BOX ELDER COUNTY
August 19, 1993

The Board of Planning Commissioners of Box Elder County, Utah, met in regular session in the Commission Chambers of the Box Elder County Courthouse, 01 South Main Street, in Brigham City, Utah, at 7:00 p.m. on August 19, 1993.

The meeting was called to order by Chairman Richard Kimber, with the following members present, constituting a quorum:

Richard Kimber	Chairman
Allen Jensen	Member, County Commissioner
Deanne Halling	Member
Jon Thompson	Member
Steve Grover	Member
Marie Korth	Ex-Officio Member, Recorder/ Clerk

Excused:

Denton Beecher	Ex-Officio Member, Surveyor

Also present:

Attendance Roster: (Attachment No. 1)

APPROVAL OF MINUTES:
Chairman Kimber presented the Minutes of July 15, 1993, for approval. Mr. Thompson made a motion to approve the Minutes of July 15, 1993, as written. Mr. Grover seconded. None opposed. The motion carried.

AGENDA: (Attachment No. 2)

SUBDIVISIONS:
SBA Minor Subdivision, Final Approval:
Chairman Kimber presented the SBA Minor Subdivision for final approval and explained that the property has been auctioned, and the family is attempting to preserve one parcel for use by a family member. In order for this to be done, a minor subdivision must be finalized. Chairman Kimber reported Surveyor Denton Beecher has reviewed the request and recommends approval. In addition the Health Department has given their approval. The property is located at 10800 West on Rocket Road. Mr. Thompson made a motion to approve the SBA Minor Subdivision and authorize the Chairman to sign. Ms. Halling seconded.

Chairman Kimber called for the vote.
Mr. Thompson: Yea
Ms. Halling: Yea
Commissioner Jensen: Yea

Mr. Grover: No

The motion carried

The Beginning Subdivision, Final Approval: (See Escrow File for referenced documents)

Mr. Roy Lemon and Mr. Ned Fairbanks met with the Planning Commission to request final approval for The Beginning Subdivision in South Willard. Chairman Kimber stated there is no approval from the Health Department. The remaining requirements, a permit from UDOT, a Certificate of Title Insurance, an Escrow Agreement in the amount of $34,745.00, and a letter from the South Willard Water Company, were presented. Commissioner Jensen made a motion to approve The Beginning Subdivision, Phase One, contingent on approval by the Bear River District Health Department. Mr. Grover seconded. None opposed. The motion carried.

LANDFILLS:

Sensitive Area Request: (Attachments No. 3 & 4)

Mr. Reggie Petersen, President, Utah Safe Drinking Water Association, met with the Commissioners to present a request for a zoning change in the White's Valley area. He first introduced the contingent who accompanied him. Mr. Petersen stated their purpose was to present a petition (attached) (There were no signatures on this petition.) to amend the Box Elder County Zoning map to recognize and designate the following sections located within Box Elder County, State of Utah, as a Sensitive Area District: Township 13 North, Range 4 West, Sections 2-11, 14-23, 26-35; Township 12 North, Range 4 West, Sections 2-8, 11. He said this request is being made because of the tremendous amount of natural resources located in the Bothwell Pocket; there are about 18 wells. The Bear River Water Conservancy District recently spent approximately 1.4 million dollars to purchase four or five wells, and they have intentions of developing the area to provide water for the Wasatch Front extending to the Ogden area. Mr. Petersen stated this is pursuant to Section 1.11.3 of the 1992 Land Use Management and Development Code for Box Elder County.

Mr. Petersen stated a number of floods have originated in the White's Valley area. He presented and discussed Exhibit 1, (attached) a copy of the Zoning Map for Box Elder County with the proposed amendment marked in red, and Exhibit 2, aerial photographs illustrating a flood which occurred in 1985.

Mr. Petersen stated he has a signed statement from a Mr. Rasley, the Chief Geologist for the SCS Office, indicating the soils throughout this area are very unstable. Mr. Petersen said the Safe Drinking Water Association believes the geological hazards relative to the unstable soil conditions, sloping in excess of 15 percent, and flooding all make this a very sensitive area.

Mr. Petersen pointed out that earthquake activity in the county is very abundant. He said by next Thursday he will submit a copy of the University of Utah seismological study done for the area.

Mr. Petersen next brought up the Oquirrh Formation which is a regional aquifer and a primary source of drinking and irrigation water for a large area. He said this formation is fractured bedrock which acts as a conduit. A region known as the Bothwell Pocket within the identified area provides an area of significant ground water recharge. Mr. Petersen stated they have a letter from Mr. Ben Averett, Chief Geologist for Water Resources, who has done an extensive study in the White's Valley area. It is his opinion that it is a recharge area for the Bothwell Pocket.

Mr. Petersen stated water is the lifeblood of the county. He also said his organization is very concerned about a landfill which exists there at the present.

Mr. Boyd Marble discussed flooding and its seriousness, presenting pictures to illustrate. He also discussed the importance of irrigation and drinking water.

Garland Mayor Andrew Funk asked why the landfill issue had not gone through the Planning Commission. After discussing the matter, Chairman Kimber stated the landfill permit would be an Agenda item for the next Planning Commission Meeting.

Tremonton Mayor Gil Smart stated fourteen of the Mayors of Box Elder County had met and petitioned the State of Utah to stay the permit. He said they have widespread support throughout the county.

PLANNING COMMISSION MEMBERSHIP:

A discussion was held concerning terms of office on the Planning Commission. It was brought out Mr. Junior Okada has resigned due to ill health and the term of Mr. DeVon Breitenbeker has expired. Several names were suggested. Commissioner Jensen will talk to prospective members.

Mr. Thompson made a motion to adjourn at 8:15 p.m. Mr. Grover seconded. None opposed. The motion carried.

Passed and adopted in regular session this 16th day of September, 1993.

ATTEST:

Marie G. Korth
Recorder/Clerk

Richard D. Kimber, Chairman

Safe Drinking Water Assoc

NAME	TITLE / ADDRESS
Andrew Funk	Mayor - Garland
Reese Quayle	Mayor - Perry
Eli Anderson	REP DISTRICT /
Gil SMART	MAYOR - Tremonton
LORI BONA HUNT	Standard - Examiner
Boyd B. Marble	Citizen of Bothwell - Safe Drinking Water
Clair Firth	Bothwell Water & Cemetery Corp
Spencer Petersen	Penrose, Utah
Bonnie Wright	Bountiful, UT
Karen Palmer	Preston, Id
T. Kent Palmer	" "
Philip Wright	BOUNTIFUL UT

SBA Minor Sub

ATT 1

BOX ELDER COUNTY PLANNING COMMISSION
MEETING PLACE; COUNTY COMMISSION CHAMBERS
BOX ELDER COUNTY COURTHOUSE
BRIGHAM CITY, UTAH

1. Public agenda for the Box Elder County Planning Commission meeting scheduled for 19 August 1993 at 7: 00 P.M.

2. Notice given to the newspaper this 18 day of August, 1993.

3. Approval of the minutes of 15 July 1993.

4. Scheduled Delegations:

   A. Final approval of SBA Minor Subd.

   B. Final Approval of The Beginning Subd.

   C. Clair Firth ,Landfill issue

   D.

   E.

   F.

   G.

   H.

   I.

   J.

5. Old Business

   A.

   B.

   C.

   D.

ATT 2

PETITION TO AMEND BOX ELDER COUNTY ZONING MAP

Petitioner:

Safe Drinking Water Association
7965 North 11600 West
Penrose, UT 84337

Proposed Amendment:

Recognize and designate the following sections located within Box Elder County, State of Utah ("Identified Area") as a Sensitive Area (SA) District:

Township 13 North, Range 4 West SLB&M

Sections 2-11, 14-23, 26-35

Township 12 North, Range 4 West SLB&M

Sections 2-8, 11

The Identified Area is shown in Exhibit 1 attached hereto, a copy of the Zoning Map for Box Elder County with the Proposed Amendment marked in red.

I. INTRODUCTION

Pursuant to Chapter 14 of the 1992 Land Use Management and Development Code For Box Elder County (the "Code"), petitioner hereby submits that the Identified Area qualifies as a Sensitive Area District and respectfully requests pursuant to Section 1.11.3 of the Code that the Box Elder County Zoning Map be amended to expressly designate the Identified Area as a Sensitive Area District.

As stated in section 14.1 of the Code:

> [t]he purpose of the Sensitive Area Overlay Zone, SA, is to designate and describe those areas within Box Elder County that possess physical and/or environmental characteristics which require special public consideration of applications for uses which might affect: the structure of the land; the management of surface or subsurface water; safety of future land occupants due to increased fire, earthquake, or storm hazards from the proposed development; or the uneconomic extension of public facilities and services. Of specific concern is development in flood-prone areas, earthquake zones, landslide areas, areas of steep slope or unstable soils, wetlands, noise or other pollution sensitive areas. Other sensitive areas also may require careful assessment prior to alteration or impact.

The Code, Section 14.1.

The Identified Area is an area of "specific concern" under the Code because it includes 1) Flood prone areas; 2) An earthquake zone; 3) Wetlands; and 4) Other pollution sensitive areas.

In addition, Section 14.4 of the Code provides:

The "Sensitive Area District, SA" zoning districts if not marked on the zoning map per se, shall nonetheless include areas of Box Elder County designated as:

14.4.1	100 year flood plain;
14.4.2	Geological hazards including earthquake areas, unstable soil conditions, sloped in excess of 15%, and areas subject to flooding;
14.4.3	Areas of high water table and ground water including wetlands, high water table, perched water, drainage ways and swampy conditions.
14.4.4	Other environmentally sensitive areas . . .

The Code, Section 14.4.

The Identified Area is currently in a Sensitive Area District by virtue of the earthquake activity, susceptibility to flooding, and high ground water content of the Oquirrh Formation. Petitioner requests that the Identified Area be designated officially as a Sensitive Area District on the Box Elder County Zoning Maps.

II. THE IDENTIFIED AREA INCLUDES WETLANDS AND OTHER POLLUTION SENSITIVE AREAS

The Oquirrh Formation, a known regional aquifer, is a primary source of drinking and irrigation water for a large area, and clearly underlies the Identified Area. A region known as the Bothwell Pocket within the Identified Area provides an area of significant ground water recharge for the Oquirrh Formation. The Oquirrh Formation is mostly limestone and sandstone that is highly fractured and permeable in the West Hills and Blue Springs Hills. From a well study of the Oquirrh Formation along the flanks of the West Hills, experts have concluded that the aquifer has high transmissivity and that the ground water reservoir is large. The Oquirrh Formation permeability ranges from low to high, and the permeability of the formation is mostly due to fractures and to solution openings. Experts have also documented that perched ground water occurs in the Oquirrh Formation.

Numerous sources document the presence of faults and geologic structures (folds, joints, etc.) in the Identified Area that generally trend in the same direction as the north-south alignment of the Bothwell Pocket. These structures provide a potential pathway between ground water in the Identified Area and the ground water in the

Bothwell Pocket. The conclusion of the comprehensive work of the Division of Water Resources in the Identified Area is that bedrock conduits are major hydrogeologic pathways in the Oquirrh Formation. Such a pathway could allow contamination from the Identified Area to migrate readily to the drinking water supplies in the Bothwell Pocket.

The Utah Division of Water Quality is currently in the process of classifying aquifers and educating elected and appointed officials in the need to comprehensively address siting questions with respect to potable water aquifers to avoid potential contamination of a major potable water aquifer.

The Utah Division of Drinking Water's proposed rules for ground water source protection will require identification of potable water aquifer recharge zones, together with ground water transport direction and velocity. These are essential elements of the United States Environmental Protection Agency's mandated program. Every community well in the Bothwell Pocket will shortly be required to demonstrate to the State that they have defined protection zones. The Utah Division of Water Rights' 1981 publication "Identification and Characteristics of Aquifers in Utah" both identifies the Oquirrh Formation as an aquifer and the Bothwell Pocket as an area of ground water development or potential development. Therefore, the County, in designating the Identified Area as a Sensitive Area District, will be taking proactive steps to assure compliance with state and federal requirements designed to assure the purity of potable water supplies.

The faulting and fracturing of the bedrock within the Oquirrh Formation provides high transmissivity that would allow contaminants to leach from the surface or

ground water of the Identified Area into the Oquirrh Formation, thereby contaminating a valuable regional water supply. For this reason any proposed use which may release contaminants onto the surface or into ground water of the Identified Area must undergo a high level of scrutiny. Designating the Identified Area as a Sensitive Area District will cause any uses other than the few enumerated in Chapter 14 of the Code to require a conditional use permit, thus helping to preserve the purity of the water in the Oquirrh Formation.

III. PORTIONS OF THE IDENTIFIED AREA ARE PRONE TO FLOODING

Certain portions of the Identified Area are prone to flooding. This is clearly shown by the aerial photographs included in Exhibit 2.

IV. THE IDENTIFIED AREA IS IN AN EARTHQUAKE ZONE

The University of Utah Seismograph Station reported a cluster of 101 seismic events between September, 1986 and April, 1987, 6 to 7 miles northeast of Howell. Seven of those events ranged in magnitude between 3.0 and 3.7. This intensity of activity, in fact, sparked response by both the University and the State Geological Survey that made portions of the Identified Area the focus of a special study. Their work maps show an epicenter within the Identified Area.

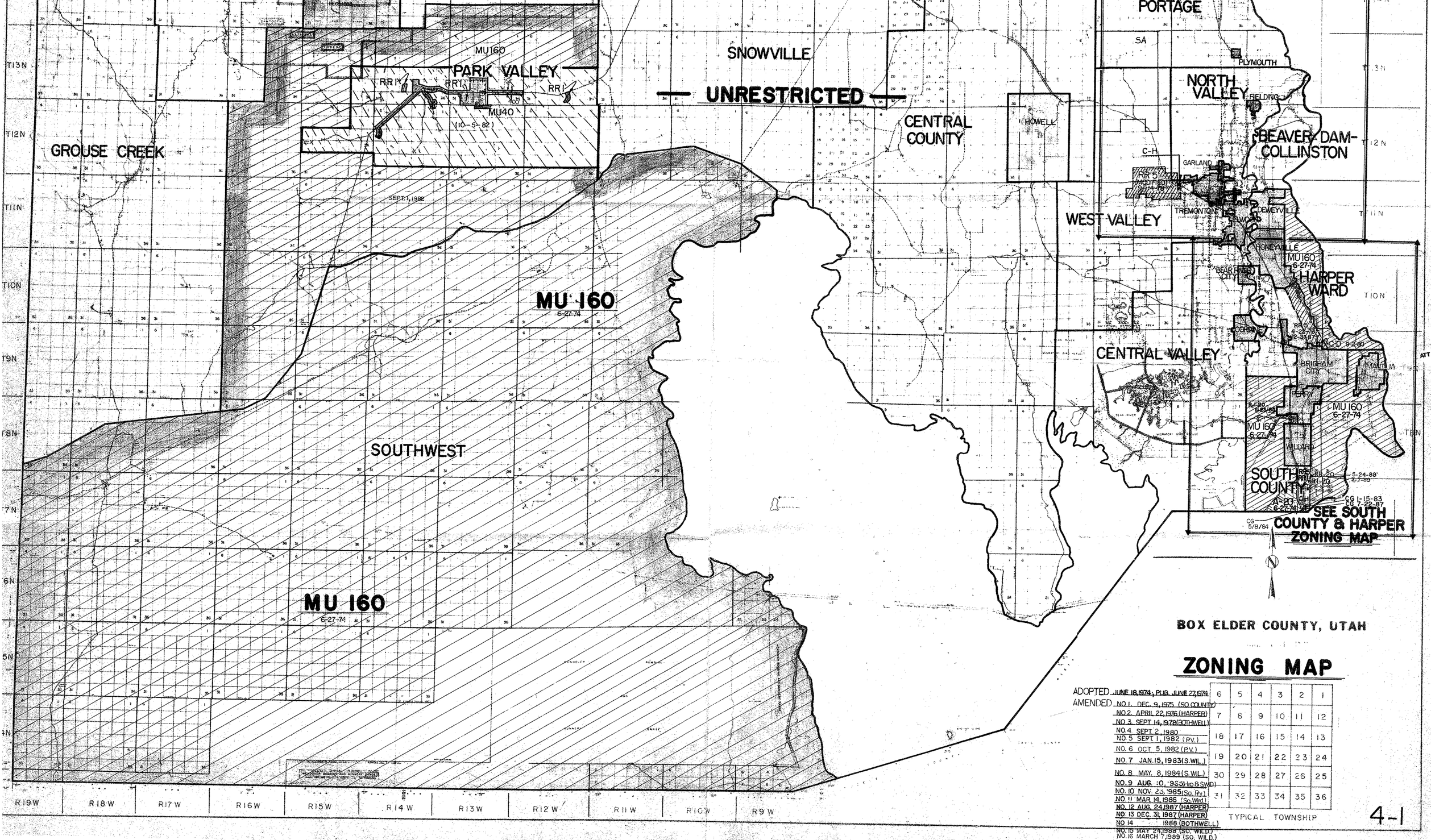
In light of the high number of seismic events in and near the Identified Area, the Identified Area is properly characterized as an earthquake zone that requires classification as a Sensitive Area District.

V. CONCLUSION

The Identified Area is a critical ground water recharge area for the Bothwell Pocket within the Oquirrh Formation. The Identified Area has portions that are prone to flooding. Documented seismic activity demonstrates the Identified Area should be designated an earthquake zone. Any one of these three characteristics demonstrates that the Identified Area is environmentally sensitive. The sum of all three characteristics leads to the inescapable conclusion that the Identified Area represents a valuable resource to the County that is environmentally sensitive and deserves protection. Petitioner respectfully requests that Box Elder County amend the Zoning Maps in accordance with Exhibit 1 to expressly designate the Identified Area as a Sensitive Area District.

VI. REQUEST FOR HEARING

Petitioner hereby requests a hearing to review the petition to designate the Identified Area as a Sensitive Area District.



BOX ELDER COUNTY, UTAH

ZONING MAP

ADOPTED JUNE 18, 1974, PUB. JUNE 27, 1974
AMENDED
NO. 1. DEC. 9, 1975 (SO. COUNTY)
NO. 2. APRIL 22, 1976 (HARPER)
NO. 3. SEPT. 14, 1978 (BOTHWELL)
NO. 4 SEPT. 2, 1980
NO. 5 SEPT. 1, 1982 (P.V.)
NO. 6 OCT. 5, 1982 (P.V.)
NO. 7 JAN. 15, 1983 (S.WIL.)
NO. 8 MAY. 8, 1984 (S.WIL.)
NO. 9 AUG. 20, 1985 (1 to 8 SWD)
NO. 10 NOV. 23, 1985 (So. Fry.)
NO. 11 MAR. 14, 1986 (So. Wrd.)
NO. 12 AUG. 24, 1987 (HARPER)
NO. 13 DEC. 31, 1987 (HARPER)
NO. 14 1988 (BOTHWELL)
NO. 15 MAY 24, 1988 (SO. WILD.)
NO. 16 MARCH 7, 1989 (SO. WILD.)

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

TYPICAL TOWNSHIP

4-1