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AFTERMATH OF DISASTER: THE TETON DAM BREAK

The Ohio State University

Ph.D. 1980

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AFTERMATH OF DISASTER:
THE TETON DAM BREAK

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By
Judith Ann Golec, B.A., M.A.

* * * * *

The Ohio State University
1980

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I want to thank the members of my reading committee: Dr. E.L. Quarantelli, my advisor, Dr. S. Dinitz and Dr. G. Hinkle. In particular, I wish to express my appreciation for the encouragement I received, for their confidence in my ability and for the freedom to pursue this research as empirical circumstances dictated.

Without the cooperation and assistance of the residents of the Upper Snake River Valley, who gave so generously of their time, this research would have been impossible. Promises of confidentiality prevent me from identifying, individually, the persons to whom I am indebted. The contributions of every person, although publicly unnamed, are privately remembered and deeply appreciated.

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CHAPTER 1
INTRODUCTION

The Study

This is a social-psychological study of the effects of community-wide disaster. Specifically, it is a study of the disaster experience of residents of the Upper Snake River Valley in Idaho. On June 5, 1976, the Teton Dam collapsed. When the embankment was breached, 80 billion gallons of water was released flooding the valley floor below. Thousands of valley residents were left homeless, communities were severely disrupted and property damages were in the hundreds of millions of dollars. This is a case study about the recovery experience following the Teton Dam break.

This is not a collection or summation of individual disaster stories. The objective of the research is to get beyond the idiosyncratic and private aspects of experience to the general and common features of the disaster aftermath as a socially meaningful phenomenon. Several types of data were gathered for this purpose. The primary data consists of open-ended interviews with a sample of valley residents nearly three years after the dam collapsed. These retrospective accounts are used in conjunction with participant observation, historical documents, informant reports, and statistical records. The process and product of the data gathering and field research strategy is an interpretive endeavour in which various types of data are synthesized into a portrait, if you will, of the typical disaster experience.

The methodological strategy, then, is informed by the qualitative tradition of social scientific inquiry. This approach is particularly well suited for exploratory research. It is also the preferred method for gaining knowledge about the meaning of events from the perspective of social actors and for examining the social context from which meaning derives. Consistent with the principles of qualitative methodology, the research design is open, flexible and empirically grounded. The research question which guides the inquiry is very simply: What are the experiences and adjustments associated with disaster recovery?
This study departs from the mainstream of disaster research in both substance and method. Disaster research, of a social-psychological nature, has been overwhelmingly concerned with the relationship between disaster and psychological damage, and, therefore, most studies employ epidemiological survey methods. The decision to depart from the current formulation of the problem resulted from casual observations based on prior disaster research and from an examination of the current literature. The reformulation of the problem is basically a reaction against the dominant social-psychological interpretation of disaster phenomenon. It is, therefore, essential to provide the grounds for this departure.

Formulating The Problem

My interest in the social-psychological aspects of disaster dates back to September 1976 when I began as a research assistant at the Disaster Research Center. During my tenure at the Center, there were many opportunities to do field work in disaster-stricken communities during the first days and weeks following impact. There were also opportunities, although less frequent, to return to communities months or years later for follow-up study. In more than 35 separate field trips, I never failed to be impressed with the sense of humor and seeming resilience and resourcefulness that victims of disaster display in the face of adversity. Admittedly, my impressions were based on casual observations, for the research projects that I participated in during this period were not social-psychologically oriented, but, rather, focused on the organizational and community aspects of disaster preparedness and response.

There is a voluminous amount of material written about the human interest aspects of disaster. Perhaps because disaster raises fundamental questions of life and death it is an intrinsically interesting topic. One need only consider the nightly news broadcast to be reminded that the drama and tragedy of disaster regularly qualifies as a newsworthy item. This general interest in disaster is clearly reflected in a vast array of popular and journalistic accounts, anecdotes, conjecture, and personal reflections. In contrast to my own observations, the overall impression conveyed in this literature paints an image of fragility by focusing on victims who despair and become dependent after disaster strikes. In a sense, the phrase "disaster victim" captures rather nicely a general expectancy that catastrophe causes adverse social-psychological effects.

Presumption of Illness

Although the empirical literature on the social-psychological aspects of disaster is surprisingly sparse, what does exist reflects the
same general expectancy. Specifically, the expectancy for adverse personal and social consequences is given expression in the presumption of mental illness or psychological disturbance. To date, the paramount question guiding research and theory of a social-psychological nature concerns the relationship between psychological disorder and disaster. Interestingly, the research generated by this question has produced ambiguous and controversial findings.

Essentially, the controversy is over long-term disability. Researchers seem to agree that in the short-term, a disturbance commonly referred to as the disaster syndrome -- a dazed state of shock -- typically occurs in disaster victims. The disagreement revolves around the transience or persistence of the so-called disaster syndrome.2

What is particularly interesting about this controversy is that the debate is carried on within the larger context of the illness paradigm. Disaster scholars who are convinced that individual disability does not constitute a serious problem in the aftermath of recovery have seemingly turned their attention to studies of organizational and community issues.3 Thus, inquiry of a social-psychological nature continues to be constrained by the medical model and by a presumption of illness.

Perry and Lindell have aptly characterized the state of knowledge in this area as an "empirical stalemate".4 In my opinion, the theoretical malaise has more important consequences than the empirical stalemate per se. In spite of more than two decades of controversial findings, the assumptive framework which follows logically from the medical metaphor has not been systematically examined.5 It seems to me that the most fruitful approach to getting beyond the empirical stalemate and to the root of the controversy is to examine the underlying theoretical structure that leads to the presumption of illness.

The Medical Model

The adoption of the medical metaphor and its acceptance as a general assumptive framework across diverse schools of thought is traceable to three major works. Lindemann's seminal study of "morbid grief reaction",6 Tyhurst's description of the "natural history of psychiatric phenomenon in civilian disasters",7 and Wallace's observations on the "disaster syndrome",8 are all considered classics in disaster literature. The work by Lindemann and his colleagues, especially their diagnosis of morbid grief reaction among hospitalized victims of the Cocoanut Grove nightclub fire in Boston, has served as a referent for both traditionally oriented psychiatric scholars and for crisis intervention theorists who, incidentally, claim Lindemann as the founding father of crisis intervention thought. The contributions of Tyhurst and Wallace have been viewed as sociologically significant formulations, for both researchers placed particular emphasis on the social
and cultural aspects of the disaster syndrome.

Certainly, the adoption of a bio-medical metaphor to describe social phenomenon is not an invention of disaster scholars. Bio-medical analogies have a long heritage in psychiatry, psychology, sociology and anthropology, and, in fact, this intellectual history probably accounts for its unchallenged acceptance in the disaster literature. What is particular to the disaster-related metaphor is that it is borrowed from trauma or emergency medicine. The lexicon of the theoretical assumptions, terms like emotional shock, emotional scars, psychic pain, psychological damage, emotional wounds, moral tissue, morbid grief, traumatic neurosis, mental health emergencies, psychological first aid, mending minds, and so on, derive their significance from association with physical injury and accidental violence. Terms borrowed from the engineering vocabulary -- stressor, stress, strain, resistance, tension, and so forth -- are fully incorporated into this structure of thought and used as interchangeable primitive terms. This is not surprising since physical medicine also utilizes these concepts. In fact, the interchangeability of terms points to a basic similarity between engineering and physical medicine. Both disciplines deal with mechanistic or closed systems, homeostatic principles and tension-reducing mechanisms.

Before examining the disaster-specific assumptions, a few comments are in order concerning the proposed generality of the fundamental structure of thought. The central tenets of the assumptive framework are grounded primarily in psychological traditions. In the disaster literature, two psychologically-oriented schools, psychoanalysis and crisis intervention, have been dominant. This observation alone does not deserve attention except for the fact that crisis intervention developed as an explicit rejection of the medical model, the disease analogy, and the psychoanalytic interpretation of orthodox psychiatry. Indeed, there are important differences in interpretation, intellectual heritage, and treatment modalities. To some extent, the differences are also reflected in a vocabulary of preference. Psychoanalytic scholars tend to use the trauma grammar, although not exclusively, and crisis intervention scholars tend to use the stress grammar, although not exclusively. However, these differences should not be allowed to obscure the fundamental similarity in the structure of thought which leads to similar expectations about the social-psychological consequences of disaster.

Both schools are grounded in a conception of the healthy personality as a closed system maintained in homeostatic balance by tension-reducing mechanisms. This underlying bio-medical model provides a general orientation which, in spite of the differences, represents a shared conceptual apparatus that both traditions bring to a particular understanding of disaster as an abnormal and accidental phenomenon. It is important, therefore, to outline the logic of this model briefly.

In psychoanalytic interpretations, the defense mechanisms of the ego, and in crisis theory interpretations, the coping strategies of the
client, represent the integrative processes which maintain internal equilibrium. An external threatening force -- a "stimuli" or "challenge to life-goals" -- overwhelms the integrative processes undermining the structural-functional integrity of the system, thereby creating a state of imbalance or disorder. The individual is rendered helpless by virtue of the fact that the "defense mechanisms" or "coping strategies" are inadequate. The external force continues to intrude and demand resolution. As the individual attempts unsuccessfully to "integrate" the external stimuli, or "engage in problem-solving activity", an internal state of excitation or tension -- "anxiety" or "stress" -- heightens. This critical juncture between the pull of external forces and internal tensions represents "acute traumatic neurosis" or "crisis reaction" which manifests itself subjectively in affective, cognitive, and somatic malfunctions, and objectively in social misconduct. Energies are directed primarily at reducing the tension. Total breakdown may occur, or, more probably, "regressive" defense mechanisms or "maladaptive" coping strategies employed in the critical period stabilize into a new homeostatic balance which reduces the tension but fixates the disabilities into a "chronic neurosis" or "irreparable emotional and mental damage". Personality growth represents a third alternative in both interpretations, although, typically, the enhancement of the "reintegrative work" or "problem-solving" are contingent upon therapeutic assistance. The point to be emphasized here is that both schools of thought adopt a tension-reducing model of the personality which views the individual as a passive reactor to the push and pull of internal tensions and external forces.

Below is an examination of the theoretical assumptions that have evolved to explain the disaster syndrome as a special case of externally induced, or accidental, disorder. Basically, the bio-medical conception of the personality is overlaid with another medical metaphor drawn from trauma medicine or accidental violence. Figure 1 diagrams the central tenet which postulates disaster as the necessary and sufficient cause of psychological disorder.

Figure 1 shows that the disaster agent -- hurricane, tornado, earthquake, explosion, dam break, for example -- as an external force, is conceptualized as a blow or a stressor. Disaster impact or disaster experience is conceptualized as an internal trauma or stress. The disaster effect, a psychological disorder termed either traumatic neurosis or crisis reaction, represents the cluster of signs and symptoms which manifest the underlying damage. In this diagram, the duality of vocabulary has been maintained to emphasize the interchangeability of primitive terms. Hereafter, the duality will not be maintained and any terms synonymous with injury will be used providing they retain the connotation implicit in the literature.

An example drawn from accidental trauma will make the implications of this metaphor clear. In an industrial accident, for example, a steel beam falls on a worker's leg and, upon impact, the blow causes an injury to the femur and surrounding tissue. The damage manifests
itself in signs of shock, pain and swelling, and in symptoms of impaired physical function. The blow, then, is viewed as the necessary and sufficient cause of disability. Similarly, the disaster falls a blow to the mind. The injured mind, like the leg, shows signs of psychic shock and emotional pain and symptoms of impaired mental function. It should be clear that the emotional wound refers not to the neurological substratum, but to the internal organization of the personality as outlined above.

Figure 2 demonstrates the first elaboration of the central tenet by focusing on the assumptions which are made concerning the onset, course, and prognosis of the disaster syndrome. Researchers typically assume that disaster strikes a community of normal or mentally healthy persons. When disaster strikes, damage to the structural-functional integrity of the mind occurs instantly. This psychic wound manifests itself in three distinct stages.

The first stage, shock, occurs immediately upon impact and lasts from a few minutes to several days. In this stage, signs of disbelief, numbness, helplessness, flat affect and shock are subjectively experienced. To observers, disaster victims appear in a daze, in a stupor, zombie-like, catatonic or, possibly, hysterical.

During the transition between the first and second stages, the individual feels anxious and continues to experience an extreme sense of helplessness as he/she attempts unsuccessfully to deal with this overwhelming experience. Anxiety heightens, beginning a downward slump into a state of disorganization.

The second stage, disorganization, depending upon one's theoretical persuasion, is presumed to last up to six or twenty-four months or up to six or eight weeks. During this stage, the mental wound encapsulates the loss and danger of the disaster experience into the form of painful "tormenting" and "intrusive" memories which continue to produce accumulative tension and affective discomfort. A number of signs of subjective distress have been suggested as typical, including anxiety, fear, pain, anguish, hostility, impotent rage, guilt, grief, despair, distrust, hopelessness, helplessness, alienation, loss, bitterness, confusion, disorientation, uncertainty and insecurity. In

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<td>PSYCHOLOGICAL TRAUMA (Stress)</td>
<td>TRAUMATIC NEUROSIS (Stress/Crisis Reaction)</td>
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Figure 1: Elementary Medical Model of Disaster
Figure 2: Medical Model, Elaboration I
addition to these affective and cognitive signs of damage, which are probably best summarized as depression, the other essential dimension of injury, manifest in social misconduct, is loss of control.

In psychoanalytic terms this second dimension has been expressed as "pathogenic liberation" from tension via looting, rape, and heavy drinking. A similar message is conveyed by crisis intervention theorists. For example, one scholar expresses the idea as follows:

... aberrant characterological acts, such as looting, alcoholism, and the like, do become part of the victim's behavior in major disaster. Little thought is given to the fact that deviant acts, such as looting, often are directed against one's own neighbors. It is seen to some degree as an act of aggression authority, and, therefore, as a symbolic act against the impersonal aggressor.

Many diverse forms of social deviance, symptomatic of the underlying damage, are presumed to occur. These include suicide, homicide, divorce, alcoholism, unemployment, highway accidents, drug abuse, child abuse, social withdrawal, crime and juvenile delinquency.

The transition between the second and third stages has been characterized as follows.

...the tension becomes so great (during the second stage) that the individual may experience acute depression because he feels so helpless and lost. As he enters the final stage...he will either experience a major emotional or mental breakdown or he may resolve the crisis by using maladaptive behaviors that decrease tension but impair his future social functioning.

If the second stage does not terminate abruptly in breakdown, the third stage of the disaster syndrome, reorganization, follows.

Essentially, reorganization represents the return to a new state of homeostatic balance which, compared to one's pre-disaster mental health, may be diminished, the same, or improved. The general assumption is that time alone heals all wounds, although, like untreated physical injury, untreated mental injury mends imperfectly. With spontaneous reorganization the signs and symptoms of the disorganized stage tend to become crystallized and fixed into an enduring pattern of subjective distress and social misconduct. This pattern reflects the classical picture of neurosis, or, to use crisis intervention terminology, it simply reflects "irreparable emotional and mental damage". Like all wounds, emotional scars may form which produce long-term disability in spite of therapy, although, generally, the achievement of pre-disaster or improved mental health status is believed to result with therapeutic intervention.

In ideal-typical form, the logic involved in the presumed course of disaster trauma suggests chronic and, possibly, permanent personal
and social disability. Most scholars, regardless of theoretical persuasion, suggest that prompt treatment reverses the effects of the disorganization stage with good prognosis. There is, of course, some suggestion that mental illness which was latent pre-disaster may become aggravated and overt after the emotional sequelae related specifically to the disaster syndrome are resolved.18

Figure 3 diagrams the second and final elaboration of the medical model. The contributions of sociology are evident in the modifications which have evolved, although the central psychological assumptions are basically unchanged. The dominant sociological orientation in the disaster literature, a stress-adaptation model of society,19 makes assumptions which, although not always explicit, are fully consistent with the above assumptions at the individual level. In fact, the theoretical terms of the stress-adaptation model -- system, strain, stress, input, output, demand, capability and so on -- also owe an intellectual debt to the organismic or medical analogy.

In this elaboration, the disaster impact remains the ultimate, but not sufficient, cause in a multi-causal model of factors that affect onset, severity, and course of the disaster syndrome.20 Three sets of factors, including characteristics of the disaster agent, the individual, and the community, are added to figure 2. Each factor has several dimensions that have received attention in the disaster literature.

Disaster agents may be natural or technological. Generally, it is believed that technological or man-made disasters introduce the added problem of culpability and, therefore, make the experience more damaging. Additionally, disaster agents vary along several dimensions: speed of onset, predictability, novelty, severity, scope, and duration. Disaster agents that are sudden, unexpected, novel, severe, diffuse, and of long duration have been associated with immediate onset and increased severity and incidence of disaster trauma. However, disaster agents with characteristics of the polar opposites may inflict a more insidious pattern of onset referred to as "strain trauma" rather than "shock trauma".21 Although the original blow of disaster impact may be less massive, an induced mental strain may continue to be aggravated by other blows and stressors which follow as indirect effects of disaster such as temporary housing accommodations, separation from family, dislocation from neighbors, or unemployment. Disasters of a less serious nature, therefore, may have a delayed onset caused by the "accumulative traumas"22 of disaster aftermath. An almost insignificant event such as a quarrel may precipitate a break reminiscent of the proverbial straw that broke the camel's back.23 It also follows that these accumulative traumas of the disaster aftermath may confound and lengthen the period of disorganization.

Individual characteristics may also affect the extent and nature of the disaster syndrome.24 Some individuals are presumed to have a higher tolerance level or resistance to stress. Individuals who are better integrated into the community by familial, friendship, and neighborhood ties are thought to be embedded in socially supportive
Figure 3: Medical Model, Elaboration II
networks that serve as a buffer which helps to cushion the blow and its effects. As it will be noted later, not all theorists agree on the buffering potential of social relations in the disaster context. Additionally, certain social demographic factors — age, sex, income, education and occupation — are presumed to place individuals in categories of differential risk. The aged, youth, females, low income, low education, and low occupational prestige categories are suggested as high risk groups.

Several characteristics of the community have also been identified as having relevance for the nature and extent of disaster trauma. Communities vary pre-disaster in terms of the presence of warning systems, preparedness, disaster-related ideology and organization. Communities that are forewarned, prepared, have prior disaster experience, a disaster-related ideology, and effectively organized resources are assumed to be able to take preventive measures to reduce the loss of disaster and thereby reduce the severity of the blow. Also, after impact, they are more likely to be capable of mobilizing an emergency response that reduces disorder through collective support. Actually, with regard to the collective support thesis and its effect on the disaster syndrome there are two contradictory interpretations.

Fritz initially introduced the collective support thesis to explain why psychological disorder does not increase over the long-term. He suggested that disaster produces a "community of sufferers" and this therapeutic community, as it has since been called, spontaneously "helps to compensate for the sorrow and stress...with an unexpected abundance of personal warmth and direct help". The central idea contained in the social support thesis is that after disaster, social barriers such as class or religion are leveled and people view each other as equals. This results in group solidarity, cooperation and participation which increases morale, provides the grounds for hope, and serves as a buffer or crutch to reduce the initial trauma. Therefore, collective support intervenes after the stage of shock and mitigates against the persistence of psychological disorder.

While this was the originators' intended meaning, the therapeutic community notion has been incorporated into the medical model along different lines. The above-mentioned effects — increased morale, hope, and tension-reduction — are incorporated into the disorganization stage as early phases which follow shock and proceed the downward slump into disillusionment or depression and loss of control. The heroic phase, lasting from a few hours to a few days, represents a period in which tension is subjectively experienced as euphoria and objectively channeled into socially approved and constructive acts of altruism. The honeymoon phase, lasting from a few days to a few months, is characterized by a sense of hope and ceaseless activity which may be very ineffective. Unrealistic expectations of the honeymoon phase give way to a disillusionment phase which has the characteristics described earlier as the disorganization stage.
Erikson introduced the notion of collective trauma, as opposed to collective support, to suggest that disasters also cause damage to the community and this damage prevents an indigenous therapeutic response, thereby explaining why psychological disturbance persists for years and, possibly, a lifetime. By collective trauma he means "a blow to the basic tissues of social life that damages the bonds attaching people together and impairs the prevailing sense of communality." In this view, primary relations are destroyed and cooperation, participation, and neighborliness fail to re-emerge after impact. Collective trauma, therefore, serves to reinforce the psychic trauma inflicted on impact. Clearly, in this view, the heroism and honeymoon phases do not occur even in the short-term.

Critique of the Medical Model

The critical questions concerning any structure of thought concern its empirical adequacy and theoretical utility. Do the empirical observations generally support the expectations predicated on the assumptive framework? Does the metaphor shed light on the important issues in a given field of inquiry? Both questions will be addressed in turn.

A firm assessment of the empirical adequacy of the medical model is hazardous due to the limited amount and uneven quality of the research. This disclaimer notwithstanding, my own reading of the empirical literature suggests that the weight of the evidence does not support the adequacy of the medical model as a general framework for understanding disaster as a social-psychological phenomenon.

The assumptions of the medical model have not been systematically outlined and tested, but, although the model as a whole cannot be examined, available data does allow an examination of the critical claims. If the medical model is basically correct, we would expect that 1) disaster victims suffer from emotional distress; 2) the distress is severe enough to interfere with one's ability to maintain social relationships and to perform daily routines competently; 3) the conduct of disaster victims violates societal norms of propriety; and 4) the additive effect of personal and social disabilities is manifest in social disorder at the community level. Only one community disaster, a dam break in West Virginia, has generated research findings which are supportive of these claims. In view of the apparent uniqueness of the event, it is prudent to devote some attention to the conclusions drawn about the effects of this disaster.

Several researchers were commissioned by a law firm to study, for the purpose of legal action, the personal and social consequences of the collapse of a coal dam which flooded seventeen communities along the hollow of Buffalo Creek in West Virginia in 1972. Psychiatrists report that more than 90 percent of the 625 litigants examined suffered from severe psychological damage for at least two years. Although
the mental health of the non-litigants was not evaluated, researchers suggest, on the basis of casual observation, that this phenomenon was universal and not limited to litigants alone.\textsuperscript{35} Victims of this disaster reportedly experienced severe emotional depression which interfered with the performance of physiological functioning, mundane tasks, and social obligations, and it prohibited the maintenance of familial and neighborhood relations. Social deviance was not independently measured although community residents reported that they believed that alcoholism, drug abuse, promiscuity, divorce, crime, and juvenile delinquency dramatically increased after the disaster.\textsuperscript{36}

Researchers also report that the magnitude of emotional damage had important consequences for community disorder. For two years later, the disaster victims still "could not mobilize their energy or the conviction necessary to stabilize their own lives or to rebuild the communities in which they had invested so much".\textsuperscript{37} The community level effects are not subtle. On the contrary, they are overt enough that one year after the disaster at least one researcher left his first meeting in Buffalo Creek "awed and depressed"\textsuperscript{38} at what he observed. His observations of that meeting are worth repeating:

Tables had been spaced at intervals across a gymnasium floor and the room was filled with people awaiting their turn, lined along the walls on benches or standing around in quiet family clusters. The whole scene looked as if it had been painted in shades of gray. The children neither laughed nor played. The adults acted as if they were surrounded by a sheath of heavy air through which they could move and respond only at the cost of a deliberate effort. Everything seemed muted and dulled. I felt for a moment as though I were in the company of people so wounded in spirit that they almost constituted a different culture, as though the language we shared in common was simply not sufficient to overcome the enormous gap in experience that separated us. I got over that feeling before long, but the sense of being in the presence of deep and numbing pain remained an important part of the emotional climate in which this study was done.\textsuperscript{39}

This is the single disaster that provides support for all four claims. Other disasters offer support for the first claim, but no other disasters justify the remaining three claims of the medical model.

In reviewing the data generated from other disaster-stricken communities, the first claim of the medical model, that is, that disaster victims experience emotional distress, seems to be supported.\textsuperscript{40} Research from ten community disasters in addition to Buffalo Creek have documented this phenomenon. Between 50 and 80 percent of disaster victims interviewed admit that they, personally, or someone in their family, had experienced an emotional upset at some time during the aftermath of the disaster. It is fairly common, although not universal,
that victims of disaster report experiencing worry, frustration, anxiousness, nervousness, emotional upset and, possibly, fear of adverse weather conditions. The important question, of course, is whether these feelings are severe enough and last long enough to be debilitating in any sense. Before considering this issue, one other observation concerning the emotions associated with disaster is noteworthy. It is not uncommon for as many as 60 to 80 percent of disaster victims to also report experiencing optimism, self-confidence, and self-reliance after a disaster, when asked. Unfortunately, this question is not often asked.

The issue of whether or not emotional distress is incapacitating is a difficult question to answer definitively, for few researchers have attempted to measure this directly. The general consensus seems to be that even among those who have contact with mental health professionals, less than 10 percent and as few as two percent demonstrate any difficulty performing routine functions and "most do not typically experience serious emotional problems which are incapacitating". In contrast to Buffalo Creek, where social relationships seem to be impaired, victims of some disasters report that marital happiness and familial relations improved for as long as three years after disaster and that their neighborhoods were actually better places in which to live. The general impression is that, although disaster creates worry and frustration, it does not produce disability.

The third claim is that disaster victims suffer from a loss of control and, therefore, socially deviant conduct becomes pervasive. Studies, including a total of 13 communities, have attempted to tap this aspect using community informants and aggregate level statistical data. Various official statistics have been used to measure social deviance including admission to psychiatric hospitals, treatment by community mental health agencies, divorce, crime, unemployment, arrests for driving while intoxicated, suicide and traffic violations. In no community was any increase recorded for as long as five years following disaster.

The final claim concerns the consequences of personal and social disability for community disorganization. Samuel Prince observed that the city of Halifax, which had suffered from an explosion that killed 2,000 and injured 6,000, had, in the space of two years, "undergone a civic transformation, such as could hardly otherwise have happened in fifty years". This was the first empirical study to demonstrate that disasters may paradoxically create new opportunities and promote social processes that enhance the long-term viability of a community. Prince's conclusions, with the exception of the Buffalo Creek disaster, have been repeatedly documented in the United States. This finding was repeated in three case studies, a comparative study of four communities, a comparative study of three U.S. cities and one foreign city, and a survey of 1,140 counties. On the basis of the available evidence, long-term community disorder does not seem to be a general phenomenon as predicted by the medical model.
If my reading of the available data is correct, the substantive claims of the medical model are not generally supported by empirical observations. The extent and severity of psychological disorder seems to be greatly overexaggerated. Even if we consider those who mental health professionals identify as having "emotional" or "severe emotional" distress as clear evidence of psychological damage, we are still talking about less than 20 percent of a treated caseload and less than two percent of the community at large. That leaves a large percentage of the population whose experience lies outside the boundaries of the theoretical framework of the medical model. Given the orientation of the medical model, illness or damage constitutes the phenomenon of theoretical interest and, presumably, health is the absence of illness and therefore, uninteresting. Thus, the medical model fails to provide any direction for investigating or understanding the disaster phenomenon as a general social-psychological phenomenon.

There is a more basic problem than this, however. The medical model may not only have limited utility in a positive sense: it may actually obscure the important issues that are in need of theoretical and empirical clarification if we are to understand the disaster experience and act to remedy disaster-related problems in a practical sense. My suspicion is that the medical metaphor obfuscates the essential aspects of disaster phenomenon by looking for the wrong problems at the wrong time, in the wrong place, with the wrong remedy.

The disaster experience of mental health professionals is particularly instructive in this regard. In the course of providing mental health services to disaster victims, health professionals typically find themselves "treating" non-medical problems with "unorthodox" non-medical practices. The vast majority of the "mental-health" caseload in the aftermath of disaster is made up of individuals and families whose primary problem is inadequate housing accommodation, consumer fraud, lack of transportation, misinformation, confusion over how to obtain disaster relief, legal disputes, or other problems along these lines.

From the earlier discussion, it will be recalled that the medical metaphor identifies the essential problem of disaster as emotional turmoil in the form of tormenting memories which come as a result of an uncontrollable compulsion to continually relive the impact experience. The problems, therefore, are symbolic and emotional; they occur on impact or in the early aftermath of disaster; they are located in the psyche of disaster victims; they are explainable by reference to internal damage; and they are remedied by the psychological work of reintegration. From this perspective, the aftermath of disaster is theoretically uninteresting except for an accumulation of "stressors" or "traumas" that may exacerbate the damage and cause serious psychological disorder at a delayed point in time.

Even a cursory review of the list of problems which come to the attention of health professionals in the aftermath of disaster raises
serious questions about the theoretical utility of the medical metaphor. My suspicion is that these problems are essentially practical, not symbolic; they occur after impact and later in the recovery period; they are located in the social world of disaster victims; they are explainable by reference to the social context; and they may be remedied more effectively by changes in public policy.

Identifying disaster problems as practical problems or "problems in living,"53 to use the phrase most closely associated with Thomas Szasz,54 alludes to the far-reaching critique of the medical metaphor. There are multiple issues and problems inherent in translating a figurative device literally, that is, in dropping the "as if" when one assumes that social conduct is explainable by mental processes "as if" there was a substantive mind that functions "as if" it was a bodily organ. But, essentially, the thrust of the argument is that the adoption of the medical metaphor to describe social conduct in any context, not only the disaster context, is futile, for it mystifies and obscures the fundamental nature of human experience. This critique penetrates to the two fundamental assumptions of the medical model, namely, the conception of the personality as a closed system and conduct as healthy or sick.

The objection raised is that individuals are not passive reactors to internal and external forces and abstract stressors and strains. They are, on the contrary, open to the world, i.e., reflexive actors who collectively create a socially meaningful world that acts back to constrain individual conduct. An understanding of the constraints and rules of conduct, therefore, is not possible by reference to a universal typology of health and illness constructs. All constraints and rules for evaluating and controlling social conduct are historically and situationally specific and necessarily grounded in social, ethical, political, legal, and economic concerns.

The important point, as I understand it, is not that medical constructs are myths and should, therefore, be automatically dismissed. The point is that medical constructs, like all constructs, are social inventions. What is at issue is whether a construct advances our understanding of a particular social phenomenon. My suspicion is that the medical metaphor does not direct inquiry into the important issues of disaster phenomenon.

Reformulation of the Problem

If my reading is correct, it is unnecessary, and possibly misleading, to continue to formulate research questions of a social-psychological nature wholly within the constraints dictated by the medical model. Disasters repeatedly occur as historical events that create social change and alter the conditions and rules which give order and predictability to daily life.55 It is self-evident that major
disasters disrupt the everyday routine of communities and of individuals. This may have adverse and/or beneficial effects. Suffering and adversity may result from the emotional experience of impact and/or from events which occur in the period of aftermath. Disaster problems may be symbolic and/or practical in nature. These are empirical questions that should not be answered by theoretical fiat.

It seems that the most efficacious approach is a descriptive and exploratory approach which focuses explicitly on the disaster and its aftermath as a socially meaningful phenomenon. The question which guides the research, therefore, is very simply; what are the experiences and adjustments associated with disaster recovery? The inquiry focuses attention on the social context, the rules and constraints which operate to shape experience, and on the significance of events from the perspective of community residents. The research problem is deliberately open-ended in order to exploit the potentialities of an exploratory design and to allow the substantive issues defining the disaster experience to emerge from the research setting.

Even though the research commitment is to describe the phenomenon as it exists, no researcher enters the field with a blank mind. The literature reviewed earlier serves as a set of sensitizing concepts, to use Blumer's phrase, that provide some direction to the conduct of inquiry. The literature suggests that specific features of the disaster agent, the community, and individuals may have relevance for the recovery process. Concepts such as the therapeutic community or collective trauma suggest that social processes which emerge or fail to emerge in the aftermath may also have important consequences. While this research is not a test of the medical model, at least some of the ideas and issues raised by this approach can be reflexively reexamined in light of the research findings generated by this case study.

Overview of the Study

The report which follows is divided into six chapters. Chapter two discusses the general issues involved in qualitative research, the field methods employed, and the interpretive procedures used in analyzing the data. The rationale used for selecting the Teton Dam break for the case study is also discussed, but in view of the earlier examination and critique of the medical metaphor, this is the appropriate place to underscore one significant aspect of the Teton setting. Expectations for increased psychological disorder became an intrinsic and debated issue in the aftermath of the Teton flood. This situation resulted from an amendment (section 413) to the Disaster Relief Act (Public Law 93-288) which was enacted by the U. S. Congress in 1974. In effect, this law officially extended the medical metaphor into the disaster context by giving the mental health care system both the mandate and money to organize mental health services for disaster-stricken communities. The Teton flood served as one of the first "experiments" in implementing this legislation. Consequently, many of the issues
raised earlier are a highly visible feature of the setting.

Chapter three describes the social context of community life in the Upper Snake River Valley. There are two dominant features, an agriculturally-based economy and the Mormon religion, which give order and meaning to everyday life in the Upper Valley. Although the dam break was an unexpected occurrence, the Mormon Church does have an effective organization, an abundance of resources, and a religious ideology that is easily adapted to the flood context.

In chapter four, an accounting of the events of June 5, 1976, is given. The dam break is described as both a technological failure and a social-psychological phenomenon. The account is organized by language which attempts to retain and express the essential emotional undercurrents which infused the event and its retelling as a socially meaningful happening. A discussion of the damages in material and social-psychological terms follows. Like the Buffalo Creek disaster, the Teton disaster resulted from a dam failure. Unlike the Buffalo Creek disaster, residents of the Teton Dam break had some warning, and there were relatively few deaths. It was primarily a disaster of property loss and social disruption.

Chapter five deals with the expectations for psychological damage and widespread social deviance in the aftermath of the flood. This discussion relies heavily on statistical data, historical documents and informants' reports. Although the following statement is an oversimplification and requires some qualification, this chapter is basically about what did not occur.

Chapter six attempts to describe what did occur in the nearly three years following the collapse of the dam. While this presentation relies most heavily on the retrospective accounts gathered in the interview context, field observations, statistical data and informants' reports are also utilized. The retrospective accounts are not treated as replications of events in chronological time and physical space. Rather, the accounts are significant as themes or meaning sets in social space and social time. If one theme stands out as the most salient feature of the recovery experience, that theme is government intervention.

The final chapter, chapter seven, summarizes the findings and discusses the implications that can be drawn from the study. The issues raised in the first chapter are reexamined in light of the findings generated from the Teton case study.
NOTES TO CHAPTER 1


3. The earlier disaster research organizations, National Opinion Research Center and Disaster Research Group of the National Academy of Science, were individually oriented during the 1950's. The later research of The Disaster Research Center has been oriented to organizational and community studies from 1963 to the present. See for example, E.L. Quarantelli, Disasters: Theory and Research, London, U.K.: Sage Publications Ltd., 1978.


The parallel structure of this presentation is set up with the first term or phrase illustrative of the psychoanalytic tradition and the second, crisis intervention. Although the interpretive context varies, the basic structure of thought is the same.

11. The elaborations of the medical metaphor are logical and not contributions added in chronological time. Figure 2 is an adaptation from the crisis intervention literature, Smith, op. cit., p. 399. The clearest presentation of the stages of the disaster syndrome from a psychoanalytic interpretation is J.L. Titchener and R.T. Kapp, "Family and Character Change at Buffalo Creek", American Journal of Psychiatry, vol. 133: 295-299.

12. The psychoanalytic tradition is more likely to assume a longer phase of disorganization although the period is variable.


20. This figure is a modified adaptation of the matrix of disaster variables which were postulated as an explanation of the therapeutic community. See Barton, op. cit., pp. 205-279. See also Perry & Lindell, op. cit. for the most recent statement of the social causation of psychological disorder.

21. For a discussion of the difference between shock trauma and strain trauma see Kinston and Rosser, op. cit., p. 452.


23. Some theorists in crisis intervention make this distinction explicit by separating the hazardous event which causes vulnerability from the precipitating event which immediately precedes the crisis reaction. Smith, op. cit., p. 398.

24. This disagreement is tied to the earlier debate of whether individual predispositions vary the onset and course of trauma. For example, Hocking, op. cit., suggests the trauma response may be universal; Kinston and Rosser, op. cit., argue that the rate of psychological disorder may increase by 1100% in a community, but it is not universal.


29. Frederick, op. cit., p. 72.


32. The support for this general position is still based largely on speculation and generalizations drawn from research on combat fatigue, concentration camp deprivation and the effects of the explosion of the A bomb in Hiroshima and Nagasaki. For a general review of the problems in disaster research, see, G.F. White and J.E. Haas, Assessment of Research on Natural Hazards, Cambridge, Mass.: MIT Press, 1975.


34. Titchener and Kapp, op. cit.

35. Lifton and Olsen, op. cit., p. 17; and Erickson, op. cit., p. 134.


37. Erickson, Ibid., p. 146.

38. Erickson, Ibid., p. 10.

39. Erickson, Ibid., p. 11.

40. At first glance it appears that the empirical literature on community disaster and psychological disorder is voluminous. In actuality, there are only 12 community disasters in the United States in which some attempt has been made to assess psychological damage in the aftermath of disaster. The disaster and corresponding publications are listed below.


Buffalo Creek, West Virginia (dam break, 1972): Refer back to footnote 33.


It will be observed that a number of reports and empirical studies which have some bearing on mental health have been omitted from the above. Some address the issue of psychological disorder during the early hours and days of the post-impact period; others are concerned with highly localized events such as a bus accident; others are conducted in countries other than the United States;
others attend primarily to the problems inherent in service
delivery; and some focus on selective aspects such as perception,
panic or the social-psychological response to warning. The above
were selected because they involve systematic or at least quasi-
systematic attempts to measure psychological status (as a global
concept) at a point in time which is distal to the immediate
post-impact period of community-wide disaster in the United States.

There are a number of difficulties in assessing this research.
First, the measures used are not necessarily indicative of
psychological disorder. Conceptually psychological damage in-
cludes two separate but interrelated dimensions: a subject
dimension of emotional distress and an objective measure of
social deviance. Unfortunately, most researchers have focused
exclusively on the subjective dimension and the implicit assump-
tion, erroneous as it may be, is that a measure of one automatic-
ally includes a measure of the other. Second, even among the
studies that focus on subjective distress, it is not at all clear
that the measures -- clinical evaluation, self-reports, other-
reports and objective scales -- are comparable. Third, the
assumption is that the amount of disorder increases, but with few
exceptions (and these use statistical data to measure objective
social deviance), there is no pre-disaster measure to warrant
such a statement. Fourth, the assumption is that psychological
damage persists over the long-term. Post disaster observations
are frequently made around 6 to 12 months after impact. The
table below indicates, by community disaster, the status of the
research findings along three of these dimensions.
Table I

Studies Assessing Psychological Damage
by Community Disaster, Dimension Measured, Pre-disaster Comparison and Time of Post-Disaster Measurement

<table>
<thead>
<tr>
<th>Community Disaster</th>
<th>Measurement of Psychological Damage</th>
<th>Pre-disaster Comparison</th>
<th>Time of Post-disaster Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subjective Distress</td>
<td>Objective Deviance</td>
<td></td>
</tr>
<tr>
<td>San Angelo, TX</td>
<td>x</td>
<td></td>
<td>6-13 mos.</td>
</tr>
<tr>
<td>(tornado, 1953)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waco, TX</td>
<td>x</td>
<td></td>
<td>9-11 mos.</td>
</tr>
<tr>
<td>(tornado, 1953)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameron Parish, LA</td>
<td></td>
<td>x</td>
<td>4 years</td>
</tr>
<tr>
<td>(hurricane, 1957)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topeka, KS</td>
<td>x</td>
<td></td>
<td>4 years</td>
</tr>
<tr>
<td>(tornado, 1966)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Fernando, CA</td>
<td></td>
<td>x</td>
<td>1 year</td>
</tr>
<tr>
<td>(earthquake, 1971)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffalo Creek, W. VA</td>
<td></td>
<td>x</td>
<td>2 years</td>
</tr>
<tr>
<td>(dam break, 1972)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid City, SD</td>
<td>x</td>
<td>x</td>
<td>1½ years</td>
</tr>
<tr>
<td>(flash flood, 1972)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming Valley, PA</td>
<td>x</td>
<td>x</td>
<td>5 years</td>
</tr>
<tr>
<td>(flood, 1972)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joplin, MO</td>
<td>x</td>
<td>x</td>
<td>6 mos.</td>
</tr>
<tr>
<td>(tornado, 1973)</td>
<td></td>
<td></td>
<td>3-5 mos.</td>
</tr>
<tr>
<td>St. Charles, MO</td>
<td>x</td>
<td>x</td>
<td>3-5 mos.</td>
</tr>
<tr>
<td>(flood, 1973)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xenia, OH</td>
<td>x</td>
<td>x</td>
<td>6 mos.</td>
</tr>
<tr>
<td>(tornado, 1974)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Omaha, NE</td>
<td>x</td>
<td>x</td>
<td>1½-7½ mos.</td>
</tr>
<tr>
<td>(tornado, 1975)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


42. The general failure seems to reflect the assumption that emotional stress and performance are strongly and inversely related and that a measure of one automatically includes the measure of the other. Moreover, it is generally assumed that emotional distress causes or interferes with social performance and is the more important dimension to measure.

43. Penick et al, op. cit., p. 67.
44. Drabek and Key, op. cit.

45. Moore, op. cit.


47. Prince, op. cit., p. 139.


52. See in particular, from footnote 40, Heffron; Omaha Tornado Project; Pennick, 1974 (b); Richard; Whalen; Zarlé et al.; and Zusman. See also, Ann S. Kliman, "The Corning Flood Project: Psychological First Aid Following a Natural Disaster", unpublished paper, 1973; Steven P. Kirn, "Community Mental Health Centers and Disaster: Considerations Regarding Response During the Post-Impact Period", Paper presented at the Southeastern Psychological Association, Atlanta, Georgia, March 28, 1975; Martin Sundel, "Problems Facing a Community Mental Health Center in Delivery of
Mental Health Services to a Disaster Area", Paper presented at the annual meeting of the National Council of Community Mental Health Centers, Washington, D.C., 1975.

53. This phrase has been used earlier in the context of delivering disaster services. Omaha Tornado Project, op. cit., pp. 30-31; and Taylor et al, op. cit., pp. 276-280.


55. This conception of disaster follows the sociological definitions of disaster. See for example, the definition by Fritz, op. cit., p. 78, which identifies disaster as:

an event, concentrated in time and space, in which a society, or a relatively self-sufficient subdivision of a society, undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented.


58. The Teton disaster also served as one of two disasters that served as the bases for a Training Manual for Human Service Workers in Major Disasters, prepared by the Institute for the Studies of Destructive Behaviors and the Los Angeles Suicide Prevention Center, under contract no. 278-75-0018 (SM) from the National Institute of Mental Health.
CHAPTER 2

METHODOLOGY

Methodological issues related to the case study approach are discussed in this chapter. The chapter begins with a discussion of the research question which guides the empirical inquiry. Second, attention is given to qualitative methodology as a research strategy, its intellectual roots in the humanistic tradition of the social sciences and the problems this raises for objectivity and truth. Third, the discussion focuses on selective aspects of the research setting chosen for study. This is followed by a description of the various field methods that were utilized in gathering data. Finally, the chapter concludes with a discussion of the interpretation and presentation of findings.

Research Question

The main objective of this research is to further our understanding of the long-term personal and social consequences of community-wide disaster. The major focus of interest is directed toward describing and explaining the essential features of the recovery experience. With this objective in mind, the question which guides the empirical inquiry is very simply: what are the experiences and adjustments associated with disaster recovery? This question is explicitly aimed at discovering how those who live through a major disaster and its aftermath characterize their experiences and adapt their lives to meet the situations which follow in the wake of large-scale disaster.

Research questions serve as a guide to the conduct of inquiry and the above question is deliberately and consciously formulated in an open-ended fashion to avoid casting the research findings in a pre-determined mold. This allows for the discovery and examination of the categories that persons "naturally" use in making sense of their own experience. The question is broadly formulated to allow for a flexible investigation whose direction is dictated by the conditions of the research setting.

The formulation of the research question in this fashion already implies the particular research strategy to be employed. In short, the strategy of choice calls for qualitative research based on field methods applicable to the natural setting.
Qualitative Methodology

Qualitative methodology is frequently characterized with varying degrees of disdain as exploratory, unsystematic, impressionistic, unsophisticated or sloppy. Typically, such claims suggest that qualitative research is either unscientific or merely preliminary to real science. This critique of qualitative methodology, indicative of a positivistic orientation, stems from a long-standing methodological controversy in sociology between positivism and humanism.¹

Qualitative methodology and the humanistic tradition generally are challenged most vociferously for a lack of objectivity and failure to meet the scientific criteria of truth or validity. This critique is already framed within the terminology of the positivistic tradition and in a sense, the charge is that humanism fails because it fails to be positivistic. However, the criticism cannot be dismissed so easily for these are critical issues which need to be addressed by a qualitative work. Perhaps the best way to sharpen and clarify the issues is to compare, in brief form, the way in which the central problems are handled within the positivistic and humanistic traditions.

It is useful to digress for a moment to establish the general features of the two orientations as a point of mutual reference. Positivism emphasizes the methodological unity of the natural and social sciences. Humanism, on the other hand, stresses the subjective quality of social phenomena and argues, therefore, that the social sciences require qualitatively different methods from those used in natural science investigations. Positivism rests on two essential assumptions concerning first, a subject-object dualism and second, a belief that social regularities conform to natural-like laws. In contrast, humanism assumes a subject-object relatedness. It also rejects the positivistic assumption of natural-like laws in favor of an assumption that the social world is a subjectively meaningful and socially constructed world. These assumptions provide the grounds for fundamentally different conceptions of the objectives of scientific inquiry, of theory and of method. Positivism is associated with explanation,² a covering-law or hypothetico-deductive model of theory³ and quantitative or controlled research.⁴ Humanism is associated with understanding,⁵ grounded or substantive theory⁶ and qualitative or field research.⁷ These broadly delineated features of the two orientations set the stage for understanding the controversy over objectivity and truth.

The issue of objectivity raised within the positivistic orientation stems essentially from a faith in subject-object dualism. The ultimate goal of inquiry is to provide a veridical explanation of events by reference to the law-like regularities or causes of the phenomenon from an outside position of subjective detachment. Subjectivity represents a source of error which confounds or biases the results. Controlling the bias, or subjectivity, of the researcher occupies a major concern in methodological treatises as evidenced by the language and procedures of quantitative manipulation. In addition
to methodological procedure, the relation between method and theory also serves to guarantee objectivity. Basically, research is viewed as a process of testing and verifying formal theory with the hypothesis deduced according to some logical or mathematical rules of calculus.

Both theory and method are viewed as measures to reduce subjectivity in the service of guaranteeing objective results. Perhaps the distrust of subjectivity and the importance of theory and method in its control are nowhere more evident than in the notion of serendipidy. Serendipitous findings, surprises that emerge unexpectedly in an otherwise controlled research program, may offer important contributions to knowledge, but they remain tangential to the research at hand. They are frequently not reported and when they are reported it is as an afterthought in the conclusion or footnotes of a work. Typically, the acknowledged value of such findings rest on their potential for generating hypotheses as the subject of future controlled research.

Objectivity thus conceived and the subject-object dualism on which it rests are rejected by the humanistic tradition as a naive form of epistemology. Subjectivity, treated as a source of error in positivistic thought, is viewed within the humanistic tradition as the essential precondition of all knowledge. Therefore, subjectivity is given a central methodological role in humanism. The assumption of subject-object relatedness means that knowledge, like all social products, is a social construction which rests ultimately on social convention or form of life, to use Wittgenstein's term. This assumption radically alters the positivistic conception of objectivity by shifting the focus of attention from objectivity (which is unobtainable) to intersubjectivity.

Given the criteria of intersubjectivity, positivism's solutions to the problems of objectivity are turned upside-down, so to speak, and positivism's solutions (formal theory and controlled research) are regarded as problematic, in fact, as antithetical to understanding. Understanding, the goal of humanistic inquiry, requires that social phenomena be analyzed by reference to the meaning framework, or form of life, indigenous to the social group in which the phenomenon occurs. Meeting this research objective requires that the researcher become immersed or experientially involved in the relevant social setting, that the study be conducted in situ, i.e., in the naturally organized setting, and that the analytic work proceeds by way of "local" concepts drawn from the indigenous frame of reference. In other words, the theoretical problem and the concrete phenomenon being researched guides method and theory rather than the other way around.

In qualitative methodology, therefore, the subjective experience of the researcher is made into a conscious and systematic procedure which intermeshes methodological decisions concerning data gathering with theoretical analyses in an ongoing and continuous process. The important thing is that the concepts not be arbitrarily taken from pre-established theory, but that they be generated from the data-gathering process. The role of thought or subjectivity in qualitative
methodology has been described in various ways as sociological imagination,10 reflexivity,11 experiential analysis,12 theoretical sensitivity,13 documentary method or indexicality,14 and hermeneutic.15 These terms are similar in their emphasis on the necessity of the self-conscious interpretive work that relates a particular event or happening to a general structure from which meaning derives. Since the meaning of local concepts is embedded in this apriori, but mutually shared, structure, and since this background knowledge is typically taken for granted by those who live in the social setting, its explication requires that the researcher enter into the setting as a participant-observer. The researcher, therefore, self-consciously attempts to exploit rather than control for subjective experiences in the conduct of inquiry.

Although the researcher enters the field with a central question and a loose framework of concepts which serve as possible cues to understanding, the systematic ordering of the data into a coherent framework is both the process and product of field research. Clearly, the qualitative enterprise is not as neat and tidy as that recommended by its positivistic counterpart, but therein lies its major strength. The rigor of qualitative work, then, derives not from a doctrinaire adherence to approved procedures, but from a sustained attitude of doubt; from a dogged pursuit of inconsistencies, exceptions and contradictions; and from a commitment to describe the phenomenon on its own terms.

The second but related issue is the problem of truth. As a consequence of subject-object dualism and adherence to the canons of science, positivism defines truth by reference to scientific tests of validity and reliability. These tests rest on the assumption that truth, or certainty, is directly and immediately discernible through the senses and the various forms of measurement which constitute observation.

In contrast, humanism views truth in terms of meaning adequacy, that is, in terms of plausibility.16 Is the researcher's interpretive schema a credible account of the event or situation? The issue is not whether the analytic-descriptive account is the only interpretation for there is no assumption of certainty guaranteed by the presumed existence of natural-like laws. The issue is whether the account is a plausible or credible rendition of the situation.

There are two general methods by which the researcher may check this out in the conduct of inquiry. The first, sometimes referred to as "making out" refers to the adequacy of the developing account being checked by his/her increasing ability to live within the setting and "pass" as a knowledgeable participant, if not as a knowledgeable insider. The second test, sometimes referred to as "saturation", refers to the increasing capacity of the developing analytic framework to account for observations. When the interpretive account repeatedly "makes sense" of new observations, and when additional observations of
various types merely reconfirm rather than modify the emerging framework, the researcher begins to have confidence that the account offers an adequate description of the social phenomenon.

Other tests of adequacy occur in the public realm with the publication of findings. Ultimately, this test relies on the relation between the researcher's account and the audience, especially the local audience from which the research was generated. The essential question in this instance is, does the analytic-descriptive account "make sense" to others who have a knowledgeable basis from which to make judgments? Is the account documented with enough detail to be credible? Are the inferential grounds for making interlinkages and synthesis of theoretical components explicit enough to be trustworthy? Again, the issue is not whether this is the only possible account, but whether, given the contextual background in the report, that is, the background information which provides the grounds for the interpretation, this is a credible and convincing account.

Finally, the adequacy of the interpretation may be checked by pragmatic criteria. In the positivistic tradition, one practical test of a theory's truth value concerns its predictive power and the resultant ability to exert control over situations. The ultimate pragmatic test of credibility within the humanistic tradition is whether the research participants or others in similar social settings could use the interpretive account in the setting to enhance their understanding of events and to act with improved efficacy.

The emphasis on intersubjectivity rather than objectivity as the central methodology issue in qualitative research has many far-reaching implications. This discussion was not intended as an exhaustive treatment of the subject and all of its ramifications. Only the issues which bear directly and immediately on the conduct of inquiry were discussed. Before turning to a discussion of the research setting where the field work was conducted, perhaps a few comments should be made concerning the possibility of other credible accounts of the same social phenomenon.

There are extreme statements in the humanistic tradition which seem to imply a seemingly infinite number of possible interpretations, all of which have equal credibility. In fact, Mehan and Wood imply that there are as many interpretations as there are interpreters. This seems to be a nihilist position which denies the possibility of public knowledge and, indeed, the possibility of a socially constructed and socially meaningful world.

The humanistic assumption of a socially constructed and socially meaningful world means that social life is humanly created and patterned in an orderly fashion. Particular experiences and events are organized by and reflect the underlying social structure. Particular events are directly observable. The underlying social structure is not. Interpretive work, of course, entails a penetration and analytic
description of the underlying structural aspects through observation and examination of particular occurrences. Interpretive accounts, therefore, vary in their presentation of particulars, in the selectivity of particulars depending upon the research interest and on the breadth or narrowness of scope. However, if accounts successfully penetrate the essential structural features of the social phenomenon in question, they will not be fundamentally contradictory. Since social phenomena undergo structural change over time, two research accounts produced in the same social setting at different times may differ substantially because in actuality they are descriptive accounts of different phenomena.

Research Setting

The choice of a research setting is always weighed by theoretical considerations and practical constraints. In the spring of 1977, I had thought that the ideal strategy for selecting a setting was to wait for a major disaster to occur, to go to the area immediately, to remain during the emergency period and to return at a later point when the recovery process was well advanced. Fortunately for the potential victims of this hypothetical disaster, but unfortunately for my purposes, fifteen months had passed without a 'suitable' event to study. It seemed that while this strategy had many qualities to recommend it as an ideal, it simply wasn't feasible.

Given the circumstances, I was forced to abandon the ideal and lose the opportunity of conducting field work during the emergency period immediately following a disaster. The best alternative available was to select a community-wide disaster that had occurred previously, but one where I had research experience, albeit with different research objectives, during the early days of the aftermath. My choices were narrowed to four possibilities and I finally selected the area in Idaho where two and a half years earlier the Teton Dam had collapsed. By the time the field work was completed, nearly three years had passed. This was an optimal, if not ideal, setting for the field study for several reasons.

According to most criteria, the dam break which occurred in the Upper Snake River Valley on June 5, 1976, was a major disaster. The area was designated a major disaster by Presidential declaration. More than 6,000 persons were homeless, 11 deaths were attributed to the disaster, and property damage was estimated at over one billion dollars. In addition, the commercial and business district which serviced more than 16,000 persons was totally destroyed. Given the magnitude of this event, one could expect to observe a broad range of disaster experiences throughout the recovery period.

I had done field work in the Upper Snake River Valley on four earlier occasions: for ten days beginning on the second day after the
dam collapsed, for a week six months later, for a second week eleven months after the dam break and for a final week two years later. In addition, I had maintained correspondence and telephone communication with some members of the community over a period of two years. Due to budgetary constraints, I was limited to ten weeks of field study, but my general knowledge of the setting and contacts in the area were extensive enough that I felt I could make maximum use of the ten weeks in intensive study. I also felt confident that gaining the cooperation of residents in the area would not be problematic. In December of 1979, I made a brief reconnaissance trip to reestablish entree, secure the cooperation of community leaders and make preliminary plans for the field work and interviewing.

In some respects, the timing of the research was advantageous. The recovery process, in material-financial terms, had seemingly been almost complete. By December, 1979, a naive visitor needed a tour guide in order to see any visible effects of the disaster. The only clue which might have raised suspicions was the fact that everything appeared "new", as if the whole area had just had a face-lift. More than 90 percent of the housing inventory had been replaced, the private and public sectors of commerce had been reestablished, and roughly 95 percent of all claims for compensation had been processed. It was reasonable to assume that most problems associated with reconstruction would have been manifest by this time.

The mental health sector of the community had also received funds under Section 413 of the Federal Disaster Relief Act. Extensive outreach work had been done in an effort to identify mental illness and provide preventive mental health services. Since the medical interpretation is one of two conceptions currently available to describe disaster experiences, it seemed beneficial that medical issues be a feature of the local setting. In addition, the extensiveness of the case finding procedures undertaken by the Section 413 project led me to assume that if mental health or illness problems existed, there was a good chance that they had been recognized. Since it was actually a doubt concerning the adequacy of the medical conception that prompted my research interest, it was important that this phenomenon be highly visible.

There are some unique aspects of this setting that, taken together, might make the disaster and recovery experiences of a slightly different nature than might occur elsewhere. The area is predominantly Mormon and religion infuses every aspect of life. This was made perfectly clear to me on my first day in the area. My objective was to learn about the delivery of emergency medical services and the first three interviewees surprisingly gave me more instructions on the Mormon faith than information about medical emergencies. While this information was of some interest, it was also a little annoying, for I had a job to do and limited time in which to accomplish the task. As so frequently occurs in research, one does not always recognize the centrality or relevance of certain information simply because its
significance had not be anticipated. At any rate, the religious beliefs, cohesion and social organization characteristic of the Mormon Church are a prominent feature of social organization in this particular area, but atypical of most disaster areas.

Also, the construction of the Teton Dam was a federally funded project. Although the federal government did not accept liability for its failure, it did acknowledge a moral obligation to those who suffered losses and four hundred million dollars was appropriated by Congress for full restitution. Monetary relief typically accrues to victims of disaster, but what makes this disaster different is the whole issue of federal culpability and the expectation for restitution.

Finally, this disaster was essentially a disaster of property loss and social disruption. There were relatively few deaths or injuries. Although eleven deaths were reported, only six were due to drowning. Thousands of injuries were reported, but only one was actually sustained during the impact phase. The reports of the remaining injuries are primarily based on records of tetanus shots given for scrapes and cuts received after the flood and during clean-up.

Having selected the general area to conduct a field study, it was clear that the spatial parameters of the disaster were far too great to be managed by a single researcher. The flood path was eleven miles at its widest point; it stretched almost ninety miles from the dam site to American Falls Reservoir; and it included five separate counties. Losses were most heavily concentrated in Madison County with more than 75 percent of the population directly affected. Initially, I drew the parameters of the research setting coincidental to Madison County boundaries. This was a tidy package because county jurisdictions have relevance for so many features of social organization. However, many of my hosts suggested that it was an error to exclude the community of Wilford because it was the first population impacted. The most devastated, and the effects of the disaster were "different". I was persuaded by my hosts and added Wilford, a small rural area that begins immediately below the dam and extends down to meet the north boundary of Madison County.

Field Work

In this discussion, attention is given to those aspects of field work which are necessary for assessing the adequacy of the findings. The discussion is limited to a description of the types of data gathered while conducting field work in the Upper Snake River Valley. The period in question is between February and May, 1979. The primary data base for the research findings is in-depth interviewing and the issues involved in interviewing are discussed first. This is followed by a discussion of four other types of supplementary data: participant observation, knowledgeable informants, historical documents and official statistics.
In-depth Interviewing

The answer to the research question calls for examining personal accounts of persons who had lived through the disaster recovery period. Obviously, everyone in the valley could not be interviewed and some type of sampling was required. Initially, I considered selecting residents of the valley using a variant of the snowball technique. This method allows for the selection of research participants on the basis of theoretical considerations and information gathered on previous interviews. This seemed like a sound strategy and one that Glaser and Strauss recommend for grounded research. It has the distinct advantage of ensuring that the theoretical schema develops and fills out in the natural setting for, ideally, the researcher remains in the field until this occurs. I was conscious that the theoretical elaboration might not be completed in ten weeks, but I rejected the idea, finally, on more serious grounds. Community residents had an idea of my research interests that was different from my own. It was common to hear, "You really have to talk to Jane Doe. What happened to her you'll NEVER believe. It was a miracle!" There was a general attitude that I was, or should be, interested in the bizarre and unusual occurrence. "I don't have anything interesting to tell you. Now, some people in the Valley have a real story to tell. You should talk to them 'cause you'll never read that in a book." Of course, my research interest was focused on the typical experience, although, clearly, the research findings must be representative of both the typical and atypical. The sampling strategy, therefore, was designed to achieve this. In actuality, the sampling procedure yielded a breadth of knowledge that was as important or more important than the sample of research participants that were produced.

Unlike most disaster situations, this community had a complete listing of disaster victims that was collected when the flood waters had receded. In addition, each ward keeps current records of all persons, members and non-members, that reside within its geographical boundaries. It was possible, therefore, to identify every resident at the period of disaster impact as well as their current status. The bishops of every ward agreed to cooperate by assisting me in identifying potential research participants. I sat down with every bishop or his delegate and constructed a population frame for each ward that fell within the parameters of the field setting. In the course of two to four hours, an enormous amount of information was conveyed about the circumstances and life situation of ward members. I had suspected that two features of social life were particularly significant in the recovery process: religious affiliation and whether one's livelihood was dependent on farming or other means. My meetings with the bishops confirmed that these situational distinctions did have local significance.

Using the frame thus constructed, the population was stratified along these situational dimensions and a sample of sixty-four persons
was drawn. This strategy seemed to guard against the earlier problem of having a sample which represented only "unusual" situations. Based upon the knowledge acquired in the construction of a population frame, it was possible to check that typical and atypical cases had been included. The sample, as drawn, omitted two types of situations that might reasonably alter the course of the recovery effort. Situations involving a disaster-related death and situations in which the residents "just never bounced back" had been excluded. To remedy this, two households representing each situational type were added.

Four persons refused to be interviewed. Three of the four refusals were associated with disaster-related problems -- legal complications and consumer fraud -- that continued to persist into the present. Given the prior knowledge that I had regarding the life situations of ward members, I selected replacements with similar experiences. Given the sensitivity surrounding these types of situations, I arranged for a local resident to explain the objectives of the research in advance. Once the concerned persons agreed to cooperate as a participant in the research project, a personal introduction was arranged before the interview was set up.

Interviewing took place in the home or business of the research participant. On some occasions, the spouse or entire family was present and actively involved in the interview. Initially, this was alarming because I had planned on a two-person dialogue to structure the interview setting. However, the family unit, as a whole, plays a particularly significant role in the social life of the valley, so this situation seemed "natural." In many respects, it was also beneficial for the purpose of the research. It highlighted features of social life that were otherwise hidden and provided a context in which some aspects of the account being offered were corrected, elaborated, reinforced and clarified.

In all instances, the goal of the interview was to achieve and maintain a casual conversation-like setting. Open-ended questions asked generally for the participant to place the disaster within the biographical and family context, to recount the experiences surrounding June 5, 1976, and to elaborate their significance by describing the later happenings using a chronology. The questions were deliberately open-ended to allow for an uninterrupted reconstruction in the participants own words. The role of the researcher may be best described as an active listener. It was never difficult to maintain a posture of attentiveness and interest, unless by unavoidable circumstance I had scheduled more than two interviews on a single day, for the accounts were intrinsically interesting. The governing rule adapted for the researcher's role was to remain silent and when necessary to use probes of a silent nature. Toward the end of the interview, the researcher assumed a more active role in the dialogue and asked specific questions to clear up contradictions and inconsistencies, to ask for elaboration and clarity, and to introduce new topics that on the bases of other sources of information, seemed to have general relevance.
Occasionally, a research participant defined the interview situation in such a way that the researcher was expected to ask a series of specific questions. It was difficult to reverse a question-answer situation once it had been initiated. The most effective strategy in transferring control of the dialogue over to the participant was by means of posing a challenging contradiction. That is, I would select a contradiction from the participant's answers, one that seemingly had considerable relevance from the perspective of the participant, and expose it as problematic or incomprehensible. This typically resulted with a specific clarification of the contradiction followed by reintegration of the paradox into the larger account which has as yet not been conveyed. Under these conditions, it was possible for the researcher to assume the more passive role in the dialogue and play the role of active listener.

To preserve the interviews for closer scrutiny and analysis after I left the field setting, the interviews, with few exceptions, were tape-recorded. The tape recorder was small and placed outside the immediate visual field. Most participants seemed to be unaware or at least not noticeably affected by the presence of the tape recorder after the first few minutes of conversation. Due to the physical constraints of some situations, handwritten notes rather than a tape recording was the preferred notational device. In two instances, the tape recorder was visibly disruptive to the conversational flow and it was turned off. Four participants refused to have the conversation tape-recorded because of legal implications and the account was preserved by way of field notes.

These open-ended in-depth interviews, lasting on the average one and one-half to two hours, formed the primary data base for this study. Although every effort was made to achieve a casual and conversational atmosphere, the interview context is basically an artificial setting in which "disaster stories" were solicited by an outsider. The general ethos of the Mormon faith and of the community under study emphasizes a positive orientation to life. If there is a bias in the accounts, it is probably in the direction of minimizing the negative aspects of disaster experience. However, the interview accounts are, with very few exceptions, surprisingly open and candid.

Participant-Observation

Other methods typically described as participant-observation were utilized to gain access to the taken-for-granted and routine aspects of normal day-to-day living. The overall objective was to grasp the routine features of social life in addition to the consequences that the disaster had for the normal and expectable conditions of community living. The various activities and social relationships which constitute participant-observation in this study vary in their relative emphasis on participation and observation.
Living in the community as a temporary resident requires, by its very nature, participation in many daily routines. Such mundane activities as renting an apartment, arranging for utilities, grocery shopping, banking, laundry, paying bills and seeking leisure activities exposed me to a cross-section of community situations. In particular, this set of experiences allowed me to experience the social constraints and elements of discrimination attendant on being both an outsider and a non-Mormon in a relatively closed and homogenous community. In a concrete and direct way I also realized the importance of having gained cooperation from community leaders. There were several instances in which successfully completing mundane tasks depended on discreetly dropping the names of my sponsors. In addition, these occasions served to indirectly confirm the fact that the local power structure had, indeed, been identified.

Many activities related to living in the field setting are best described simply as hanging around. Hanging around refers to merely being present in different types of public settings at different times of the day where social customs and local conversations can be unobtrusively observed. Perhaps the most significant observation I made while hanging around was the absence of disaster as a topic of local conversation. This was in marked contrast to observations made six and twelve months following the collapse of the dam. At that time, talk of the disaster even took precedence over the usual and customary greetings of polite discourse. Social occasions were frequently observed to begin immediately with a report or inquiry of the latest disaster-related developments. This finding was an important discovery, for my presence, or the knowledge of my research interest, always elicited disaster talk and it was possible, therefore, to overemphasize the current relevance of the disaster as a significant social issue.

Whenever possible, I accepted invitations to participate in family and social gatherings. This type of gathering, freed from the constraints of the interview context, provided me with many and varied opportunities to observe some of the more private and less obvious features of social life. They were also occasions in which I could test out specific ideas and my general knowledge of the area. In more private settings also, the disaster was, for the majority, not a topic of immediate daily concern. However, the disaster did repeatedly crop up as a dimension of social time. The smooth flow of conversation was frequently punctuated with, "Oh, I forgot, that was B.F." B.F. and A.F. had become community symbols indicative of subtle changes which occurred as a result of the flood. It is also indicative of the Biblical proportions of the catastrophe.

It had become apparent that a fairly extensive knowledge of Mormon theology was required, for even the socio-geographical boundaries have a religious basis. Consequently, I consented to allow missionaries to instruct me in the formal aspects of religious doctrine. Initially, I resisted this course because I found the proselytizing, which is so characteristic of the Mormons, to be burdensome. In the long run, this
turned out to be a congenial and fruitful arrangement. Seemingly, my willingness to hear the word of God from authoritative sources was a sign of potential conversion. In many respects, this minimized my role as an outsider and opened up opportunities that were previously concealed and generally unavailable for observation.

During the last five weeks of field work, I cultivated three close relationships that were more sociable and spontaneous. The first was with a family that was actively involved in the Mormon Church. The second was with a non-Mormon family. This family had lived in the community for about twenty years and they considered this area home. The third was with an older man who had owned and operated a local business for years. Although he was a Mormon, he was currently inactive in church activities. The relationships, in all cases, were friendly and casual and in many respects, these persons functioned as co-researchers. The trust which develops with continuing social interaction allowed me to explore sensitive and guarded issues in a more open atmosphere. In addition, I was able to test out theoretical ideas with interested residents who were knowledgeable enough to respond with enlightened criticisms.

Knowledgeable Informants

In the course of interviewing and observation, a variety of topics and their significance for the recovery process frequently required more detailed and factual information than could be obtained using the above methods. This information was sought from others whose training and/or occupation made them experts on a particular topic. Knowledgeable persons, representing many areas of expertise, were contacted for specific types of information. Informants selected for this purpose included home builder, tax assessor, agricultural agent, local historian, lawyer, church officials, psychologists, social workers, relief volunteers, county officials and city officials.26

Historical Documents

Hundreds of documents were gathered during the several field trips made over the three year period following the collapse of the Teton Dam. Some materials, of a general nature, describe the historical origins and development of the Mormons as a social and religious group, their trail westward to the Great Salt Lake Basin and the subsequent colonization of the Upper Snake River Valley. Materials describing the geography, demography and community organization of the area under study are drawn primarily from local historical reports, census data, maps, city and county plans, labor and commerce statistics and Department of Commerce brochures. Technical reports investigating the collapse of the Teton Dam were also reviewed. Documents that recorded
the course of events related to the dam break and its aftermath were collected. Particularly useful in this connection was a scrapbook kept by the Civil Defense office of Madison County and archival data collected for the Archives of Ricks College Library. Many documents of a more specific nature were kept by particular organizations as records of their involvement and participation in the recovery process. Some of these were endogenous community organizations and others were state, regional, and federal organizations. Some organizations, for example, Red Cross, Civil Defense, and The Federal Disaster Assistance Administration, have a specific mandate to perform disaster-related tasks and responsibilities. Other organizations, for example, schools and churches, have no specific disaster responsibilities, but, under the circumstances, provide important services. These documents include such items as hearings, after-action reports, organizational charts, memos, logs, minutes of meetings, written announcements, plans, surveys, and financial statements. Finally, some social-psychologically oriented documents were available from other research projects. This type of data was particularly useful for comparative purposes. Examining other sources for both consistencies and inconsistencies served as a check on the adequacy of the findings generated from the present study.

Official Statistics

Many scholars anticipate significant increases in behavior indicative of moral, psychological, and social deterioration. Social deviance following disaster is thought to be manifest in a range of behaviors, such as mental illness, alcoholism, unemployment, traffic violations, felonies and misdemeanors, suicide, divorce, and withdrawal from community life. Violations of normative standards are sensitive issues, and one might reasonably expect that this type of information might be taboo in public discussions and that it might also be concealed in an interview context. Therefore, statistical data indicative of deviant behaviors presumed to be serious enough to come to the attention of official agents of social control were collected. Statistical data were gathered from complaints received by police concerning suspicious behavior, bizarre or strange behavior, and suspected suicide. Police statistics recording traffic violations and arrests for felonies and misdemeanors were also collected. County records pertaining to voter participation, emergency welfare, divorce, marriage, and civil, criminal and juvenile trials were collected. Treated cases of mental illness were counted by admission to the local mental hospital. The case load data generated by the special disaster mental health project were obtained. A variety of miscellaneous sources were also utilized to gain other types of statistical data such as alcohol sales, unemployment, welfare, food stamps, and school performance.
Interpretation and Presentation

The goal of qualitative analysis in this study is to reconstruct, using the various types of data gathered, a general portrait of the recovery experience by focusing on the thematic and structural dimensions which organize experience. Since interpretive work is the main objective and the end product of this qualitative analysis, the central problem in analysis is deriving the specific themes and descriptive categories from the various types of data, but in particular, from the tape-recorded interviews. The following procedure was utilized in an effort to make the interpretive process systematic and rigorous.

The interviews were categorized according to whether the disaster recovery experience had been subjectively evaluated, in a global sense, as positive, mixed, or negative. Evaluations of this nature were given in a fairly direct and straightforward manner. Illustrations of global evaluations that were categorized as positive, mixed, and negative, in that order, follow.

Not many people will admit this but, well, well, the disaster is the best (laughter) thing that happened. Ya, I, well, things have just turned around for us, you know; the break we needed. Look at our house, an an just, just look around, the whole town's sort of had, sort of a face lift I guess you'd call it.

There's been some real funny things, like jokes that happened, you know. It not all, well, it's not all bad. Brought us closer together — like the family is closer (silence). Ain't no amount of money could make me want to go through it again though. The place still isn't right. An an well, maybe I'm thinkin maybe it never will.

It's awful. I can just hardly talk about it. (Silence) Some sometimes I just, well, I just, you know, think nothing will ever be the same again. There's nothin good happened since.

The interviews were then sorted by global evaluation and according to the sampling dimensions of urban-rural living and religious affiliation. Two interviews from each of the resultant categories were selected and reproduced in verbatim transcripts.

Tape recorded materials are ideal in the sense that the integrity and accuracy of the account is preserved. With respect to analysis, however, tape recorded materials are available to the auditory senses
only. Thus, the recordings are too intangible and their objectivity too fleeting for rigorous manipulation. It was essential, therefore, to have verbatim transcriptions of the interviews. It would have been ideal to have all of the tape-recorded interviews transcribed, but the cost was prohibitive. A total of roughly 106 interview hours was transcribed.

Each transcript was read and reread in search of the themes and descriptive categories which provided internal order to the account. The themes of each interview were compared for similarities and differences. Then, the remaining untranscribed interviews were played and the researcher listened for new variations. Finally, a general or typical portrait of the recovery experience was then synthesized from the dimensions discovered in the individual accounts.

Essentially, the analysis included two analytically separate, but empirically continuous, forms of interpretive work. The major focus of analysis concentrated on the transcribed interviews as outlined above. Additionally, the supplementary and supporting types of data were being reviewed and categorized for thematic content and specific details. The interpretive work, thus, involved a working back and forth between the various forms of data which had been generated during field work. This report, an analytic-descriptive account of the Teton recovery experience, is the product of that interpretive work.

Analytic description does not readily lend itself to a propositional form of presentation. Therefore, the findings of this research are presented basically in a narrative or expository format. The broad outlines and organization of the report takes its cue from the research setting.

While doing research in the valley, I was repeatedly asked, "Are you a Mormon? Are you from around here? Well, do you understand about Mormons?" From an insider's perspective, an understanding of one's personal experience depended upon a prior understanding of community life in general. The organization of the exposition, therefore, reflects this principle and proceeds from the broader context of community to experience. Chapter three now turns to a description of life in the valley before the Teton Dam collapsed.
NOTES TO CHAPTER 2

1. The Naturwissenschaften-Geisteswissenschaften debate in Germany was introduced into the mainstream of sociological thought through the writings of Max Weber. Weber argued that the subject matter of the social sciences was fundamentally different from the natural sciences and, therefore, required a different methodology. In *The Theory of Social and Economic Organization*, New York: Oxford University Press, 1947, pp. 99-100, Weber argued as follows. "If adequacy in respect to meaning is lacking then no matter how high the degree of uniformity and how precisely its probability can be numerically determined it is still an incomprehensible statistical probability whether dealing with overt or subjective processes." Social sciences, therefore, require verstehen, particularly aktuelles verstehen, as a methodological device to understand meaningful social action. Verstehen has been the subject of many debates. For a collection of essays devoted to this debate see Marcella Truzzi (Ed.), *Verstehen: Subjective Understanding in the Social Sciences*, Reading, Mass.: Addison-Wesley Publishing Co., 1974.


5. For discussions of understanding see any of the references in footnote 1 above.


7. There are a number of standard texts on qualitative methodology. See, for example, Robert Bogdan and Steven J. Taylor, Introduction to Qualitative Research Methods: A Phenomenological Approach to the Social Sciences, New York: John Wiley and Sons, 1975; Lofland, John, Analyzing Social Settings: A Guide to Qualitative


9. It should be pointed out that not all authors who use qualitative data reject the positivistic paradigm. See, for example, A. E. Maxwell, Analyzing Qualitative Data, London: Chapman and Hall, 1961. Maxwell’s research procedures are guided by a positivistic conception and his major problem concerns the transformation of qualitative data into quantitative data as a prerequisite to scientific analysis.


18. Mehan and Wood, op. cit. Their discussion on the problem of infinite regress reflects this extremist position which leads them to
ignore the possibility that self-reflection entails reflections of the external world and not simply or merely reflections of one's knowledge about the external world. This latter formulation becomes an infinite circularity of reflections of reflections.


20. This occurred in spite of efforts to maintain a public and highly visible image. The local newspaper ran an article describing the objectives of the research project and I contacted many community leaders to explain the research. Many residents selected in the sample were already aware of my presence and research interests before being contacted by telephone, but nonetheless, there was a difference in the definition of what was interesting.

21. The success of this community in having a complete list of disaster victims underscores the uniqueness and efficiency of the Mormon's social organization. In the years between the dam break and the research, the original lists for 3 wards had been misplaced. The disaster population, in these wards, was reconstructed from church records and the memory of the presiding bishop. Although considerable importance is placed on having information on every person within ward boundaries, errors of omission are most likely in the case of non-Mormons and geographically mobile persons.

22. Forms were used containing the following information: family name, number in the household, religious affiliation, principal income from farming/non-farming, current ward residence, and whether or not losses were incurred. Additional information was conveyed about illness, failure to recover from the disaster, problems related to recovery, death and so on.

23. See Appendix A, Field Guide For In-Depth Interviewing.

24. Many public settings were observed. I went to different churches and to a wedding. I ate in expensive restaurants, a truck stop, fast food chains, and a senior citizen's activity center. I shopped in different types of stores. I sat in the park, school playgrounds, and the hospital waiting room. I walked through residential areas of varying degrees of affluence, toured mobile home parks, and drove around the rural countryside. I went to the library, beauty salon, local pub, and farm equipment retail outlet. In addition, collecting documents and statistics at various public and private agencies offered many occasions to observe unobtrusively.

25. Among the types of invitations I accepted were family dinners, luncheons, home movies, a boy scout banquet, coffee breaks, local church services, and a variety of women's church association meetings.
26. These contacts lasted, on the average, two to five minutes, although there was considerable range. The longest lasted about one hour. Some contacts were made by telephone and others were face-to-face contacts. One contact was tape-recorded because of the technical nature of the material and my ignorance on the topic.

27. Three sources were of particular significance in this respect. A survey of the needs of elderly victims was analyzed by the Department of Sociology, Idaho State University, and published in the following research report. Faye C. Huerta, Robert L. Horton and Leonard Kovit, Older Americans and the Natural Disaster, Title III Model Project, Eastern Idaho Special Services Agency, Inc., Idaho Falls, Idaho, 1977. Nearly 300 personal accounts were voluntarily submitted by residents of the Teton Valley for publication in a locally published book. Janet Thomas, Bernice Mc Cowin, Mary Tingey and Margaret Thomas (Eds.), That Day in June: Reflections on the Teton Dam Disaster, Rexburg, Idaho: Ricks College Press, 1977. Nearly 400 oral histories were collected in a joint research project by the Departments of History of Utah State University and Ricks College during the summer of 1977. Approximately 71 of these were transcribed and available for review in the Archives of Ricks College.
CHAPTER 3
SOCIAL CONTEXT

There is a general feeling among residents of the Upper Snake River Valley that the people who live in the valley are unique and that their response to the destruction wrought in the wake of the disaster was a demonstration of their special courage and determination. Typically, this issue is introduced by reference to stories of the amazement of outsiders who came to the valley after the dam broke and wondered "why it is that these people of the Upper Snake River Valley could react as they did -- with optimism, hard work and courage -- in the face of such utter destruction". And the valley people have a ready explanation. "The answer, of course, lies largely in their background, which is semi-rural and western. But, of even more significance in the eyes of many, is the fact that the area is predominantly Mormon -- and Mormons have a long history of hardship and adversity."

This answer underscores the importance of both agriculture and Mormonism as organizing themes in the life of valley residents.

This chapter focuses on these two themes and provides a general sketch of the social conditions which influenced the quality of life in Madison County before the normal routine of daily life was disrupted by the failure of the Teton Dam. The discussion focuses first on the social environmental aspects which determine the material conditions of survival. Then, the demographic characteristics of the population are described. The chapter concludes with a discussion of the social organization of community life, the unique influence of the Mormon Church on this organization and its significance for daily living.

Social Ecology

Madison County, formerly the southeastern corner of Fremont County, was created by the state legislature on February 18, 1913. Madison County (figure 4 and 5), shaped in an irregular rectangle, is situated in the east end of southeast Idaho. The land area of 473 square miles is bounded on the north by Fremont County; on the west and southwest by Jefferson County; on the south by Bonneville County; and
Figure 4: Map of Idaho showing Madison County
Figure 5: Map of Madison County
on the east by Teton County.

There are two incorporated areas in Madison County. Rexburg is the county seat and Sugar City, approximately five miles north, functions as a bedroom community of Rexburg. Roughly two-thirds of the county's population resides in these two communities. Rexburg serves as the center for governmental services, light industrial development and commercial trade. Since the entire southeast region of this predominantly rural state is sparsely populated, Rexburg's business and service sectors offer substantial competition to Idaho Falls which lies twenty-five miles to the south. Thus, Rexburg is an important service center for the five adjacent and northerly counties. U. S. Highway 20 and 191 cut through the westerly one-third of the county connecting Rexburg with Idaho Falls to the south and St. Anthony (the county seat of Fremont County) twelve miles to the north.

Although tourism does not constitute a major factor in the economy, the tourist industry does produce some important seasonal revenues. Rexburg is one of the last major stops on Highway 20 and 191 which takes tourist traffic northeast to the famous Yellowstone National Park. State Highway 22 runs from Rexburg west through Jefferson County to the Challis National Park and State Highway 33 runs east from Sugar City through Teton and Newdale to the Teton County line and southeast to Jackson Hole and the Grand Teton National Park.

Numerous creeks and two major rivers supply the county with an abundance of water. The North and South Forks of the Teton River cross the northwest section of the county and empty into the north fork of the Snake River. This fork, called Henry's Fork, joins with the main branch of the Snake River on the southwesterly corner of the county.

The topographical contours of the land range from forested mountains and rolling hills to fertile plains, barren lava rock, and sandy desert. This geophysical diversity is reflected on the map labeled figure 6. Big Hole Mountains extend from Wyoming in the southeast corner forming part of the Targhee National Forest. The forest and park area is bordered with range land extending westward to a stretch of benchland which is used for dry farming. The benchland (shaded white) is about ten miles wide and runs twenty miles in a northeast direction through the middle of the county. Westward, almost to Rexburg and the South Fork of the Teton River, lie irrigated rolling hills with an elevation that averages a little more than a mile above sea level. This irrigated benchland slopes westward onto the fertile plains of the valley floor. In the northwest corner (shaded white) is a stretch of land that is almost pure sand. Rising out of the lava rock in the southeast corner are two buttes, called the Menan or Twin Buttes.

In addition to the topography, figure 6 also includes a distribution of residential and miscellaneous structures throughout the county. Even a cursory glance reveals the uneven concentration of
Figure 6: Map of Madison County Showing Topography and Population Distribution
development in the westerly one-third of the county. This pattern reflects the early construction of irrigation canals and the development and growth of the agricultural industry.

In spite of the abundance of waterways throughout the county, there is a chronic shortage of water for farm usage. The climate is dry and arid with an annual precipitation that ranges from 10 inches in the westerly region to 23 inches in the southeast corner. Winters are long and cold. This has two important consequences. First, the growing season is short, ranging from 90 to 110 days, and, second, winters with heavy snowfall have the potential for producing floods during spring runoff. Paradoxically, the topographical and climatological conditions combine to produce a cycle of flooding in late spring and drought in late summer. Both phases of the cycle have repeatedly damaged crops and produced serious economic losses.

More than thirty separate canal systems have been constructed for irrigation purposes. The proposed construction of the Teton Dam in 1963 was justified, among other reasons, for its beneficial effects in controlling flooding and alleviating the water shortage caused by drought. Approximately 56 percent of the total land in Madison County is utilized in cropland and the central 178,000 acres of farmland (indicated by dark shading on figure 6) is under irrigation. If the Teton Dam, located 3 miles northeast of Newdale on the Teton River, had not failed, about 40,000 acres would have been newly irrigated and another 40,000 acres would have received supplemental irrigation.

The vital importance of agriculture for the economy of Madison County is shown in Table 2. Table 2 documents the amount of income generated by different economic activities which contribute to the economic base. Agriculture accounts for almost two-thirds (22.5 million dollars) of the total 35.5 million dollars generated in 1974. Of manufacturing, roughly one-half of the amount is generated from the processing of agricultural products.

There are ten manufacturing firms and the largest, a potato processing plant, employs between 300 and 499 persons. There are also two natural cheese plants. The remainder are not related directly to agriculture and are of relatively small size.

Ricks College, a two-year church operated college, plays the second most important role in the economy of Madison County. It is the single largest employer in the county, employing more than 500 persons. In addition, the expansion of college facilities supports the construction industry and the nearly 6000 students enrolled support the retail and rental sectors of the economy. In fact, it is interesting that the student college population makes up 35 percent of the total population.
### Table 2

Income generated in Madison County, 1974, by type of economic activity

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Income generated (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>22.5</td>
</tr>
<tr>
<td>Ricks College</td>
<td>*7.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.1</td>
</tr>
<tr>
<td>Construction</td>
<td>*1.0</td>
</tr>
<tr>
<td>State and Federal</td>
<td>1.9</td>
</tr>
<tr>
<td>Government</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35.5</strong></td>
</tr>
</tbody>
</table>

*Estimated
Social Demography

The population of Madison County, according to the 1970 Census, recorded 13,452 persons. Figure 6 shows the distribution of the population by residential dwellings for the unincorporated areas. More than 90 percent of the population is concentrated in the westerly one-third of the county on irrigated land. Roughly 80 percent live within a narrow corridor along Highway 20 and 191. The rural areas to the west of Rexburg -- Salem-Hibbard, Burton and Plano -- have roughly 12, 8, and 3 percent of the county's population, respectively. The south-eastern part of the corridor which extends along the Snake River has about 10 percent of the population, and the area north of Rexburg and east of the South Fork of the Teton has less than 1 percent.

Until 1960, the population was fairly stable. Between 1960 and 1970, a population increase of 43 percent was recorded. Between 1970 and 1976, the population had increased again by about 34 percent with an estimated total of 18,000 persons living in the county. To some extent, this growth reflects the national demographic trend west, although there are two particular factors which explain this increase.

First, during the early sixties, the benchland immediately east of Rexburg came under irrigation and land use shifted from dry farming to potato crops. This stimulated the local economy significantly and brought considerable prosperity, as well as more people, to the area. The amount of land under potato crops nearly doubled. Net farm income also doubled during the decade, and by 1974 they had nearly quadrupled 1964 values. In 1966 a potato processing plant producing about 200 new jobs opened near Rexburg.

The second factor in explaining the growth is the expansion of Ricks College. In 1950 there were fewer than 1000 students. By the mid-sixties, enrollment tripled and by 1974, 5800 students were enrolled. The effect of this expansion to the area generally shows up in the Department of Employment statistics in an increase of jobs in the service and miscellaneous category from 100 in 1960 to 2000 in 1975. Most of this increase is accounted for by the expansion of the college.

Although the Saints were not the first to pioneer the Upper Snake River Valley, they were among the first to develop commercial centers in Madison County. The heritage of the present population begins in 1883 with the decision of John Taylor, then President of The Church of Jesus Christ of Latter-day Saints, to send Thomas E. Ricks to southeast Idaho to select a site for the "location of a central point for religious, educational, and commercial enterprises, and to prepare the way for the rapid colonization of the county". The religious composition of the population reflects the success of this venture.

An estimated 95 percent of the population is Mormon, although probably no more than 60 percent of the membership is actively
involved in church life. The remaining 5 percent is divided among Presbyterian, Lutheran, Roman Catholic, Jehovah Witness and Baptist denominations. In sociological terms, the non-Mormon population constitutes a minority group. There are no exclusive non-Mormon residential areas, although non-LDS persons tend to live more often in the city of Rexburg and in the southern part of the county in the Burton-Thornton area. While the seven-county region of southeast Idaho is heavily influenced by the Mormon faith, it is fair to conclude that Madison County has proportionately more LDS than any other county in the region.

The population is overwhelmingly white, Anglo-Saxon and, of course, Protestant. The racial composition of the population reflects the New England heritage of the founders of Mormonism and their extensive missionary programs in Great Britain and Western Europe to convert and to persuade new converts to emigrate to North America. There was one black man living in Rexburg in 1970, but he died shortly after. Oriental-Americans, Mexican-Americans, and North American Indians make up the 124 non-white persons recorded in the 1970 Census.

Mormon doctrine prohibits all forms of contraception and the effect of this rule, while not universally practiced, is clearly evident in the age structure of the population. Table 3 compares the age structure of Madison County with the nation for 1970. The relatively large percentage of the population (51 percent compared to 34.2 percent for the nation) below 18 years of age indirectly reflects the characteristically high birth rate of Mormon families. Families with nine or eleven children are not uncommon, although the typical LDS family in Madison County has five or six.

As one might expect with the presence of Ricks College, the educational level of the population is fairly high. According to the 1970 Census, the median school years completed for persons 25 years and older was 12.6. In Rexburg, more than 72 percent of the population 25 years and older had completed at least four years of high school. This is consistent with the general emphasis in the Mormon Church on education and on the value of applied scientific technology.

Table 4 shows the occupational structure in Madison County. The high percentage of the labor force employed in white collar jobs reflects the importance of Ricks College as an educational center and Rexburg as a service center for governmental agencies, human services, and commerce. The paucity of manufacturing and industrial development is reflected in the relatively small percentage of the labor force employed in blue collar work. The relatively high percentage of the labor force employed in service reflects the domestic jobs generated by facilities such as the county hospital, college dormitory, motels, and nursing homes. Although agriculture is vital to the economy, only slightly less than 14 percent of the labor force is directly employed in farming. Indeed, there are only 641 farms in Madison County.
### Table 3 Percentage of Population of Madison County and the United States by Age, 1970

<table>
<thead>
<tr>
<th>Age</th>
<th>Madison County (%)</th>
<th>United States (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 or younger</td>
<td>51</td>
<td>34.2</td>
</tr>
<tr>
<td>(N=7033)</td>
<td></td>
<td>(N=70 mil)</td>
</tr>
<tr>
<td>19 - 64</td>
<td>42.7</td>
<td>56.0</td>
</tr>
<tr>
<td>(N=5562)</td>
<td></td>
<td>(N=114.9 mil)</td>
</tr>
<tr>
<td>65 or older</td>
<td>6.3</td>
<td>9.8</td>
</tr>
<tr>
<td>(N=857)</td>
<td></td>
<td>(N=20 mil)</td>
</tr>
<tr>
<td>Table 4</td>
<td>Occupational characteristics of the labor force of 16 years and older for Madison County, 1970.</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>White Collar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional and kindred workers</td>
<td>658</td>
<td>13.8</td>
</tr>
<tr>
<td>Managers and administrators</td>
<td>391</td>
<td>8.2</td>
</tr>
<tr>
<td>Sales workers</td>
<td>246</td>
<td>5.1</td>
</tr>
<tr>
<td>Clerical and kindred workers</td>
<td>617</td>
<td>12.9</td>
</tr>
<tr>
<td>Blue Collar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craftsmen, foremen and kindred workers</td>
<td>349</td>
<td>7.3</td>
</tr>
<tr>
<td>Operatives including transport</td>
<td>633</td>
<td>13.3</td>
</tr>
<tr>
<td>Non-farm labor</td>
<td>298</td>
<td>6.2</td>
</tr>
<tr>
<td>Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service workers</td>
<td>909</td>
<td>19.1</td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers and farm managers</td>
<td>322</td>
<td>6.7</td>
</tr>
<tr>
<td>Farm laborers and foremen</td>
<td>335</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>4758</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The national trend in the reduction of farms and land in farm use is also evident in Madison County, although the decrease up to the present has not been radical. Nonetheless, given the increasing trend toward automation in agriculture, the number of jobs in farming is expected to continue to decrease. This seems to imply a need for a more diversified economy.

Table 5 provides a statistical summary of the population by family income for 1970. The median family income for Madison County was $8,063.00. The income structure for the county compares favorably with the state as a whole. Although the median family income for the State of Idaho ($8,381.00) is slightly higher than for Madison County there are, in Madison County, a significantly larger number of families with incomes of more than $15,000.00. Compared to the median family income ($10,200.00) in the United States as a whole, however, the dollar value is significantly lower.

Table 6 compares the median income of workers in Madison County with the nation by sex and selected occupational characteristics. This table demonstrates that the entire income scale is lower, although female labor, blue collar labor, and farm labor receive surprisingly low incomes. In part, this reflects the absence of unions in the workplace. This also explains why the percentage of women in the labor force is increasing in spite of the Mormon emphasis on family and on traditional sex role behavior.

Although the wage structure of the county is low, property values and the cost of living are also low. For example, the median value of a house, and the vast majority of families live in single-family homes, was $17,300.00 for the same year. More expensive homes were being built by the affluent on the hill in the residential area surrounding the college and in the subdivisions west along Highway 88.

During the early years of the seventies, Madison County and the state of Idaho generally were enjoying a period of increasing affluence. The total personal income for the state of Idaho increased by 33 percent for 1970, 1971, and 1972 while the national average increased by only 25 percent. In 1972, the state of Idaho was ranked ninth for the rate of increase in total personal income. By 1974 it was ranked 4th. During 1975 when the unemployment rate for the nation was 8.5 percent the unemployment rate for Madison County was 5.9 percent.

Social Organization

As a religious group, Mormons have a unique history and identity, but it is best to remember that Mormonism is thoroughly American in origin and development. Its founder, Joseph Smith, received his first revelations and heavenly visitations in western New York State.
<table>
<thead>
<tr>
<th>Family Income</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 3,999</td>
<td>422</td>
<td>17.69</td>
</tr>
<tr>
<td>4,000 - 5,999</td>
<td>413</td>
<td>16.52</td>
</tr>
<tr>
<td>6,000 - 7,999</td>
<td>381</td>
<td>15.25</td>
</tr>
<tr>
<td>8,000 - 9,999</td>
<td>392</td>
<td>15.68</td>
</tr>
<tr>
<td>10,000 - 11,999</td>
<td>213</td>
<td>8.53</td>
</tr>
<tr>
<td>12,000 - 14,999</td>
<td>264</td>
<td>10.56</td>
</tr>
<tr>
<td>15,000 - 24,999</td>
<td>268</td>
<td>10.72</td>
</tr>
<tr>
<td>25,000 - 49,999</td>
<td>100</td>
<td>4.00</td>
</tr>
<tr>
<td>50,000 or more</td>
<td>26</td>
<td>1.04</td>
</tr>
</tbody>
</table>
Table 6  Median income of Madison County and United States civilian labor force of 16 years and over by selected occupational category and sex, 1970.

<table>
<thead>
<tr>
<th>Occupational category and sex</th>
<th>Median Income (dollars)</th>
<th>Madison County</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional, managerial and kindred workers</td>
<td>8,824</td>
<td>10,735</td>
<td></td>
</tr>
<tr>
<td>Craftsmen, foremen and kindred workers</td>
<td>6,891</td>
<td>8,172</td>
<td></td>
</tr>
<tr>
<td>Operatives, including transport</td>
<td>3,567</td>
<td>6,700</td>
<td></td>
</tr>
<tr>
<td>Laborers, except farm</td>
<td>1,801</td>
<td>4,617</td>
<td></td>
</tr>
<tr>
<td>Farmers and farm managers</td>
<td>5,833</td>
<td>4,822</td>
<td></td>
</tr>
<tr>
<td>Farm laborers</td>
<td>1,691</td>
<td>2,570</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical and kindred workers</td>
<td>1,278</td>
<td>4,232</td>
<td></td>
</tr>
<tr>
<td>Operatives including transport</td>
<td>1,622</td>
<td>3,635</td>
<td></td>
</tr>
</tbody>
</table>
Perhaps the most important are the visitations from the Angel Moroni who led Joseph Smith to the discovery of the link between the Old and the New Worlds through the discovery of ancient plates buried in the hill now called Cumorah. These ancient plates, translated by Joseph Smith into The Book of Mormon, are believed by Mormons to be the word of God. The Book of Mormon offers a scriptural account of, first, the emigration of Lehi and his family from Jerusalem around 600 B.C. to the Western Hemisphere, and, second, the history of Lehi and his descendants in America up to their ultimate destruction near Cumorah in 400 A.D.

Belief in the The Book of Mormon as a companion to The Holy Bible distinguishes the Saints as a unique social and religious group. An official statement of the central tenets of Mormon doctrine, called the Articles of Faith, appears in figure 7. Fundamental to the Mormon theology is a belief in revelation and living prophets. Under the leadership of Joseph Smith, the first living prophet of the Church of Jesus Christ of Latter-day Saints, the original group of modern-day Saints (believing themselves to be the children of Israel) accepted the task of restoring the "original" Church on earth and set out to build the city of Zion in preparation for the coming Armageddon and the second reign of Christ in these latter days.

Beginning with the formal establishment of the Church on April 6, 1830, the history of the Saints is recorded as a history of persecution and hardship. It is the history of escape from religious persecution through the great migration westward to Ohio, Missouri and Illinois and finally, the Great Salt Lake Basin in 1847. It is the history of the struggle to survive and create a subsistence from the desert soil in Utah. It is also the history of pioneer settlements in the virgin territories of southeast Idaho as the church undertook extensive colonization programs at the end of the nineteenth century.

In spite of persecution and adversity, or perhaps because of it, Mormonism has flourished and the Mormon Church has grown to include more than four million members in many nations around the world. More than two-thirds of the membership, however, resides west of the Mississippi River in North America.

Ecclesiastical Structure

To understand what Mormonism means for the daily life of its members, it is necessary to understand first the ecclesiastical structure of church government. (See figure 8 for a diagrammatic representation of this structure) Mormons maintain that the fundamental organization of the Church of Jesus Christ of Latter-day Saints is the same as that which was established by Christ in biblical times. That is, its organization consists of prophets, apostles, ministers, evangelists, priests, teachers, bishops, and so on.
1. We believe in God, the Eternal Father, and in His Son, Jesus Christ, and in the Holy Ghost.

2. We believe that men will be punished for their own sins, and not for Adam's transgression.

3. We believe that through the Atonement of Christ, all mankind may be saved, by obedience to the laws and ordinances of the Gospel.

4. We believe that the first principles and ordinances of the Gospel are: first, Faith in the Lord Jesus Christ; second, Repentance; third, Baptism by immersion for the remission of sins; fourth, Laying on of hands for the gift of the Holy Ghost.

5. We believe that a man must be called of God, by prophecy, and by the laying on of hands, by those who are in authority to preach the Gospel and administer in the ordinances thereof.

6. We believe in the same organization that existed in the Primitive Church, viz., apostles, prophets, pastors, teachers, evangelists, etc.

7. We believe in the gift of tongues, prophecy, revelation, visions, healing, interpretation of tongues, etc.

8. We believe the Bible to be the word of God as far as it is translated correctly; we also believe the Book of Mormon to be the word of God.

9. We believe all that God has revealed, all that He does now reveal, and we believe that He will yet reveal many great and important things pertaining to the Kingdom of God.

10. We believe in the literal gathering of Israel and in the restoration of the Ten Tribes; that Zion will be built upon this (the American) continent; that Christ will reign personally upon the earth; and, that the earth will be renewed and receive its paradisical glory.

11. We claim the privilege of worshipping Almighty God according to the dictates of our own conscience, and allow all men the same privilege, let them worship how, where, or what they may.

12. We believe in being subject to kings, presidents, rulers, and magistrates, in obeying, honoring, and sustaining the law.

13. We believe in being honest, true, chaste, benevolent, virtuous, and in doing good to all men; indeed, we may say that we follow the admonition of Paul—We believe all things, we hope all things, we have endured many things, and hope to be able to endure all things. If there is anything virtuous, lovely, or of good report or praiseworthy, we seek after these things.

Figure 7: The Articles of Faith of The Church of Jesus Christ of Latter-day Saints
Figure 8: Ecclesiastical Structure of the Church of Jesus Christ of the Latter-day Saints
General Authorities. At the head of the Mormon Church is the First President, also known by Joseph Smith's original title, "prophet, seer and revelator". The president is selected, according to seniority, from the Quorum of Twelve Apostles and his tenure is for life. The authority of this position is believed to be inherited from the Prophet himself and as the title"prophet, seer, and revelator" signifies, the First President is the only member of the church empowered to voice revelations. The First President and his two counselors make up the office of the First Presidency.

A quorum of twelve apostles, also tenured for life, serves as an executive committee to the First Presidency. This quorum of twelve advises the First Presidency on issues of doctrinal import and in a more practical sense, the quorum also oversees all ecclesiastical affairs within the church including priesthood and auxiliary organizations, church education and curriculum, temples, genealogy, and missionary work. Together, these fifteen men at the top are the final authority on all church-related matters.

In addition to the First Presidency and the Quorum of Twelve Apostles, three other offices -- the Quorum of Seventy, Patriarch of the church, and Presiding Bishopric -- make up the General Authorities. The Quorum of Seventy consists of seven members who oversee the missionary work of the church and supervise regional and local Quorums of Seventy. The church patriarch is an official of the church responsible for giving special blessings to individual church members. The presiding bishop and his two counselors are responsible for managing the temporal affairs of the church including business and financial transactions.

General Authorities, like all positions in the church, are subject to approval by the membership at large. The vote, called a vote of common consent, merely represents a nominal vote for there is no pretense that the Mormon Church is a democracy. On the contrary, the church is decidedly theocratic with all authority emanating from the top.

The General Authorities are supported by a centralized bureaucratic network of administrators, advisors and specialists located in Salt Lake City, Utah. In all, central administration consists of about twenty-six departments with a total staff of more than 3000 persons.

Mormon Priesthood. Important as the central organization of the church is for the direction of all ecclesiastical and temporal affairs, the ward unit is, except for the family, the most important social unit in Mormandom. Moreover, it is the priesthood hierarchy which orders ward life and links the relatively autonomous ward units with the central structure of the church. Kephart has correctly observed that the priesthood hierarchy "provides the bones and sinew of present-day Mormonism".
All "worthy" male members are ordained into the lay priesthood of which there are two orders, The Aaronic and Melchizedek. The Aaronic, or lesser priesthood, is believed by the Saints to have originated when Joseph Smith and Oliver Cowdery received heavenly keys from John the Baptist in 1829. The higher or Melchizedek priesthood came about later when both men received "the keys of all spiritual blessings of the church" from the Apostles Peter, James, and John. All Mormon priests trace their ordination and authority back to these original holy acts. 28 Offices in the Aaronic priesthood are deacon, teacher, and priest; those in the Melchizedek order are elder, seventies and high priest.

About four years after baptism, every "worthy" male starts his priestly career at the age of twelve when he is called into the Aaronic order and ordained at the rank of deacon. Deacons' duties include assisting at church meetings, collecting fast offerings, and generally assisting the higher ranks. About the age of fourteen, if all goes well, the deacon is promoted to the rank of teacher and at about eighteen to priest whose duty it is "to preach, teach, expound, exhort, and baptize, and administer the sacrament". 29

If the duties of the Aaronic order are satisfactorily performed, a man is called into the higher order of the Melchizedek priesthood at about twenty years of age. The most commonly held rank is the lowest rank of this order, the rank of elder. The elder is invested with the authority to bestow certain blessings, to take charge of meetings and to officiate during rites in the absence of the high priest. Seventies are charged with the responsibility of missionary work. Once a man has obtained the rank of high priest, there are no higher priestly ranks one can aspire to, although there are innumerable administrative and executive positions available providing he has the right qualifications.

Wards and Stakes. Wards are geographical units having an average of six hundred individuals and two hundred families. As indicated earlier, the ward, similar to a Catholic parish or protestant congregation, is the local unit of church organization through which Mormonism affects the daily life of individual members. Thus, wards function as a mini-commonwealth whose raison d'être is to serve the spiritual and temporal needs of every individual who resides within its boundaries.

The ward is presided over by a bishopric consisting of three members including a bishop and two counselors. It is the bishop (as father of the ward family) who baptizes and confirms, ordains and releases, performs marriages and funeral rites, counsels members in spiritual and temporal affairs, receives contributions, officiates at meetings, issues a recommend to participate in temple rituals, oversees the management of ward finances, and so on. Assisting the bishop in the government of ward life is a corps of priesthood quorums and ladies' auxiliaries organized into more than two hundred voluntary
positions. The bishopric, like all local positions, serve for roughly four or five years before they are released with a note of thanks.

Home teachers and visiting teachers form the important and continuous linkages between the bishop and his congregation. Once a month, every Mormon household is visited by a pair of home teachers from the priesthood quorum and a pair of home visitors from the women's auxiliary called Relief Society. It is their conjoint responsibility to offer religious instruction in the home and to report back to the bishop concerning any problems, whether they be financial, medical, parental, social, emotional or spiritual in nature.

Although each ward contains both priesthood orders -- and every rank thereof -- the bishop's responsibilities are limited to the supervision of the Aaronic priesthood. Stake presidents supervise the Melchizedek priesthood.

A stake, similar to a Catholic diocese, is made up of between five and ten wards. At the head of the stake is a president who is assisted by two counselors and a council of twelve. The stake president nominates the various ward bishops, holds conferences, and is generally responsible for the smooth functioning of the wards within his jurisdiction. Like all positions at the local level, stake positions are voluntary although they may require up to forty hours of work per week. In essence, stakes are a regional or middle form of organization which draws lines of relation between the general authorities and ward units.

Sixes of Stakes. Madison County is roughly coterminal with the regional division of the Mormon Church referred to as the Sixes of Stakes. Ricks College consists of three stakes and thirty wards. Prior to the disaster, the resident population was organized into three stakes -- Rexburg North Stake, Rexburg Stake and Rexburg East Stake -- and twenty-one wards. Rexburg North Stake consists of nine wards. Three are located within the city of Rexburg; two are in Sugar City; three are located in the rural areas of Plano, Salem and Hibbard in the north part of the county; and the remaining are located in the south end of Fremont County in Teton and Newdale. Rexburg Stake consists of seven wards. Six are located in the west of the city of Rexburg and the suburban fringe and one ward is located in the rural area of Burton in the southwest of the county. Rexburg East Stake has a total of five wards: three are located in the east end of the city and two are located in the rural areas of Lyman and Archer in the southeast section of Madison County.

Active Involvement

The relentless demands of Mormonism does not encourage nominal membership among its rank and file. If the ward centers appear as
proverbial beehives of activity, it is because, in fact, they are.
Indeed, the main objective of Mormonism is to involve as many members
as possible in doing God's work, as interpreted by the General Author-
ities. And the challenge of this "activist pragmatism", to use Wha-
len's phrase, includes time, money, labor and commitment.

It is not uncommon for an individual to have ten hours occupied in
church-sponsored meetings or activities each week. For those who have
been "called" to special assignments it is possible to devote up to
thirty or forty hours per week in church work in addition to meeting
the demands of a full-time career. Sundays consist of a general
priesthood meeting, quorum meetings, a congregational meeting, Sunday
school, visitations and another late afternoon or evening ward meet-
ing. Monday evening is spent at home engaging in church-planned ac-
tivities as part of a regularly scheduled family home evening. At
least two or three hours in the week will be scheduled for an auxil-
iary or quorum meeting. Then there are a whole range of church-spon-
sored activities in which members are expected to participate: spe-
cial ward projects, stake conferences, cultural enrichment programs,
recreational and social evenings, sporting events, Mormon holiday ce-
lebrations, genealogical research, and ordinance work in the temple,
to name only a few.

According to the principle of tithing, every Mormon (children are
also encouraged to comply) is expected to pay ten percent of his or
her gross income to the general fund. Another offering of roughly one
to two percent is given to the ward fund for the maintenance and
operation of ward facilities. On the first Sunday of every month,
fast Sunday, each family also donates the equivalent of the two fast
meals in cash. There are, in addition, private donations and special
contributions for ward projects which might include a new ward build-
ing, stake center, tabernacle, organ, or any other needed property or
commodity.

Involvement does not end with the expenditure of time and money.
Mormons are also expected to provide generous amounts of labor for "a
coin reached out of the pocket is soon forgotten, but sweat and blis-
ters and the fellowship of community toil are long remembered". Routine maintenance of ward and stake properties and special beau-
tification projects require that members contribute labor on a regular
basis. Every stake also supports a welfare project -- a farm, ranch
or cannery, for example -- on voluntary labor.

Finally, Mormonism requires an active and visible commitment to
the ordinances and rules of church doctrine. To participate in temple
rituals, to receive the blessings of the church, to be called to serve
in special assignments, and to be ordained within the priesthood, Mor-
mons are expected to be "worthy", a word which means essentially that
one pays tithes and offerings, attends meetings, endeavors to be hon-
est, follows the Ten Commandments, observes the Word of Wisdom, and
practices fidelity within the bonds of marriage. Mormons are
encouraged to proselytize and to share their testimony of faith with others. 38

**Importance of Family**

Mormons consider the family-marriage and parenthood — a duty, a blessing and the pathway to salvation and godliness. By successfully fulfilling the covenant of marriage, including fidelity to each other and obedience to God, it is believed that the highest level of the celestial kingdom may be achieved.

The distinguishing feature of the Mormon family is the concept of "eternal marriage". 39 Marriages performed in the sacred temples are, by special ordinance, unions for time and all eternity. Although this is the ideal, not all marriages are performed in the temple and, in fact, those officiated by the bishop in the local wards are, similar to those performed by a justice of the peace, for time only. However, even in these instances, partners may at some later date, providing the couple is worthy, be "sealed" for eternity in special temple rites.

The practice of sealing extends beyond the simple nuclear family and, indeed, beyond the living. A broad network of unbreakable kin relationships may reach back to include several past generations by means of vicarious work for the dead. The search for one's ancestry and the performance of special ordinances to ensure their salvation signifies the religious significance and central importance of the family.

These beliefs also have implications for daily living. Mormons have strong proscriptions against any behaviors which they believe serve to undermine the family, such as masturbation, premarital and extramarital sex, indecent language, birth control, abortion, and divorce. Conversely, they encourage modest dress, early marriage, and large families. Children are taught at an early age to aspire to a temple marriage and to take courtship seriously, for the selection of a marriage partner determines one's temporal happiness as well as one's eternal welfare.

On Monday evening, families are expected to stay home for what is termed family home evening. This period of instruction, prayer and recreation singles out the family as a school of experience, a place of worship, and a preparatory arena for eternal life. Families are encouraged to provide a home that is free from the influence of alcohol, tobacco, coffee and tea; 40 and an environment that is conducive to obedience, work, thrift, self-reliance, learning, achievement, and success. The ideal family also carries on genealogical research, keeps a Book of Remembrance, and makes regular temple visits.
Church Welfare Program

The United Order envisioned by the founders of Zion was a total kingdom -- a political, economic, social and spiritual totality -- governed by the General Authorities. Prior to achieving statehood, in Utah this vision seems to have been realized in practice, for Mormondom was fundamentally a communal society. Arrington and Bitton provide a fascinating historical account of the social forces which produced a radical transformation in the political economy of this society. Before the first decade of the twentieth century came to a close, pragmatic considerations had forced the church leadership to abandon their collectivist economic philosophy and embrace the individualism of the larger society. They concluded that the general welfare was best promoted through private enterprise and competition. The Law of Consecration, the scriptural foundation for the collectivist order, was replaced with the rediscovery of tithing as a principle of the new capitalist order. Tithing was then, and continues to be, advocated as the system of taxation and the standard of individual righteousness.

Widespread unemployment and the increasing demands for relief from the conditions of poverty ushered in with the Great Depression challenged the viability of the newly adopted philosophy. If the church was unable to respond to the conditions produced by the depression it would surely not weather the impending disasters foretold in the Book of Revelations. The Church Welfare Program, originally called the Church Security Plan, was instituted in 1936 as both an ongoing system of relief and a general contingency for disaster preparedness.

Interestingly, the welfare program combines elements of both philosophies into a unique arrangement. This contradiction can be seen in the official goals of the program as summarized by one of the LDS Presidents.

Our primary purpose in organizing the Church Security Plan was to set up a system under which the curse of idleness would be done away with, the evils of a dole abolished, and independence, industry, thrift and self-respect be once more established amongst our people. The aim of the Church is to help the people to help themselves. Work is to be re-enthroned as the ruling principle of the lives of our Church membership.

Mormons insist that they look after their own, for it is presumed that a "religion which has not the power to save people temporally and make them prosperous and happy here, cannot be depended upon to save them spiritually". All members are encouraged to contribute to and draw from the church welfare program. They are strongly urged to stay off the "public dole" for this surely signifies spiritual degeneration.
The welfare program, more accurately called the workfare program, has several facets. As with all Mormon programs, the strength of this program depends upon the active participation of individuals and families within the context of the larger church structure.

Each stake has a particular welfare project. Some stakes have farms, some orchards, others raise cattle, some have canneries or factories, and so on. All welfare project labor is donated without remuneration by local members. Stake welfare projects produce roughly ninety percent of all welfare needs including such diverse items as soap, blankets, dairy products, clothing, and shoe polish. The quota of goods produced by the stake welfare projects are gathered and transported to the central clearing house on Welfare Square in Salt Lake City and redistributed in proportion to the more than eighty Bishop's Storehouses located in various LDS centers.

Every ward also supports a welfare program. The fast offerings donated on fast Sunday are used exclusively for welfare purposes. The monies are collected from ward members and spent locally to meet the needs of indigent ward members. Surplus money, from the more affluent wards in particular, is passed on to the stake, and, ultimately, the general fund, for distribution at regional levels as required.

Every Mormon has the right and duty to contribute to the welfare program. Bishops have the right and authority to decide who shall receive relief from the welfare program. In lieu of this, bishops are assisted by the routine organizational machinery of ward government. Home teachers and visiting teachers identify and report the needs of members to the bishop on a monthly basis. The bishop then conducts a personal interview with members to verify their need, determine their financial status, and explore the possibility of aid from family and kin resources. Determination of the appropriate source of aid always begins with individual resources and extends outward to family, kin, ward quorums, and, finally, church resources. When needs cannot be adequately met within the ward parameters, the bishop signs a special order approving release of materials from the Bishop's Storehouse. Additionally, the bishop discusses how the recipient will reimburse his/her benefactors: provide voluntary labor for a stake or ward project, offer help to another ward family in need, contribute work on the ward building, be active in church quorums, be more active in church attendance, stay home with the family and be productive and responsible at home, and finally, stop breaking the rules and commandments of the church.

If the underlying problem is unemployment or physical disability, priesthood quorums are enlisted to place members in the private sector. If this fails, the church at large has several investments that employ large numbers of workers in welfare-related projects that recycle old goods, and transport, process, distribute and store products from the various stake projects.
The church encourages members to be self-sufficient and maintain economic independence, even in times of adversity, through a home storage program. Mormon homes are expected to have in storage at least one year's supply of food and water, clothing, fuel and first-aid supplies.

Summary

Most of Madison County's relatively small population lives on the valley floor in a concentrated area that forms a corridor running through the westerly one-third section of the county. Life opportunities in the valley are shaped largely by an agriculturally based economy and a church sponsored junior college. For most, Mormonism provides the context, or in Peter Berger's terms, a canopy, for a meaningful life: Mormons share a common identity, a common theology, a common history, common institutions, common activities and a common tradition. As Arrington and Bitton have correctly observed, "They have goals and objectives on a local, manageable scale. They have a sense of being involved in something larger than themselves. They see themselves as moving toward eternal goals, but with the assistance of the church programs and specific personal and family objectives as guideposts along the way". Most importantly, they have an enormous reserve of resources, both human and material, and a very efficient organizational framework to mobilize in times of emergency.

Not all who live in the valley are Mormons, not all Mormons are active, and not all active Mormons measure up successfully to the expectations of the church. But none can escape the pervasive influence of the Mormon Church, for its organization affects the very rhythm and flow of social life. Its ecclesiastic value orientation filters into the institutions of the larger community as Mormons take up their work-a-day life in Civic, commercial, medical, educational, legal and social service sectors of the community.

Non-Mormons in the valley occupy a position in community life which is best described as a minority position in the sociological sense. In response to the pressures imposed by Mormonism, accommodation takes various forms. Some move on to more congenial areas; some remain in relative harmony with their immediate family, friends and neighbors, with some family member eventually marrying into the LDS faith; and some remain, partially isolated, with a rugged sense of independence and resolve. Not surprisingly, non-Mormons, as the choice of this term signifies, derive their social identity in large measure in opposition to the prevailing Mormon ethic. Lines of distinction are typically drawn by reference to religious doctrine, examples of hypocrisy and acts of discrimination.

On June 4, 1976, the reservoir behind the newly constructed Teton Dam was filling. In fact, it was filling far too rapidly. The news
media announced that on the following day, Saturday, the spillway gate at the dam would be opened and some increase in the water level of the Teton River and possibly some flooding in the lowlands downstream might be expected. Except for construction crews who worked on the dam, few had ever seriously considered that the dam might not be safe and no one anticipated that it would collapse on June 5th. We turn now to the events of that day.
NOTES TO CHAPTER 3

1. This particular quotation is drawn from the editorial comments of a locally published collection of personal reflections gathered from victims of the Teton Dam disaster. Janet Thomas, Bernice Mccowin, Mary Tingey and Margaret Thomas (Eds.), That Day In June: Reflections On The Teton Dam Disaster, Rexburg, Idaho: Ricks College Press, 1977, p. v.


3. This map and all maps used in the study, unless stated otherwise, are copies of maps drawn by Forsgren, Perkins and Associates, P. A., Rexburg, Idaho.

4. This table is prepared from data published in Braman et al., Ibid, p. 40.

5. Unless otherwise stated, all demographic data is drawn from the U. S. Census, 1970.

6. A comprehensive history of Ricks College from its beginnings in 1888 as an elementary school can be found in Clements and Forbush, op. cit., Chapter 6, prepared by Norman Ricks.


8. 95 percent is the estimate typically given by local church and civic officials. My own estimate suggests that this is a conservative figure.

9. It is estimated that approximately 300 persons (slightly less than 2 percent of the population) express affiliation with non-Mormon denominations. Non-LDS churches have so few members that they serve a multi-county area. The largest church, Community Presbyterian Church, has 70 registered members and the involvement of a total of 100 families in varying degrees of activity. A small splinter of this larger group involves no more than 3 or 4
families of about 11 persons. Although Rexburg has a Roman Catholic church, its congregation is described as a mission of the St. Anthony parish. Prior to the disaster, there were 17 Catholic families, about half of which had temporary residence because they were employed on the construction of the dam. There are probably no more than 25 persons of this faith in total. The Southern Baptist Church moved from Rexburg to St. Anthony in 1966 and there are fewer than 10 persons in Madison County who have an affiliation with this church. A small Independent Baptist Church whose membership meets in a trailer began less than a year before the flood. It consists of three regular families and perhaps eight others with a total of no more than 22 persons. The Jehovah Witness congregation involves at least one person from about eight households at the most. The Lutheran membership was strong enough to support a church near Sugar City at one time, but prior to the flood their small membership had already been absorbed by other churches.


11. At the turn of the century more than 150 Japanese had settled in the area, finding work on the railroads and, later, in the sugar beet factory. This factory has since closed and about eight Japanese-American families remain.

12. It is not entirely clear how many Mexican-Americans live in Madison County. They tend to be poor, unsuccessful in acquiring employment locally, mobile, and largely invisible. There are suspicions that illegal aliens of Mexican citizenship work as migrant labor during the summer season, although they are not visible.

13. There is not a visible and stable population of North-American Indians. Most live on a reservation, Fort Hall, near Idaho Falls. A special educational program of the Mormon Church, a program for Lamanites as North American Indians are called, means that some North American Indian children are temporary residents in the guest home of a Mormon family.


15. In 1977, the recorded birth rate (31.66 births per thousand) of Mormons was more than twice as high as the birth rate for the nation at large. Arrington and Bitton, op. cit., p. 295.

16. Between 1964 and 1969 the number of farms had decreased from 691 to 641 and the number of acres in farm use had decreased from
183,686 to 170,000.

17. It is not uncommon for Mormon officials to assert that there is no stratification among Mormons. The unequal distribution of wealth and income documented in this chapter does not support this claim.

18. Between 1970 and 1976 the percentage of the labor force which was female had increased from 22.9 percent to 33 percent.


21. In addition to The Book of Mormon, the revelations of Joseph Smith recorded in Doctrine and Covenants and Pearl of Great Price are also treated as holy scripture.

22. The original name of the church, The Church of Christ, was changed to The Church of Jesus Christ of Latter-day Saints in 1838. Mormons refer to themselves in various ways. The nickname Mormon derives from The Book of Mormon. Saints, LDS, or Latter-day Saints are also used. All forms appear interchangeably in this study.

23. Kephart, op. cit., p. 239.

24. The following discussion refers continually to the ecclesiastical structure presented in diagrammatic form in the text.

25. The vote of common consent represents the unanimous acceptance of a member into the position and it serves as a pledge on behalf of the congregation to cooperate and sustain the position. Since members are "called" to a position by those who have the authority and power to know God's will, there is little room for dispute about the appointment.


30. It should be clear that the priesthood is an all male organization. Ideally, every home should have a priest to preside over the family in all spiritual and temporal affairs. The president of the Relief Society (a female organization) functions like the mother of the ward and thus, the charge of the relief society and all mothers concerns compassionate work.

31. The active membership of all church leaders in a ward, irrespective of their duties, means that the leadership does not become structurally or experientially removed from the concerns of ward life.

32. As the membership of the LDS church has expanded the regional structure has also become more elaborate than indicated, but a fully detailed account of this middle level of organization is not necessary for the purpose of this study.

33. This is not to imply that there are not inactive Mormons or defectors. There are and these are a serious concern to the church. The important point is that the expectations and ideals of the church strongly encourage full participation.


35. Religious instruction and social activities for family home evening are standardized by the General Authorities. Each year every family receives a manual with lessons for the weeks of the following year. This is also true for all other quorum and auxiliary meetings and Sunday school.


37. The Word of Wisdom, in Mormon vocabulary, refers to a set of rules concerning food and especially the prohibition against tobacco, alcohol and hot drinks. See *Doctrine and Covenants*, section 89.

38. Young worthy men about the age of 19 or 20, if their parents are financially able to support them, are urged to spend two years in the field doing missionary work. If unmarried, women are allowed, but not strongly encouraged, to participate in the missionary program. Everyone is encouraged to share their testimony with others: Mormons and gentiles (non-Mormons), family and strangers. The ward meeting on fast Sunday institutionalizes the testimonial as part of the regular service although testimonials are not limited to this time or place.
39. Polygamy is commonly thought of as the distinguishing feature of the Mormon family, although this is incorrect. Even when polygamy was officially sanctioned by the church, fewer than 3 percent of the population at large practiced plural marriage. Seemingly, the church leadership and affluent males were blessed with plural wives. At any rate, a proscription against polygamy was received in a revelation, referred to as the Manifesto, to President Wilford Woodruff in 1890. Since that time the church does not condone or teach polygamy for this life on earth.

40. As noted earlier, this refers to the Word of Wisdom.

41. Arrington and Bitton, op. cit., see especially chapters 6, 9, and 13.

42. The implications of the relationship between the ecclesiastical structure, the welfare program and disaster preparedness has been outlined by Patrick J. Gurney, "The Therapeutic Community Revisited; Some Suggested Modifications and Their Implications", Disaster Research Center, The Ohio State University, Preliminary Paper No. 39, 1977.

43. Arrington and Bitton, op. cit., p. 274.

44. Helping Others To Help Themselves, p. 2.

45. Welfare Square consists of a warehouse, administration building, heating plant, milk evaporating plant, modern cannery, sewing center, shoemaking shop, store, root cellar and a grain elevator which stores 318,000 bushels of wheat at capacity.

46. The closest Bishop's Storehouse to Rexburg is within twenty miles in the small town of Ucon.


On Saturday, June 5, 1976, the water level behind the dam was still about three feet below the spillway gate, so the scheduled opening of the spillway did not occur. Instead, the dam became the focus of a series of unscheduled events that ended in disaster. Residents downstream, particularly along the Teton River, had experienced flooding in the past, but the type of flood that resulted from the collapse of the dam was totally unexpected. In fact, ironically, the dam was constructed primarily to control flooding.

This chapter deals with the Teton Dam break, concentrating primarily on the events of June 5, 1976. The report begins with a brief description and history of the dam as a man-made structure. A chronological account of the disaster as a technological and social phenomenon follows. The discussion then considers the scope and magnitude of the disaster by examining the extent of damage caused by the flood waters. Finally, the chapter concludes with a discussion of the early efforts of local officials in attempting to formulate and estimate the human cost of the Teton tragedy.

**History of The Teton Dam**

Teton Dam and its reservoir were principal features of the Teton Basin Project, a multi-purpose project that was designed and operated by the Bureau of Reclamation (BOR), U.S. Department of the Interior. The dam, situated three miles northeast of Newdale on the Teton River, had cost about 66 million dollars. Teton Dam was an earth-fill structure 305 feet high and 3,000 feet long. At the crest it had a depth of 35 feet and at the base, 1,000 feet. 80 billion gallons of water filled the 17 mile-long reservoir stretching upstream on the river.

Investigations of site possibilities began as early as 1904 and surveys had continued at various times thereafter until Congress finally authorized construction of the proposed structure on September 7, 1964, with the signing of Public Law 88-583. Funds for the water
resource project were appropriated for fiscal year 1967. A construction contract was awarded on December 13, 1971, and construction commenced the following year. The embankment was topped out on November 26, 1975. Filling of the reservoir, begun on October 3, 1975, was expected to take two years. Just eight months later, with the reservoir more than 90 percent full, the Teton Dam collapsed.

In its nearly 70 year history, there was no public hint of safety hazard, of inadequate site selection, or of incompetent design. In fact, the construction of the dam enjoyed broad public support due to the anticipated benefits of flood control, water irrigation, power generation, and recreational development. Not until after construction began in 1972 was there any public opposition voiced and even this did not hint at a safety hazard. Opposition was framed primarily in terms of environmental loss and economic feasibility.

Although the public was ignorant, engineers might have been forewarned of the inevitable failure of the Teton Dam. During the period of construction, grouting was required to seal leaks in the porous volcanic rock in amounts that far exceeded what was anticipated by design. Also, reports from a team of geologists who were conducting a geological mapping of the Snake River Valley in December of 1972 indicated that the geological properties of the dam site would not support the proposed structure. For whatever reasons—technical, bureaucratic, or otherwise—engineers, like the public at large, were unconcerned with the safety of the dam.

Two days before the dam collapsed, construction crews observed three small leaks downstream from the toe of the dam along the right abutment. These discoveries were seemingly not cause for concern. Leaks spurtng clear running water, as these were, were seen by dam officials as routine and expectable occurrences during the fill-stage of an earthen structure.

Chronology of Disaster

June 5, 1976, was a beautiful day with sunshine and a clear blue sky overhead—not the kind of day that signals disaster. People downstream from the dam were going about their routine Saturday morning business cleaning house, canning, shopping, making repairs, gardening, working the fields, attending meetings and so on.

8:00 a.m.

At the dam site between 7:00 and 8:00 a.m. construction crews had located two more leaks. One of these was located about 132 feet below the crest of the dam at a point where the right abutment joined the embankment and the other was slightly downstream from the toe of the dam, but also near the right abutment. These leaks were somewhat
different than the others. The water spurting out was turbid, and turbid seepage, to site personnel, signified a problem. Engineers were notified and construction crews began working first, to fill the leaks and later, to excavate a diversion channel to prevent further erosion.

10:15 a.m.

The final and fatal leak appeared in the dam embankment about 15 feet from the right abutment and 130 feet below the crest of the dam. Water was flowing through this leak at such a rapid rate that the force of the water was digging a crater on the downstream slope of the dam until, fifteen minutes later, it had expanded to about 25 feet in diameter.

10:40 a.m.

Four dozers began pushing fill material into the enlarging hole.

10:43 a.m.

The first telephone calls were placed to the sheriffs of Madison and Fremont Counties. In Madison County the message, "there's some trouble with leaks up at the dam", was relayed to both the chairman of county commissioners and the owner of the local radio station. Although doubtful that the problem warranted any action, the commissioner nonetheless drove to the site for a first-hand view of the situation.

The owner of the radio station reacted in a similar manner. At about 10:48 he announced very casually that he was driving to the dam "to check on a reported leak". At a later point, some of the listening audience would remember having heard this message, but, at the time, those who heard either didn't notice or didn't take it seriously as the following quip from a listener indicates. "Tell 'em to stick their finger in the dike."

11:00 a.m.

A whirlpool developed opposite the crater on the reservoir side of the dam. Two dozers moved top-side and started to push sand, gravel and rock toward the whirlpool. About 11:20 the engineer in charge realized this effort was futile and ordered the crew off the top of the dam. The commissioner, in the meantime, had seen enough to be worried. He jumped into his truck and raced south to organize operations from Rexburg.

11:30 a.m.

On the downstream side of the dam the dozer had gotten stuck in the hole and a second dozer moved to the location to pull the other
out. Suddenly, the operators jumped to safety as both machines dis–
appeared into the hole at about 11:30. Sheriffs of both Fremont and
Madison Counties then received their second message. The leaks are
bad. Start evacuating downstream people. No one had yet grasped the
magnitude or immediacy of the unfolding event. But in Fremont
County, officials had calculated that residents of Newdale, Teton,
and Wilford, especially those near the river, were in greatest danger
of flooding. State and county police were organizing to tell resi-
dents that there was a leak in the dam and since there was a possi-
bility of flooding, they should move to higher ground.

In the meantime, the radio announcer was making his own obser–
vations at the dam site and had begun to realize that the "problem"
was more than just a leak. He recalls:

From that point on (shortly after the dozers disap–
ppeared), I began telling people that we were having a
difficult problem with the dam. There was definitely more
than a leak. The dam is slowly beginning to crumble, it
would appear! There is a lot of water coming through and
there is going to be some problems downstream!

11:57 a.m.

As I was talking (he continues), suddenly the whole
down-stream face of that north side of the dam seemed to
crumble. A huge gaping hole broke up and water, mud, and
dust just spurted out. The volume was suddenly so tremen–
dous and immediately I knew, everyone standing there knew,
a real disaster was in the making. I began broadcasting that
continually from that point on. "People downstream, evacuate
quickly! Hurry! Hurry!

The water, mud and debris which burst through the opening as
the right side of the dam collapsed had begun its path through the
five-mile canyon on its way to the community of Wilford, at the mouth
of the canyon, below. The torrent, released at 11:57 a.m., would not
cease until the reservoir behind lay empty six or seven hours later.
For the communities below, seventy-two hours would pass before the
flood waters had finally reached their destination at American Falls
Reservoir some 85 miles south. (See Figure 9.)

12:00 p.m.

About 20 minutes after the dam collapsed, a flood wall estimated
between 30 and 70 feet in height exploded out of the mouth of the
canyon onto the plain. When the water hit the plain, the lead edge
flattened slightly to an estimated 25 or 30 feet and spread out about
six to eight feet in width. Travelling at roughly 10 to 15 miles
Figure 9: Teton Flood Path, June 5, 1976
per hour, the water swiftly inundated the three by six mile area of 154 homes and farms known as Wilford.

Those who had their radios on were hearing versions of the following repeated over and over until the station lost power at about 2:30 p.m.

People downstream, people in the way of these floodwaters, there is going to be a tremendous flood! The volume of water coming through will be tremendous! The people downstream should evacuate quickly! The water is coming!

This is no joke. The Teton Dam is gone.

People downstream, get out quickly. Hurry! Hurry!

Don't stop to gather your things. Get out. Get out.

Hurry! The Teton Dam broke. This is no joke.

Local people view the timing of the failure as a blessing, for many were either returning or already home for lunch. At most, residents of Fremont County had more than 45 minutes to learn that the dam had collapsed. Some learned of approaching danger by the door-to-door warnings initiated by state, county and local police; others had their radios on; others heard from a passing neighbor or visiting family member; some received telephone calls and made others; and still others, especially those in the fields, noticed an unusually large volume of road and air traffic and consequently, became vigilant of environmental cues. For many, the first sign of disaster came with the curtain of dust that was thrown up in front of the moving wall of water. Some had no warning at all.

Expectations of both officials and the public at large were formed by conventional ideas of flooding. Prior experience had taught that floods result when riverbanks overflow. With a conventional idea of flooding in mind, many kept a watchful eye on the river as they attempted to quickly locate family members, save valuable items, or take measures to protect machinery and farm animals. At the last minute, they were taken by surprise. Many narrowly escaped with water splashing at the rear wheels of a truck. Several families ended up as a group of 30 stranded on the highest piece of ground in the vicinity: their escape routes had been cut off. One young man found safety on the roof of a house. Five, unable to escape, were drowned.

Few were fishing on the Teton River that morning, but those who were, too isolated to be warned by traditional means. A small fishing party of five observed rapid changes in river conditions, heard a gunshot fired from the canyon wall and scurried up the banks of the river in time to see the wall of water leave the canyon. Two
young fishermen had no warning at all. One drowned.\textsuperscript{10} His friend was rescued later that afternoon from the top of a tree.\textsuperscript{11}

This was not a conventional flood. The wall of water that razed Wilford was more like a tidal wave than a flood. The destructive power that has been unleashed caused those who witnessed it to feel that they were actually living through a nightmare.\textsuperscript{12} They remember, with a sense of awe and disbelief still evident, having seen bridges tossed into the air like toys, homes exploding on impact, trees and utility poles uprooted and floated away like match sticks, whole groves of trees sheared in an instant, homes severed from their foundation and carried off on the crest, herds of cattle swallowed up into the churning water, and railroad ties twisted like pretzels and thrown aside.

1:00 p.m.

The flood path totally ignored the topography of the land. During this early phase, the force of 260,000 acre feet of water dammed up in the reservoir drove the flood waters out of the canyon due west. Newdale, situated on the ridge of the canyon wall, was untouched. St. Anthony and Teton, except for a few properties on the north fringe, also escaped damage. Sugar City, like Wilford, was located on a westerly path and Sugar City, like Wilford, received a head-on attack.

When the water approached the edge of Sugar City about one hour after the dam broke, the town was deserted except for perhaps seven persons. Evacuation procedures had commenced in Madison County shortly after the county commissioner returned from the dam site.\textsuperscript{13} Road blocks warned northbound traffic;\textsuperscript{14} police and ambulance vehicles patrolled county roads and city streets shouting, "The dam broke. Go to high ground. Turn on the radio."; sirens on the firehalls of Sugar City and Rexburg blared continuously; neighbors warned neighbors; and priesthood leaders concentrated on the isolated and infirm. The convergence of multiple warnings and the activity which was there-by generated created an atmosphere of excitement.

Although there was a general sense of excitement, few were cognizant of the devastation above. It was the rare person who had envisioned the destructive potential of such a flood. Most doubted the necessity of a whole-scale evacuation, but Mormons have a history of obedience to authority and private scepticism gave way to social pressure. Most did as they were told and left their homes - after accounting for family members, that is. Few saw any need to protect their property or take survival equipment. They would be back home shortly. Some did take additional time, in spite of appeals to the contrary, to protect their property from flood damage: garage doors were closed, valuables were set on high places, food storage was removed from the basement, windows were shut and doors were locked. In retrospect, such measures would seem foolish.
Houses, boulders, fertilizer tanks, fences, dead cattle, trees and debris of every imaginable description, picked up in Fremont County, rode the 10 to 15 foot wave into Sugar City. The combined force of the water and debris left this small town totally devastated. Many homes remained on their foundations, but this was deceptive for, in large measure, they remained empty shells which would be condemned and demolished later. The contents of homes were scattered over the countryside. By four o'clock that afternoon, Sugar City would still be under 12 feet of chocolate-colored water.

1:20 p.m.

Some 260 miles away in the state capital of Boise, the Governor declared the valley an extreme state of emergency. Shortly after, he prepared to board a plane to make a personal assessment of the situation. Outside media began picking up the story from the wire and broadcasting it to the nation.

2:00 p.m.

As the flood waters approached the northeast side of Rexburg, the lead edge was still an estimated six to eight feet moving approximately eight to ten miles per hour. The current of water flowing through the city created secondary disasters in its wake. Three fires started when the bulk plants of two oil companies exploded and thousands of floating missiles were added to the debris when the lumber mill was hit. The water-driven logs from the mill functioned like projectiles and battering rams as they collided into two subdivisions and a trailer court in the northwest section of the city.

Thousands who had gathered near Ricks College watched from "the hill of refuge." In the words of one observer:

The noise was incredible. The sound was like a large rushing river as the waters came through. There were squeaks and squeals from the homes as nails pulled loose, rushing sounds from the waters themselves and debris cracking, breaking, popping off against any solid objects. Mixed in were sounds of animals as they were swimming through the flood waters and explosions in the background when gasoline tanks and other kinds of flammable materials caught on fire. There was not a sound in town. There were no horns—people just stood by silently as they watched flood waters go through town.

Reactions were varied, but underneath the diversity was a general sense of disbelief and detachment. The atmosphere, reportedly, was marked by a unique combination of a carnival and a bad movie. "Disasters like this happen in other places to other people. Not here. Not us." "I just kept thinking, this can't really be happening." In the background, missing family members greeted and embraced in relief, relatives searched anxiously for those still missing, field glasses
were passed around for friends to have a closer look, cameras clicked, cars moved slowly through the streets lined with parked cars, infants cried, tears were shed and jokes were made. Mostly, people remember standing, watching and feeling helpless.

About five hours later the crest of the flood waters had passed through the city of Rexburg. The business center along Main Street and residential areas below the hill on the north, west, and southwest were under six to eight feet of water. Inside many of the homes and shops looked like giant eggbeaters had churned everything topsy-turvy.

4:30 p.m.

In the meantime, the lead edge had advanced onto the plains moving toward the river. As the flood waters left Sugar City and Rexburg, some of the force had been spent, the lead edge flattened, and the water slowed. In a sense, this represents the second phase in the Teton flood. The water turned southward and followed the normal drainage patterns of the terrain a little more closely. In the rural areas of Salem, Hibbard, and Burton the water behaved more capriciously. One home was lifted from its foundation and floated downstream while the neighbor's home, less than a few hundred yards away, stood barely touched. The soil of one farm was scraped down to the rockbed, another nearby had rich deposits from upstream, and another had only enough water to appear well irrigated.

At the southwest corner of Madison County, a third phase began. The lead edge split, forming two paths, one running around each side of the Menan Buttes. The north edge cut a channel around the Butte and carried flood water unexpectedly further west into the small town of Roberts in Jefferson County. The marshy lowlands of Roberts trapped stagnant water in a lake which remained for more than a week.

The Snake River below began to receive the spill-over which drained from the plains into its banks. From this point south the fourth and final phase occurred as the Teton flood took on a more conventional appearance.

Rising water levels in the Snake River threatened the city of Idaho Falls about 44 miles south of the dam, but sandbagging operations and diversion channels proved to be effective emergency measures. Additionally, control measures were aided by the creation of artificial dams which formed as debris from upstream obstructed passage under bridges. Downstream, the communities of Firth, Shelley, and Blackfoot experienced serious flood damage as the Snake River crested and overflowed its banks after midnight on Sunday. Seventy-two hours had passed after the Teton Dam broke before the flood was finally stemmed by the American Falls Reservoir.
9:00 p.m.

But the discussion has advanced too far downstream, for the parameters of this study have been drawn at Madison County. As the communities downstream from Madison County were preparing for impending disaster, Madison County had already experienced the full impact. By 9:00 p.m. on Saturday, June 5th, the flood waters had begun to recede. All over the upper valley, residents wondered about their losses and their future. Residents and officials were returning to the flood path (figure 10 diagrams the flood path for Fremont and Madison Counties alone) to estimate the extent of the damages. Table 7 itemizes the flood damages by selective categories for both Fremont and Madison County.

Destruction In Its Path

In Fremont County, the rural community of Wilford, which takes its name from the LDS ward chapel, was almost totally devastated. Of the 154 homes in Wilford only 20 remained on their foundations. Although the ward chapel, the center of social activity for the predominantly Mormon population of 480 persons, was still standing, damage to the structure was so extensive that it was burned to the ground a few days later. Crops, trees, roads and the natural habitat along the river had been razed. In fact, even the course of the river was altered when the force of the water cut a new channel. Most importantly, the top soil had been washed away and in many areas erosion extended right down to bedrock. In some sections, 60 foot deep holes and gravel pits stood where fertile farmland had been only hours earlier.

As residents returned later that day they were shocked by the totality of destruction. In the words of one resident:

We stayed up there (St. Anthony) to about 4 o'clock and gee, we just couldn't stand it any longer. And we came back. All the roads were washed away. There was, oh, probably two or three feet of water yet, you know. We came as far as we could but you looked over and there was nothing. I mean, absolutely nothing. Course we had a few trees near our place but as far as buildings, lights or lightpoles, fence posts, there was nothing. It looked like a dried up river bed.

Next morning we got boots and we walked in here. And, oh, you just can't believe it. Our basement and our foundation stayed but I don't think there was any others right in the immediate area. Except, let's see, one neighbor's, his was partially there. But, you couldn't even tell where the houses had been. The others, where they are, I don't know.
Figure 10: Teton Flood Path, Madison and Fremont Counties
<table>
<thead>
<tr>
<th>SELECTED CATEGORIES OF LOSS</th>
<th>MADISON COUNTY</th>
<th>FREMONT COUNTY</th>
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<tbody>
<tr>
<td></td>
<td>PERSONAL</td>
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<td>DEATH (total)</td>
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<td></td>
<td>Drowning</td>
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<td>Gun-shot wound</td>
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<td>Heart Failure</td>
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<tr>
<td></td>
<td>Serious</td>
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<td></td>
<td>UNEMPLOYMENT (non-agricultural)</td>
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<tr>
<td></td>
<td>Total Unemployed</td>
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<tr>
<td></td>
<td>Number due to flood alone</td>
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<td>Unemployment rate (%)</td>
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<td>PROPERTY - NON-AGRICULTURAL</td>
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<td>RESIDENTIAL (total)</td>
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<td></td>
<td>Homes with minor damage</td>
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<td></td>
<td>Destroyed or damaged</td>
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<td></td>
<td>PROPERTY - AGRICULTURAL</td>
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<tr>
<td></td>
<td>FARM BUILDINGS</td>
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<td></td>
<td>Destroyed or damaged</td>
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<td>CROPS (acre)</td>
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<td></td>
<td>Potato</td>
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<td></td>
<td>Grain</td>
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<td></td>
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<td></td>
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<td></td>
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<td>LIVESTOCK (head)</td>
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<td>Horses</td>
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<td></td>
<td>CROPLAND (acre)</td>
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<tr>
<td></td>
<td>Non-reclaimable</td>
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<tr>
<td></td>
<td>Non-productive for one year</td>
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<tr>
<td></td>
<td>More than 35% productivity loss</td>
<td>16,500</td>
</tr>
<tr>
<td></td>
<td>No permanent damage</td>
<td>24,700</td>
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</table>
I'd painted our foundation green. That's how we knew it was our place. But when you were walking in, you couldn't tell one place from another. The water just washed everything, especially the fields that had just been planted — like hay and pasture — you know.

It was a weird feeling. I can tell you that. You just couldn't believe. You can't comprehend something like that when it just takes, well, we had a brick house, and it seemed like it just exploded. It was gone.

And the ground looked so bad. It looked just like a dried up river bed. Well, if you had never known people were here, you'd think no one had ever lived here before. It was just, well, I don't know. You just couldn't believe it.

But there was a lot of trash. There was so many logs up there behind the dam. And there was a lot of huge logs and rocks. And a lot of trash.

The mud was so bad. Our basement — it was clear full of mud. Part of the sub floor stayed on, the part where we kept our freezer. When the water came we figure it hit that basement stairway and just blew that freezer right out. I had a couple of bedrooms down there in the basement. Well, the beds just exploded. Oh, furniture and bedding and I mean, kid's clothes and everything. It was a mess, all down there mixed up in the mud."

Downstream, a significant proportion of the sixes of stakes had been inundated with water. As indicated on figure 10, the flood path in Madison County encompassed a large portion of the densely populated corridor which runs through the westerly one-third of the county. Although damages were extensive in Madison County, no single community in the flood path was as completely affected as the community of Wilford.

The three college stakes located on the hill in Rexburg were outside the flood path. Six of nine wards (Salem, Sugar City first and second, Hibbard, and Rexburg first and eighth) and roughly 70 percent of the Rexburg North Stake properties along the fringes of Teton and Plano the other three wards were outside the flood area. Roughly 85 percent of the population of Rexburg Stake and five (second, third, fifth, eleventh and twelfth) wards were in the flood path. The remaining two wards (Rexburg seventh and ninth) were partially flooded. Of the five wards in Rexburg East Stake, only the west section of the fourth ward (below the hill) was flooded. Since the flood waters cut through the city of Rexburg just below the hill and moved southwest onto the plain, the wards east on the hill (sixth and tenth) and southeast along the Snake River (Archer and Lyman) were unaffected. In total, about 60 percent of the non-student population of the sixes of stakes resided directly in the flood path.
Almost all of the population was affected in some way. Services to the entire county were disrupted. Two thousand persons in the labor force were reported as unemployed immediately after the flood. The commercial, financial, governmental and light industrial sectors located around or in Rexburg along Highway 191 and 20 were severely damaged. Bridges, dikes, irrigation canals, railroad tracks, utility lines, telephone cables and more than 700 miles of highway and county road were washed out. 420,000 cubic yards of debris obstructed activity and movement and the carcasses of more than 6,000 dead animals threatened to become a public health problem.

Second to Wilford, Sugar City was the most severely damaged community in the flood path. This community lost 75 percent of the city water system, 30 percent of the sewage system, all municipal and commercial facilities, and 98 percent of the housing inventory. Both schools and the ward chapel were damaged. Many of the homes remained on their foundation, but this was deceptive, for after they had been "mudded out" and cleaned up, most were condemned and demolished. Of the 300 homes in Sugar City, about six were salvaged.

One resident, whose home was restored after extensive repair, recalls the kind of damage that resulted from the force of the water in Sugar City.

Sunday morning we walked in. Drove from Ririe, up on the dry farms, down as far as Sugar City cemetery and walked in. We were in water, oh, up to our waist sometimes. There was no roads and we'd fall over the rocks and stuff. It was a hard trip in here. And we could see all the houses gone and just tons of machines and cars and things all mangled up against the station and then, when we got over to this side we saw our house still standing. We locked the house when we left 'cause we thought we'd be back in a couple of hours. We didn't have a key so we had to break a window to get in. My son-in-law said we better take off our shoes so we don't track up the carpet. Ha!

We opened the door and it was just heartbreaking. Two floors were completely caved in and the one wall where the floor caved in was just hanging. Water had got up on the north wall to about, oh, up to the eaves.

Funny part of it was we didn't have a window broke, well, until we broke one to get in. The door was locked and when we got in we found a big long lawn rake. And it was leaning up against the living room wall. We found some dead fish on the cupboard and roots of shrubs and things like that all over the house. And we don't know how they ever got in the house because the foundation wasn't moved at all. There wasn't a crack in the foundation or that. But those things were all in there and that rake, leaning up against the wall. The smell. Ugh!
Well, everyone told us that we were silly to ever try to fix it back. We just couldn't leave it.

Residential damage in the city of Rexburg and in the unincorporated areas of Madison County was difficult to assess, initially. Damage to homes varied widely from almost negligible to total loss. In the county as a whole, 2,798 homes were damaged. Of these, about one out of four homes received only minimal damage or, at least, damage that was repairable; 493 were totally destroyed; and the remaining 1,383 received major damage with a large percentage of these beyond repair. Flood damages categorized in this way leave out the human aspect of such losses. The vignettes below are included to convey some sense of what this inventory of residential loss meant. The accounts selected are fairly typical of the variety that was experienced by the residents of Madison County as they returned to the flood path to make their own assessments.

Account 1

It was almost dusk and the water had pretty well gone down and we were tryin' to make it out to our house to see what happened. Stuff had ripped out the culverts and 88 was closed so we couldn't make it. So, we were just drivin' around and I'll never forget that feeling. I can't explain it, it's so eerie, you know. There was still water but the four-wheel drive sits up high. There were fires and it was so bleak. Helicopters were everywhere and you could hear the cows bellin'.

We didn't hardly sleep at all and at the crack of dawn we got up and headed out toward our house again. We came within a half a mile or so and then there were trees and stuff across the road. So, we walked. It was just awful.

We had this little white fence around the house, you know. And that was gone. We could see that all that was left of the garage was the cement pad. But the house, our house was still there. We just walked in the house and there was a foot of mud. Everything was like you'd taken a mixer and just whipped everything around. The couch was turned completely around. Stuff that was down in the basement was sittin' up on the front room floor. It'd just washed up the stairs and through the kitchen. It was weird.

Goll, we didn't know where to start. We didn't have a truck to start haulin' things off. We didn't even have our shovels. They were someplace with the garage.

I did get my wedding pictures. We took those back to a friends and I scrubbed 'em off. I still have them. They've got water spots on them, but you know, they're okay. We just went back into town."
Account 2

When we came back and we looked in the basement, it was still full of water and there was suckers swimmin' around — in our basement! Oh, geez, even snakes too.

And then me an' my daughter was walking' around on the street — it was so muddy you couldn't walk in the yard — past this big pile of logs and I caught hold of her hand and said, 'Somethin's lookin' at me,' She said, 'Oh, mother!' I looked in that bunch of logs and there stood this bull cow, just standin' up. The logs had come around her where she couldn't fall. She died. But she didn't feel it. So, we had ten big cows in our yard — in the yard, under the logs, under the house, up in the tree. Ten. That really was a lot of 'em.

We had so many logs. Just looked like a log truck had come and dumped 'em in our yard.

It was a lot of mess. And when ya got in there shovellin' it out, it was terrible. The stench!

Account 3

And as we turned onto our street, 'course we were looking for our house. What we saw we just couldn't believe. This was Sunday at about five o'clock. Everybody was out on our street in front of their garages and the driveways were full of things they'd brought out of their homes. We just arrived back from Utah and we stopped along the way. We were so glad to see them and they were so glad to see us.

A new home on the corner was completely ruined — it was all smashed in. And the second home, a brand new home that young folks had lived in for six months, it was gone. A third home on the east side of the street had been rammed with logs and it was askew on its foundation. Some of them didn't look like they'd been touched, from the outside at least.

The road was slimy mud about ten to twelve inches deep. There was mud on our driveway, a good ten inches deep.

Of course, when we drove in, we took our shoes off and walked in through the mud and opened the garage door. The Chrysler was sitting pretty good but the Volkswagon was sitting crossways with the back wheels up on the steps into the kitchen and the front end was into the side of the Chrysler. My husband had a ten gallon can of oil in the garage. (He always changed his own oil.) That oil had gone all over everything.

The water had come through the garage and into the back door of the house — into the kitchen, the utility room and the dining room. Mud everywhere. The carpet was covered with mud and there was about two inches in the utility room. The water ended right at the doorway into the front room —
it and the bedrooms on the main floor were dry. Well, we thought they were dry. They looked dry.

The water downstairs was still about four feet deep. We looked things over and my husband said, "Well, we can't do anything. Let's go back to the Falls and get a room and we'll just stay there tonight and come back tomorrow," And, oh, I didn't want to go. But, my husband had had three heart attacks and had learned to live with them, and, all of a sudden I realized, he had to get away.

Account 4

First thing I did was drive to the trailer court where my house was. The only thing there was my garden hose. It was still attached to the faucet underneath the house and it was all stretched out.

I had a lot of time right then and I walked. I thought I'd just walk in the pattern the water flowed and see if I could find it. And I ended up walking two miles out west. I found it. I had two motorcycles that were parked to the side of my trailer and I spent almost four weeks before I found them. They were only about a quarter of a mile from my trailer, layin' side by side, in a ditch. But they were totally mangled and there wasn't anything salvageable on 'em.

The trailer? Well, there was a couple of pieces of furniture, like, the mattresses on the beds was alright. I had a wooden frame for the bed and it floated so the mattresses wasn't dirty. I had some blankets too. They was okay. Funny enough, this deer head right here was hangin' on a hook like it is now — a teeny tiny hook. That thing travelled the full length and it didn't fall off. He was high and dry.

It was the funniest thing I ever seen because the wall where my kitchen was was gone. My oven was gone, dryer was gone, pantry was gone. But somethin' that fragile — I'm an avid hunter and that's pretty important to me, you know -- stayed on the wall. I just couldn't believe it. It was crazy.

Table 7 indicates that loss to the agricultural sector was considerable. More than 1,000 pieces of farm machinery, 9,730 head of livestock and 45,200 acres of crops were lost. Farmers and officials worried that crops which were undamaged directly by the flood would be burned up due to a shortage of irrigation water as a result of damage to the canal system. Reduction and permanent loss in crop productivity due to extensive soil erosion was a major concern for the serious implications this had both for the welfare of individual farmers and the economic base of the county as a whole.

Then, there are the intangible losses, the losses that do not lend themselves readily to inventory. Intangible losses include
Things like historical landmarks, the labor of a lifetime's work, family heirlooms, genealogical research, family Books of Remembrance, dreams and plans for the future, food storage, momentos saved from special occasions, baby pictures, wedding albums and community roots. In the words of one resident; "Everything we worked for all our lives washed down the valley. It was just as if we never existed."

Except along the lines of loss of life and injury to person, the destruction which followed in the wake of the Teton Dam break was extensive. In monetary terms, the earliest estimates for Fremont and Madison County were set at 71.2 million and 556 million dollars, respectively. It is not uncommon for early estimates of disaster loss to be overexaggerated and the Teton flood is no exception. Later surveys calculated the dollar loss at roughly two-fifths of the original. Whatever the precise figures may be, if indeed they are precisely calculable, and to the extent that disasters are measureable by inventories and monetary valuation, the Teton Dam break was a disaster of major proportions.

The Human Cost

Estimates of material losses are fairly straight-forward. Damages to buildings, cars and machines are directly observable and clearly visible, but damages in personal and social terms are more elusive. It seemed clear to most observers that the initial response of shock and disbelief was almost universal, but the question was does one "bounce back" after the shock subsides or does shock progress to "breakdown". There was no prior local disaster experience on which to base an answer, but there was a general feeling that, in social-psychological terms, the adverse effects of disaster extended beyond the space and time of the flood path itself. Just what the adverse effects are and how long they last was unknown.

Two organizational divisions, the LDS Church and the government, have a social responsibility for the social welfare of residents in the flood area, and both viewed this issue as a central concern falling within their domain. From the community perspective, at least from the point of view of the dominant group, public authorities of both state and federal agencies are outsiders. Nonetheless, insiders and outsiders shared a common concern. More important than the status of insider or outsider was the different perspective that each brought to bear on their assessment. Although the observations were similar, the significance attributed to the observations and the proposed remedies differed significantly.

There seemed to be general agreement that the initial shock and disbelief were followed by visible signs of emotional upset, worry, confusion, grief, a sense of loss, anxiety and depression. To some
degree the descriptive terminology differs, but only minimally. However, the interpretation and significance differ substantially.

LDS authorities viewed these signs of human suffering as normal, not desirable, but normal adaptations to the hardships imposed by disaster. The experience of July 5th seemed to provide a self-evident justification for being upset. The inability of families to provide for their own basic needs such as food and shelter seemed reasonable grounds for worry. Given the disruption to community and family routine, a certain amount of confusion was understandable. Given the extent of concrete and intangible losses, a sense of loss and grief seemed like an appropriate and realistic emotional response. The extent of destruction in economic and agricultural terms also seemed to provide reasonable grounds for anxiety and discouragement about the future. Essentially, these signs were viewed as an understandable, but temporary, situational adaptation.

Clearly, an enduring sense of despair, bitterness, idleness, neglect of family and church duties, irresponsibility, loss of faith, or anger would be both undesirable and unacceptable. In fact, such deviations in social conduct would signal spiritual degeneration. But such aberrations and long-term effects were not envisioned as necessary or probable.

The ecclesiastical structure of the Mormon Church provides a philosophy and organization that is immediately adaptable to the disaster context. Thus, the dam break was explainable both as a sign of the calamities prophesied in Revelations and as a test of the Saints' preparedness for these latter days. In the words of one president of the LDS Church,

The Lord used this community because of the high concentration of believers. He didn't cause it to happen, but it's part of the gearing up for the financial and other crises that are increasing all over the world.

Thus, the suffering and adversity could be explained within the larger spiritual context as preparation for the latter days, as a challenge of faith and commitment, and an opportunity which, if met successfully, would bring its own blessings and prosperity.

The solution to the suffering, like the interpretation, was found in the organization and philosophy of the LDS Church. Like all projects, spiritual and temporal, work, self-reliance, mutual self-help, priesthood counsel, family unity, active involvement, testimonials and obedience to the commandments of church doctrine were the ingredients to be emphasized. The disaster was no exception. The first public counsel given to the evacuees who gathered on
Ricks College on Sunday would be repeated many times.

Roll up your sleeves and get your homes and our communities cleaned up. Don't sit back and wait for the federal government to do it for you. Let's do it ourselves.

There seemed to be an automatic understanding that the medium to alleviate suffering and adversity was work and fellowship. The sooner the residents began the arduous task of rebuilding homes, farms, businesses and community, the sooner the situation would return to normalcy. Thus, the experience of rebuilding and the emotional adjustments to the hardship imposed by the flood would be restructured according to the same principles and rules that existed prior to the flood.

In contrast, public authorities interpreted the observed social-psychological phenomenon within a clinical or mental health perspective. The observed worry, anxiety, emotional upset, depression, confusion, grief and sense of loss were seen as the reflection of psychological damage imposed first, by the trauma of disaster itself and second, by the trauma of stressful living conditions. Essentially, these were signs of a deeper psychological trauma. Given the nature of the trauma, crises or mental health emergencies were expectable and predictable sequelae for at least a year unless appropriate therapeutic measures intervened.

Crises conveyed the idea that "someone had reached the point that emotionally they are in such distress that it is life-threatening or so severe that it demands intervention." These early observations, then, were a signal of impending mental health emergencies along the lines of suicide, acting out, social disability, and deep depression. One official outlined the essential features of trauma as follows.

We are dealing with acute depressions, anxieties, the inability of children to sleep at night, nightmares, and regressive behavior ... marital problems due to stress and financial difficulty ... increased instances of child abuse ... and ... a 300 percent increase in the use of drugs and alcohol.28

The implication is that unless aided by clinical measures, traumatized disaster victims adapt to the stress of disaster aftermath with conduct that is in the long-run maladaptive, personally damaging and socially offensive or, perhaps, socially harmful also.

There was some suspicion that disaster trauma would be denied or minimized within the dominant structure of LDS organization and,
moreover, that "deep depression" would be missed by an untrained eye. Public authorities viewed the psychological damage as serious enough to require large-scale social intervention organized according to a clinical understanding of human behavior. Essentially, this required a social network that was capable of "reaching out" and bringing crises counseling to the homes of disaster victims. The intervention must also be capable of linking up victims of disaster with the pre-existent network of social service agencies in order to meet the full range of human needs that might arise.

To LDS church leaders, this therapeutic intervention seemed unnecessary, duplicative, and competitive. The ecclesiastical structure, in their opinion, already provided an indigenous social network that "reaches out" into family homes and the church welfare program makes provisions for all temporal and spiritual needs. In addition, acceptance of public social service "handouts" tends to be seen as acceptance of the "dole", an undesirable condition which undermines self-sufficiency and self-respect.

The most important issue raised by the clinical perspective was the possibility of wide-scale mental health emergencies. If expected increases in crises along the order of alcohol and drug abuse, marital discord, child abuse, and deep depression were actually realized, the human cost of the Teton tragedy would be serious, indeed. In fact, these predictions seemed to imply that the social and moral fabric of the community had been extensively damaged by the flood.

Summary

The collapse of the Teton Dam was an unexpected man-made tragedy. With the exception of those who were immediately below the dam, most downstream residents had sufficient warning to provide for their personal safety. Undoubtedly, the warning accounts for the low death count. Destruction to public and private property was extensive, and the resulting damage caused major disruption to the normal routine of several communities and thousands of families. As attempts were made to assess the full impact of the dam break there were many questions and expectations about the ability or inability of residents to resume a normal existence and to rebuild their lives and communities in the aftermath of disaster. The remainder of this report deals specifically with the aftermath of disaster, the rebuilding effort and the features which gave order and meaning to the recovery experience.

2. Investigations reveal that the dam collapsed due to an interaction effect of geological conditions, site selection, inadequate design, management procedure and neglect of safety regulations. For technical descriptions refer to the reports issued in 1977 and listed in footnote 1 above.

3. At least one engineer resigned allegedly due to an assessment of safety hazard. Although he apparently gave information of this nature to environmental opposition groups, it was not made a matter of public debate. Several of the construction crew are noted to have voiced their lack of faith in the permanence of the dam, but this information, while known to a select group of acquaintances and pub friends, was not exposed for public review.

4. The history of the report from the pen of the three geologists to the desk of officials of the BOR would make an interesting study in the philosophy of science. Apparently, the report conveyed the alarm felt by the geologists. It was however, judged to be emotional and, therefore, unscientific. By the time the language had been laundered clean enough for "science", the urgency and seriousness of the findings had also been washed out. The report was eventually received but ignored. This, of course only represents a portion, but an interesting portion, of the problem, nonetheless.
5. There are many popular accounts of the events of this day which the interested reader may consult. See, for example, Tragedy: A Chronology of the Teton Dam Disaster, The Blackfoot News and The Standard Journal, Idaho, 1976; "Teton: Eyewitness to Disaster", Time, vol. 107, no. 26: p. 56, 1976; Bureau of Reclamation, Department of the Interior, "After Teton", Reclamation ERA, vol. 62, no. 3: 1-33, Washington, D.C.: U.S. Government Printing Office, 1976; Earl Selby and Miriam Selby, "The Day the Teton Dam Broke", Reader's Digest, 1977; Utah Power and Light Company, "Special Flood Issue", Circuit, Salt Lake City, Utah: Utah Power and Light Co., 1976; Van Varner, "The Teton Dam Break: A Time When Heroes Are Born", Guideposts, Nov., 1977. This account makes use of the popular literature in addition to the above listed investigative reports, newspaper documents, and open-ended interviews. The identification of exact times for various events is problematic since recording the hour is not generally seen as a priority at the time. However, given the various sources, the time frame given is felt to be a fairly close approximation.

6. The location of this leak was especially dangerous, for erosion at this point had the potential of placing the entire structure in jeopardy. What had not been realized was that the entire internal core of the dam was saturated with water. Any efforts to save the dam were already futile.

7. The exact wording of messages from their source is not available, for to the best of my knowledge, this was not recorded. However, if the wording of the message sent is not correct, the interpretation of the message received is generally as noted. There clearly was no urgency in the message sent from the dam. Officials at the dam site did not anticipate a failure. Messages were also relayed to the head office of the BOR on two occasions. The owner of the radio station in St. Anthony was notified and also present at the dam site.

8. The messages conveyed over the radio carried a note of urgency and, in a sense, this was fortunate. Many later regretted that there was no official or systematic calculation of the path and time dimension associated with the flood. It was generally felt that some areas had ample time to take measures to protect and save valuable property if they had specific information. In fact, it will be clear to the reader that there was no pre-disaster planning for such an event.

9. The rescue of this group was also suspenseful. A light airplane rescued the party in smaller groups of three, but the hill was about 40 acres in size and the wheels of the plane almost skidded into the flood on take-off.
10. All six drownings took place in Fremont County.

11. This is the one injury (a crushed chest) attributed directly to the impact of the flood.

12. In addition to site personnel and radio announcers, others were direct observers near the dam. A geologist and his family were standing on the look-out terrace at the dam. The series of pictures which this gentleman took from the look-out as the dam collapsed appeared in Time Magazine. Several persons were stranded on the St. Anthony over-pass near-by and a large crowd of evacuees from Newdale had gathered on the crest of the canyon immediately below the dam site. Unlike observers at Rexburg, below, those near the site had a sense of immediate and personal involvement in the event.

13. As the commissioner arrived back in Rexburg, other civil defense personnel were beginning to initiate action also. It was shortly after his arrival that knowledge of the collapse came through. One of the problems noted by officials concerns the difficulty in conveying the urgency of action. The commissioner recalls using some "un-Christian" terminology and, presumably, such words coming from the mouth of a bishop have the desired effect. From a small plane, the commissioner and civil defense director were able to survey the approaching flood path and radio decisions about areas to be evacuated. It is critical, I believe, that the major source of warning and organization in Madison County had the credibility attendant on the priesthood hierarchy. Upon reviewing all available sources, it would appear that less than one-half of one percent of the population of Madison County did not evacuate.

14. Residents of Wilford who were in the Rexburg area continued northbound through the roadblocks until the nature of the flood was discerned from aerial views. Afterward, all northbound traffic was stopped.

15. Later that evening the Governor requested that southeast Idaho be declared a federal disaster. On Sunday, President Ford declared four counties a federal disaster. (Jefferson County, the fifth county, was added later.)

16. Seemingly, there were so many small planes and helicopters overhead that flying was a dangerous undertaking. The convergence phenomenon is a frequently noted occurrence during disasters.

17. Many false reports - Newdale, Rexburg and Idaho Falls have just been wiped off the map - gave unnecessary concern to distant friends and relatives who waited anxiously for news about the situation.
18. The majority of evacuees congregated on the hill in Rexburg. This was the logical place, given the terrain, and college personnel had issued a news bulletin that they were preparing to receive evacuees. However, some went west to the buttes near the Snake River, north to St. Anthony or south to Idaho Falls. The route selected seems to have been determined by family ties and proximity. The diversity in escape patterns gave rise to later problems in accounting for survivors. At one point on Sunday, 250 persons were listed as missing and feared dead. In actuality, they were all safe, but interruption to communication lines delayed knowledge of their survival from reaching officials and family.

19. Roberts, Menan and Lewiston in Bingham County were all seriously damaged by flood water.

20. Minimal flood damage occurred in Bonneville County to properties near the river on the north end.

21. Lowland sections of Fort Hall Indian Reservation and farmland between Blackfoot and the American Falls Reservoir were also flooded.

22. The college dorms were almost empty because few students were enrolled for summer sessions. At the time, the college was preparing for the arrival of a special seminar held for out-of-town participants. Fortuitously, the college was prepared to receive flood victims, provide temporary housing and serve meals during the emergency period.

23. One gas station was repaired and all other commercial buildings were destroyed or demolished. There were few commercial buildings in Sugar City since this small community was basically a bedroom community of Rexburg.

24. For the flood as a whole, the highest estimate of damages that I am aware of is seven billion dollars. This was a figure that was suggested in the first five days and aired over radio. The highest estimate in print is two billion dollars. The most commonly published figure, 1.2 billion dollars, appeared in Boise Statesman, June 28, 1976. The most recent, and lowest, estimate of 400 million dollars appears in a survey published in a report noted earlier, Powel et al, op. cit, p.5. These estimates are all exclusive of the cost of the dam itself.

26. The State Department of Health and Welfare is the ultimate public authority for welfare. Locally, a private community mental health center has responsibility for the provision of mental health services but the general orientation to disaster consequences of center staff and administration is closer to the Church than the State.

27. LDS members are more likely to use phrases or terms like people are hurting, idle, discouraged or under pressure rather than anxious, dysfunctional, depressed or under stress, although all terms are used to some degree.

28. This particular statement appears in a newspaper, Boise Statesman, July 31, 1976. The details are not different from those in other sources, but because this newspaper receives wide publication, the contents of the article had a public impact. It was not uncommon to be told in an interview that "the state sent 50 psychiatrists in here and they thought we were all crazy I guess. Found 2,500 people mentally ill right after the flood." There was a state assessment done with the assistance of 40 personnel from the Department of Health and Welfare, one of whom was a psychiatrist, and they did report 2,500 contacted who were in need of mental health services immediately after the flood. The point, of course, is not that the details are a little inaccurate, but that the statement was viewed locally as an insult. Whatever mental health, crisis, or mental health emergency may mean to clinicians or social service professionals, it means mental illness or crazy to the lay public. In lay terms, the priesthood deals with temporal problems and professionals deal with mental illness as a medical problem.

29. This account may give the impression that the therapeutic orientation was immediately adaptable to the disaster context. This is incorrect. In actuality, the ideas about psychological damage caused by disaster were vague and had not been theoretically or programatically formulated in a precise statement. These ideas emerged in the disaster context under the influence of guidelines outlined in section 413 of Public Law 93-288 and with the advice of consultants from the Institute for the Studies of Destructive Behaviors and the Los Angeles Suicide Prevention Center. The Teton Dam break served this Institute as the first of two exploratory cases of disaster mental health services in preparation for a training manual for human service workers in the disaster context under contract number 278-75-0018 (SM) from the National Institute of Mental Health.

30. The inventory of losses shown in Table 7 indicates that a total of 11 deaths were attributed to the flood. Six, all in Fremont County, were due to drowning. Both gunshot wounds, one in each county, were suspected suicides. The one in Fremont County
is counted as a suicide and involves a previously treated woman diagnosed as psychotic. The other is counted as an accident. The remaining three deaths occurred during, or shortly after, evacuation and the stress of the evacuation process was viewed as a contributing factor to death.
One of the official definitions that emerged in the early aftermath of the flood, as noted in the preceding chapter, was informed by a clinical orientation. From this perspective, the recovery period is most accurately described as a vicious cycle which ultimately leads victims of disaster to experience mental health emergencies. Within the first two weeks, the advocates of this position had set forth some fairly specific predictions about the nature and extent of the emergencies which were likely to occur over the next year and possibly longer. This chapter begins with a discussion of the assessments which were made along these lines. The remainder of the chapter examines the expectations in light of the available evidence.

Expected Mental Health Emergencies

Expectations were based fundamentally on a presumption of psychological damage. In a sense, the assumption that disaster causes psychological trauma served the function of what some have termed an incorrigible proposition. This proposition provided the logical grounds for anticipating a wide range of behavioral deviations which are traditionally included under the mental illness rubric. When one begins with this assumption, the expectation for aberrant conduct provides its own warrant. The comments of three mental professionals provide some insight into the self-evident nature of the expectations. When asked to explain why the psychiatric staff expected increasing numbers of valley residents to require admission for acute disorders, the first professional responded, "What can you expect but depression?" A second mental health professional recalled his thoughts as he stood near the canyon and observed the dam collapse: "I knew as it happened, before it happened, you know, that when there's a lot of loss there will be psychological trauma". "When I heard of the flood," the third practitioner states, "I thought holy smokes, they're going to be crawling the walls!" This assumption leads to a general openness to interpret general feelings of emotional discomfort and single instances of aberrant conduct like suicide, for example, as merely the tip of the iceberg and as documentation of widespread
patterns of maladjustment. The assessment procedures employed in evaluating the emotional trauma and the debate which these procedures created underscores the general importance of the incorrigible proposition.

Essentially, the assessment involved being physically present in the company of disaster victims, carrying on a conversation and attempting to get a "feel" for the emotional undercurrent. The technical term used to describe this procedure was outreach, and, as the term implies, the dialogue serves simultaneously as assessment and treatment. One professional offers the following concrete illustration of how the assessment was conducted in the field.

I drove up and down the road in my truck and stopped where houses used to be or a half of a house was still standing. I introduced myself with my name only and said I was from the disaster center at St. Anthony. "Could I answer any questions?" There were lots of questions about housing, especially, and clothing, or money. I reached out to people on roads, in houses, on farms. I identified myself as a person with information about what was going on in town. I identified unusual circumstances and gave counseling on the spot. For example, there were two boys about 11 or 14 years old. They lived in the disaster area but were standing on the road lost in their own land because the familiar landmarks were gone. They were confused and disoriented. It really helped to be a child psychologist.

The second example shows how the procedure was adopted in the one-stop center where valley residents came to apply for disaster relief. The speaker in this quotation worked as a caseworker who had the responsibility of identifying victims in need of therapeutic intervention.

Uncontrollable anger, that was the real thing. Let me give you an example. There was this lady and she'd been to the one-stop center, oh, I don't know how many times but she'd been there before. She forgot to bring her copy of the registration form -- they give you one the first time you come to the center. You have to have it or they can't help you. She'd been standing in line for a long time and when her turn came, she didn't have her form. They told her they couldn't help her without the form. "I'm just a yellow piece of paper with a number on it. I can't stand another day of this. I'm being treated like a ball -- bounced from one desk in here to another. Another day like this and I'll go off the deep end!" She really lost it. Anger, that was a problem. Suicidal, I guess you'd say. At least, the threat was there. I went over to calm her down before she got everybody upset. I wrote
down the name of the counselor on a piece of paper and told her that he could help her and then I sent her over to that desk.

The assessment continued for about two weeks at which time more than 2,000 "contacts" had received mental health services. The consensus among one-stop workers seemed to be that between 10 and 40 percent of all victims who were processed through the center were in need of mental health counseling. Additionally, most people were reportedly concerned with immediate material needs, but after their basic survival needs were met, they "admitted, under questioning, that they were experiencing emotional distress as well". It was also decided "that all persons affected by the flood would be considered in potential need of mental health services in the context that all were under emotional duress from their ordeal". Given that between 10 and 40 percent were likely to experience a mental health emergency, it could be anticipated that within the area of Madison County and Wilford there would be between 1,348 and 5,392 acute episodes within the first six months.

This assessment, in conjunction with other pieces of information, was used to make more specific predictions about the number and nature of the emergencies that could be expected over the following one or two years. There was some recollection that the disaster literature reported an increase in admissions to psychiatric hospitals following the earthquakes in Managua and the San Fernando Valley. Admission to the state psychiatric hospital, therefore, was expected to increase by 30 percent for at least one year. The exact number of suicides was admittedly unknowable, but there had already been one suicide and one self-inflicted and fatal gun-shot wound and it seemed reasonable to expect more in lieu of the magnitude of the losses incurred. Inquiries about alcohol sales and drug use led to the conclusion that alcohol and drug abuse would increase by 300 and 250 percent, respectively. It was reasoned that when police turned their attention from looting and security back to traffic control, an increase in arrests for driving while intoxicated (DWI) would reflect an increase in substance abuse. By August, expectations also included increases in divorce, family disorganization, child abuse, crime and juvenile delinquency. Apparently, inquiries directed to police officials suggested that police activities regarding domestic calls, and juvenile and adult offenses were increasing.

There were many critics who argued that the "contacts" had been misinterpreted. One critic asked the question, "These so-called contacts the state says they found: are they mental health problems?" His answer follows.

No! It'd be just the same as you sittin' in a confused place, say you're in Grand Central Station, and somebody's lost and they come up and talk to you. And you're able to calm 'em
It'd be the same thing. You get 'em squared away, let 'em talk a minute and then they go away. It isn't mental health as such. It's just being there when people need somebody to talk to. In that sense, yes, it might be mental health but it isn't really mental health. ... It doesn't mean your mental health is going to decay.

In part, the debate revolved around the meaning of mental health and mental illness and the leap which was involved in concluding that bizarre and socially deviant conduct would increase over the long-term because individuals admitted to feeling emotional distress in the short-term. In part, the critics were suggesting that the context had been radically altered and that the standards for appropriate feelings and remedies had also changed. The speaker in the following quotation attempts to deal with these complex issues.

They (the state) were counting everybody they stopped to talk to. It's true, people were nervous and upset. We all were. If you want to call that mental health, well, I can't agree. We considered that the normal response. People were upset, but they were coping with the situation and functioning as well as you could expect if you think about how much confusion there was all around. ... There were no breakdowns that we could see. ... We were concerned about the people who weren't upset. That's what we were looking for. That seemed like the most important thing to watch for. ... And we were concerned about the people who were upset and might not bounce back once things settled down. ... We already had the best therapy you could have up at Rick's College. Neighbors comforting neighbors. A place to sleep and eat and check on friends and relatives. Ward meetings. Counsel from the bishops. That's the kind of reassurance people need. They need to know: "We're going to rebuild -- better than before". And, they need to know the Church is there to help. The state seemed to forget that. ... What good are strangers at a time like that? People don't need mental health. You feel uplifted when somebody you know puts their arm around you and says, "It's going to be okay", and picks up a shovel and starts to mud out right beside you. Maybe it even helps to shed a few tears together -- helps you keep going -- even the men. ... The flood is a different situation. It's not mental health, the way you generally think of it.

Although the assessment was debated it did serve as a possibility that was not easily dismissed or ignored. Since there was a mental health project to provide services to the victims of disaster, mental health issues were necessarily introduced into the setting as an ongoing feature of the aftermath. The predictions outlined in the early aftermath came to serve as anticipatory cues for possible
It is clear from the above that the early expectations were for rather extensive and serious deviations from routine conduct. The general pattern of expectancy seems to be that disaster victims lose control and think and behave in ways that are disruptive and possibly dangerous to self, family and others. Moreover, the expectations for mental health emergencies were framed in terms of official statistics that are routinely gathered before and after disaster. This allows us the opportunity to examine the expectations in light of the available evidence.

**Actual Mental Health Emergencies**

The problems involved in utilizing statistics as an accurate reflection or indicator of some social phenomenon are well known. Clearly, the statistic represents the end product of complex social processes involved in the violation, definition, detection, processing and recording of deviant phenomenon. However, the difficulties are not as problematic in this case since the criteria and definition of anticipated mental health emergencies was initially formulated in terms of increases in officially detected and recorded cases. Nonetheless, the issue of interpretation still poses a serious problem.

All statistics presented in the analysis below are limited to Madison County. Since the community of Wilford represents only a small portion of the Fremont County population it was felt that any deviations attributable to residents of the Wilford area would not be detected in aggregate data gathered for the county as a whole. The statistical material is presented in a graph format with a broken line drawn vertically through the graph to indicate the dam break of June 5, 1976.

**Personal Disability**

It was predicted that admission to psychiatric hospital would increase by 30 percent for at least one year and that suicide would increase, although at an unknowable rate. The assumption seems to be that an increasing number of victims adapt to disaster with feelings, acts, and motivations that are irrational, bizarre, and/or self-destructive. This condition is presumably serious enough or disruptive enough to self and/or others that official interventions occur.

Figure 11 shows the number of admissions (new admissions and total admissions) of Madison County residents to the state psychiatric hospital between January 1, 1974, and December 31, 1979. Unfortunately, statistical reports are only available on a semi-annual basis.
Figure 11  Admissions (New and Total) to Psychiatric Hospital for Madison County, semi-annual reports, 1974-1979

Figure 12  Complaints of Strange, Bizarre or Mental Behavior received by the Rexburg Police Department, by the month, 1974- (April) 1979

Figure 13  Complaints of Suspected Suicidal Behavior received by the Rexburg Police Department, by the month, 1974- (April) 1979
Contrary to expectations, the number of admissions did not increase. In fact, both new and total admissions actually decreased over a three year period. In 1976, following the disaster, there were no new admissions and four readmissions. This is not an uncommonly high number for readmission in a six month period. Excluding 1976, and combining all new admissions for the three years following the disaster, there are fewer admissions (13) than in the preceding two years (22). This is also true for total admissions (22 compared to 25). This general decline undoubtedly reflects a trend in state policy toward deinstitutionalization. Nonetheless, the disaster did not seemingly affect this trend as predicted. Moreover, the possibility for a reversal existed since the state hospital prepared for the expected influx of acute disorder by employing three additional staff members.

The peak occurring in 1978 between the eighteenth and twenty-fourth months post-disaster represents an interesting anomaly in the pattern of admissions. This anomaly is difficult to interpret without knowledge of the social context. It may represent 1) an actual increase in aberrant behavior around one and a half to two years after impact; 2) a delay in admissions due to a higher degree of tolerance for strange behavior; or 3) it may reflect a change in treatment practices. I believe the peak can be accounted for by a combination of the last two factors giving more weight to the latter. This does lend some support to the therapeutic community notion and there is sufficient evidence to believe that during the first year, in particular, the social environment is more tolerant and more supportive. In July of 1978, immediately preceding the peak, there was a major change in the administration, staffing, and funding of the community mental health center from a private to a public facility. Some of the more serious out-patients were transferred to the hospital during the transition period and this probably accounts for a large portion of the peak in both new and readmissions.

Figure 12 shows the number of complaints which the Rexburg Police Department received each month concerning "strange, bizarre or mental" behavior for the period between January 1, 1974, and April 30, 1979. Although there are few complaints of this nature prior to the flood (a total of 6 in 2½ years), the pattern is interesting for the absence of complaints for eighteen months after impact. Similar to the pattern of hospital admissions, activity resumes and peaks around the eighteenth to the twenty-fourth months after impact.

Official data on suicides is available in two forms: police complaints received and vital statistics. Figure 13 shows the complaints which the Rexburg Police Department received concerning behaviors that may be termed suspected suicide. This includes complaints entered into police files as "overdose", "gun-shot wound", "suicide attempt", "threatened suicide" or "self-inflicted wound". This pattern, similar to the two above, does not reflect a post-disaster increase as expected. Comparing the complaints received for the two and a half years pre-disaster (a total of 18) to the two and a half years post-disaster (a total of 14) there is actually a slight decrease of four cases.
This pattern is interesting because, although the overall trend shows a decrease, the immediate post-disaster depression which occurs for complaints of strange behavior and new admissions is absent. A total of seven complaints was received in the first nine months following impact before a seven month depression of zero complaints. Activity resumes again around the eighteenth month. Given that readmissions to the psychiatric hospital continued in the early post-impact period, it may be that the condition of persons who have a pre-disaster psychiatric or suicidal history are exacerbated or unaffected by contextual events in the aftermath of disaster.

Vital statistics maintained by the Department of Health and Welfare (Appendix B) fail to show any deaths by suicide. However, accidental deaths are frequently suspected as death with suicidal intent. To the extent that this connection is relevant, the vital statistics do indicate an increase in accidental deaths for 1976 and 1977 with a sharp decline in 1978. It is unfortunate for the purpose of this analysis that these statistics are not reported monthly. If we can assume, given the population increase, that ten accidental deaths per year for 1976, 1977 and 1978 does not represent an increase, then the number of accidental deaths deviating from this artificially imposed baseline is +1 for 1976, +3 for 1977 and -4 for 1978. The net difference for the three year post-disaster period is zero or no increase. Nonetheless, the distribution is interesting with more deaths due to accident concentrated in the first year and a half after impact.

The official statistics reviewed thus far represent fairly extreme forms of aberrant conduct. If my reading of the data is correct, the dam break was not followed by an increase in extreme forms of personally disabling conduct as predicted. This is a reasonable conclusion since case finding procedures were actually intensified within the community post-impact. The debate concerning the expectations for emergencies sensitized most community leaders and officials concerning the possibility of occurrence. It is possible to argue the reverse, that the debate made community officials even more resistant to accept such definitions and in fact, to deny the seriousness of such conduct. Although this is possible, it is difficult to deny or define away suicidal attempts or bizarre behavior that has destructive implications. Even if this is true, there was an additional cadre of 100 advocate workers who went door-to-door within the community with the express purpose of identifying and referring emotionally distraught victims into the official mental health network. Their efforts should have identified persons with such extreme forms of deviation. The other explanation might be that the success of the 413 project accounts for the lack of increase. In other words, if there had not been mental health services to disaster victims, the predicted increases would have occurred. The caseload of the 413 project will be examined later following an analysis of the remaining predictions.
Alcohol Abuse

An increased incidence of alcohol abuse was predicted to show up in the sale of alcohol and in the number of police arrests for driving while intoxicated (DWI). An initial survey of selected liquor outlets, immediately after impact, indicated that sales had increased by 300 percent. Figure 14 shows the monthly dollar sales for the state dispensary in Madison County between 1974 and 1979. This dispensary is the only retail outlet for the sale of wine and alcohol in the county. Contrary to expectations, there is no increase in alcohol sales. In fact, given the increase both in the population and in the cost of alcohol, one would expect a gradual increase. The only deviation in the pattern is a sharp decline immediately following impact. This decline reflects a three week period in which the dispensary was closed for the repair of damages incurred by the flood.

Figure 15 shows the number of DWI arrests reported by the Rexburg Police Department by the month for 1975 through 1978. Consistent with expectations, this graph shows a sustained increase over a twelve month period beginning the first month after impact. Around the thirteenth month the number of arrests drops with the remaining six months of 1977 and the year 1978 showing a return to the pre-disaster pattern. The total number of arrests for the years 1974, 1975, 1976, 1977, and 1978 is 32, 34, 67, 58, and 32, respectively. The question is whether this dramatic increase is attributable to a twelve month change in the alcohol use of disaster victim or to some other phenomenon. This increase reflects a change in two other factors: an influx of construction and repair workers in the disaster area and increased police surveillance. It is difficult to estimate how many workers came into the flood area to assist in clean-up, demolition, repair and reconstruction, but the number easily exceeds 1,000. The closest public taverns were located north in St. Anthony or south in Idaho Falls, and workers were caught at security check points as they were driving through Madison County. The accuracy of this interpretation is confirmed in a report which documents that 69 outside workers had been referred by the courts for substance abuse treatment prior to September 10, 1976.

Familial Disorder

An increasing incidence of police calls for domestic problems, cases of child abuse, and divorce was predicted as a reflection of familial disorder caused by the flood. Figure 16 shows the number of domestic calls reported by the Rexburg Police Department by the month for 1974 through April, 1979. In contrast to expectations, this graph shows an absence of domestic calls for eleven months following the flood. Activity resumes during the eleventh month although pre-disaster levels are not reached over the following two years. This is reflected in the total number of calls per year: 13, 16, 4, 8 and 5 for
Figure 14  Liquor Sales (dollars) reported by State Liquor Dispensary for Madison County, by the month, 1974-1979

Figure 15  DWI Arrests reported by Rexburg Police Department, by the month, 1975-1979
Figure 16 Domestic Calls reported by Rexburg Police Department, by the month, 1974- (April) 1979.

Figure 17 Divorce Filings for Madison County, by the month, (June) 1974- (April) 1979

There is a problem with the data on child abuse. During 1976, the judicial policy was changed in an attempt to divert child abuse cases from the court system to more informal channels through the Department of Health and Welfare. Unfortunately, I did not gather data from the Department of Health and Welfare on this statistic. Informants from this agency did not identify child neglect as a problem of increasing concern, although this may have been an oversight. Relevant data from either police reports or court filings does not indicate an increase along these lines. One might expect that police arrests for "family and child" offenses and arrests for assault might have some bearing on this issue. If this is correct, police activities (Appendix C, Table 9) do not indicate a problem. There are no arrests in 1976, 1977, or 1978 for "family and child" related offenses. There are no arrests for assault in 1976 or 1977, although six are recorded for 1978. To the extent that this reflects some aspect of familial disorder or child neglect, it does not occur until 18 months after impact and, incidentally, the six recorded arrests for assault in 1976 is less than the number recorded for 1975. Court filings (Appendix D) also fail to show any increase in child protective cases or guardianship of minors. Given the policy change in 1976, a decrease might be expected regardless of other factors.

The number of monthly divorce filings recorded for Madison County between June 1974 and April 1979 are shown in figure 17. It should be pointed out that this statistic represents the number of divorce filings and not the number of divorces granted. Contrary to expectations, there is a decrease in the number of couples filing for divorce. The totals for 1976, 1977, and 1978 (127, 135 and 140, respectively) do not reach the 1975 total of 179, although the early months of 1979 suggest that this level may be reached again three and a half to four years post-disaster.

Legal Deviance

Expectations for an increase in criminal conduct and juvenile delinquency were based initially on a general perception that police security was necessarily intensified in the disaster area to protect property owners from looting and, in large part, on inquiries in which police indicated that the number of arrests was rising sharply. This general perception seemed to be confirmed when the police had requested the assistance of the crisis team to defuse a violent encounter involving a disaster victim and his neighbor. Additionally, within the first two months after impact, the police and the courts had begun referring clients to the substance abuse program of the section 413 project following alcohol and drug related arrests. The anticipation, then, was that crime and, in particular, crimes that involved alcohol and drugs, were increasing.
Figure 18  All arrests (adult and juvenile) reported by the Rexburg Police Department, by the month, 1975-1978

Figure 19  Alcohol Related Arrests (adult and juvenile) reported by the Rexburg Police Department, by the month, 1975-1978

Figure 20  Drug Related Arrests (adult and juvenile) reported by the Rexburg Police Department, by the month, 1975-1978
Figures 18, 19 and 20 show the arrests reported by the Rexburg Police Department for all arrests combined, for alcohol-related arrests and for drug related arrests, respectively. Consistent with expectations, there is an increase for both adult and juvenile arrests. The pattern for adults and for juveniles is similar for all three figures. This reflects that fact that alcohol and drug related arrests together represent the single largest category of arrest and, moreover, alcohol and drug related arrests seem to account for most of the post-disaster increase. You will recall from the earlier discussion that a large portion of adult alcohol related arrests are DWI's attributable to an influx of work crews. There are some interesting variations in the pattern for adults compared to juveniles.

For adults, the highest peak occurs in the first month after impact. The general trend declines, although it remains above pre-disaster levels for roughly two years. If we look at the yearly totals for combined arrests (196, 257, 237, and 160 for 1975, 1976, 1977, and 1978, respectively) it will be observed that the total arrests for 1978 fall below the 1975 total. For juveniles, the trend of the first six months in 1976 appeared to foreshadow an increase in arrests over the preceding year (67 of 95 arrests occurred in the pre-disaster period of 1976). Unlike the pattern for adult arrests, a rather sharp decline occurs over six months immediately following the flood. This is followed by an increase of one and a half years, and then a decline during 1978. If we look at the yearly totals for juvenile arrests (92, 95, 147 and 109 for 1975, 1976, 1977, and 1978, respectively) it will be seen that, also unlike the adult pattern, the number of arrests does not fall below or return to the 1975 total. Alcohol-related incidents appear to be the major factor in maintaining juvenile arrests for 1978 above the 1975 total.

The question of central concern, of course, is whether the post-disaster increase in arrests reflects an increase in violations of the law or in detection. The weight of the evidence seems to suggest that the latter alternative offers the better explanation. Prior to 1976, the general trend showed an increase of sufficient magnitude that the police department added seven officers to the police force in 1976 and one additional staff member for each following year in 1977, 1978, and 1979. Immediately after the flood, security measures were a high priority and 65 state police officers were assigned to the Madison-Fremont-Jefferson County area for three weeks. Also, the equivalent of 43 police officers were temporarily added to Madison-Fremont Counties for six months under an emergency grant received from LEAA. This increase in personnel allowed for increased police surveillance and detection.

The adequacy of this explanation is supported by a statistical comparison of arrests, offenses, and complaints reported by the Rexburg Police Department for 1974 through 1979 (Appendix C, Table 10). It will be observed that the number of offenses reported for 1976 drops from 1975 to below the total for 1974, increases in 1977 but remains below the total for 1975 and decreases in 1978 to roughly the
1974 total. Observing the yearly totals for complaints received from the public, a post-disaster decrease is also noted. The total for 1976 drops below the total complaints for 1974 and continues to decline each consecutive year. To the extent that reported offenses and complaints reflect legal deviance, it would appear that legal violations do not noticeably increase in the aftermath of disaster. In fact, the interesting phenomenon to be explained is the apparent decline. It is reasonable to assume that the visibility and presence of additional police in the area acted as a deterrent. Also, this data lends some support to the notion that community cohesion is enhanced by social processes which are promoted in the aftermath of disaster.

If my interpretation of the official statistics is correct, the increase in arrests reflects an intensification of police surveillance. For the most part, arrests of a relatively minor nature, particularly those related to traffic violations, occur as a consequence of increased attention to security and traffic control. (See Appendix D for a comparison of court filings for felonies and misdemeanors for further confirmation). However, this general statement of the rather minor nature of offenses requires some qualification. The index crimes reported on a yearly basis by the Rexburg Police Department (Appendix C, Table 11) suggest a mixed picture for the more serious crimes. It will be observed that burglary and armed robbery increased during 1976 and 1977 while vehicular theft and larceny decreased. It is not clear whether this is attributable to the disaster or whether it reflects a pre-disaster trend. Residents and officials do express concern that as southeast Idaho grows it takes on many urban characteristics including problems of crime. Disasters may also create situations -- a temporary influx of outsiders and unattended private property -- in which there are new opportunities for certain types of legal deviance, crimes against property, in particular.

Detected Crises

The fiscal and operational arrangements of the 413 project were set up so that all disaster-related crises, regardless of the location or type of mental health treatment, were paid for by 413 monies and recorded in monthly reports in accordance with the terms of the contract. In view of this policy and the rather extensive and intensive outreach efforts, it is reasonable to assume that most of the detected crises would appear on the 413 project's caseload reports. Moreover, the most serious crises should be recorded since inter-agency relationships formed a tiered pattern of referral. Interfaith advocates referred the "emotional" crises and severe problems in coping to the disaster crisis team for immediate evaluation and intervention and the disaster crisis team referred the long-term and more serious cases into the pre-existent mental health system. Table 8 provides a summary of the crises episodes which were brought to the attention of
Table 8  Detected Crises Reported by Project 413 by Selective Case Description, by the month, August 1976–April 1977.

<table>
<thead>
<tr>
<th>Case Description</th>
<th>1976</th>
<th>1977</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Clients</td>
<td>145</td>
<td>57</td>
<td>114</td>
</tr>
<tr>
<td>Primary Problem(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>74</td>
<td>40</td>
<td>24</td>
</tr>
<tr>
<td>Family/Marital</td>
<td>9</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Living Arrangements</td>
<td>4</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Depression</td>
<td>24</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Anxiety/Stress</td>
<td>8</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Education</td>
<td>12</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Delinquency</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Drug Use</td>
<td>3</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Decision-Making</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Financial</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Aggression</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>148</td>
<td>103</td>
<td>114</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilford</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar City</td>
<td>114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rexburg</td>
<td>409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>227</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referrals To</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Hospital</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Treatment</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centers</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clients in Treatment</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>At Project Termination</td>
<td></td>
<td></td>
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<tr>
<td>Crisis Team</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Hospital</td>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td>Other Treatment</td>
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<tr>
<td>Centers</td>
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<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
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</tbody>
</table>
the 413 project over a nine month period.

Although the number of crises the 413 project expected to treat was rather vague, an estimated 1,348 to 5,392 crisis episodes was calculated above by applying the reasoning and criteria employed by professionals who had the responsibility of assessing psychological trauma. It will be observed that the total number of crisis clients (787) reported is considerably lower than even the lowest estimate. Moreover, the project director estimates that roughly 40 percent of the total caseload is composed of construction and other workers who came into the area over the first year following impact. The catchment area for the project extends beyond the research setting to include four counties. However, flood damages were most heavily concentrated in the area of study and consequently, outreach efforts were also more aggressive in this area. Of the 787 clients, 560 or roughly four percent of the non-college population were identified as having an officially recorded crisis reaction.

Some idea of the seriousness of the crises may be obtained by examining the number of referrals that were made to pre-existent treatment agencies. Of the total caseload, 31 were referred to psychiatrists, 14 to the psychiatric institutional setting and 25 to other centers. The total, seventy, represents roughly half of one percent of the non-college population.

In spite of the screening process, there are relatively few clients whose primary problem was listed as depression, anxiety or aggression as might be expected. Alcohol use, marital and family difficulties and living arrangements, in that order, are the most commonly identified crisis problems.

Finally, observe the number of crisis clients receiving treatment eleven months after impact when the 413 project terminated. A total of 79 clients continued to receive treatment: 40 clients were still being counseled by the crisis team, 4 were resident in the state psychiatric hospital and 4 were receiving alcohol treatment in other institutional centers. This suggests that the detected crises, on the whole, were relatively short-term. Support for this interpretation is found in the final report in which the project director concludes: "The potential for follow-up care to disaster victims (needing treatment) is excellent, as is the predicted outcome. In view of the seriousness of the disaster and its effects, it appears that the victims will effectively recover".19

Changing Expectations

Project personnel viewed their efforts as a social experiment and, consequently, sustained a sense of the "pioneer spirit" with a marked degree of openness and responsiveness to the social context. Over the months, the expectations and definitions of project personnel
underwent some interesting changes. The exigencies of the disaster situation, political forces, involvement in the daily lives of disaster victims and the influence of outside consultants underscored the contradictions and short-sightedness of the initial orientation. To a large degree, the clinical case-oriented framework seemed too constraining to adequately address many of the problems at hand. There were many efforts to reconceptualize the problem in order to come to terms with the typical problems of disaster victims and with the potential relationship between these types of problems and the 413 project. In retrospect, the project director suggested what the typical disaster problem is not.

It's not psychosis or schizophrenia or neurosis or mental illness or any of the labels that come to mind when you think of mental health. It's just not that kind of thing. You're going to be off on the wrong track if you start out thinking that way.20

There were other occasions during the tenure of the project when positive reformulations were set forth. Below are two statements which reflect the direction of the change in reformulating the problem.

We got a crisis by definition, a disaster, and it affected thousands of people and groups of people. And so, it not only had an effect on the individuals, it had an effect on the groups: the social patterns; the culture itself. There was a crisis with the social aspect. There was a crisis with the culture aspect. So we had to intervene in there too. That's what I felt. The crisis is multidimensional. And so, you know, if we focused just on the suicidal person or somebody that was exhibiting bizarre behavior or something like that -- if we had focused just on that, I think it would be like -- what's that proverb? -- missing the forest for the trees kind of a thing.

We have a mental health center and that means shrinks or psychiatrists and things but we don't have a sociology center or a culture center -- people that can sit back and look at the sociology of the situation and apply treatment to groups of people. We just don't really have those kinds of entities, you know, that can provide those kinds of services. To me it still falls under the rubric of mental health, you know, instead of one person out there that's having a problem you might have a hundred people, you know, and it's created by a natural disaster or a disaster.

It had become clear to the project personnel that many of the significant problems, from the victim's perspective, were supra-individual in nature. For example, confusion occurred because individuals and agencies were uncertain about the new rules and regulations of
disaster relief; routine procedures like filling out income tax forms were complicated in view of the reimbursement program for disaster losses; children and teen-agers were bored because recreational facilities had also been destroyed in the flood; and frustrations and fatigue occurred due to the unremitting need to rebuild a home and simultaneously maintain a sense of order within the confinement of living in a trailer home. If the source of disaster problems were supra-individual and contextual then, it was reasoned, so were the remedies. Although the project continued to maintain an individual case-oriented approach to therapy, many of their activities reflected a change in perspective. For example, the project cooperated in inter-agency programs to sponsor a seminar on taxation problems; they began a fund-raising drive to provide recreation equipment for the trailer villages; they supported efforts to provide Christmas trees and presents for disaster families; they worked toward establishing a mobile library service; they participated in staffing a weekly child care center; and they became regular attendants at local council meetings. To some degree the problems and their proposed remedies were still seen within the larger framework of therapy and preventive medicine but the changes represented a radical departure from the initial mode of thought.

Summary

An examination of the available evidence does not support the initial expectations concerning wide-spread mental health emergencies following the flood. As a general rule, residents did not respond to the disaster in ways that were severely debilitating or socially harmful. Expected increases in psychiatric admissions, bizarre behavior or self-destructive behavior did not occur. There were, in the early aftermath, some hospital readmissions and some suspected suicidal acts. The suspicion is that pre-disaster conditions of a limited number of persons with psychiatric histories were exacerbated by the flood experience. Familial disorder, along the lines anticipated, seemingly did not occur. Although the number of arrests increased, there is no compelling evidence to suggest that this is attributable to disaster victims who are so distraught that they lose control and compulsively violate community sanctioned rules for appropriate conduct. Interestingly, the number of offenses and complaints actually decreased after the flood. The number, severity and duration of detected crises also failed to reach expected proportions.

To the extent that official statistics actually reflect changes in experience, the exploration in this chapter approaches the aftermath of disaster from a negative perspective. That is, this chapter explored what the experiences and adjustments of disaster recovery is not. I do not wish to imply that the officially detected problems are insignificant or that crisis counseling in the disaster context is irrelevant. From the perspective of public officials and service providers and from the perspective of social control these still
constitute a significant number of problems which fall within their respective jurisdictions. Moreover, the disaster creates conditions which raise practical problems in providing services and maintaining control. Nonetheless, expectations for wide-spread and extreme forms of personal and social deviance were not realized. In chapter six, the open-ended accounts of valley residents, informant reports and field observations are utilized to construct a portrait of the typical disaster experience.
NOTES TO CHAPTER 5


2. The mental health assessment was done to provide documentation of need as required by the regulations of PL-93-288, section 413. On June 18, 1976 a "Planning Meeting", sponsored by the Department of Health and Welfare, brought together representatives of the LDS Church and various social service agencies in order to compile information that would be of relevance for the proposal. This meeting also publicly established the intent of the state to 1) provide mental health services to disaster victims; 2) cooperate with a broad network of community service organizations and agencies; and 3) form an on-going steering committee composed of the various agencies in attendance to facilitate a cooperative effort. This discussion relies primarily on the content of the preliminary and final draft of the proposal which was submitted to the Federal Disaster Assistance Administration. State of Idaho, Department of Health and Welfare, F.D.A.A. Mental Health Proposal, Teton Dam Disaster, Submitted to the National Institute of Mental Health Contracts Management Section, Rockville, Maryland, July 9, 1976.

3. Although the proposal was written for a six month period, as required by federal law, the architects of the proposal were thinking that the mental health needs would persist for at least one or two years.

4. The effects of the Maniquan earthquake is documented by Frederick L. Ahearn, "The Impact of a Natural Disaster on Rates of Mental Illness", unpublished paper, 1976. However, the author is very careful to point out that the increase of 27 percent may well be an artifact of more intensive case finding procedures and an increase in the number of mental health workers. In other words, the author suggests that the earthquake probably did not cause mental illness. The Director of the Division of Community Rehabilitation, Department of Health and Welfare had had prior experience with mental health service delivery following the Xenia tornado and some involvement in professional meetings which pre-dated and led to the section 413 law. In many respects, this was a critical determinant in mobilizing the state's resources to assess the psychological damage produced by the flood and in making the decision to apply for federal funds under section 413, PL-93-288.

5. The lines of division which formed around this debate are structural in nature and can best be understood by different vested interests rather than by clinical or non-clinical orientation. Those who agreed with the expectations for increasing mental health emergencies and with the need for a special 413 project
represented state interests and were the direct beneficiaries of federal funds. Those who tended to disagree viewed the project as an enhancement of the power of the state in mental health matters and as an encroachment on their domain. This was true for the leaders and resource personnel for the LDS Church (psychologists, social workers, presidents, welfare directors and bishops) and for the staff of the privately owned and operated local community mental health center. Typically, mental health problems were seen, within the context of the LDS structure, as falling under the domain of the bishop's authority. Professional psychological or psychiatric intervention was to be sought only as a last resort and in conjunction with the bishop's counsel. There was an inherent conflict between church and state interests and this conflict also affected treatment modalities. For example, LDS leaders and therapists strongly disapproved of the state's willingness to condone or possibly recommend divorce as a solution to marital problems and their unwillingness to base "treatment" on scriptural truth. The private community mental health center had developed a relation of accommodation with LDS philosophy and tended to view the situation along lines that were consistent with the Mormon Church. But more importantly, with the exception of this one private center, all other mental health facilities in the State of Idaho were state operated. The local center was struggling financially to remain viable, had only one year of federal seed money remaining and suspected that this 413 project (if operated by the state) signaled the demise of the private center.

6. In response to the state's predictions and activities, the LDS Church leaders appointed a psychologist from the college to direct health (physical and mental) efforts on behalf of the ecclesiastical structure, to advise bishops of matters of importance in this area and to monitor the membership for any evidence of crises along the lines anticipated.

7. When the dam broke the psychiatric hospital had reduced the staff by sixteen and budget by $100,000.00 from the preceeding fiscal year as part of the deinstitutionalization process.

8. Salary for the three employees was included in the 413 project contract.

9. Another "outside" agency, Teton Interfaith Disaster Task Force, emerged within the first week after impact to respond to human needs in a general sense. Interfaith was included as part of the steering committee for the 413 project. Additionally, the roughly 100 Interfaith advocates who went door-to-door in the community, received some training on how to recognize and refer mental health crises.

10. This discussion excludes the sale of beer which is sold in local supermarkets and stores. Only the sale of spirits and wine is
controlled through the state dispensary.

11. One company, for example, brought in 295 workers from outside the flood area to repair utility lines. Utah Power and Light Company, "Special Flood Issue", Circuit, Salt Lake City, Utah: Utah Power and Light Company., (July) 1976, pp. 25-30.


13. Using police statistics is somewhat problematic because there are three separate reporting procedures -- one for internal, state and FBI documentation -- and the statistics are not always consistent. Whenever possible, I have used internal reports since that was the source for deriving monthly totals. The other reporting procedures are available on a yearly basis only. For the purpose of this study, this is most problematic in discerning the general pattern for all arrests combined. Using internal reports the yearly totals for 1974, 1975, 1976, 1977 and 1978 are 318, 288, 352, 384 and 269, respectively. It will be observed that the number of all arrests declines over 1975, increases over 1976 and 1977 and drops below the 1974 total in 1978. Using state reports the yearly total of all arrests combined for 1974, 1975, 1976, 1977 and 1978 is 358, 381, 427, 367 and 354. In contrast to the former pattern, the number of arrests increases between 1974 and 1975. Similar to the former pattern, an increase occurs between 1975 and 1976 although the increase is greater. Unlike the previous pattern, there is a decrease over 1977. Like the previous pattern, a decrease occurs over 1978 but the yearly total does not fall below the total for 1974. Unfortunately, this is an irresolvable problem which obviously calls all of the statistics into question.

14. In large part, the increase in alcohol and traffic arrests was most probably due to an influx of persons who view drinking as a regular and normative feature of relaxation and social occasions. From a community perspective this does reflect an increase in conduct that violates the law, but it is not attributable to radical changes in conduct among valley residents.

15. This is the case, particularly when referring to arrests involving local residents. There are reported instances of residents who "fell off the wagon" or who began drinking after the flood but for the most part these are isolated cases. Persons who drink pre-disaster typically drink post-disaster and their alcohol consumption may increase for a short time but generally, there is too much work to be done to "over-consume" on a regular basis.

17. A grant (#76-DF-10-0025) of $150,000.00 was awarded by the United States, Department of Justice, Law Enforcement Assistance Administration (L.E.A.A.), under Title I of the Omnibus Crime Control and Safe Streets Act of 1968, PL 90-351.

18. Sub-contractual agreements with the private community health center, college psychologists and psychologists in the St. Anthony-Wilford area meant that the formally designated 413 project staff did not actually do all the crisis counseling. However, the counseling done by other professionals or agencies was documented in the monthly 413 reports.


20. The expectations documenting the need for a 413 project created an image associated with mental illness. From its inception, the project worked to change this image for it was interpreted as a liability.

21. I do not wish to mislead the reader. The project, from its inception, adopted prevention as a major goal. However, the initial meaning of this goal was in terms of secondary and tertiary prevention of long-term complications from psychological trauma.

22. There are some interesting observations made concerning persons with a pre-disaster treatment history of mental health problems. After the community mental health center had checked on the status of the out-patients in the aftermath of disaster, they concluded that "Strangely enough the patients were doing the best. It seems like they had a purpose for living. They were really functioning pretty well. We saw a few back in the office over the year but it's surprising just how few got into trouble." A similar phenomenon was noted among institutionalized patients. Some in-patients were released from the state psychiatric hospital to assist in sand-bagging operations around Blackfort. Others were enlisted to aid in preparing an emergency medical unit in the state institution in the event that the number of injuries exceeded the capacity of the local hospital. The professional staff of the institution felt that the performance level increased and symptomatic behavior decreased for as long as six weeks. This improvement was described as a lift in morale which comes from providing a useful and meaningful service to others.
CHAPTER 6

AFTERMATH OF DISASTER: REBUILDING

The Teton disaster was essentially a disaster of property damage and social disruption. Whatever else the disaster may signify, from the perspective of valley residents, it meant that their homes, family life and communities had to be cleaned up and rebuilt. The return back to a sense of order, to self-sufficiency and to the privacy of home life was made possible within the larger context of a socially organized response. The experience of the aftermath, the opportunities and disappointments, accomplishments and frustrations, were influenced and constrained by the resources which local and outside organizations mobilized and distributed among valley residents. To understand the aftermath of disaster, from the perspective of valley residents, it is, therefore, necessary to understand the social forces which gave order and meaning to the rebuilding process. This chapter begins with a description of the major aspects of the socially organized response. The remainder of the chapter describes the essential features of the rebuilding process by focusing on the thematic strands which are woven through the accounts gathered from the residents of the Upper Snake River Valley.

Socially Organized Disaster Response

Perhaps the single most important feature of the initial response to major disaster is the almost immediate convergence of persons and resources into the disaster-stricken area. Friends, family and neighbors, from the perspective of residents, are the most significant first arrivals. Their aid and support is immediate, direct, intimate and unconditional. From the perspective of community leaders, and in terms of the long-term impact of disaster welfare, formal organizations, and in particular, federally funded programs are the most significant arrivals. Before the "feds" arrived, however, community leaders had consolidated a local response fashioned along the principles and doctrine of the LDS Church. In the words of one church authority, "the Lord's program should be used to the full. The Lord expects us to be a light unto the world". LDS look after their own. From the beginning, the potential for conflict and distrust between government and church programs existed and indeed, local officials were willing to forego federal assistance unless their programs were tailored to local conditions and in particular, to the ecclesiastical structure of the LDS Church.
Local Response

Ricks College continued to earn its reputation as the refuge on the hill. Many families settled there in emergency living quarters over a period of six to ten weeks. The college was also the central focus of social activity, information, resource distribution and community control in the more general sense. Residents, bishops, stake presidents and government officials converged on the hill to take stock, respond to urgent needs and plan for the future. The first steps toward rebuilding which were undertaken by church and government officials was to consolidate their power, reestablish the social structure of the ward system and activate the welfare program.

Central control represented a merger of stake presidents and county commissioners. The county commissioners held prestigious offices in the priesthood, one representing each of the three impacted stakes, and in many ways, the consolidation of power along these lines was almost automatic. Correlation meetings began at 5:00 a.m. on the first Sunday after impact and included, in addition to the presidents and commissioners, representatives of other relevant public agencies and local churches. This meeting established a pattern of control that remained in operation for several months. After the correlation meeting, stake presidents met with ward bishops who later met with ward members and later that night bishops met again with stake presidents. This pattern allowed for a two-way flow of information from the center of control to the membership and back to the center of control over a twenty-four hour period. Community leaders felt that the Church had the organization to reach the people, and all disaster programs, regardless of their nature, should utilize this network of control.

Plans to reestablish the ward structure also began the first Sunday morning. A general meeting of valley residents was held on the campus of Ricks College and people were counseled to go to designated areas, one assigned for each ward, to meet with their bishop. Although attendance at this meeting was minimal, informal messages, passed by word of mouth, managed to reinstitutionalize the ward pattern within a relatively short period of time. The frequency of ward meetings varied depending upon the magnitude of the damages within different wards but many of the most severely damaged met daily for more than a month. The meetings, both temporal and spiritual in content, were instrumental in maintaining a sense of cohesion and morale. They helped to reinforce the feeling that "everybody is in this together. We're all in the same boat". This theme of optimism that ran through the meetings was also reflected more generally. For example, the headlines of the first local newspaper that was published after the flood read, "Devastating Flood Waters Can't Drown Our Spirits". But it is important to note that the theme of optimism coexisted simultaneously with a sense of discouragement.
Many aspects of the church welfare program occurred informally and spontaneously. Even though nearly 2,000 persons were housed and fed in Ricks College facilities, the majority of residents found protection and shelter in the homes of family and friends. It is with considerable pride that residents report how successful the food storage program proved to be. It was not uncommon to be told:

That was the real test. There were eight families, oh, I don't know, maybe forty-two or forty-eight of us all together. We stayed at the _____’s home for, ah, about six weeks, I guess. Six weeks! And we had good meals, too—right from their storage. Everything we needed. Didn't need to go to the store once. Well, it's a good thing, 'cause the stores weren't open.

Ricks College, of course, was critical in the more formal aspects of the church welfare program. It was perhaps fortuitous that the college was prepared with clean rooms and large food supplies for a large convention was scheduled to begin the Sunday after impact. On Saturday evening, the first meal of crackers and soup was served to 2,000 persons and roughly 1,700 persons were bedded down in dormitories. Within a period of about ten weeks, the college had supplied a total of 100,000 person nights of lodging and 386,250 meals. The college program peaked on June 10th. The maximum number of meals served on this day was 30,000 and the maximum number of lodgers was 3,000. After June 10th, the demand for services decreased as residents found other means of subsistence. The last residents left the college on August 10th in time for the staff to prepare for college students who were scheduled to begin the fall semester on the 24th.

The college also provided space to set up an emergency Bishop's Storehouse which stocked a variety of items—including shovels, cleaning supplies, food, mattresses, boots, generators, clothes and toothbrushes—which had been sent from Welfare Square in Salt Lake City. Space was also provided for the one-stop center; other disaster-related voluntary agencies such as the Red Cross; federal and state programs; and local businesses.

Church officials organized a special welfare program to bring volunteer labor into the disaster area to help residents clean their homes and property. On Tuesday, June 15th, the first volunteers, 2,000 in number, arrived in buses. The largest number on any single day, 5,000, appeared in Rexburg on June 19th. In total, more than 30,000 volunteers offered their services before the program ended in August. In addition, between 80,000 and 100,000 hours of heavy equipment were donated.

For many residents, Sunday, June 13th was remembered as the most "spiritually uplifting" day of a lifetime. That was the day that the
Prophet arrived to counsel valley residents. Not surprisingly, his message, alluding to the trials of the pioneer forefathers, emphasized the need to work; participate in the church programs and keep the Lord's work going forward; keep the family together; involve the children in the valuable experience of work, observe family home evening; turn to the church and the bishops for counsel; and don't take assistance that you haven't earned. Residents left the meeting singing "We Thank Thee Oh God For A Prophet". The Prophet's message engendered a transcendent sense of community, for some at least, but it also created a sense of confusion. By this time, other welfare programs--state, federal and private--had arrived in the area with various forms of assistance including unemployment benefits; food stamps; trailers; money in the form of gifts, loans and grants; clothing; labor; counseling and building supplies. What did the Prophet's message mean? Were the saints not entitled to receive disaster relief from other than the Church program? It was several days, and weeks for some, before this issue was settled but the main program which the Church continued to oppose was the food stamp program. Interestingly, 2,078 households were issued food stamps during the month of June. In July, only 20 households received food stamps and coupons were actually being returned to the government office.

The blueprint for the local response, with some modifications, was fashioned out of the pre-disaster social context. The church authority, the ward structure, and the welfare program reintroduced, to some degree a sense of order and social cohesion. But the very nature of the response excluded some from participation. Although formally, bishops and members were counseled to treat everyone, members and non-members alike, this was difficult to do in practice. The difficulty stems from the same differences which existed pre-disaster. Some non-members preferred to sleep out-of-doors on the lawn than stay in the college dorm where smoking and coffee were prohibited. Some refused to accept relief because it was tied to the beliefs and practices of the LDS Church. In the words of one resident:

I went up to Ricks College to get a pair of boots to work in because I felt like the help was there for everyone. I was told I'd need the bishop of my ward to sign the paper. Well, I don't live in a ward and I don't have a bishop. I just said, "then forget it. I'll get them someplace else". Those Mormons, they probably thought well, there goes a crazy person. But the feeling was general. It wasn't just me. And, I never went back either.

Federal Response

At the request of Idaho's Governor, President Ford declared the Teton Dam area a major disaster on June 6, 1976. With this
declaration, and under the authorization of the Disaster Relief Act of 1974, roughly 68 federal compensatory programs were set in motion to provide aid to institutions, government entities, businesses, farmers, families and individuals who suffered losses as a result of the flood. These Federal programs, designed essentially to supplement the efforts and available resources of state, local governments and private relief organizations, were coordinated by the Federal Disaster Assistance Administration (F.D.A.A.).

As is typical, Federal Disaster Assistance Centers, commonly referred to as one-stop centers, were set up to house the representatives of the various relief agencies under one roof. After considerable negotiation with community leaders, a one-stop center was set up in Ricks College on Tuesday, June 8th. Although the agencies are spatially consolidated in one building, the programs remain autonomous entities with separate rules and regulations, separate criteria for eligibility and separate application procedures. Individuals, therefore, were compelled to make the rounds from one agency to another in an effort to discern which programs were available to assist them.

The number and types of disaster programs available are far too numerous and complicated to list in detail but a few examples are suggestive of the range: 1) Veteran's assistance, such as death benefits, pensions, insurance settlements, and adjustments to home mortgages held by the Veteran's Administration if a VA-insured home has been damaged; 2) Social Security assistance for recipients or survivors, such as death or disability benefits or monthly payments; 3) Crisis counseling and referrals to appropriate mental health agencies to relieve disaster caused mental health problems; 4) consumer counseling and assistance in obtaining insurance benefits; 5) distribution of food coupons to eligible disaster victims who are adversely affected by a major disaster when they are unable to meet such expenses or needs through other programs or other means; 6) disaster unemployment assistance and job placement assistance for those unemployed as a result of the disaster; 7) agricultural assistance, including technical assistance; payments of up to 80 percent of cost to eligible farmers who perform emergency conservation measures on farmland damaged by the disaster; and donations of federally-owned feed grain for com-mingled livestock and herd preservation; and finally, 8) disaster loans to individuals, businesses and farmers for financing, repair, rehabilitation or replacement of damaged real and personal property not fully covered by insurance. From the perspective of residents, these one-stop centers presented a rather confusing "jungle of red tape".

On the day after the one-stop center opened, Senators McClure and Church introduced legislation to provide full compensation for the victims of the Teton Dam disaster. If this legislation received congressional approval, the new legislation and programs would supersede all loans or assistance received under the Federal Disaster Relief Act and full compensation would be granted. Residents were urged to apply for assistance under the existing programs in the event that
the bill was delayed in either the House or the Senate. There was some uncertainty among many residents about whether it was worth going through the red tape at the one-stop center if the new legislation passed. On the other hand, if the legislation did not pass, how would they manage to rebuild their homes and businesses?

Congressman Hansen issued a statement in a news release on June 9th which was met with a general consensus in the valley. "As the facts are developing, I don't believe there is any doubt as to the culpability of the Federal Government in this tragedy." Although the Federal Government did not accept legal responsibility for the dam failure, it did accept moral responsibility and about ten days after the dam collapsed President Ford proposed that Congress make available 200 million dollars to begin restitution for flood damages. The appropriate amendment to the Public Works Appropriation Act of 1976 (PL 94-355) was signed into law on July 12, 1976. The Bureau of Reclamation (BOR) was assigned to administer the congressional funds appropriated for restitution. On July 14th the BOR opened an office at Ricks College and began distributing information and claims forms to valley residents. The Teton Dam Disaster Assistance Act of 1976 (PL 94-900), enacted by Congress on August 25th of that year, superseded the Public Works Act and determined that full restitution should be made swiftly, in order that the residents and communities would return to their pre-disaster conditions. In total, four hundred million dollars was appropriated for compensation of losses incurred in the flood.

BOR quickly became a household word. By the time the BOR office closed its doors on May 3, 1979, 7,884 disaster claims had been received. Of those, 5,532 were processed for less than the amount claimed. The difference between the amount claimed and approved was $79,610,127.16.

One other federal disaster program, commonly referred to as HUD, deserves special mention for it too became a household word. The Housing and Urban Development Department (HUD) is authorized to provide temporary housing with free rental for a period of one year. There were three basic programs offered to disaster victims: occupancy in a mobile home; accommodation in a commercial or private rental unit or home; and a minimal repair program designed to make damaged homes habitable. Of those whose homes were damaged in the valley, roughly 500 families found permanent housing without the assistance of HUD. Of those families who received HUD assistance, 526 had their homes repaired under the minimal repair program, 232 occupied private rental units and 1,118 lived in mobile homes. The first mobile homes began arriving in the valley on June 21st with an average of 50 arriving per day. At the insistence of the LDS leaders, the mobile homes were distributed to maintain the ward boundaries so that the order of community life would not be disrupted. In Sugar City almost every family lived in one of two HUD trailer parks. In Rexburg, Wilford and the rural areas of Madison County, most residents had their HUD trailer parked on their private property in close proximity
to the building site of their new home. When the HUD program closed in October of 1977, 350 trailers were purchased by the occupants for permanent housing accommodation.

Other Response

There were many other individuals, groups, agencies and volunteer organizations that became involved in the disaster relief response. Their efforts, collectively, served to sustain a sense of the altruistic community for as long as a year. But it is also important to point out an essential contradiction inherent in the arrival of large numbers of outsiders. Residents began to discern that among the outsiders there were volunteers and vultures, humanists and charlatans, benefactors and exploiters, honest workers and profiteers.

One organization deserves special mention. The Teton Interfaith Disaster Task Force organized a cadre of about 100 advocates that were assigned to the area under study. They provided many important services to valley residents. Two programs sponsored by Interfaith seem to be remembered by a substantial number of disaster victims. Interfaith provided volunteer labor and technical assistance in filing out the BOR claims. When the Interfaith program phased out in July of 1977, an estimated one million hours of labor had been donated and more than 2,000 persons had received assistance in filing for compensation.

The Process of Rebuilding

The rebuilding process can be divided into three phases. The first phase, a relatively brief period of about three months, is characterized by uncertainty. The second phase, lasting about fourteen months, is best described as a series of obstacles. Transcendence, the third phase, represents the period in which the obstacles of disaster recovery are overcome and a more routine pattern of daily living is reestablished.

Uncertainty

The early weeks and months of the aftermath represented a period of rapid change. New problems were discovered daily and new solutions were just as rapidly being introduced. Countless outsiders—national guardsmen, state police, family, friends, tourists, government officials, church officials, tourists, utility workers, and construction crews—were highly visible in every segment of the county and their presence contributed to a sense of ceaseless activity, excitement and progress. "That was the thing, to see progress. It helped so much to
see things get done." Their collective efforts quickly resulted in a sense that order was being restored to the environment.

A sense that the social order had remained intact was reinforced with the ascendance of ecclesiastical authority, the reestablishment of the ward structure and the immediate response of welfare programs. The exigencies of the situation necessarily created conditions of communal living and while this also generated frustrations and conflicts, it had the overall effect of heightening a sense of public optimism. Commitments were made to "rebuild bigger and better" than before and in public settings at least, individuals participated in activities and conversations that promoted expectations for a brighter future.

But there was also confusion about how the present destruction would be refashioned into a coherent and familiar future. The general blueprint already existed in the cultural and social arrangements of pre-disaster conditions but this blueprint was rapidly being altered by new forms of welfare imported from outside organizations and in particular, from federal agencies. A whole host of unfamiliar terms--terms like FDAA, one-stop center, HUD, BOR, reclamation, food stamps, demolition crews, writs of entry, forms of confidential release, assessors, verifiers and inspectors--were introduced into everyday discourse. These terms, of course, were not just words. They reflected new procedures and rules that were linked to hopes for a better future. In the present, they represented a constraint on daily living and a source of confusion.

You had to go by the rules. Fill out this piece of paper and that piece of paper. Everything took a piece of paper to get anything. Then you had to wait in line, and go by a number. It was really something. ...I did it, just like everybody else. You had to. But I couldn't tell you now who they all were or what their business was.

The general commitment to rebuild and the public display of optimism were important features in the daily experience of residents. But the facts of life were grim. Perhaps the overriding concern during this period was one of economic uncertainty. Two accounts presented below, underscore this concern.

There I was, never broke a day in my life, credit good any place I went into. All of a sudden, didn't matter how good your credit was. Two dollars in my pocket and nothing but the clothes on my back and nine kids to feed. ... Looked pretty bleak, I can tell you that. And, I'm an optimist. Nothing gets me down. But that can do it. ... I want to tell you, it was some day when we heard for sure that the
reimbursement was coming. It was lookin' pretty bleak, pretty bleak. ...

It was a horrible feeling. We didn't know reimbursement would be coming and so we thought it was a total loss. All that mud, that horrible, sticky mud—it was just like glue—it wouldn't come off. We were so tired—tired all the time. ... There wasn't much time to think in those days. But, can you imagine trying to decide whether or not you should take a loan? What to do? It seemed like we just stood around for two days trying to decide. In the end, you don't have much choice. How else can you live? So, you take a loan and work yourself to death. What if you don't get your job back? What if you can't make it? ... 

Economic uncertainty was a constant worry in the early period although it was frequently superceded by the urgency of cleaning up, or "mudding out", as it was called. It was difficult to maintain a sense of optimism when confronted with a task that seemed almost unending and almost insurmountable.

We were so exhausted and got pretty despondent. Even me. You just feel like saying what's the use? You feel like leaving, just giving up and going some place else. You get so tired and there's so much to do it seems like—well, it can't be done. See that chair over there? You could pick that up yourself couldn't you? Sure! Well, when a chair that size was soaked with mud it took three men to lift it, and even then they couldn't get it out of the house. We chopped everything up with axes and then carried it out in little pieces. Only way it could be done. ... Just when you thought it was clean, you could smell the mud again. So you'd have to clean it again, and again. Then you could still smell the mud. So we took a piece of wall board off—there was even mud behind the walls. Stripped the whole inside out! ... The wiring even had to be changed... Then, we discovered it was under the floor boards! Do you see why we just felt like giving up?

After a day of "mudding out", it was a relief to meet in the ward building or return to Ricks College shelter. As one resident recalls, "There was a special closeness and you were never at a loss for words". Experiences were similar enough that even unfamiliar residents no longer seemed unfamiliar. These occasions were remembered as "precious" experiences when people tried to lift each others spirits with jokes, stories, pranks, testimonials and prayers. "There was enough gloom to live with without makin' some up, so, we tried to lighten things up." But, these occasions were also times of tears and discouragement and seemingly, a tolerance for the expression of a
broad range of human emotions: ecstasy, joy, anger, doubt, discouragement and despair. There was a general sense that the intensity of emotions was as strange or normal, depending on your point of view, as the conditions of living.

For many residents living near the dam, those whose losses were total, the phase of uncertainty was more intense and had a different texture. What seems to be of utmost importance is that there were no physical remnants remaining to begin the work of restructuring the present into a future. Their major task seems to have been in re-fashioning the links with the past. "We'd walk sometimes for miles just diggin' through the rubble looking for something that belonged to us, something that showed we existed." There is perhaps one other important feature in this context. Families in the Wilford area were dispersed for lodging in private homes over a wide geographical area. Therefore, systematic and regular ward meetings failed to materialize on a daily basis and failed to daily reconfirm the unity of the ward as a transcendent entity. The following account points out that, for some residents, this was a period not only of uncertainty and unfamiliarity, but of strangeness.

We were just vagabonds. No place to go. Nothing to do. No home. ... Strangers in our own land... We'd just kind of wonder around in, oh, a kind of state of oblivion or something. We didn't know which way to turn, where to start. I mean when you've been married for 25, 26 years, an' you think you're set for the rest of your life and suddenly, you find that you don't have one thing on earth that's familiar to you. ... Even the hillside, the rocks where we used to sit and meditate or whatever--I mean they were gone. And, it was a really scary feeling. How do you, how do you, completely start over? It was quite an empty feeling. You'd find yourself, well, kind of grasping for this an' that, something to hang on to, to start rebuilding again.

In spite of the determination to rebuild and the general overarching sense of public optimism, the grim reality of "mudding out" generated a sense of futility and helplessness. It was a very simple fact of life that the sheer magnitude of the task required equipment, labor, money and materials, commodities that were in short supply. From the perspective of residents, the real basis for hope arrived in the form of volunteer labor and money.

Volunteers, that was the key and that's what saved us. And you got the Church to thank for that. Doctors and nurses and lawyers workin' just like everybody else. Why, they'd get up at 3 in the mornin', drive on a bus all night--paid for it themselves too--get here in the morning, work all day, eat their own lunch--they didn't sponge for nothin'--and get back
on the bus late at night. And work! There wasn't nothin'
was too good for them volunteers. Came by the thousands,
busloads full of them. ... When they came here and worked
so hard, how could you give up? You just had to keep going.

Volunteer labor, materials and heavy equipment were critical in
the material, emotional and symbolic aspects of recovery. To many,
the success of the volunteer efforts reconfirmed the truth of the Mor-
mon way of life. Others felt that the program organized by the LDS
Church unfairly distributed volunteers among active members and per-
sons of power and prestige. Still, others felt that the efforts of
other volunteers--Mennonites, Christian Brethren, and Interfaith, in
particular--didn't receive appropriate recognition or praise. To
some, the volunteer program reconfirmed the fundamental social divi-
sion within the community.

As important as the volunteers were in helping to overcome the
practical constraints in cleaning up the mess, the federal dollars ap-
propriated for restitution of flood losses was the essential factor
in reconstruction. Money provides the warrant for realistic hope and
the resource for self-sufficiency.

I just want to go on record as saying the federal government
really pulled us out. I sure appreciate it. You know, you
can't do much without money, doesn't matter how hard you work.

But valley residents also have a general distrust of the feds and it
was very common to hear:

I was mighty glad to hear the money was comin' but I wasn't
goin' to spend it before I had it in my hand. You never know
with the government how long it can take or even if they're
goin' to keep their promise.

Obstacles

Around the second to the third month after impact, the essential
uncertainty and confusion of the early aftermath was being replaced by
temporary conditions of a more routinized and predictable nature. HUD
trailers had been moved into the valley and residents were settling
into living quarters that maintained some coherence and order to family
life. The communal aspects of daily living gradually diminished and
energies were focused on problems of a family and private nature. The
opening of the BOR office and the beginning of the reimbursement pro-
gram generated a sense of economic security. Knowledge that the
legislation for restitution to disaster victims had received congres-
sional approval escalated the number of homes and businesses under
construction and the disaster context, in this phase of rebuilding,
was like the proverbial boom town.

The physical environment was described by one resident as such a
mess that "it looked like badgers were digging all over". Indeed, the
conduct of practical affairs was possible only by a diversionary
course through and around many environmental obstacles. In an impor-
tant sense, the physical obstructions were symbolic of obstructions
which also existed in the social environment.

HUD trailers, for the most part, were viewed as "a place to close
the door and be a family. ... a place to be private". But trailer liv-
ing was not without its problems. The trailers, about 12 feet by 50
feet, were confining and in many cases, two trailers were required to
accommodate large families. The trailers had been transported from
other areas of the country and many were infested with rats; they
were poorly winterized and not equipped with heaters. They were hot
in the summer and cold in the winter. In an environment like this,
residents say, as time passes and these conditions begin to feel per-
manent, it is easy to allow small issues to become magnified.

We were having problems that we never dreamed existed. Ar-
guing with each other, an, some bitter fighting too. Because
we were all in a state of turmoil an' we were lashing out at
everything. ... "we've always been a close family. We stayed
a close family and we're probably even closer now but don't
you see, you argue 'cause there's so much to think about and
decisions and all the things that bothered you before still
bother you. Take my husband. He sits with his feet up on
the furniture and that bothers me, always has. Before, I'd
just go in another room or get out my hobbies and after all,
what does it matter? In that trailer, well, there was no room
to go to, no hobbies to pick up. So, you say something and
then you argue. ... That's changed now. He still puts his
feet on the furniture and it still bothers me. But we have
other rooms and if things irritate me, then, I've got some-
thing to do that's familiar again.

Perhaps one of the hardships of living in a HUD trailer, stems
from the many intrusions into one's privacy. It seemed to many
that government officers and investigators were constantly making inquir-
ies of one type or another. To residents, it may have made sense from
a bureaucratic standpoint, but it was a nuisance nonetheless. One
resident tells, how, eventually, his patience had been tried.

Just because you lived in a HUD trailer they thought you
was dirt. And they came in swarms to check up on you.
They didn't even call first. One day there was a knock at the door. "I want to check your storm windows. Have you still got them?" Yes, I said. "Let me see them." They wouldn't take your word for nothing. I got angry and that time I put my foot down. Don't you come back again unless you call first. You got a phone and so have I. Use it!

As noted earlier, news of the program for restitution was an occasion for optimism. For some, particularly those who had legal or bureaucratic expertise, the procedures for submitting a claim were simply taken as a matter of course. But for the majority, the process was viewed as "a headache", "a hassle", "a nightmare" or "an impossibility". Briefly, residents were expected to itemize and describe every article damaged or lost; indicate the current market price for the item; supply photographs of any discarded items; provide titles or proof of ownership; and secure three estimates from contractors for the construction of a home or other structure. The mechanics of the procedure were generally intimidating but for many, the impersonalization which accompanies bureaucratic management was even more upsetting.

I guess maybe it was necessary, all that red tape, but it was hard to take. Made you feel like you weren't a real person. (silence) Like you were begging, as if you had no pride. I'm not the only one who feels that way. ... Oh, we're so grateful to the government for what they done but like I say, it was awful hard to take all that red tape.

Expectations for full reimbursement and economic security were soon called into question. The earliest claims submitted were, for the most part, paid in full. As time progressed, the criteria for restitution were more stringent, more inflexibly applied and more exclusive. BOR personnel viewed this as an indication of an increasing professionalization of their staff and as evidence of more responsible management of taxpayers' money. Residents saw this as a source of injustice and frustration.

The following account indicates the extent of time and expenditure which was frequently spent on preparing a single item for the claim. This resident received partial reimbursement for the item but, in the long run, coin collections are not essential to survival.

So many areas they just beat you down. I had a coin collection and I had to make long distance phone calls and trips to get appraisals on the coins. They didn't pay for the phone calls or the trips. They give you one quarter of what you lost in value and for the ones that were saved, one quarter of the cost of the labor to clean them up. You had to haggle
over every penny and they still won. It was so exasperating. I think they knew all along how much they'd pay you and they just sent you on a wild goose chase trying to prove something they wouldn't accept anyway. They don't even get angry. They just didn't care. Finally, you get so worn down you just quit and take what they give you.

The experience told by the following resident has implications of a much more serious nature. This man and his family qualify as one of the "casualties" of the disaster response.

My claim was for $112,000.00 and all they was goin' to give me was $9,000.00. Treat you just like a crook. You'd think I was tryin' to steal the money. I didn't know what to do: they weren't listenin' to me. Interfaith found me and they knew what to do. They get all the credit. That lady, she's just like a bulldog. She helped me prove my claim and the next time they offered $20,000.00 and the third time $69,000.00. ... We went as far as we could go and then it had to go to an appeal with lawyers and everything. Well, I'm retired and I couldn't hold out all that time and lawyers fees cost a lot of money. But that's not the real reason. They just wore me down. I couldn't fight anymore. Seemed like you had to haggle over everything. And I was too worn out to do it anymore... Now, we live in this HUD trailer with everything stacked up everywhere. The wife, she doesn't like it, but what else can we do? We had to spend some of that money just to live and now the cost of everythin' is so blamed high you can't build a house for that and still live. ... and, now they tell me I have to buy back all my machinery. Well, I'm not farmin' the same as I was then. ... Just doesn't make sense. ... And this capital gains. They want to take my money back 'cause they think I got something free I guess. ... Just doesn't make sense.

As this gentleman mentions at the end of his account, capital gains tax emerged as an issue for residents whose life-style had changed since the disaster. The philosophy behind the reimbursement program was that every item should be replaced, under the assumption that families and communities would be restored to their pre-disaster state. Failure to comply with this regulation had serious implications. Reimbursement not spent on replacement was treated as profit in much the same way as if assets had been voluntarily liquidated. Therefore, the reimbursement money was subject to a capital gains tax. Although the capital gains tax is not generally understood, as the woman in the following account makes clear, the reimbursement philosophy has a fundamental flow which was clearly recognized.
It's just not fair. This capital gains, I think you call it. We used to have a need for loaders and sorters and tractors and all kinds of things but we don't need them anymore. What are we going to do with that now? We got a gravel pit, not a farm. And they're tryin' to make us buy the same things we had before the flood. That's the idea. Replace everything, item for item, just the way it was before the flood. What they don't understand is it'll never be the same again. We can never grow potatoes again so why should we buy back all that machinery. ... Do you know what the verifier told me? "Just buy it and sell it the next day." ... It's just not fair. Do you think it's right? They pay us the money because their dam broke and ruined our land. And now they're going to take half of it back. I don't think that's justice, do you?

There were many things to be grateful about concerning the reimbursement program. Claims were processed quite rapidly, many of the verifiers were congenial persons and some actually helped residents in identifying losses they had failed to include. Although a large percentage of submitted claims were not reimbursed for the total amount claimed, there was a general sense of urgency to finalize the process and get on with rebuilding. To some degree, the pre-disaster perspective on the cost of living was still operative and the amounts of money received from the BOR office seemed, at first glance, substantial.

Have you ever been handed a check for $87,000.00? I'd never seen so much money before. You think you're rich. You know you're not, but you feel rich and then you start spending as if you were rich. The prices just skyrocketed around here. You thought you could buy an iron for $9.00 and all of a sudden it cost $15.00. And that's the way it was with everything. You put one thing down on your claim but you couldn't buy it for that when you went shopping. ...

The illusion of affluence quickly dissipated as residents realized that inflation had arrived with the windfall of money. The increasing cost of labor was a major item for although the federal government sponsored many programs, the work was contracted to private industry at union wages. Prior to the disaster, the average wage of a truck operator, for example, was $3.50 an hour. Immediately after the disaster, the wage had increased to about $8.50 an hour. This increase was generalized throughout the economy and residents were surprised to discover that the reimbursement money was insufficient to replace their losses.
Now, the cost of construction materials just went out of sight. Not just construction materials but that was the big thing. I just finished building this same house the year before the disaster. Cost me about $40,000.00. To have it rebuilt, exactly the same, the lowest bid was almost $60,000.00. It isn't finished yet and I already know that I'm owing a few thousand extra. Don't know how much more it will cost in the end. But I can tell you this. We won't have much furniture in it and there won't be any carpets for a while.

The cost of rebuilding was high but unfortunately, many discovered that the quality of the finished product was often low. There was a saying in the valley that I heard many times. "If you had a hammer in your back pocket you could call yourself a carpenter and if you had a greasy rag, you were a mechanic." Except for plumbers and electricians, tradespersons were not required to be licensed, and that, says the gentleman, in the following passage:

was where the problem started. Local labor had all they could do, and more. Nobody could keep up with the work. So, you had to depend on people you didn't know. ... $450.00 he wanted to build me a cabinet. I could have done it before for $65.00 at the most. But that's where they got you--over a barrel. You couldn't do it all yourself and they knew it. ... And when he brought the cabinet in it wouldn't fit. Too big. Used the wrong material too. That wasn't what I paid for but it's too late then. $450.00 and it wasn't even right.

There were persons in the valley who came to be regarded as vultures, scavengers and/or profiteers. Generally, this designation refers to "outside" contractors who are suspected of "following disasters to prey on people when they're down". The term is also used in its more inclusive sense to refer to anyone who exhibited signs of greed. It was customary in the valley to contract work out to familiar persons and in many instances, "contracts" were simply "gentleman's agreements". The exigencies of the disaster context precluded the possibility of everyone having work done by familiar persons. Unfortunately, there were no legal provisions to have contractors bonded and although formal contracts were generally instituted, the contractual agreements did not include a consent of release. These conditions allowed for some residents to become the victims of secondary disasters.

The following account is told by an elderly widow whose home was severely damaged. She had understood that her home was repairable, muddied it out and discovered that it had to be demolished. The claim she submitted included the costs of repair but she didn't resubmit a claim "because I had some savings and I didn't think it was right to ask for too much".
It's so morbid. I just don't want to talk about it. ...
It's not the kind of experience you want to share. ...
Well, yes, it was difficult (to find a contractor) but then this
guy opened up an office here and said he'd do it and
this is where my story gets so morbid. .... I lost about
$30,000.00-$30,666.00. He was such a nice fellow too and he
was going to put it (my house) up for $47,000.00 and I gave
him the first installment and then I wanted white brick and
he said he'd have to go to Boise but needed another $15,000.00
and even then I thought he was such a nice fellow, so, I gave
him the second installment and he left town. Then, there
was a lien on the plumbing and a lien from the lumber company.
They said he didn't even do $10,000.00 worth of work. So,
that's why I say I lost about $30,000.00. You just have to
start from scratch. .... It's just an awful adjustment. Then,
when it came time to buy furniture, why, I didn't have any
money. So, I just have to do without the things I had. You
have to learn to live with it.

This woman's attitude is quite philosophical. Other residents,
who were also victimized by the "vultures", are similarly reluctant
to share the experience but unlike the above woman, generally express
more anger and bitterness. The following excerpt is from a resident
whose response is more typical.

I'm really bitter, I know it might not be right but I feel
bitter against the contractors, the city, the county, the
merchants--well, except one and I never heard a bad word
against him. Sometimes I lay in bed and I go through every-
thing all over again and I just can't sleep. It's all been
such a hassle. I guess I have a nicer home (with two mort-
gages)--I have new carpets, drapes, and some furniture, but,
I look around and I hate them. They have no meaning, none
of it, the city, the county, none of it.
Sometimes I have a few belts--and, you know, I don't
drink--but I have a couple of drinks and then I just tell
people what I think of them. You don't feel proud after, you
know. You feel like you degraded yourself and you don't feel
proud for doing it. ...
Well, I just feel like I had the screws put to me.
That's not a nice way to say it but that's how I feel. ...
If they offered me $40,000.00 right now I think I'd
sell and just leave it all. It's been nothing but a pro-
blem. And I used to love my house but its been nothing
but trouble.
Transcendence

The level of construction activity was still higher than normal in the fall of 1977 but the area generally had a more typical appearance: crops were growing in the fields; roads and highways were rebuilt; the dumping sites for debris removal were no longer visible; the commercial district was vigorous; and all but three hundred and fifty trailers had been removed from the valley. However, the communities, having just had a major "face lift", would never be the same again. Historical landmarks were gone, the landscape had changed, physicians offices moved to the professional plaza, some "old-timers" didn't reopen their businesses, some new businesses opened on Main St., and many shops reopened but in new locations. Neighborhood relations had also changed, to some degree, for the flood had seemingly provided many with the opportunity or necessity to relocate. The pre-disaster trend of residential encroachment into the urban areas and development on the hill in Rexburg intensified and many residents discovered that their neighborhoods were no longer the same.

The vast majority of residents were settled back into the sanctity of a home and into a more typical routine of daily living. The events of June 5, 1976 and the uncertainty and hassles which followed in the aftermath were becoming a part of history, but, "it will never be the same again". Life was somehow different and there was a general sense that the people were different too but the changes are subtle and difficult to articulate. "It's hard to put into words, but sometimes I look at my friend sitting in her house--everything beautiful and new--and I think, you don't look right. You don't belong here." Other residents commonly express the difference by reference to the relationship between the environment of a new home and habitual acts. "I'll be needing a hammer and I go out to the shed to get it and all of a sudden, I think, now that's foolish, the shed isn't there any more. That was before the flood."

There seems to be a general feeling that the flood experience brought people closer together and families, in particular. This is not true in all cases, of course, and some divorces and divisions in extended family networks also occurred. Nonetheless, the comments of the resident below are typical of the experience of most residents.

For a long time people were feeling closer together. People were more concerned and thoughtful and I think some of the concern is still around. Some had received help from others and that gave them the idea that they needed to return this thoughtfulness to others. ... You know, it really brought families closer together--sons, daughters, nieces, nephews, second cousins--people you didn't even consider to be close thought about you and made contact. You never forget that. It's a precious blessing the flood waters brought into the valley.
At the same time, there is also a sense that the flood experience has had consequences that are socially divisive. The feelings expressed by the resident below are representative of this contradictory aspect of social relations.

Do you know what hurts? Sometimes, it makes me feel bitter and resentful. When you hear people say, "I wish I'd been in that flood. I wish I'd lost everything and replaced it with brand new things." It really hurts when people say that. They only see from the outside but they don't understand the mental anguish you go through. They think you just go out and get everything new. They never stop to think of what you had to go through. It's as if they're tellin' you you got it for nothing as if you don't deserve it.

Visible signs of material affluence marked the valley's transcendence over the obstacles inherent in the preceding phase of rebuilding. Indeed, many had prospered economically. New job opportunities were created, certain wages increased and substantial profits were made in selective aspects of the economy. For many, the disaster "gave us back our free agency" and provided the conditions in which it was possible to make major life changes.

We're set now. What the flood did is it shook us loose, you know. Once I stopped trying to resurrect the past; once I let go, I was able to start really rebuilding our lives together. I mean it was a very traumatic thing, and I'm not gonna put that down at all. I mean, it was just, well, there's never been anything quite so horrible for us. But after the flood, it was sorta like a real boot in the rear-end to get me goin'. I was settin' in this job that wasn't goin' anywhere. ... It was hard living that way. We were scraping to get by. But in a sense, it was comfortable. You knew what the next day held. ... But, after the flood, I started takin' what I thought was a few chances on different types of jobs and really tryin' to go someplace. And, as a result, I now have a really good job. ... Turned things around for us.

The earlier sense of optimism and the prevailing ethic to "rebuild bigger and better" was in many respects, supported by a period of economic growth and prosperity. Perhaps, these conditions account for the change in consumption patterns and for what some critical residents see as the "foolish desire to have your dream house". At any rate, many residents had achieved a standard of affluence that was difficult to sustain, given the wage structure of the valley.
Right now I'm just praying to Heavenly Father that I can keep this house. Before the flood, I paid about $120.00 a year in taxes. This year I paid, uh, $480.00. If it was just the taxes, I could manage but $6,000.00 a year doesn't go very far with the price of everything going up. Seems like the only thing that didn't go up after the flood is our wages. ... I don't know what to do because the houses aren't selling on the market. There's lots of them for sale but the houses are all so expensive now and people just can't afford them. ... People's wages around here aren't very high you know. I probably couldn't buy a cheaper one and rents are higher than my house payments. I don't know what I'm going to do.

The period of transcendence signaled a return to the more typical concerns and struggles of everyday living. As one resident describes it, "the world got bigger again". But the rebuilding process had introduced new concerns and elements into the environment. Although worries of the consequences of a recession were expressed on a national scale, this issue had a heightened sense of urgency in the disaster area. The building boom had started its decline in the winter of 1977 and by the summer of 1978 disaster losses had been replaced, new construction ceased, consumer spending came to a halt and the local economy had slumped into a recession. The cost of living continued to increase, property taxes increased, and residents were beginning to wonder if the prosperity associated with the windfall of disaster money might have dire economic consequences over the long term.

Summary

The diagram below, figure 21, summarizes the material presented in this chapter. It outlines the aftermath of disaster showing the three phases of the rebuilding process, the progress of reconstruction as a collective phenomenon and the socially organized constraints that were operative during the period under study.

The first phase, lasting roughly two and a half to three months, is characterized essentially by uncertainty. The cascade of existential problems left in the wake of the flood were of a magnitude that far surpassed the resources and energies of individual residents and their families and the underlying sense of economic uncertainty was magnified by a sense of futility and helplessness. Paradoxically, this was also a period of optimism and reassurance engendered by informal and formal sources of material and social support. In particular, the conjoint efforts and consolidation of power on the part of the LDS Church and County Government resulted in the reestablishment of the ecclesiastical structure of the pre-disaster context. The LDS social structure transcended the spatial disorder created by the
Uncertainty Transcendence

Building Boom

Figure 21 Aftermath of Disaster: The Rebuilding Process
disaster and immediately re instituted a pattern of activity and mean­
ing constrained by the ward system. The consequences of the Church
and County Government were most intensely experienced during this ear­ly period although there was some continuation of disaster-specific
involvement into the early part of 1977. Thereafter, their activities
remained in the background of the rebuilding process.

This was also a period of rapid change and the introduction of
federally sponsored disaster welfare programs. These new elements in
the social environment brought an almost incomprehensible set of new
rules and procedures, confusion and most importantly, money which pro­
vided the grounds for hope.

The second phase, characterized by the obstacles which rebuilding
posed, lasted roughly fourteen months. It should be noted that the
LDS Church organization and doctrine continues to provide the over­
arching structure which gives meaning to daily life. However, these
are not, for the most part, problematic aspects in living. The pro­lems of rebuilding are associated with the sources of help--HUD and
the BOR--which are most prominent in this phase. Many of the problems
in living and in rebuilding stem from the confinement of living in
trailers and from the rigidity of the bureaucratic management of di­
saster compensation. Additionally, problems arise from the lack of
constraints on the construction industry.

This is a period when Interfaith, in particular, emerged as an
important social resource. They were particularly instrumental in
guiding residents through the arduous task of preparing, submitting
and appealing claims to receive restitution for losses.

As a collective phenomenon, the phase termed obstacles, ends a­
round October of 1977. Like all cut-off points, this is an arbitrary
designation but it seems reasonable in view of the fact that roughly
69 percent of trailer occupants had resettled in private homes and
more than 75 percent of all flood claims had been processed.

This second phase represents the period in which material con­
struction was most heavily concentrated and "outsiders" were most vi­
sible. Although it is a period of obstacles, it is also a period of
prosperity and growth. Construction activity levels off during the
rather severe winter of 1978, increases slightly over the summer and
plummets in the fall of that year. The activity in the construction
industry reflects, fairly closely, the general pattern in the economy
as a whole.

Paradoxically, social life during this period is both private and
public. It is private in the sense that all energies are concentrated
on individual efforts to reestablish normalcy to familial life. It is
also private in the sense of being confined within the constraints of
15 x 50 foot walls and inflexible rules. Nonetheless, it is also pub­
lic in that similar conditions are shared by the majority of valley
residents affected by the flood. It is also public in the sense that
official authorities seemingly have the right to intrude into the privacy of the home on the pretext of official business.

This phase seems to be the period when "casualties" of the flood are created as a consequence of the socially organized response to disaster. The losses incurred from the flood itself are minimized by the fact that they are experienced by "everybody" and by the presence of social processes designed to mitigate their effects. Losses incurred as a consequence of the recovery process are individual losses for which the social context fails to provide remedial action. The same social processes which promote recovery for the majority of residents also serve to disadvantage others and trap them in a "holding" pattern which precludes them from advancing to the phase of transcendence.

Transcendence, the final stage of the rebuilding process, represents the period in which the obstacles of rebuilding are overcome. The past, the conditions of life which existed prior to the flood, can never be resurrected. Family and community life are never the same again but a new sense of routine and order are refashioned out of a combination of pre-disaster and disaster elements.

The economic prosperity, or the illusion of prosperity, evident in the preceding phase is challenged with the more typical struggles of making ends meet. By necessity, and sometimes as a result of excessive consumption, residents are faced with a standard of living that becomes problematic to sustain in view of a wage structure that is fundamentally unchanged.

In this phase, the salience of the disaster and its effects, recedes into the background as a part of one's personal and familial history. Other aspects of "the social world"—missionary work, stake conferences, vacations, current events and international affairs—re-emerge as issues of interest and concern. Many of the contradictions and conflicts typical of social life become, once again, problematic features of daily living. To some degree, the sense of closeness between family and friends remains although new divisive elements are interwoven into the broader pattern of social relationships.
NOTES TO CHAPTER 6


2. In addition to the meals which were served in the cafeteria, lunch boxes were also prepared for residents to take with them to their homes each morning when they went to work. Outside workers who came into the area to help were also fed at Ricks College until private restaurants were able to reopen.

3. Many services were provided for valley residents including childcare, first aid, movies, and other forms of entertainment.

4. Only one Prophet had ever visited the Upper Snake River Valley before and that was President Taylor who came to survey the area as a site for colonization.

5. The First Presidency sent a letter to the Stake Presidents and Bishops, dated June 15, 1976. This letter basically, repeats the same message and requests that bishops inform the membership of the Church's position again on the following Sunday.

6. A fairly comprehensive, although not exhaustive, list of the various outside agencies involved in the disaster response appears in Appendix E.

7. This was a period in which many forms of aid and support were donated. For example, the Fire Department of a near-by city sent their fire trucks to clean the mud from the streets, a city in Montana declared itself a "sister" city and sponsored a drive for money and clothing, a near-by city sent their floats so that the flood residents could celebrate July 24th (the day the pioneers settled in the west) with the traditional parade; one man baked a huge bicentennial cake for the residents who were sheltered at Ricks College; private businesses sent in truckloads of goods; and various wards played host to a disaster ward with a potluck supper.
CHAPTER 7
CONCLUSION

This research report concludes with a discussion of three general topics. First, the major findings of the case study are summarized. Second, the general issues raised earlier in connection with the medical metaphor are reexamined in light of the findings generated by this study. Finally, the implications of the study are discussed.

Summary of Findings

From the official LDS point of view, June 5, 1976, represents a day of historical proportions and, in this context in particular, a day that has overtones of biblical significance. Although the dam break is viewed as a man-made disaster, testimony to the imperfections of human technology and human institutions, it is also viewed as a "test" put before the Saints as preparation for the Armageddon. As such, it serves as a reminder that the Kingdom of God, as yet incomplete, requires renewed commitment and devotion. Nonetheless, the events of the succeeding months and years since the flood are also interpreted as testimony to the correctness of the Mormon way of life, the spirit of the Saints and the truth of the ecclesiastical structure. In this respect, the official interpretation connects the disaster and the aftermath to the larger overarching socio-religious context of meaning.

From a common sense perspective, June 5, 1976, is remembered variously as a nightmare, an incredible experience, an unforgettable day, a shock, and a day of utter destruction. The events of that day are still, almost three years later, remembered with detail of amazing exactitude and vivid imagery that continues to evoke strong emotions. June 5th is remembered as a day of the past, a day that produced an aftermath of a vast number and array of existential problems which challenged the strength, tenacity, and courage of valley residents.

In the early aftermath of disaster, there was a great deal of speculation and concern about the long-term affects and the social-psychological costs of the flood. The material destruction and social disruption was of such a magnitude that some public officials suspected that psychological trauma, of necessity, would surface in the form of
widespread personal disability and social deviance. This view, based upon a presumption of illness or mental health emergencies, represents an orientation that is dominant in the social-psychologically oriented disaster literature.

The specific expectations for self-destructive, personally debilitating and socially deviant conduct, predicated on the assumptive framework of the medical metaphor, were reviewed. Official statistics, gathered over a period of two-and-a-half to three years pre- and post-disaster, were examined. It was found that, contrary to expectations, there was no observable increase in officially detected cases of the following type: 1) admission to psychiatric hospital; 2) complaints to police for "strange, bizarre or mental behavior"; 3) suspected suicide; 4) alcohol sales; 5) police reports of domestic calls; 6) child abuse; or 7) divorce. Although there was no discernible increase, the pattern of official detection is interesting. With few exceptions, the immediate aftermath of disaster shows a general depression followed by return to normal activity between twelve to eighteen months following impact.

The official data concerning legal deviance is a little more complicated although generally, there is no compelling evidence to suggest an increase. There is no increase in reported offenses or complaints to police in the aftermath of the flood. However, there is an increase in police arrests, particularly substance abuse related arrests, and this increase, consistent with expectations, occurs immediately after impact and is sustained for one-and-a-half to two years post-disaster. The weight of the evidence seems to suggest that this increase is attributable to an influx of outside workers and increased police surveillance.

There were a number of crisis episodes treated on an out-patient basis by the disaster mental health team, although the number failed to reach expected proportions. As a general rule, the severity and duration of the detected crises seemed to be of a relatively minor and short-term nature. In fact, before the end of the first year of the aftermath, the crisis team concluded that "the victims will effectively recover."

The typification of disaster aftermath as a period characterized by psychological trauma along the lines expected by mental health professionals appears to have been a misconception. From the perspective of valley residents, at least, the flood aftermath is most accurately characterized as a period of rebuilding. In a practical sense, the concerns and daily activities of residents were organized around restoring a sense of order and coherence to daily life. The single goal in restoring order, in personal and social terms, was to rebuild the lives, the homes and the communities that had been damaged by the flood waters.
One of the most notable features of the disaster and its aftermath is that it is essentially a collective phenomenon. Everyone in the valley, in varying degrees, was affected by the flood. For some, the personal and family losses were almost total, others were affected only indirectly by the losses of immediate family or friends, some temporarily lost their jobs, others became involved only in providing assistance, and all were affected by the disruption to the patterned flow of goods and services which characterize community life. There were relatively few deaths or injuries caused by the flood and consequently, the network of primary or intimate relations transcended the physical disorder. Moreover, the LDS social structure, based fundamentally on the ward system, was quickly re instituted and restored a sense of order and unity based upon a pattern of social relationships that was familiar and predictable. Additionally, a variety of social organizations and, in particular, federal agencies, converged on the disaster area with resources to aid in the process of reconstruction.

Three analytically distinguishable phases emerged from an analysis of the accounts to provide a pattern to the rebuilding experience. Each phase was distinguished by a set of existential problems and contradictions, by the dominance of a particular feature of the socially organized context, and by the progress of the rebuilding effort as a collective background feature.

The first phase, uncertainty, was characterized by economic uncertainty and a paramount concern for the continuity of the past and future. Social processes engendered a sense of optimism, assurance, and self-reliance, but the grim reality of material conditions engendered a sense of futility, fatigue, and helplessness. The remedies, embedded in the socially structured context, arrived in several forms. The transcendence of the LDS social structure provided a sense of order, meaning, and continuity with the past. Money, appropriated by Congress for full restitution, provided the warrant for hope. Labor and materials volunteered from a variety of sources marked the arrival of help to deal with the enormity of the tasks which the challenge of the present posed. This period was, seemingly, characterized by intense emotional highs and lows and by a degree of tolerance and support for wide variations. It was also a period of rapid change and confusion as new social forms of organization were introduced into the community context.

The second phase, characterized by the obstacles inherent in the rebuilding process, lasted roughly fourteen months. For some individuals who were fortunate enough to buy a home on the market and submit a claim early, the entire process may have been truncated over three months. At the other extreme, roughly thirty percent experienced this second stage for more than fourteen months and for roughly five to ten percent, this stage extended beyond two years. But, the typical length of this stage was around fourteen months.
This stage was distinguished by a sense of economic prosperity or security and a return to a more individual and private life within the context of a temporary home. What is interesting about this stage is that the social forces organized to provide assistance in the recovery effort were simultaneously the source of further obstacles. Among the outsiders who converged on the disaster area were sincere workers and profiteers, volunteers and vultures, altruists and charlatans. The money and federal programs of relief which provided the warrant for hope and a prosperous future also imported higher wages and inflationary processes. The rules and regulations which were attached to the disaster programs were associated with the promise of self-sufficiency and an entanglement of red tape which seemed beyond the comprehension and control of many. The temporary housing which allowed for privacy and familial unity also gave rise to public intrusion, confinement, and new forms of material, personal, and social discomforts. This was, paradoxically, a period of economic security, hope, and real progress as well as a period of frustration, anger, hassles, and a sense that many forces were operating beyond one's control. It was a period of new opportunities in which some improved their life chances, and a period in which some were disadvantaged by the rules for distributing disaster relief. Questions of justice, equity, and personal rights were central.

Those who were disadvantaged as a consequence of the socially organized response to disaster were, in a sense, victims of secondary disasters. These disasters, unlike the flood, were private rather than collective phenomena. The experience of a secondary disaster appeared as a process of individuation, that is, as the consequence of social processes which singled one out for a peculiar hardship distinct from the typical recovery experience. The victims of these disasters, I believe, are more likely to be left with feelings of bitterness, resentment, anger, distrust and a real loss in terms of life chances. The data suggests that the victims of a secondary disaster -- inequity in the distribution of disaster money, the effects of inflation, or consumer fraud, for example -- are more likely to be located in socially marginal positions by virtue of age, marital status, religious, ethnic or social class position. During the later part of this stage, the disaster was becoming history and a tiresome subject, and the volunteer disaster-specific programs of assistance were de-escalating or had already withdrawn from the social environment. In short, there were few resources or forms of social support to which secondary victims could turn for a remedy. To some extent, this condition resembles a holding pattern in which the hardships prevented one from recovering fully from the disaster, relative to most members of the community.

Transcendence, the final stage, represents the stage in which the obstacles of the preceding period are resolved and a more routine and predictable pattern of daily living is re-established. The important thing is that life as it was lived prior to the disaster will never be the same again. This is also a period when one has the
luxury to reflect on the experiences of the proceeding months and to place the disaster and the process of rebuilding within the larger perspective. To some degree, there is the realization that new experiences, new competencies, and new opportunities resulted from meeting a situation that at times seemed futile and insurmountable. There are many expressions of pride and a sense of elation at having endured conditions of adversity. Perhaps the following comment conveys this phenomenon. "We built this back ourselves. We did it all alone. We had never done anything like it before. When we go to bed at night, sometimes my husband says, 'I love this house.'" But, at the same time, there is a sense of ambivalence about the cost of the "blessings." This is most frequently expressed as a sense of having "grown older."

It is interesting that the graphs showing the pattern of officially detected cases of deviance have some relation to the stages of the rebuilding process as outlined. The depression which appeared in new admissions to psychiatric hospitals, reports of strange, bizarre and mental behavior, domestic calls, suspected suicide, and divorce have a rough correspondence to the first two stages of the rebuilding process. This suggests that the social context is generally supportive and that the frustrations and feelings of anger and of being hassled are viewed as understandable and reasonable within the constraints of the situation. It would appear that during the phase of transcendence, when life circumstances take on the appearance of a more routine and familiar pattern, problems become individualized and official solutions are more likely to be sought for extreme forms of behavior that are viewed as disruptive or in violation of socially sanctioned rules of appropriate conduct.

General Issues

As discussed in chapter one, the dominant orientation to understanding disaster phenomena of a social-psychological nature is informed by the medical model. The adoption of the medical metaphor and its extension to the disaster context rests on an assumptive framework which directs attention along certain lines. The medical metaphor suggests that the significant problems of disaster victims are symbolic and emotional in content; that they occur immediately upon impact and in the early aftermath of disaster; that they are located primarily in the psychological structure of the personality; that they are explainable by reference to disturbances in internal homeostatic mechanisms; and that the remedy requires a symbolic reintegration of the disaster experience within the context of a therapeutic or communicative model of intervention.

Based upon the data generated by this case study, the medical metaphor is correct in its conclusions concerning the emotional and symbolic significance of disaster. It is also correct that victims
of disaster find assurance and comfort in talking about the disaster with friends, family, neighbors, and strangers. Dialogue does provide the symbolic medium through which residents come to terms with and make sense of an event that seems unbelievable. It is also the case that the experience of disaster impact gives rise to feelings of helplessness, hopelessness, worry, anxiety, grief, frustration, and confusion, feelings that are traditionally categorized under the rubric of mental health problems. This, however, appears to be the extent of the utility of the medical metaphor.

From the perspective of valley residents, the most significant problems of disaster are not tormenting memories of disaster impact which are compulsively relived on a daily basis. The most significant problems are the multiplicity of existential problems whose solutions pose unrelenting demands on time, energy, and resources. The problems, essentially problems of rebuilding, occur throughout the aftermath of disaster. While the experience of rebuilding gives rise to feelings of helplessness, confusion, futility, fatigue, worry, and frustration, there are simultaneous social processes which give rise to feelings at the opposite end of the continuum. The essential problems associated with the disaster aftermath are located within the social and material context of daily living and their explanation derives from an understanding of the socially structured context. There are "casualties," if you will, which occur later in the aftermath of disaster, and these are produced, paradoxically, by the same conditions which account for the recovery of the majority of disaster victims. The remedy to disaster-related problems takes the form of restoration of the social order, money, labor, resources, simplified rules and procedures, information, legal advice, and protection from exploitation.

Basically, the assumptive framework on which the medical model rests leads to an interpretation which obscures the contradictions and essential features of the disaster experience and process of recovery. The medicalization of social phenomena, as noted by others, has two basic shortcomings which seem to account for this tendency to obscure the important features of social events. The adoption of the medical metaphor to explain social conduct over-psychologizes and depoliticizes social phenomena.

Within the context of the medical approach, the problems of disaster tend to be viewed as individual and private problems whose source is affective, cognitive, and emotional in nature. For example, recall the case of the gentleman who, having submitted a claim for $112,000.00, was initially offered $9,000.00 for compensation. This experience led to feelings of frustration, bitterness, hopelessness, helplessness, anger, and self-doubt. Moreover, it interfered with his and his family's ability to rebuild in both an emotional and material sense. This experience also led to a vicious cycle in which the family felt trapped and powerless to escape. From a mental health perspective, a sense of powerlessness, hopelessness, and loss of self-esteem are critical elements in the phenomenon of clinical depression. The thrust
of the medical approach is to focus on the emotional aspects, thereby locating the source of the problem within the individual. The logical remedy, therefore, is to treat the individual by helping him or her come to terms with the feelings and to accept the conditions of life.

What is missing from this interpretation is the relationship between individual conduct and the social context. A sense of self-esteem, efficacy, and hope, as others have pointed out, depends upon the exercise of power within a social context that is at least minimally responsive to the efforts to act on one's own behalf. In this case, the mistakes, arbitrariness, and inconsistencies built into the bureaucratic rules and procedures for restitution were forces that were unmanageable and beyond the control of individual residents.

In addition to over-psychologizing, the medical metaphor also tends to decontextualize and depoliticize social phenomena. In attributing the cause of problems to impersonal forces and abstract stressors and strains, social phenomena are by definition, divorced from the social-historical context and from such issues as power, equity, justice, and rights. To return to the example above, the gentleman felt powerless to alter a condition which he felt was unjust and unfair. From his perspective, at least, his problem was not a mental health problem, but, rather, a problem that was political and ethical in nature. From the crisis or trauma orientation, his interpretation may be symptomatic of a post-disaster phenomenon referred to as "paranoid reactions toward government officials."

By ignoring the social context and by focusing on the causal primacy of disaster impact, the medical metaphor leads to a misunderstanding about the nature of at least some of the post-disaster problems which have important consequences for disaster victims. It also fails to recognize, therefore, that the most efficacious solution to some disaster problems may reside in changes in public policy and in intervention aimed at changing aspects of the social structure.

Implications of the Study

There are certain limitations inherent in all case studies that caution against unwarranted generalization. This case study was unique in at least two important respects. The population of the Upper Snake River Valley is predominantly Mormon and the authoritarianism, social organization and social cohesion characteristic of this population may well account for the speed with which a sense of social order was reestablished. Also, this disaster was caused by the failure of a federally owned dam and this led to the distribution of large sums of money which Congress appropriated for the restitution of flood losses. Undoubtedly, the amount of money was, in large part, responsible for the relatively short recovery period.
Although the area selected for field research is unique in some respects, it is typical in others. With few exceptions, community-wide disasters in North America tend to be primarily disasters of property damage and social disruption. The Teton Dam failure, like most North American disasters, was a disaster of property damage and social disruption. Similar to other large-scale disasters large amounts of relief—money, personnel and resources—converged on the area to provide assistance to flood victims. Also, like other major disasters, residents in the path of the Teton Dam flood were the recipients of a vast array of federal compensatory programs authorized by the Disaster Relief Act.

The research setting was important in that there were intensive and extensive efforts by mental health professionals to uncover victims suffering from psychological trauma. In view of this emphasis, it is significant that the research findings do not support the expectations for long-term personal and social disability predicated on the assumptive framework of the medical metaphor. It seems reasonable to suggest, therefore, that this metaphor fails to provide direction for discovering knowledge that will enhance our general understanding of disaster experience as a socially meaningful phenomenon.

This research suggests that future studies of a social psychological nature shift the focus to include historical and contextual features which constrain and give significance to human experience. It is perhaps ironic that suggestions along these lines were affirmed twenty-five years ago by two scholars whose works were seminal contributions to the orientation grounded in the medical metaphor. Wallace points to the importance of the "common maze," the collective pattern of social activity and shared meaning, in determining both the consequences of disaster experience and the direction of disaster recovery. But, it was Tyhurst, a psychiatrist, who placed the essence of disaster experience within the larger socio-historical context. Referring to the disaster experience as a lack of congruity between existential conditions caused by impact and the larger socio-cultural map of reality, Tyhurst explains:

We daily experience change, but we do so within the supporting framework of a coherent system of certain personal values, assumed roles, definable expectations and responses which we take for granted. We may come up against changing circumstances, but our views of the world and our relation to it are not affected. We deal with the new situation on the basis of the premises and values which are not questioned. Change tends to be subjectively experienced most intensely when the persons' premises are called into question.\(^5\)

It is significant that this insight led Tyhurst to reconceptualize disaster experience from the category of abnormal phenomenon to normal or social phenomenon drawing on a synthesis of ideas presented in
Schutz' work on the stranger, Mannheim's concept of "crisis in valuation", Park's concept of the "marginal man", W. I. Thomas' dual notions of "crisis" and "definition of the situation" and the parallel notions of "hitch" and "assumptive form world" of Ames and Cantril.

This research suggests that in addition to examining the socio-cultural complex of meaning, future research must also focus on the material substratum of economic forces and the role of institutional processes of relief which are extraneous to the local milieu. The understanding of the aftermath of disaster and the process of recovery requires an understanding of the relationship between disaster experience and the larger socio-historical context by examining the mediating influences or the federally organized response, voluntary private organized forms of response, the political economy and in particular, the construction industry. If the experience of residents in the Upper Snake River Valley is illustrative of the recovery process in other U. S. disaster-stricken communities, the social institutions of aid are simultaneously the source of new obstacles.

In conclusion, I would like to engage in some speculation about the effects of the Buffalo Creek dam break to suggest the potential benefits of enlarging the scope of inquiry along the lines suggested. You will recall that two-and-a-half years after the flood, psychiatrists concluded that more than 90 percent of the litigants diagnosed, still suffered from traumatic neurosis. They expressed signs of helplessness, hopelessness, anger, anxiety and distrust; felt the world was strange; and had lost a sense of communality. Moreover, two years after the dam break, disaster victims still "could not mobilize their energy or the conviction necessary to stabilize their own lives or to rebuild the communities in which they had invested so much". The explanation, of course, was that the flood experience had caused psychic and collective trauma which produced long-term personal and social disability. It is important to point out that the residents were not warned and about one hundred and twenty-five persons, mostly women and children, drowned. The experience, as described by the survivors, was horrifying as they physically struggled to survive the force of the flood waters and watched as others in their family failed to survive. This type of disaster experience alone may account for the reported consequences as predicted by the medical model. However, there may be other factors to consider.

First, the survivors were temporarily housed in HUD trailers but unfortunately, the organizational rules for assignment were based on a first-come-first-serve basis. Therefore, the social order and neighborhoods which were maintained pre-disaster by seventeen communities along the hollow was significantly disrupted. The world was, in fact, strange and without distinguishable and familial communities as a consequence of social policy. Second, the State government decided that this was a good opportunity to consider constructing a major highway through the hollow. Unfortunately, two years passed before the decision was finalized. To some degree, this public action may
have delayed the decision of some residents to rebuild in an effort to avoid being uprooted a second time when their properties were expropriated for public use. Third, the six hundred and twenty-five litigants diagnosed were involved in legal action to sue the coal company for negligent and irresponsible conduct in the construction of the dam which failed. The corporation successfully delayed legal proceedings for more than two and a half years before the case was finally settled before it went to trial. In the meantime, the litigants were on hold, waiting for compensation of damages which may have been awarded by the courts if they were successful. The judgement on the part of survivors that the single most important employer in the hollow was guilty of corporate homicide and the long history of exploitation provided grounds for distrust and anger.

It seems reasonable to assume that social conditions of the above nature may contribute to obstructions in the recovery process and to realistic feelings of distrust, anger, anxiety, helplessness, hopelessness, disorder and lack of community. The most enlightening explanation for long-term "disability" may not be by reference to psychic or collective "trauma". This is speculation, of course, and it does not dismiss the importance of the human misery or hardship imposed by such conditions. It does suggest, however, that the remedy requires social, political and legal change rather than or in addition to clinical intervention. What is important is that issues of this nature not be precluded from empirical and theoretical examination and from practical modification.
NOTES TO CHAPTER 7


APPENDICES
APPENDIX A
FIELD GUIDE FOR IN-DEPTH INTERVIEWING

Open-Ended Questions

INSTRUCTIONS TO THE RESEARCHER: The objective of in-depth interviewing is to introduce a minimum of structure into the interview setting to allow the participant to reconstruct his/her own experiences from his/her own perspective. Consequently, the researcher participates minimally in the dialogue maintaining an attitude of active listening. To accomplish this objective, avoid interjecting comments or questions, for this interrupts the internal coherence and flow of ideas. Use silent probes and gestural cues to indicate an active listening stance. When necessary, wait for a natural break in the flow and ask for elaboration or clarification using the participants terminology or neutral phrases.

1. It would help me to understand better if you would tell me a little about the year before the dam broke. What kind of a year was it for you and your family, generally speaking?

2. Do you remember what you were doing on June 5, 1976? What happened on that day?

3. Why don't you just continue with your experiences and give me a history of what has happened up to the present?

NOTE: As a number of interviews have been completed, it may become apparent that certain types of events have greater theoretical significance. In this case, take a more active role and focus on selective aspects. This decision, however, will necessarily be made in the field.

Questions Expected To Be Answered in the Account

INSTRUCTIONS TO THE RESEARCHER: Listen for the answers to the following questions. If the answers are not contained in the reconstruction, wait until the interview is completed and ask for the appropriate information. Please note which, if any, items are solicited.
1. What was the composition of the participant's household at the time of the disaster? Now?

2. How long had the participant lived in the community and in that particular household before the disaster occurred?

3. Does the participant still live on the same property as before the disaster?

4. Did the participant have any previous disaster experience or preparedness training?

5. Does the participant have any other family members who lived in the community at the time of the disaster? How extensive are the social and family ties in the area?

6. What losses were incurred as a result of the disaster?

7. What losses, if any, were reimbursed? Did the reimbursement cover the costs of replacement?

8. What is the educational background of the participant?

9. What is the occupation of the participant and/or the head of the household? Has there been any change since the disaster?

10. What was the total household income at the time of the disaster? Has there been any change since the disaster?
### APPENDIX B

**VITAL STATISTICS (DEPARTMENT OF HEALTH AND WELFARE, STATE OF IDAHO) FOR MADISON COUNTY, 1974-1978**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Rate</td>
<td>Number</td>
<td>Rate</td>
<td>Number</td>
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<tr>
<td><strong>Population 7/1</strong></td>
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<td>----</td>
<td>17,000</td>
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<td>18,000</td>
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<tr>
<td><strong>Natural Increase</strong></td>
<td>313</td>
<td>19.8</td>
<td>372</td>
<td>21.8</td>
<td>382</td>
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<td><strong>Live Births</strong></td>
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<td>25.0</td>
<td>442</td>
<td>25.9</td>
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<td><strong>Sex: Male</strong></td>
<td>200</td>
<td>----</td>
<td>255</td>
<td>----</td>
<td>261</td>
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<tr>
<td><strong>Female</strong></td>
<td>195</td>
<td>----</td>
<td>188</td>
<td>----</td>
<td>212</td>
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<td><strong>Out-of-wedlock</strong></td>
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<td>15.2</td>
<td>6</td>
<td>13.5</td>
<td>6</td>
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<td><strong>Premature</strong></td>
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<td>98.7</td>
<td>25</td>
<td>56.4</td>
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<tr>
<td><strong>Infant Deaths</strong></td>
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<td>7.6</td>
<td>6</td>
<td>13.5</td>
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<td>6</td>
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<td>----</td>
<td>----</td>
<td>----</td>
<td>3</td>
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<td><strong>Perinatal Deaths</strong></td>
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<td>17.7</td>
<td>11</td>
<td>24.8</td>
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<tr>
<td><strong>Fetal Deaths</strong></td>
<td>4</td>
<td>10.1</td>
<td>5</td>
<td>11.7</td>
<td>4</td>
</tr>
<tr>
<td><strong>Deaths</strong></td>
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<td>5.2</td>
<td>71</td>
<td>4.2</td>
<td>92</td>
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<td><strong>Sex: Male</strong></td>
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<td>----</td>
<td>41</td>
<td>----</td>
<td>54</td>
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<tr>
<td><strong>Female</strong></td>
<td>34</td>
<td>----</td>
<td>30</td>
<td>----</td>
<td>38</td>
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<tr>
<td><strong>Heart Disease</strong></td>
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<td>208.9</td>
<td>22</td>
<td>127.8</td>
<td>29</td>
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<td><strong>Cancer</strong></td>
<td>13</td>
<td>94.9</td>
<td>10</td>
<td>58.5</td>
<td>9</td>
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<tr>
<td><strong>Cerebrovascular Disease</strong></td>
<td>9</td>
<td>57.0</td>
<td>15</td>
<td>87.7</td>
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<td><strong>Accidents</strong></td>
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<td>50.6</td>
<td>9</td>
<td>52.6</td>
<td>11</td>
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<td><strong>Influenza and Pneumonia</strong></td>
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<td>6.3</td>
<td>----</td>
<td>----</td>
<td>4</td>
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<tr>
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<tr>
<td><strong>Suicide</strong></td>
<td>----</td>
<td>----</td>
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<td>5.8</td>
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<tr>
<td><strong>Diabetes Mellitus</strong></td>
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<td>12.7</td>
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<td>4.9</td>
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### APPENDIX C

**STATISTICAL SUMMARIES OF REXBURG POLICE DEPARTMENT REPORTS**

Table 9  Summary of Activity for Rexburg Police Department, 1974-1978

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<tr>
<th>Police Activity</th>
<th>1974 Total</th>
<th>1975 Total</th>
<th>1976 Total</th>
<th>1977 Total</th>
<th>1978 Total</th>
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<td>55</td>
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<td>4</td>
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<td>Rape</td>
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<td>0</td>
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<td>0</td>
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<td>Arson</td>
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<td>0</td>
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<tr>
<td>All Other (except traffic)</td>
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<td>78</td>
<td>28</td>
<td>10</td>
</tr>
</tbody>
</table>

| TOTAL | 201 | 117 | 318 | 196 | 92 | 288 | 257 | 95 | 352 | 237 | 147 | 384 | 160 | 109 | 269 |

**TRAFFIC CONTROL**

| Traffic Citations | -- | -- | 1018 | -- | -- | 1282 | -- | -- | 1297 | -- | -- | 1183 | -- | -- | 1260 |
| Parking Citations | -- | -- | 1127 | -- | -- | 1317 | -- | -- | 1299 | -- | -- | 1916 | -- | -- | 2943 |
| Warnings Issued   | -- | -- | 2660 | -- | -- | 2695 | -- | -- | 2486 | -- | -- | 2276 | -- | -- | 2696 |
| Accidents Reported| -- | -- | 491 | -- | -- | 582 | -- | -- | 602 | -- | -- | 611 | -- | -- | 385 |
| Citations on Accidents | -- | -- | 146 | -- | -- | 151 | -- | -- | 124 | -- | -- | 166 | -- | -- | 159 |
| Person Injured/Accidents | -- | -- | 72 | -- | -- | 51 | -- | -- | 18 | -- | -- | 79 | -- | -- | 76 |
Table 10  
Arrests, Offenses and Complaints Recorded by Rexburg Police Department, 1974-1978

<table>
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<tr>
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<th></th>
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<tbody>
<tr>
<td>Arrests</td>
<td>358</td>
<td>381</td>
<td>427</td>
<td>367</td>
<td>354</td>
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<tr>
<td>Offenses</td>
<td>2301</td>
<td>2698</td>
<td>2028</td>
<td>2422</td>
<td>2329</td>
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<tr>
<td>Complaints</td>
<td>4101</td>
<td>5165</td>
<td>4068</td>
<td>3970</td>
<td>3688</td>
</tr>
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Table 11  
Index Crimes and Arrests Reported by Rexburg Police Department, 1975-1978

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Offense</td>
<td>Arrest</td>
<td>Offense</td>
<td>Arrest</td>
<td>Offense</td>
<td>Arrest</td>
<td>Offense</td>
<td>Arrest</td>
</tr>
<tr>
<td>Burglary</td>
<td>46</td>
<td>8</td>
<td>56</td>
<td>6</td>
<td>71</td>
<td>23</td>
<td>57</td>
<td>11</td>
</tr>
<tr>
<td>Larceny</td>
<td>401</td>
<td>58</td>
<td>345</td>
<td>69</td>
<td>332</td>
<td>51</td>
<td>307</td>
<td>17</td>
</tr>
<tr>
<td>Armed Robbery</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Motor Vehicle Theft</td>
<td>32</td>
<td>2</td>
<td>24</td>
<td>2</td>
<td>16</td>
<td>2</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Assault</td>
<td>25</td>
<td>9</td>
<td>10</td>
<td>0</td>
<td>26</td>
<td>0</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>Rape</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Homocide</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>TOTAL</td>
<td>505</td>
<td>77</td>
<td>437</td>
<td>77</td>
<td>448</td>
<td>81</td>
<td>410</td>
<td>42</td>
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</tbody>
</table>
### APPENDIX D

**COURT FILINGS FOR MADISON COUNTY, 1974-1978**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>CIVIL COURT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Relations</td>
<td>174</td>
<td>172</td>
<td>123</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>Personal Injury/Property Damage</td>
<td>16</td>
<td>19</td>
<td>7</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Support Proceedings</td>
<td>0</td>
<td>12</td>
<td>6</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Other Complaints and Petitions</td>
<td>218</td>
<td>242</td>
<td>219</td>
<td>294</td>
<td>337</td>
</tr>
<tr>
<td>Small Claims</td>
<td>112</td>
<td>83</td>
<td>73</td>
<td>109</td>
<td>192</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>502</td>
<td>528</td>
<td>428</td>
<td>579</td>
<td>722</td>
</tr>
<tr>
<td><strong>CRIMINAL COURT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felony</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug</td>
<td>n/a</td>
<td>12</td>
<td>20</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>MVI</td>
<td>n/a</td>
<td>18</td>
<td>5</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>99</td>
<td>198</td>
<td>94</td>
<td>116</td>
<td>85</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>-</td>
<td>228</td>
<td>119</td>
<td>130</td>
<td>90</td>
</tr>
<tr>
<td>Misdemeanor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug</td>
<td>n/a</td>
<td>27</td>
<td>68</td>
<td>28</td>
<td>39</td>
</tr>
<tr>
<td>MVI</td>
<td>n/a</td>
<td>109</td>
<td>141</td>
<td>142</td>
<td>93</td>
</tr>
<tr>
<td>Other</td>
<td>428</td>
<td>451</td>
<td>512</td>
<td>457</td>
<td>454</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>-</td>
<td>587</td>
<td>711</td>
<td>627</td>
<td>586</td>
</tr>
<tr>
<td>All MVI</td>
<td>53</td>
<td>127</td>
<td>146</td>
<td>150</td>
<td>95</td>
</tr>
<tr>
<td>All Drug</td>
<td>12</td>
<td>39</td>
<td>88</td>
<td>54</td>
<td>42</td>
</tr>
<tr>
<td><strong>Traffic (except MVI)</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2,045</td>
<td>2,534</td>
<td>2,309</td>
<td>2,425</td>
<td>1,825</td>
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<tr>
<td><strong>YOUTH REHABILITATION PROCEEDINGS</strong></td>
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</tr>
<tr>
<td>Drug</td>
<td>5</td>
<td>18</td>
<td>4</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>MVI</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>74</td>
<td>106</td>
<td>45</td>
<td>49</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>79</td>
<td>122</td>
<td>49</td>
<td>59</td>
<td>0</td>
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<tr>
<td><strong>SPECIAL PROCEEDINGS</strong></td>
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<tr>
<td>Child Protective cases</td>
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<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Adoption</td>
<td>16</td>
<td>21</td>
<td>16</td>
<td>25</td>
<td>21</td>
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<tr>
<td>Guardianship of Minors</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>2</td>
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<tr>
<td>Guardianship of Incapacitated Persons</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Formal Estate</td>
<td>38</td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Haberez Corpus</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>All Other</td>
<td>9</td>
<td>16</td>
<td>6</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>70</td>
<td>56</td>
<td>41</td>
<td>48</td>
<td>39</td>
</tr>
<tr>
<td><strong>TOTAL (ALL COURTS)</strong></td>
<td>3,278</td>
<td>6,074</td>
<td>3,687</td>
<td>3,908</td>
<td>4,285</td>
</tr>
</tbody>
</table>
## APPENDIX E
### DISASTER RELIEF BY TYPE OF AGENCY, TASK, AND FUNDING SOURCE

Disaster Relief Task by Federal Agency and Funding Source

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>SOURCE OF FUNDS</th>
<th>TASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Stabilisation and Conservation Service</td>
<td>FDAA</td>
<td>Removal of debris.</td>
</tr>
<tr>
<td></td>
<td>Emergency Conservation Measures</td>
<td>Replacement of livestock and crops.</td>
</tr>
<tr>
<td></td>
<td>Low Yield Assistance</td>
<td>Provision of feed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Income Maintenance</td>
</tr>
<tr>
<td>Corps of Engineers</td>
<td>FDAA</td>
<td>Debris clearance and demolition of buildings. Damage survey reports and inspection of completed work.</td>
</tr>
<tr>
<td></td>
<td>Public Law 84-99</td>
<td>Channel work</td>
</tr>
<tr>
<td>Defense Civil Preparedness Agency</td>
<td>FDAA</td>
<td>One person to manage disaster center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Three people to assist local Idaho offices.</td>
</tr>
<tr>
<td>Economic Development Admin.</td>
<td>Dept. of Commerce</td>
<td>Funds for Economic Adjustment Program.</td>
</tr>
<tr>
<td>Farm Home Administration</td>
<td>FDAA</td>
<td>Funds for diverse emergency activities.</td>
</tr>
<tr>
<td>Federal Disaster Assistance Ad.</td>
<td>Presidents' Emergency Fund</td>
<td>Engineers to assess damage.</td>
</tr>
<tr>
<td>Federal Highway Administration</td>
<td>FDAA</td>
<td>Support services - Offices, phones.</td>
</tr>
<tr>
<td>Food and Nutrition Service</td>
<td>FDAA</td>
<td>One person to inspect library</td>
</tr>
<tr>
<td>General Services Admin.</td>
<td>FDAA</td>
<td>Temporary Housing</td>
</tr>
<tr>
<td>Health Education and Welfare</td>
<td>FDAA</td>
<td>Support Services for Transportation.</td>
</tr>
<tr>
<td>Housing and Urban Development</td>
<td>FDAA</td>
<td>One person to inspect library</td>
</tr>
<tr>
<td>Interior</td>
<td>FDAA</td>
<td>One person to inspect library</td>
</tr>
<tr>
<td>Internal Revenue Service</td>
<td>Dept. of Treasury</td>
<td>Grants to Law Enforcement Agencies.</td>
</tr>
<tr>
<td>Law Enforcement Assistance Admin.</td>
<td>FDAA</td>
<td>Funds for unemployment compensation for one week wait period.</td>
</tr>
<tr>
<td>Labor</td>
<td>FDAA</td>
<td>Crisis counseling</td>
</tr>
<tr>
<td>National Institute of Mental Health</td>
<td>FDAA</td>
<td>Aid to School Districts</td>
</tr>
<tr>
<td>Small Business Administration</td>
<td>SBA</td>
<td>Replacement of about 250 destroyed checks. Processing of change of addresses. Processing of flood-related social security claims (about 30).</td>
</tr>
<tr>
<td>Social Security Administration</td>
<td>SSA</td>
<td>Emergency clean-up, river work Watered protection measures.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gravel removal, riprap, dike repair, and revegetation.</td>
</tr>
<tr>
<td>Soil Conservation Service</td>
<td>FDAA</td>
<td>Emergency clean-up</td>
</tr>
<tr>
<td></td>
<td>Section 216</td>
<td>Food and clothing vouchers</td>
</tr>
<tr>
<td>U.S. Army</td>
<td>FDAA</td>
<td></td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>Veteran Relief Funds</td>
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### Disaster Relief by State Agency and Funding Source

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>SOURCE OF FUNDS</th>
<th>TASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>FDAA Budget, Budget</td>
<td>Public buildings and equipment, Legal assistance</td>
</tr>
<tr>
<td>Attorney General</td>
<td>FDAA via Labor, Budget</td>
<td>Unemployment assistance</td>
</tr>
<tr>
<td>Employment</td>
<td>FDAA</td>
<td>Protective measures, Road systems, Public buildings and equipment, Public utilities</td>
</tr>
<tr>
<td>Fish and Game</td>
<td>FDAA</td>
<td>Protective measures, Road systems, Public buildings and equipment, Public utilities</td>
</tr>
<tr>
<td>Health and Welfare</td>
<td>FDAA, Disaster Food Stamp Program, Emergency Medical Program, National Inst. of Mental Health</td>
<td>Food stamps to 1,709 households, Medical Aid to 21 households, Crisis Counseling</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>LEAA</td>
<td>Protective Measures, Public buildings and equipment</td>
</tr>
<tr>
<td>Military Div. (National Guard)</td>
<td>Budget</td>
<td>Security, heavy equipment</td>
</tr>
<tr>
<td>Parks &amp; Recreation</td>
<td>Budget</td>
<td>Emergency Service</td>
</tr>
<tr>
<td>Public Utilities Commission</td>
<td>Budget</td>
<td>Technical Assistance, Road systems, Public buildings and equipment</td>
</tr>
<tr>
<td>Revenue and Taxation</td>
<td>FDAA, Budget</td>
<td>Guidance and technical assistance to farmers, businessmen, and residents.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Budget</td>
<td>Water control facilities</td>
</tr>
<tr>
<td>University of Idaho</td>
<td>FDAA, Budget</td>
<td></td>
</tr>
<tr>
<td>Water Resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Disaster Relief Tasks by Volunteer Private Organizations

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>TASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Red Cross</td>
<td>Medical aid, emergency supplies, food.</td>
</tr>
<tr>
<td>Citizens' Band Radio Group</td>
<td>Emergency Communications.</td>
</tr>
<tr>
<td>Christian Reformed Church</td>
<td>Technical assistance, office supplies, administrative personnel.</td>
</tr>
<tr>
<td>Church of Jesus Christ of Latter Day Saints</td>
<td>Food, clothing, household goods, labor.</td>
</tr>
<tr>
<td>Concilio de Migrante de Idaho, Inc.</td>
<td>Assistance to migrant workers.</td>
</tr>
<tr>
<td>Eastern Idaho Special Services Agency</td>
<td>Assistance to Elderly flood victims.</td>
</tr>
<tr>
<td>Madison County Community Council</td>
<td>Education and Recreation.</td>
</tr>
<tr>
<td>Mennonite Disaster Service</td>
<td>Volunteer labor.</td>
</tr>
<tr>
<td>Rick's College</td>
<td>Meals and lodging, facilities and space to agencies and volunteer groups.</td>
</tr>
<tr>
<td>Salvation Army</td>
<td>Provided food, clothing, and lodging.</td>
</tr>
<tr>
<td>Teton Interfaith Disaster Task Force</td>
<td>Assistance in claim filing, advocacy information and refer, labor.</td>
</tr>
</tbody>
</table>


Author unknown, "After Disaster: what about survivors?", Modern 1975 Medicine, December 1, 63-66.


Beal, Merrill D., A History of Southeast Idaho, Caldwell, Idaho: 1942 Caxton Printers, Ltd.


Church of Jesus Christ of Latter-day Saints, Essentials of Home Storage, Salt Lake City, Utah: Deseret Press.

Church of Jesus Christ of Latter-day Saints, Helping Others to Help Themselves: The Story of the Mormon Church Welfare Program, Salt Lake City, Utah: Deseret Press.

Church, June, "The Buffalo Creek Disaster: Extent and Range of Emotional and/or Behavioral Problems", Omega, vol. 5, 61-64.


Disaster Assistance for Crisis Counseling and Training, Public Law 93-288, section 413, part 38, *Federal Register*, vol. 41, no. 75, April 16.

Division of Community Rehabilitation, Idaho Department of Health and Welfare, Final Service Report for the Crisis Counseling Services to Disaster Victims and Their Families in the State of Idaho, Contract Number 278-76-0063 (SM).


Erickson, Kai T., Everything in its Path: Destruction of Community in the Buffalo Creek Flood, New York: Simon and Schuster.


Family Home Evening, Salt Lake City, Utah: The Church of Jesus Christ of Latter-day Saints.


Frederick, Calvin J., "Effects of Natural vs. Human-Induced Violence Upon Victims", Evaluation and Change, Special Issue, pp. 71-75, Minneapolis, Minnesota: Program Evaluation Resource Center, Minneapolis Medical Research Foundation, Inc.


Funk Wiebe, Katie, Day of Disaster, Scottdale, Pa: Herald Press.

Gerontology Program, Service Priorities for the Elderly in Natural Disasters, A Research Report, University of Nebraska, Omaha, Nebraska.


Goldstein, Arnold, "Reactions to Disaster", Psychiatric Communications, vol. 3, 47-58. 1960


Gurney, Patrick J., "The Therapeutic Community Revisited: Some Suggested Modifications and Their Implications", Disaster Research Center, The Ohio State University, Preliminary Paper No. 39. 1977


Haas, J. Eugene, Robert W. Kates, Martyn Bowden (Eds.), Reconstruction Following Disaster, Cambridge, Massachusetts: The MIT Press. 1977


Habermas, Jurgen, Knowledge and Human Interests, Boston: Beacon Press. 1971


Heffron, Edward F., Project Director, Project Outreach, Final Report submitted to the National Institute of Mental Health, Contract No. 1-MH-4-0008.


Horowitz, Mardi J., "Psychic Trauma: Return of Images After a Stress Film, Archives of General Psychiatry, vol. 20, 552-559.


Howard, Stephen J. and Norma S. Gordon, Mental Health Intervention in a Major Disaster, Final Progress Report, Small Research Grant, MH21649-01.


Keerdoja, Eileen and Peter S. Greenberg, "Boom After the Burst", *Newsweek*, vol. 89, no. 23, p. 9, June 6, 1977.


Matza, David, Becoming Deviant, Englewood Cliffs: New Jersey. 1969

Maxwell, A.E., Analysing Qualitative Data, London: Chapmon & Hall. 1961


Moore, Harry Estill, Tornadoes Over Texas: A Study of Waco and San Angelo in Disaster, Austin: University of Texas Press.


Nugent, Tom, Death at Buffalo Creek: The Story Behind the West Virginia Flood Disaster of 1972, New York: W.W. Norton and Co., Inc.


O'Kura, Patrick K., "Mobilizing in Response to a Major Disaster", Community Mental Health Journal, vol. 11, 136-144.
Omaha Tornado Project, *Omaha Tornado Project Final Report*, prepared for Federal Disaster Assistance Administration, NIMH, by Eastern Nebraska Human Services Agency.


Penick, Elizabeth C., Stephen W. Larson, Jane E. Brownstone, Ann F. Nord and Barbara J. Powell, *Leader's Manual: Mental Health and Disaster Relief*, A Workshop by the Jefferson Missouri Department of Mental Health in Collaboration with the American Red Cross Midwestern Area, St. Louis, Missouri, Jefferson, Missouri: Missouri Department of Mental Health.


Poulshock, S.W. and E.S. Cohen, "The Elderly in the Aftermath of a Disaster*, *Gerontologist*, vol. 15, 357-361.


Smith, Joseph, *Doctrine and Covenants*, Salt Lake City, Utah: The Church of Jesus Christ of Latter-day Saints, n.a.


Sundel, Martin, "Problems Facing a Community Mental Health Center in Delivery of Mental Health Services to a Disaster Area", Paper presented at the annual meeting of the National Council of Community Mental Health Centers, Washington, D.C., 1975.


Taylor, Verta A., G. Alexander Ross and E.L. Quarantelli, Delivery of Mental Health Services in Disasters: The Xenia Tornado and Some Implications, The Disaster Research Center Book and Monograph Series, 11, The Ohio State University.


Thomas, Janet, Bernice McCowin, Mary Tingey and Margaret Thomas (Eds.), That Day In June: Reflections On The Teton Dam Disaster, Rexburg, Idaho: Ricks College Press.


