



BNA FEDERAL CREDIT UNION

DISASTER RECOVERY PLAN

INTRODUCTION

The need for a contingency plan for business interruptions is vital to the operations of the BNA Federal Credit Union. Without such a plan, the credit union can expose itself to numerous liabilities that can cause permanent damage to the credit union and its members' assets. The BNA Federal Credit Union has a responsibility to ensure the safety of the facility, the employees, and the financial assets of its members. Beyond the development of this plan, a periodic test of the plan will occur to ensure that it operates as intended.

This plan outlines the procedures to follow in the event of a disaster or emergency that causes a business interruption.

OBJECTIVES

The overall objectives of the BNA FCU Disaster Recovery Plan are to protect the credit union's resources and employees, to safeguard critical information, and to guarantee the continued availability of essential credit union operations and services.

This plan is to document, design, and implement a sufficient set of procedures for responding to a disaster that involves interruption of BNA FCU's operations and services.

A disaster is defined as the occurrence of any event that causes a significant disruption in BNA FCU's capabilities. The purpose of this plan is to minimize the effect of a disaster upon operations. This plan responds to the most severe disaster, the kind that requires moving off-site to a back-up facility. Occurrences of a less severe nature are controlled at the appropriate management level as a part of the total plan.

The basic approach, general assumptions, and sequence of events that needs to be followed will be stated in this plan. It will outline specific preparations prior to a disaster and emergency procedures immediately after a disaster. The BNA FCU Disaster Recovery Plan will be distributed to all key personnel.

The general approach is to make the plan as threat-independent as possible. This means that it should be functional regardless of what type of disaster occurs. In order to limit the credit union's loss, the plan provides for the logical restoration of all critical

systems to a production status within 24 hours after the equipment is operational at either a home location or a backup site.

This plan also contains the contact numbers of key parties, including credit union employees and Board of Directors.

RESPONSIBILITIES

The effectiveness of this plan is the responsibility of all employees of BNA Federal Credit Union. The manager is responsible for providing sufficient guidance during a disaster situation and promoting a high level of employee understanding in carrying out the practices established in this plan. Employees are responsible for carrying out the plan according to the prescribed guidelines.

The manager will ensure that the plan is reviewed and tested on an annual basis and revised when changes occur in the organizational structure or physical environment. The manager is responsible for providing a copy of the plan to the Board of Directors, and any changes made to this plan will be provided to the Board of Directors for approval. The manager will be responsible for establishing a method of communicating to all employees the objectives of the plan and the degree of individual responsibility involving its implementation. The manager, Board of Directors, Supervisory Committee, and any other involved parties will keep a copy of this plan at their place of residence. Several copies of the plan will also be kept at the credit union's office and at an off-site storage facility.

ASSUMPTIONS

The operations of a credit union could be suddenly disrupted by events beyond our control, involving people, mechanics, electronics, or natural disasters. The credit union office is the core of the data center and operations. Any threat in or near the office can affect the critical flow of information. The location of the disaster could be more important than the amount of damage it causes. A small problem at a critical location could cripple the credit union's services and operations and require it to reestablish operations at a backup facility.

This plan assumes that a catastrophic event has severely crippled the credit union office, forcing it to reestablish full operations at a fully equipped backup facility. All applications will eventually be processed at the backup location, even those not

classified as critical operations. Concurrent with the backup facility processing is the reconstruction of the original or alternate permanent facility, and the planning for the final move back to this site. Although this plan assumes a catastrophic disaster, the plan can be altered to handle a less severe emergency as determined by the manager.

PROCESSING ENVIRONMENT

The credit union office is equipped with workstations, a server, report printer, a check printer, and a receipt printer. These are the main resources that enable the credit union to serve its members. These computers contain critical information on the members', credit union financial assets and the necessary programs to access these accounts.

Three personal computers are also part of the credit union equipment. These computers hold various important documentation, reports, information and customized programs for the continued operation of the credit union.

The credit union is also equipped with fireproof filing cabinets, which hold vital records of the credit union's assets and resources.

I. CONTINGENCY PLAN FOR DISASTERS

The cycle from the occurrence of a disaster to the full restoration of normal processing has four phases: initial response, preparation for temporary backup site operation, backup site operation, backup site fully operational, restoration and return to permanent facility.

A. INITIAL RESPONSE

As soon as an emergency business interruption occurs, the employees should contact appropriate emergency authorities and then take the necessary steps to minimize property damage and injury to people in the vicinity.

1. Identify the problem. Notify the proper authorities.

a. Emergency services

Telephone the following numbers to reach local authorities for emergency situations such as fire, explosion, earthquake, tornado, etc.:

EMERGENCY NUMBERS	
Fire Department	911
Police Department	911
Paramedics	911

b. Environment

If a problem is detected concerning the credit union office environment, such as electrical, water damage, excessive heat, cold, or humidity, contact the following authorities

	Office Number
Les Holmes	(202) 452-4085

c. Physical Security

If you are aware that an unauthorized person is in a secured area of the credit union office, notify one of the following:

Security Guard

Office Number
(202) 452-3302

2. Reducing your exposure

Following the procedures below will help to reduce the credit union's exposure to additional losses because of actions not taken by employees. These actions are targeted at emergencies concerning fire, electrical, or water damage.

a. Fire Alarm Procedure

Various fire alarm systems can detect and suppress fires within the first few seconds. They can automatically close fire doors, control elevators, shut off equipment and circulation fans, and notify the local fire department through 24-hour, ventral-station monitoring. If automatic controls are inappropriate or nonexistent, local smoke alarms should alert you, and fire extinguishers can be used. Water sprinklers systems are activated depending on the type of controls installed.

Should fire or smoke be detected in the credit union office, do the following:

1. Immediately power-down the computer
2. Take the hand fire extinguisher and attempt to put out the fire.
3. If unable to extinguish the fire
 - Pull the fire alarm and call the Fire Department
 - Call the security guard
 - Ensure that the filing cabinets are closed and locked
 - Take a copy of the Disaster Recovery Plan with you.

4. If time permits

- Remove necessary documents and files from the credit union office to a safe place

b. Electrical Failure Procedure

Should an electrical problem be detected in the credit union office, the following steps should be taken:

1. Immediately notify the Operation and Maintenance Department
2. Power down the computer if this hasn't been done already
3. When the problem has been resolved, verify that all files are properly restored.

c. Flood and water damage

Water damage can be caused by a discharge or leak in the sprinkler system, broken pipes, bathroom facilities, etc. The following steps should be followed if there is a water problem from the sprinkler system or other leakage:

1. If a fire is not apparent, but the sprinkler system discharges:
 - a. Power down the computers
 - b. Cover all hardware with plastic covers
 - c. Call the appropriate personnel and tell them that the sprinkler is discharging and no fire is apparent. Have them turn off the sprinkler system and notify the necessary maintenance people
 - d. Make sure the filing cabinets are secured
 - e. Inspect equipment for water damage before the equipment is powered up again.
2. If water damage exposure is not caused by the sprinkler system but has affected the computer hardware.
 - a. Power down the computer
 - b. Place plastic covers on all equipment if water is coming from above
 - c. Close and lock the filing cabinets

- d. Notify the Maintenance Department, who will determine the source of the water and take corrective action.
- e. Inspect equipment for damage before the equipment is powered up again.

3. Evacuation of the facility.

Evacuation because of various threats to human life such as fire, earthquakes, floods, explosions and bomb threats may be initiated by anyone, but other threats may require an executive to authorize the evacuation.

Employees should be trained in emergency procedures and should know the evacuation routes from various parts of the building.

4. Advising Disaster Recovery Team and other Key people of the situation.

As soon as a disaster occurs, credit union employees should notify the Disaster Recovery Team. It is the responsibility of the on-site personnel to make sure that the team is advised of the situation.

Name	Home Phone
Rodrigo Jaurigue	(703) 931-2303
Trina Barretto	(703) 254-3154
John Wenner	(301) 834-8730
Patricia Spencer	(301) 249-7442

The manager and credit union staff will make an initial determination of the extent of the damage. Based on their assessment, all or part of the Disaster Recovery Plan will be initiated. They will then decide:

- a. If the credit union operation can be continued at the site and repairs can be started as soon as possible
- b. If the credit union office and equipment is destroyed to the extent that the backup recovery facility must be used and the full Plan initiated.

The Disaster Recovery Team will decide on its plan of action and then notify the Board of Directors.

CONTINGENCY PLAN - DETECTION AND INITIAL RESPONSE

1. Coordinate initial response using office procedures to protect life and minimize property damage
2. Assess the damage.
3. Determine extent to which BNA FCU Contingency Plan will be utilized.

MINOR DAMAGE

- Processing can be restarted in a short time
- Anticipated downtime is less than one day. Damage could be to hardware, software, mechanical equipment, electrical equipment, or the facility.

MAJOR DAMAGE

- Selected personnel or department will be called to direct restoration of normal operations at current site
- Estimated downtime will probably be around 1-2 days. Major damage to hardware or facility

CATASTROPHE

- Damage is extensive. Restoration could take a couple of days.
 - Credit Union facility and equipment could be completely destroyed
 - Begin a total implementation of the BNA FCU Contingency Plan.
4. Notify Board of Directors
 5. Notify Members
 6. Prepare regular status report to Board of Directors
 7. Notify members of projected time for becoming operational.

B. INITIATION OF BACKUP SITE PROCEDURE

1. Following an emergency at the Credit Union office, the on-site personnel will take the appropriate initial action and then contact a member of the Disaster Recovery Team. When a member is located, that member will contact the remaining members of the Disaster Recovery Team. The members will meet at or near the disaster to make a firsthand assessment of the damage. They will determine the action to take and will notify the Board of Directors.
2. Establish a Backup Facility. The location of the facility can be in BNA's Rockville office, another building, or a private home. The phone numbers should be made available to all key people and members.
3. The Head of the Disaster Recovery Team will document the team's activity to prepare status reports for the Board of Directors and for documentation purposes.

C. ESTABLISHMENT OF FULL RECOVERY AT BACKUP SITE

1. All planned software, hardware and resources in place at backup site, and the applications tested.
2. Communications network and other equipment fully operational.

Make arrangements with outside vendors for delivery and installation of temporary equipment. Conduct a complete series of test to ensure full recovery of the credit union service and operations capabilities. Provide for full restoration of service at the original or alternate facility.

3. Disaster Recovery Team Checklist

The following checklists are used to keep track of the activities that will be performed by the team during a Disaster-Recovery situation.

BNA FEDERAL CREDIT UNION
Disaster Recovery MANAGEMENT Checklist

Date ____ / ____ / ____

Events	Person Assigned	Begin Date and Time	Completed Date and Time
Coordinate initial response.			
Assess the damage			
Notify Board of Directors			
Give formal notification for request to use backup facilities			
Arrange for emergency funds to cover extra expenses			
Establish Backup facility and coordinate the recovery			
Update Board of Directors on the recovery status			
Update members on the status of the credit union.			
Produce report damages			
Arrange for any additional professional help			

BNA FEDERAL CREDIT UNION
Disaster Recovery OPERATIONS Checklist

Date ____ / ____ / ____

Events	Person Assigned	Begin Date and Time	Completed Date and Time
Assess the damage and identify the necessary equipment to be replaced			
Obtain necessary hardware equipment			
For backup site, review and ensure availability of required power and communication lines for proper operation			
Assess status of processing and point of recovery for the entire system and/or individual systems. Develop plan to restart operating schedule			
Review list of requirements for supplies			
Arrange for transportation and/or purchase of replacement supplies			
Notify vendors of status and give address of backup site			
As soon as backup site is operational, begin to clean up and restore original site if feasible			
Check on requirement for cables and connectors and other start-up requirements at original site			
Determine the damage to PC, office equipment, data entry and other units			

BNA FEDERAL CREDIT UNION
Disaster Recovery DATA AND INFORMATION CONTROL Checklist

Date ____ / ____ / ____

Events	Person Assigned	Begin Date and Time	Completed Date and Time
Determine the starting point for recovery			
Match the latest backup files to use for restoration			
Obtain original documents to bring files up to current status			
Determine when equipment will be available			
Arrange for setting up temporary office space			
Obtain the backup documents			

D. RESTORATION OF FACILITIES AND OPERATIONS AT THE ORIGINAL AND/OR ALTERNATE SITE

When the backup facility is fully functional as the temporary credit union office, it is time to plan on rebuilding a more permanent facility. Reconstruction plans should already be in progress. The permanent replacement hardware that will eventually be used at the permanent facility can be ordered and installed at the temporary facility. Once the permanent facility is ready for use, the hardware at the backup site can be moved to the permanent facility.

II. SUPPLIERS/VENDORS

Not all suppliers that the credit union actively works with in the normal business environment will be listed in this section. This section is designated to identify only those specified vendors who need to be contacted to repair or replace equipment or supplies critical to the operation of the data center and required as part of the recovery effort.

Company Name: Integrasys – CubicsPlus
Contact Person: Russell Graham, Account Executive
Address: 2601 Network Boulevard Suite 600 Frisco, TX 75034
Phone: (469) 287-3761
Email: russell.graham@integrasys.fiserv
Equipment: - Workstation and Server
- CubicsPlus Programs
- Current Backup Data in Secure Data Storage Site

Company Name: Chevy Chase Bank
Contact Person: Matthew Fowler, Branch Manager
Address: 2400 M Street, Washington DC
Phone: (202) 728-2517
Equipment: - Checks
- Deposit Slips

III. INFORMATION PROTECTION

A. Protection of Vital Records

The protection and retention of vital records is part of the credit union's business operations. BNA FCU also has a legal responsibility to protect certain records for five years.

(i) IRON MOUNTAIN STORAGE

The BNA FCU maintains its records at an off-site storage facility, Iron Mountain Storage and Records. This off-site storage facility has adequate security systems in place to assure the safety of the credit union's records.

The credit union stores specified media, records, and documentation off-site for use in the recovery of the data processing system should a disaster or other emergency occur. The manager or designee will be responsible for insuring that all the necessary information is maintained at the storage facility, with the exception of backup disks which will be kept by the manager or designee, so as to provide immediate response time for computer conversion with the new equipment shipped by our data processor vendor, Integrasys.

The following is a list of materials stored off-site and may not be all inclusive:

1. Monthly, quarterly, and annual backup disks of the database
2. Other important documents
 - a. General Ledger accounting data and supporting information
 - b. Member account information
 - c. Files relating to loans
 - d. Copies of the Disaster Recovery Plan

At least quarterly, the Manager will review the checklist of items maintained off-site and verify that the necessary information is maintained at the off-site storage facilities.

(ii) CUBICS PLUS SECURE DATA STORAGE

The BNA FCU can transmit encrypted data over a secure internet connection to a secured off-site electronic vault. This data can be easily retrieved 24/7 for rapid restoration in the event of a disaster.

The following is a list of materials stored off-site and may not be all inclusive:

1. Monthly, quarterly, and annual backup disks of the database
2. Daily backup of all application data files including:
 - a. General Ledger accounting data and supporting information
 - b. CubicsPlus database and reports
 - c. Data files relating to loans
 - d. Data files and system files relating to spreadsheets, word processing and any other personal computer information
 - e. Copies of the Disaster Recovery Plan
 - f. Credit Union Policies

B. Protecting the Database

1. Complete daily database backups are taken at the end of each day's operation.
 - (a) One zip disk that is kept on -site for seven days,
 - (b) One zip disk is kept by the manager or designee to be brought home or off-site.
 - (c) USB Flash Drives, one for each employee, are brought home by each employee
 - (d) A backup of the database is transmitted to the off-site electronic vault.
2. The daily database backups are compiled and copied to a disc each week.
3. End of Month Backups are made at the end of each month. At least two backup disks are created. One is kept on-site, and the other is kept by the manager or designee.

IV. TESTING

BNA FCU Disaster Recovery Plan must be tested annually to ensure effectiveness.