



Instructions and Helpful Hints

for Preparation of

Emergency Action Plans

using the “fillable form” electronic template

for the NRCS sample EAP

June 25, 2007

Introduction

Emergency Action Plans (EAPs) are important documents to have in the event of an emergency involving the potential failure of a high hazard dam. It is critical that the information contained in the EAP is accurate and current to effectively warn and evacuate people at risk and other citizens downstream from the dam.

While at first glance it might appear that preparation of EAPs is a time consuming task, this guide has been prepared to streamline the process and help you through each step.

A fillable form electronic template for an EAP that is consistent with the sample EAP in the NRCS National Operation and Maintenance Manual is available as a Microsoft® Word file. This template contains 39 pages, however, some of the pages do not require any additional information, and many only require filling in a few blanks. After local information is filled in, such as state and local official's addresses, phone numbers, and sponsor names, you will have a county EAP template that can be saved for preparation of EAPs for other high hazard dams in the same county, without having to fill in these blanks again.

NRCS policy for development of EAPs is contained in the National Operation and Maintenance Manual, Subpart F. This policy can be accessed at <http://directives.sc.egov.usda.gov/>; left click on *Manuals*, then *Title 180, Part 500*, and then *Subpart F*. The fillable form electronic template for EAPs can also be accessed at the above Web site. EAPs for NRCS-assisted dams shall contain the minimum content as shown in the policy. The format may be adjusted from the sample EAP as required to be in compliance with state and local procedures.

Listed below are suggested steps to assist in preparing an EAP.

Step 1: Gather county/conservation district information.

- a. Complete EAP Worksheet Number 1. This worksheet contains the contact information for state, county, and local officials who have roles in implementing an EAP.
- b. Determine the roles and responsibilities for each of the principals identified in the EAP:
 - Identify who will be the Incident Commander during the emergency. The Incident Commander is responsible for managing and directing persons and organizations during the emergency. Generally, the Sheriff or Emergency Management Coordinator is the Incident Commander, but you need to check with officials in your area to see who will be the local responsible official.
 - Identify who will be responsible for being the point of contact with the media (generally the Sheriff or Emergency Management Coordinator).
 - Identify who will be the primary contact for the conservation district.
- c. Review the list of responsibilities in the sample EAP, and revise as necessary.

Step 2: Prepare the county EAP template:

- a. Download the EAP template from the following URL: <http://directives.sc.egov.usda.gov/>, left click on *Manuals*, then *Title 180, Part 500, Subpart F*, then scroll down to *Fillable Form Template*. Save this document (suggested file name: “NRCS Sample EAP”).
- b. Change the view of the document on your screen. Select *View* in the toolbar, then *Print Layout*. This will allow you to view the boxes to be filled out in the document.
- c. Input the data gathered in EAP Worksheet Number 1 into the EAP template by filling in the blanks.
- d. Save this file as a template for future use. It can be used to develop EAPs for other high hazard dams in your county without having to retype this local information. Suggested file name: “____ County EAP template.”

Tip: Editing the EAP template:

Any of the content of the sample EAP can be edited; however, the shaded areas contain information that must be input for the site-specific EAP. Just type in your site-specific information in the shaded boxes and it will replace what is in the template. Be sure the *Insert* key is not engaged. For nonshaded areas, highlight the words to be replaced, and type in the site-specific information.

Words or titles may be changed globally throughout the entire template. For example, if you need to change the Conservation District Manager to another title such as Conservation District Chairperson, select *Edit* in the toolbar, then *Replace*. A box titled *Find and Replace* will open. In the space *Find What*, type in Conservation District Manager. Then type the new title in the *Replace With* space. Click *Replace All*, and the change will be made globally.

Step 3: Gather site-specific dam information.

- a. Determine the downstream area and the people, businesses, and public infrastructure at risk if the dam should fail. Sometimes this can be determined with a quick analysis and field review if only isolated properties are involved downstream from the dam. But generally, field surveys and a detailed breach inundation study will be required.
- b. Complete EAP Worksheet Number 2 with information for a specific dam. Information can be obtained from the as-built drawings and National Inventory of Dams database.
- c. Make copies of needed sheets from the as-built drawings. Locate or prepare maps showing the location of the dam in the state; the vicinity map of dam showing the detailed location of the dam and how to access it; the watershed project map; plan view and profile of the dam and important appurtenances; and the reservoir elevation-area-volume-discharge data. If possible, make an electronic scan of the drawings for insertion into the document.

Step 4: Prepare the site-specific EAP:

- a. Using the county template prepared in Step 2, enter the site-specific dam information gathered in Step 3.
- b. To make changes to the headers and footers, such as date and watershed name, dam number, etc., select *View*, then *Header and Footer*, make appropriate changes, and then *Close*. Note that you only need to make the changes to the header and footer on one page, and it will be made on all pages automatically.
- c. When completed, save this file. Suggested file name: “_____ Creek Watershed, Dam No. ____ EAP.”

Tips on inserting local information in the EAP document:

To insert maps or scanned files into this document, place your cursor in the appropriate location, select *Insert* in the toolbar, *Picture*, and *From File*. Navigate to the folder where the maps or scanned drawings are located, select the appropriate file to insert, and then select *Open*.

If you have trouble with inserting a photo, map, or drawing, select *Format* in the toolbar, then *Paragraph*. Make sure the *Line spacing* is set on *single*. If you need more than one graphic per page, select *Insert* on the toolbar, then *Insert Text Box*. After the text box is placed on the page, it can be sized by dragging a corner of the box. A graphic can be inserted into the box as described above. The text boxes will hold the graphics in place.

Cover: If electronic copies of maps are not available, delete boxes and type in “**Location maps are located in Appendix B–2.**”

Page 5: If there is not a responsible Emergency Management Services agency (as in many small rural areas), combine appropriate bullets of this section with the Incident Commander paragraph above.

Step 5: Assemble the draft EAP:

- a. Print (one-sided) hard copies of the site-specific EAP, and assemble into half-inch notebooks.
- b. Pages 32–37: If electronic or scanned maps or drawings are not available, insert photocopies of appropriate sheets from “as-built drawings.”

Step 6: Distribute the draft EAP for review and comments:

- a. Distribute the draft EAP to the emergency management officials, dam safety officials, and NRCS, and request their review and comments.
- b. Arrange an onsite review of the dam with the Sheriff and emergency management official.
- c. Incorporate comments received.

Step 7: Obtain concurrence signatures:

- a. Obtain signatures of all officials with responsibilities with implementing the EAP.
- b. The project sponsors and the responsible official for the local emergency management organization should also sign the cover page.

Step 8: Assemble and distribute final copies of the EAP:

- a. Print (one-sided) hard copies of the site-specific EAP, and assemble the EAP document into the notebook with the following dividers and tabs (note: the standard EAP divider tabs can be ordered via the LANDCARE Web page: <https://landcare.nrcs.usda.gov>), or by calling 1-888-LANDCARE (1-888-526-3227). Request engineering form #210-020 entitled “High Hazard Dams Emergency Action Plan Tabs.”

<u>Top divider tabs</u>	<u>Place prior to page no.</u>
Emergency Levels	6
Notification Charts	12
Expected Actions	16
Evacuation Map	34
People at Risk	35

Side dividers tabs: Place in front of the appropriate page or section.

- b. Prepare copies for only those having an official need and responsibility to implement the EAP. Assign a number for each person, and write this number in the blank on the cover sheet (“Copy __ of __”). Record these numbers and the person who received the copy on page 21, Record of Holders of Control Copies of this EAP.
- c. Clearly label the spine of the notebook to show that it is an Emergency Action Plan for the specific watershed and dam. Make an extra copy of the cover sheet, and insert it in the notebook cover.

Hand deliver the copies (do not mail them). Discuss the intent and information contained in the EAP. Invite the recipients to an onsite review of the dam if they have not been there previously.

EAP Worksheet Number 1
County EAP Template Information

**Basic Information Needed for Development of all
Emergency Action Plans in a Specific Watershed and County**

Name of Watershed: _____

Name of Watershed Project Sponsors:

Contact Information:

The primary sponsor must designate a primary contact person for the EAP, and also designate alternates in case the primary contact cannot be reached (cannot be an NRCS person).

Sponsor: _____ Conservation District

Primary Contact: _____

Title: _____

_____ (Office)

_____ (Home)

_____ (Cell)

Alternate Contact Person: _____

Title: _____

_____ (Office)

_____ (Home)

_____ (Cell)

Sheriff

Name: _____

_____ (Office)

_____ (Home)

_____ (Cell)

County or City Emergency Management Agency Director

Name: _____

Title: _____

_____ (Office)

_____ (Home)

_____ (Cell)

Other Emergency Services Contacts

Agency / Organization	Principal Contact	Address	Office Telephone Number	Alternate Telephone Numbers
_____ County Board of Commissioners	Chairman			
Natural Resources Conservation Service	District Conservationist			
Natural Resources Conservation Service	State Engineer			
Natural Resources Conservation Service	NRCS Technician			
Department of Transportation				
Highway Patrol				
State Dam Safety Agency				
_____ County Emergency Management Coordinator				
_____ Fire Department				
_____ Police				
_____ Radio Station				

* Back-up to primary contact

Locally Available Equipment, Labor, and Materials:

The County Commissioners have the following resources that can be utilized in the event of an emergency: Contact person information _____

Kinds of Equipment _____

The City of _____ has the following resources that can be utilized in the event of an emergency. Contact person information _____

Kinds of equipment: _____

Other Material, Supplies, or Equipment:

Heavy Equipment Service and Rental	Sand and Gravel Supply	Ready-Mix Concrete Supply
Pumping Contractor	Diving Contractor	Divers

EAP Worksheet Number 2 Site-specific EAP Information

Watershed Name and Dam No.: _____

Local Dam Name: _____

Directions to Dam: *(Start at a spot like an intersection in town or two major roads and give, in miles, directions from that point to the dam):*

If the main road to the dam could be flooded if the dam failed, provide an alternate route:

An alternate route to the dam is:

Houses, businesses, highways, other structures in the downstream area that will be impacted by a dam failure:

Residents/Businesses/Highways At Risk

House/ business no.*	Resident/business	Address	Phone no.	Distance downstream from dam (feet)	Max water depth above 1st floor (feet)
1.					
2.					
3.					

* Identify and label structure on the evacuation map.

Name, address, and phone number of landowner where dam is located:

National Inventory of Dams (NID) Data

Dam name:	Federal constructed: USDA NRCS
State:	Program authority:
NID ID:	Watershed No.:
Longitude: –	Watershed name:
Latitude:	Service life: ___ yr
Geodetic location:	O&M insp. resp.: _____ Cons. District
County:	O&M insp. current?:
Stream:	Population at risk:
Nearest town:	Dam height: ___ ft
Distance to nearest town: ___ mi	Dam length: ___ ft
Operator: _____ Cons. District	Dam volume: ___ yd ³
Year constructed:	Design hazard potential:
Max. discharge: ___ ft ³ /s	Current hazard potential:
Max. storage: ___ acre-ft	Hazard potential class. year:
Normal storage: ___ acre-ft	Sediment storage: ___ acre-ft
Surface area: ___ acre	Flood storage: ___ acre-ft
Drainage area: ___ mi ²	Surcharge storage: ___ acre-ft
Inspection frequency: ___ yr	Other storage: ___ acre-ft
State regulated?:	Principal spillway type: Concrete pipe
State reg. agency:	Principal spillway conduit diameter: ___ in
Federal funding: USDA NRCS	Auxiliary spillway type: Vegetated earth
Federal design: USDA NRCS	Auxiliary spillway width: ___ ft