



October 18, 2005

05-RF-00969

John Rampe
Director
RFPO Closure Project Manager
DOE, RFPO

UNITED STATES ARMY CORE OF ENGINEERS (COE) CERTIFICATE OF COMPLETION FOR
NATIONWIDE PERMIT NUMBER 27, CORPS FILE NO. 200480620 - DAW-041-05

Dear John,

Enclosed is the COE Certificate of Completion required to be submitted at completion of the permitted activity per the COE Nationwide Permit Number 27 (Corps File No. 200480620, Removing Culverts and to Reconstruct Portions of Stream Channels at Rocky Flats Environmental Technology Site, Six Locations). This wetland permit was required for the activities conducted as part of the Industrial Area Land Configuration Project which was completed last week. The permit application (wetlands evaluation) submitted to the COE indicated a net gain of wetlands would result from the Project. However, it is my opinion that because the permit application indicated that a net gain of wetlands would result from the permitted activities, the Certificate of Completion should not be submitted until the wetlands have become established (3-5 years from now). This letter serves as a reminder to the Department of Energy that this Certification of Completion will need to be sent in at the appropriate time in the future to complete the requirements of Nationwide Permit No. 27. The Permit Application and Nationwide Permit No. 27 are also enclosed for your information.

If you have further questions, please call me at 303-966-5938 or Jody Nelson at 303-966-2231.

Sincerely,

David Ward
Environmental Stewardship

plh

Enclosures (3)
As Stated

Certification of Completed Work

Corps File Number: 200480620

Name of Permittee: _____

Date of Issuance: December 8, 2004

Expiration Date: _____

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U. S. Army Corps of Engineers
Denver Regulatory Office
9307 South Wadsworth Blvd.
Littleton, Colorado 80128-6901

Phone (303) 979-4120
Fax (303) 979-0602

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of said permit, and required mitigation was completed in accordance with the permit conditions.¹

Signature of Permittee

¹ If your permit included wetlands monitoring and annual reports, these activities will continue after submittal of this form until you are notified by the Denver Regulatory Office that your mitigation is successful and monitoring reports are no longer required.



Department of Energy

ROCKY FLATS PROJECT OFFICE
10808 HIGHWAY 93, UNIT A
GOLDEN, COLORADO 80403-8200

DEC 01 2004

04-DOE-00896

Mr. Timothy T. Carey
Chief, Denver Regulatory Office
U.S. Corps of Engineers
9307 South Wadsworth Boulevard
Littleton, Colorado 80128-6901

Post-it* Fax Note	7671	Date	12-02-	# of pages	1
To	D. Ward	From	C. Franklin		
Co/Dept.		Co.			
Phone #		Phone #			
Fax #	8482	Fax #			

Dear Mr. Carey:

As the Rocky Flats Environmental Technology Site is transitioned from a weapons production facility to grasslands and a National Wildlife Refuge, existing structures need to be removed. In Sections 10 and 11, Township 2 South, Range 70 East, several projects are planned for removing culverts and to reconstruct portions of stream channels.

Enclosed is a Wetlands Evaluation for these projects, including a map showing the locations and Table 1, a listing of wetland types which will be impacted. During initial conversations with Terry McKee, of your staff, on November 30, 2004, and based on my verbal descriptions of the activities, he suggested that these could probably be handled under Nationwide Permit # 27.

Removal of these structures will allow the stream channel to be returned to a more natural configuration. These changes will result in an overall improvement in values and functions of these tributaries to the Platte River System. Our evaluation shows a potential for creating/re-storing of approximately 2.54 additional acres of wetland.

As always, I would appreciate a quick response to my request for a required Clean Water Act Section 404 Permit. If you have questions, or like to visit the sites, please call me at (303) 966-5919.

Sincerely,

Cliff Franklin
Physical Scientist

Enclosure

**WETLANDS EVALUATION FOR THE IA LAND CONFIGURATION PROJECTS AT THE
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE**

November 2004

Revision 0

Classification Exemption CEX-105-01

The Department of Energy (DOE) developed this wetland evaluation for the Rocky Flats Environmental Technology Site (Site, RFETS) to address potential wetland impacts that may result from the Industrial Area (IA) Land Configuration Projects. This document is written to meet requirements of Section 404 of the Clean Water Act (CWA).

As part of the closure activities at the Rocky Flats Environmental Technology Site (Site or RFETS), several culverts that go beneath roads will be removed and the areas recontoured to reconnect the stream drainages that were separated during the construction of the IA infra-structure. The boxes shown in Figure 1 show the locations of the projects that will impact jurisdictional wetlands as mapped by the U.S. Army Corps of Engineers (USACOE) in 1994. During a Site visit in November 2001, Terry McKee of the USACOE Denver office, reclassified several "wetlands" in the IA as non-jurisdictional (Figure 1). Only those wetlands considered as jurisdictional by the USACOE are considered for impacts. The IA Land Reconfiguration activities are considered non-CERCLA activities and therefore fall under the jurisdictional oversight of the USACOE. Impacts at specific locations are discussed below.

Some of these actions will impact the habitat of the Preble's meadow jumping mouse (Preble's mouse, *Zapus hudsonius preblei*), a federally listed threatened species under the Endangered Species Act of 1973, as amended (ESA). Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) has been conducted and completed. A Programmatic Biological Assessment (PBA; April 2004) was written to cover the activities discussed below. A Programmatic Biological Opinion (PBO; April 5, 2004, ES/CO: ES/LK-6-CO-04-F012) has been received from the USFWS giving approval to the projects from an ESA standpoint.

At location #1, the culvert will be removed from beneath the North Access Road. Only minimal disturbance beyond the end of the culvert on either side of the road is expected. After culvert removal, the area will be contoured to match the surrounding streambanks and then seeded/planted with native species. Erosion controls will be installed as necessary throughout the duration of the project. Table 1 lists the wetland types and total wetland impacts expected. Approximately 0.05 acres of total temporary wetland disturbance near the ends of the culverts is expected from this project. The return of the culvert area to stream channel will potentially create an additional 0.03 acres of wetland at this location while returning the area to a more natural state (Figure 1).

At location #2, the culvert beneath the North Access Road will be removed. Only minimal disturbance beyond the end of the culvert on either side of the road is expected. After culvert removal, the area will be contoured to match the surrounding streambanks and then seeded/planted with native species. Erosion controls will be installed as necessary throughout the duration of the project. Table 1 lists the wetland types and total wetland impacts expected. Approximately 0.1 acres of total temporary wetland disturbance near the ends of the culverts is expected from this project. The return of the culvert area to stream channel will potentially create an additional 0.13 acres of wetland at this location while returning the area to a more natural state (Figure 1). Additionally, the borrow area being developed to the south of this location will potentially create an additional 0.87 acres of riparian wetland (Figure 1). This may provide additional potential habitat for the Preble's mouse at the Site and reconnect areas that may have been barriers to Preble's mouse movement.

At location #3, a portion of the wetland will be permanently lost (Figure 1) when the area is recontoured to recreate the stream channel between locations #3 and #4. When the drainage to the south is connected to this channel of North Walnut Creek that runs along the North Access Road, riprap will be necessary for energy dissipation of flows from the south and to prevent erosion at the confluence of the two drainages. After the culvert between locations #3 and #4 is removed and the drainage from the south is connected to North Walnut Creek, the area will be contoured to match the surrounding streambanks and then

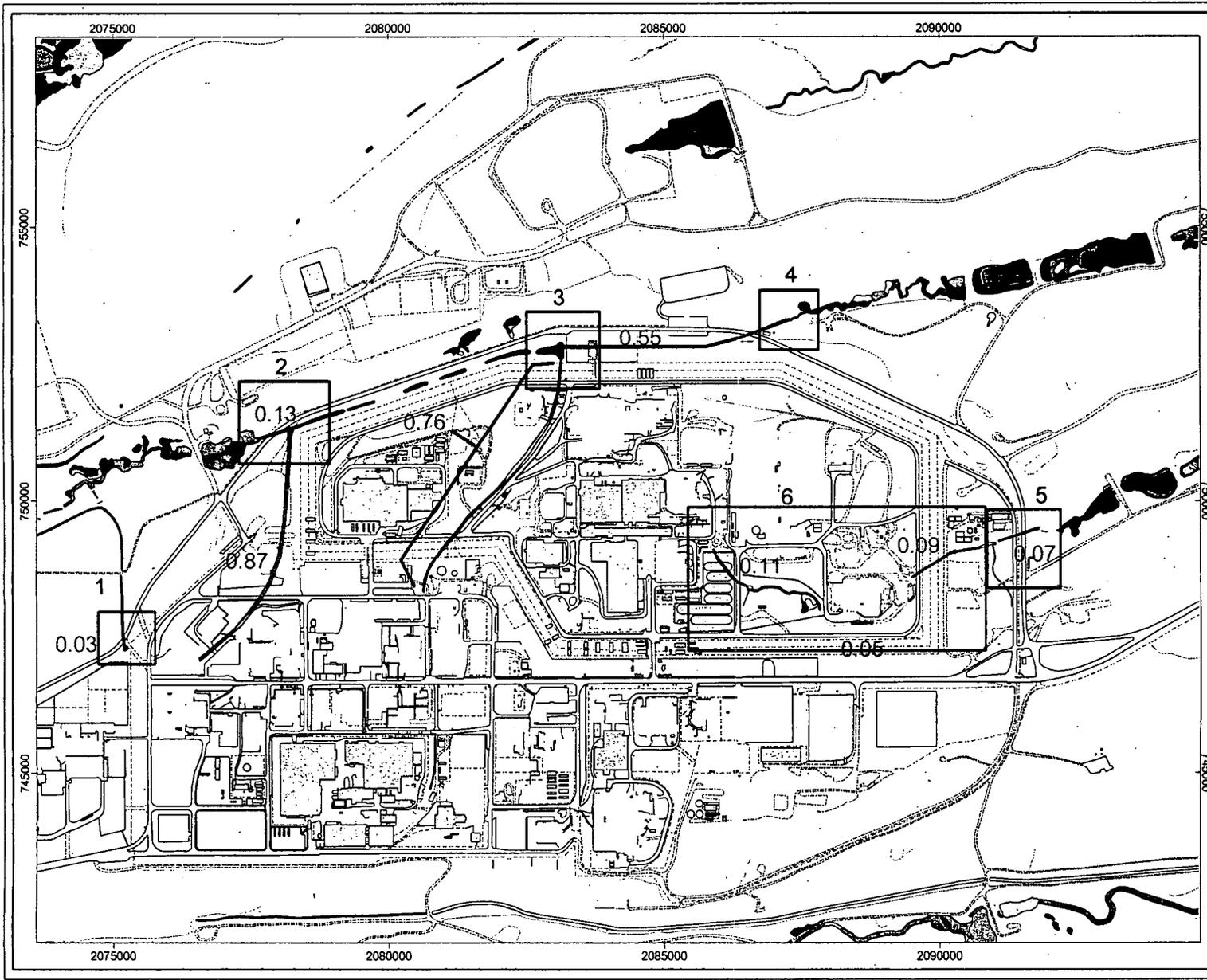
seeded/planted with native species. Erosion controls will be installed as necessary throughout the duration of the project. Table 1 lists the wetland types and total wetland impacts expected at location #3. Approximately 0.12 acres of total wetland will be permanently lost at this location. The return of the culvert area between locations #3 and #4 to stream channel will potentially create an additional 0.55 acres of riparian wetland at this location while returning the area to a more natural state (Figure 1). It will reconnect and bring above ground, sections of North Walnut Creek that have for many years flowed through a culvert. Additionally removal of culverts in the drainage to the south of location #3 will potentially create an additional 0.76 acres of riparian wetland. These actions may provide additional potential habitat for the Preble's mouse at the Site and reconnect areas that may have been barriers to Preble's mouse movement.

At location #4, the removal of the underground culvert that connects location #3 to location #4 will temporarily disturb a small section of wetland. Table 1 lists the wetland types and total wetland impacts expected at location #4. Approximately 0.02 acres of total temporary wetland disturbance near the ends of the culverts is expected from this project. After culvert removal, the area will be contoured to match the surrounding streambanks and then seeded/planted with native species. Erosion controls will be installed as necessary throughout the duration of the project. See discussion under location #3 for possible additional wetland creation potential.

At location #5, the culvert that goes beneath the North Access Road will be removed and the area recontoured to recreate the stream channel in that area. After the area has been contoured to match the surrounding streambanks it will be seeded/planted with native species. Erosion controls will be installed as necessary throughout the duration of the project. A total of 0.059 acres of temporary wetland impacts are expected from the project. Table 1 lists the wetland types and total wetland impacts expected at location #5. The return of the culvert area to stream channel at this location will potentially create an additional 0.07 acres of riparian wetland at this location while returning the area to a more natural state (Figure 1). It will reconnect and bring above ground a section of South Walnut Creek that has flowed through a culvert for many years. These actions may provide additional potential habitat for the Preble's mouse at the Site and reconnect areas that may have been barriers to Preble's mouse movement.

At location #6, the stream is largely an artificial ditch/drainage that has drained the eastern part of the Industrial Area at the Site. The western portion of it currently runs down a ravine and then is routed around a parking area and road near Building 991 in a ditch before going through a culvert under some roads. After the culvert has been removed, the area will be contoured to match the surrounding streambanks. Sections of the upstream areas will be slightly relocated (through the previous road/parking area) to recreate a more natural stream drainage. The western end of the drainage will be extended northwest into areas currently under parking lots or buildings to drain this part of the IA. After the contouring has been conducted the area will be seeded/planted with native species. Erosion controls will be installed as necessary throughout the duration of the project. A total of 0.2 acres of temporary wetland impacts are expected from the project. Table 1 lists the wetland types and total wetland impacts expected at location #6. The return of the ditches, culverts, and parking areas to stream channel at this location will potentially create an additional 0.25 acres of riparian wetland at this location while returning the area to a more natural state (Figure 1). It will reconnect and bring above ground, sections of South Walnut Creek that have been under parking areas or buildings or flowed through culverts or ditches for many years. These actions may provide additional potential habitat for the Preble's mouse at the Site and reconnect areas that may have been barriers to Preble's mouse movement.

In summary, the total acres of wetland impacted from these projects will be approximately 0.549 (0.429 acres of temporary impacts and 0.12 acres of permanent loss; Table 1). However, the return of the culvert areas and other currently non-wetland areas to riparian wetland has the potential to create an additional 2.66 acres of wetland in the IA at the Site. Thus there is a potential gain of 2.54 acres of wetland habitat at the Site which could be used to offset wetland impacts/losses from other projects at the Site.



RFETS IA Land Configuration Wetland Impact Areas Figure 1

- Lacustrine Littoral, Unconsolidated Bottom, Permanently Flooded
- Palustrine Aquatic Bed, Permanently Flooded
- Palustrine Emergent, Temporarily Flooded
- Palustrine Emergent, Saturated
- Palustrine Emergent, Seasonally Flooded
- Palustrine Emergent, Semipermanently Flooded
- Palustrine Forested, Temporarily Flooded
- Palustrine Forested, Seasonally Flooded
- Palustrine Scrub-Shrub, Temporarily Flooded
- Palustrine Scrub-Shrub, Seasonally Flooded
- Palustrine Unconsolidated Bottom, Semipermanently Flooded
- Palustrine Unconsolidated Bottom, Permanently Flooded
- Palustrine Unconsolidated Shore, Seasonally Flooded
- Riverine Intermittent, Streambed, Seasonally Flooded
- Riverine Intermittent, Streambed, Intermittently Exposed
- Riverine Intermittent, Streambed, Intermittently Flooded
- Project Areas (Number corresponds with Table)
- Permanent Wetland Impact Areas
- Non-Jurisdictional Wetlands (USACOE 2001)
- Potential Wetland Creation Areas (Orange numbers represent the approximate number acres that may be created at the location.)

Standard Features

- Buildings
- Demolished Buildings
- Lakes & ponds
- Streams & ditches
- Fences
- Paved roads
- Dirt roads
- Contours (20 ft. intervals)

DATA SOURCE BASE FEATURES:
Buildings, fences, hydrography, roads and other structures from 1998 aerial feature data captured by ESRI's Aerial Imagery, Las Vegas. Digitized from the orthorectified, vrs.

N

0 500 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

**U.S. Department of Energy
Rocky Flats Environmental Technology Site**

Prepared by: **Professional Environmental Group, L.L.C.**

For: **Kaiser-Hill Company, LLC** RFETS GIS Dept. 303-999-7707

MAP ID: 05-0003 November 11, 2004

G:\Projects\RFETS\05-0003\050003 Wetland Creation.apr

Table 1. Estimated IA Land Reconfiguration Potential Wetland Impacts

Area #1. Road N of B131

Drainage Basin	Wetland ID	Wetland Code	Wetland Type	Acres	Wetland Restored	Comments	Potential Wetland Acres Created
WCM1	3C	PEMB	Palustrine Emergent, Saturated	0.03	Y	Assumed approximately 1/5 of polygon disturbed.	
WCM1	3B	PEMB	Palustrine Emergent, Saturated	0.02	Y	Assumed entire polygon disturbed.	
		Total		0.05			Total 0.03

Area #2. North Access Road NW of B371

Drainage Basin	Wetland ID	Wetland Code	Wetland Type	Acres	Wetland Restored	Comments	Potential Wetland Acres Created
WCM2	6ZZZ	PSSC	Palustrine Scrub-Shrub, Seasonally Flooded	0.05	Y	Assumed approximately 1/4 of polygon disturbed.	
WCM2	4A	PEMB	Palustrine Emergent, Saturated	0.05	Y	Assumed approximately 1/3 of polygon disturbed.	
		Total		0.1			Total 1.00

Area #3. Wetland West of Parking North of B771

Drainage Basin	Wetland ID	Wetland Code	Wetland Type	Acres	Wetland Restored	Comments	Potential Wetland Acres Created
WCM2	4A	PEMB	Palustrine Emergent, Saturated	0.12	N	Assumed 1/2 of polygon disturbed.	
		Total		0.12			Total 1.31

Area #4. Area Near SW093

Drainage Basin	Wetland ID	Wetland Code	Wetland Type	Acres	Wetland Restored	Comments	Potential Wetland Acres Created
WCM3	1A	PSSA	Palustrine Scrub-Shrub, Temporarily Flooded	0.02	Y	Assumed entire polygon disturbed.	
		Total		0.02			Total See #3

Area #5. North Access Road near WWTP (east and west of road)

Drainage Basin	Wetland ID	Wetland Code	Wetland Type	Acres	Wetland Restored	Comments	Potential Wetland Acres Created
WCB	1C	R4SBG	Riverine Intermittent, Streambed, Intermittently Exposed	0.03	Y	Went same distance east and west of road edges for impacts.	
WCB	1AA	PUBH	Palustrine Unconsolidated Bottom, Permanently Flooded	0.01	Y	Assumed entire polygon disturbed.	
WCB	1BB	PSSC	Palustrine Scrub-Shrub, Seasonally Flooded	0.01	Y	Assumed entire polygon disturbed.	
WCB	1D	PUBH	Palustrine Unconsolidated Bottom, Permanently Flooded	0.005	Y	Assumed entire polygon disturbed.	
WCB	1C	R4SBG	Riverine Intermittent, Streambed, Intermittently Exposed	0.004	Y	Line feature = 96' length x 2' width. Assumed entire line disturbed.	
		Total		0.059			Total 0.07

Area #6. B991 Area and Old Pidas Area

Drainage Basin	Wetland ID	Wetland Code	Wetland Type	Acres	Wetland Restored	Comments	Potential Wetland Acres Created
PA	1A	PEMB	Palustrine Emergent, Saturated	0.06	Y		
PA	1B	PEMC	Palustrine Emergent, Seasonally Flooded	0.07	Y		
PA	1C	PEMB	Palustrine Emergent, Saturated	0.03	Y	Line feature = 554' length x 2' width. Assumed entire line disturbed.	
PA	1D	PEMC	Palustrine Emergent, Seasonally Flooded	0.01	Y	Line feature = 185' length x 2' width. Assumed entire line disturbed.	
PA	1F	PEMB	Palustrine Emergent, Saturated	0.01	Y	Only 1 of 3 polygons considered jurisdictional (USACOE 2001). Assumed entire polygon disturbed.	
WCB	1B	PEMB	Palustrine Emergent, Saturated	0.01	Y	Assumed entire polygon disturbed.	
WCB	1BC	R4SBJ	Riverine Intermittent, Streambed, Intermittently Flooded	0.01	Y	Line feature = 152' length x 2' width. Assumed entire line disturbed.	
		Total		0.2			Total 0.25

Grand Total Restorable	0.549	Total Wetlands Created (Acres)	2.66
Permanent Loss	0.429	Minus permanent loss (Acres)	0.12
	0.12	Net Wetland Gain (Acres)	2.54

RECEIVED

2004 DEC 14 A 4:59

CORRESPONDENCE
CONTROL

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
DENVER REGULATORY OFFICE, 9307 SOUTH WADSWORTH BOULEVARD
LITTLETON, COLORADO 80128-6901

December 8, 2004



Mr. Cliff Franklin
Department of Energy
Rocky Flats Project Office
10808 Highway 93, Unit A
Golden, CO 80403-8200

**RE: Removing Culverts and to Reconstruct Portions of Stream Channels at Rocky Flats Environmental Technology Site, Six Locations
Nationwide Permit No. 27, Corps File No. 200480620**

Dear Mr. Franklin:

Reference is made to your December 1, 2004 letter to my office concerning the above-mentioned projects located in portions of Sections 10 and 11, T2S, R70W, Jefferson County, Colorado.

Based on the information provided, this office has determined that this work within Colorado is authorized by the Department of the Army Nationwide Permit No. 27, found in the January 15, 2002 Federal Register, Issuance of Nationwide Permits; Notice (67 FR 2077). Enclosed is a fact sheet, which fully describes this Nationwide Permit and lists the General Conditions, Section 404 Only Conditions, and Colorado Regional Conditions, which must be adhered to for this authorization to remain valid.

Although an Individual Department of the Army permit will not be required for this work, this does not eliminate the requirement that any other applicable Federal, state, tribal or local permits be obtained as required. Please be advised that deviations from the original plans and specifications of this project could require additional authorization, from this office.

The applicant is responsible for all work accomplished in accordance with the terms and conditions of the nationwide permit. If a contractor or other authorized representative will be accomplishing the work authorized by the nationwide permit on behalf of the applicant, it is strongly recommended that they be provided a copy of this letter and the attached conditions so that they are aware of the limitations of the applicable nationwide permit. Any activity which fails to comply with all the terms and conditions of the nationwide permit will be considered unauthorized and subject to appropriate enforcement action.

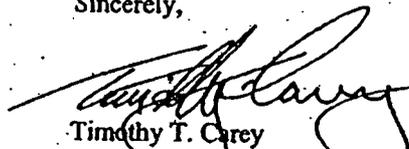
This verification will be valid until December 8, 2006. In compliance with general Condition 14, the attached "Certification of Completed Work" form (blue) must be signed and returned to this office upon completion of the authorized work and any required mitigation.

Should anyone at any time become aware that either an endangered and/or threatened species or its critical habitat exists within the project area, this office must be notified immediately.

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If there are any questions call Mr. Terry McKee at (303) 979-4120 and reference Corps File No. 200480620.

Sincerely,



Timothy T. Carey
Chief, Denver Regulatory Office

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Enclosures

Copies Furnished:

U.S. Fish & Wildlife Service
Colorado Department of Public Health & Environment
Environmental Protection Agency
Colorado Division of Wildlife

**FACT SHEET
NATIONWIDE PERMIT 27**

STREAM AND WETLAND RESTORATION ACTIVITIES: Activities in waters of the United States associated with the restoration of former waters, the enhancement of degraded tidal and non-tidal wetlands and riparian areas, the creation of tidal and non-tidal wetlands and riparian areas, and the restoration and enhancement of non-tidal streams and non-tidal open water areas as follows:

(a) The activity is conducted on:

(1) Non-Federal public lands and private lands, in accordance with the terms and conditions of a binding wetland enhancement, restoration, or creation agreement between the landowner and the U.S. Fish and Wildlife Service (FWS) or the Natural Resources Conservation Service (NRCS) or voluntary wetland restoration, enhancement, and creation actions documented by the *NRCS* pursuant to *NRCS* regulations; or

(2) Reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the OSM or the applicable state agency (the future reversion does not apply to streams or wetlands created, restored, or enhanced as mitigation for the mining impacts, nor naturally due to hydrologic or topographic features, nor for a mitigation bank); or

(3) Any other public, private or tribal lands;

(b) Notification: For activities on any public or private land that are not described by paragraphs (a)(1) or (a)(2) above, the permittee must notify the District Engineer; and

(c) Planting of only native species should occur on the site.

Activities authorized by this NWP include, to the extent that a Corps permit is required, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or creation of riffle and pool stream structure; the placement of instream habitat structures; modifications of the stream bed and/or banks to restore or create stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized landclearing to remove non-native invasive, exotic or nuisance vegetation; and other related activities.

This NWP does not authorize the conversion of a stream to another aquatic use, such as the creation of an impoundment for waterfowl habitat. This NWP does not authorize stream channelization. This NWP does not authorize the conversion of natural wetlands to another aquatic use, such as creation of waterfowl impoundments where a forested wetland previously existed. However, this NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands, on the project site provided there are net gains in aquatic resource functions and values. For example, this NWP may authorize the creation of an open water impoundment in a non-tidal emergent wetland, provided the non-tidal emergent wetland is replaced by creating that wetland type on the project site. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Reversion: For enhancement, restoration and creation projects conducted under paragraph (a)(3), this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion. For restoration, enhancement, and creation projects conducted under paragraphs (a)(1) and (a)(2), this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or creation activities). The reversion must occur within five years after expiration of a limited term wetland restoration or creation agreement or permit, even if the discharge occurs after this NWP expires. This NWP also authorizes the reversion of wetlands that were restored, enhanced, or created on prior-converted cropland that has not been abandoned, in accordance with a binding agreement between the landowner and NRCS or FWS (even though the restoration, enhancement, or creation activity did not require a Section 404 permit). The five-year reversion limit does not apply to agreements without time limits reached under paragraph (a)(1). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate State agency executing the agreement or permit. Prior to any reversion activity, the permittee or the appropriate Federal or State agency must notify the District Engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps regulatory requirements will be at the future date. (Sections 10 and 404)

Note: Compensatory mitigation is not required for activities authorized by this NWP, provided the authorized work results in a net increase in aquatic resource functions and values in the project area. This NWP can be used to authorize compensatory mitigation projects, including mitigation banks, provided the permittee notifies the District Engineer, and the project includes compensatory mitigation for impacts to waters of the United States caused by the authorized work. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition. NWP 27 can be used to authorize impacts at a mitigation bank, but only in circumstances where it has been approved under the Interagency Federal Mitigation Bank Guidelines.

General Conditions: The following general conditions must be followed in order for any authorization by a NWP to be valid:

1. **Navigation:** No activity may cause more than a minimal adverse effect on navigation.
2. **Proper Maintenance:** Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
3. **Soil Erosion and Sediment Controls:** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
4. **Aquatic Life Movements:** No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
5. **Equipment:** Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

6. Regional and Case-By-Case Conditions: The activity must comply with any regional conditions which may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the State or tribe in its Section 401 water quality certification.

7. Wild and Scenic Rivers: No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

8. Tribal Rights: No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. Water Quality: In certain States and tribal lands an individual 401 water quality certification must be obtained or waived (see 33 CFR 330.4(c)).

10. Coast Zone Management: *Not applicable.*

11. Endangered Species: (a) No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the US. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS), the District Engineer may add species-specific regional endangered species conditions to the NWP.

(b) Authorization of any activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.hs.gov/r9endspp/endspp.html> and <http://www.nfm.noaa.gov/prot-res/overview/es.html> respectively.

12. Historic Properties: No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the

requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification: Pre-construction notification is a condition in which the applicant is required to notify the *Corps* of Engineers before work begins. By receiving this nationwide permit verification letter, this condition has been met.

14. Compliance Certification: Every permittee who has received NWP verification from the *Corps* will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the *Corps* with the authorization letter. The certification will be forwarded by the *Corps* with the authorization letter and will include: (a) A statement that the authorized work was done in accordance with the *Corps* authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.

15. Use of Multiple Nationwide Permits: The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the *NWPs* does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3 acre).

16. Water Supply Intakes: No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

17. Shellfish Beds: No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material: No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

19. Mitigation: The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring notification, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this

requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(d) Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWP's. For example, 1/4-acre of wetlands cannot be created to change a 3/4-acre loss of wetlands to a 1/2-acre loss associated with NWP 39 verification. However, 1/2-acre of created wetlands can be used to reduce the impacts of a 1/2-acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWP's.

(e) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purpose. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineer may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

(g) Compensatory mitigation proposals submitted with the notification may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the United States.

(h) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. Spawning Areas: Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows: To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelization will be reduced to the minimal amount necessary, and the activity must, to the

maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect water flows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the *Corps* will defer to state and local authorities regarding management of water flow.

22. Adverse Effects From Impoundments: If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restriction of its flow, shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the United States, or discharges of dredged or fill material.

23. Waterfowl Breeding Areas: Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. Removal of Temporary Fills: Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. Designated Critical Resources Waters: Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, State natural heritage sites, and outstanding national resource waters or other waters officially designated by a State as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Not applicable to NWP 27.

(b) For NWP 27, notification is required for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under this NWP only after it is determined that the impacts to the critical resource waters will be no more than minimal.

26. Fills Within 100-Year Floodplains: The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

27. Construction Period: For activities that have not been verified by the *Corps* and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12 months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the *corps*.

For projects that have been verified by the *Corps*, an extension of a *Corps* approved completion date may be requested. This request must be submitted at least one month before the previously approved completion date.

Further Information:

1. District Engineers have authority to determine if any activity complies with the terms and conditions of a NWP.

2. NWPs do not obviate the need to obtain other Federal, State, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. *NWPs* do not authorize interference with any existing or proposed Federal project.

**NATIONWIDE PERMITS
REGIONAL, CONDITIONS
OMAHA DISTRICT CORPS OF ENGINEERS
STATE OF COLORADO**

Fens

Nationwide permits 1, 2, 4, 6-11, 13-19, 21-25, 28-31, 33-36, 39-44 are revoked for activities in these regionally important aquatic resources.

Fens are defined as wetlands which are characterized by waterlogged spongy ground and contain (in all or in part) soils classified as histosols* or mineral soils with a histic epipedon*. To determine whether this provision applies, the entire wetland must be examined for the presence of histosols or histic epipedons.

*Histosols have 40 centimeters (16 inches) or more of the upper 80 centimeters (32 inches) as organic soil material (or less over bedrock). Organic soil material has an organic carbon content (by weight) of 12 to 18 percent, or more, depending on the clay content of the soil. Histic epipedons have a 20 to 60 centimeter-thick (8-24 inches) organic soil horizon that is at or near the surface of a mineral soil. Histosols and histic epipedons are widely recognized as organic soils formed by slow accumulation of plant debris in waterlogged situations where it cannot decompose. (More information on histosols can be obtained from the U.S. Department of Agriculture, Natural Resources Conservation Service publications on Keys to Soil Taxonomy and Field Indicators of Hydric Soils in the United States).

Springs

All nationwide permits are revoked for activities located within 100 feet of the water source of natural spring areas. A spring source is defined as any location where ground water emanates from a point in the ground. Springs do not include seeps or other discharges which do not have a defined channel.

Sombrero Marsh

Existing revocations of all nationwide permits for the Sombrero Marsh in Boulder County, Colorado, published by Omaha District, Corps of Engineers, remains in effect. This determination includes all new or revised nationwide permits.

Central City and Black Hawk

The Omaha District, Corps of Engineers has removed the revocation of all nationwide permits within the 11-square mile Central City and Black Hawk area. This action reinstates the use of all nationwide permits within this designated area.

Nationwide Permit 13 - Bank Stabilization

In Colorado, bank stabilization activities necessary for erosion prevention in streams that average less than 20 feet in width (measured between the ordinary high water marks) are limited to the placement of no more than 1/4 cubic yard of material per running foot below the plane of the ordinary high water mark.

Activities greater than 1/4 cubic yard per running foot may be authorized if the permittee notifies the District Engineer in accordance with General Condition No. 13 (Notification) and the Corps determines the adverse environmental effects are minimal.

Removal of Temporary Fills

General Condition No. 24 (Removal of Temporary Fills) is amended by adding the following: When temporary fills are placed in wetlands in Colorado, a horizontal marker (i.e., fabric, certified weed-free straw, etc.) must be used to delineate the existing ground elevation of wetlands that will be temporarily filled during construction.

Important Spawning Areas

General Condition No. 20 (Spawning Areas) is amended by adding the following: In Colorado, activities which: (a) would destroy important spawning areas; (b) would be conducted in these waters during spawning seasons for trout and kokanee salmon (spawning season for rainbow and cutthroat trout is from March 15 through July 15, and for brown and brook trout and kokanee salmon is from September 15 through March 15); or (c) have greater than minimal release of sediments during these spawning seasons are not authorized by any nationwide permit. Bioengineering techniques, such as native riparian shrub plantings are required for all bank protection activities that exceed 50 linear feet in important spawning areas. Important spawning areas are identified in the attached list of critical resource waters in Colorado.

Additional Information

Important Spawning Areas: In Colorado, important spawning waters are defined as "Wild Trout Waters" as identified by the State of Colorado. Wild Trout Waters are listed in the Colorado Fishing Season Information brochure, or a list can be obtained from any Corps office in Colorado. Wild Trout Waters within the Omaha District geographic boundary include parts of the: Cache La Poudre, Laramie River, Middle Fork of the South Platte River, North Platte River, North St. Vrain Creek, South Platte River, and Tarryall Creek.

Critical Resource Waters Within Colorado

In accordance with General Condition No. 25 (Designated Critical Resource Waters), the following waters within the State of Colorado within the Omaha District geographic boundary are designated as critical resource waters:

Outstanding Natural Resource Waters

Cache La Poudre Basin: All tributaries to the Cache La Poudre River system, including lakes and reservoirs, within Rocky Mountain National Park.

Laramie River: All tributaries to the Laramie River system, including all lakes and reservoirs, which are in the Rawah Wilderness Area.

North Platte River: All tributaries to the North Platte and Encampment Rivers, including all lakes and reservoirs, which are in the Mount Zirkle Wilderness Area.

Certification of Completed Work

Corps File Number: _____

Name of Permittee: _____

Date of Issuance: _____

Expiration Date: _____

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U. S. Army **Corps** of Engineers
Denver Regulatory Office
9307 South Wadsworth Blvd.
Littleton, Colorado 80128-6901

Phone (303) 979-4120

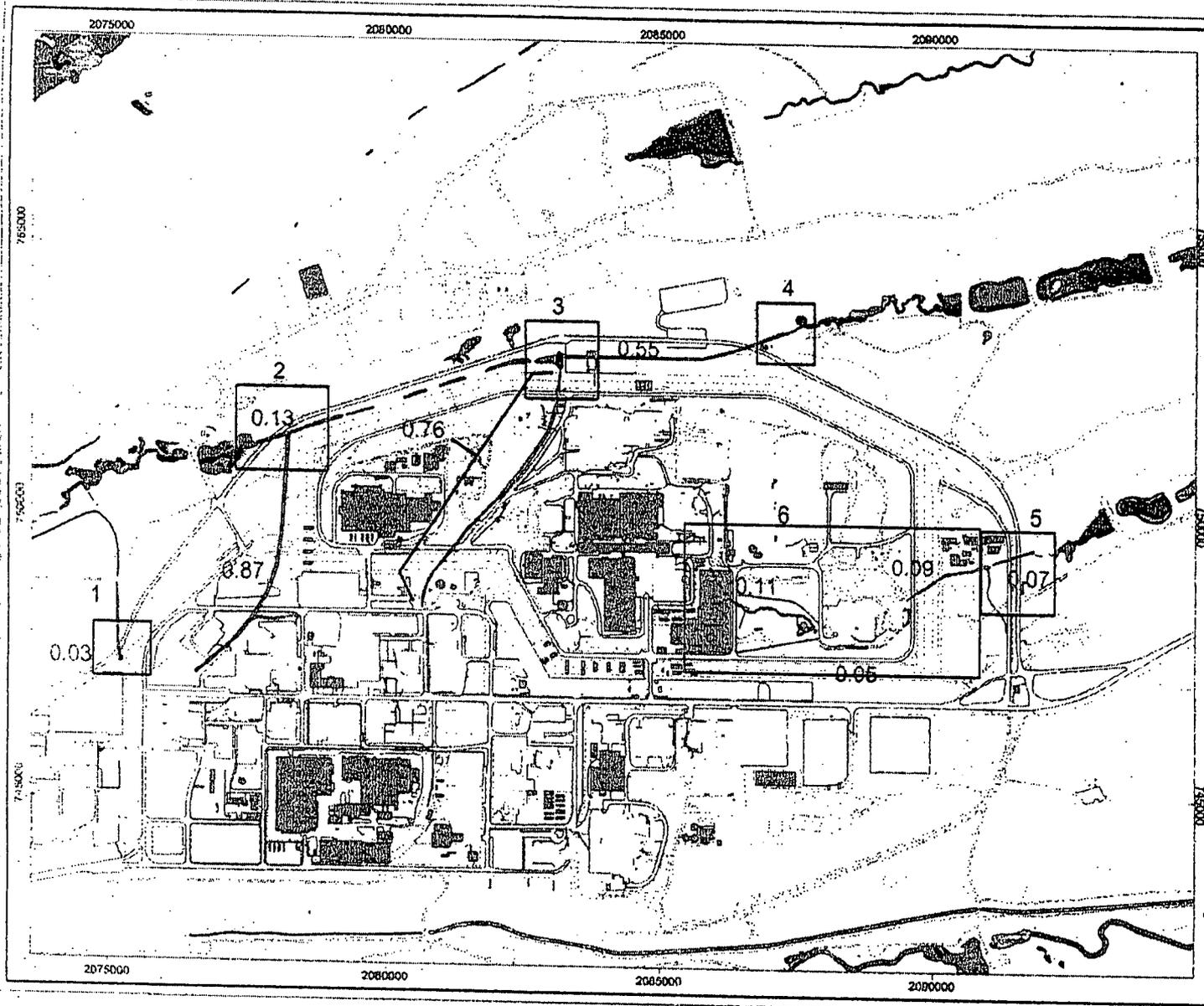
Fax (303) 979-0602

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army *Corps* of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of said permit, and required mitigation was completed in accordance with the permit conditions.¹

Signature of Permittee

¹ If your permit included wetlands monitoring and annual reports, these activities will continue after submittal of this form until you are notified by the Denver Regulatory Office that your mitigation is successful and monitoring reports are no longer required



**RFETS IA Land Configuration
Wetland Impact Areas**
Figure 1

- Lacustrine Littoral, Unconsolidated Bottom, Permanently Flooded
- Pelustrine Aquatic Bed, Permanently Flooded
- Pelustrine Emergent, Temporarily Flooded
- Pelustrine Emergent, Saturated
- Pelustrine Emergent, Seasonally Flooded
- Pelustrine Emergent, Semipermanently Flooded
- Pelustrine Forested, Temporarily Flooded
- Pelustrine Forested, Seasonally Flooded
- Pelustrine Scrub-Shrub, Temporarily Flooded
- Pelustrine Scrub-Shrub, Seasonally Flooded
- Pelustrine Unconsolidated Bottom, Semipermanently Flooded
- Pelustrine Unconsolidated Bottom, Permanently Flooded
- Pelustrine Unconsolidated Shore, Seasonally Flooded
- Riverine Intermittent, Streambed, Seasonally Flooded
- Riverine Intermittent, Streambed, Intermittently Exposed
- Riverine Intermittent, Streambed, Intermittently Flooded
- Project Area (Number corresponds to table)
- Permanent Wetland Impact Areas
- Non-jurisdictional Wetlands (USACOE 2001)
- Potential Wetland Creation Areas (Change numbers represent the approximate number acres that may be created at the location.)

Standard Features

- Buildings
- Demolished Buildings
- Lakes & ponds
- Streams & ditches
- Pavement
- Paved roads
- Dirt roads
- Contours (20 ft. intervals)

DATA SOURCE: BASE FEATURES:
Buildings, Streams, Ditches, Lakes and Ponds
contours from 2003 LIDAR, LIDAR
contours from 2003 LIDAR, LIDAR
contours from 2003 LIDAR, LIDAR

N
↑
0 500 1000 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

**U.S. Department of Energy
Rocky Flats Environmental Technology Site**

Prepared by: **Professional Environmental Group, L.L.C.**

For: Kaiser Energy Services Company, LLC

RFETS GIS Dept.
303-668-7702

MAP ID: 08-0023 November 11, 2004