

PMC-EF2a

(2.04.02)

U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION



RECIPIENT:NREL

STATE: CO

**PROJECT TITLE :** NREL STM Site Infrastructure – Expansion of Central Arroyo Detention Pond; NREL Tracking No. 11-001

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
		NREL-11-001	GO10337

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

## Description:

<b>DOE/EA-1440-S-II</b>	Final Supplement-II to Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South Table Mountain Complex (November 2009)
<b>DOE/EA-1440</b>	Final Site-Site Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South Table Mountain Complex (February 2003)

## Rational for determination:

The proposed project would be for construction of a stormwater detention pond for the central arroyo at the National Renewable Energy Laboratory's (NREL) South Table Mountain (STM) Complex, City of Golden, County of Jefferson, and State of Colorado. The basin would be located within the 25-acre "Camp George West Parcel," south of Denver West Parkway and was identified as "Site Development Zone 6" in the July 2003 Site-Wide Environmental Assessment (SWEA) of the NREL STM Complex (DOE/EA-1440).

NREL would expand the size of the current central arroyo detention pond located in the southeast portion of the Camp George West Parcel and this proposed expansion would result in a central arroyo regional detention pond (referred to hereafter as the "Regional Pond") that is approximately two to three times the size of the current pond. The Regional Pond would expand to the north, east, and west, but not to the south, since Jefferson County Open Space property (Pleasant View Park) is adjacent to the pond site, to the south. However, some construction work would occur south of the fence (e.g. filling in a ditch, and adding soil to facilitate sheet flow through the Pleasant View ball field during a large storm event) and NREL's Infrastructure and Campus Development Office has been coordinating with and obtained approval from the appropriate Jefferson County offices. The increased pond capacity was deemed necessary to address the additional detention capacity needed due to the increase in impervious features onsite as a result of ongoing construction activities on the STM campus, and the resultant increase in stormwater runoff. Features would be built into the pond to detain stormwater runoff, and maintain historic discharge rates to Lena Gulch. According to the 95% design drawings (uploaded to the PMC database), the water holding capacity of the Regional Pond would be 11.25 acre-feet (AF) in the event of a 100-year storm. During such storms, the pond would be installed to allow sheetflow runoff over a flow spreader berm at the south end of the pond, into the adjacent Pleasant View Park field. During lower flow conditions, stormwater would be directed through an outlet pipe into the Jeffco swale to the east of the pond, which carries stormwater runoff to Lena Gulch. Hydrologic calculations would consider not only hillside runoff, but also hardscape runoff from existing and future hardscape components in the eastern part of the STM campus. The detention pond would be constructed by excavating soils from the existing pond. All soils excavated would either be used for onsite fill requirements, or transported offsite to an appropriate disposal facility in accordance with all local and state laws. Stormwater that is directed to the Regional Pond would enter one of several forebay areas, composed of grouted boulder riprap, covered with native topsoil, and seeded with native vegetation, so that the riprap is not exposed. Trickle channels would help direct low flow stormwater runoff to the outlet pipe at the southeastern portion of the pond. Work would be initiated in the last quarter of 2010.

As the total area of land disturbance may exceed one acre, NREL and the construction contractor would file a Notice of Intent (NOIs) with US EPA Region VIII for stormwater associated with construction activity permit and develop a site-specific storm water pollution prevention plan (SWPPP) to supplement the STM SWPPP and NREL Procedure 6.2-15 as needed. No dredge or fill of Waters of the U.S. (WOUS) including wetlands or seeps is anticipated and

construction stormwater BMPs would be used as prescribed through the required SWPPP. After excavation of the detention pond, the slopes of the pond would be seeded to stabilize soils and minimize weed invasion. Re-seeding would be done in accordance with the NREL Procedure 6-2.15 and a landscape architect would be consulted for the final design, to ensure incorporation of appropriate trees and shrubs along the slopes of the pond, to create spaces that provide not only human interest, but also enhance existing wildlife habitat. The U.S. Army Corps of Engineers identified no jurisdictional wetlands and no WOUS at the STM site in a recent jurisdictional determination. There would be no historic properties affected by this proposed action. The development of this area, within Site Development Zone 6, was scope within the 2003 SWEA, which included formal consultations with SHPO. This proposed action would not impact the amphitheatre, footbridge, or ammunition igloo. No federally listed threatened or endangered species, or designated critical habitats have been indentified at the STM. Fugitive particulate emissions from the construction would be controlled in accordance with the existing STM land disturbance air permit (APCD# 08JE0889L), including mitigation measures like dust suppression. The construction phases would require the utilization of mobile point emission sources, such as front-end loaders, scrapers, dump trucks etc., but these emissions would be negligible given the size and duration of the construction activity. Construction-related noise would consist of a short-term increase in ambient noise levels and the impacts would vary with the phase of construction and occur intermittently. Construction activities would comply with applicable noise ordinances. All work would be conducted in accordance with standard NREL and EHS policies and procedures, and with industry standard construction equipment, techniques, and methods. If any Munitions and Explosives of Concern (MEC) from Camp George activities, or from previous occupants, or if any other historic artifacts are discovered, construction activities would immediately cease, and the EHS office contacted for further instruction.

Development of Site Development Zone 6 was analyzed in DOE/EA-1440 and part of the Proposed Action analyzed in the November 2009 Final Supplement-II to Final SWEA of the NREL STM Complex (DOE/EA-1440-S-II) was the resizing of current detention basins and installation of additional detention basins for proper management of storm water runoff from additional impervious surfaces due to continued development and expansion of the NREL STM Complex. DOE/EA-1440-S-II states the following as a committed measure that would be taken to minimize the water quality impacts of the Proposed Action: "To address impacts from increased surface water runoff, DOE would install stormwater management measures, such as a new detention basin or a series of basins in or around the central or eastern drainage dry stream channels, or other stormwater management techniques, to minimize and manage potential impacts of off-site runoff that could occur under the Proposed Action. In addition, DOE would regrade the surrounding terrain and/or install engineered drainage systems to direct runoff from the proposed parking lots into the new stormwater management structures." Therefore, the Affected Environment described in DOE/EA-1440 and the construction and operation of the proposed stormwater improvements for the central arroyo in DOE/EA-1440-S-II are hereby incorporated by reference into this NEPA determination.

As this proposed project was analyzed as part of the Proposed Action in DOE/EA-1440-S-II and with no extraordinary circumstances identified, the November 2009 Finding of No Significant Impact (FONSI) determination applies to this proposed action, and no further NEPA review is warranted.

#### NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:

If construction activities for the Regional Pond occur within the bird nesting season (mid-March through mid-September), ground-nesting bird surveys prior to initiation of construction activities would be required per NREL EHS policies.

Additionally, NREL EHS reports that the existing cottonwood or box elder trees within the middle arroyo have historically provided nesting habitat for neotropical migratory birds, such as orioles, that are protect under the Migratory Bird Treaty Act (MBTA). Any impact to this habitat shall be coordinated with NREL EHS and DOE GO Office of Environment to ensure regulatory compliance with the MBTA and other applicable regulations.

Note to Specialist :

EF2A created by Rob Smith on 10/15/2010

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: Roi Plummer  
NEPA Compliance Officer

Date: 10/15/2010

**FIELD OFFICE MANAGER DETERMINATION**

Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_  
Field Office Manager

Date: \_\_\_\_\_