

Monument Resource Management Plan Amendment

Record of Decision

Decision: It is my decision to implement the Preferred Alternative and amend the Monument Resource Management Plan to designate two RNA/ACECs and one ACEC. The 320 acre area known as Big Juniper shall be designated an RNA/ACEC. The 320 acre area known as Sand Kipuka shall be designated an RNA/ACEC. The 40 acre area known as Baker Cave shall be designated an ACEC.

Rationale: The subject lands meet the planning criteria for ACEC designation and the criteria necessary for RNA designation. The unique national resource values will be protected and enhanced on these sites. These areas will also be sources of future study.

Finding of No Significant Impact: The Environmental Assessment has been analyzed and a finding of no significant impact has resulted. It is concluded that the proposed action will not adversely affect the quality of the human environment. Preparation of an environmental impact statement pursuant to Section 102 (2)(c) of the National Environmental Policy Act of 1969 is not required for this action.

Recommended:

7-30-87

Date

John Davis
Burley District Manager

Approved:

1-21-88

Date

Richard D. Vail
Idaho State Director

I-25589

Monument Resource Management Plan
Research Natural Area/Area of Critical Environmental Concern
Amendment and Environmental Analysis

I. Introduction

A. Purpose and Need for Amendment

The Monument RMP was completed on April 22, 1985. Three areas of Critical Environmental Concern (ACEC's) were designated these are: the Substation Tract, Vinyard Creek Natural Area and Box Canyon/Blueheart Springs Sensitive Area. The Substation Tract is the only area within the Burley District.

The University of Idaho, working with the Nature Conservancy has proposed two Research Natural Areas (RNAs) due to unique vegetation. A proposal was also made for ACEC designation of Baker Cave for the protection of artifacts by the Burley District Archaeologist.

There is a need to amend the Monument RMP to allow for the designation of areas as RNA/ACECs. These designations are considered to be in the public's interest. Designation of Baker Cave will provide for the protection of a part of America's history. Designation of the other two areas will provide rangeland managers and users with information on rangeland conditions with changes in use.

B. Location:

1. Big Juniper is located approximately 14 air miles northeast of Minidoka, Idaho in the E 1/2 of Section 36, T6S, R27E. The nominated area is 320 acres in size with the kipuka encompassing about 40 acres. The area is accessed via an arduous three hour hike over undulating Pahoe-hoe lava flows from due west of the kipuka. It can also be reached from the Wapi Park area to the northeast. The entire area is managed by the BLM.
2. Sand Kipuka is reached by a 30 minute hike over gentle lava surface from the end of a poor road which approaches from the west in Section 15, T8S, R27E. The area is located in T8S, R27E, Section 11, SE 1/4 and T8S, R27E, Section 14: NE 1/4. This encompasses 320 acres.
3. Baker Cave can be accessed via road and a ten-minute hike across the lava. The area is located in T8S, R27E, Section 9: NW 1/4 NE 1/4 and encompasses 40 acres.

C. Planning Process:

The Monument RMP was approved by the Idaho State Director on April 22, 1985. The RMP was prepared in accordance with BLM manual procedures and involved public participation. The RMP has been published and distributed to all interested parties.

These areas fall within L2 Great Rift WSA Recommended Suitable, of the Monument RMP (Appendix 2).

Upon concurrence of this plan amendment by the State Director, a public notice summarizing the amendment and probable environmental impacts will be published in the local newspaper. If no protests are filed, the decision will be made a part of the Monument RMP, clearly identified as an amendment and implementation would follow.

D. Conformance:

The Monument RMP amendment is consistent with Blaine County's Zoning Ordinance Map. This area is classified as A-10, Unproductive Agriculture. This amendment meets the "consistency" requirements found in 43 CFR 1610.3-2.

II. Planning Issues and Criteria

A. Planning issues:

The planning issue here is whether these proposed areas meet the criteria for RNA/ACEC designation.

The Federal Land Policy and Management Act (FLPMA) defines ACECs as "areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards." (Section 103(a).)

43 CFR 8223.0-6 states:

"Areas established as research natural areas shall be of sufficient number and size to adequately provide for scientific study, research, and demonstration purposes."

B. Planning Criteria:

To be considered as an ACEC an area must meet the Relevance and Importance criteria as defined by the CFR. 43 CFR 1610.7-2 defines "Relevance" and "Importance" as follows:

"(1) Relevance. There shall be present a significant historic, cultural, or scenic value; a fish and wildlife resource or other natural system or process; or natural hazard."

"(2) Importance. The above described value, resource, system, process, or hazard shall have substantial significance and values. This generally requires qualities of more than local significance, meaning, distinctiveness, or cause for concern. A natural hazard can be important if it is a significant threat to human life or property."

43 CFR 8223.0-5 defines an RNA as:

"(a) "Research natural area" means an area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: (1) A typical representation of a common plant or animal association; (2) an unusual plant or animal association; (3) a threatened or endangered plant or animal species; (4) a typical representation of common geological, soil, or water features; or (5) outstanding or unusual geologic, soil, or water features."

Two areas are recommended for RNA/ACEC designation. This dual designation is recommended for two reasons. RNA designation is designed to be used for research purposes, two of the proposed areas are to become research sites; therefore, the RNA designation. The addition of the ACEC designation will allow more specific management guidelines to apply to these areas.

All three of these areas have been determined to meet the "relevance" and "importance" requirements as outlined in 43 CFR 1610.7-2.

1. Big Juniper

Relevance

Big Juniper Kipuka contains three undisturbed vegetative types common to the eastern Snake River Plain of southern Idaho. These types are Wyoming big sagebrush (*Artemisia tridentata*, *Wyomingensis*)/bluebunch wheatgrass (*Agropyron spicatum*); Wyoming big sagebrush/Thurber's needlegrass (*Stipa Thurberiana*); and threetip sagebrush (*Artemisia tripartita*)/bluebunch wheatgrass. The Kipuka is also the site of the record Rocky Mountain juniper for the State of Idaho.

Importance

The University of Idaho and The Nature Conservancy has nominated this area to serve as a range habitat reference site. Natural successional processes can be referenced when rangeland managers manipulate rangelands of similar species. The undisturbed character of the area qualifies it as a valuable and scarce resource.

2. Sand Kipuka

Relevance

Sand Kipuka contains a range habitat type for Wyoming big sagebrush (Artemisia tridentata)/ needle-and-thread grass (Stipa comata) that occurs on the Snake River Plains of Southern Idaho.

Importance

The vegetation on the kipuka is in good condition. The University of Idaho and The Nature Conservancy identified this area as a reference range habitat site. The area is naturally protected from grazing by domestic livestock.

3. Baker Cave

Relevance

Baker Cave is an intact cave site which represents several, short term occupations from the late Archaic period. This is a dry cave site containing numerous artifacts, many of them perishable, in an intact condition. No other sites of this nature are presently known in Idaho which have not been destroyed or excavated.

Importance

This site is well known both locally and state-wide among professional and amateur archaeologists. Boise State University is preparing a report on the excavation of the cave to date. This cave was partially excavated by BSU and the BLM in 1985. When the BSU report is complete, the cave will take its place as a moderately important cultural site in the Great Basin.

III. Analysis and Justification

1. Big Juniper

It is recommended that the proposed area be designated as an ACEC. This designation is consistent with the existing management of the area. Designation will allow for the study and protection of the present, undisturbed vegetation.

Big Juniper was proposed as an RNA by The Nature Conservancy in October 1983. The Kipuka was located on state of Idaho land until the recent land exchange with the Coeur d'Alene District.

Big Juniper Kipuka is located within the proposed Great Rift Wilderness. In the final EIS, Big Juniper Kipuka is referred to as the Old Juniper Kipuka.

This kipuka was selected by The Nature Conservancy to represent undisturbed examples of several major range habitat types that occur on the eastern Snake River Plain of southern Idaho. The most extensive of the types present are Wyoming big sagebrush/bluebunch wheatgrass, Wyoming big sagebrush/Thurber's needlegrass and threetip sagebrush/bluebunch wheatgrass. The surrounding lava has a Utah juniper woodland with a mixed shrub layer. This site is also the home of the record Rocky Mountain juniper for the State of Idaho.

Due to its general inaccessibility, this kipuka is located in a manner such that its integrity can be fairly well insured. Though this site does get some recreational use, this is accomplished by hiking. ORV's are not able to traverse the lava and no roads exist to this site.

RNA/ACEC designation is needed on this site to provide a reference site for rangeland managers. Rangeland treatments could be referenced to this known site to measure success.

This site is located within the proposed Great Rift Wilderness area. ACEC designation will aid in the protection of the vegetative resource whether or not the area becomes a designated wilderness.

2. Sand Kipuka:

It is recommended that the proposed area be designated as an RNA/ACEC. This designation is consistent with the existing management of the area. Designation will allow for the study and protection of the present, undisturbed vegetation.

Sand Kipuka was suggested as a potential Research Natural Area by The Nature Conservancy in October 1983. This Kipuka was selected to represent undisturbed examples of a major range habitat type that occurs on the Snake River Plain of southern Idaho. The type is well-developed on the sandy soils of the kipuka. Additionally, a Utah juniper woodland is well-developed on the surface of the lava flows that surround the kipuka.

This site is located within the Wapi Flow of the proposed Great Rift Wilderness area. The possible dual designation of ACEC and wilderness will not have adverse affects on the management of the area. ACEC designation will aid in the protection of the vegetative resource whether or not the area becomes wilderness.

3. Baker Cave:

It is recommended that the proposed area be designated as an ACEC. This designation is consistent with the existing management of the area. Designation will allow for the protection of the historical and cultural values of the cave. It will also provide for the study of additional cultural sites.

Baker Cave is a lava tube cave containing the remains of at least one and probably two butchering and occupation episodes dating to the late Archaic, probably around 1200 A.D. Due to the dry nature of the cave, numerous perishable items were located in the cave which is very unusual in Idaho. In addition, the cave had not been vandalized prior to excavation. Associated with the cave and about 50 yards west of it, is a small lava tube bubble that was prehistorically rocked up with lava rock and juniper logs. It contained a deposit of items more associated with ceremonial functions, i.e., pipes, than with undisturbed normal habitation. While most of both caves have been excavated, some undisturbed deposits still remain.

This site is located within the Wapi Flow of the proposed Great Rift Wilderness area. The possible dual designation of ACEC and wilderness will not have adverse affects on the management of the area. ACEC designation will aid in the protection of the remaining, undisturbed cultural deposits.

IV. Alternatives, Including the Proposed Action

A. Alternative 1 - Preferred Alternative.

The preferred alternative is to amend the Monument RMP to allow for the RNA/ACEC or ACEC designation of these proposed areas. This alternative will permit RNA/ACEC designation of Big Juniper and Sand Kipuka and ACEC designation of Baker Cave.

1. Big Juniper:

An area 320 acres in size, as described in Fig. 2, Appendix 1, will be designated an RNA/ACEC.

The Monument RMP shall be amended to read:

"L 13- Big Juniper RNA/ACEC. This area is designated an RNA/ACEC to allow for the study and protection of the present, undisturbed vegetation. The vegetation is relicit in nature and will be used as a range reference site.

The area will remain in Federal ownership. Natural processes will be promoted. Fire suppression will be minimal to none, except to protect adjacent land owners.

This area is closed to ORV use. No surface occupancy will be permitted on the RNA/ACEC area. Livestock grazing is not permitted."

2. Sand Kipuka

An area 320 acres in size, as described in Fig. 3, Appendix 1, will be designated an RNA/ACEC.

The Monument RMP shall be amended to read:

"L 14- Sand Kipuka RNA/ACEC. This area is designated an RNA/ACEC to allow for the study and protection of the present, undisturbed vegetation. The vegetation is relict in nature and will be used as a range reference site.

The area will remain in Federal ownership. Natural processes will be promoted. Fire suppression will be minimal to none, except to protect adjacent landowners.

This area is closed to ORV use. No surface occupancy will be permitted on the RNA/ACEC area. Livestock grazing is not permitted. Firewood harvesting is not permitted."

3. Baker Cave

An area 40 acres in size, as described in Fig. 4, Appendix 1, will be designated an ACEC.

The Monument RMP will be amended to read:

"L 15- Baker Cave ACEC. This area is designated an ACEC for the protection of the historical and cultural values of the cave.

Activities which would destroy the integrity of the cultural resource will not be permitted."

B. Alternative 2 - No Action

This option allows the current RMP recommendations to guide the management of these areas. This alternative does not provide for priority consideration of areas of critical environmental concern.

V. Affected Environment

A. Big Juniper:

Vegetative: This area consists of K-055 sagebrush steppe; K-023 juniper-pinyon woodland; SAF-239 pinyon-juniper. Idaho Natural Diversity Scorecard rating is as follows:-eastern Snake Plain sage/grass; eastern Snake Plain juniper woodland. Other vegetation types include ARTRW/AGSP; ARTRW/STTH; ARTR2/AGSP; and JUOS/mixed shrub (Caicco and Wellner, 1983). The lava flows and kipukas show a full range of ecological succession from the pioneer plants such as lichens and mosses to the highly diversified plant communities, most of which are climax (or highest) stage (Crawford, 1978 as reported in BLM 1980).

Wildlife: Bobcat, mule deer, coyote, rattlesnake and pygmy rabbits are known to inhabit the area.

Geologic: The area is included within the Wapi lava field, an area covered with Pleistocene Pahoehoe basalts. The basalts have a smooth rolling surface. A soil cover is generally lacking. No

detailed geologic studies of the site have been conducted. The hill kipuka itself is a small cinder-and-spatter cone whose crater has been partly flooded by younger flows of the Wapi lava field. Although the Wapi lavas have not been dated, locally they flow over fissures of the King's Bowl rift set, which has been dated at 2,130 plus or minus 130 years before present (Greeley and King, 1975 as reported in Caicco and Wellner, 1983).

Big Juniper kipuka is located within the eastern Snake River Plain section of the Columbia Intermountain Geomorphic Province. It is a hill kipuka, that is, a previous volcanic terrain that rises above younger lavas which have flowed around it. Although the surface of the lava which surrounds the kipuka is undulating, the vertical distance from trough to peak of the pressure ridges at times exceeding 25 feet, the lavas have an average surface elevation of between 4,800 and 4,900 feet. Generally steep slopes rise about 100 vertical feet to the summit of the hill kipuka, which slightly exceeds 5,000 feet. A bowl-shaped crater lies about 40 vertical feet below the summit rim (Caicco and Wellner, 1983).

Physical information: The area is located approximately 14 air miles northeast of Minidoka, Idaho in the E 1/2 of Section 36, T6S, R27E. The nominated area is 320 acres in size with the kipuka encompassing about 40 acres. The area is accessed via an arduous three hour hike over undulating Pahoehoe lava flows from due west of the kipuka. It can also be reached from the Wapi Park area to the northeast. The entire area is managed by the BLM.

Soils: Soils within the kipuka are generally poorly developed, and comprised largely of particles of cinders. On the steeper slopes, the surface is marked by a high degree of instability. The ridge is often of bedrock, or bedrock covered by loose cinders (Caicco and Wellner, 1983).

B. Sand Kipuka:

Vegetative: The principal feature of Sand Kipuka is the extensive vegetation dominated by big sagebrush and needle-and-thread grass. The vegetation is in fair to good condition locally, although large areas within the kipuka show signs of severe disturbance. The degree to which the disturbance can be attributed to the natural instability of the sandy substrate under the influence of wind is unknown. This area consists of K-055 sagebrush steppe; K-023 juniper-pinyon woodland; SAF-239 pinyon-juniper. The Idaho Natural Diversity Scorecard rating is:-eastern Snake Plain sage/grass; eastern Snake Plain juniper woodland. Other vegetation type-ARTRW/STCO; JUOS/mixed shrub. In addition, a juniper woodland is developed on the lavas which surround the kipuka. The Utah juniper occurs as scattered individuals of presumed great age, but locally they form dense stands with a nearly closed canopy. A low to moderate degree of floristic diversity occurs on the site. Habitat diversity is low, but the habitat types which are represented cover an extensive area (Caicco and Wellner, 1983).

Wildlife: Bobcat, mule deer, coyote, rattlesnake and pygmy rabbits are known to inhabit the area.

Geologic: The entire area is included within the Moon-Kings Bowl-Wapi Lava Fields, an extensive Pleistocene volcanic field of Pahoehoe basalts with a smooth rolling surface and little soil cover (Armstrong et al., 1978 as reported in Caicco and Wellner, 1983). No detailed geologic investigation of the area has been made. The features of the area constitute a good example of the volcanism that has characterized the history of the Snake River Plateau.

Sand Kipuka lies within the eastern Snake River Plain section of the Columbia Intermountain Geomorphic Province. It is a depression surrounded by lava flows. The difference in elevation between the floor of the kipuka and the surface of the lava flows averages about 25 feet.

Physical Information: Sand Kipuka is reached by a 30 minute hike over gentle lava surface from the end of a poor road which approaches from the west in Section 15 (T8S, R27E or from the south in Section 14 (T8S, R27E)). The area is located in T8S, R27E, Section 11: SE 1/4 and T8S, R27E, Section 14: NE 1/4.

Soils: The soils within this area are part of the Vining-Kecko-Rock outcrop complex. Also occurring in the area are the Feltham loamy fine sand and the Banbury fine sandy loam. The Vining loamy fine sand occurs on the convex tops and sideslopes. It is formed from aeolian materials derived from various sources, and is moderately deep and well drained, with moderate permeability and an effective rooting depth of 20 to 40 inches. The Kecko soil is found in the depressions and drainageways; it is very deep and well drained, with moderate permeability and an effective rooting depth of 60 inches or more (Caicco and Wellner, 1983).

C. Baker Cave:

Geologic: The area is included within the Moon-Kings Bowl-Wapi Lava Fields, and extensive Pleistocene volcanic field of Pahoehoe basalts with smooth rolling surface and little soil cover (Armstrong et al., 1978 as reported in Caicco and Wellner, 1983). No detailed geologic investigation of the area has been made. The features of the area constitute a good example of the volcanism that has characterized the history of the Snake River Plateau. It is located near the extent of the lava flow.

Physical Information: Baker Cave can be accessed via road and a ten-minute hike across the lava (see map). The area is located in T8S, R27E, Section 9: NE 1/4, NE 1/4 and encompasses 40 acres.

Soils: The soils are part of the Vining-Kecko-Rock outcrop complex.

Wildlife: Bobcat, mule deer, coyote, rattlesnake and pygmy rabbits are known to inhabit the area.

Vegetation: Juniper, sagebrush and grasses occur near the cave site.

VI. Environmental Consequences:

A. Alternative 1 - Preferred Alternative

1. Big Juniper:

Grazing: This area is not grazed due to its location and composition of lava. There is no surface water present and the three mile access traverses very rough terrain with sparse vegetation. RNA/ACEC designation will not alter this situation.

Cultural: Prehistoric peoples did use this site as is evidenced by the obsidian fragments found at the kipuka. An additional four cultural sites have been located in the proposed RNA/ACEC area. Most of these are surface lithic scatters consisting of numerous, small obsidian waste flakes and projectile points. Designation is expected to have a positive affect on this resource.

Recreation: Primitive recreation has been recorded in the area. Primary uses include; hiking and observation of wildlife and wildflowers. Designation will have no adverse affects on recreation in this area.

2. Sand Kipuka:

Cultural Values: Fragments of worked obsidian found in the kipuka indicate that its location was known in prehistoric times. An inventory of the kipuka site has not yet been conducted. Designation of this area is expected to have positive affects on this resource.

Grazing: Lack of water and access may be a limiting factor for grazing of this area. Some forage does exist. Designation will not alter this situation.

Recreation: This area is presently a part of the Great Rift Wilderness proposal and primitive recreation is the most likely use of the area. This area is easily accessed by foot and will likely be used for hiking, wildlife and wildflower observation and hunting. This type of recreational use is not expected to be in conflict with the proposed RNA/ACEC designation.

Firewood: Utah juniper is present in this area and could be of some value as firewood.

3. Baker Cave:

Wildlife: Bobcat, mule deer, coyote, rattlesnake and pygmy rabbits are known to inhabit the area. Designation will not alter their habitat.

Vegetation: Juniper, sagebrush and grasses occur near the cave site. ACEC designation will not effect the vegetation.

Cultural Values: The remains of at least one and probably two butchering and occupation episodes dating to the late Archaic (probably around 1200 A.D.) have proven Baker Cave to be of prehistoric significance. The Burley District Archaeologist expects to discover mammal bones in the vicinity of the occupational caves since early peoples were forced to butcher and eat large animals near the kill site. It is likely that further evidence of use of this area will be found. Designation of this area will provide protection of the cultural and historical values associated with the cave.

Grazing: Livestock grazing is of no importance at the cave site.

Recreation: The area is presently a part of the Great Rift Wilderness proposal. Caving is most likely the recreational use this area will see. This area is easily accessed and will likely get some use for hiking, wildlife and wildflower observation and hunting. This type of recreational use is not expected to be in conflict with the proposed ACEC designation.

B. Alternative 2 - No Action

Selection of this alternative will involve no environmental consequences. However, selection of the no Action Alternative will not assure protection of the vegetation and cultural values of these sites.

VII. Management Guidelines

A. Big Juniper:

Few special management requirements will be made in this area. The area will be kept in as near relict condition as possible. This intention of RNA/ACEC designation is to provide a vegetative study area.

Incompatible uses include activities involving surface disturbance.

B. Sand Kipuka:

This area is also intended to be a vegetative study area. As such, the area will be kept in as near relict condition as possible.

Incompatible uses include activities involving surface disturbance.

C. Baker Cave:

Special management considerations include:

1. Excavate the remainder of the cave (possibly with amateurs).
2. Completely record the wall in Baker I.
3. Place interpretative signs in the cave and at the start of the trails.
4. Continue to study the collections from the cave.
5. Continue to look for similar sites and for the bison kill area that is expected to be nearby.

VIII. Coordination, Consistency, and Public Participation

A Notice of Intent to Amend the Monument RMP was published in the Federal Register on Thursday, April 23, 1987. Local newspapers ran advertisements during the last two weeks of April 1987 as well.

IX. List of Preparers

Lynda Boody, Forester
Melanie La Chapelle, Editor

X. Consultants

Kirk Koch, Watershed Specialist
Duane Wilson, Range Conservationist
Terry Costello, Snake River Area Manager
Pete Laudeman, Archaeologist
Sharon LaBrecque, Realty Specialist
Bill Boggs, Recreation Planner
Linda Parsons, Wildlife Biologist

Appendix 1

- Fig. 1 General Location Map from Proposed Great Rift Wilderness EIS
- Fig. 2 General Location Map, 1:100,000
- Fig. 3 Big Juniper, 1:24,000
- Fig. 4 Sand Kipuka, 1:62,000
- Fig. 5 Baker Cave, 1:24,000

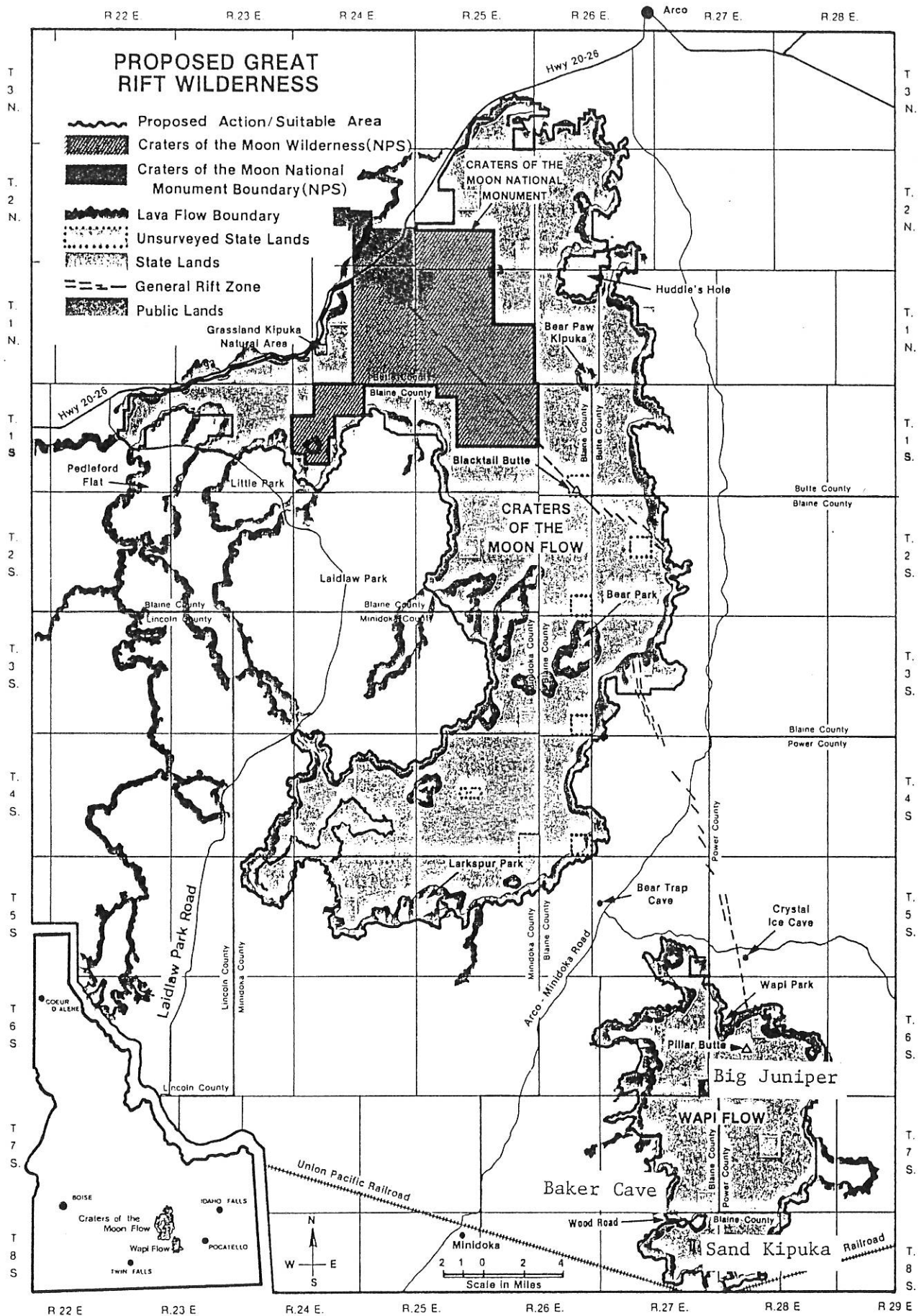


Fig. 1- General Location Map

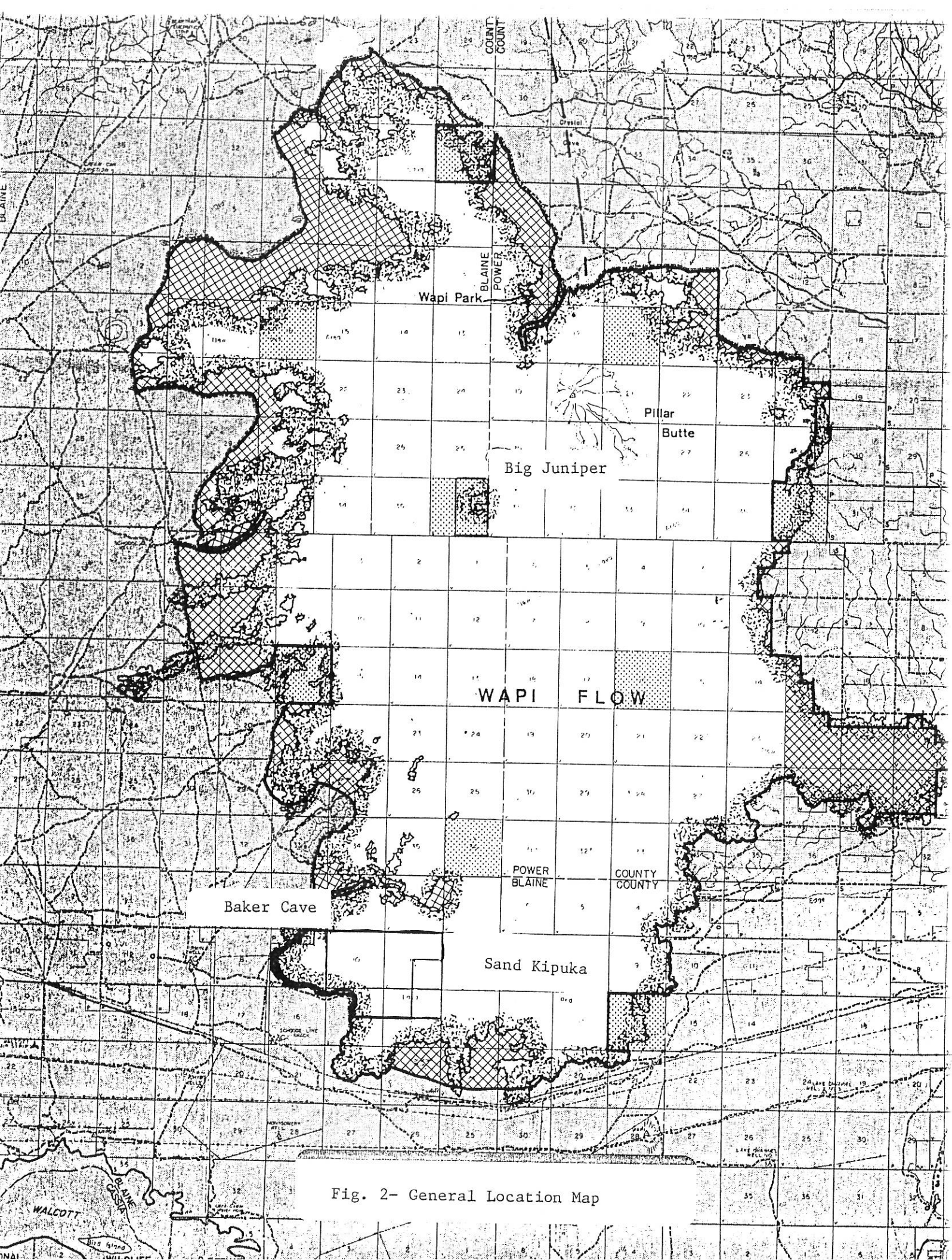
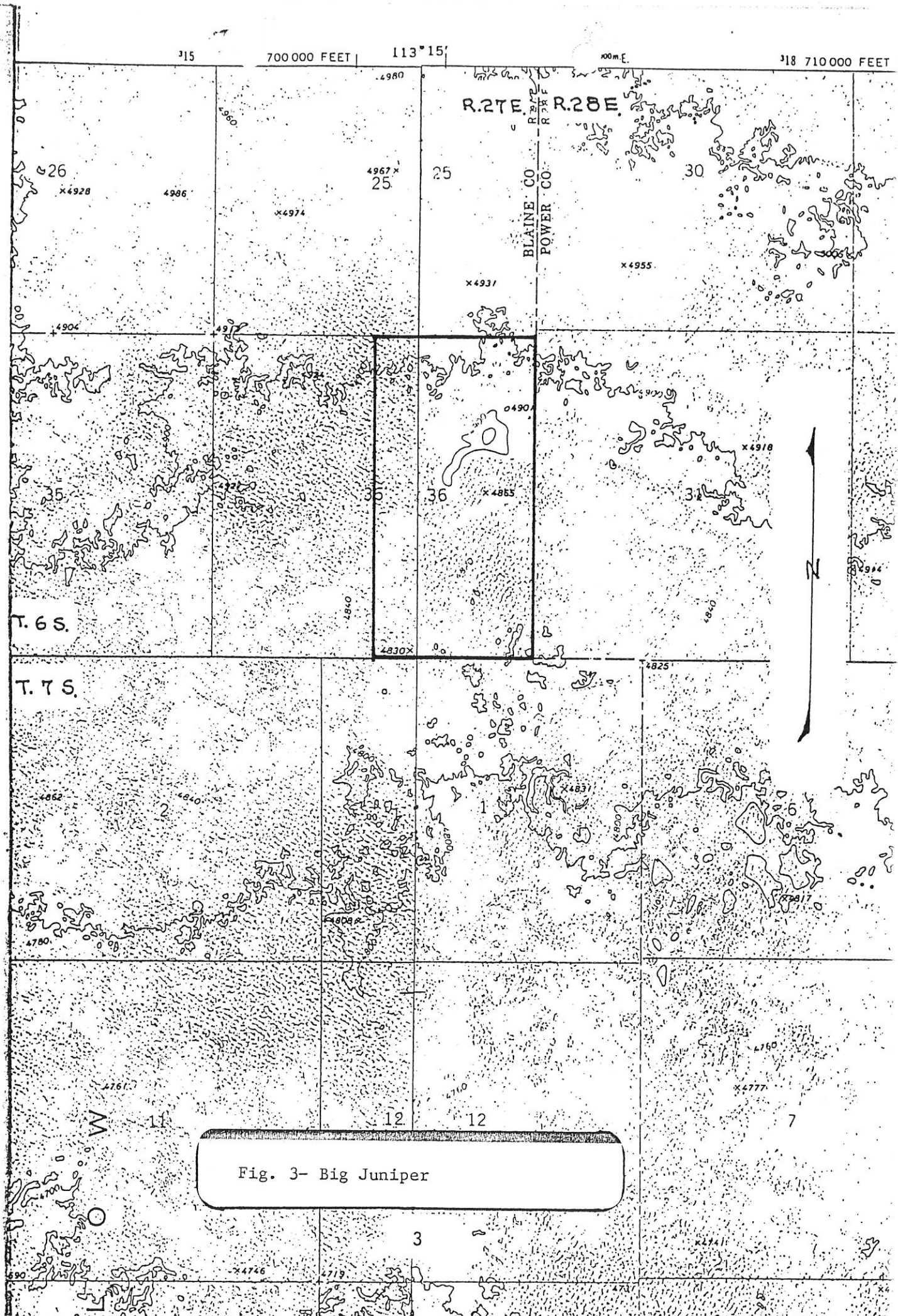


Fig. 2- General Location Map



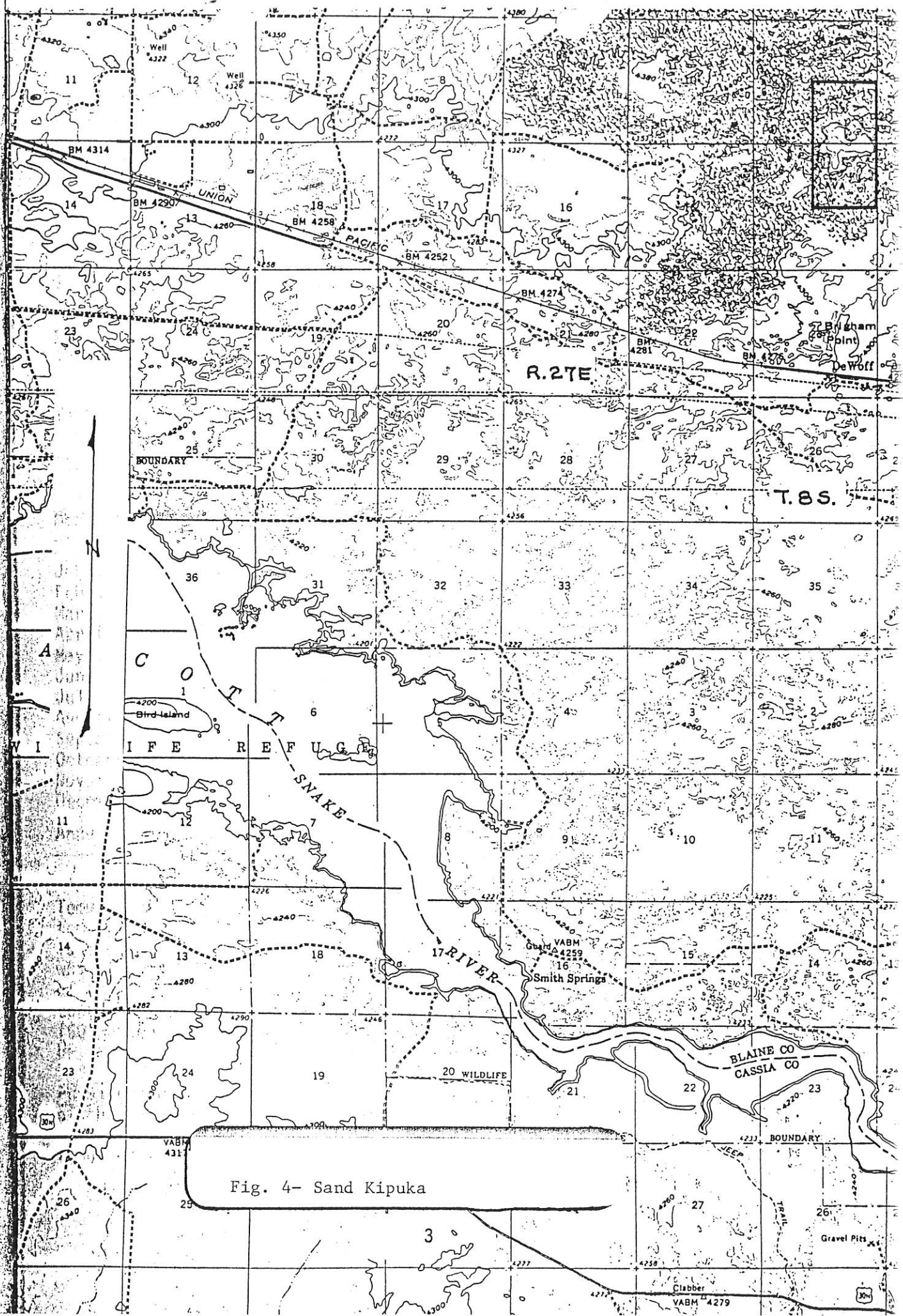


Fig. 4- Sand Kipuka

Fig. 5- Baker Cave

