standards are based on the level of risk to human health and the environment using long-term exposure scenarios even though these exposure scenarios do not actually exist at or directly downstream of RFS. RFLMA monitoring provides information to trigger timely investigation, evaluation, and mitigation under RFLMA requirements for any contamination that may be adversely impacting water quality above RFLMA standards to assure that the remedy remains adequately protective.
26	Table 5-2. A word seems to be missing from the "No Action" column from Threatened & Endangered Pant and Wildlife Species: "The Preble's mouse preferred multi-strata habitat could change <u>from</u> the multi-strata riparian…"	Changed to read "In Walnut Creek, the Preble's mouse preferred multi-strata riparian woodland/shrubland habitat could change to a single story herbaceous habitat….." Also changed Table ES–1.
Susan Clyne, Mayor Pro-tem, City of Northglenn, Colorado (May 18, 2010)		
27	The proposed breaching of the dams increases the risk of contamination leaving off site. Sediment from the former ponds can be moved downstream during a precipitation event.	Refer to Response 25 and Common Concern Statement Responses 4 and 5.

No.	Comment	DOE Response
28	DOE proposes to establish wetlands to stabilize the soil in the pond footprint. Wetlands can take years to establish, should a large enough precipitation event occur before the wetlands are established, it is almost certain that contaminated sediment would be moved downstream. Northglenn suggests that water levels in the ponds be slowly reduced, allowing time for wetlands to become established prior to breaching the dams.	Refer to Common Concern Statement Response 5 concerning sediment. Additionally, DOE has successfully revegetated Rocky Flats and the revegetation includes establishing wetlands. In preparation for breaching of the terminal ponds, it is expected that drawdown of the ponds may be conducted in advance of the breaching to allow for seeding and installation of erosion controls in the areas previously covered by water. Based on the establishment of vegetation from the previous dam breaching, DOE expects that vegetation would develop successfully in these areas over a period of several years, and this would help stabilize these upper areas along the former pond bottoms. Then, during and post-breaching, additional seeding and erosion controls would be installed to stabilize the soils.
29	Once the dams are breached, water flowing off site can no longer be contained. In the event a water quality standard is violated, there is no way to capture the water.	Refer to Common Concern Statement Response 4.
30	The Draft EA states that the dams are no longer needed and breaching would reduce costs and by association taxpayers costs, but no estimates of cost savings were given.	Refer to Common Concern Statement Response 6.
31	Northglenn can not support the establishment of new surface water monitoring and compliance points due to the absence of a contingency plan to ensure downstream surface water quality are protected at all times.	Refer to Common Concern Statement Responses 3 and 4.
Rocky Flats Stewardship Council		
32	As the DOE designated local stakeholder organization for Rocky Flats, the Rocky Flats Stewardship Council is expressing its support of the downstream communities to advocate for the “No Action” alternative based on: • Uncertainties resulting from an insufficient post-closure period of record for assessing hydrologic conditions at the site. • The inability to fully evaluate the effectiveness of the remedy due to the ongoing construction activities, recent operational changes, and future plans for passed modifications at landfills and groundwater treatment systems.	Refer to Common Concern Statement Responses 1 and 2.
33	We request that DOE host a formal public meeting on the Rocky Flats Surface Water Configuration Environmental Assessment within the first two weeks after the document is published.	The meeting was held on May 19, 2010. Reference to the meeting, details, and a synopsis is provided in Section 2.0.

No.	Comment	DOE Response
LeRoy Moore, PhD., Rocky Mountain Peace and Justice Center		
34	What purpose is served by seeking public comment on a matter to which the regulators, EPA and CDPHE, have already given approval? The Rocky Flats site was remediated to a graduated set of Radionuclide Soil Action Levels for plutonium/americium for which the strictest level was 50 picocuries per gram of soil (50 pCI/g) for the top 3 feet of soil. A study done as part of the multi-year Actinide Migration Evaluation concluded that cleaning the Rocky Flats site to an RSAL of 10 pCi/g would not guarantee meeting the 0.15 pCi/L surface water standard for areas downstream of the 903 Pad (Kaiser-Hill, Report on Soil Erosion and Surface Water Sediment Transport Modeling for the Actinide Migration Evaluations at the Rocky Flats Environmental Technology Site [RF-00015], February 2001). This report underscored uncertainties regarding conditions at the site vis-à-vis the surface water standard. I am not aware that any further work of the AME or any other body refuted the conclusion of this report. I believe that it referred only to the Woman Creek watershed.	DOE has not received any approval from regulators EPA or CDPHE. As stated in the Draft EA, DOE has proposed that the RFLMA be modified to change some of the current RFLMA monitoring points, which is subject to CDPHE and EPA approval. Additionally, in Section 6.3 it is stated that no earth-moving activities will be started until either an approval letter or biological opinion (BO) from USFWS has been obtained. USACE has stated that a Nationwide Permit # 27 would be applicable to the Proposed Action, but notification of intent by DOE to USACE to conduct work under this permit has not yet been submitted for concurrence. This approval has been requested as a portion of scoping for the feasibility of the project, as was the USFWS and USACE approvals. DOE believes that this comment is at least partially based on RFLMA Contact Record 2010-02 (which is included as Appendix C in the EA) regarding the Proposed Action excavation work. The Contact Record provides the technical and regulatory information required to determine if excavation work, which is otherwise prohibited by institutional controls incorporated in the CAD/ROD and RFLMA, may be performed. As discussed in Section 3.1.7 of the Final EA, due to comments from local communities, CDPHE withdrew approval of Contact Record 2010-02. , Pursuant to CERCLA implementing regulations and guidance, a Proposed Plan to amend the CAD/ROD clarifying the institutional controls and the regulatory approval process for soil disturbing activities will be issued for public review and comment when the RFLMA Parties have completed the consultative process regarding the Proposed Plan. The CAD/ROD amendment will consider public comments in relation to the evaluation criteria specified by CERCLA implementing regulations for making remedy decisions. DOE believes the comment is a fair synopsis of the conclusions of the AME study. The AME study is also considered by DOE in the RI/FS. To account for the possibility that soils that meet the Radionuclide Soil Action Levels (RSALs) may not preclude exceedance of RFLMA standards, one focus in post-closure stewardship is in minimizing and

No.	Comment	DOE Response
		mitigating erosion. The revegetation of the site and final site land configuration after completion of cleanup are showing that these measures are effective, and several of the RFLMA control soil disturbance requirements work to minimize erosion.
35	In 2004 there were reports that the surface water standard was twice exceeded not in Woman Creek but in Walnut Creek. CDPHE, I'm sure, could readily provide the records. The source of these exceedances, as I recall, was never identified. Is it not likely that such exceedances will occur again, especially in Woman Creek? If the holding-pond dams are breached, will exceedances be detected? If so, will there be any way to prevent the contaminated water from moving off the site? The Draft EA nowhere considers the issues posed by the referenced K-H report or the exceedances documented in 2004. (Reference documented refer to the K-H Report: Kaiser-Hill, Report on Soil Erosion and Surface Water Sediment Transport Modeling for the Actinide Migration Evaluations at the Rocky Flats Environmental Technology Site [RF-00015, February 2001.	Building demolition, removal of infrastructure, and excavation and grading work were being conducted on a large scale during the final years of the cleanup and closure project. This work did result in exceedances (at that time based on 30-day moving averages) for both Pu and Am at all three POEs; multiple investigations and reports regarding mitigation actions ensued. Most exceedances were determined to be caused by the increased soil transport due to soil disturbance associated with remediation. The only 'anomaly' to this was that water from the Building 771 footing drain resulted in the Am in N. Walnut Creek. This pathway was found quickly and subsequently eliminated. Even these cases were of short duration (~weeks) relative to the risk-based surface water standards (lifetime consumption of water at the Standard); short-term exceedances do not significantly increase the long-term risk. The flow through configuration and continued sampling for the terminal dams from 2011 to final breaching would supply added confirmation for meeting remedy standards.
Lori R. Cox, Mayor Pro-tem Broomfield City Council Ward 2 (May 19, 2010)		
36	….we are commenting on an environmental assessment however, every reference DOE makes to being protective of the environment include the words "human health" ~ DOE's own documents never separate the two thoughts therefore, it is consistent to consider protection of "human health" when considering whether or not an action is protective of the environment.	Comment noted.

No.	Comment	DOE Response
37	The DOE has been consistent with their message that the terminal ponds, whose dams you are seeking to breach, aren't and were never part of the remedy. It is worth noting; however, that testing the water captured in these terminal ponds provides assurance that the remedial actions remain protective "of human health and the environment." While they may not be part of the remedy, they provide an indication as to whether or not the remedies have been effective, which is one of the reasons a testing protocol was developed. If breached, the dams no longer capture the water, allowing any residual contamination contained in that water to move downstream and out of the "long term surveillance and maintenance area" for which Legacy Management has assumed responsibility.	Refer to Common Concern Statement Responses 1 and 4.
38	It should also be noted that each series of ponds has specific upstream sources of water thereby currently making it simple to determine the source of contamination, should any occur, in a sample taken at a single terminal pond. If water simply flows through each terminal pond to a single Point of Compliance and contamination is detected not only could that contamination have been significantly diluted by having been mixed with several water sources giving a false level of contamination, it would also mean having to analyze every upstream water source to determine the source of contamination because a single POC can't eliminate any source.	Refer to Common Concern Statement Response 3. POEs and other performance monitoring locations are located upstream of the ponds; these are RFLMA locations (Refer to Figure 1–1 in the Final EA). These locations are used to help determine the origination of contaminants should a POC exceedance occur. POEs: SW093 in N Walnut (upstream of A-Series); GS10 in S Walnut (upstream of B-Series); SW027 at the end of the SID (upstream of C-2). Performance locs: GS13 (downstream of SPPTS, upstream of A-Series); SW018 (downstream of carbon tet plume, upstream of SW093); PLFTS locs (at PLFTS system); GS10 (also POE, downstream of MSPTS); POM2 (downstream of ETPTS, upstream of B-5); GS05 and GS59 (upstream and downstream of OLF on Woman Creek).
39	I submit to you my opinion that it is premature to move forward with these changes while the site is still in the "stabilization" process…… and to move forward without documentation expressly showing that the remedial actions through several cycles of CERCLA reviews remains protective of human health and the environment is, simply, irresponsible. If future CERCLA reviews provide the necessary documentation supporting your proposed action, then by all means, we would support moving ahead but, until then, I respectfully request that, in an effort to be protective of human health and the environment, no changes are made to current conditions of the terminal ponds or the present landfill pond.	Refer to Response 25 and Common Concern Statement Response 1. The effectiveness of the remedy is continually evaluated as monitoring data become available, and not just during CERCLA reviews; this is one of the requirements of RFLMA. Refer to Section 8.0 of the EA for reference of all of the routine reports.

No.	Comment	DOE Response
Mary (Mickey) Harlow Citizen, City of Arvada		
40	The Rocky Flats Site Regulatory Contact Record indicates that DOE requested Approval of Excavation Greater than 3 Feet below Grade to Breach Dams, A-3, A-4, B-5, C-2 and the Present Landfill Dam and the Contact Record was approved on April 15, 2010 by CDPHE. Carl Spreng, CDPHE, maintains that the contact record approval does not allow DOE to remove the ponds. However, would it not have been more appropriate to include this request as part of the EA and obtain public approval of this action? Breaching the dams, restoring stream configuration, and removing ponds are linked.	Refer to Common Concern Statement Response 3.
41	I support the no action alternative. Operation and maintenance of the dams and necessary structures must be continued until DOE can prove that the selected closure remedies are operating efficiently and that the cracking and sloughing in the Original Landfill Site in the Woman Creek drainage is no longer occurring. Additional peiziometers need to be added to this hillside and movement monitored for at least ten additional years.	Refer to Common Concern Statement Response 1. The OLF is within the Woman Creek basin, not the SID basin. C-2 is at the end of the SID and does not receive flows from Woman Creek. Breaching C-2 would not change the OLF's relationship with Woman Creek.
42	The remedy for the solar ponds has failed miserably to this point. DOE has not been able to meet the stream standard, which is also a drinking water standard, for nitrates in Walnut Creek. This remedy needs to be proven for at least five years.	The SPPTS is upstream of A-3 and A-4; the SPPTS discharge is tributary to these ponds. We continue to strive to meet surface water standards at the system effluent, but data suggest that system effluent WQ does not drive WQ in North Walnut. Refer to Common Concern Statement Response 2 concerning the comparison of a hose into a creek.
43	Without the dams, sedimentation will not occur. Although DOE has not mentioned the initial purpose of the dams citing that they were needed during operations, one must assume that they were used to settle out site surface contamination during runoff and storm events.	Refer to Response 25 and Common Concern Statement Response 5. The remedy is designed to prevent the movement of surface soil to the creeks and ponds; the ponds were not designed, nor are they intended to catch the surface soil.
44	The ponds are the only protection and early warning that the downwind communities have that the remedy's constructed during cleanup are working. Over time it is expected that contamination will surface either through, wind, erosion, burrowing animals or an earthquake. DOE cannot just consider $$$. Human health must also be considered.	Refer to Common Concern Statement Response 5.

No.	Comment	DOE Response
45	LM has instructed DOE to ensure protection of human health and the environment through effective long-term stewardship of land, structures and facilities. DOE has further been instructed to be responsible for the cost-effective management of this directive. DOE knew that the dams were 30 years old when they supported Kaiser-Hill closure of the site and accepted the liability for cleanup. DOE has not effectively demonstrated that they can currently meet the requirements set forth by LM for long-term stewardship.	Refer to Common Concern Statement Response 1.
46	A complete 5 year CERCLA review cycle has not occurred since regulatory closure.	Refer to Common Concern Statement Response 1.
47	A sufficient number of dry, normal and wet hydrological cycles have not occurred.	Refer to Common Concern Statement Response 1.
48	Monitoring results since closure have not been consistent and cannot be used to determine baseline conditions.	Refer to Common Concern Statement Response 1. Monitoring results show variability that is consistent with known natural processes; variability at POCs to date has resulted in compliance values all below standards; the RFLMA process to evaluate monitoring data is designed to address variability.
49	Additional soil samples of the sediments behind the ponds needs to be completed to determine if further changes to the remedy are required.	Refer to Common Concern Statement Responses 1 and 5.
50	In the event of large storm event at the site, the stream beds and sides will be eroded how does DOE plan to ensure the stream beds erosion of banks is repaired? Isn't another Institutional control required?	Section 3.1.1 explains erosion control measures for the construction and post-construction activities, including channel bottom and side slope armoring proposed for all dam breach activities. Site surveillance and maintenance work includes maintaining required erosion controls and other best management practices, including making repairs to minimize erosion. Additionally the ponds are not considered a part of the remedy, and therefore another institutional control would not be required.
51	What are the costs required for the inspection, maintenance, sampling, water purchases from Broomfield that are referred to in this document? Page 1-2 states that the ponds in both Walnut and Woman Creek are only discharged 0 to 2 times a year.	Refer to Common Concern Statement Response 6.

No.	Comment	DOE Response
52	DOE has undertaken sampling of the Original Landfill in order to shorten the 30 year post-closure care period. There is no mention of this in the draft EA. What is the outcome of this sampling? The Rocky Flats Site Regulatory Contact Record dated 2010-01 discusses the Targeted soil sampling at the Original Landfill to evaluate residual contamination levels in relation to the CDPHE August 2008 Policy, End of Post Closure Care. Contact Record approval was given as January 20, 2010. The OLF was closed in accordance with the March 10, 2005 Final Interim Measure/Interim Remedial Action for the Original Landfill. Under the Colorado Hazardous Waste Act, regulatory requirements, the generally applicable post-closure care period is 30 years, but this period may be shortened or extended. Has DOE been successful in shortening this time period?	The RFLMA CR 2001-01 is a record concerning the Targeted soil sampling at the Original Landfill (OLF) to evaluate residual contamination levels in relation to the Colorado Department of Public Health and Environment's (CDPHE's) August 2008 Policy, End of Post-Closure Care. Because this CR is not connected with the Draft EA, responding to the question posed by the commentor concerning the outcome of the CR is not appropriate for this NEPA process. Refer to Response 41. The OLF is not tributary to any of the ponds addressed in the EA.
53	Section 3.1.1. The average construction duration for dam breaching at each structure is approximately 11 weeks why are 14 vehicles required on the site. Why does C-2 require more area of disturbance lay down and road area than the other dam sites? Where is the lay down area in location to the drainage?	Same as question 65. We assume the commentor is referring to Table 3–1. Dam Breach – Estimated Summations per Dam. As stated in the sentence directly above this table "The final drawings would be completed prior to construction and may contain site-specific changes due to ground truthing land surveys but would not include any additional disturbance than assessed in this EA." These quantities are based on preliminary engineering estimates that reflect the maximum amount of disturbance that would occur as a result of the Proposed Action. C-2 has a larger area of disturbance because the access road from Indiana Street would need to be minimally upgraded. Laydown areas are included in Table 3–1 as part of the overall disturbance.
54	Where will the earth removed be stockpiled? Will protection from storm events be provided to the stockpile? Will the removed soil be sampled? What are the locations that will receive the infill? DOE states that the excavated soil from the breach channel will fill predefined fill areas. These areas need to be detailed in this EA. Where will be the piping etc. removed from the dam sites be stored and disposed? Does DOE assume that this removed equipment will be free from contamination?	Same as question 65. Any temporary stockpiling and storm water issues would be a part of the required NPDES permit. Please refer to the RFLMA Regulatory Contact Record 2010-02 (Appendix B of the Draft EA), provision question 1, concerning this comment.

No.	Comment	DOE Response
55	The channel bottom and side slopes are to be armored as need to resist future erosion. Armored with what? What is the life expectancy of the armor? Doesn't this require another institutional control?	These two same questions were asked twice in the comment letter. The final design would specify the exact final erosion control measures to be used. The erosion controls would be maintained until the revegetation is established. Refer to Response 50. As stated in various sections, the dams are not considered a part of the remedy. No additional remedy-related institutional controls are included in the Proposed Action. Armoring (reinforcing stream bottom and side slopes) would result in the reduction of erosion during storm events.
56	I am amazed that the decision was made by EPA, CDPHE to support of closure of the landfill as a CERCLA Municipal Landfill Presumptive Remedy to Military Landfills. The Original Landfill was not a municipal or military landfill. There were no environmental regulations at the site during its early operations. Everything was dumped into that landfill. I am also aware that classified shapes turned up in the original landfill during the late 1990's. *Records detailing the waste that was put into this landfill are not available. Many important DOE documents related to site operations have been misplaced or destroyed. I base this observation on my work as Rocky Flats Coordinator for the City of Westminster during cleanup and closure of the Site. As co-chair of the Soil Action Level Oversight Panel I was made painfully aware of how difficult it would become to select a soil action level that was protective of human health and the environment due to the lack of background documents and sampling records that would have been very helpful in determining the extent of radionuclide contamination.* The Rocky Flats Site Regulatory Contact Record dated 2010-01 states that the OLF's historical use is typical of solid waste dumps of the time and the wastes disposed of were plant trash and construction debris that based on sampling likely contained some chemical that subsequently were regulated as CERCLA hazardous substances. The document further states that the OLF was not a radioactive contaminated waste disposal area. However, there is a documented instance of placing a smoldering depleted uranium slab in the OLF to allow it to "burn out". When the burned slab was recovered not all of the DU mass was recovered. Surface	Comment noted. The OLF is not part of this EA and is addressed in CERCLA documents. Refer to Response 41. The OLF is located north of Woman Creek, which is not a tributary to any of the ponds addressed in this EA. Woman Creek is routed around Pond C-2.

No.	Comment	DOE Response
	soil monitoring at the site also located several hot spots. Before the soil cover was place on the OLF, the hot spots were removed. The OLF IM/IMRA contains environmental media, analytical results, including results from 57 surface soil locations and 22 subsurface soils (to bedrock) borehole locations. The OLF has never been tested for Thorium which was used at the site during its early history. It was used in three buildings on site. Thorium compounds were used in analytical procedures and development programs.	
57	A review of the Original Landfill Closure at RFETS by Stephen Dwyer, PhD, PE dated January 28, 2005 indicates that the remedy selected was a quick, cheap solution to a very complex landfill that poses significant environmental problems and consequences. VOC's, SVOC's metals, rads such as uranium and plutonium have been identified at or near the site. Groundwater passes through the subsurface waste while surface water passes over the OLF. The cover is not designed to minimize percolation through it into the underlying waste. There is no means to prevent biointrusion. Without the presence of a biointrusion layer burrowing animals will continue to surface. Plants can bring many of these contaminants to the surface and contamination can be blown away and spread, washed away by surface runoff or ingested by fauna. No peziometers installed the length of the hillside where the OLF is located to determine the extent of erosion and sloughing. Plutonium uptake by tumbleweeds at the Hanford Site, Washington State (EPA 1991) is a perfect example of this.	Comment noted. The OLF is not part of this EA and is addressed in CERCLA documents. Refer to Response 41. The OLF is located north of Woman Creek, which is not a tributary to any of the ponds addressed in this EA. Woman Creek is routed around Pond C-2.
58	Access to pond C-2 is on the east side of the Refuge (Indiana Street) and via existing dirt roads east and south of C-2. Does the expansion of the Northwest Parkway in the 300ft right of way given for Indiana roadway expansion in the Wildlife Refuge Bill have a bearing on DOE decision to remove the dam at C-2?	Access to the C-2 was determined because Indiana Street is closer to the C-2 dam. This shorter access route would result in less use of petroleum and would therefore represent an environmentally preferable access. The possible Indiana roadway expansion was not part of the equation in developing the EA. However, because it is required to consider possible connected and/or cumulative actions, the possible Indiana Street expansion was addressed, as stated in Section 5.4.3, "the Indiana Street project has public controversy, and as of the date of completion of the Draft EA, has not been scheduled for construction."

No.	Comment	DOE Response
59	DOE states that since 1989 and 1991 inventories, the areas adjacent to the retention ponds have been minimally disturbed, with the exception of removing sediment from the bottom of the PLF Pond during construction of the nearby landfill; outlet works upgrades to the ponds, spillway repair and occasional sampling of sediment from the other ponds. With these exceptions no surface-disturbing activities have occurred during the past 20 years. For this reason DOE believes that the 1989 and 1991 inventories remain applicable and have no effect. The pond soils should be sampled prior to removal of any soil to ensure that radionuclide contamination has not settled out in the sediments during cleanup and post closure.	The inventories the commentor is referring to are the cultural resources inventories, which are not related to the remedy. The reason DOE stated that it believes that the 1989 and 1992 inventories remain applicable and have no effect pertains to the communication between DOE and the State Historical Preservation Officer concerning specific surface inventories for cultural resources. Also please refer to Common Concern Statement Response 5 for information on sediments.
60	Table 1, Resource-Specific Consequence and Mitigation Impacts to Wildlife. Restore a more natural, seasonally variable flow system to provide more consistent water for downstream habitat. Next bullet states that the action will eliminate surface water habitat for species and restore a more seasonally variable flow system to provide more consistent water for downstream habitat. Conflicting statements.	We assume the commentor meant Table ES–1, Resource-Specific Consequences and Mitigation. The bullets under Impacts to Wildlife state as follows: • Restore a more natural, seasonally variable flow system to provide more consistent water for downstream habitat. • Temporary disturbance from construction noise. • Eliminate surface water habitat for species. • Reduced disturbance from human activities for monitoring and maintenance. It is not stated in this table or in the text that “restore a more seasonally variable flow system to provide more consistent water for downstream habitat” in any other bullet than the first bullet as stated above.
61	Page 4-6 second paragraph. The ponds located in the project areas are used by waterfowl and shorebirds as breeding habitat or feeding areas. Isn’t this habitat part of a Wildlife Refuge?	All ponds are located in the COU and are not part of the Wildlife Refuge.
62	US Fish and Wildlife has not designated critical habitat for the Preble’ Mouse. According to Fish and Wildlife an amendment to the Programmatic Biological Assessment will be written to address impacts from this project. An amendment to the PBA would be written to address impacts from this project. USFWS would then respond with either a BO or letter for the amendment. Fish and Wildlife should designate the critical habit for the Preble’ Mouse before this project begins not afterward.	Critical habitat is considered when a species is proposed for listing as endangered or threatened under the Endangered Species Act. Therefore, at the time of listing for the Preble’s Mouse, the USFWS did not designate the RFS as containing any critical habitat. Also as stated in the Draft EA: No critical habitat was designated at the RFS by USFWS in its final ruling on critical habitat for the Preble’s mouse, because RFS remains under federal ownership and management after closure in 2005. Additionally, Preble’s mouse protection areas at RFS were designated in the Programmatic Biological Assessment as part

No.	Comment	DOE Response
		of the consultation with the USFWS. Since the release of the Draft EA, the USFWS has released a Draft EA for the designation of critical habitat for the Preble's mouse. Refer to Section 5.4.4.1 of the Final EA for the USFWS and DOE consultation information. An amendment to the PBA is necessary because most of these dams were not consulted on when that document was written.
63	Breaching the dams would result in an estimated 95 percent reduction of available open surface water area at the RFS that is utilized by a variety of ducks and other avian species. There would be a reduction in the abundance of fish, aquatic species such as fish, frogs, or turtles which live in and around the ponds may not be able to relocate prior to dewatering actions. It would seem appropriate to maintain habitat for these species. Does Fish and Wildlife concur?	USFWS is neither required nor expected to concur on habitat issues regarding these species. They are required only to evaluate the issues regarding threatened and endangered species. The only species within this category is the Preble's mouse and its habitat at RFS. Refer to response for comment 62.
64	Section 4.3.4.2 Wetlands….The table in this section lists the existing pond wetlands/open water summary. However DOE states small difference from the 1994 USACE wetland delineation may currently exist at the remaining ponds due to the changes in environmental conditions. Therefore the extent of wetland mapping as delineated by USACE site closure activities result in disturbances to wetlands. The values listed may no longer be accurate due to changes in the environmental conditions between 1994 and present. *The 2009 wetland mitigation monitoring report submitted to EPA shows no changes in wetland acreage for C-2 or the other ponds only the Primary landfill pond is noted*. An increase in wetlands from removing the ponds and allowing flow through will not occur. Increase in wetlands from removing the ponds and allowing flow through will not occur. Page vii of the document states that "the contribution of water to Woman Creek resulting from the infrequent releases from Pond C-2 is minimal due to the relatively small drainage basin area (South Interceptor Ditch basin) tributary to Pond C-2." Based on the above information why is it necessary to eliminate C-2 Pond?	The text the commentor is referring to states: "Small differences from the 1994 USACE wetland delineation may currently exist at the A-3, A-4, B-5, and C-2 ponds due to changes in environmental conditions. Therefore the extent of the wetland mapping as delineated by USACE may no longer be accurate due to changes in the environmental conditions between 1994 and the present." It is not stated in this section that the wetland mapping as delineated by USACE site closure activities would result in disturbances to wetlands. The reason the change may have occurred is related to fluctuations and changes in the ponds between 1994 and the present. The reference to the 2009 reporting on wetlands referred to the PLF changes and is not applicable to C-2. Please refer to EA Section 4.3.4.2 concerning the explanation of the 2009 wetland mitigation monitoring report as follows: "The PLF and wetlands were disturbed as part of site closure activities, and wetland re-establishment is ongoing. Accordingly, the first set of values under total acreage presented in Table 4–4 for the PLF are based on what was previously delineated by the 1994 USACE mapping. The values in parenthesis are based on the 2009 wetland mitigation monitoring report submitted to EPA." Also please refer to Appendix B of the Draft EA, provision question 2.

No.	Comment	DOE Response
		The commentor's statement "An increase in wetlands from removing the ponds and allowing flow through will not occur" or "increase in wetlands from removing the ponds and allowing flow through will not occur "was not stated in the Draft EA. Please refer to the Purpose and Need section of the EA for a description of why the dams (including C-2) are being proposed for breaching. A summary is provided starting on page viii, and the full text is in the body of the EA, Section 1.2.
65	Section 3.1.1 The average construction duration for dam breaching at each structure is approximately 11 weeks why are 14 vehicles required on the site. Why does C-2 require more area of disturbance lay down and road area than the other dam sites? Where is the lay down area in location to the drainage? This information should be included in the EA. 1. Where will the earth removed be stockpiled? 2. Will protection from storm events be provided to the stockpile? 3. Will the removed soil be sampled? 4. What are the locations that will receive the infill? DOE states that the excavated soil from the breach channel will fill predefined fill areas. These areas need to be detailed in this EA. 5. Where will be the piping etc. removed from the dam sites be stored and disposed? Does DOE assume that this removed equipment will be free from contamination?	Same as questions 53 and 54. We assume the commentor is referring to Table 3–1. Dam Breach – Estimated Summations per Dam. As stated in the sentence directly above this table "The final drawings would be completed prior to construction and may contain site-specific changes due to ground truthing land surveys but would not include any additional disturbance than assessed in this EA." These quantities are based on preliminary engineering estimates that reflect the maximum amount of disturbance that would occur as a result of the Proposed Action. Concerning parts 1 and 2 of this comment; any temporary stockpiling and storm water issues would be a part of the required NPDES permit. Please refer to the RFLMA Regulatory Contact Record 2010-02 (Appendix B of the Draft EA), provision question 1, concerning parts 3, 4, and 5 of this comment.
66	The channel bottom and side slopes are to be armored as need to resist future erosion. Armored with what? What is the life expectancy of the armor? Doesn't this require another institutional control?	See response to comment 55. As stated in various sections, the dams are not considered a part of the remedy. Armoring (reinforcing channel bottom and side slopes) is designed to protect the channels through the remaining embankments; the dams are not being fully removed, they are being breached by constructing an engineered channel through the embankment.

No.	Comment	DOE Response
Steve Berendzen, Project Leader, Rocky Mountain Arsenal NWR Complex, U.S. Fish and Wildlife Service		
67	The area of damage from breaching 26 acres seems a little excessive, but the EA does state that this is a worst case estimate. I assume this area included disturbance caused by construction and removal of coffer dams as well as the pond breaching.	Section 3.1.1 states that the final drawings would be completed prior to construction and may contain site-specific changes due to ground truthing land surveys but would not include any additional disturbance than assessed in this EA. Also, Table 3–1 provides a breakdown of activities and the associated acreage with the activities.
68	The EA states that breaching will take about 11 weeks per dam. This seems a bit excessive, but I am not an engineer and the time may be necessary. As a biologist, though, I feel that a shorter period would be better for the wildlife.	Section 3.1.1 states that the average time construction duration for dam breaching at each structure is approximately 11 weeks. Table 3–1 provides a specific estimated timeframe for each individual dam breach project duration.
69	The EA promotes the use of native vegetation, and I am very comfortable with this as long as Jodi Nelson is directing this aspect of the project. I have full confidence in his ability to know what should be planted where.	Comment noted. DOE thanks USFWS for their confidence in Jody Nelson as a qualified ecologist. In response to this comment, and with the recognition for an ongoing need for such a person the following was added to Section 6.4.1 Vegetation Mitigation, as well as Table ES–1 (addition underlined): The following measures will be implemented <u>by a qualified ecologist, botanist, or environmental scientist</u> to avoid and reduce impacts to vegetation:
70	The EA suggests that the work will benefit Preble's meadow jumping mouse. I suspect that the long-term restoration of riparian habitat will provide benefit, but defer to the Ecological Services branch of the Fish and Wildlife Service on this issue.	Comment noted.
71	The Rocky Flats National Wildlife Refuge supports this project.	Comment noted.
Gail MacCabe, Broomfield, CO		
72	Please don't breach the dams at Rocky Flats! They were put their (sic) for our protection and need to stay in place. Please, please don't breach them!	Comment noted.

No.	Comment	DOE Response
Morgan Davies, Golden, CO		
73	I am concerned that the EA does not discuss the potential mobilization of radionuclides from the sediment as a result of the breaching of the dams. The draft EA mentions but does not review the pertinent elements of the "Erosion Control Plan for Rocky Flats Property Central Operable Unit July 2007". The erosion control plan states that "no grading, excavation, digging, tilling, or other disturbance of any kind of surface soils is permitted, except in accordance with an erosion control plan approved by CDPHE or EPA". One of my principal concerns is the mobilization of radionuclides as a result of increased erosion from the banks of the creeks. The erosion control plan notes that plutonium 239/240 could reach surface water as the result of disturbance of the surface soils.	Refer to Common Concern Statement Responses 4 and 5.
74	It is my understanding that breaching the dams will result in increased flow in the creeks and erosion during major storm events. I am also concerned that by breaching the dams the ability to measure and mitigate pollution from storm water runoff will be inhibited. After reading the erosion control plan, it seemed that performing batch and release management of the waters was inherent to ensuring that there were no significant releases of radionuclides as a result of storm water runoff.	Refer to Common Concern Statement Response 4 and 8. Increased peak flood flows would be increased below the dams; these areas were not targeted for remediation based on characterization data; the sediments are not a substantial source term from a risk perspective.
75	I would also like to call your attention to section 7.1 of the erosion control plan which states that it is important to "minimize the project activities in wet areas and wet conditions to avoid damage to the Preble's mouse habitat." I understand that one objective of the breaching of the dams is to improve the Preble's mouse habitat, but I am concerned that the construction activities could have detrimental affects to critical habitat for the Preble's mouse.	The final project design and construction activities would be conducted to minimize disturbance to wetlands and Preble's mouse areas. The commentor states the "construction activities could have detrimental affects [sic] to critical habitat for the Preble's mouse." There is no critical habitat designated for the Preble's mouse currently at RFS. As a point of further clarification; however, one of the reasons that the breaching would potentially improve the habitat for the Preble's mouse is that open water is not considered Preble's habitat. Therefore, conversion of the open water areas to a vegetated plant community would actually increase the amount of Preble's habitat at RFS.
Portia Buchanan, Broomfield, CO		
76	Under no circumstances should the DOE, breach the dams, at Rocky Flats. They must find a safer water supply to restore the wetlands and riparian habitat. URANIUM238 has a half life of 4.5 billion years, i.e, URANIUM235 i.e, URANIUM.	Comment noted. Refer to Common Concern Statement Response 1 concerning water quality.

No.	Comment	DOE Response
77	Around 5 years ago, an unidentifiable person, who worked on the clean up of Rocky Flats, said that Rocky Flats will NEVER BE SAFE!!!!!!!! The elements of RADIOACTIVE CONTAMINATION would be detrimental, given the fact, URANIUM238 HAS A HALF LIFE OF 4.5 billion years!!	Comment noted.
Susan Clyne, Mayor Pro-tem City of Northglenn (May 27, 2010)		
78	Plutonium 239/240 and americium 241 are primarily transported as insoluble particles associated with suspended sediments. In a study of actinide loads in and out of the Rocky Flats Site, Walnut Creek ponds 69% of Pu 239,240 and 85% of Am241 were removed (Squibb, Patton, The Rocky Flats Environmental Technology Site BMP Experience and Implications for Site Closure." April 9, 2003). These sediments are currently safely trapped behind the five dams.	Refer to Common Concern Statement Response 5. These dams did remove load during closure, but with the other aspects of the closure: soil removal, source removal, erosion control, and revegetation, the dams do not need to do this anymore and the remedy was designed without consideration of the dams.
79	DOE proposes to establish wetlands to stabilize the soil in the pond footprint. Stabilizing polluted sediments using wetlands is uncertain at best. Wetlands can take years to establish, their ability to slow runoff and trap associated sediment is seasonal and environmental conditions such as drought and disease reduce plant vigor and density which diminishes the effectiveness of sediment stabilization.	As DOE has seen from the prior breaching of dams at the RFS, both upland and wetland vegetation would be established in the former pond footprint dependent on hydrologic conditions at specific locations. The establishment of vegetation (upland or wetland) to reduce erosion and sedimentation is well documented in the scientific literature. Additionally, refer to Response 28. The remedy is designed to prevent surface soil from becoming sediment; wetlands were not proposed to stabilize sediments. The wetlands enhance habitat, and erosion would not occur because of design, i.e., flat areas, with no slope. Section 4.3.4.2 discusses the existing wetlands that have established around the perimeters of the existing ponds.

No.	Comment	DOE Response
80	It is certain that wildfire will occur, indeed, one occurred in 2006. Wildfire removes plant material, should a large enough precipitation event occur while the soil is exposed, sediment will be moved downstream. Given the gravity of the pollutants, and the possible effects to public health, it seems prudent to keep the dams intact and the sediments in place.	Section 6.4.1 describes the mitigation measures that would be used to minimize erosion both throughout and after the breaching of the dams. Because these measures would be used on a consistent basis, it is not necessary to add additional mitigation measures following a wildfire event. The URL address to the Erosion Control Plan for the Rocky Flats Property Central Operable Unit has been added as a reference in Section 8.0. Additionally refer to Common Concern Statement Response 5. It should be noted that the April 2006 wildfire that occurred in the NE corner of the Buffer Zone largely burned areas east of the terminal ponds in Walnut Creek. Therefore the terminal ponds did not function in the fashion the commentor suggests.
81	Once the dams are breached, water flowing off site can no longer be contained. In the event a water quality standard is violated, there is no way to capture the water. It will flow through the communities of Westminster, Broomfield, Thornton, and down to the South Platte River. Both Walnut and Big Dry Creek provide many important recreational opportunities to the citizens of these communities. Big Dry Creek supports a Primary Recreation use designation which is defined by the CDPHE as “recreational activities where the ingestion of small quantities of water is likely to occur. Such activities include but are not limited to swimming, rafting, kayaking, tubing, windsurfing, water-skiing, and frequent water play by children.” While Northglenn does not border Walnut or Big Dry Creeks, we support protecting citizens from potential health risks.	Refer to Common Concern Statement Response 4.
82	The dams serve as a last line of defense to protect human health and the environment.	Refer to Common Concern Statement Responses 1 and 4.

No.	Comment	DOE Response
83	The Site is moving from surface water to groundwater. There are multiple contaminate plumes of carcinogenic volatile organic compounds (“VOC”). VOC’s delivered to surface water have more time to volatilize if retained in ponds.	This comment appears to refer to the fundamental hydrologic processes at Rocky Flats, wherein contaminated groundwater discharges to surface water. DOE does not rely on the process described by the commentor to reduce concentrations of VOCs in water. Instead, treatment systems are in place to intercept and treat contaminated groundwater that would otherwise discharge to surface water. These systems are repeatedly confirmed to be effective through the collection of analytical data and operational information and undergo maintenance as needed to ensure their continued effectiveness. Potential system improvements are also evaluated and, if warranted, are installed. However, it is true that not all of the VOC-contaminated groundwater plumes at Rocky Flats are routed through a treatment system; to confirm that contaminated groundwater from these plumes does not discharge to surface water, monitoring wells are positioned along the flowpaths between these plumes and surface water. These wells are monitored in accordance with RFLMA and indicate surface water quality is not adversely impacted by the plumes; if the analytical data suggested otherwise, the RFLMA process would drive evaluation of the cause(s) and appropriate response(s) to the potential impact.
84	Water quality at the Indiana Street Points of Compliance show more variability post closure than preclosure. This is an indication that the hydrology has not stabilized.	Refer to Response 17 and Common Concern Statement Response 1. Additionally, a table showing the POC data has been included in the Final EA (Table 4–17).
85	Two of the four purposes for the proposed dam modification can be linked to cost savings. While no estimate of savings was given in the EA, the DOE have an estimate of $24 million savings over a 75 year period at the EA public meeting; at the same meeting, an estimate of $130,000 savings from dam maintenance and operation was expressed. As this seems a primary reason for wanting to breach the dams, a detailed report of the cost savings is appropriate. Northglenn requests that the DOE develop a detailed budget for operation and maintenance of the remaining dams, monitoring costs by general objective, and administrative costs associated with the substitute supply-augmentation plan. Furthermore, Northglenn requests that these costs be evaluated against the costs to the environment and human health if contamination migrates off site. If a detailed budget is nor forthcoming, Northglenn requests that any potential economic benefit, as identified by DOE, be removed from consideration for this EA.	Refer to Common Concern Statement Response 6 and 8.

No.	Comment	DOE Response
86	The post closure data record does not include sufficient wet/dry cycles for assessing hydrologic conditions at the site. Wet/dry cycles test the function and effectiveness of remedy.	Refer to Common Concern Statement Response 1.
87	The inability to fully evaluate the effectiveness of the remedy due to ongoing construction activities, recent operational changes, and future plans for phased modifications at landfills and groundwater treatment systems.	Refer to Common Concern Statement Response 2.
88	Not enough technical data was provided in the EA to support the proposed action of breaching the remaining dams.	40 CFR 1508.9(a) directs an EA to "briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or finding of no significant impact. To avoid undue length, the EA may incorporate by reference background data to support its concise discussion of the proposal and relevant issues." Extensive data are referred to in the EA but not repeated in the document. Please refer to Section 8.0 (References) for further information.
89	Lack of a Contingency Plan to ensure the health and safety of downstream communities should a water quality standard be exceeded. If a Contingency Plan is developed, it should model the fate and transport of contaminants in the flow through condition to the South Platt River, a drinking water source.	Refer to Common Concern Statement Response 4.
90	The EA does not address contamination for the proposed action; however, the proposed action will lead to additional risks not identified within the EA. These risks have not been evaluated or considered. This is an egregious oversight and is sufficient reason to determine that a Finding of No Significant Impact (FONSI) is not supported and an EIS should be considered or the process halted.	Refer to the Common Concern Statement 8.
James Campbell, MD, MS, Arvada, CO		
91	After learning more about the proposed changes, I do remain concerned that breaching the dams constitutes a relatively irreversible loss of potential containment for contaminated surface water leaving the site. In short, I submit that the dams should be maintained and not breached.	Refer to Common Concern Statements 1 and 4.

No.	Comment	DOE Response
93	While the present system of periodic release of batched pond water is no guarantee that surface water will be confirmed as meeting specification before leaving the site (e.g. the recent emergency release at the B5 Pond in Spring of 2010), it is true that the current ability to retain water in the ponds does represent an important line of defense against the vast majority of unforeseen releases of contaminated surface water in the future. The current site, even post-remediation, still represents an enormously complex and dynamic system of ongoing cleanup tasks (e.g. volatile organic compound (VOC) degradation) and monitoring of contaminants (e.g. surveillance of radionuclide levels in surface water effluent). Given the great deal of work done to clean up the site and continually monitor it, we may hope with some degree of confidence that there will not be unexpected contaminant releases from the site in the future, but it would be untenable to project that the dynamic migrations of ground and surface water through this intricately and highly contaminated site will never change in unpredicted ways. It is important for any public review to recall that the Rocky Flats cleanup agreement achieved higher standards for surface soil remediation by allowing for retention of many original Rocky Flats structures underground.	Refer to the Common Concern Statement 8.
94	Additionally, while there is diligent attention currently focused on the current system for remediation and monitoring of underground VOC plumes, this too can be a tricky business, prone to unanticipated events over the coming years and decades.	General groundwater characteristics (such as flow directions) are assessed annually, and new technologies (including for groundwater treatment) are examined at least every 5 years as a part of the CERCLA Periodic Review. These efforts, together with the near-daily site visits and collection of analytical data on groundwater and surface water quality, help to provide leading indicators of changing conditions. When and if they arise and warrant a response, unanticipated events and conditions would be addressed via the RFLMA process.

No.	Comment	DOE Response
95	In reference to the Citizen's Advisory Board "Our Legacy Report to the Community" As "Water Quality will be a significant measure of the site's cleanup. Historically, water quality problems have occurred at Rocky Flats during periods of increased precipitation and run-off. Although surface water quality as it leaves the site has always remained below regulatory limits, there have been some instances, as late as 2005, where onsite water quality has exceeded state standards for plutonium, uranium, and americium. This water is collected in onsite ponds and tested before it is released to streams that travel offsite… The board advises that site neighbors and other interested community members pay particular attention to the surface water monitoring program for the foreseeable future." This expert recommendation represents the culmination of 13 years of dedicated service by the men and women of the Citizen's advisory board and constitutes a warning for all parties interested in the future of Rocky Flats to maintain the highest reasonable standards for monitoring the site's surface water quality as a means of monitoring the fitness of the entire site in the coming post-cleanup decades. Breaching the dams diminishes our ability to characterize and control effluent releases of surface water from the site and consequently should be viewed with great caution and avoided. While maintaining the current system of retention ponds at the site is not without difficulty and expense, it does constitute a better and safer alternative than free unregulated flow of surface water off the site via breached dams.	Refer to Common Concern Statement Responses 1, 4, and 5. Additionally, the Citizen's Advisory Board report does not issue a warning for all parties interested in the future of Rocky Flats to maintain the highest reasonable standards for monitoring the site's surface water quality. Rather, the recommendations included the explicit statement to the public for future questions to be asked as "are water quality standards being met?" (page 17 of Our Legacy report to the Community URL: http://www.rockyflatssc.org/legacy_report.html). The Citizen's Advisory Board report also stated "Given the amount of secrecy that surrounded Rocky Flats in its first 40 years of operation, the openness of the cleanup years was an astounding reversal."
Josh Nims, President Woman Creek Reservoir Authority (May 28, 2010 – also incorporating February 11, 2010 letter)		
96	The Authority strongly prefers a "No Action" decision, the "alternative of breaching the five dams and the resulting flow of water and sediments from the existing ponds is simply unacceptable to the Authority. Under this alternative there would be a permanent loss of any DOE control of water in the watersheds. Simply walking away from any long term stewardship obligations associated with the 5 ponds is inappropriate at this time and cannot constitute a viable "alternative", nor can it be justified in the name of alleged water quality, riparian or wetland improvements. NOTE: this statement was in the Feb. 11, and May 28 letters, which have been consolidated for this table.	Comment noted.

No.	Comment	DOE Response
97	The A, B and C series ponds were constructed, in part, to allow contaminated sediments to settle out of the water column before the surface water was discharged offsite. These ponds currently serve as a last measure of on-site protection for the downstream communities. DOE has not provided any documentation in the EA to address sediment mobility concerns. The potential costs associated with cleanup of mobile sediment should be factored into any cost saving determination advanced by DOE. NOTE: this statement was in the Feb. 11, and May 28 letters, which have been consolidated for this table.	Refer to Response 21 and Common Concern Statement Response 5.
98	There are still a number of ongoing DOE remedial efforts at the Site that still do not conform to the requirements of the RFLMA as of this date (February 11), including but not limited to, ongoing groundwater treatment and landfill cover activities. In light of these activities and in light of the fact that regulatory closure occurred less than four years ago, there is not nearly enough of a record of wet and dry year cycles to reach any meaningful conclusions on the long terms flow regime of both the Woman and Walnut Creek watersheds that could possibly justify breaching existing dams. Frankly, the current effort to breach the dams appears to be motivated more by a desire to reduce DOE dam liability and operational costs, rather than any supportable environmental benefit. Note: This statement was in the February 11 letter only.	Refer to Common Concern Statement Responses 1 and 2.
99	The Authority wants specific assurances from DOE and the relevant regulators that a “breach” or any other “alternative” considered in this process does not include or constitute a relaxation, movement, change or re-visitation of DOE’s ongoing obligations for operation and monitoring of the Indiana Street Point of Compliance in the future. DOE most continue to monitor water quality at the Indiana Street Point of Compliance indefinitely. Any attempts to relax or move the point of compliance would constitute a major change to the RFLMA and would be inconsistent with DOE’s existing agreements with the Authority. The Authority wants written assurances that any such activity is not contemplated under the current proposal. NOTE: this statement was in the Feb. 11, and May 28 letters, which have been consolidated for this table.	Refer to Common Concern Statement Response 3.

No.	Comment	DOE Response
100	Pond C-2 is the only remaining on-site detention facility in the Woman Creek basin. It contains sediments from the days when DOE actively conducted nuclear activities at the Site and, to this day, still collects runoff from a portion of the industrial zone via the South Interceptor Ditch. At a minimum, continued maintenance of Pond C-2 is critical to the protection of Woman Creek flows. As such, an alternative should be analyzed that at least maintains a viable dam and appropriate water quality testing at Pond C-2. The water quality testing that currently occurs at Pond C-2 prior to any release would presumably be eliminated if the dam is breached. This water quality testing is critical to the interests of the Authority and serves as an additional assurance that the water released to Woman Creek is of an acceptable quality. NOTE: this statement was in the Feb. 11, and May 28 letters, which have been consolidated for this table.	This comment essentially recommends the No Action alternative, which is evaluated in the EA. Also, refer to Common Concern Statement Response 7. Monitoring of flow from the SID that would become part of the flow-through of the breached C-2 would continue at POE SW027; outflows would continue to be measured at RFLMA POC(s).
101	DOE failed to consider the Authority's suggested alternative in the EA. The Authority suggested that DOE should consider a breach of Pond C-2 in 10, 25, or 50 years as separate alternatives. This would allow a meaningful analysis of flow regime in Woman Creek during both extended wet and dry year cycles. Moreover, before any breach under these types of approaches is authorized, it would be essential for a full suite of independent testing of the sediments in Pond C-2 to occur that demonstrates that the sediments released by a breach of the dam do not negatively impact Woman Creek and the related environment and ecology. An extended delay of any breach event coupled with the sediment testing should be considered as an alternative to simply breaching the dams in the next year as proposed by DOE. These alternatives need to be fully analyzed in the EA, not simply ignored and justified as a no action alternative. These were not a "no action" alternatives, but rather specific alternatives for dam breaching at different times to allow for additional data collection. NOTE: this statement was in the Feb. 11, and May 28 letters, which have been consolidated for this table.	Refer to Responses 3, 25, 100 and Common Concern Statement Responses 1, 4, and 7.

No.	Comment	DOE Response
102	The current DOE effort to breach the dams appears to be motivated more by a desire to reduce DOE dam liabilities and operational costs, rather than any supportable environmental benefit. In public meetings, DOE has stated that breaching the dams will save "$24 million over a 75 year period". Nothing in the EA provides any support for these figures. DOE must provide a detailed breakdown of support for these figures, including, but not limited to, an appropriate estimate of costs and liability if contaminated water and/or sediments leaves federally controlled property. It is inappropriate for DOE to rely on cost savings as a rationale for dam breaching under the EA without including the cost saving data in the EA itself. At a minimum, the EA needs to be supplemented with detailed cost saving information as to each of the terminal ponds and circulated for additional comment.	Refer to Common Concern Statement Response 6.
103	At a public meeting, DOE rationalized, in part, the alternative of dam breaching by pointing to ongoing evaporation concerns. Those concerns, however, will be addressed by the currently pending plan for augmentation filed by DOE in Colorado Water Court – Water Division No. 1. In Case No. 08CW002, DOE has already taken steps to address the current level of evaporation from the terminal ponds. Upon issuance of a decree in Water Court, those concerns will be addressed on a permanent basis. During the pendency of that case, on information and belief, DOE has obtained a valid Substitute Supply Plan to address evaporative losses until such time as a final decree issues in Water Court. In short, DOE is already addressing evaporative loss issues.	While retention of water and evaporative loss of water may be recognized by the Water Court in the mentioned proceeding, this is not DOE's Proposed Action. The water court documents provide for evaporative loss water to be made up so downstream rights holders get the water they are entitled to, but Broomfield has to give up some of their water to do this, because the water that evaporates at the RFS is no longer available to be used. If no reportable evaporation occurs at the RFS, both DOE and Broomfield would not have the need to spend resources on accounting and reporting.
104	DOE has suggested that different timing of dam breaching occur to allow for additional collection of data. DOE has failed to explain why Pond C-2 is treated differently than the other terminal ponds. The Authority prefers a no action alternative. To the extent that DOE goes forward with dam breaching, however, it would be appropriate to operate all the terminal in a flow through approach to collect more data. Under this approach, the outlet works for Pond C-2 would be opened so as to operate as a flow through system. Testing would be maintained at both the outlet and at the Indiana Street Point of Compliance. To the extent a relevant standard is exceeded at either point of compliance, the outlet could be shut to retain any remaining contaminated water on site until such time as DOE can adequately address the exceedance. This allows DOE to maintain some level of ability to retain contaminated water on-site.	Refer to Common Concern Statement Response 7.

No.	Comment	DOE Response
105	DOE argues that any such contamination is unlikely, but this approach allows for some level of protection to downstream entities if DOE's assurances of no exceedances proves inaccurate. It also allows DOE to obtain additional data on the flow regime on Woman Creek in both extended wet and dry year cycles to justify additional action in the future. To the extent DOE's assurances are accurate and no future exceedances occur, the DOE will have minimized evaporation issues associated with a flow through pond and furthered its stated goal of wetlands and riparian improvements, yet maintained the ability to retain water on-site if necessary in the future. To the extent DOE claims a lack of cost reduction related to dam monitoring and repairs associated with the approach, it must provided (sic) a detailed cost analysis specific to costs associated with operating and maintain Pond C-2.	Refer to Responses 3 and 25 and Common Concern Statement Responses 1, 4, 6, and 7.
106	DOE has claimed that it will operate some of the terminal ponds in a flow through manner to obtain additional necessary data prior to final breach. The Authority believes this need for additional data, in and of itself, precludes DOE's ability to issue a Finding of No Significant Impact in this instance. It is inappropriate to make a determination of no significant impact when all of the data required to support the decision are not, as yet, collected.	Refer to Common Concern Statement Responses 1 and 7.
107	If Pond C-2 is breached. DOE must be required to maintain long term monitoring of Woman Creek flows at the Indiana Street Point of Compliance in Perpetuity and sediment testing prior to any such breach. As indicated above, the Authority strongly prefers a "No Action" determination. In the worst case scenario, however, a breach upon demonstration that the released sediments pose no undue risks coupled with a perpetual monitoring requirement at the Indiana Street Point of Compliance would be better than a simple breach alternative.	Refer to Common Concern Statement Responses 1, 3, and 7.
Ed Lanyon, Water Resources Administrator, Thornton, CO		
108	Thornton strongly supports the "No Action" alternative for reasons identified below.	Comment noted.
109	Impact to and protection of human health and the environment were not fully considered in the EA. At the public meeting held on May 18, 2010, DOE staff stated that a contingency plan has not been developed or even considered should residual contamination move off the Rocky Flats site and into the downstream communities.	Refer to Common Concern Statement Response 4.

No.	Comment	DOE Response
110	It is unknown if sufficient time has passed since regulatory closure in 2006 to adequately evaluate the effectiveness of the mitigation that has been put in place. At a minimum, Thornton requests that the DOE provide information on how it has evaluated the effectiveness of the mitigation.	Refer to Common Concern Statement Response 1.
111	Breaching of the dams will remove facilities that help to prevent residual contamination from moving off the site.	Refer to Common Concern Statement Response 5.
112	Thornton requests that the DOE allow more time to pass to evaluate the remedy before taking action so soon after regulatory closure. Unnecessary and hasty actions at this point could have serious consequences for the downstream communities should the assumptions made by the DOE prove to be incorrect.	Refer to Common Concern Statement Response 1.
113	The Draft EA states that a reduction/elimination of depletions would reduce or eliminate the following: 1) costs incurred by Broomfield; 2) depletion reporting costs; and 3) costs to water rights holders responsible for downstream augmentation. • Unless all depletions are going to be eliminated and water won't be impounded on the site, and reporting will not be required by the State Engineer, then reporting costs aren't going to be reduced. It doesn't matter if an entity is reporting 100AF or 1AF, there will still be reporting requirements to perform • Water impounded on the site to maintain wetlands will cause depletions. • How are costs to water rights holders responsible for downstream augmentation going to be reduced or eliminated? This statement is not clear and is not consistent with Colorado water law or water rights administration.	Refer to Response 103 and Common Concern Statement Response 6. DOE believes that breaching the dams would essentially eliminate depletion issues. The resulting stream configuration would promote wetlands formation, but the amount of evaporative loss would be very small in relation to the current water retention regime. DOE believes that the monitoring and subsequent reporting of depletion amounts after dam breach would also range from minimal to none required. Cost to water rights holders responsible for augmentation would be reduced or eliminated because water is no longer retained for which augmentation would be required. The EA is not intended to constitute a DOE legal opinion regarding this issue but rather reflects what DOE believes would be the practical outcome of the Proposed Action.
114	The Draft EA states that the dams are no longer needed and breaching would reduce costs (and by association taxpayer's costs). • What are the estimated cost savings? There isn't an amount discussed in the EA. If cost savings is one of them major reasons for breaching the dams then the estimated savings should be stated.	Refer to Common Concern Statement Response 3

No.	Comment	DOE Response
115	The Draft EA states that breaching of the dams will preclude any injury to calling senior water rights holders. • This is not a true statement since there is an augmentation plan in place that augments depletions associated with these reservoirs. That is the function of an augmentation plan, to ensure other water rights are not injured.	See response to comment 113. DOE considers that this constitutes a practical and not a legal determination.
116	The Draft EA states that breaching the dams would not change DOE obligations to monitor surface water and meet standards as required by RFLMA. • What are the DOE's plans if there is an exceedence of the standards?	Refer to Common Concern Statement Responses 1 and 4.
117	The Draft EA discusses floodplains across the eastern portion of the Rocky Flats site. • Why weren't the floodplains related to the entire site addressed and studied? If they would have been studied, could that reveal an increased risk of residual contamination being exposed and conveyed through the breached dams and onto the downstream communities? • Were out-of-basin inflows from canals considered in the assessment? If out-of-basin inflows were not considered, could they increase the risk of residual contamination being exposed and conveyed through the breached dams and onto the downstream communities? DOE stated at a public meeting that they get flows onto the site from the irrigations canals.	Section 4.3.4.3 explains that floodplains are generally delineated by the Federal Emergency Management Agency (FEMA). Within the RFS, no floodplains are delineated by FEMA because the extent of FEMA mapping does not extend into the current RFS boundaries. Because FEMA has not mapped the RFS, DOE used the information available to them through the references listed in Section 4.3.4.3 to assess potential impacts. Section 1502.22 of CEQ regulations for implementing NEPA provides for the disclosure of unavailable information in a NEPA document, provided that the unavailable information is identified. Based on the additional information available from other reports cited in Section 4.3.4.3, DOE believes that the agency's evaluation of impacts is based upon research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts that may have catastrophic consequences, even if their probability of occurrence is low, and the analysis of the impacts is supported by credible scientific evidence. All of the ditches and diversions were taken into account in the EA assessment of impacts upstream of the dams. Refer to Appendix F modeling data.

No.	Comment	DOE Response
118	The Draft EA states that even with maintenance, the dams still might need to be breached in the future. • Appropriate and continued maintenance of the dams could make them last for decades.	Refer to Common Concern Statement Response 6. In addition to maintenance costs, as stated in Section 5.2.5.2 "failure of an earthen dam would result in the downstream transport and deposition of large quantities of soil from the embankment structure. The remaining dams at the RFS are more than 30 years old. While the expected lifespan of these earthen dams is not known, continued aging, regardless of rigorous maintenance, could necessitate the breach of these structures in the interest of dam safety."
J. Brent McFall, City Manager, Westminster, CO		
119	The City of Westminster advocates the "No Action" EA alternative and provides supporting evidence herein to refute assertions in the EA that minimize or dismiss the significance of potential impacts to identified resources. In addition, the City identifies in its comments additional resource impacts that were omitted from evaluation in the EA.	Comment noted.
120	Westminster contends the EA Proposed Action violates the Institutional Controls for the Central Operating Unit (COU) as detailed in RFLMA Attachment 2, Table 4, February 2007. Use Restriction Control #2 states: "Excavation, drilling and other intrusive activities below a depth of three feet are prohibited, except for remedy-related purposes and routine or emergency maintenance of existing utility easements, in accordance with pre-approved procedures." Based on the purpose of the EA stated above, excavation for breaching the dams under this EA would be in violation of Institutional Control #2. The Use Restrictions are legally enforceable requirements placed upon the property owner under the Environmental Covenant granted to CDPHE by DOE and filed with Jefferson County in 2006. The CDPHE granted approval of Contact Record 2010-02 titled Approval of Excavation Greater Than 3 Feet Below Grade to Breach Dams A-3, A-4, B-5, C-2 and the Present Landfill Dam on April 15, 2010. The CR details plans for the Surface Water EA that was not released for public comment until April 30, 2010. The Rocky Flats Operations Guide, Appendix F, Rocky Flats Site Soil Disturbance Evaluation Procedure assumes excavation below the three foot depth only requires compliance with a soil erosion control protocol. The requirement for an erosion control plan, while applicable to this project, is not the regulatory compliance document required to perform excavation at depths below three feet for non-remedy related purposes. The EA and CR 2010-02 fail to recognize that the Proposed Action violated	Refer to Common Concern Statement Response 3. The RFLMA party consultation was necessary prior to the release of the Draft EA, because as the commenter points out, the dam breach work would otherwise be assumed to be in violation of the institutional control. Also, refer to response 34. The Contact Record is the result of the RFLMA party consultative process and reflects the implementation of the institutional control requirements to meet the stated objective and rationale, as contemplated by the CAD/ROD. The CAD/ROD provides the following: "In addition to the specific rationales set forth in the text for the various use restrictions, imposing the institutional controls discussed in the text also results in achieving compliance with the CDPHE risk management policy of ensuring that residual risks to the site user are at or below 1×10^{-6}. ... DOE shall notify EPA and CDPHE 45 days in advance of any proposed land use changes that are inconsistent with the objectives of these institutional controls or the selected remedy/corrective action. DOE shall not modify or terminate institutional controls, implementation actions or modify land use without approval by EPA and CDPHE. DOE

No.	Comment	DOE Response
	Institutional Control #2 because the Proposed Action is not remedy-related. The CAD/ROD states and the Rocky Flats Site Operations Guide – Appendix F reiterates the objective and rationale for prohibiting non-remedy related activities in the COU as stated for Institutional Control #2: • *Objective; prevent unacceptable exposure to residual subsurface contamination. Rationale; contaminated structures, such as building basements, exist in certain areas of the Central OU, and the CRA did not evaluate the risks posed by exposure to this residual contamination. Thus, this restriction eliminates the possibility of unacceptable exposures. Additional, it prevents damage to subsurface engineered components of the remedy.* The CAD/ROD states "these controls will extend throughout the Central OU" and "will run with the Property in perpetuity and be binding on DOE and all parties having any right, title or interest in the Property". Westminster contends that the excavation activities proposed in CR 2010-02, for consideration based on results of the EA, violate Institutional Control #2.	shall seek prior concurrence before any anticipated action that may disrupt the effectiveness of these institutional controls or any action that may alter or negate the need for institutional controls." CAD/ROD, Section 17, p.71. Thus, the Contact Record provides this notification and documents that the excavation for the dam breach would be in compliance with the CAD/ROD requirements regarding institutional controls.
121	The City of Westminster is located directly east of the RFS adjacent to Indiana Street along the eastern boundary of the federal property. Surface water flows in Woman Creek leaving the RFS bypass the City's drinking water supply in Standley Lake by means of the facilities constructed and operated under the Standley Lake Protection Project; however, Walnut Creek flows that bypass Great Western Reservoir flow through portions of the City to Big Dry Creek and provide an existing primary contact recreation use to City residents that could result in incidental ingestion of water.	Comment noted. An explanation of the flow regime has been added to Section 1.1 in the Final EA to further clarify. Additionally, refer to Response 25.
122	Walnut and Woman Creeks, including those segments on the COU and the POU are classified by the Colorado Water Quality Control Commission as Aquatic Life Warm Water 2, which means these waters are not capable of sustaining a wide variety of warm water biota, including sensitive species, due to physical habitat, water flows or levels, or uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species. Breaching all remaining dams in a selective attempt at riparian habitat improvement on the COU will not ensure sustainable habitat improvement in the drainages downstream of the existing ponds. The numerous references to water quantity limitation provided by DOE	Comment noted. The riparian habitat improvements and enhancements DOE is referring to are related to the vegetation communities behind the dams and along the streams downstream of the ponds, not the aquatic communities in the streams.

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	throughout the EA and RFS annual reports support this conclusion. The success in establishing new habitat in downstream drainages if the dams are breached is optimistic, especially due to the water quantity limitations. It is certain that dam breaching will eliminate 95 percent (14 acres) of open water habitat for 45 species of waterfowl. The gains in riparian habitat and the species they support would be minimal relative to the loss of open water habitat.	
123	The details provided for breaching the dams in the EA are inconsistent with the details included in CR 2010-02. In addition, DOE's explanation of the proposed dam configuration and operations presented at the public meeting on May 18, 2010 presented other conflicting details, such as the free board levels that would remain above the Pond C-2 sediments following the dam breach. Consistence of the message would simplify the efforts to understand and respond to the impacts; DOE must address any inconsistencies between the two documents.	The comment is noted but does not provide details regarding perceived inconsistencies. The purpose of the Contact Record is discussed in comment Response 120, and DOE does not believe there is any inconsistency.
124	The EA describes the channel inlets at the dam breach sites "…will be located to provide positive drainage from the area upstream of each channel inlet. This would ensure a consistent flow of water and prevent ponding. The area upstream of each channel would be designed to preserve and enhance wetlands and habitat to the extent possible, while still providing positive flow." The EA does not specify any criteria for assessing the habitat enhancements, yet quantifies the acres of existing habitat to be eliminated in the areas upstream of each channel. The priority for the dam breach focuses on positive flow of surface water off the COU – at the expense of any open pond habitat.	As stated in Section 5.2.4.1, the acres of habitat to be eliminated is based on expected drawdown of the pond water derived from the preliminary engineering estimates. Setting criteria for assessing the habitat enhancements would be a requirement of the USACE, which has stated that the activities would most likely be permitted under a Nationwide Permit #27, as stated in Section 6.4.2. Section 6.4.2 includes general and activity-specific conditions to control and mitigate the water quality impacts of the work, including post-construction erosion controls and revegetation and requires notification of USACE of the intent to perform work in accordance with the permit prior to commencing the work.
125	The soil in the breach channel below a depth of three feet (as detailed in CR 20010-02[sic]) will be used to fill "former spillways and roads to be reclaimed." There is no reference to characterization of the excavated soils or specific identification of the designated areas to be filled with excavated soils Westminster contends this activity is in violation of Institutional Control #2.	The Contact Record provides information and reference to the characterization results. The removed material (which, although is below a depth of 3 feet from the current surface, would be from the soils in the dam structure) is consistent with the surface soils within the COU, and thus is acceptable for use within the COU for revegetation purposes.

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126	The EA states that the dams are no longer needed for the original purpose. According to historical documents, the original purpose for the majority of the ponds was the containment of wastewater flows including some flows which were contaminated with radionuclides and other analytes of concern. In effect, the ponds serve as the last line of defense for the downstream communities by preventing contaminated sediment migration of the COU.	Refer to Common Concern Statement Response 4 and 5.
127	DOE revealed at the public meeting held on May 18, 2010, the cost savings resulting from implementing the Proposed Action for operation, maintenance and dam safety compliance would be $24 million over a 75 year period. The detailed assessment of how DOE derived the cost saving estimate is not available for review.	Refer to Common Concern Statement Response 6.
128	The attendees at the public meeting on May 18, 2010 were also led to believe the dams are in jeopardy of failing – especially B-5. Summaries of the recent dam inspections reported by DOE lists satisfactory condition ratings and recommended a safe storage level of "full." Clearly, dam safety has not been jeopardized. Emergency releases as detailed in the Rocky Flats Site Operations Guide are utilized, as necessary, to ensure dam safety.	Comment noted. Also refer to Response 118.
129	The EA states that breaching Pond C-2 and PLF dams will have little to no effect on improvement to downstream habitat. Cost savings, rather than habitat improvement, appears to be the driver for breaching the Pond C-2 and PLF dams.	Section 1.2 describes the purpose and need for the Proposed Action. All issues described in this section are the purposes, and no single one is the determinant factor for the decision document from DOE.
130	The EA states that "water discharged from the terminal pond dams meets applicable RFLMA surface water quality standards, which are based on the CWQCC CCR, Regulation No. 31…, and on the site specific standards in the CWQCC Regulations No. 38…." It should be noted, however, that while the RFLMA surface water standards are based on the referenced regulations, they are not applied in the same manner. The mechanism for calculating compliance with RFLMA standards is relatively unique in the state for assessing compliance with surface water standards applicable for individual stream segments. The manner in which CWQCC Regulation No. 38 is applied for segment 4a within the RFS and how it is applied outside the boundary of federal lands are not the same. Protection of surface water was a basis for making soil and groundwater response action decisions during the cleanup period so that surface water on site and leaving the site would be of sufficient quality to support all uses. Table ES-1 in the EA, Resource-Specific	Refer to Response 25 and Common Concern Statement Responses 1 and 4.

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	Consequences, states "individual sample results downstream are expected to show increased variability." The EA does not indicate how the variability will be monitored. Increase variability in sample results based on the Proposed Action could result in exceedance of the applicable stream standards in the downstream watersheds when the WQCC Regulation No. 38 standards are applied to streams off federal lands.	
131	In some instances, the statistical assessment software DOE uses for data interpretation requires more individual data points than are collected under the current sampling frequencies and site conditions. Oftentimes, contaminant plume migration trending cannot be assessed as evidenced in CR 2010-05. The uranium data in the groundwater wells downstream of the Old Landfill (OLF), while significantly higher than the wells upgradient of the OLF, cannot be trended due to the limited data collected. These limitations on interpretation and applicability of the data collected to predict impacts on the downstream site locations, both on federal lands, and off, concern the downstream communities regarding the protectiveness of the remedy to ensure surface water is of sufficient quality to protect all uses.	Refer to Common Concern Statement Responses 2 and 5.
132	It should also be noted that surface water standards have been exceeded on the COU at the POEs upstream of the ponds and in the PLF pond.	Refer to Response 18.
133	Westminster is concerned by the following section included in the EA: "Parallel to the completion of this EA, DOE has proposed that the RFLMA be modified to change some of the current RFLMA monitoring points, including Point of Compliance (POCs) downstream of the dams. The proposed RFLMA modification is subject to CDPHE and EPA approval. The RFLMA modification is not considered a part of this EA but is a part of the remedy for the RFS. The modification has not been approved as of the date of this Draft EA, but if the approval has been received by the Final EA, this document will be updated to reflect the change. If the RFLMA is modified to change the location of the POCs downstream of the dams, ground disturbance would occur with the closure of the current POCs and development of new monitoring points." The public does not have access to the proposed RFLMA modification document referenced. The EA should not be amended following the public comment period to incorporate significant changes, such as monitoring point locations, if the public is not permitted to provide comments. DOE must disclose the specifics of all actions relevant to this EA for evaluation of the resource impacts to downstream communities.	Refer to Response 10 and 25 and Common Concern Statement Response 3. The Final EA will clarify that DOE's proposal was still at an informal stage and specific details were still being considered by DOE, CDPHE, and EPA (the RFLMA Parties) under the RFLMA consultative process (see RFLMA paragraph 11). However, the RFLMA Parties have communicated to stakeholders in the Draft EA (as well as at the Rocky Flats Stewardship Council public meetings) their intent to issue a formal RFLMA proposed modification document for public review and comment. The proposed POC modification is different than the EA. While the breaching of the dams for Ponds A-4, B-5 and C-2 (part of the Proposed Action) triggers evaluation of relocating the RFLMA surface water points of compliance downstream of these ponds pursuant to the CAD/ROD and RFLMA, DOE may propose changes to RFLMA

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		monitoring points at any time, whether or not the dams are breached. The Proposed Action is not dependent on any proposed modifications to RFLMA monitoring points, now or in the future. DOE is the decision-making agency regarding the NEPA evaluation of the Proposed Action and to make a determination whether a FONSI should be approved or whether an EIS is required. DOE is responsible to confer with the other RFLMA parties to reach agreement to the extent possible regarding a proposed course of action to implement RFLMA in accordance with the RFLMA consultative process. CDPHE and EPA are the approving agencies of any final modification to RFLMA monitoring points in accordance with the CAD/ROD and RFLMA. The EA states that water monitoring in accordance with RFLMA will be conducted for as long as RFLMA requires.
134	The EA categorizes groundwater under the "Resources Considered but not Present or Impacted by the Proposed Action" section. The EA dismisses the impact to groundwater at all five proposed dam breach locations. Westminster insists that groundwater could be impacted if the dams are breached. Changing the hydrologic configuration at the RFS for surface water flow may increase the migration of groundwater plumes, some of which are direct contiguous links to surface water. It has been noted that groundwater seeps to the surface more in dry years. Seeps have been identified in the drainages where the Proposed Action is identified. The EA states that if the POCs are relocated downstream of the ponds, groundwater will be considered in deciding where the POCs should be located. Westminster contends that there is a potential for groundwater to be impacted by the Proposed Action.	Refer to Common Concern Statement Response 2.

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135	The EA discusses the need for an EPA-issued stormwater permit to be applied during the construction activities. The potential impact to surface water due to construction activities could be significant. In the event the Proposed Action proceeds, Westminster requests EPA consider adding a water quality monitoring requirement to the stormwater permit in addition to the best management practices to ensure protection of human health and the environment during construction activities.	Comment noted. As stated in Section 6.5, for federal facilities in Colorado, the stormwater permitting is regulated by EPA. A construction general permit for stormwater discharge is provided by EPA regulations in 40 CFR 122. All requirements under the stormwater permit as directed by EPA would be followed. Based on experience with past construction activities, DOE believes its erosion control and storm water management actions would appropriately comply with the stormwater permit conditions. All RFLMA-required monitoring would continue during construction (and after, for as long as RFLMA requires).
136	Westminster has identified additional resources that could be impacted by the Proposed Action, which were not addressed in the EA: The EA fails to address the impact of the Proposed Action on the downstream communities in the event any part of the remedy releases contaminated water or sediments that would have been captured in the ponds, but as a result of the Proposed Action, will be released downstream and off federal land. A contingency plan for containment of contamination on the COU is critical.	Refer to Common Concern Statement Response 4 and 5.
137	The EA fails to consider the impacts of fires on the COU, how the impacts would be monitored and the physical barriers required to contain any contamination on site.	Refer to Response 80.
138	The proposed relocation of the boundary POCs should be fully evaluated as part of this EA.	Refer to Common Concern Statement Response 3.
139	DOE is currently performing non-RFLMA sampling (CR 2010- 03) to assess sediment transport in the A and B series ponds. If more data is required to ensure the Proposed Action is protective of surface water before those dams are breached, then DOE is acknowledging there is the potential for downstream impacts. The present action should be assessed as a cumulative impact in the EA.	DOE is performing the sampling project for the reasons stated in the Contact Record 2010-03 because DOE believes that the information will be useful for comparison to pre-closure data and data that may be collected in the future from time to time. The EA is based on the post-closure sampling data available during preparation of the EA.
140	DOE has received approval from CDPHE to perform targeted soil sampling at the OLF (CR 2010-01) in order to meet CDPHE requirements for ending post-closure landfill care - which usually is required for 30 years, but may be extended or shortened. The impacts of ending OLF monitoring in the foreseeable future should be addressed as a cumulative impact in this EA.	Refer to Common Concern Statement Response 2 and Response 41. The OLF is within the Woman Creek basin, not the SID basin. C-2 is at the end of the SID and does not receive flows from Woman Creek. Breaching C2 would not change the OLF's relationship with Woman Creek.

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141	Westminster respectfully requests a written response to each of our concerns individually.	Comment noted. Please refer to responses above.
142	In closing, Westminster does not support a Finding of No Significant Impact (FONSI) for this EA and advocates the "No Action" alternative. At less than five years post-closure, remediation activities continue at the Rocky Flats Site and the uncertainties of all impacts associated with those activities do not justify the risk to the downstream communities. DOE - Legacy Management is obligated to comply with the CAD/ROD and RFLMA requirements for Institutional Controls on the COU to ensure protection of public health and the environment.	Comment noted. Also, refer to Common Concern Statement Response 1.
Alan King, Director of Public Works, City and County of Broomfield, CO		
143	We would like to remind DOE-LM of their responsibility to ensure all activities performed at the site must remain protective of human health and the environment following completion of cleanup, disposal, or stabilization in perpetuity.	Comment noted.
144	The on-site ponds serve as our last measure of defense. Based on current regulatory requirements, DOE-LM must measure water quality before it leaves the site and the ponds provide a mechanism to control and contain water that does not meet surface water standards. DOE-LM may also need the ponds to store and treat water onsite since ponds A-3 and A-4 were used for this purpose in the past to ensure off-site surface water quality is protected. With residual contamination remaining on-site, Broomfield wants to make certain that DOE-LM will continue to maintain the site in a safe configuration that protects human health and the environment for the life of the remaining contaminants. Broomfield has very thoughtfully and thoroughly reviewed this crucial document and prepared both general and specific concerns associated with the EA.	Refer to Common Concern Statement Responses 1, 4 and 5.

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145	Broomfield strongly believes that DOE-LM must adopt the "No Action" alternative and provides strong support herein for our assertion that the EA improperly minimizes or dismisses the significance of potential impacts to environmental resources. The mere fact that the proposed action has the potential to introduce contaminants into downstream ecosystems, and such impacts have not been mentioned, assessed, or quantified, should automatically preclude DOE-LM from adopting a Finding of No Significant Impact (FONSI). Our justification for the "No Action" alternative is primarily based on the following key concerns.	Comment noted.
146	DOE-LM Has Failed to Follow the Proper National Environmental Policy Act (NEPA) Process. It is clear from the actions that have already been taken that the preferred EA alternative was pre-determined. The CDPHE granted approval of Contact Record (CR) 2010-02 titled Approval of Excavation Greater Than 3 Feet Below Grade to Breach Dams A-3, A-4, B-5, C-2 and the Present Landfill Dam on April 15, 2010. The Surface Water EA was not released for public comment until April 30, 2010; therefore, CR 2010-02 presumed selection of the preferred proposed action by DOE-LM prior to allowing the public to participate in the NEPA process to evaluate and determine the action that best protects public health and the environment. Broomfield is also aware that DOE-LM has already provided CDPHE with a draft contact record addressing modifications to the regulatory Points-of-Compliance (POCs).	Refer to Response 34 and Common Concern Statement Response 3.
147	If DOE-LM is concerned about costs, please clarify why funds have been utilized for a proposed action that has yet to be determined in accordance with the NEPA process.	Refer to Common Concern Statement Response 6. Additionally, costs incurred to date have been in connection with the preliminary design of the dams and NEPA-related activities of assessing existing conditions, which would be necessary to evaluate the environmental impacts related to the Proposed Action.
148	Implementation of the Chosen Alternative Would Violate Otherwise Applicable Institutional Controls. The Rocky Flats Legacy Management Agreement (RFLMA) includes seven Institutional Controls that restrict certain uses within the Central Operable Unit (COU). Use restriction Control #2 of the RFLMA explicitly states: "Excavation, drilling and other intrusive activities below a depth of three feet are prohibited, except for remedy-related purposes and routine or emergency maintenance of exiting utility easements, in accordance with pre-approved procedures.	Refer to Common Concern Statement Response 3 and Response 120.

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	The proposed dam breaching activity, which is supposedly justified by the EA, would be in violation of these Institutional Controls. These use restrictions are legally enforceable requirements placed upon the property owner under the Environmental Covenant granted to CDPHE by DOE and filed with Jefferson County, Colorado in 2006. The restrictions in Attachment 2, Table 4 of the RFLMA were established to ensure such site activities would not compromise the integrity or function of the remedy or result in uncontrolled releases of, or exposure to, subsurface contamination that remains at the site. The EA and the CR 2010-02 fail to recognize that the proposed action violates the Institutional Controls identified within the RFLMA. In addition, the CAD/ROD and the Rocky Flats Site Operations Guide - Appendix F are clear in the objective and rationale for prohibiting non-remedy related activities in the COU as stated for Institutional Control #2: Objective: prevent unacceptable exposure to residual subsurface contamination. Rationale: Contaminated structures, such as building basements, exist in certain areas of the Central OU, and the CRA did not evaluate the risk posed by exposure to this residual contamination. Thus, this restriction eliminates the possibility of unacceptable exposure. Additionally, it prevents damage to subsurface engineered components of the remedy. The CADROD for the Rocky Flats site states: "These controls will extend throughout the Central OU" and 'Will run with the Property in perpetuity and be binding on DOE and all parties having any right, title or interest in the Property." (Emphasis added.) Broomfield submits that the three-year period that has elapsed since regulatory closure clearly does not equate to "perpetuity." Comment: Please provide the rationale as to why DOE-LM would have the authority to violate the RFLMA and the intent of the CAD/ROD and the Proposed Plan.	
149	Breaching the Present Landfill (PL) Pond Dam is Contrary to the Requirements Established Pursuant to the Resource Conservation and Recovery Act (RCRA) Plan. The PL was closed in accordance with 6 CCR 1007-3 3 265.12(a) (3) as a Subtitle-C Resource Conservation and Recovery Act (RCRA) landfill. Section 2.5.5 of the Present Landfill Monitoring and Maintenance Plan and Post-Closure Plan, U.S. Department of Energy Rocky Flats Site, March 2008, states: The East Landfill Pond will remain and	Refer to Common Concern Statement Responses 1 and 4 and comment Response 130. Section 2.5.5 of the Present Landfill Monitoring and Maintenance Plan and Post-Closure Plan (M&M Plan) provides a factual site physical description. If DOE issues a FONSI, and the surface water configuration is changed under the Proposed Action, the site physical description

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	receive treated water from the PLFTS and surface water from the east face and surrounding hillsides, as well as precipitation falling directly into the Pond. The decision framework for this sampling is found in RFLMA Attachment 2, Figure 1 1. The Present Landfill pond was remediated and the contaminated soils were placed within the Present Landfill. The pond does serve as a settling pond based on the material that was removed during remediation of the pond. In addition, the pond receives and contains water that exceeds the RFLMA standard at the Present Landfill Treatment Unit. Vinyl chloride, selenium, silver and other analytes have exceeded the surface water RFLMA standards as recently as this past year. Comment: Please provide the exception to the regulation that would allow DOE-LM to intentionally discharge water that does not meet surface water standards to waters of the state.	would be modified. The PLF Pond (or the East Landfill Pond as the commentor stated) is not required by the CAD/ROD, because it is not a component of the final closure of the PLF. See M&M Plan Section 1.0. However, DOE notes that M&M Plan Section 2.5.5 also refers to the description of monitoring of the pond as discussed in M&M Plan Section 5. Section 5.1 references RFLMA Attachment 2, Table 2, “Water Monitoring Locations and Sampling Criteria” as the requirements for the monitoring location. As discussed in the EA, DOE is proposing changes to RFLMA monitoring locations, and the proposed modification addresses the replacement for the pond sampling current location. The PLF treatment system monitoring results have intermittently exceeded the RFLMA standards, which triggers more frequent sampling to determine if the exceedance persists and thus may trigger RFLMA consultation to determine if the exceedance condition may require mitigating action. Exceedances have been only slightly above the RFMLA standard (triggering additional sampling) but have not triggered consultation or mitigating action because of the short duration. It should be noted that the RFLMA standards are based on the lowest standard promulgated by the Colorado Water Quality Control Commission but are implemented to trigger investigation and/or mitigation actions under RFLMA in a more conservative way than provided for by the WQCC standards. For example, the RFLMA standard for vinyl chloride (VC) is based on the lowest laboratory Practical Quantification Limit for VC of 0.2 µg/L, which is below the upper limit of the WQCC promulgated standard, which is 0.02-2 µg/L (2 µg/L is the Maximum Contaminant Level [MCL] for drinking water). VC exceedances of the RFLMA standard have been well below the MCL. DOE does not intentionally discharge water that does not meet surface water standards. The PLF treatment system is designed and functioning

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		in accordance with the final closure requirements for the PLF. Whether the remedy is being implemented as required is routinely evaluated by the RFLMA regulatory agencies.
150	The proposed action would allow water to freely flow from the pond and there would be no control in place to prevent negative impacts to such a valuable resource. Waste in the landfill was not removed and contamination remains in place. Benzene and vinyl chloride were the primary contaminants detected above the established standards during the remedial investigation. Comment: Provide the process to ensure the RFLMA is enforced to meet surface water standards prior to release.	Refer to Common Concern Statement Responses 1, 2, 3, and 4.
151	The treatment unit for the PL serves as a point source and the effluent must meet surface water standards prior to discharge. Comment: Please provide the associated contingency plan to contain the leachate if it exceeds the RFLMA surface water standard. Include the notification process, schedule to contain water, monitoring methodology, and notification process to downstream communities.	Refer to Common Concern Statement Responses 1 and 4. The "Final Interim Measure/Interim Remedial Action for IHSS 114 and RCRA Closure for the Present Landfill" (IM/IRA), August 2004, describes the regulatory status of the Present Landfill Treatment System (PLFTS) discharge. CDPHE approved the PLFTS as a waste water treatment unit (WWTU), and the discharge is regulated under the National Pollution Discharge Elimination System (NPDES) requirements. As such, under CDPHE's hazardous waste regulations, the discharge is not a solid waste and therefore not a hazardous waste at the point of discharge. The requirement for a NPDES permit for the PLFTS is waived in accordance with CERCLA permit waiver provisions for on-site actions, and the PLFTS is subject to CERCLA applicable or relevant and appropriate requirements (ARARs) identified in the CAD/ROD. The IM/IRA and identified NPDES ARARs were adopted in the CAD/ROD.
152	Broomfield understands that the dams are not required to maintain adequate protection of human health and the environment under the final CADROD; however they do serve as sediment ponds to collect contaminants. The ponds were identified as Individual Hazardous Substance Sites (IHSS) during site closure and some of the ponds had extensive remediation to remove materials above action levels and/or surface water standards. The scope of the previous 2004 EA related to breaching the dams in North and South Walnut Creek upstream of ponds A-3, A-4, and B-5 was limited only to those ponds listed because the downstream communities were adamant in their insistence that the terminal dams were not to be breached until adequate data were available	Refer to Common Concern Statement Response 4 and 8. The EA modeling report was for water volumes only and not contaminants.

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	to evaluate sediment and contamination migration post-closure. The downstream communities want to have a baseline developed on post-closure conditions after the site has fully stabilized and associated trending during wet and dry precipitation years has been completed. The current 2010 EA states it evaluated the direct, indirect, and cumulative impacts of breaching all remaining dams. We contend the EA did not properly assess environmental impacts directly, indirectly, or cumulatively related to impacts to offsite watersheds and potential risk to downstream communities. Comment: Please provide the modeling and evaluation that was performed to determine impacts to downstream watersheds if surface water leaves the site that does not meet the regulatory standards.	
153	The 2010 EA did not evaluate sediment migration after an uncontrolled fire. Fires can substantially increase runoff in watersheds. The US Forest Service's Rocky Mountain Research Station has studied the impact of fires on watersheds in General Technical Report RMRS-GTR-63, "Evaluating the Effectiveness of Post fire Rehabilitation Treatments", September 2000. The report states that severe fire can increase surface runoff by 70 percent and increase erosion by three orders of magnitude (Page 5). A single grassland similar to Rocky Flats was studied, as most of the fires studied were in forests. The increase in water yield ranged from 12 percent to 1421 percent, with the one incidence of grassland fire increasing water yield by 1150 percent. If drought conditions are combined with severe fires, the vegetation may not recover for many years. Comment: Please provide more information about the evaluation DOE-LM performed to address wildfires to ensure there are not direct, indirect, and cumulative impacts to human health and the environment related to the certainty of increased runoff from an uncontrolled fire. Please identify the Contingency Plan that would be implemented to prevent major erosion and release of sediment off-site.	Refer to Response 80. Section 6.4.1 describes the mitigation measures that would be used to minimize erosion both throughout and after the breaching of the dams. Because these measures would be employed on a consistent basis, it is not necessary to add additional mitigation measures following a wildfire event. The URL address to the Erosion Control Plan for the Rocky Flats Property Central Operable Unit has been added as a reference in Section 8.0. Additionally refer to Common Concern Statement Response 4.
154	The absence of a Contingency Plan to limit/control actinide migration from soil erosion, especially following a major storm event or fire, has not been provided for us to review so we could evaluate the proposed action. DOE-LM has not provided us with a response or identification of a process as to how DOE-LM would maintain regulatory compliance for surface water, identify	Refer to Common Concern Statement Responses 1 and 4.

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	the details of the sampling methodology for water flowing freely versus the current protocols; or how the agency would contain or treat water that did not meet the RFLMA standards. Broomfield wants to protect our communities and watersheds in the event of an exceedance. Comment: We request that DOE-LM provide us with the details of their Contingency Plans for the events identified in these comments.	
155	Broomfield questions the evaluation performed to address impacts from groundwater. The site has not stabilized and DOE-LM acknowledges this fact in its own documents. The EA improperly dismissed the impact to groundwater at all five proposed dam breach locations. The EA improperly evaluates such a key component of the proposed action as a mere concern. More emphasis is placed on ecological systems than on hydrology at the site. This approach is improper, particularly for a site that is still undergoing treatment and has not fully stabilized. The site has not been subject to a full 5-year Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) review since regulatory closure occurred. There is no sufficient baseline data available to identify trends and evaluate the effectiveness of the existing remedies. DOE-LM has several ongoing activities that have the potential for affecting or negatively impacting surface water quality such as modifications to groundwater treatment units, evaluation of the subsidence in the Original Landfill cover, and additional sampling regimes at the Present Landfill. In addition, insufficient time has lapsed since closure to be able to observe the hydrological or topographical impacts to the surface water quality resulting from sequential wet and dry periods. Changing the surface water flow may increase the migration of groundwater plumes, some of which are direct contiguous links to surface water on the Rocky Flats site. It is well-known that seeps south of the B-series ponds have had elevated VOC concentrations. Comment: How will monitoring of groundwater seeps downstream of the proposed dams be evaluated?	Refer to Common Concern Statement Responses 1 and 2. Additionally, the dams would be breached, not removed, and the portion of the structures that influence groundwater hydrology would remain. Any groundwater seeps below the dams would flow into the creeks and would therefore be included in the POC monitoring,

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156	Pertinent contaminants in groundwater within the drainages are monitored upstream of the ponds that are proposed for breaching and most of the constituent concentrations at the relevant Points of Evaluation (POEs) are above the RFLMA standards that apply at the POCs. Comment: Please provide additional information to address how groundwater and seeps downstream of the breached ponds will be monitored to ensure water quality leaving the site is maintained.	Refer to Common Concern Statement Response 2.
157	In light of the fact that water quality is such a key component of the remediation at Rocky Flats, it is disappointing to see that groundwater was evaluated in one short paragraph of the EA. Other resources such as socioeconomic considerations, cultural resources, and transportation were given more thorough reviews than groundwater. Comment: Please provide the analysis that the agency performed to validate the EA's rationale pertaining to its determination that there would be minimal impact to groundwater. Please identify the direct impacts, indirect impacts, and cumulative impacts and the modeling associated with the EA's statement. Was this analysis validated and if so, by whom? Did the evaluation consider drought years, wet years, floods, and fires?	Refer to Common Concern Statement Response 2.
158	Section 5.1 of Attachment 2 to RFLMA states: “If the terminal ponds are removed, new monitoring and compliance points will be designated and will consider groundwater in alluvium.” In order to make an informed decision on the proposed action and provide suitable comments on the EA, we need additional information to evaluate impacts to groundwater and other environmental media. Comment: Please provide the details concerning how the groundwater alluvium was evaluated and how those results will be considered as part of the Points-of-Compliance. What will the sampling methodology be for the groundwater alluvium?	Refer to Common Concern Statement Response 2.

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159	All government agencies and members of the interested public agree that protection of surface water is one of the primary objectives for remedial actions at the site. Due to the life expectancy of the remaining contaminants at the site, Section 2.1 of Attachment 2 to RFLMA states: Protection of surface water was a basis for making soil and groundwater response action decisions during the cleanup period so that surface water on-site and leaving the site would be of sufficient quality to support all uses. The proposed dam breaches will likely increase the risk that water on-site will leave the federal site boundary and not meet the RFLMA regulatory standards. Breaching the dams would clearly increase the potential for uncontrolled releases of contaminated surface water off-site that would negatively impact downstream watersheds and expose downstream communities to additional risks. Broomfield submits once again that the proposed action is not authorized per the RFLMA. Without the holding ponds, DOE-LM will intentionally be removing the only control in place to ensure surface water on-site and leaving the site would be of sufficient quality to support all uses. Comment: To ensure that the RFLMA is adhered to, please provide DOE-LM's rationale for the assumption that the Draft EA sufficiently evaluates all water quality impacts for the proposed action in order to make a Finding of No Significant Impact (FONSI) and does not warrant an Environmental Impact Statement (EIS).	Refer to Common Concern Statement Responses 1, 2, 3, and 4.
160	The existing ponds serve as an early warning that the remedy is functioning as designed. The final Environmental Assessment Comment Response and Finding of "No Significant Impact," dated October 2004, states the following: Ponds A-4 and B-5 would be maintained for two reasons. First, these ponds improve water quality by holding the water long enough for suspended solids to settle out. Since these terminal ponds are the largest ponds in their respective drainages, and thereby provide the longest residence times, they provide the most improvement in water quality of any ponds in the existing pond network. The second reason for maintaining the terminal ponds is for flood control. Removing all of the dams and the stormwater protection these ponds provide would change the hydrology of the basin and potentially expose downstream development to increased risk from flood hazards. However, the importance of this second reason for maintaining the terminal ponds may be partially diminished as future runoff volumes from the Site	Refer to Common Concern Statement Response 1 concerning water quality. Additionally, the 2004 EA stated in the “as discussed below” (as cited in the quote from the commentor): “Although the dams at Ponds A-4 and B-5 would remain unchanged and continue to operate in the same manner as they are currently, the volume of water routed through these ponds would be reduced in the future.” The decrease is further discussed in the 2004 EA concerning stormwater runoff volumes diminished as buildings and pavement are eliminated. Based on the reasons stated in the 2004 EA, the possible flood control measures needed to maintain the hydrology at the RFS are no longer applicable, because the inflow into the dams and surface water runoff

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	decrease, as discussed below. (Emphasis added.) The 2004 EA for the Pond Reconfiguration clearly identifies the need to maintain the terminal ponds to improve water quality. Broomfield also submits that the ponds serve an essential purpose to ensure that the water in the ponds meets RFLMA water quality standards prior to release off-site. Comment: What changes have occurred since 2004 to conclude that the remaining dams no longer provide a water quality benefit? Please provide the documentation that supports this conclusion.	from paved areas is no longer applicable. Additionally, upstream data (and POC data) show that the remedy is functioning acceptably. The remedy was designed not to need the ponds.
161	Table 4- 16 of the draft EA provides a summary of analytical results at POEs and Performance Monitoring locations. The average of the data is for October 2005 through 2009. Data when averaged especially over four years can provide us with the average concentration, but we would like to see the highest concentration for each location to determine if compliance would have been met at any single point in time. Comment: Please provide in table format, the supporting data for each location and include the highest concentration and the lowest.	Refer to Response 88. Data are provided on the RFS LM web page, and the URL address is available in Section 8.0 of the EA.
162	The draft EA provided some insight to the peak flow rates in the events of major storm events but leaves several critical questions unanswered. Comment: Has sediment transport been modeled with the associated storm events? Did Wright Water Engineers, Inc. determine the peak flow in the event of a wildfire with no vegetation as part of the report attached to the EA as Appendix D? What would the erosion rates be and would channeling contribute to sediment transport?	Refer to Common Concern Statement Response 5 and Response 153.
163	The draft EA identifies dam safety as an issue which supports DOE-LM's decision to remove the dams. In Table ES-1 Surface Water Quality, the draft EA states for Surface Water Quality under No Action: However, failure of a dam during a flood event would result in higher flood flows downstream and transport and deposition of large quantities of soil from the embankment structure. The remaining dams at the RFS are more than 30 years old. We understand that the dams are more than 30 years old. Nevertheless, there are several dams in Colorado that are much older than three decades. Continued operations and maintenance would ensure the safety of the dams. From previous inspections, it appears there were no issues with the dams.	Refer to Response 118.

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	Comment: Please provide information that supports what appears to be DOE-LM's determination that the dams are failing or are suffering from other conditions that would help us make a determination concerning the safety of the dams.	
164	The following statement is included in Table ES-1 for Surface Water Quality under Proposed Action: "Individual sample results……. " The downstream communities are very concerned about this statement. The Proposed Action is expected to have increased variability yet such changes can result in water quality that exceeds Colorado Water Quality Control Commission (WCCC) Regulation No. 38 that are applicable the downstream watersheds below federally controlled lands. Comment: Please clarify which sampling results are expected to have increased variability and provide information as to the magnitude, frequency, and basis for calculation that was used to make this conclusion. How will the variability be monitored? How many data points will be collected and under what site conditions? Please provide the information on the application of surface water standards via summary statistics.	Refer to Common Concern Statement Responses 1 and 8. Table ES–1 is a summary of impacts and is not intended to supply detailed data. Please refer to Section 5.2.5.1 for complete detailed information. The ponds are operated in batch mode, and a discharge can include water 'collected' over several months. This water arrived in the ponds with varying levels of constituents due to hydrology and natural processes: uranium associated with groundwater gets diluted by runoff, periods of runoff can result in higher levels of constituents that are associated with solids transport. The resulting batch discharge is essentially an 'average' of this variability. So, if the ponds are removed, the downstream POCs (automated samplers) would be collecting samples with higher variability over the extended flow period not just during a 2-week batch discharge. But, the 'average' water quality is expected to be essentially the same.
165	DOE-LM Attempts to Justify the Proposed Alternative based on Unsupported Assumptions that Breaching; the Dams will Enhance Habitat and Various Ecological Systems. The agency has not adequately evaluated the hypothesis that the chosen alternative will enhance or improve habitat and various ecological systems as compared to the current system. DOE-LM has failed to properly support its conclusion that negative impacts are occurring with the present pond system. The draft EA does not properly assess alleged long-term habitat enhancements. The alleged benefits are theoretically based on the concept of what "available water allows. " Numerous references by DOE-LM to water quantity limitations throughout the draft EA and DOE-LM annual reports theoretically support this conclusion. DOE-LM's decision to breach all the remaining dams is based on an unsupported theory that the breaches will improve riparian habitat within the COU. The proposed action will not ensure sustainable habitat improvement in the drainages downstream of the existing ponds. It is optimistic at best to	See Response 122 and Section 5.2.3.2 in the EA.

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	suggest that breaching the dams will establish new and better habitat in downstream drainages. Water quantity limitations, alone, bring this conclusion into question. Moreover, the draft EA clearly states that the dam breaching will eliminate 95 percent (14 acres) of open water habitat for 45 species of waterfowl. Broomfield submits that the theoretical gains in riparian habitat and the species they support would be minimal relative to the proven and admitted loss of open water habitat that will result from the dams being breached. Comment: Please provide an analysis of, and the justification for, elimination of 95% of one type of habitat (i.e., open-water habitat) as the proper trade-off for the theoretical potential gain for riparian habitat, particularly in light of the fact that the project site is located in a part of Colorado that is mainly a prairie grassland ecosystem.	
166	The objective of the Proposed Action is to "preserve and enhance wetlands and habitat to the extent practicable." However, the draft EA does not offer any objective criteria for measuring success of the proposed action, nor does the draft EA identify the expected timelines for reaping the theoretical environmental rewards of the proposed action. Comment: Please provide the evaluations that DOE-LM prepared to determine the enhancements to, and the viability of, the wetlands. Please provide the data to document the negative impacts the current system has on habitat.	See Response 124.
167	Since the ponds are more than 30 years old, Broomfield submits that substantial alterations to the associated ecological systems have already occurred. Comment: Please identity how human activities impact the ecosystems and the alterations that such activities have created at the site for the past 30 years.	Section 1.1 provides background on the RFS activities. Section 4.3 describes the current conditions in relation to present operations, and Section 5.0 provides expected impacts from the Proposed Action, as well as a cumulative impact summary. The purpose of this EA is to assess impacts that would be associated with the breaching of the remaining dams. For information concerning the activities for the past 30 years, and associated ecosystem impacts, please refer to Section 8.0 for reference documents.

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168	Establishing the suggested riparian habitat will certainly take many years, during which time the potential for uncontrolled contaminant migration flow off site remains. Comment: If contaminants flow offsite, what is the impact to the offsite habitat? Have offsite impacts to habitats been evaluated?	Refer to Common Concern Statement Responses 1 and 5.
169	DOE-LM has Not Adequately Evaluated the Impacts to Threatened and Endangered Plant and Wildlife Species. The draft EA states that the multi-strata habitat could change the multi-strata riparian woodland/shrubland habitats in Walnut Creek to a single story herbaceous habitat, which would limit the amount of quality habitat for the Preble's Meadow Jumping Mouse (PMJM). In fact, continued long-term reduction in creek flows below the dams in Walnut Creek will likely reduce the amount of existing wetland along this reach of creek, which would in turn, reduce available habitat. Comment: Please provide us with the agency's assessment of the change in downstream habitat from the original habitat in 1979 as compared to today's habitat.	Section 6.3 addresses the U.S. Fish and Wildlife requirements concerning the PMJM. DOE would evaluate the impacts to the Preble's mouse during consultation with the USFWS on the amendment to the PBA. The purpose of the EA is to assess impacts that would be associated with the breaching of the remaining dams. One of the purposes, as stated in Section 1.2, is to return the RFS surface water flow configuration to the **approximate** conditions existing prior to construction of the dams (emphasis added). For habitat information concerning pre-dam construction, please refer to Section 8.0 for reference documents.
170	In addition, because Broomfield augments water for downstream asset holders, Broomfield does not agree with the agency's suggestion that the lower South Platte River species would continue to be impacted by the retention of water upstream of the dams in the No Action Alternative. Comment: Please provide a proper assessment of the reduction in wetlands based on the current configuration of wetlands at the site.	Refer to Response 124.
171	DOE-LM has Failed to Explain the Inconsistencies which have Surfaced in the Draft EA, the Contact Record (CR), and the May 18, 2010 Public Meeting. Broomfield is also concerned about the inconsistencies that have surfaced in terms of the details provided in and related to two of the critical documents related to the agency's proposed choice of alternatives (i.e., the draft EA and the CR), as well as the DOE-LM's attempt to explain the proposed dam breaching activities and related operations presented at the public meeting on May 18, 2010. It is impossible to adequately comment on the proposed action	Refer to Common Concern Statement Responses 1, 3, and 7.

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	when DOE-LM has changed the concept, rationale, and protocols for the breaching of the dams throughout the process. Comment: Why is it necessary to collect several years of additional information and data related to habitat development and ecological changes related to the proposed flow-through condition that will be created at the terminal dams in the A and B series, but not at the terminal dam in the C series? How can the draft EA properly state that there will be enhanced habitat and ecological conditions that will result from the dam breaches, while simultaneously stating at the May 18, 2010 public meeting that several additional years of information and data compilation will need to be gathered at two of the three terminal dams to determine the exact habitat and ecological conditions which will result from the flow-through conditions?	
172	As justification for breaching the dams for the Present Landfill and Pond C-2 dam in 2011, the draft EA conclusively states, with virtually no explanation or assessment, that there will be minimal change to the habitat for No Name Gulch and Woman Creek. Without an adequate assessment of this conclusion, it is impossible for Broomfield or any other interested party to understand the need to proceed with the proposed action or the urgency to breach the C-2 dam. DOE-LM, without explanation, is treating two of the terminal dams in the A and B series differently than the C-2 dam. At the May 18, 2010 public meeting DOE-LM either could not, or simply would not, explain or justify its decision to place the C-2 dam breaching on a different schedule than the breaching for the A-4 and B-5 dams. All three of the terminal ponds are used as the downstream users' last opportunity to determine the quality of water to be released offsite. C-2 receives the run-off water from the 903 Pad, Inner Lip area, Americium area, 881 hillside and the 400 area. All these areas have residual contamination and C-2 captures the surface runoff for this large area. In addition, several trenches remain in the area north of C-2. Elevated readings for uranium have been recorded in this pond, and DOE-LM acknowledges that it is not 100% natural uranium. Although it is not discussed in the draft EA, the agency has determined that it is necessary to collect several years of additional information related to habitat and ecological system changes by creating a flow-through condition at two of the terminal dams. Broomfield submits that, before DOE-LM breaches any of the terminal dams, the same data and information should be collected	Refer to Common Concern Statement Responses 1 and 7.

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	over the same period of years for the C-2 terminal dam. There is no justification to treat the C-2 dam any differently than the A-4 and B-5 dams. Once that information is collected for the habitat above and below all three dams, and several years from now, the agency should then assess the need, if any, to suggest breaching of the terminal dams and make that assessment available to the public for review and comment. Comment: Why is DOE-LM treating the terminal dams associated with the A- and B- series ponds differently than dam for Pond C-2? Please provide the methods of evaluation and basis for success of the proposed flow-through operations.	
173	The EA Fails to Disclose or Quantify the Fiscal Benefit of the Proposed Action It appears the key motive for DOE-LM's proposal is alleged cost savings. As a downstream community, Broomfield reminds DOE-LM that they are responsible for the long-term stewardship of the site for the life of the contaminants left on-site and which, if improperly managed, may move off-site. Comment: Please clarify how DOE-LM determined cost savings associated with the proposed action. Provide a comparison of costs against the potential cost for corrective actions to address a release of offsite contamination. Has a cost benefit analysis been prepared to make a comparison between the actual cost and increased risk? Please provide the following financial information: - Annual cost to inspect the dams; Annual cost to draft reports associated with the ponds; - Annual cost to perform O&M activities for the ponds; = Annual cost for sampling to ensure compliance; The estimated construction costs to breach the dams; The cost saving that would be made if the proposed action is implemented; and A comparison of these dam-related costs to the overall costs of the remedy to date, and as compared to expected future costs for the entire remedy.	Refer to Common Concern Statement Response 6.

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174	DOE-LM has Not Identified the Assessments that Need to be Made Related to Sediment/Soil Removal. Broomfield does not agree sediment from a settling pond should be removed and placed on the site surface without prior characterization. The ponds were clearly identified as IHSSs due to their nature to capture sediment potentially containing radionuclides, heavy metals or other analytes. Comment: When dredging the sediments and soil from the ponds and dams, will any sampling be performed to determine if there are any contaminants in the sediments?	Refer to Response 125 and Common Concern Statement Response 5.
175	In conclusion, Broomfield reiterates that it is too soon to breach the dams. More time is needed for the site to stabilize to develop a proper baseline and then compile data for trending and analysis. DOE-LM has not been able to provide the public with a Contingency Plan to protect downstream communities, and we do not have the details of the proposed relocation of the points-of-compliance. In addition, all three terminal dams should continue to serve as the last line of defense to prevent the movement of contaminated water and/or sediments off-site.	Comment noted.
176	We would also like to remind DOE-LM that monitoring at A-4, B-5 and C-2 is not a 'feel good' thing as stated at the public meeting on May 18, 2010. These sampling locations are regulatory obligations explicitly identified within the RFLMA. The terminal ponds are currently points-of-compliance and, at one time, the sampling methodology for these terminal ponds was for a 30-day running average.	Comment noted. Predischarge monitoring is not a CAD/ROD requirement but was added to RFLMA Attachment 2 as a component of operational monitoring based on agreement by the RFLMA Parties. The CAD/ROD and RFLMA POCs are located downstream of the dam locations.

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177	Broomfield and other downstream communities worked in good faith with DOE-LM to develop and identify the sampling locations and protocols for the site post-closure. Broomfield expects DOE-LM to uphold its obligation to ensure protection of human health and the environment by ensuring it has an effective long-term monitoring and maintenance program. We look forward to your response to our comments and a future meeting to address your disposition to the comments. We ask that DOE-LM disseminate our comments individually to address each specific concern to reflect due diligence on their part to address our concerns and comments to protect one of our greatest assets, surface water. Finally, we are hopeful that Broomfield and the general public will have an opportunity to review and comment on the additional information requested in this letter before DOE-LM takes any formal action on the Draft EA.	Comment noted.
John L. Watson, Special Counsel to the City and County of Broomfield, CO, Berenbaum Weinshienk, PC		
178	Broomfield strongly supports the “No Action” alternative identified in the Draft EA. We question the rationale for breaching terminal dams A-4, B-5, and C-2. The Draft EA does not provide sufficient analysis, data, or information for eliminating these features which serve as the last line of defense to ensure that contaminants which remain on the Rocky Flats site in soil, sediments, ground water and surface water are not released off-site into surrounding communities.	Comment noted.
179	Moreover, the agency acknowledges that it needs to gather several years of data and information related to ecological systems and habitat formation and restoration in the context of the “flow-through” configuration which the agency has proposed for terminal dams A-4 and B-5. Broomfield submits that the agency has not adequately justified its intent to breach terminal dam C-2 without gathering this same type of data and information for the habitat and ecological systems which exist in that portion of the site.	Refer to Common Concern Statement Responses 1 and 7.

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180	Timing of the dam breach activities:	
	• At the May 18, 2010 public meeting, the DOE staff explained that, although it would breach terminal dam C-2 relatively quickly, i.e., in 2011, the agency intended to breach terminal dams A-4 and B-5 several years later, i.e., sometime in the years 2015-2018. The timing differential was referenced in the draft EA, but the reasoning for this time differential was not addressed in the draft EA.	Refer to Common Concern Statement Response 7.
	• Although it was not mentioned in the draft EA, the agency staff also stated at the May 18, 2010 public meeting that they intend to create a "flow-through" condition in the intervening years at terminal dams A-4 and B-5	Maintaining flow-through conditions at the dams is discussed in Section 2.1.1 and in the Project Description Section 3.1. For clarity, the flow-through configuration proposal has been reinforced in the wording throughout the document.
	• At the May 18, 2010 meeting, in response to the question of "why," the agency staff stated that they wanted to collect several years of additional data and information in the interim related to changes to habitat and the ecological systems that would occur after the agency created a flow-through condition for both terminal dams A-4 and B-5.	Refer to Common Concern Statement Responses 1 and 7.
	• Having learned for the first time at the May 18, 2010 public meeting about this "flow-through" condition concept and the need for the agency to collect additional habitat formation and other ecological system data and information for two of the terminal dams, Broomfield asked why the agency was treating terminal dam C-2 differently than terminal dams A-4 and B-5.	Refer to response above on the flow-through configuration. Additionally, refer to Common Concern Statement Response 7.
		Section 3.1 describes the Proposed Action.
	Please explain in detail: o The methods and protocols for establishing the "flow-through" condition at terminal dams A-4 and B-5;	Refer to Common Concern Statement Response 7.

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	o Why this same "flow-through" condition could not be established at terminal dam C-2; o What data and information the agency intends to collect related to habitat formation and ecological systems for terminal dams A-4 and B-5 in the intervening years between now and 2015-2018; and o Why the agency has determined that it is not necessary to collect the same types of data and information related to habitat formation and ecological systems before it fully breaches terminal dam C-2.	There is no regulatory requirement to collect additional habitat or ecological information at the ponds/dams prior to any proposed breaching. A baseline of ecological information is available for RFS in previous annual reports that date back to the early 1990s.
181	Downstream Habitat. The Draft EA provides a partial justification for the breaching proposal and states: "Long-term continuation of batch releases from the ponds, predominantly during the non-growing season, could alter the structure and composition of the downstream habitat." *See* page xii, Walnut Creek "No Action Summary;" *see also* page 5-4, section 5.2.2.2; and page 5-15, Table 5-2. • In light of the fact that the terminal dams have been in operation for several decades, i.e., in excess of 30 years, it is clear that the structure and composition of the downstream habitat has already been altered over those several decades. • The public learned for the first time at the May 18, 2010 public meeting that the DOE intends to create a "flow-through" condition at terminal dams A-4 and B-5, but not at terminal dam C-2. The purpose of this flow-through condition is to collect additional data and information related to ecological systems and habitat restoration and formation before breaching terminal dams A-4 and B-5. • The agency also mentioned in the Draft EA that the batch and release events occur during the "non-growing" season for vegetation. *See* page 5-3, section 5.2.1.2.	Section 5.2 states that the potential impacts have been assessed according to the degree in which impacts may occur in magnitude in relation to the overall environment and associated resources. Some impacts are assessed based on professional judgment. Each section states if information is not available or uncertain. 40 CFR Section 1502.15 directs the environmental assessment to "succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives. …. Verbose descriptions of the affected environment are themselves no measure of the adequacy …." The prior conditions at the RFS have been extensively described in numerous documents referenced throughout the EA. Refer to Section 8.0 for a list of the referenced documents. Refer to Response 180 and Common Concern Statement Response 7. The purpose of the flow-through conditions, prior to breaching, are not as the commentor has suggested to "collect additional data and information related to ecological systems and habitat restoration and formation…" but rather to evaluate how the upstream breached ponds are affecting water quality. Comment noted.

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	• Broomfield MAY be amenable to operating all three terminal dams with a flow-through configuration, provided that the agency develops and implements an acceptable contingency plan in the event of high flow (or any other) conditions which could otherwise result in releases offsite which are not in conformance with applicable standards. If such an acceptable contingency plan is prepared and submitted to Broomfield and other members of the public for comment, it MAY be acceptable to allow "flow-through" at all three terminal dams so that releases occur throughout the year, including the "growing seasons.	Refer to Common Concern Statement Responses 1, 4, and 7. Additionally, as described in the Executive Summary, and Sections 3.1.7, 4.3.5.1, and 4.3.5.3, according to the RFLMA operational monitoring and the Operations and Maintenance Plan for the Rocky Flats Surface Water Control Projects…., the operation of ponds A-4, B-5, and C-2 is to retain water until approximately 40 to 50 percent of capacity is reached, at which point discharge planning is initiated. This discharge is planned at capacity limits at directed in these referenced documents and is not driven by seasonal needs.
	• This will ensure that (a) data and information related to ecological systems and habitat restoration and formation can be collected for all three dams rather than just two, and that (b) the dams can continue to serve their exceptionally valuable function as a final line of defense against problematic off-site releases. • In the meantime, Broomfield submits that it makes more sense to maintain the status quo via the "No Action" alternative.	There is no regulatory requirement to collect additional habitat or ecological information at the ponds/dams prior to any proposed breaching. A baseline of ecological information is available for RFS in previous annual reports that date back to the early 1990s.
182	**<u>Riparian habitat and wetlands</u>. *See* discussion in the Draft EA related to "Purpose and Need," at page 1-5, which states in part, "Returning flows to approximate pre-retention conditions would provide ecological benefits by improving riparian habitat and reestablishing wetland formation."** • Extensive wetland and riparian habitat has developed as a result of dam placement over the last several decades (*see* Figures 4-1 through 4-5; *see also* page 4-9, Table 4-4 showing total wetland acreage of 18.155 acres). • Has the agency assessed and estimated (and if so what is your best estimate of) the total acreage of wetlands which will develop over time as a result of the dam breach as compared to the total wetland	Comment noted. Section 5.2.4.1 provides quantifiable data concerning the total acreage of wetlands that would be expected to be created in former open water habitat areas.

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	and riparian habitat acreage which will be lost as a result of the dam breach? • What is the net acreage increase or decrease for wetlands? • Is it a wash? In other words, is there essentially no net increase or decrease? • What is the basis for your response to questions (3) and (4), immediately above? • Is the agency's need to properly answer these questions at least in part the reason the agency wishes to collect additional data and information related to ecological systems and habitat restoration and formation related to terminal dams A-4 and B-5?	Section 5.2.4.1 provides quantifiable data concerning the total acreage of wetlands that would be impacted. Section 5.2.4.1 provides the net increase/decrease acreage of emergent wetlands expected. The basis of the information presented in the EA is from the RFS GIS data and professional judgment. Refer to Common Concern Statement Responses 1 and 7 and response to bullet 2 in Response 181.
183	**<u>Water quality standards</u>. *See* discussion in the Draft EA related to "Purpose and Need," at page 1-5, which states in part, "Water discharged from the terminal pond dams meets applicable RFLMA surface water quality standards."** • The water quality monitoring program results which support the above statement are premised on 12-month averages. • The DOE staff stated at the May 18, 2010 public meeting that the individual data points for each monitoring event, each location, and each constituent are provided in the quarterly reports provided on the agency's website. • We have not had the time to review the data related to these individual monitoring events, but one expects that there will be substantial variation over time showing that in relation to several data points (location, date, media, constituents analyzed), there will be several exceedances of the applicable water quality standards at	Comment noted. Comment noted. As stated in Sections 4.3.5.3 and 5.2.5.1, over 7,400 individual grab samples have been taken. Refer to Section 8.0 for references for Annual Reports. These reports provide individual sample results and are incorporated into the EA by reference. A single data point does not make an exceedance of a Standard.

No.	Comment	DOE Response
	individual monitoring stations and at different dates over the 12-month averaging period. • Is this true? • What are the trends, if any, with regard to these exceedances? • How does the water quality vary over time?	Compliance is demonstrated using some method: 85th percentile, 50th percentile, 30-day average, 12-month average, etc. Additionally, refer to Response 164.
184	**<u>Sediments</u>. *See* discussion in the Draft EA related to "Issues and Concerns," at page 2-1, section 2.1.1, Internal Scoping which states in part, "The team identified the following issues to be addressed in the EA: . . . Surface water quality monitoring, including <u>downstream sediment</u> (the team noted that surface water quality is a key known concern for neighboring communities)." (Emphasis added.)** ***See also* the agency's statement at page 5-1 of the Draft EA, "[T]he dams are not a part of the final CAD/ROD remedy for RFS and are not <u>designed or operated as sedimentation basins</u>." (Emphasis added.)** • Although the dams (both terminal dams and non-terminal dams) are not "designed or operated as sedimentation basins," they function as such, i.e., they have collected sediment behind the dams for decades. • The agency mentions at page "x" of the Draft EA in the "No Action" discussion that, "Data would continue to be collected on water quality <u>and sediment</u>." (Emphasis added.) • What is the current protocol for testing sediments – both upstream and downstream of the dams? • What are the levels of contaminants which have been found in both upstream and downstream sediments?	Refer to Common Concern Statement Response 5. Refer to Response 3. Refer to Common Concern Statement Response 1. Sediments that are transported in surface water are sampled inherently within the water samples collected. Water samples are not filtered prior to analysis, and analytical results reflect constituent concentrations for both the water and any suspended solids.

No.	Comment	DOE Response
	• We assume that contaminated sediments (wherever they are found, above or below the dams) which are above a certain threshold will be removed to an appropriate area and isolated from the environment or disposed off-site. • What criteria have been developed to determine whether and when to remove sediments upstream or downstream of the dams in the context of the breaching activities? • Why did the agency limit its assessment of sediments to "downstream sediments?" *See* "Issues and Concerns," at page 2-1, section 2.1.1, Internal Scoping of the Draft EA. • Did the agency consider the fact that the breaching activities will cause what are now "contained and captured sediments" which lie above the dams to be released downstream of the dams and perhaps off-site, particularly during peak surface water flows?	Refer to Common Concern Statement Response 1. See response to prior bullet. Refer to Common Concern Statement Response 5.

No.	Comment	DOE Response
185	**<u>Floodplains and Peak Flood Flows</u>. The agency's floodplain analysis in the Draft EA which begins at page 4-10 confirms that substantial peak flows will occur at the site in the event of 50-year or 100-year flood events.** **The water quality analysis beginning at page 4-24 of the Draft EA confirms Total Uranium exceedances at POE GS-10 (16.9 ug/L averaged over 68 sampling events versus a standard of 16.8 ug/L) and, more particularly Performance location GS-13 (26.4 ug/L averaged over 76 sampling events versus a standard of 16.8 ug/L).** • Broomfield submits that it makes more sense to maintain the terminal dams at ponds A-4, B-5 and C-2 indefinitely to avoid substantial sediment movement downstream of the dams if and when such flood events occur? • The agency states at pages 5-18 and 5-19 of the Draft EA that the "breach of the C-2 dam would be engineered to accommodate" the possibility that the Woman Creek Diversion Dam would fail, and thus the C-2 dam breach would be "designed to accommodate the entire Woman Creek flood flow." • What are the characteristics of the sediments which would flow downstream in the event of the failure of the Woman Creek Diversion Dam? • Given the fact that there is a possibility that the new C-2 dam configuration resulting from the "C-2 dam breach" might not "accommodate the entire Woman Creek flood flow," Broomfield submits that it makes more sense to maintain the status quo via the "No Action" alternative for all three terminal dams, including C-2. • As stated above in the section related to <u>Downstream Habitat</u>, Broomfield MAY be amenable to operating all three terminal dams with a flow-through configuration, provided that the agency develops	Refer to Common Concern Statement Response 5 for all of the bullet points in this comment. Additionally, the dams are classified by the State of Colorado as Low or No Public Hazard, which means that even if they were to fail, flood volumes are not a downstream risk.

No.	Comment	DOE Response
	and implements an acceptable contingency plan in the event of high flow (or any other) conditions which could otherwise result in releases offsite which are not in conformance with applicable standards. If such an acceptable contingency plan is prepared and submitted to Broomfield and other members of the public for comment, it MAY be acceptable to allow "flow-through" at all three terminal dams so that releases occur throughout the year, including the "growing seasons. • This will ensure that (a) data and information related to ecological systems and habitat restoration and formation can be collected for all three dams rather than just two, and that (b) the dams can continue to serve their exceptionally valuable function as a final line of defense against problematic off-site releases. • The agency's flood flow modeling predicts that flood flows will occur over time. Broomfield submits that the agency should maintain all three terminal dams to capture the modeled and predicted flood flows. • Again, Broomfield submits that it makes more sense to maintain the status quo via the "No Action" alternative for all three terminal dams, including C-2.	
186	In sum, subject to further communications among the interested parties and agencies particularly with regard to contingency plans, and to allow the continued use of the terminal dams as the last line of defense against unacceptable off-site releases, Broomfield submits that it is better to maintain the status quo via the "No Action" alternative. It is important to continue to capture water flows and test the water before releases occur.	Comment noted.

In addition to the written comments received on the Draft EA, the following provides a transcript of statements that were written on a flip chart during the information public meeting at the Broomfield City and County Building on May 18, 2010. The meeting was an informal format, and these comments were written on flip charts for the audience review. Many comments were answered during this meeting, and this is noted in the following transcript.

Summary of oral questions and comments at the May 18, 2010 informational public meeting on the Rocky Flats Surface Water Configuration EA

Key: Q = questions
C = comments
A = answers or responses where applicable

1) Q – What are the water levels in A-4, B-5 in flow-through condition, how high are the dams?
A – Water levels not below 10 percent of capacity, A-4 approximately 5 feet, B-5 approximately 10 feet above water level.

2) Q – In flow-through condition you can stop the flow if monitoring results show elevated contaminants. Would you (DOE) consider closing the A-4, B-5 valves if turbidity gets too high? What are the annual amounts of evaporative losses?
A – Yes – variable, less than 100 acre-feet.

3) Q – Elaborate on costs, $24 million over 75 years, how much did DOE spend last year (on dam maintenance)?
A – Approximately $135,000 on operation and maintenance only.

4) Q – What evaluation was used in the EA concerning sediments?
A – The evaluations were developed during closure.

5) C – Woman Creek Basin, unresolved – issues with seepage at Original Landfill remedy (cap) that didn't work – continued monitoring required, upstream wells with elevated uranium levels – seems premature (to breach C-2) – still working to control seeps, landfill not resolved – concerned about filling in SID.

6) Q – Why are you treating Terminal Dam C-2 differently (than A-4, B5)? – does groundwater enter C-2 – can't stop water or sediments from C-2.
A - C-2 is not part of Woman Creek, so not a terminal dam –some groundwater from other ditches and Woman Creek does seep into C-2.

7) C – Issue with human health and environment - wants to see several CERCLA review cycles go by before breaching terminal dams - takes too long to establish wetlands and sediments can move if there is a flood (from written statement that will be submitted).

8) C – Should slowly reduce levels – no way to control the water – no contingency plan (from written statement that will be submitted).

9) C – 2004 EA did not consider breaching the PLF pond, A-3, A-4, B-5, C-2. Did not review all cumulative impacts – not consider off-site contaminant migration or include a contingency plan in this EA.

10) Q – To CDPHE: How will you stop contaminants from leaving the site if you breach the dams and change the POCs?
A – Explained RFLMA process: evaluate, consultation, actions plans, source evaluation, potential corrective action.

11) C – Contact Record approving excavation premature, presumption that dams will be breached, why make the effort to put together the CR if you haven't already made the decision to breach the dams.
A – Explained that addressing the IC at this time is part of the evaluation of the proposed action.

12) Q – How can you resolve issuing a FONSI if you are going to operate A-4, B-5 in flow-through to evaluate ecological impacts to drainage?

13) Q – Why not operate the three terminal dams in flow-through state to get additional data on impacts?

14) C – (The EA should) explain monitoring targets, analytes – questions on how DOE monitors at the site and location of data.

15) Q – Is there anything to prevent monitoring POCs on USFWS property?
A – No

16) Q – Who approved going forward with this EA - how much has it cost - does it take a court challenge to challenge a FONSI?
C – This action is premature for a number of reasons – Pu loading on site from 69 fires, 903 pad (one other event mentioned but not captured).
There still is contamination on east side of site, which is not stabilized. The City and County of Broomfield has been insulted enough over the last 60 years. This project is 90 –100 years premature. This is not safe for people. Our reservoir had 10–20 pCi/l.

17) Q – No information in Draft EA on what condition dams are in, what you are required to do to maintain the dams. Would DOE release the state engineer inspection reports?
A – Scott Surovchak will check to see if that information is releasable to the public.

18) Q – If you notch the dams will you be able to hold the water from flowing downstream if contaminants are found?
A – No.

19) C – Need greater discussion on:
    a. cost reduction analysis/comparison to cost of project/remedy.
    b. clarify why you are treating C-2 differently from the other terminal dams – should operate all three in flow-through for another five years and study – then come back to community with EA.
    c. sedimentation – dams not designed or operated as settling ponds, but might act as settlement basins.

20) C – You say dam releases during non-growing season alter downstream habitats, is it feasible to conduct more frequent batch releases during the year to aid habitat?

21) Q – Water quality standards?
    A – Water released meets RFLMA standards

22) Q – Will data continue to be collected on water and sediments? Suggest implementing sediment sampling regimen or explain why not needed.

23) C – If an exceedance occurs, then you will evaluate – not an acceptable response.

24) C – Much too soon to move forward. There is no information on an extensive fire or heavy precipitation event. Need more analysis of site conditions and configuration. Once the dams are breached we will have no final line of protection. Not enough information in EA to make informed decision. Not convinced remedy remains protective with dams breached.

25) C – Remedy not established, still making adjustments on treatment systems – when can we get the information we've asked for – will there be a second round of review and comments on EA.

26) C – Are you studying the upstream breaches and how the wetlands are establishing – the impact of the changes has not been evaluated, only have subjective qualitative statements – can't quantify or determine what the ecological impacts will be.