



United States
Department of
Agriculture

Forest
Service

Manti-LaSal N.F.

Reply to 2510 Watershed Surveys and Plans

Date March 9, 1984

Subject Contingency Plan for 1984 Snowmelt Period

To District Rangers and Staff

Enclosed is a second copy of the draft contingency plan for this spring's coming events. We prepared this plan and sent a copy (unsigned) to the Regional Office. The Regional Office's comments are that it looks pretty good. The only criticism was that they foresee a need for better coordination with the Public Information Officer on the capital city Forest (Wasatch).

Other known problems include the following: Some of the assignments of names to jobs was done without consulting the person's supervisor. Some of the NIIMS charts were incorrectly drawn.

Please read the plan before the Management Team Meeting on March 15 so that productive discussions can occur. We need to come to an agreement and implement the plan.

RICHARD B. OTTESEN

for
REED C. CHRISTENSEN
Forest Supervisor

Enclosure



D. KELLY

Manti-LaSal N.F.

2510 Watershed Surveys and Plans
1590 Defense and Emergency Operations

February 15, 1984

Flood Landslide Contingency Plan for 1984 - Manti-LaSal

Regional Forester

In response to your memorandum of December 1, 1983, we submit the enclosed
Contingency Plan.

A. L. Foster

REED C. CHRISTENSEN
Forest Supervisor

Enclosure

DKelly:pf

CONTINGENCY PLAN
for
FLOODING AND LANDSLIDES DISASTER IN 1984

Manti-LaSal National Forest

Recommended by: _____ Date _____

Approved by: _____ Date _____

Table of Contents

- I. Introduction
- II. Management of an Incident - NIIMS
 - A. Alternative 1 - The Multi-Jurisdictional Approach
 - B. Alternative 2 - The Single Jurisdictional Approach
- III. Definition of an Incident
- IV. Four Phases of an Incident
- V. Phase 1 - Pre-Incident
 - A. Management Objectives
 - B. Public Safety
 - C. Pre-Incident Tasks and Responsibilities
- VI. Phase 2 - Ongoing Incident
 - A. Management Objectives
 - B. Situation
 - C. Public Safety
 - D. Tasks and Responsibilities
- VII. Phase 3 - Post Incident Survey and Assessment
 - A. Management Objectives
 - B. Situation
 - C. Tasks and Responsibilities
- VIII. Phase 4 - Rehabilitation

1. INTRODUCTION

The flood and landslide disaster of 1983 was caused by record setting moisture conditions of snowpack, precipitation, soil moisture, and a late snowmelt. Wet years back to back increased the severity of the moisture conditions--1982 was wet, and 1983 was wet. The springtime of 1983 conditions generated high stream flows and landslides resulting in road washouts, facility destruction, dam breaks, and resource damage on the Manti-LaSal National Forest.

The snowpack, precipitation, and soil moisture records for the fall of 1983 and the winter of 1984 indicate extreme conditions for the snowmelt runoff period of 1984 on portions of the Manti-LaSal National Forest. The moisture buildup of 1982 and 1983 continues into 1984. Incidents in the form of landslides, road failures, dam emergencies, and floods are expected.

Based on the experience of 1983, this plan should aid our decision making process by improving our organization and preparations for the anticipated snowmelt period.

II. MANAGEMENT OF AN INCIDENT - NIIMS

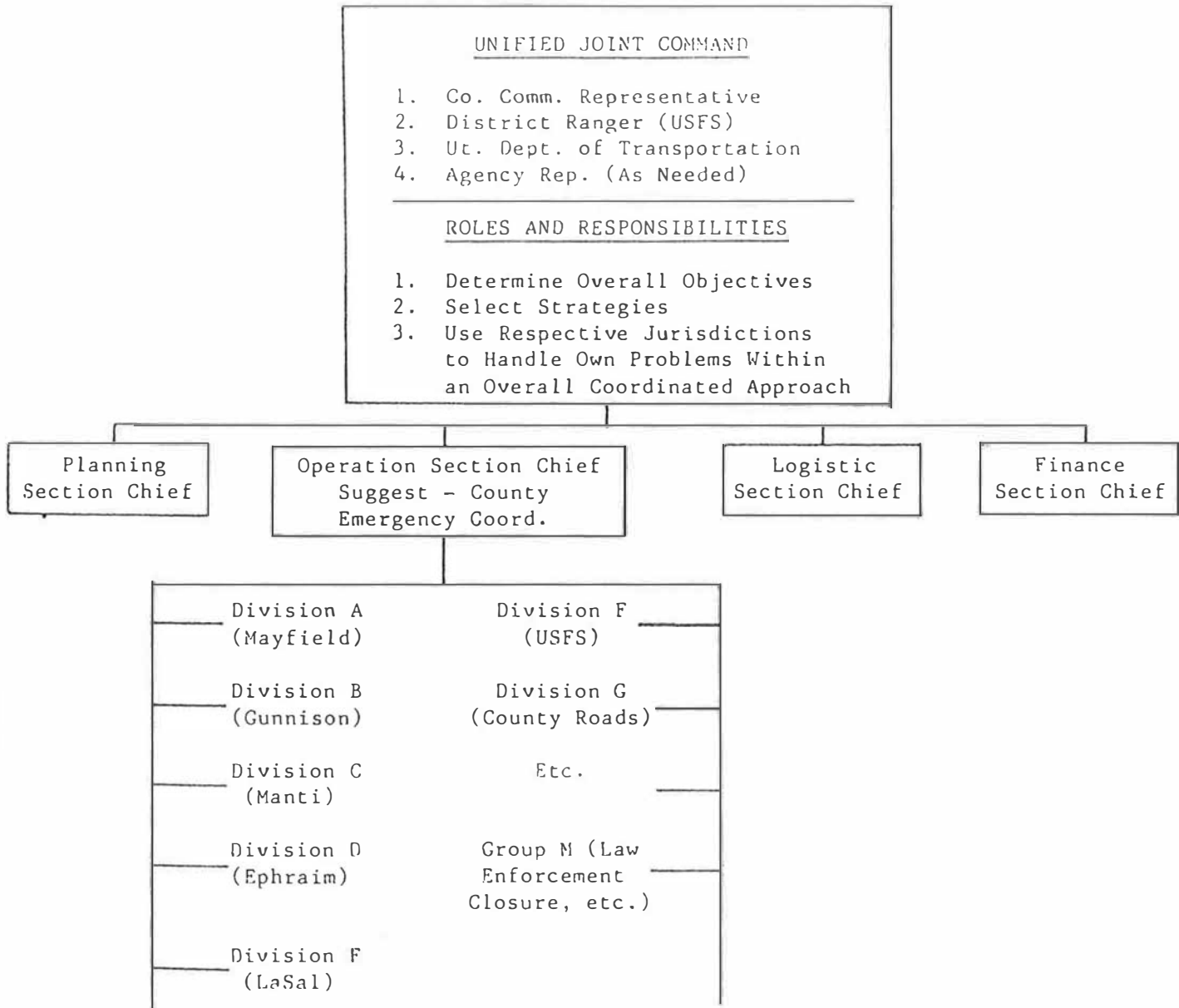
Events that require action to protect lives, property, and resources often cross jurisdictional boundaries. Likewise, the repair and rehabilitation of damaged facilities and resources often requires funding from many sources. In order to deal with these situations, the National Interagency Incident Management System (NIIMS) has been developed. This NIIMS system is modular in concept and can be multi-jurisdictional in operation.

The expected snowmelt event of 1984 can be handled either as a multi-jurisdictional incident, or as a single jurisdictional incident. In Alternative 1, a multi-jurisdictional incident, the Manti-LaSal National Forest will be totally integrated into an interagency management effort incorporating Federal, State, county, and municipal agencies. In Alternative 2, a single jurisdictional approach, the Manti-LaSal National Forest will put forth a Forest-wide effort to take emergency action and coordinate with other agencies, permittees, etc. Depending on the desires and requests of other agencies, the Manti-LaSal National Forest can adapt to either alternative. For either approach, the Forest will use the NIIMS system.

A. Alternative 1 - The Multi-Jurisdictional Approach

A conceptual approach to this type of a coordinated system is shown below only for the purpose of displaying one way which it could work. This approach, or something similar, could only be implemented if the participating agencies are willing to investigate it further and agree to approach the 1984 situation in this or a similar manner. With this type of system, each jurisdiction would handle their own problems within their capabilities. Equipment or sharing of resources could be moved from Division (community) as needed as part of a mutual assistance pact.

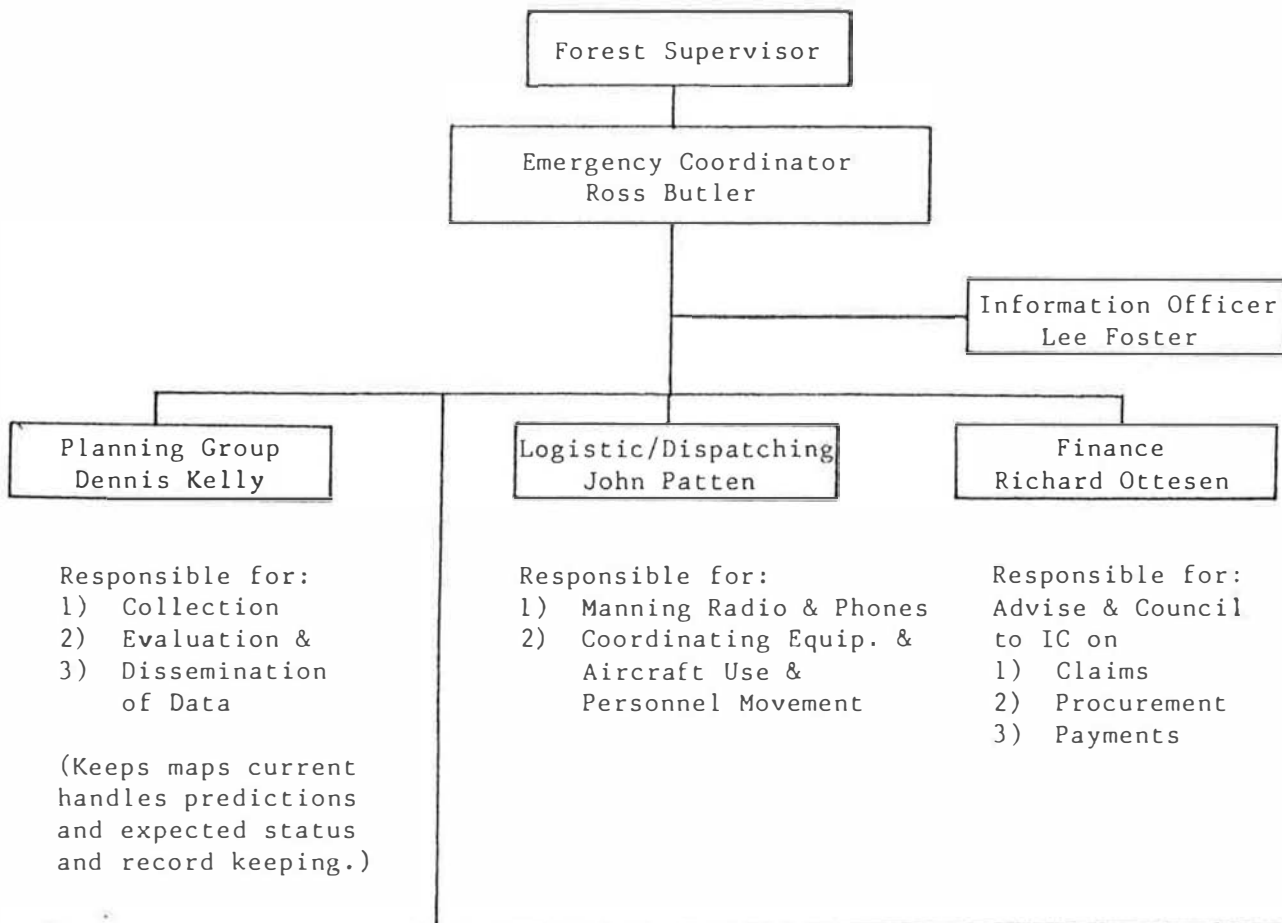
Figure 1 - Possible Multi-Jurisdictional NIIMS Organization



B. Alternative 2 - The Single Jurisdictional Approach

The Forest Supervisor's Office will coordinate the District efforts so information, status, and resources can be handled and coordinated based on priority. The Forest-wide organizational structure is as follows:

Figure 2 - Possible Forest-Wide NIIMS Organization



Resource Pool of Technical Specialists

The following personnel--if not assigned--a specific position with the respective Districts organization can be dispatched and assigned to provide technical input or monitoring to the IC as needed:

Roads & Dams

Bob Sengl
Ted Fitzgerald
Brent Barney

Holger Theobalt
Jed Parkinson
Jim Duncan
Mike Montgomery
Ed Carlson
Mike Smith

Landslides

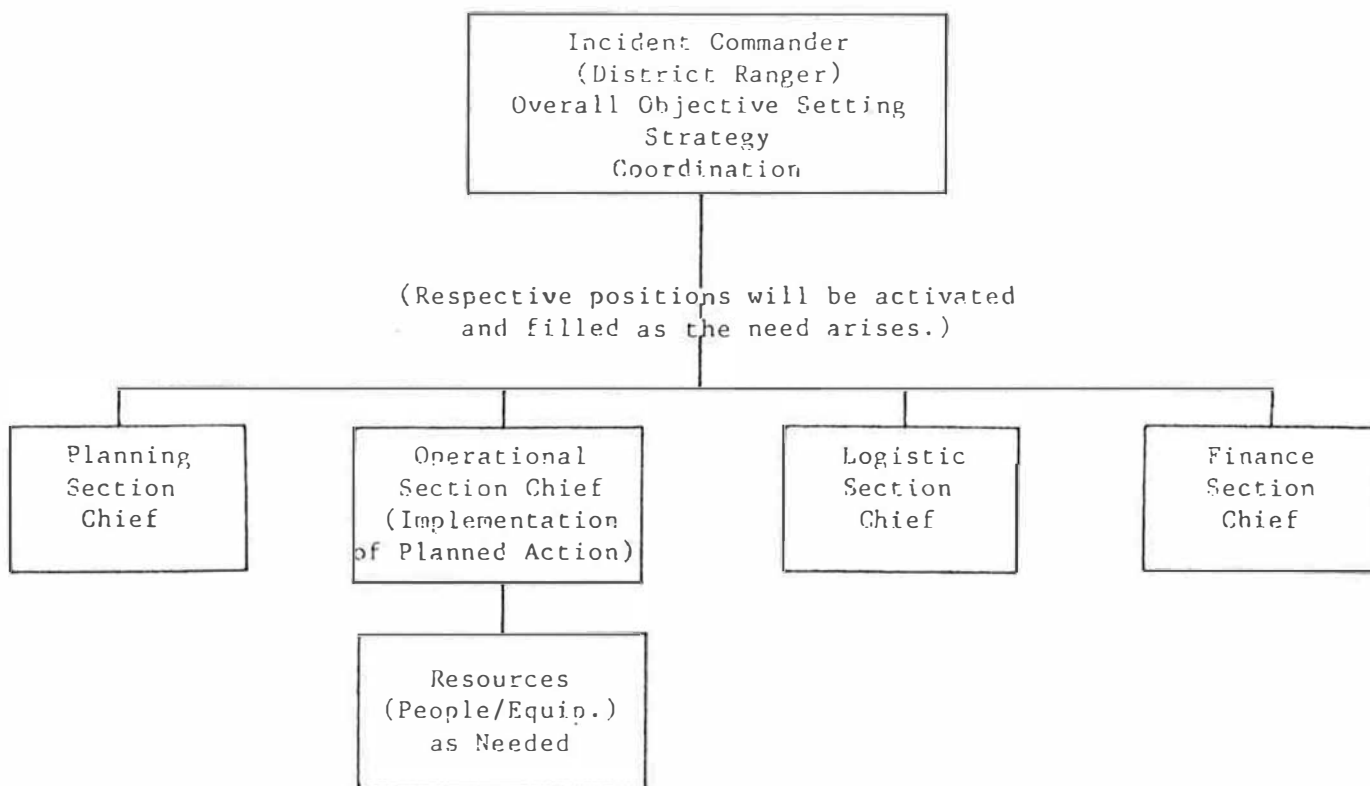
Alan Gallegos
Carter Reed
Steve Robison
Sam Hotchkiss
Dan Larsen
Jim Iaquinta

Floods

Robert Thompson
Don Ward
Jeff Lucero
Al Mills

Each District Ranger will serve as the Incident Commander for his respective District and support help will be provided by personnel from the District, Supervisor's Office, Regional Office, or detailers as may be appropriate. The Ranger will handle the interagency coordination at the local level. A conceptual approach (very similar to how the Forest handled the situation in 1983) is shown below using NIIMS.

Figure 3 - Possible District NIIMS Organization



Divisions and/or
Groups will be
Designated as the
Need Arises.

III. DEFINITION OF AN INCIDENT

- A. For the purposes of this plan, an Incident is: The snowmelt event of 1984 and includes all subsequent events and actions. The incident is geographically defined as a Ranger District.
- B. The Incident Commander is the District Ranger.
- C. Ross Butler is the Emergency Coordinator at the Forest level.
- D. Individual situations within the incident, such as an individual landslide, an individual road washout, or individual dam, may be classified as a division.

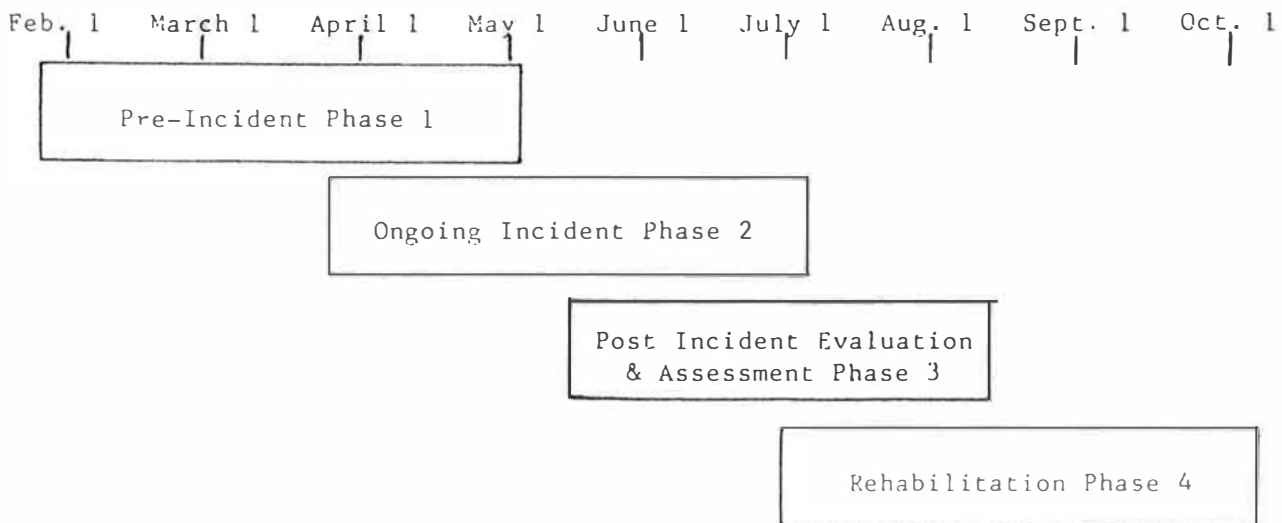
IV. FOUR PHASES OF AN INCIDENT

As an incident develops, four phases can be identified. For each phase, certain types of activities will take place aimed at achieving certain objectives. The four phases are:

- Phase 1 - Pre-Incident
- Phase 2 - Ongoing Incident
- Phase 3 - Post Incident Survey and Assessment
- Phase 4 - Reclamation

The activities associated with each phase may overlap in time as shown in Figure 4.

Figure 4 - Expected Timing of the Snowmelt Incident of 1984



V. PHASE 1 - PRE-INCIDENT

A. Management Objectives

1. Monitor snowpack, water conditions, and buildup to compare current conditions to historical records.
2. Predict the magnitude and extent of the incident.
3. Detect the incident in a timely manner.

B. Public Safety

1. As the buildup develops, coordinate dam safety with the appropriate permittees and agencies.
2. When landslides are determined to be moving, notify other agencies as appropriate.
3. Notify State and county police of road and area closures, and of public safety reasons for any such closures.

C. Pre-Incident Tasks and Responsibilities

To prepare for the expected disaster, the following tasks have been identified and responsibilities assigned as follows:

Task & Responsibilities	Person Responsible		Expected Accomp. Date	Remarks
	Primary	Support		
1. Monitor Snotell Data to determine expected runoff & degree or severity of incident for selected locations.	Kelly	Patten O'Neil Parkinson	Weekly and Daily if Needed	
a. Disseminate information to District.		---	As Needed	
b. Prepare runoff models.			5/15	
2. Complete landslide analysis of 1983 event (from aerial photo evaluation) & determine expected degree of succptability for 1984.	Gallegos	Larsen Reed	5/15	

Task & Responsibilities	Person Responsible		Expected Accomp. Date	Remarks
	Primary	Support		
3. Conduct an I-220 NIIMS Training Session for Forest overhead personnel and District Rangers.	Patten	Lowry	3/31	
4. Prepare for and hold pre-incident coordination meetings w/ other Federal, State, counties, & cities.	District Rangers		3/15 Begin Immediately	
5. Keep all dam & reservoir permittees abreast of plans & conditions.	District's Rangers	Boley	As Needed	
6. Determine team members availability & make assignments.	S.O. Staff		3/1	
7. Obtain pre-incident heavy equipment rental agreements. Prepare list of contacts & equip. as an amendment to this plan & for cooperators (through District Rangers).	District's Rangers Moynier	Moynier Dispatcher	4/1 4/14	
8. Obtain a "Call When Needed" helicopter contract.	Vastan Forest Air Officer	R.O. Aviation	4/15	
9. Obtain necessary fixed winged aircraft & pilot certification.	Forest Air Officer Vastan	R.O. Aviation	4/1	
10. Fill Forest Dispatcher position.	Butler	Murphy	5/1	
11. Obtain BIFC Radio Cache & Repeater for improved communication on D-1.	Brown	Patten	5/1	

Task & Responsibilities	Person Responsible		Expected Accomp. Date	Remarks
	Primary	Support		
12. Negotiate & obtain MOU on exchange of equip., people, w/ other agencies, counties, etc.	Ottesen	Allan	5/1	
13. Complete pre-grided maps of each respective District for their use & Dispatch Office.	Districts	Patten	5/1	
14. Take appropriate preventive actions such as: Obtain sandbags and local sand source. Keep culverts & ditches clear.	Districts	Road Crew	Continuing	
15. Initiate field monitoring & evaluation & reporting of conditions to Dispatcher & Planning Section as needed.	Districts	Respective Specialists	After 5/1	
16. Prepare and/or update emergency notification plans.	Districts <i>Rangers</i>		4/15	

VI. PHASE 2 - ONGOING INCIDENT

A. Management Objectives

1. Provide for public and employee safety.
2. Minimize on-Forest and downstream damage to life, property, and resources.
3. Monitor, evaluate, and record the incident for legal, analytical, and historical purposes.

B. Situation

- 1. Flooding and landslides are expected to occur, causing on-site Forest damage.
- 2. Due to elevational differences, flooding and damage are expected to occur at different times in different drainages.

C. Public Safety

- 1. Areas and roads of the National Forest that are deemed hazardous will be closed to public access by administrative order, signs, and where appropriate by physical barrier.
- 2. When situations develop within the National Forest and pose down-stream or down slope hazards to other ownerships, the sheriff and county disaster officials will be notified.

D. Tasks and Responsibilities

During Phase 2, the ongoing incident, the following procedures, tasks, and assignments have been identified.

- 1. All Forest personnel may be called to participate if the incident develops to the size and complexity as last year.
- 2. Additional detailers will be requested if needed.
- 3. The following Supervisor's Office personnel are predesignated to respond as requested by the respective Incident Commanders (District Rangers) to fill any established positions or offer technical advice and assistance as deemed necessary. Those people will be dispatched without further clearance from their immediate supervisors. When conflicting needs are identified for the same person, priorities will be assigned by the Emergency Coordinator (Ross Butler). Persons assigned to an incident will be released upon the approval of the Incident Commander. These names will be filled in by April 1, 1984.

<u>Eng./Minerals</u>	<u>Range, WS, & WL</u>	<u>Timber/Fire</u>	<u>Business Mgmt.</u>
----------------------	----------------------------	--------------------	-----------------------

- 4. Other non-designated personnel that are requested by Incident Commanders will be cleared through respective Forest Staff or Ranger before dispatching.
- 5. The Incident Commanders and the Forest Information Officer will assure that information is released to other agencies, other organization levels, and to the news media in a timely manner.
- 6. The Incident Commanders and plans section leaders will keep accurate records of occurrences and actions taken.

7. As provided in Phase 1, Step 13, all Districts will be pregridded for coordinated locations. As slides or damage occurs, it will be transmitted to the Dispatcher by grid location for plotting and keeping an accumulative record of impacts by Supervisor's Office Planning Group.
8. Unit Logs (ICS - form 202) will be prepared daily of key actions taken by all overhead personnel assigned to incidents. A copy will be transmitted to Supervisor's Office Planning for documentation purposes.
9. Photographs and video tapes, if necessary, of damage will be taken as appropriate as determined by the Incident Commanders.
10. As provided for in NIIMS, each employee assigned to an incident will be briefed and made aware of appropriate safety hazards, requirements, and preventative action.
11. As necessary to provide for the safety of Forest users, emergency administrative closures for areas or specific roads will be initiated under the Forest Supervisor's authority. These closure notices will be posted in the Supervisor's Office and Ranger District offices and on the ground as necessary to bring them to the attention of the public. This effort will be coordinated with county sheriffs, the Highway Patrol, and others (news media).

VII. PHASE 3 - POST INCIDENT SURVEY AND ASSESSMENT

A. Management Objective

Complete a survey and assessment of damage incurred and determine restoration and repairs needed to correct damage by August 1, while keeping Forest resources and activities functioning at an acceptable level.

B. Situation

If Phase 1 and Phase 2 are accomplished as planned, the Forest should have a fairly good overall assessment of damages. It will be necessary to refine and update this damage when all the facts are available. The damages and estimated repair needs must be quantified and evaluated for restoration purposes, and application for funding from various sources. From last year's (1983) experience, there are three separate steps that must be taken.

1. Emergency Action to restore an acceptable level of Forest activity and resource use.
2. Completion of an overall Flood Damage Assessment Report and an Emergency Watershed Protection Program Report (see 403).
3. Completion of preliminary investigation report of transportation system repair needs to determine if the damage may qualify for Emergency Relief Federally Owned funding.

C. Tasks and Responsibilities

1. Any short-term emergency action (step 1 above) to keep the Forest systems operational will be requested by the District Rangers through the Supervisor's Office Emergency Coordinator (Ross Butler) who will coordinate with the respective staff officers. Once agreed upon, any exigency action that the Forest Supervisor can approve will be initiated immediately.
2. The Flood Damage Assessment Report and 403 Report (Step 2) will be conducted Forest-wide by an Interdisciplinary Damage Assessment Team. The assessment team will probably include the following disciplines and responsibilities.
 - a. Probable Damage Assessment Team Needs and Roles
 - (1) Team Leader
 - (a) Coordinate priorities with Rangers and other agencies.
 - (b) Assign specific projects and tasks to team members.
 - (c) Set time schedules.
 - (d) Arrange for necessary support.
 - (e) Ensure that safety practices are followed.
 - (f) Ensure that information is consolidated into appropriate reports for further action and information purposes.
 - (g) Be cost effective in use of manpower and available resources.
 - (h) Coordinate progress of team with respective Ranger Districts and other Forest Staff.
 - (2) Environmental Geologist
 - (a) Map all recent slides and mudflows.
 - (b) Estimate date of stability (prognostication).
 - (c) Recommend possible/practical methods for rehabilitation and slope stability.
 - (d) Coordinate mass instability problems with other resource areas.
 - (3) Hydrologist
 - (a) Assess damage to riparian and all water related resources.
 - (b) Gather data, assemble flood reports.

- (c) Identify flood plains and quantity.
 - (d) Determine rehabilitation prescriptions.
- (4) Fishery Biologist
- (a) Determine fish habitat lost.
 - (b) Compare former habitat condition with present situation.
 - (c) Determine rehabilitation needs for fisheries, for stream channel work, ponds, and reservoirs.
- (5) Range Conservationist
- (a) Determine loss of suitable range and AUM's by allotments.
 - (b) Determine loss of facilities, fences, water developments, etc.
 - (c) Determine livestock access problems.
 - (d) Make recommendations for alternate grazing management systems, access problems, or facilities needed to aid permittees.
 - (e) Develop rehabilitation prescriptions.
- (6) Engineer
- (a) Assess damage to transportation system and other facilities (dams, etc.).
 - (b) Aid Ranger in alternate route selection for immediate needs.
 - (c) Coordinate with other team members, transportation needs for ERFO action.
- (7) District Representative
- (a) Provide input for team action (past and present).
 - (b) Coordinate local conditions.
 - (c) Handle other functional data as needed (recreation, timber).
 - (d) Stay with team through report preparation.
- (8) Support - Map Maker
- (a) Assemble maps/photographs by incidents and functional resource areas.

b. Priorities

Before the team is brought together, priorities for assessment will be determined by the Forest Management Team, and a time frame for completion will be determined for the team leader to follow.

c. Support

A helicopter and necessary field evaluation surveys to assess the extent and types of damage associated with these incidents will be needed to refine detailed damages. Aircraft support will be coordinated by Team Leader through Forest Dispatcher.

Additional aircraft or teams may need to be added to complete within time frames.

Aerial photographs and video tapes should be taken of the damage to provide a record of damage that has occurred for documentation and future planning. Obtain specific, more detailed photographs where needed for specific rehabilitation prescriptions.

d. Coordination

Coordination with the Soil Conservation Service is essential once the team is activated to assure the proper hazard categories are assigned to each incident, and to assure that incidents eligible for 403 funding will be properly handled. The District Conservationist for the respective counties or his representative should be invited to participate with the team action.

Coordination between this team and the transportation damage team of the Forest Service and Federal Highway Administration is essential to assure that road design and other planned rehabilitation measures are not duplicated.

3. The transportation system damage assessment (Step 3) will be completed.

a. The team(s) will be comprised of one Forest Service Engineer and one Federal Highway Administration Engineer.

b. Priorities for Assessment

These will be established by the respective District Rangers and Forest Engineer, and a proposed schedule will be established.

c. Support

A helicopter will probably be needed for this affect. All aircraft needs will be coordinated through the Forest Dispatcher.

d. Coordination

Coordination of this teams effort will be needed with counties, States, and the Forest Damage Assessment Team so efforts are not duplicated.

VIII. PHASE 4 - REHABILITATION

When the results of Phase 3 (Post Incident Survey and Assessment) are known and funding is available, specific steps can be initiated for this phase.

2/14/84

Sanpete Ranger District
Emergency Contacts

Sanpete County

	<u>Office</u>	<u>Home</u>
Ned Madsen, Chairman, Sanpete County Commission	835-2141	835-4612
Kennard Anderson, Sanpete County Sheriff	835-2191	528-7700
Wally Buchanan, Sanpete County Emergency Coordinator	835-2191	835-3041
Gene Bardsley, County Road Supervisor	835-6441	528-3504

Juab County

Ross Garrett, Chairman, Juab County Commission	623-0801	623-0702
David Carter, Juab County Sheriff	623-1344	623-1463

Utah State Department of Transportation

Howard Richardson, Road Supervisor (Richfield)	896-8241	896-8366
Gunnison Equipment Shed	528-7886	
Mt. Pleasant Equipment Shed	462-2272	
Ron Christensen		462-2892

2/13/84

Moab Ranger District
Emergency Contacts

Grand County

Grand County Sheriff Office, Phone: 259-8115
Jim Nyland (County Sheriff), Phone: 259-8389
Grand County Road Department, S. Highway 163, Phone: 259-5308

Moab City, Phone: 259-5121
Police, Phone: 259-8938
State Department of Highways, Phone: 259-7636

San Juan County

San Juan County Sheriff Office, 117 South Main, Monticello, Phone: 587-2237
County Road Office, 835 East Highway 66, Monticello, Phone: 587-2231

Montrose County, Colorado

Tom Gilmore (County Sheriff), Phone: 303-249-6606
Les Cook, County Road Office, 107 South Cascade, Montrose
Phone: 303-249-8505 Office
303-249-5424 Garage